Western Refining

GALLUP REFINERY

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August 28, 2008

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Hope Monzeglio
Environmental Specialist
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, BLDG 1
Santa Fe NM 87505

Carl Chavez, Environmental Engr.
Oil Conservation Division
1220 S. Saint Francis
Santa Fe, NM 87505

RE: 2007 Annual Groundwater Report, Discharge Permit GW-032

Dear Hope and Carl:

Western Refining – Gallup has prepared a 2007 annual ground water monitoring report according to the requirements in the OCD Discharge Permit GW-032.

If you have any questions please contact me at (505) 722-0227 or Ed Riege at (505) 722-0217.

Sincerely,

Gaurav Rajen, Environmental Engineer
Western Refining - Gallup Refinery

cc: Ed Riege w/o report

OIL CONSERVATION DIVISION
2007 ANNUAL GROUNDWATER REPORT

Binder 1: Annual Groundwater Report

Western Refining – Gallup Refinery

McKinley County, New Mexico

September 1, 2008

EPA ID No. NMD000333211

Discharge Permit No. GW-032

Prepared By: Gaurav Rajen, Environmental Engineer, Western Refining – Gallup Refinery

Signature: Gaurav Rajen, Date: 8/28/08

Certified By: Mark Turri, Refinery Manager, Western Refining – Gallup Refinery

Signature: Mark S. Turri, Date: 8/28/08

Executive Summary

The purpose of groundwater sampling performed in 2007 at Gallup Refinery is to determine whether contamination resulting from refinery related activities has entered groundwater at the facility. In previous reports, we have described the twenty monitoring wells that are distributed within the boundaries of the refinery and the nine monitoring wells that are located along the perimeter of the facility's wastewater treatment lagoons and ponds. In 2007, three new shallow groundwater monitoring wells were established, of which two were subsequently closed as directed by the Hazardous Waste Bureau of the New Mexico Environment Department. The additional new well that remained open has not been sampled in 2007.[1]

Groundwater monitoring is conducted at the Gallup Refinery located approximately 17 miles east of Gallup and approximately 1 mile north of Interstate I-40 at Exit 39. The facility is owned and operated by Western Refining Southwest, Inc. with headquarters in El Paso, Texas. U.S. Environmental Protection Agency (EPA) Permit ID No. NMD000333211 pertains to the facility.

In 2007, monitoring conducted between December 27-31, 2007 (and January 1, 2008, as inclement weather prevented completion of sampling of some wells within December 2007)) **showed that in Potable Well #3 the contaminant 2-Methylnapthalene was at a level of 0.032 mg/l. This level exceeds the current NM Water Quality Control Commission standard of 0.03 mg/l for 2-Methylnapthalene.**

In 2007, monitoring conducted between December 27-31, 2007 (and January 1, 2008, as inclement weather prevented completion of sampling of some wells within December 2007)) **showed that Methyl Tetra-Butyl Ether (MTBE) contamination had entered the shallow perched groundwater at OW-14 and OW-30. The levels of MTBE were 0.92 mg/l in OW-14 and 0.29 mg/l in OW-30. These levels exceed the current U.S. EPA Maximum Contaminant level (MCL) of 0.20 mg/l and the current NM Water Quality Control Commission standard of 0.1 mg/l.** The monitoring in 2006 and 2005 had also shown that MTBE contamination had entered the shallow perched groundwater at OW-14 and OW-30.[2] The sampling in 2007, as had been found in 2006, established that the MTBE contamination was limited in extent and had not migrated significantly to other nearby wells (OW-12 had a level of non-detect, OW-13 a level of 0.0013 mg/l, and OW-29 had a level of 0.0043 mg/l). **The monitoring of well OW-14 also found that Benzene was elevated. The benzene concentration in this sample was 0.014 mg/l, exceeding the NM Water Quality Control Commission standard of 0.01 mg/l and the U.S. EPA Maximum Contaminant level (MCL) of 0.005 mg/l.** The highest level of Benzene in this well in 2006 was 0.0042 mg/l, but in 2005 the level was 0.017 mg/l. In 2007, Benzene was not detected in nearby wells (OW-12, OW-13, OW29 and OW-30 had no detectable levels of Benzene.) In 2007, 1-Methylnapthalene was found in the sample taken from OW 14. The level of 1-Methylnapthalene was at 0.027 mg/l, which is below the NM WQCC standard of 0.03 mg/l.

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[1] In 2007, three new shallow groundwater monitoring wells (KA-1, KA-2, and KA-3) were established around the facility's New American Petroleum Institute Oil-Water Separator (NAPIS). Well logs for these new wells are attached to this document. The New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) disapproved these three wells, and three new wells were drilled in March of 2008. Of the three wells drilled in 2007, two were asked by NMED-HWB to be abandoned and one kept open. These wells have not been sampled in 2007.

[2] On 9/27/2005, OW-14 had MTBE levels of 0.077 mg/l, and OW-30 of <0.0025 mg/l. On 10/27/2006, OW-14 had MTBE at a level of 0.18 mg/l, and OW-30 a level of 0.018 mg/l. On 12/28/2006, OW-14 was at level of 0.18 mg/l of MTBE.

The monitoring of the Inlet of Evaporation Pond #1 found Benzene at a level of 0.13 mg/l which exceeds the NM Water Quality Control Commission standard of 0.01 mg/l and the U.S. EPA Maximum Contaminant level (MCL) of 0.005 mg/l. The level of Benzene in the Inlet of Evaporation Pond # 1 in 2006 was less than 0.01 mg/l on 10/30/2006 and at 0.21 mg/l on 3/30/2006. **The levels of Napthalene, 1-Methylnapthalene, and 2-Methylnapthalene were also found to be elevated at 0.2, 0.25, and 0.39 mg/l respectively, and above the NM WQCC standards of 0.03 mg/l.** (On March 30, 2006, the levels of Napthalene, 1-Methylnapthalene and 2-Methylnapthalene were 0.2, 0.62, and 0.41 respectively.)

The monitoring of the Inlet of Evaporation Pond #2 also found Benzene at a level of 0.13 mg/l which exceeds the NM Water Quality Control Commission standard of 0.01 mg/l and the U.S. EPA Maximum Contaminant level (MCL) of 0.005 mg/l. The level of Benzene in the Inlet of Evaporation Pond # 2 on 10/27/2006 was less than 0.01 mg/l. **The levels of Napthalene, 1-Methylnapthalene, and 2-Methylnapthalene were also found to be elevated at 0.25, 0.46 and 0.75 mg/l, respectively, and above the NM WQCC standards of 0.03 mg/l.**

Western Refining conducted annual sampling of GWM-1 on May 24, 2007. The benzene concentration in this sample was 0.016 mg/l, exceeding the NM Water Quality Control Commission standard of 0.01 mg/l and the U.S. EPA Maximum Contaminant level (MCL) of 0.005 mg/l. In 2006, the benzene concentration in this sample was 0.012 mg/l. In 2005, monitoring of well GWM-1 had also shown benzene in elevated concentrations (June 2005 = 0.010 mg/l and September 2005 = 0.081 mg/l) **In 2007, MTBE levels were found in GWM-1, at a concentration of 0.23 mg/l, exceeding the U.S. EPA MCL of 0.20 mg/l and the NM Water Quality Control Commission standard of 0.1 mg/l.**[3] In 2006, the MTBE levels were found and reported as 0.16 mg/l, in 2005 as 0.17 mg/l and in 2004 as 0.048 mg/l.

Arsenic was found in the May 2007 analysis of water from GWM-1 at 0.081 mg/l which exceeds the NMWQS of 0.050 mg/l, and the U.S. EPA MCL of 0.01 mg/l. Arsenic was found in the December 2007 analysis of water from MW-1 at 0.02 mg/l which exceeds the U.S. EPA MCL of 0.01 mg/l.

Elevated levels of fluoride have shown up in some of the boundary wells in 2007, 2006, 2005 and 2004. Chloride was detected in elevated concentration in GWM-1 in 2007 at 1,800 mg/l (3,700 mg/l in 2006 and 2,000 mg/l in 2005).

Groundwater elevations are measured at all monitoring wells during the course of sampling exercises. Additional seasonal fluctuations in some wells are monitored throughout the year. Free product is also recovered from a few wells where such product exists.

[3] In 2008, the MTBE results in GWM-1 are lesser and a level of 0.12 mg/l.

Table of Contents

Section **Title**

I. Annual Groundwater Report (Binder 1)

1. Introduction
   1.1 Facility Description
   1.2 Background Information
   1.3 Site Characteristics

2. Scope of Activities

3. Regulatory Criteria

4. Groundwater Monitoring Results

5. Groundwater Chemical Analytical Data

6. Recommendations Based on Groundwater Testing

7. List of Tables
Permit Condition 16A vi (Volume of product recovered)
Well Data Summary Table
Well Inspection Logs

8. List of Figures
   - Figure 1 – Regional Map
   - Figure 2 – Topographic Map
   - Figure 3 - Well and Boring Locations Map
   - Figure 4 - Potentiometric Elevation Map (Alluvium – Chinle Group Interface Water Levels)
   - Figure 5 - Annual Product Thickness Map (Separate Phase Hydrocarbon Thickness)
   - Figure 6 – Sonsela Water Piezometric Surface
   - Figure 7 – Groundwater Elevation Map of RW-1 and Benzene Isopleth Map in Vicinity (Permit Condition 16A iv)

Appendix A: Gallup Field Sampling Collection and Handling Procedures

II. OCD Addendum (Binder 2)

1. Permit Condition 17B (Temporary land farm analytical results)
2. Permit Condition 19A (Weekly pond inspections)
3. OCD Permit Condition 21:

   a. Summary of All Major Refinery Activities or Events
   b. Results of All Sampling and Monitoring Events
   c. Waste and Wastewater Disposal Summary and Pond Evaporation Balance
   d. Sump and Underground Wastewater Lines Tested
   e. Summary of All Leaks, Spills and Releases and Corrective Actions
   f. Summary of Discovery of New Groundwater Contamination
   g. Summary and Copies of EPA/NMED/RCRA Activity

I. Annual Groundwater Report (Binder 1)

Section 1 Introduction

1.1 Facility Description

This annual groundwater report pertains to the Western Refining Southwest Inc. Gallup Refinery located at Exit 39 on Interstate I-40. This refinery is known as the Gallup Refinery and is located at Jamestown New Mexico, approximately 17 miles east of Gallup. Figure 1 shows the regional location of the Gallup Refinery.

The owner is:

	Western Refining 123 W. Mills Avenue El Paso, TX 79901	(parent corporation)
Operator:	Western Refining Southwest Inc Route 3, Box 7 Gallup, New Mexico 87301	(postal address)
	Western Refining Southwest Inc I-40, Exit 39 Jamestown, New Mexico 87347	(physical address)

SIC code 2911 (petroleum refining) applies to the Gallup Refinery.

The following regulatory identification and permit governs the Gallup Refinery:

- U.S. EPA ID Number NMD000333211
- OCD Discharge Permit No. GW-032

The facility status is corrective action/compliance. Annual and quarterly groundwater sampling is conducted at the facility to evaluate present contamination.

The refinery is situated on an 810 acre irregular shaped tract of land that is substantially located within the lower one quarter of Section 28 and throughout Section 33 of Township 15 North, Range 15 West of the New Mexico Prime Meridian. A small component of the property lies within the northeastern one quarter of Section 4 of Township 14 North, Range 15 West. Figure 2 is a topographic map showing the general layout of the refinery in comparison to the local topography.

1.2 Background Information

The Gallup Refinery is located within a rural and sparsely populated section of McKinley County in Jamestown New Mexico. The setting is a high desert plain on the western slope of the continental divide. The nearest population centers are the Pilot (formerly Giant) Travel Center refueling plaza, the Interstate 40 highway corridor, and a small cluster of residential homes located on the south side of Interstate 40 approximately 2 miles southwest of the refinery (Jamestown). The surrounding land is comprised primarily of public lands and is used for cattle and sheep grazing at a density of less than six cattle or 30 sheep per section. Except for Gallup, McKinley County is predominantly rural area, as are the adjoining portions of neighboring counties.

The refinery primarily receives crude oil via two 6 inch diameter pipelines: Bisti Pipeline comes down from the Four Corners Area and enters the refinery property from the north and Hospah Pipeline comes in from the northeast and is an interconnection with a main interstate pipeline. In addition, the refinery also receives natural gasoline feedstocks via a 4-inch diameter pipeline that comes in from the west along the Interstate 40 corridor from the Conoco gas plant. These feedstocks are then stored in tanks until refined into products. The refinery has an overall capacity to process up to 32,000 barrels per day of crude oil and natural gasoline feedstocks.

The refinery incorporates various processing units that convert crude oil and natural gasoline into finished products. These units are briefly described as follows.

- The crude distillation unit separates crude oil into various fractions; including gas, naphtha, light oil, heavy oil, and residuals.
- The fluidized catalytic cracking unit (FCCU) dissociates (cracks) long-chain hydrocarbon molecules into smaller molecules, and essentially converts heavier oils into naphtha and lighter oils.
- The alkylation unit combines specific types of hydrocarbon molecules into a high octane gasoline blending component.
- The reforming unit combines low octane naphtha molecules to form high octane naphtha.
- The hydrotreating unit removes undesirable sulfur and nitrogen compounds from intermediate feedstocks, and also saturates the feedstocks with hydrogen.
- The isomerization unit converts low octane hydrocarbon molecules into high octane molecules.
- The treater units remove impurities from various intermediate and blending feedstocks in order to produce finished products that comply with sales specifications.
- The sulfur recovery unit converts and recovers various sulfur compounds from other processing units and then produces a solid elemental sulfur byproduct.

As a result of these processing steps, the refinery produces a wide range of petroleum products including propane, butane, unleaded gasoline, diesel, kerosene, and residual fuel. In addition to the aforementioned processing units, various other equipment and systems support the operation of the refinery and are briefly described as follows.

Storage tanks are used throughout the refinery to hold and store crude oil, natural gasoline, intermediate feedstocks, finished products, chemicals, and water. These tanks are all located aboveground and range

in size from 80,000 barrels to less than a 1,000 barrels. A grouping of tanks is commonly referred to as a "tank farm" such as the hot oil "tank farm".

Pumps, valves, and piping systems are used throughout the refinery to transfer various liquids among storage tanks and processing units.

A railroad spur track and a railcar loading rack are used to transfer feed-stocks and products from refinery storage tanks into and out of railcars.

Several tank truck loading racks are used at the refinery to load out finished products and also may receive crude oil, other feedstocks, additives, and chemicals.

A pipeline from the refinery carries diesel fuel to the Pilot (formerly Giant) Travel Center. Gasoline is delivered to the Pilot Center via tanker truck.

A firefighting training facility is used to conduct employee firefighting training. Waste water from the facility, when training is conducted, is pumped into a tank which is then pumped out by a vacuum truck. The vacuum truck pumps the oily water into a process sewer leading to the New API Separator (NAPIS).

The process wastewater system is a network of curbing, paving, catch basins, and underground piping that collects waste water effluent from various processing areas within the refinery and then conveys this wastewater to the new API separator.

The NAPIS is a two compartment oil water separator. Oil is separated from water based on the principle that, given a quiet surface, oil will float to the water surface where it can be skimmed off. The skimmed slop oil is passed to a collection chamber where it is pumped back into the refinery process. The clarified water is piped to the top of dual stripping columns where benzene is removed. The stripped water flows into the first aeration lagoon. Sludge sinks to the bottom of the separator which is periodically vacuumed out by a vacuum truck and disposed as hazardous waste at an approved landfill or recycled and reused in refineries that have this allowable exemption under RCRA.

At the stripping columns, ambient air is blown upwards through the falling cascade of clarified wastewater as it passes through distillation column packing. Countercurrent desorption of benzene from the water occurs due to the high volume of air passing over the relatively large surface area provided by the packing. The desorbed benzene is absorbed into the air stream and vented to the atmosphere. Effluent from the stripper columns gravity flows through piping into the first aeration lagoon.

At the aeration basins, the treated wastewater is mixed with air in order to oxidize any remaining organic constituents and increase the dissolved oxygen concentration available in the water for growth of bacteria and other microbial organisms. The microbes degrade hydrocarbons into carbon dioxide and water. Three 15-hp mechanical aerators provide aeration in the first aeration lagoon with two 15-hp aerators providing aeration in the second lagoon. Effluent from the second aeration lagoon flows onward into the first of several evaporation ponds of various sizes.

At the evaporation ponds, wastewater is converted into vapor via solar and mechanical wind-effect evaporation. No wastewater is discharged from the refinery to surface waters of the state because all of the waste water evaporates. Therefore, the refinery is not required to have a NPDES discharge permit for discharge of treated process water. However, the Gallup refinery does have a NPDES permit for storm water discharge.

The storm water system is a network of valves, gates, berms, embankments, culverts, trenches, ditches, natural arroyos, and retention ponds that collect, convey, control, treat, and release storm water that falls within or passes through refinery property. Storm water discharge from the refinery is very infrequent

due to the arid desert-like nature of the surrounding geographical area. The Gallup Refinery maintains a storm water pollution prevention plan (SWPPP) that includes Best Management Practices (BMPs) for effective storm water pollution prevention. The refinery has constructed several new berms in various areas and improved outfalls (installed barrier dams equipped with gate valves) to minimize the possibility of contaminated runoff leaving the refinery property.

1.3 Site Characteristics

The Gallup Refinery is located within a rural and sparsely populated section of McKinley County. It is situated in the high desert plain on the western flank of the continental divide approximately 17 miles east of Gallup. The surrounding land is comprised primarily of public lands and is used for cattle and sheep grazing at low densities[4]. Surface vegetation consists of native xerophytic vegetation including grasses, shrubs, small junipers, and some prickly pear cacti. Average rainfall at the refinery is less than 7 inches per year, although it can vary to slightly higher levels elsewhere in the county depending on elevation.

Local topography consists of a gradually inclined down-slope from high ground in the southeast to a lowland fluvial plain in the northwest. The highest point on refinery property is located at the southeast corner boundary (elevation approximately 7,040 feet) and the lowest point is located at the northwest corner boundary (elevation approximately 6,860 feet). The refinery processing facility is located on a flat man-made terrace at an elevation of approximately 6,950 feet.

Surface water in this region consists of the man-made evaporation ponds and aeration basins located within the refinery, a livestock watering pond (Jon Myer's Pond) located east of the refinery, two small unnamed spring fed ponds located south of the refinery, and the South Fork of the Puerco River and its tributary arroyos. The various ponds and basins typically contain water consistently throughout the year. The South Fork of the Puerco River and its tributaries are intermittent and generally contain water only during, and immediately after, the occurrence of precipitation.

The 810 acre refinery property site is located on a layered geologic formation. Surface soils generally consist of fluvial and alluvial deposits; primarily clay and silt with minor inter-bedded sand layers. Below this surface layer is the Chinle Formation, which consists of low permeability claystones and siltstones that comprise the shales of this formation. As such, the Chinle Formation effectively serves as an aquiclude. Inter-bedded within the Chinle Formation is the Sonsela Sandstone bed, which represents the uppermost potential aquifer in the region.

The Sonsela Sandstone bed lies within and parallels the dip of the Chinle Formation. As such, its high point is located southeast of the refinery and it slopes downward to the northwest as it passes under the refinery. Due to the confinement of the Chinle Formation aquiclude, the Sonsela Sandstone bed acts as a water-bearing reservoir and is artesian at its lower extremis. Artesian conditions exist through much of the central and western portions of the refinery property.

Groundwater flow within the Chinle Formation is extremely slow and typically averages less than 10^{-10} centimeters per second (less than 0.01 feet per year). Groundwater flow within the surface soil layer above the Chinle Formation is highly variable due to the presence of complex and irregular stratiography; including sand stringers, cobble beds, and dense clay layers. As such, hydraulic conductivity may range from less than 10^{-2} centimeters per second in the gravelly sands immediately overlying the Chinle Formation up to 10^{-8} centimeters per second in the clay soil layers located near the surface.

Shallow groundwater located under refinery property generally flows along the upper contact of the Chinle Formation. The prevailing flow direction is from the southeast and toward the northwest; however, a subsurface ridge has been identified and is thought to deflect some flow in a northeasterly direction in the vicinity of the refinery tank farm.

[4] See, for example, the web site of McKinley County at http://www.co.mckinley.nm.us/

2. Scope of Activities

The annual monitoring of the ground water monitoring wells was conducted primarily in May, and December 2007. The following table shows the dates of sampling and the parameters of analysis:

Well/ Pond	Date Sampled	Parameters of Analysis
OW-11	12-27-2007	Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), and Volatiles (EPA Method 8260B)
OW-12	12-27-2007	Volatiles (EPA Method 8260B)
OW-13	12-27-2007	Volatiles (EPA Method 8260B)
OW-14	1/1/2008 (Inclement weather prevented sampling for this well along with the other wells monitored on 12-27-2007, 12-28-2007, 12-29-2007, and 12-31-2007)	Volatiles (EPA Method 8260B)
OW-29	12-28-2007	Volatiles (EPA Method 8260B)
OW-30	12-28-2007	Volatiles (EPA Method 8260B)
BW-1A	Not sampled - Dry	
BW-1B	Not sampled - Dry	
BW-1C	12-31-2007	Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
BW-2A	12-31-2007	Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
BW-2B	12-31-2007	Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
BW-2C	12-31-2007	Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
BW-3A	Not sampled - Dry	
BW-3B	12-31-2007	Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity

BW-3C	12-31-2007	Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
GWM-1	5-24-2007	Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
GWM-2	Dry	
GWM-3	Dry	
MW-1	12-29-2007	Mercury (EPA Method 7470), Antimony (EPA Method 200B), Cyanide (Method SM4500CNE), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Diesel Range Organics (DRO, EPA Method 8015B), Gasoline Range Organics (GRO, EPA Method 8015B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
MW-4	12-29-2007	Mercury (EPA Method 7470), Antimony (EPA Method 200B), Cyanide (Method SM4500CNE), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Diesel Range Organics (DRO, EPA Method 8015B), Gasoline Range Organics (GRO, EPA Method 8015B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
MW-5	12-29-2007	Mercury (EPA Method 7470), Antimony (EPA Method 200B), Cyanide (Method SM4500CNE), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Diesel Range Organics (DRO, EPA Method 8015B), Gasoline Range Organics (GRO, EPA Method 8015B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
SMW-2	1-1-2008 (Inclement weather prevented sampling for this well along with the other wells monitored on 12-27-2007, 12-28-2007, 12-29-2007, and 12-31-2007)	Mercury (EPA Method 7470), Antimony (EPA Method 200B), Cyanide (Method SM4500CNE), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Diesel Range Organics (DRO, EPA Method 8015B), Gasoline Range Organics (GRO, EPA Method 8015B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH,

		Specific Conductivity
SMW-4	12-29-2007	Mercury (EPA Method 7470), Antimony (EPA Method 200B), Cyanide (Method SM4500CNE), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Diesel Range Organics (DRO, EPA Method 8015B), Gasoline Range Organics (GRO, EPA Method 8015B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
PW-3	1-1-2008 (Inclement weather prevented sampling for this well along with the other wells monitored on 12-27-2007, 12-28-2007, 12-29-2007, and 12-31-2007)	Mercury (EPA Method 7470), Antimony (EPA Method 200B), Cyanide (Method SM4500CNE), Total Recoverable Metals (EPA Method 6010B), Dissolved metals (EPA Method 6010B), Diesel Range Organics (DRO, EPA Method 8015B), Gasoline Range Organics (GRO, EPA Method 8015B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity
RW-1	February, April, June, July and November 2007	Measure product layer thickness
RW-2	February, April, June, July and November 2007	Measure product layer thickness
RW-5	February, April, June, July and November 2007	Measure product layer thickness
RW-6	February, April, June, July and November 2007	Measure product layer thickness
Ponds 1 and 2 -Inlets	December 2007	Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity, TDS (Not all parameters were analyzed for each inlet according to the discharge permit.)
Ponds 1 through 8	November 29 2007	Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), Anions (EPA Method 300), Volatiles (EPA Method 8260B), Semi- Volatiles (EPA Method 8270C), pH, Specific Conductivity

The results of the annual sampling event are summarized in tables provided in Section 4 (Groundwater Monitoring Events). In addition to these wells, several other effluent streams both into and within the wastewater treatment system were sampled. Examples of sampling activities in addition to the sampling of groundwater monitoring wells are provided in section 4.0. Complete details of all of these sampling activities are described in section 3b of Binder 2 attached to this report.

Groundwater Monitoring Well Installations in 2007

In 2007, three new shallow groundwater monitoring wells (KA-1, KA-2, and KA-3) were established around the facility's New American Petroleum Institute Oil-Water Separator (NAPIS). Well logs for these new wells are attached to this document. The New Mexico Environment Department Hazardous Waste Bureau (NMED-HWB) disapproved these three wells, and three new wells were asked to be drilled in 2008. Of the three wells drilled in 2007, two were asked by NMED-HWB to be abandoned and one kept open. These wells have not been sampled in 2007.

Ground water remediation activities are conducted at the Gallup refinery including the pumping of **4.075** gallons of product from recovery well No.1 (RW-1) in 2007.

Perimeter Search

Western Refining conducts a perimeter search of the refinery property on a bimonthly basis starting in December 2004. The inspection focuses on hydrocarbon staining or any release that could result in contamination leaving the property boundary. Western Refining has prepared an inspection checklist to be completed and signed by the environmental employee conducting the inspection. Completed inspection sheets are maintained onsite.

3. Regulatory Criteria

No site-specific groundwater risk based screening levels have been established for the Gallup refinery so the criteria that Gallup groundwater samples are compared with are the New Mexico Water Quality Control Commission Standards 20.6.2.3103 and the U. S. EPA's National Primary Drinking Water Quality Standards (MCLs) and the NMED total petroleum hydrocarbon (TPH) screening guidelines. Tables comparing the results of sampling with the standards are provided in Section 4.

Attachment I

New Mexico Water Quality Control Commission Ground Water Standards

A. Human Health Standards - Ground water shall meet the standards of Section A and B unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria of WQCC Section 1-101.UU. for the combination of contaminants, or the Human Health Standard of WQCC Section 3-103.A. for each contaminant shall apply, whichever is more stringent.

Arsenic (As) 0.1 mg/l
Barium (Ba) 1.0 mg/l
Cadmium (Cd) 0.01 mg/l
Chromium (Cr) 0.05 mg/l
Cyanide (CN) 0.2 mg/l
Fluoride (F) 1.6 mg/l
Lead (Pb) 0.05 mg/l
Total Mercury (Hg) 0.002 mg/l
Nitrate (NO3 as N) 10.0 mg/l
Selenium (Se) 0.05 mg/l
Silver (Ag) 0.05 mg/l
Uranium (U) 5.0 mg/l
Radioactivity: Combined
Radium-226 & Radium-228 30.0 pCi/l
Benzene 0.01 mg/l
Polychlorinated biphenyls (PCB's) 0.001 mg/l
Toluene 0.75 mg/l
Carbon Tetrachloride 0.01 mg/l
1,2-Dichloroethane (EDC) 0.01 mg/l
1,1-Dichloroethylene (1, 1-DCE) 0.005 mg/l
1, 1,2,2-tetrachloroethylene (PCE) 0.02 mg/l
1, 1,2-trichloroethylene (TCE) 0.1 mg/l
ethylbenzene 0.75 mg/l
total xylenes 0.62 mg/l
methylene chloride 0.1 mg/l
chloroform 0.1 mg/l
1, 1 -dichloroethane 0.025 mg/l
ethylene dibromide (EDB) 0.0001 mg/l
1, 1, 1 -trichloroethane 0.06 mg/l
1, 1,2-trichloroethane 0.01 mg/l
1, 1,2,2-tetrachloroethane 0.01 mg/l
vinyl chloride 0.001 mg/l
PAH'S: total naphthalene plus
monomethylnaphthalenes 0.03 mg/l
benzo-a-pyrene 0.0007 mg/l

B. Other Standards for Domestic Water Supply

Chloride (Cl) 250. mg/l
Copper (Cu) 1.0 mg/l
Iron (Fe) 1.0 mg/l
Manganese (Mn) 0.2 mg/l
Phenols 0.005 mg/l
Sulfate (SO4) 600. mg/l
Total Dissolved Solids (TDS) 1000. mg/l
Zinc (Zn) 10. mg/l
pH between 6 and 9

C. Standards for Irrigation Use

Ground water shall meet the standards of subsections A, B, and C unless otherwise provided.

Aluminum (Al) 5.0 mg/l
Boron (B) 0.75 mg/l
Cobalt (Co) 0.05 mg/l
Molybdenum (Mo) 1.0 mg/l
Nickel (Ni) 0.2 mg/l

TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 6 WATER QUALITY
PART 4 STANDARDS FOR INTERSTATE AND INTRASTATE SURFACE WATERS

20.6.4.1 ISSUING AGENCY: Water Quality Control commission.
[20.6.4.1 NMAC - Rp 20 NMAC 6.1.1001, 10-12-00]

20.6.4.2 SCOPE: Except as otherwise provided by statute or regulation of the water quality control commission, this part governs all surface waters of the state of New Mexico, which are subject to the New Mexico Water Quality Act, Sections 74-6-1 through 74-6-17 NMSA 1978.
[20.6.4.2 NMAC - Rp 20 NMAC 6.1.1002, 10-12-00; A, 05-23-05]

20.6.4.3 STATUTORY AUTHORITY: This part is adopted by the water quality control commission pursuant to Subsection C of Section 74-6-4 NMSA 1978.
[20.6.4.3 NMAC - Rp 20 NMAC 6.1.1003, 10-12-00]

20.6.4.4 DURATION: Permanent.
[20.6.4.4 NMAC - Rp 20 NMAC 6.1.1004, 10-12-00]

20.6.4.5 EFFECTIVE DATE: October 12, 2000, unless a later date is indicated in the history note at the end of a section.
[20.6.4.5 NMAC - Rp 20 NMAC 6.1.1005, 10-12-00]

20.6.4.6 OBJECTIVE:

A. The purpose of this part is to establish water quality standards that consist of the designated use or uses of surface waters of the state, the water quality criteria necessary to protect the use or uses and an antidegradation policy.

B. The state of New Mexico is required under the New Mexico Water Quality Act (Subsection C of Section 74-6-4 NMSA 1978) and the federal Clean Water Act, as amended (33 U.S.C. Section 1251 *et seq.*) to adopt water quality standards that protect the public health or welfare, enhance the quality of water and are consistent with and serve the purposes of the New Mexico Water Quality Act and the federal Clean Water Act. It is the objective of the federal Clean Water Act to restore and maintain the chemical, physical and biological integrity of the nation's waters, including those in New Mexico. This part is consistent with Section 101(a)(2) of the federal Clean Water Act, which declares that it is the national goal that wherever attainable, an interim goal of water quality that provides for the protection and propagation of fish, shellfish and wildlife and provides for recreation in and on the water be achieved by July 1, 1983. Agricultural, municipal, domestic and industrial water supply are other essential uses of New Mexico's surface water; however, water contaminants resulting from these activities will not be permitted to lower the quality of surface waters of the state below that required for protection and propagation of fish, shellfish and wildlife and recreation in and on the water, where practicable.

C. Pursuant to Subsection A of Section 74-6-12 NMSA 1978, this part does not grant to the water quality control commission or to any other entity the power to take away or modify property rights in water.
[20.6.4.6 NMAC - Rp 20 NMAC 6.1.1006, 10-12-00; A, 05-23-05]

20.6.4.7 DEFINITIONS: Terms defined in the New Mexico Water Quality Act, but not defined in this part will have the meaning given in the Water Quality Act.

A. **"Acute toxicity"** means toxicity involving a stimulus severe enough to induce a response in 96 hours of exposure or less. Acute toxicity is not always measured in terms of lethality, but may include other toxic effects that occur within a short time period.

B. "**Adjusted gross alpha**" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample, including radium-226, but excluding radon-222 and uranium. Also excluded are source, special nuclear and by-product material as defined by the Atomic Energy Act of 1954.

C. "**Aquatic life**" means any plant or animal life that uses surface water as primary habitat for at least a portion of its life cycle, but does not include avian or mammalian species.

D. "**Attainable**" means achievable by the imposition of effluent limits required under sections 301(b) and 306 of the Clean Water Act and implementation of cost-effective and reasonable best management practices for nonpoint source control.

E. **"Best management practices" or "BMPs":**

(1) for national pollutant discharge elimination system (NPDES) permitting purposes means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution of "waters of the United States;" BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal or drainage from raw material storage; or

(2) for nonpoint source pollution control purposes means methods, measures or practices selected by an agency to meet its nonpoint source control needs; BMPs include but are not limited to structural and nonstructural controls

and operation and maintenance procedures; BMPS can be applied before, during and after pollution-producing activities to reduce or eliminate the introduction of pollutants into receiving waters; BMPs for nonpoint source pollution control purposes shall not be mandatory except as required by state or federal law.

F. **"Bioaccumulation"** refers to the uptake and retention of a substance by an organism from its surrounding medium and food.

G. **"Bioaccumulation factor"** is the ratio of a substance's concentration in tissue versus its concentration in ambient water, in situations where the organism and the food chain are exposed.

H. **"Biomonitoring"** means the use of living organisms to test the suitability of effluents for discharge into receiving waters or to test the quality of surface waters of the state.

I. "**CAS number**" means an assigned number by chemical abstract service (CAS) to identify a substance. CAS numbers index information published in chemical abstracts by the American chemical society.

J. **"cfs"** means cubic feet per second.

K. **"cfu"** means colony forming units.

L. **"Chronic toxicity"** means toxicity involving a stimulus that lingers or continues for a relatively long period relative to the life span of an organism. Chronic effects include, but are not limited to, lethality, growth impairment, behavioral modifications, disease and reduced reproduction.

M. **"Classified water of the state"** means a surface water of the state, or reach of a surface water of the state, for which the commission has adopted a segment description and has designated a use or uses and applicable water quality criteria in 20.6.4.101 through 20.6.4.899 NMAC.

N. **"Coldwater"** in reference to an aquatic life use means a surface water of the state where the water temperature and other characteristics are suitable for the support or propagation or both of coldwater aquatic life.

O. **"Commission"** means the New Mexico water quality control commission.

P. **"Criteria"** are elements of state water quality standards, expressed as constituent concentrations, levels or narrative statements, representing a quality of water that supports a use. When criteria are met, water quality will protect the designated use.

Q. "**DDT and derivatives**" means 4,4'-DDT (CAS number 50293), 4,4'-DDE (CAS number 72559) and 4,4'-DDD (CAS number 72548).

R. **"Department"** means the New Mexico environment department.

S. **"Designated management agency"** means an agency as defined by 40 CFR Section 130.9(d).

T. **"Designated use"** means a use specified in Sections 20.6.4.101 through 20.6.4.899 NMAC for a surface water of the state whether or not it is being attained.

U. **"Dissolved"** means a constituent of a water sample that will pass through a 0.45-micrometer pore-size membrane filter under a pressure differential not exceeding one atmosphere. The "dissolved" fraction is also termed "filterable residue."

V. **"Domestic water supply"** means a surface water of the state that could be used for drinking or culinary purposes after disinfection.

W. "**Escherichia coli" or "E. coli"** means a bacterial species that inhabits the intestinal tract of humans and other warm-blooded animals, the presence of which indicates the potential presence of pathogenic microorganisms capable of producing disease.

X. **"Ephemeral"** when used to describe a surface water of the state means a water body that flows only in direct response to precipitation or snowmelt in the immediate locality; its bed is always above the water table of the adjacent region.

Y. **"Existing use"** means a use actually attained in a surface water of the state on or after November 28, 1975, whether or not it is a designated use.

Z. **"Fecal coliform bacteria"** means the portion of the coliform group of bacteria present in the gut or the feces of warmblooded animals. It generally includes organisms capable of producing gas from lactose broth in a suitable culture medium within 24 hours at 44.5 ± 0.2°C.

AA. **"Fish culture"** means production of coldwater or warmwater fishes in a hatchery or rearing station.

BB. "**Fish early life stages**" means the egg and larval stages of development of fish ending when the fish has its full complement of fin rays and loses larval characteristics.

CC. **"High quality coldwater"** in reference to an aquatic life use means a perennial surface water of the state in a minimally disturbed condition with considerable aesthetic value and superior coldwater aquatic life habitat. A surface water of the state to be so categorized must have water quality, stream bed characteristics and other attributes of habitat sufficient to protect and maintain a propagating coldwater aquatic life population.

DD. **"Intermittent"** when used to describe a surface water of the state means a water body that contains water only at certain times of the year, such as when it receives flow from springs, melting snow or precipitation.

EE. **"Interstate waters"** means all surface waters of the state that cross or form a part of the border between states.

FF. **"Intrastate waters"** means all surface waters of the state that are not interstate waters.

GG. **"Irrigation"** means application of water to land areas to supply the water needs of beneficial plants.

HH. **"LC-50"** means the concentration of a substance that is lethal to 50 percent of the test organisms within a

defined time period. The length of the time period, which may vary from 24 hours to one week or more, depends on the test method selected to yield the information desired.

II. "**Limited aquatic life**" as a designated use, means the surface water is capable of supporting only a limited community of aquatic life. This subcategory includes surface waters that support aquatic species selectively adapted to take advantage of naturally occurring rapid environmental changes, ephemeral or intermittent water, high turbidity, fluctuating temperature, low dissolved oxygen content or unique chemical characteristics.

JJ. **"Livestock watering"** means the use of a surface water of the state as a supply of water for consumption by livestock.

KK. **"Marginal coldwater"** in reference to an aquatic life use means that natural intermittent or low flows, or other natural habitat conditions severely limit maintenance of a coldwater aquatic life population or historical data indicate that the maximum temperature in the surface water of the state may exceed 25°C (77°F).

LL. **"Marginal warmwater"** in reference to an aquatic life use means natural intermittent or low flow or other natural habitat conditions severely limit the ability of the surface water of the state to sustain a natural aquatic life population on a continuous annual basis; or historical data indicate that natural water temperature routinely exceeds 32.2°C (90°F).

MM. **"Micrograms per liter (µg/L)"** means micrograms of solute per liter of solution; equivalent to parts per billion when the specific gravity of the solution = 1.000.

NN. **"Milligrams per liter (mg/L)"** means milligrams of solute per liter of solution; equivalent to parts per million when the specific gravity of the solution = 1.000.

OO. **"Minimum quantification level"** means the minimum quantification level for a constituent determined by official published documents of the United States environmental protection agency.

PP. **"Natural causes"** means those causal agents that would affect water quality and the effect is not caused by human activity but is due to naturally occurring conditions.

QQ. **"Nonpoint source"** means any source of pollutants not regulated as a point source that degrades the quality or adversely affects the biological, chemical or physical integrity of surface waters of the state.

RR. **"NTU"** means nephelometric turbidity units based on a standard method using formazin polymer or its equivalent as the standard reference suspension. Nephelometric turbidity measurements expressed in units of NTU are numerically identical to the same measurements expressed in units of FTU (formazin turbidity units).

SS. "**Organoleptic**" means the capability to produce a detectable sensory stimulus such as odor or taste.

TT. "**Playa**" means a shallow closed basin lake typically found in the high plains and deserts.

UU. **"Perennial"** when used to describe a surface water of the state means the water body contains water continuously throughout the year in all years; its upper surface, generally, is lower than the water table of the region adjoining the stream.

VV. **"Picocurie (pCi)"** means a measure of radioactivity equal to the quantity of a radioactive substance in which the rate of disintegrations is 2.22 per minute.

WW. **"Point source"** means any discernible, confined and discrete conveyance from which pollutants are or may be discharged into a surface water of the state, but does not include return flows from irrigated agriculture.

XX. "**Practicable**" means that which may be done, practiced or accomplished; that which is performable, feasible, possible.

YY. **"Primary contact"** means any recreational or other water use in which there is prolonged and intimate human contact with the water, such as swimming and water skiing, involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard. Primary contact also means any use of surface waters of the state for cultural, religious or ceremonial purposes in which there is intimate human contact with the water, including but not limited to ingestion or immersion, that could pose a significant health hazard.

ZZ. **"Secondary contact"** means any recreational or other water use in which human contact with the water may occur and in which the probability of ingesting appreciable quantities of water is minimal, such as fishing, wading, commercial and recreational boating and any limited seasonal contact.

AAA. **"Segment"** means a classified surface water of the state described in 20.6.4.101 through 20.6.4.899 NMAC. The water within a segment should have the same uses, similar hydrologic characteristics or flow regimes, and natural physical, chemical and biological characteristics and exhibit similar reactions to external stresses, such as the discharge of pollutants.

BBB. "**Specific conductance**" means conductivity adjusted to 25°C.

CCC. **"State"** means the state of New Mexico.

DDD. **"Surface water(s) of the state"** means all surface waters situated wholly or partly within or bordering upon the state, including lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, reservoirs or natural ponds. Surface waters of the state also means all tributaries of such waters, including adjacent wetlands, any manmade bodies of water that were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state, and any "waters of the United States" as defined under the Clean Water Act that are not included in the preceding description. Surface waters of the state does not include private waters that do not combine with other surface or subsurface water or any water under tribal regulatory jurisdiction pursuant to Section 518 of the Clean Water Act. Waste treatment systems, including treatment ponds or lagoons designed and actively

used to meet requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR Part 423.11(m) that also meet the criteria of this definition), are not surface waters of the state, unless they were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state.

EEE. **"TDS"** means total dissolved solids, also termed "total filterable residue."

FFF. **"Technology-based limitations"** means the application of technology-based effluent limitations as required under Section 301(b) of the federal Clean Water Act.

GGG. **"Total"** means a constituent of a water sample that is analytically determined without filtration.

HHH. "**Total PCBs**" means the sum of all homolog, all isomer, all congener or all aroclor analyses.

III. **"Toxic pollutant"** means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring.

JJJ. "**Tributary**" means a perennial, intermittent or ephemeral waterbody that flows into a larger waterbody, and includes a tributary of a tributary.

KKK. **"Turbidity"** is an expression of the optical property in water that causes incident light to be scattered or absorbed rather than transmitted in straight lines.

LLL. **"Warmwater"** with reference to an aquatic life use means that water temperature and other characteristics are suitable for the support or propagation or both of warmwater aquatic life.

MMM. **"Water contaminant"** means any substance that could alter if discharged or spilled the physical, chemical, biological or radiological qualities of water. "Water contaminant" does not mean source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954, but may include all other radioactive materials, including but not limited to radium and accelerator-produced isotopes.

NNN. **"Water pollutant"** means a water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or to unreasonably interfere with the public welfare or the use of property.

OOO. **"Water quality-based controls"** means effluent limitations, as provided under Section 301(b)(1)(C) of the federal Clean Water Act, that are developed and imposed on point-source dischargers in order to protect and maintain applicable water quality standards. These controls are more stringent than the technology-based effluent limitations required under other paragraphs of Section 301(b).

PPP. **"Wetlands"** means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico. Wetlands that are constructed outside of a surface water of the state for the purpose of providing wastewater treatment and that do not impound a surface water of the state are not included in this definition.

QQQ. **"Wildlife habitat"** means a surface water of the state used by plants and animals not considered as pathogens, vectors for pathogens or intermediate hosts for pathogens for humans or domesticated livestock and plants.
[20.6.4.7 NMAC - Rp 20 NMAC 6.1.1007, 10-12-00; A, 7-19-01; A, 05-23-05; A, 07-17-05; A, 08-01-07]

20.6.4.8 ANTIDEGRADATION POLICY AND IMPLEMENTATION PLAN:

A. **Antidegradation Policy**: This antidegradation policy applies to all surface waters of the state.

(1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected in all surface waters of the state.

(2) Where the quality of a surface water of the state exceeds levels necessary to support the propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the commission finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the state's continuing planning process, that allowing lower water quality is necessary to accommodate important economic and social development in the area in which the water is located. In allowing such degradation or lower water quality, the state shall assure water quality adequate to protect existing uses fully. Further, the state shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable BMPs for nonpoint source control. Additionally, the state shall encourage the use of watershed planning as a further means to protect surface waters of the state.

(3) No degradation shall be allowed in waters designated by the commission as outstanding national resource waters (ONRWs), except as provided in Subparagraphs (a) through (e) of this paragraph.

(a) Temporary and short-term degradation of water quality shall be allowed only when such degradation can be shown to result in restoration or maintenance of the chemical, physical or biological integrity of the ONRW and is consistent with the objectives in 20.6.4.6 NMAC and with the purposes for which the commission designated the ONRW.

(b) Temporary and short-term degradation of water quality that complies with Subparagraph (a) of this paragraph shall be limited to the shortest possible time and last no longer than 12 months, unless approved by the commission.

(c) Temporary and short-term degradation shall only be approved on a case-by-case basis by the commission, the department or a designated management agency as appropriate. Temporary and short-term degradation

resulting from applications under 20.6.4.16 NMAC shall be considered and may be approved by the commission. All other temporary and short-term degradation shall be considered and may be approved by the department or by a designated management agency pursuant to a commission-approved memorandum of agreement between the department and the designated management agency. In approving temporary and short-term degradation, the commission, the department or the designated management agency shall consider and minimize the frequency and cumulative effects of such degradation. The approval of temporary and short-term degradation shall not result in permanent degradation of water quality in the ONRW or in water quality lower than necessary to protect existing uses in the ONRW and shall not alter the essential character or special use that makes the water an ONRW.

(d) In implementing activities that may result in temporary and short-term degradation of water quality, all practical means of minimizing such temporary and short-term degradation shall be utilized.

(e) Preexisting land-use activities allowed by federal or state law prior to designation as an ONRW, and controlled by best management practices (BMPs), shall be allowed to continue so long as there are no new or increased discharges resulting from the activity after designation of the ONRW.

(4) In those cases where potential water quality impairment associated with a thermal discharge is involved, this antidegradation policy and implementing method shall be consistent with Section 316 of the federal Clean Water Act.

(5) In implementing this section, the commission through the appropriate regional offices of the United States environmental protection agency will keep the administrator advised and provided with such information concerning the surface waters of the state as he or she will need to discharge his or her responsibilities under the federal Clean Water Act.

B. Implementation Plan: The department, acting under authority delegated by the commission, implements the water quality standards, including the antidegradation policy, by describing specific methods and procedures in the continuing planning process and by establishing and maintaining controls on the discharge of pollutants to surface waters of the state. The steps summarized in the following paragraphs, which may not all be applicable in every water pollution control action, list the implementation activities of the department. These implementation activities are supplemented by detailed antidegradation review procedures developed under the state's continuing planning process. The department:

(1) obtains information pertinent to the impact of the effluent on the receiving water and advises the prospective discharger of requirements for obtaining a permit to discharge;

(2) reviews the adequacy of existing data and conducts a water quality survey of the receiving water in accordance with an annually reviewed, ranked priority list of surface waters of the state requiring total maximum daily loads pursuant to Section 303(d) of the federal Clean Water Act;

(3) assesses the probable impact of the effluent on the receiving water relative to its attainable or designated uses and numeric and narrative criteria;

(4) requires the highest and best degree of wastewater treatment practicable and commensurate with protecting and maintaining the designated uses and existing water quality of surface waters of the state;

(5) develops water quality based effluent limitations and comments on technology based effluent limitations, as appropriate, for inclusion in any federal permit issued to a discharger pursuant to Section 402 of the federal Clean Water Act;

(6) requires that these effluent limitations be included in any such permit as a condition for state certification pursuant to Section 401 of the federal Clean Water Act;

(7) coordinates its water pollution control activities with other constituent agencies of the commission, and with local, state and federal agencies, as appropriate;

(8) develops and pursues inspection and enforcement programs to ensure that dischargers comply with state regulations and standards, and complements EPA's enforcement of federal permits;

(9) ensures that the provisions for public participation required by the New Mexico Water Quality Act and the federal Clean Water Act are followed;

(10) provides continuing technical training for wastewater treatment facility operators through the utility operators training and certification programs;

(11) provides funds to assist the construction of publicly owned wastewater treatment facilities through the wastewater construction program authorized by Section 601 of the federal Clean Water Act, and through funds appropriated by the New Mexico legislature;

(12) conducts water quality surveillance of the surface waters of the state to assess the effectiveness of water pollution controls, determines whether water quality standards are being attained, and proposes amendments to improve water quality standards;

(13) encourages, in conjunction with other state agencies, implementation of the best management practices set forth in the New Mexico statewide water quality management plan and the nonpoint source management program, such implementation shall not be mandatory except as provided by federal or state law;

(14) evaluates the effectiveness of BMPs selected to prevent, reduce or abate sources of water pollutants;

(15) develops procedures for assessing use attainment as required by 20.6.4.15 NMAC and establishing site-specific standards; and

(16) develops list of surface waters of the state not attaining designated uses, pursuant to Sections 305(b) and 303(d) of the federal Clean Water Act.

[20.6.4.8 NMAC - Rp 20 NMAC 6.1.1101, 10-12-00; A, 05-23-05; A, 08-01-07]

20.6.4.9 OUTSTANDING NATIONAL RESOURCE WATERS:

A. Procedures for nominating an ONRW: Any person may nominate a surface water of the state for designation as an ONRW by filing a petition with the commission pursuant to the *guidelines for water quality control commission regulation hearings*. A petition to classify a surface water of the state as an ONRW shall include:

(1) a map of the surface water of the state, including the location and proposed upstream and downstream boundaries;

(2) a written statement and evidence based on scientific principles in support of the nomination, including specific reference to one or more the applicable ONRW criteria listed in Subsection B of this section;

(3) water quality data including chemical, physical or biological parameters, if available, to establish a baseline condition for the proposed ONRW;

(4) a discussion of activities that might contribute to the reduction of water quality in the proposed ONRW;

(5) any additional evidence to substantiate such a designation, including a discussion of the economic impact of the designation on the local and regional economy within the state of New Mexico and the benefit to the state; and

(6) affidavit of publication of notice of the petition in a newspaper of general circulation in the affected counties and in a newspaper of general statewide circulation.

B. Criteria for ONRWs: A surface water of the state, or a portion of a surface water of the state, may be designated as an ONRW where the commission determines that the designation is beneficial to the state of New Mexico, and:

(1) the water is a significant attribute of a state gold medal trout fishery, national or state park, national or state monument, national or state wildlife refuge or designated wilderness area, or is part of a designated wild river under the federal Wild and Scenic Rivers Act; or

(2) the water has exceptional recreational or ecological significance; or

(3) the existing water quality is equal to or better than the numeric criteria for protection of aquatic life uses, recreational uses and human health uses, and the water has not been significantly modified by human activities in a manner that substantially detracts from its value as a natural resource.

C. Pursuant to a petition filed under Subsection A of this section, the commission may classify a surface water of the state or a portion of a surface water of the state as an ONRW if the criteria set out in Subsection B of this section are met.

D. Waters classified as ONRWs: The following waters are classified as ONRWs:

(1) Rio Santa Barbara, including the west, middle and east forks from their headwaters downstream to the boundary of the Pecos Wilderness; and

(2) the waters within the United States forest service Valle Vidal special management unit including:

(a) Rio Costilla, including Comanche, La Cueva, Fernandez, Chuckwagon, Little Costilla, Holman, Gold, Grassy, LaBelle and Vidal creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit;

(b) Middle Ponil creek, including the waters of Greenwood Canyon, from their headwaters downstream to the boundary of the Elliott S. Barker wildlife management area;

(c) Shuree lakes;

(d) North Ponil creek, including McCrystal and Seally Canyon creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; and

(e) Leandro creek from its headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit.

[20.6.4.9 NMAC - Rn, Subsections B, C and D of 20.6.4.8 NMAC, 05-23-05; A, 05-23-05; A, 07-17-05; A, 02-16-06]

20.6.4.10 REVIEW OF STANDARDS; NEED FOR ADDITIONAL STUDIES:

A. Section 303(c)(1) of the federal Clean Water Act requires that the state hold public hearings at least once every three years for the purpose of reviewing water quality standards and proposing, as appropriate, necessary revisions to water quality standards.

B. It is recognized that, in some cases, numeric criteria have been adopted that reflect use designations rather than existing conditions of surface waters of the state. Narrative criteria are required for many constituents because accurate data on background levels are lacking. More intensive water quality monitoring may identify surface waters of the state where existing quality is considerably better than the established criteria. When justified by sufficient data and information, the water quality criteria will be modified to protect the attainable uses.

C. It is also recognized that contributions of water contaminants by diffuse nonpoint sources of water pollution may make attainment of certain criteria difficult. Revision of these criteria may be necessary as new information is obtained on nonpoint sources and other problems unique to semi-arid regions.

[20.6.4.10 NMAC - Rp 20 NMAC 6.1.1102, 10-12-00; Rn, 20.6.4.9 NMAC, 05-23-05; A, 05-23-05]

20.6.4.11 APPLICABILITY OF WATER QUALITY STANDARDS:

A. Waters Created by Discharge: When a discharge to an otherwise ephemeral or intermittent, non-

classified surface water of the state causes a water to enter a surface water of the state with criteria that are more restrictive than the criteria listed in 20.6.4.97 or 20.6.4.98 NMAC, the more restrictive criteria shall apply at the point such a water enters the surface water of the state with the more restrictive criteria. If discharge to such otherwise ephemeral or intermittent, non-classified waters of the state ceases or is diverted elsewhere the criteria listed in 20.6.4.97 or 20.6.4.98 NMAC shall apply.

B. Critical Low Flow: The numeric standards set under Subsection F of 20.6.4.13 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC may not be attainable when streamflow is less than the critical low flow, but narrative criteria in 20.6.4.13 NMAC will continue to apply. The critical low flow of a stream at a particular site shall be:

(1) for human health criteria, the harmonic mean flow; "harmonic mean flow" is the number of daily flow measurements divided by the sum of the reciprocals of the flows; that is, it is the reciprocal of the mean of reciprocals; for ephemeral waters the calculation shall be based upon the nonzero flow intervals and modified by including a factor to adjust for the proportion of intervals with zero flow;

$$\text{Harmonic Mean} = \frac{n}{\sum 1/Q}$$

where n = number of flow values
and Q = flow value

$$\text{Modified Harmonic Mean} = \left[\frac{\sum_{i=1}^{Nt-No} \frac{1}{Qi}}{Nt - No}\right]^{-1} x \left[\frac{Nt - No}{Nt}\right]$$

where, Qi = nonzero flow
Nt = total number of flow values
and N_0 = number of zero flow values

(2) for all other narrative and numeric criteria, the minimum average four consecutive day flow that occurs with a frequency of once in three years (4Q3); critical low-flow numeric values may be determined on an annual, a seasonal or a monthly basis, as appropriate, after due consideration of site-specific conditions.

C. Guaranteed Minimum Flow: The commission may allow the use of a contractually guaranteed minimum streamflow in lieu of a critical low flow determined under Subsection B of this section on a case-by-case basis and upon consultation with the interstate stream commission. Should drought, litigation or any other reason interrupt or interfere with minimum flows under a guaranteed minimum flow contract for a period of at least thirty consecutive days, such permission, at the sole discretion of the commission, may then be revoked. Any minimum flow specified under such revoked permission shall be superseded by a critical low flow determined under Subsection B of this section. A public notice of the request for a guaranteed minimum flow shall be published in a newspaper of general circulation by the department at least 30 days prior to scheduled action by the commission. These water quality standards do not grant to the commission or any other entity the power to create, take away or modify property rights in water.

D. Mixing Zones: A limited mixing zone, contiguous to a point source wastewater discharge, may be allowed in any stream receiving such a discharge. Mixing zones serve as regions of initial dilution that allow the application of a dilution factor in calculations of effluent limitations. Effluent limitations shall be developed that will protect the most sensitive existing, designated or attainable use of the receiving water.

E. Mixing Zone Limitations: Wastewater mixing zones, in which the numeric criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.101 through 20.6.4.899 NMAC or 20.6.4.900 NMAC may be exceeded, shall be subject to the following limitations:

(1) Mixing zones are not allowed for discharges to publicly owned lakes, reservoirs, or playas; these effluents shall meet all applicable criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC at the point of discharge.

(2) The acute numeric criteria, as set out in Paragraph (1) of Subsection I, Subsection J, and Subsection K of 20.6.4.900 NMAC, shall be attained at the point of discharge for any discharge to a surface water of the state with a designated aquatic life use.

(3) The general criteria set out in Subsections A, B, C, D, E, G, H and J of 20.6.4.13 NMAC, and the provision set out in Subsection D of 20.6.4.14 NMAC are applicable within mixing zones.

(4) The areal extent and concentration isopleths of a particular mixing zone will depend on site-specific conditions including, but not limited to, wastewater flow, receiving water critical low flow, outfall design, channel characteristics and climatic conditions and, if needed, shall be determined on a case-by-case basis. When the physical boundaries or other characteristics of a particular mixing zone must be known, the methods presented in Section 4.4.5,

"Ambient-induced mixing," in "Technical support document for water quality-based toxics control" (March 1991, EPA/505/2-90-001) shall be used.

(5) All applicable water quality criteria set under Subsection F of 20.6.4.13 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC, shall be attained at the boundaries of mixing zones. A continuous zone of passage through or around the mixing zone shall be maintained in which the water quality meets all applicable criteria and allows the migration of aquatic life presently common in surface waters of the state with no effect on their populations.

F. **Multiple Uses**: When a classified water of the state has more than a single designated use, the applicable numeric criteria shall be the most stringent of those established for such classified water.

G. Human health criteria in Subsection J of Section 20.6.4.900 NMAC shall apply to those waters with a designated, existing or attainable aquatic life use. When limited aquatic life is a designated use, the human health criteria shall apply only if adopted on a segment-specific basis. The human health criteria for persistent toxic pollutants, as identified in Subsection J of Section 20.6.4.900 NMAC, shall also apply to all tributaries of waters with a designated, existing or attainable aquatic life use.

H. **Aquatic Life:** Aquatic life criteria shall apply to all surface waters of the state containing an aquatic life community. Except when a limited aquatic life use and specific criteria have been designated on a segment-specific basis, or when otherwise provided in this part, chronic aquatic life criteria listed in Subsection J of 20.6.4.900 NMAC are applicable to all perennial surface waters of the state, and acute aquatic life criteria listed in Subsection J of 20.6.4.900 NMAC are applicable to all surface waters of the state.

I. **Exceptions:** Numeric criteria for temperature, dissolved solids, dissolved oxygen, sediment or turbidity adopted under the Water Quality Act do not apply when changes in temperature, dissolved solids, dissolved oxygen, sediment or turbidity in a surface water of the state are attributable to:

(1) natural causes (discharges from municipal separate storm sewers are not covered by this exception.); or

(2) the reasonable operation of irrigation and flood control facilities that are not subject to federal or state water pollution control permitting; major reconstruction of storage dams or division dams except for emergency actions necessary to protect health and safety of the public are not covered by this exception.

[20.6.4.11 NMAC - Rp 20 NMAC 6.1.1103, 10-12-00; A, 10-11-02; Rn, 20.6.4.10 NMAC, 05-23-05; A, 05-23-05]

20.6.4.12 **COMPLIANCE WITH WATER QUALITY STANDARDS:** The following provisions apply to determining compliance for enforcement purposes; they do not apply for purposes of determining attainment of uses. The department has developed assessment protocols for the purpose of determining attainment of uses that are available for review from the department's surface water quality bureau.

A. Compliance with acute water quality criteria shall be determined from the analytical results of a single grab sample. Acute criteria shall not be exceeded.

B. Compliance with chronic water quality criteria shall be determined from the arithmetic mean of the analytical results of samples collected using applicable protocols. Chronic criteria shall not be exceeded more than once every three years.

C. Compliance with water quality standards for total ammonia shall be determined by performing the biomonitoring procedures set out in Subsections D and E of 20.6.4.14 NMAC, or by attainment of applicable ammonia criteria set out in Subsections K, L and M of 20.6.4.900 NMAC.

D. Compliance with water quality criteria for the protection of human health shall be determined from the analytical results of representative grab samples, as defined in the water quality management plan. Human health criteria shall not be exceeded.

E. The commission may establish a numeric water quality standard at a concentration that is below the minimum quantification level. In such cases, the water quality standard is enforceable at the minimum quantification level.

F. In determining compliance with criteria for chromium an analysis that measures both the trivalent and hexavalent ions shall be used.

G. For compliance with hardness-dependent numeric criteria, hardness (as mg $CaCO_3$/L) shall be determined from a sample taken at the same time that the sample for the water contaminant is taken.

H. The hardness-dependent formulae for metals shall be valid only for hardness values of 0-400 mg/L. For values above 400 mg/L, the value for 400 mg/L shall apply.

I. The total ammonia tables shall be valid only for temperatures of 0 to 30°C and for pH values of 6.5 to 9.0. For temperatures below 0°C, the total ammonia criteria for 0°C shall apply; for temperatures above 30°C, the total ammonia criteria for 30°C shall apply. For pH values below 6.5, the total ammonia criteria for 6.5 shall apply; for pH values above 9.0, the total ammonia criteria for 9.0 shall apply.

J. **Compliance Schedules**: It shall be the policy of the commission to allow on a case-by-case basis the inclusion of a schedule of compliance in a NPDES permit issued to an existing facility. Such schedule of compliance will be for the purpose of providing a permittee with adequate time to make treatment facility modifications necessary to comply with water quality based permit limitations determined to be necessary to implement new or revised water quality standards. Compliance schedules may be included in NPDES permits at the time of permit renewal or modification and shall be written to require compliance at the earliest practicable time. Compliance schedules shall also specify milestone dates so as to measure progress towards final project completion (e.g., design completion, construction start, construction completion, date

of compliance).
[20.6.4.12 NMAC - Rp 20 NMAC 6.1.1104, 10-12-00; A, 10-11-02; Rn, 20.6.4.11 NMAC, 05-23-05; A, 05-23-05]

20.6.4.13 GENERAL CRITERIA: General criteria are established to sustain and protect existing or attainable uses of surface waters of the state. These general criteria apply to all surface waters of the state at all times, unless a specified criterion is provided elsewhere in this part. Surface waters of the state shall be free of any water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or unreasonably interfere with the public welfare or the use of property.

A. Bottom Deposits and Suspended or Settleable Solids:

(1) Surface waters of the state shall be free of water contaminants including fine sediment particles (less than two millimeters in diameter), precipitates or organic or inorganic solids from other than natural causes that have settled to form layers on or fill the interstices of the natural or dominant substrate in quantities that damage or impair the normal growth, function or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom.

(2) Suspended or settleable solids from other than natural causes shall not be present in surface waters of the state in quantities that damage or impair the normal growth, function or reproduction of aquatic life or adversely affect other designated uses.

B. Floating Solids, Oil and Grease: Surface waters of the state shall be free of oils, scum, grease and other floating materials resulting from other than natural causes that would cause the formation of a visible sheen or visible deposits on the bottom or shoreline, or would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life.

C. Color: Color-producing materials resulting from other than natural causes shall not create an aesthetically undesirable condition nor shall color impair the use of the water by desirable aquatic life presently common in surface waters of the state.

D. Organoleptic Quality:

(1) Flavor of Fish: Water contaminants from other than natural causes shall be limited to concentrations that will not impart unpalatable flavor to fish.

(2) Odor and Taste of Water: Water contaminants from other than natural causes shall be limited to concentrations that will not result in offensive odor or taste arising in a surface water of the state or otherwise interfere with the reasonable use of the water.

E. Plant Nutrients: Plant nutrients from other than natural causes shall not be present in concentrations that will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state.

F. Toxic Pollutants:

(1) Except as provided in 20.6.4.16 NMAC, surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, concentrations or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitation or aquatic organisms for food, or that will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels that will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.

(2) Pursuant to this section, the human health criteria shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for human health not listed in 20.6.4.900 NMAC, the following provisions shall be applied in accordance with 20.6.4.11, 20.6.4.12 and 20.6.4.14 NMAC.

(a) The human health criterion shall be the recommended human health criterion for "consumption of organisms only" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act. In determining such criterion for a cancer-causing toxic pollutant, a cancer risk of 10^{-5} (one cancer per 100,000 exposed persons) shall be used.

(b) When a numeric criterion for the protection of human health has not been published by the U.S. environmental protection agency, a quantifiable criterion may be derived from data available in the U.S. environmental protection agency's Integrated Risk Information System (IRIS) using the appropriate formula specified in *methodology for deriving ambient water quality criteria for the protection of human health (2000)*, EPA-822-B-00-004.

(3) Pursuant to this section, the chronic aquatic life standard shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for aquatic life with no chronic standard listed in 20.6.4.900 NMAC, the following provisions shall be applied in sequential order in accordance with 20.6.4.11, 20.6.4.12 and 20.6.4.14 NMAC.

(a) The chronic aquatic life criterion shall be the "freshwater criterion continuous concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act;

(b) If the U.S. environmental protection agency has not published a chronic aquatic life criterion, a geometric mean LC-50 value shall be calculated for the particular species, genus or group that is representative of the form of life to be preserved, using the results of toxicological studies published in scientific journals.

(i) The chronic aquatic life criterion for a toxic pollutant that does not bioaccumulate shall be 10 percent of the calculated geometric mean LC-50 value; and

(ii) The chronic aquatic life criterion for a toxic pollutant that does bioaccumulate shall be: the calculated geometric mean LC-50 adjusted by a bioaccumulation factor for the particular species, genus or group

representative of the form of life to be preserved, but when such bioaccumulation factor has not been published, the criterion shall be one percent of the calculated geometric mean LC-50 value.

(4) Pursuant to this section, the acute aquatic life criteria shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for aquatic life with no acute criterion listed in 20.6.4.900 NMAC, the acute aquatic life criterion shall be the "freshwater criterion maximum concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act.

(5) Within 90 days of the issuance of a final NPDES permit containing a numeric criterion selected or calculated pursuant to Paragraph 2, Paragraph 3 or Paragraph 4 of Subsection F of this section, the department shall petition the commission to adopt such criterion into these standards.

G. **Radioactivity**: The radioactivity of surface waters of the state shall be maintained at the lowest practical level and shall in no case exceed the criteria set forth in the New Mexico Radiation Protection Regulations, 20.3.1 and 20.3.4 NMAC.

H. **Pathogens**: Surface waters of the state shall be free of pathogens from other than natural sources in sufficient quantity to impair public health or the designated, existing or attainable uses of a surface water of the state.

I. **Temperature**: Maximum temperatures for each classified water of the state have been specified in 20.6.4.101 through 20.6.4.899 NMAC. However, the introduction of heat by other than natural causes shall not increase the temperature, as measured from above the point of introduction, by more than 2.7°C (5°F) in a stream, or more than 1.7°C (3° F) in a lake or reservoir. In no case will the introduction of heat be permitted when the maximum temperature specified for the reach would thereby be exceeded. These temperature criteria shall not apply to impoundments constructed offstream for the purpose of heat disposal. High water temperatures caused by unusually high ambient air temperatures are not violations of these standards.

J. **Turbidity**: Turbidity attributable to other than natural causes shall not reduce light transmission to the point that the normal growth, function or reproduction of aquatic life is impaired or that will cause substantial visible contrast with the natural appearance of the water. Turbidity shall not exceed 10 NTU over background turbidity when the background turbidity is 50 NTU or less, or increase more than 20 percent when the background turbidity is more than 50 NTU. Background turbidity shall be measured at a point immediately upstream of the turbidity-causing activity. However, limited-duration activities necessary to accommodate dredging, construction or other similar activities and that cause the criterion to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and all appropriate permits and approvals have been obtained.

K. **Total Dissolved Solids (TDS):** TDS attributable to other than natural causes shall not damage or impair the normal growth, function or reproduction of animal, plant or aquatic life. TDS shall be measured by either the "calculation method" (sum of constituents) or the filterable residue method. Approved test procedures for these determinations are set forth in 20.6.4.14 NMAC.

L. **Dissolved Gases**: Surface waters of the state shall be free of nitrogen and other dissolved gases at levels above 110 percent saturation when this supersaturation is attributable to municipal, industrial or other discharges.
[20.6.4.13 NMAC - Rp 20 NMAC 6.1.1105, 10-12-00; A, 10-11-02; Rn, 20.6.4.12 NMAC, 05-23-05; A, 05-23-05]

20.6.4.14 SAMPLING AND ANALYSIS:

A. Sampling and analytical techniques shall conform with methods described in the following references unless otherwise specified by the commission pursuant to a petition to amend these standards:

(1) "*guidelines establishing test procedures for the analysis of pollutants under the Clean Water Act*," 40 CFR Part 136 or any test procedure approved or accepted by EPA using procedures provided in 40 CFR Parts 136.3(d), 136.4, and 136.5;

(2) *standard methods for the examination of water and wastewater*, latest edition, American public health association;

(3) *methods for chemical analysis of water and waste*, and other methods published by EPA office of research and development or office of water;

(4) *techniques of water resource investigations of the U.S. geological survey*;

(5) *annual book of ASTM standards*: volumes 11.01 and 11.02, water (I) and (II), latest edition, ASTM international;

(6) *federal register*, latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations;

(7) *national handbook of recommended methods for water-data acquisition*, latest edition, prepared cooperatively by agencies of the United States government under the sponsorship of the U.S. geological survey; or

(8) *federal register*, latest methods published for monitoring pursuant to the Safe Drinking Water Act regulations.

B. **Bacteriological Surveys**: The monthly geometric mean shall be used in assessing attainment of criteria when a minimum of five samples is collected in a 30-day period.

C. **Sampling Procedures**:

(1) Streams: Stream monitoring stations below discharges shall be located a sufficient distance downstream to ensure adequate vertical and lateral mixing.

(2) Lakes: Sampling stations in lakes shall be located at least 250 feet from a discharge.

(3) Lakes: Except for the restriction specified in Paragraph (2) of this subsection, lake sampling stations shall be located at any site where the attainment of a water quality standard is to be assessed. Water quality measurements taken at intervals in the entire water column at a sampling station shall be averaged for the epilimnion, or in the absence of an epilimnion, for the upper one-third of the water column of the lake to determine attainment of criteria, except that attainment of criteria for toxic pollutants shall be assessed during periods of complete vertical mixing, e.g., during spring or fall turnover, or by taking depth-integrated composite samples of the water column.

D. Acute toxicity of effluent to aquatic life shall be determined using the procedures specified in U.S. environmental protection agency "methods for measuring the acute toxicity of effluents to freshwater and marine organisms" (5th Ed., 2002, EPA 821-R-02-012), or latest edition thereof if adopted by EPA at 40 CFR Part 136, which is incorporated herein by reference. Acute toxicities of substances shall be determined using at least two species tested in whole effluent and a series of effluent dilutions. Acute toxicity due to discharges shall not occur within the wastewater mixing zone in any surface water of the state with an existing or designated aquatic life use.

E. Chronic toxicity of effluent or ambient surface waters of the state to aquatic life shall be determined using the procedures specified in U.S. environmental protection agency "Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms" (4th Ed., 2002, EPA 821-R-02-013), or latest edition thereof if adopted by EPA at 40 CFR Part 136, which is incorporated herein by reference. Chronic toxicities of substances shall be determined using at least two species tested in ambient surface water or whole effluent and a series of effluent dilutions. Chronic toxicity due to discharges shall not occur at the critical low flow, or any flow greater than the critical low flow, in any surface water of the state with an existing or designated aquatic life use more than once every three years. [20.6.4.14 NMAC - Rp 20 NMAC 6.1.1106, 10-12-00; Rn, 20.6.4.13 NMAC, 05-23-05, A, 05-23-05]

20.6.4.15 USE ATTAINABILITY ANALYSIS:

A. A use attainability analysis is a scientific study that shall be conducted only for the purpose of assessing the factors affecting the attainment of a use. Whenever a use attainability analysis is conducted, it shall be subject to the requirements and limitations set forth in 40 CFR Part 131, Water Quality Standards; specifically, Subsections 131.3(g), 131.10(g), 131.10(h) and 131.10(j) shall be applicable.

(1) Any person who proposes to classify, or reclassify to a designated use with less stringent criteria, a surface water of the state with designated uses that do not include the uses specified in Section 101(a)(2) of the federal Clean Water Act must conduct a use attainability analysis. Section 101(a)(2) uses are also specified in Subsection B of 20.6.4.6 NMAC.

(2) A designated use cannot be removed if it is an existing use.

(3) A use attainability analysis or an equivalent study approved by the department and the regional administrator must be conducted to remove any non-existing designated use from any classified waters of the state.

B. Physical, chemical and biological evaluations of surface waters of the state other than lakes and reservoirs for purposes of use attainability analyses or equivalent studies shall be conducted according to the procedures outlined in the "*technical support manual: waterbody surveys and assessments for conducting use attainability analyses*," United States environmental protection agency, office of water, regulations and standards, Washington, D.C., November 1983, or latest edition thereof, which is incorporated herein by reference, or an alternative equivalent study methodology approved by the department.

C. Physical, chemical and biological evaluations of lakes and reservoirs for purposes of use attainability analyses or equivalent studies shall be conducted according to the procedures outlined in the "*technical support manual: waterbody surveys and assessments for conducting use attainability analyses, volumeIII: lake systems*," United States environmental protection agency, office of water, regulations and standards, Washington, D.C., November 1984, or latest edition thereof, which is incorporated herein by reference, or an alternative equivalent study methodology approved by the department.

D. A use attainability analysis or equivalent study should include:

(1) identification of existing uses of the surface water of the state to be reviewed that have existed since 1975;

(2) an evaluation of the best water quality attained in the surface water of the state to be reviewed that has existed since 1975;

(3) an analysis of appropriate factors demonstrating that attaining the designated use is not feasible because of the condition listed in 40 CFR Part 131.10(g);

(4) a physical evaluation of the surface water of the state to be reviewed to identify factors that impair attainment of designated uses and to determine which designated uses are feasible to attain in such surface water of the state;

(5) an evaluation of the water chemistry of the surface water of the state to be reviewed to identify chemical constituents that impair the designated uses that are feasible to attain in such water; and

(6) an evaluation of the aquatic and terrestrial biota utilizing the surface water of the state to determine resident species and which species could potentially exist in such water if physical and chemical factors impairing a designated use are corrected.

E. Any person may submit notice to the department stating that they intend to conduct a use attainability analysis or equivalent study. The proponent shall develop a work plan to conduct the use attainability analysis or equivalent study and shall submit the work plan to the department and the regional EPA staff for review and comment. The work plan

should identify the scope of data currently available and proposed to be gathered, the factors affecting use attainment that will be analyzed and must contain provisions for public notice and consultation with appropriate state and federal agencies. A copy of the notice and the work plan must be submitted concurrently to the commission. Upon approval of the work plan by the department, the proponent shall conduct the use attainability analysis or equivalent study in accordance with the approved work plan. The cost of such analysis or equivalent study shall be the responsibility of the proponent. Upon completion of the use attainability analysis or equivalent study, the proponent shall submit the data, findings and conclusions to the department and the commission.

F. If the department determines that the analysis or equivalent study was conducted in accordance with the approved work plan and the findings and conclusions are based upon sound scientific rationale, and demonstrates that it is not feasible to attain the designated use, the department or the proponent may request the commission to initiate rulemaking proceedings to modify the designated use for the surface water of the state that was reviewed.

[20.6.4.15 NMAC - Rp 20 NMAC 6.1.1107, 10-12-00; Rn, 20.6.4.14 NMAC, 05-23-05; A, 05-23-05; A, 07-17-05]

20.6.4.16 PLANNED USE OF A PISCICIDE: The use of a piscicide registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. Section 136 *et seq.*, and under the New Mexico Pesticide Control Act (NMPCA), Section 76-4-1 *et seq.* NMSA 1978 (1973) in a surface water of the state, shall not be a violation of Subsection F of 20.6.4.13 NMAC when such use has been approved by the commission under procedures provided in this section. The commission may approve the reasonable use of a piscicide under this section to further a Clean Water Act objective to restore and maintain the physical or biological integrity of surface waters of the state, including restoration of native species.

A. Any person seeking commission approval of the use of a piscicide shall file a written petition concurrently with the commission and the surface water bureau of the department. The petition shall contain, at a minimum, the following information:

(1) petitioner's name and address;

(2) identity of the piscicide and the period of time (not to exceed five years) or number of applications for which approval is requested;

(3) documentation of registration under FIFRA and NMPCA and certification that the petitioner intends to use the piscicide according to the label directions, for its intended function;

(4) target and potential non-target species in the treated waters and adjacent riparian area, including threatened or endangered species;

(5) potential environmental consequences to the treated waters and the adjacent riparian area, and protocols for limiting such impacts;

(6) surface water of the state proposed for treatment;

(7) results of pre-treatment survey;

(8) evaluation of available alternatives and justification for selecting piscicide use;

(9) post-treatment assessment monitoring protocol; and

(10) any other information required by the commission.

B. Within thirty days of receipt of the petition, the department shall review the petition and file a recommendation with the commission to grant, grant with conditions or deny the petition. The recommendation shall include reasons, and a copy shall be sent to the petitioner by certified mail.

C. The commission shall review the petition and the department's recommendation and shall within 90 days of receipt of the department's recommendation hold a public hearing in the locality affected by the proposed use in accordance with Adjudicatory Procedures, 20.1.3 NMAC. In addition to the public notice requirements in Adjudicatory Procedures, 20.1.3 NMAC, the petitioner shall provide written notice to:

(1) local political subdivisions;

(2) local water planning entities;

(3) local conservancy and irrigation districts; and

(4) local media outlets, except that the petitioner shall only be required to publish notice in a newspaper of circulation in the locality affected by the proposed use.

D. In a hearing provided for in this Section, registration of a piscicide under FIFRA and NMPCA shall provide a rebuttable presumption that the determinations of the EPA Administrator in registering the piscicide, as outlined in 7 U.S.C. Section 136a(c)(5), are valid. For purposes of this Section the rebuttable presumptions regarding the piscicide include:

(1) Its composition is such as to warrant the proposed claims for it;

(2) Its labeling and other material submitted for registration comply with the requirements of FIFRA and NMPCA;

(3) It will perform its intended function without unreasonable adverse effects on the environment; and

(4) When used in accordance with all FIFRA label requirements it will not generally cause unreasonable adverse effects on the environment.

(5) "Unreasonable adverse effects on the environment" has the meaning provided in FIFRA, 7 U.S.C. Section 136(bb): "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide."

E. After a public hearing, the commission may grant the petition in whole or in part, may grant the petition subject to conditions, or may deny the petition. In granting any petition in whole or part or subject to conditions, the commission shall require the petitioner to implement post-treatment assessment monitoring and provide notice to the public in the immediate and near downstream vicinity of the application prior to and during the application.
[20.6.4.16 NMAC - Rn, Paragraph (6) of Subsection F of 20.6.4.12 NMAC, 05-23-05; A, 05-23-05]

20.6.4.17 - 20.6.4.49: [RESERVED]

20.6.4.50 BASINWIDE PROVISIONS - Special provisions arising from interstate compacts, international treaties or court decrees or that otherwise apply to a basin are contained in 20.6.4.51 through 20.6.4.59 NMAC.
[20.6.4.50 NMAC - N, 05-23-05]

20.6.4.51 - 20.6.4.53: [RESERVED]

20.6.4.54 COLORADO RIVER BASIN - For the tributaries of the Colorado river system, the state of New Mexico will cooperate with the Colorado river basin states and the federal government to support and implement the salinity policy and program outlined in the most current "review, water quality standards for salinity, Colorado river system" or equivalent report by the Colorado river salinity control forum.

A. Numeric criteria expressed as the flow-weighted annual average concentration for salinity are established at three points in the Colorado river basin as follows: below Hoover dam, 723 mg/L; below Parker dam, 747 mg/L; and at Imperial dam, 879 mg/L.

B. As a part of the program, objectives for New Mexico shall include the elimination of discharges of water containing solids in solution as a result of the use of water to control or convey fly ash from coal-fired electric generators, wherever practicable.
[20.6.4.54 NMAC - Rn, Paragraphs (1) through (3) of Subsection K of 20.6.4.12 NMAC, 05-23-05; A, 05-23-05]

20.6.4.55 - 20.6.4.96: [RESERVED]

20.6.4.97 EPHEMERAL WATERS - All ephemeral surface waters of the state that are not included in a classified water of the state in 20.6.4.101 through 20.6.4.899 NMAC.

A. Designated Uses: livestock watering, wildlife habitat, limited aquatic life and secondary contact.

B. Criteria:

(1) The use-specific criteria in 20.6.4.900 NMAC, with the exception of the chronic criteria for aquatic life, are applicable for the designated uses listed in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 548 cfu/100 mL, no single sample shall exceed 2507 cfu/100 mL (see Subsection B of 20.6.4.14 NMAC).
[20.6.4.97 NMAC - N, 05-23-05]

20.6.4.98 INTERMITTENT WATERS - All intermittent surface waters of the state that are not included in a classified water of the state in 20.6.4.101 through 20.6.4.899 NMAC.

A. Designated Uses: livestock watering, wildlife habitat, aquatic life and secondary contact.

B. Criteria:

(1) The use-specific criteria in 20.6.4.900 NMAC.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 548 cfu/100 mL, no single sample shall exceed 2507 cfu/100 mL (see Subsection B of 20.6.4.14 NMAC).
[20.6.4.98 NMAC - N, 05-23-05]

20.6.4.99 PERENNIAL WATERS - All perennial surface waters of the state that are not included in a classified water of the state in 20.6.4.101 through 20.6.4.899 NMAC.

A. Designated Uses: aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) Temperature shall not exceed 34°C (93.2°F). The use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses listed in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 548 cfu/100 mL, no single sample shall exceed 2507 cfu/100 mL (see Subsection B of 20.6.4.14 NMAC).
[20.6.4.99 NMAC - N, 05-23-05]

20.6.4.100: [RESERVED]

20.6.4.101 RIO GRANDE BASIN - The main stem of the Rio Grande from the international boundary with Mexico upstream to one mile below Percha dam.

A. **Designated Uses:** irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. **Criteria:**

(1) In any single sample: pH: within the range of 6.6 to 9.0 and temperature 34°C (93.2°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL (see Subsection B of 20.6.4.14 NMAC).

(3) At mean monthly flows above 350 cfs, the monthly average concentration for: TDS 2,000 mg/L or less, sulfate 500 mg/L or less and chlorides 400 mg/L or less.

C. **Remarks:** Sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.

[20.6.4.101 NMAC - Rp 20 NMAC 6.1.2101, 10-12-00; A, 12-15-01; A, 05-23-05]

20.6.4.102 RIO GRANDE BASIN - The main stem of the Rio Grande from one mile below Percha dam upstream to Caballo dam.

A. **Designated Uses:** irrigation, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. **Criteria:**

(1) At any sampling site: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

C. **Remarks:** Sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.

[20.6.4.102 NMAC - Rp 20 NMAC 6.1.2102, 10-12-00; A, 05-23-05]

20.6.4.103 RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Caballo reservoir upstream to Elephant Butte dam and perennial reaches of tributaries to the Rio Grande in Sierra and Socorro counties.

A. **Designated Uses:** fish culture, irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, secondary contact and warmwater aquatic life.

B. **Criteria:**

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 25°C (77°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

C. **Remarks:** Flow in this reach of the Rio Grande main stem is dependent upon release from Elephant Butte dam.

[20.6.4.103 NMAC - Rp 20 NMAC 6.1.2103, 10-12-00; A, 05-23-05]

20.6.4.104 RIO GRANDE BASIN - Caballo and Elephant Butte reservoir.

A. **Designated Uses**: irrigation storage, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. **Criteria**:

(1) At any sampling site: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.104 NMAC - Rp 20 NMAC 6.1.2104, 10-12-00; A, 05-23-05]

20.6.4.105 RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Elephant Butte reservoir upstream to Alameda bridge (Corrales bridge) and intermittent water below the perennial reaches of the Rio Puerco that enters the main stem of the Rio Grande.

A. **Designated Uses**: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. **Criteria**:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-

specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS 1,500 mg/L or less, sulfate 500 mg/L or less and chloride 250 mg/L or less.

[20.6.4.105 NMAC - Rp 20 NMAC 6.1.2105, 10-12-00; A, 05-23-05]

20.6.4.106 RIO GRANDE BASIN - The main stem of the Rio Grande from Alameda bridge (Corrales bridge) upstream to the Angostura diversion works and intermittent water in the Jemez river below the Jemez pueblo boundary that enters the main stem of the Rio Grande.

A. Designated Uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: dissolved oxygen greater than 5.0 mg/L, pH within the range of 6.6 to 9.0 and temperature less than 32.2°C (90°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS 1,500 mg/L or less, sulfate 500 mg/L or less and chloride 250 mg/L or less.

[20.6.4.106 NMAC - Rp 20 NMAC 6.1.2105.1, 10-12-00; A, 05-23-05]

20.6.4.107 RIO GRANDE BASIN - The Jemez river from the Jemez pueblo boundary upstream to Soda dam near the town of Jemez Springs and perennial reaches of Vallecito creek.

A. Designated Uses: coldwater aquatic life, primary contact, irrigation, livestock watering and wildlife habitat.

B. Criteria:

(1) In any single sample: temperature 25°C (77°F) and pH within the range of 6.6 to 8.8. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.107 NMAC - Rp 20 NMAC 6.1.2105.5, 10-12-00; A, 05-23-05]

20.6.4.108 RIO GRANDE BASIN - Perennial reaches of the Jemez river and all its tributaries above Soda dam near the town of Jemez Springs, except Sulphur creek above its confluence with Redondo creek, and perennial reaches of the Guadalupe river and all its tributaries.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 400 µmhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.108 NMAC - Rp 20 NMAC 6.1.2106, 10-12-00; A, 05-23-05]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.124 NMAC.]

20.6.4.109 RIO GRANDE BASIN - Perennial reaches of Bluewater creek, Rio Moquino, Seboyeta creek, Rio Paguate, the Rio Puerco above the village of Cuba and all other perennial reaches of tributaries to the Rio Puerco including the Rio San Jose in Cibola county from the USGS gaging station at Correo upstream to Horace springs.

A. Designated Uses: coldwater aquatic life, domestic water supply, fish culture, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature 20°C (68°F) or less and total phosphorus (as P) 0.1 mg/L. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.109 NMAC - Rp 20 NMAC 6.1.2107, 10-12-00; A, 05-23-05]

20.6.4.110 RIO GRANDE BASIN - The main stem of the Rio Grande from Angostura diversion works upstream to Cochiti dam.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, secondary contact, coldwater aquatic life and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 25°C (77°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.110 NMAC - Rp 20 NMAC 6.1.2108, 10-12-00; A, 05-23-05]

20.6.4.111 RIO GRANDE BASIN - Perennial reaches of Las Huertas creek.

A. Designated Uses: high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 25°C (77°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.111 NMAC - Rp 20 NMAC 6.1.2108.5, 10-12-00; A, 7-25-01; A, 05-23-05]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.125 NMAC.]

20.6.4.112 RIO GRANDE BASIN - Cochiti reservoir.

A. Designated Uses: livestock watering, wildlife habitat, warmwater aquatic life, coldwater aquatic life and primary contact.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 9.0 and temperature 25°C (77°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.112 NMAC - Rp 20 NMAC 6.1.2109, 10-12-00; A, 05-23-05]

20.6.4.113 RIO GRANDE BASIN - The Santa Fe river and perennial reaches of its tributaries from Cochiti reservoir upstream to the outfall of the Santa Fe wastewater treatment facility.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, secondary contact, and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0, temperature 30°C (86°F) or less and dissolved oxygen 4.0 mg/L or more. Dissolved oxygen 5.0 mg/L or more as a 24-hour average. Values used in the calculation of the 24-hour average for dissolved oxygen shall not exceed the dissolved oxygen saturation value. For a measured value above the dissolved oxygen saturation value, the dissolved oxygen saturation value will be used in calculating the 24-hour average. The dissolved oxygen saturation value shall be determined from the table set out in Subsection N of 20.6.4.900 NMAC. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.113 NMAC - Rp 20 NMAC 6.1.2110, 10-12-00; A, 10-11-02; A, 05-23-05]

20.6.4.114 RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Cochiti reservoir upstream to Rio Pueblo de Taos, Embudo creek from its mouth on the Rio Grande upstream to the junction of the Rio Pueblo and the Rio Santa Barbara, the Santa Cruz river below Santa Cruz dam, the Rio Tesuque below the Santa Fe national forest and the Pojoaque river below Nambe dam.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 22°C (71.6°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS 500 mg/L or less, sulfate 150 mg/L or less and chloride 25 mg/L or less.

[20.6.4.114 NMAC - Rp 20 NMAC 6.1.2111, 10-12-00; A, 05-23-05]

20.6.4.115 RIO GRANDE BASIN - The perennial reaches of Rio Vallecitos and its tributaries, and perennial reaches of Rio del Oso and perennial reaches of El Rito creek above the town of El Rito.

A. **Designated Uses**: domestic water supply, irrigation, high quality coldwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. **Criteria**:

(1) In any single sample: specific conductance 300 □mhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.115 NMAC - Rp 20 NMAC 6.1.2112, 10-12-00; A, 05-23-05]

20.6.4.116 RIO GRANDE BASIN - The Rio Chama from its mouth on the Rio Grande upstream to Abiquiu reservoir, perennial reaches of the Rio Tusas, perennial reaches of the Rio Ojo Caliente, perennial reaches of Abiquiu creek and perennial reaches of El Rito creek below the town of El Rito.

A. **Designated Uses**: irrigation, livestock watering, wildlife habitat, coldwater aquatic life, warmwater aquatic life and secondary contact.

B. **Criteria**:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 31°C (87.8°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.116 NMAC - Rp 20 NMAC 6.1.2113, 10-12-00; A, 05-23-05]

20.6.4.117 RIO GRANDE BASIN - Abiquiu reservoir.

A. **Designated Uses**: irrigation storage, livestock watering, wildlife habitat, primary contact, coldwater aquatic life and warmwater aquatic life.

B. **Criteria**:

(1) At any sampling site: pH within the range of 6.6 to 8.8 and temperature 25°C (77°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.117 NMAC - Rp 20 NMAC 6.1.2114, 10-12-00; A, 05-23-05]

20.6.4.118 RIO GRANDE BASIN - The Rio Chama from the headwaters of Abiquiu reservoir upstream to El Vado reservoir and perennial reaches of the Rio Gallina and Rio Puerco de Chama north of state highway 96.

A. **Designated Uses**: irrigation, livestock watering, wildlife habitat, coldwater aquatic life, warmwater aquatic life and secondary contact.

B. **Criteria**:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 26°C (78.8°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.118 NMAC - Rp 20 NMAC 6.1.2115, 10-12-00; A, 05-23-05]

20.6.4.119 RIO GRANDE BASIN - All perennial reaches of tributaries to the Rio Chama above Abiquiu dam except the Rio Gallina and Rio Puerco de Chama north of state highway 96 and the main stem of the Rio Chama from the headwaters of El Vado reservoir upstream to the New Mexico-Colorado line.

A. **Designated Uses**: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation,

livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 500 µmhos/cm or less (1,000 µmhos or less for Coyote creek), pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.119 NMAC - Rp 20 NMAC 6.1.2116, 10-12-00; A, 05-23-05]

20.6.4.120 RIO GRANDE BASIN - El Vado and Heron reservoirs.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact and coldwater aquatic life.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.120 NMAC - Rp 20 NMAC 6.1.2117, 10-12-00; A. 05-23-05]

20.6.4.121 RIO GRANDE BASIN - Perennial tributaries to the Rio Grande in Bandelier national monument and their headwaters in Sandoval county and all perennial reaches of tributaries to the Rio Grande in Santa Fe county unless included in other segments.

A. Designated Uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, secondary contact and primary contact.

B. Criteria:

(1) In any single sample: specific conductance 300 µmhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.121 NMAC - Rp 20 NMAC 6.1.2118, 10-12-00; A. 05-23-05]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segments are under 20.6.4.126, 20.6.4.127 and 20.6.4.128 NMAC.]

20.6.4.122 RIO GRANDE BASIN - The main stem of the Rio Grande from Rio Pueblo de Taos upstream to the New Mexico-Colorado line, the Red river from its mouth on the Rio Grande upstream to the mouth of Placer creek, and the Rio Pueblo de Taos from its mouth on the Rio Grande upstream to the mouth of the Rio Grande del Rancho.

A. Designated Uses: coldwater aquatic life, fish culture, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.122 NMAC - Rp 20 NMAC 6.1.2119, 10-12-00; A, 05-23-05]

20.6.4.123 RIO GRANDE BASIN - Perennial reaches of the Red river upstream of the mouth of Placer creek, all perennial reaches of tributaries to the Red river, and all other perennial reaches of tributaries to the Rio Grande in Taos and Rio Arriba counties unless included in other segments.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 400 µmhos/cm or less (500 µmhos or less for the Rio Fernando de Taos) and pH within the range of 6.6 to 8.8, temperature 20°C (68°F) or less. For the Red river in this segment, total phosphorus (as P) less than 0.1 mg/L. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.123 NMAC - Rp 20 NMAC 6.1.2120, 10-12-00; A, 05-23-05]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.129 NMAC.]

20.6.4.124 RIO GRANDE BASIN - Perennial reaches of Sulphur creek from its headwaters to its confluence with Redondo creek.

A. Designated Uses: limited aquatic life, wildlife habitat, livestock watering and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 2.0 to 9.0 and temperature 30°C (86°F) or less. The use-specific criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) The chronic aquatic life criteria of Subsections I and J of 20.6.4.900 NMAC shall also apply.

[20.6.4.124 NMAC - N, 05-23-05]

20.6.4.125 RIO GRANDE BASIN - Perennial reaches of San Pedro creek.

A. Designated Uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 25°C (77°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.125 NMAC - N, 05-23-05]

20.6.4.126 RIO GRANDE BASIN - Perennial portions of Cañon deValle from Los Alamos national laboratory (LANL) stream gage E256 upstream to Burning Ground spring, Sandia canyon from Sigma canyon upstream to LANL NPDES outfall 001, Pajarito canyon from Arroyo de La Delfe upstream into Starmers gulch and Starmers spring and Water canyon from Area-A canyon upstream to State Route 501.

A. Designated Uses: coldwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 24°C (75.2°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.126 NMAC - N, 05-23-05]

20.6.4.127 RIO GRANDE BASIN - Perennial portions of Los Alamos canyon upstream from Los Alamos reservoir and Los Alamos reservoir.

A. Designated Uses: coldwater aquatic life, livestock watering, wildlife habitat, irrigation and primary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.127 NMAC - N, 05-23-05]

20.6.4.128 RIO GRANDE BASIN - Ephemeral and intermittent portions of watercourses within lands managed by U.S. department of energy (DOE) within LANL, including but not limited to: Mortandad canyon, Cañada del Buey, Ancho canyon, Chaquehui canyon, Indio canyon, Fence canyon, Potrillo canyon and portions of Cañon de Valle, Los Alamos canyon, Sandia canyon, Pajarito canyon and Water canyon not specifically identified in 20.6.4.126 NMAC. (Surface waters within lands scheduled for transfer from DOE to tribal, state or local authorities are specifically excluded.)

A. Designated Uses: livestock watering, wildlife habitat, limited aquatic life and secondary contact.

B. Criteria:

(1) The use-specific criteria in 20.6.4.900 NMAC, except the chronic criteria for aquatic life are applicable for the designated uses listed in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) The acute total ammonia criteria set forth in Subsection K of 20.6.4.900 NMAC (salmonids absent) are applicable to this use.

[20.6.4.128 NMAC - N, 05-23-05]

20.6.4.129 RIO GRANDE BASIN - Perennial reaches of the Rio Hondo.

A. Designated Uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 400 µmhos/cm or less, pH within the range of 6.6 to 8.8, total phosphorous (as P) less than 0.1 mg/L and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.129 NMAC - N, 05-23-05]

20.6.4.130 - 20.6.4.200: [RESERVED]

20.6.4.201 PECOS RIVER BASIN - The main stem of the Pecos river from the New Mexico-Texas line upstream to the mouth of the Black river (near Loving).

A. Designated Uses: irrigation, livestock watering, wildlife habitat, secondary contact and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) At all flows above 50 cfs: TDS 20,000 mg/L or less, sulfate 3,000 mg/L or less and chloride 10,000 mg/L or less.

[20.6.4.201 NMAC - Rp 20 NMAC 6.1.2201, 10-12-00; A, 05-23-05]

20.6.4.202 PECOS RIVER BASIN - The main stem of the Pecos river from the mouth of the Black river upstream to lower Tansil dam, including perennial reaches of the Black river, the Delaware river and Blue spring.

A. Designated Uses: industrial water supply, irrigation, livestock watering, wildlife habitat, secondary contact and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 34°C (93.2°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) At all flows above 50 cfs: TDS 8,500 mg/L or less, sulfate 2,500 mg/L or less and chloride 3,500 mg/L or less.

C. Remarks: Diversion for irrigation frequently limits summer flow in this reach of the main stem Pecos river to that contributed by springs along the watercourse.

[20.6.4.202 NMAC - Rp 20 NMAC 6.1.2202, 10-12-00; A, 05-23-05]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.218 NMAC.]

20.6.4.203 PECOS RIVER BASIN - The main stem of the Pecos river from lower the headwaters of Lake Carlsbad upstream to Avalon dam.

A. Designated Uses: industrial water supply, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 34°C (93.2°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.203 NMAC - Rp 20 NMAC 6.1.2203, 10-12-00; A, 05-23-05]
[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.219 NMAC.]

20.6.4.204 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Avalon reservoir upstream to Brantley dam.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, secondary contact and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less, single sample 2880 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).
[20.6.4.204 NMAC - Rp 20 NMAC 6.1.2204, 10-12-00; A, 05-23-05]

20.6.4.205 PECOS RIVER BASIN - Brantley reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).
[20.6.4.205 NMAC - Rp 20 NMAC 6.1.2205, 10-12-00; A, 05-23-05]

20.6.4.206 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, perennial reaches of the Rio Hondo and its tributaries below Bonney canyon and perennial reaches of the Rio Felix.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, secondary contact and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) At all flows above 50 cfs: TDS 14,000 mg/L or less, sulfate 3,000 mg/L or less and chloride 6,000 mg/L or less.
[20.6.4.206 NMAC - Rp 20 NMAC 6.1.2206, 10-12-00; A, 05-23-05]

20.6.4.207 PECOS RIVER BASIN - The main stem of the Pecos river from Salt creek (near Acme) upstream to Sumner dam.

A. Designated Uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) At all flows above 50 cfs: TDS 8,000 mg/L or less, sulfate 2,500 mg/L or less and chloride 4,000 mg/L or less.
[20.6.4.207 NMAC - Rp 20 NMAC 6.1.2207, 10-12-00; A, 05-23-05]

20.6.4.208 PECOS RIVER BASIN - Perennial reaches of the Rio Peñasco and its tributaries above state highway 24 near Dunken, perennial reaches of the Rio Bonito downstream from state highway 48 (near Angus), the Rio Ruidoso downstream of the U.S. highway 70 bridge near Seeping Springs lakes, perennial reaches of the Rio Hondo upstream from Bonney canyon and perennial reaches of Agua Chiquita.

A. **Designated Uses**: fish culture, irrigation, livestock watering, wildlife habitat, coldwater aquatic life and secondary contact.

B. **Criteria**:

(1) In any single sample: pH within the range of 6.6 to 8.8, temperature 30°C (86°F) or less and total phosphorus (as P) less than 0.1 mg/L. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.208 NMAC - Rp 20 NMAC 6.1.2208, 10-12-00; A, 05-23-05]

20.6.4.209 PECOS RIVER BASIN - Perennial reaches of Eagle creek above Alto reservoir, perennial reaches of the Rio Bonito and its tributaries upstream of state highway 48 (near Angus) and perennial reaches of the Rio Ruidoso and its tributaries upstream of the U.S. highway 70 bridge near Seeping Springs lakes.

A. **Designated Uses**: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply and secondary contact.

B. **Criteria**:

(1) In any single sample: specific conductance 600 µmhos/cm or less in Eagle creek, 1,100 □mhos or less in Bonito creek, and 1,500 µmhos or less in the Rio Ruidoso, pH within the range of 6.6 to 8.8, total phosphorus (as P) less than 0.1 mg/L and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.209 NMAC - Rp 20 NMAC 6.1.2209, 10-12-00; A, 05-23-05]

20.6.4.210 PECOS RIVER BASIN - Sumner reservoir.

A. **Designated Uses**: irrigation storage, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. **Criteria**:

(1) At any sampling site: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.210 NMAC - Rp 20 NMAC 6.1.2210, 10-12-00; A, 05-23-05]

20.6.4.211 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Sumner reservoir upstream to Tecolote creek.

A. **Designated Uses**: fish culture, irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. **Criteria**:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) At all flows above 50 cfs: TDS 3,000 mg/L or less, sulfate 2,000 mg/L or less and chloride 400 mg/L or less.

[20.6.4.211 NMAC - Rp 20 NMAC 6.1.2211, 10-12-00; A, 05-23-05]

20.6.4.212 PECOS RIVER BASIN - Perennial tributaries to the main stem of the Pecos river from the headwaters of Sumner reservoir upstream to Santa Rosa dam.

A. **Designated Uses**: irrigation, coldwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. **Criteria**:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 25°C (77°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.212 NMAC - Rp 20 NMAC 6.1.2211.1, 10-12-00; A, 05-23-05]

20.6.4.213 PECOS RIVER BASIN - McAllister lake.

A. Designated Uses: coldwater aquatic life, secondary contact, livestock watering and wildlife habitat.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 8.8 and temperature 25°C (77°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.213 NMAC - Rp 20 NMAC 6.1.2211.3, 10-12-00; A, 05-23-05]

20.6.4.214 PECOS RIVER BASIN - Storrie lake.

A. Designated Uses: coldwater aquatic life, warmwater aquatic life, primary contact, livestock watering, wildlife habitat, municipal water supply and irrigation storage.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.214 NMAC - Rp 20 NMAC 6.1.2211.5, 10-12-00; A, 05-23-05]

20.6.4.215 PECOS RIVER BASIN - Perennial reaches of the Gallinas river and all its tributaries above the diversion for the Las Vegas municipal reservoir and perennial reaches of Tecolote creek and its perennial tributaries.

A. Designated Uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 300 µmhos/cm or less except specific conductance 450 µmhos/cm or less in Wright Canyon creek, pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.215 NMAC - Rp 20 NMAC 6.1.2212, 10-12-00; A, 05-23-05]

20.6.4.216 PECOS RIVER BASIN - The main stem of the Pecos river from Tecolote creek upstream to Cañon de Mazanita.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life and primary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 30°C (86°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

(3) At all flows above 10 cfs: TDS 250 mg/L or less, sulfate 25 mg/L or less and chloride 5 mg/L or less.

[20.6.4.216 NMAC - Rp 20 NMAC 6.1.2213, 10-12-00; A, 05-23-05]

20.6.4.217 PECOS RIVER BASIN - Perennial reaches of Cow creek and all perennial reaches of its tributaries and the main stem of the Pecos river from Cañon de Manzanita upstream to its headwaters, including perennial reaches of all tributaries thereto.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 300 µmhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.217 NMAC - Rp 20 NMAC 6.1.2214, 10-12-00; A, 05-23-05]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segments are under 20.6.4.220 and 20.6.4.221 NMAC.]

20.6.4.218 PECOS RIVER BASIN - Tansil lake and Lake Carlsbad.

A. Designated Uses: industrial water supply, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 9.0 and temperature 34°C (93.2°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.218 NMAC - N, 05-23-05]

20.6.4.219 PECOS RIVER BASIN - Avalon reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, secondary contact and warmwater aquatic life.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.219 NMAC - N, 05-23-05]

20.6.4.220 PECOS RIVER BASIN - Perennial reaches of the Gallinas river and its tributaries from its mouth upstream to the diversion for the Las Vegas municipal reservoir, except Pecos Arroyo.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life and primary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 30°C (86°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section. (see Subsection B of 20.6.4.14 NMAC)

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 410 cfu/100 mL or less.

[20.6.4.220 NMAC - N, 05-23-05]

20.6.4.221 PECOS RIVER BASIN - Pecos Arroyo.

A. Designated Uses: livestock watering, wildlife habitat, warmwater aquatic life and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.221 NMAC - N, 05-23-05]

20.6.4.222 - 20.6.4.300: [RESERVED]

20.6.4.301 CANADIAN RIVER BASIN - The main stem of the Canadian river from the New Mexico-Texas line upstream to Ute dam, and any flow that enters the main stem from Revuelto creek.

A. Designated Uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0, temperature 32.2°C (90°F) or less and TDS 6,500 mg/L or less at flows above 25 cfs. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.301 NMAC - Rp 20 NMAC 6.1.2301, 10-12-00; A, 05-23-05]

20.6.4.302 CANADIAN RIVER BASIN - Ute reservoir.

A. Designated Uses: livestock watering, wildlife habitat, municipal and industrial water supply, primary

contact and warmwater aquatic life.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.302 NMAC - Rp 20 NMAC 6.1.2302, 10-12-00; A, 05-23-05]

20.6.4.303 CANADIAN RIVER BASIN - The main stem of the Canadian river from the headwaters of Ute reservoir upstream to Conchas dam, the perennial reaches of Pajarito and Ute creeks and their perennial tributaries.

A. Designated Uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.303 NMAC - Rp 20 NMAC 6.1.2303, 10-12-00; A, 05-23-05]

20.6.4.304 CANADIAN RIVER BASIN - Conchas reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.304 NMAC - Rp 20 NMAC 6.1.2304, 10-12-00; A, 05-23-05]

20.6.4.305 CANADIAN RIVER BASIN - The main stem of the Canadian river from the headwaters of Conchas reservoir upstream to the New Mexico-Colorado line, perennial reaches of the Conchas river, the Mora river downstream from the USGS gaging station near Shoemaker, the Vermejo river downstream from Rail canyon and perennial reaches of Raton, Chicorica and Uña de Gato creeks.

A. Designated Uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0, temperature 32.2°C (90°F) or less and TDS 3,500 mg/L or less at flows above 10 cfs. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.305 NMAC - Rp 20 NMAC 6.1.2305, 10-12-00; A, 05-23-05]

20.6.4.306 CANADIAN RIVER BASIN - The Cimarron river downstream from state highway 21 in Cimarron to the Canadian river and all perennial reaches of tributaries to the Cimarron river downstream from state highway 21 in Cimarron.

A. Designated Uses: irrigation, warmwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0, temperature 32.2°C (90°F) or less and TDS 3,500 mg/L or less at flows above 10 cfs. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.306 NMAC - Rp 20 NMAC 6.1.2305.1, 10-12-00; A, 7-19-01; A, 05-23-05]

20.6.4.307 CANADIAN RIVER BASIN - Perennial reaches of the Mora river from the USGS gaging station near Shoemaker upstream to the state highway 434 bridge in Mora, all perennial reaches of tributaries to the Mora

river downstream from the USGS gaging station at La Cueva in San Miguel and Mora counties, perennial reaches of Ocate creek and its tributaries downstream of Ocate, and perennial reaches of Rayado creek downstream of Miami lake diversion in Colfax county.

A. Designated Uses: marginal coldwater aquatic life, warmwater aquatic life, secondary contact, irrigation, livestock watering and wildlife habitat.

B. Criteria:

(1) In any single sample: temperature 25°C (77°F) or less and pH within the range of 6.6 to 9.0. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.307 NMAC - Rp 20 NMAC 6.1.2305.3, 10-12-00; A, 05-23-05]

20.6.4.308 CANADIAN RIVER BASIN - Charette lakes.

A. Designated Uses: coldwater aquatic life, warmwater aquatic life, secondary contact, livestock watering and wildlife habitat.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less; single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.308 NMAC - Rp 20 NMAC 6.1.2305.5, 10-12-00; A, 05-23-05]

20.6.4.309 CANADIAN RIVER BASIN - The Mora river and perennial reaches of its tributaries upstream from the state highway 434 bridge in Mora, all perennial reaches of tributaries to the Mora river upstream from the USGS gaging station at La Cueva, perennial reaches of Coyote creek and its tributaries, the Cimarron river and its perennial tributaries above state highway 21 in Cimarron, all perennial reaches of tributaries to the Cimarron river north and northwest of highway 64, perennial reaches of Rayado creek and its tributaries above Miami lake diversion, Ocate creek and perennial reaches of its tributaries upstream of Ocate, perennial reaches of the Vermejo river upstream from Rail canyon and all other perennial reaches of tributaries to the Canadian river northwest and north of U.S. highway 64 in Colfax county unless included in other segments.

A. Designated Uses: domestic water supply, irrigation, high quality coldwater aquatic life, livestock watering, wildlife habitat, municipal and industrial water supply and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 500 µmhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.309 NMAC - Rp 20 NMAC 6.1.2306, 10-12-00; A, 7-19-01; A, 05-23-05]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.310 NMAC.]

20.6.4.310 CANADIAN RIVER BASIN - Perennial reaches of Corrumpa creek and perennial reaches of tributaries of the Canadian river north of U.S. highway 54/66 and east and northeast of the Ute creek drainage.

A. Designated Uses: livestock watering, wildlife habitat, secondary contact and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 548 cfu/100 mL or less, single sample 2507 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.310 NMAC - N, 05-23-05]

20.6.4.311 - 20.6.4.400: [RESERVED]

20.6.4.401 SAN JUAN RIVER BASIN - The main stem of the San Juan river from the Navajo Nation boundary at the Hogback upstream to its confluence with the Animas river.

A. Designated Uses: municipal and industrial water supply, irrigation, livestock watering, wildlife habitat, secondary contact, marginal coldwater aquatic life and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.401 NMAC - Rp 20 NMAC 6.1.2401, 10-12-00; A, 05-23-05]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.408 NMAC.]

20.6.4.402 SAN JUAN RIVER BASIN - La Plata river from its confluence with the San Juan river upstream to the New Mexico-Colorado line.

A. Designated Uses: irrigation, marginal warmwater aquatic life, marginal coldwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.402 NMAC - Rp 20 NMAC 6.1.2402, 10-12-00; A, 05-23-05]

20.6.4.403 SAN JUAN RIVER BASIN - The Animas river from its confluence with the San Juan upstream to Estes Arroyo.

A. Designated Uses: municipal and industrial water supply, irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 27°C (80.6°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.403 NMAC - Rp 20 NMAC 6.1.2403, 10-12-00; A, 05-23-05]

20.6.4.404 SAN JUAN RIVER BASIN - The Animas river from Estes Arroyo upstream to the New Mexico-Colorado line.

A. Designated Uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8, temperature 20°C (68°F) or less and total phosphorus (as P) 0.1 mg/L or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.404 NMAC - Rp 20 NMAC 6.1.2404, 10-12-00; A, 05-23-05]

20.6.4.405 SAN JUAN RIVER BASIN - The main stem of the San Juan river from Canyon Largo upstream to the Navajo dam.

A. Designated Uses: high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 400 µmhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.405 NMAC - Rp 20 NMAC 6.1.2405, 10-12-00; A, 05-23-05]

20.6.4.406 SAN JUAN RIVER BASIN - Navajo reservoir in New Mexico.

A. Designated Uses: coldwater aquatic life, warmwater aquatic life, irrigation storage, livestock watering, wildlife habitat, municipal and industrial water storage and primary contact.

B. Criteria:

(1) At any sampling site: pH within the range of 6.6 to 8.8, temperature 20°C (68°F) or less and total phosphorus (as P) 0.1 mg/L or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.406 NMAC - Rp 20 NMAC 6.1.2406, 10-12-00; A, 05-23-05]

20.6.4.407 SAN JUAN RIVER BASIN - Perennial reaches of the Navajo and Los Pinos rivers in New Mexico.

A. Designated Uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8, temperature 20°C (68°F) or less and total phosphorus (as P) 0.1 mg/L or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.407 NMAC - Rp 20 NMAC 6.1.2407, 10-12-00; A, 05-23-05]

20.6.4.408 SAN JUAN RIVER BASIN - The main stem of the San Juan river from its confluence with the Animas river upstream to its confluence with Canyon Largo.

A. Designated Uses: municipal and industrial water supply, irrigation, livestock watering, wildlife habitat, secondary contact, marginal coldwater aquatic life and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0, and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.408 NMAC - N, 05-23-05]

20.6.4.409 - 20.6.4.500: [RESERVED]

20.6.4.501 GILA RIVER BASIN - The main stem of the Gila river from the New Mexico-Arizona line upstream to Redrock canyon and perennial reaches of streams in Hidalgo county.

A. Designated Uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.501 NMAC - Rp 20 NMAC 6.1.2501, 10-12-00; A, 05-23-05]

20.6.4.502 GILA RIVER BASIN - The main stem of the Gila river from Redrock canyon upstream to the confluence of the West Fork Gila river and East Fork Gila river and perennial reaches of tributaries to the Gila river below Mogollon creek.

A. Designated Uses: industrial water supply, irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 28°C (82.4°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.502 NMAC - Rp 20 NMAC 6.1.2502, 10-12-00; A, 05-23-05]

20.6.4.503 GILA RIVER BASIN - All perennial tributaries to the Gila river above and including Mogollon creek.

A. Designated Uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock

watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 300 µmhos/cm or less for the main stem of the Gila river above Gila hot springs and 400 µmhos or less for other reaches, pH within the range of 6.6 to 8.8 and temperature 20°C (68° F) or less except 32.2°C (90°F) or less in the east fork of the Gila river and Sapillo creek below lake Roberts. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.503 NMAC - Rp 20 NMAC 6.1.2503, 10-12-00; A, 05-23-05]

20.6.4.504 GILA RIVER BASIN - Wall lake, Lake Roberts and Snow lake.

A. Designated Uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 300 µmhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 22°C (72°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.504 NMAC - Rp 20 NMAC 6.1.2504, 10-12-00; A, 05-23-05]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.806 NMAC.]

20.6.4.505 - 20.6.4.600: [RESERVED]

20.6.4.601 SAN FRANCISCO RIVER BASIN - The main stem of the San Francisco river from the New Mexico-Arizona line upstream to state highway 12 at Reserve and perennial reaches of Mule creek.

A. Designated Uses: irrigation, marginal warmwater and marginal coldwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 32.2°C (90°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.601 NMAC - Rp 20 NMAC 6.1.2601, 10-12-00; A, 05-23-05]

20.6.4.602 SAN FRANCISCO RIVER BASIN - The main stem of the San Francisco river from state highway 12 at Reserve upstream to the New Mexico-Arizona line.

A. Designated Uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 25°C (77°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.602 NMAC - Rp 20 NMAC 6.1.2602, 10-12-00; A, 05-23-05]

20.6.4.603 SAN FRANCISCO RIVER BASIN - All perennial reaches of tributaries to the San Francisco river above the confluence of Whitewater creek and including Whitewater creek.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: specific conductance 400 µmhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less except 25°C (77°F) or less in Tularosa creek. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.603 NMAC - Rp 20 NMAC 6.1.2603, 10-12-00; A, 05-23-05]

20.6.4.604 - 20.6.4.700: [RESERVED]

20.6.4.701 DRY CIMARRON RIVER - Perennial portions of the Dry Cimarron river above Oak creek and perennial reaches of Oak creek.

A. Designated Uses: marginal coldwater aquatic life, warmwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8, temperature 25°C (77°F) or less, TDS 1,200 mg/L or less, sulfate 600 mg/L or less, and chloride 40 mg/L or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.701 NMAC - Rp 20 NMAC 6.1.2701, 10-12-00; A, 05-23-05]

[NOTE: The segment covered by this section was divided effective 05-23-05. The standards for the additional segment are under 20.6.4.702 NMAC.]

20.6.4.702 DRY CIMARRON RIVER - Perennial portions of the Dry Cimarron river below Oak creek, and perennial portions of Long canyon and Carrizozo creeks.

A. Designated Uses: warmwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8, temperature 32.2°C (90°F) or less, TDS 1,200 mg/L or less, sulfate 600 mg/L or less and chloride 40 mg/L or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.702 NMAC - N, 05-23-05]

20.6.4.703 - 20.6.4.800: [RESERVED]

20.6.4.801 CLOSED BASINS - Rio Tularosa lying east of the old U.S. highway 70 bridge crossing east of Tularosa and all perennial tributaries to the Tularosa basin except Three Rivers.

A. Designated Uses: coldwater aquatic life, fish culture, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.801 NMAC - Rp 20 NMAC 6.1.2801, 10-12-00; A, 05-23-05]

20.6.4.802 CLOSED BASINS - Perennial reaches of Three Rivers.

A. Designated Uses: irrigation, domestic water supply, high quality coldwater aquatic life, secondary contact, livestock watering and wildlife habitat.

B. Criteria:

(1) In any single sample: specific conductance 500 µmhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.802 NMAC - Rp 20 NMAC 6.1.2802, 10-12-00; A, 05-23-05]

20.6.4.803 CLOSED BASINS - Perennial reaches of the Mimbres river downstream of the confluence with Willow Springs canyon and all perennial reaches of tributaries thereto.

A. Designated Uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. Criteria:

(1) In any single sample: pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of

this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.803 NMAC - Rp 20 NMAC 6.1.2803, 10-12-00; A, 05-23-05]

20.6.4.804 CLOSED BASINS - Perennial reaches of the Mimbres river upstream of the confluence with Willow Springs canyon and all perennial tributaries thereto.

A. **Designated Uses**: irrigation, domestic water supply, high quality coldwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. **Criteria**:

(1) In any single sample: specific conductance 300 µmhos or less, pH within the range of 6.6 to 8.8 and temperature 20°C (68°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 235 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.804 NMAC - Rp 20 NMAC 6.1.2804, 10-12-00; A, 05-23-05]

20.6.4.805 CLOSED BASINS - Perennial reaches of the Sacramento river (Sacramento-Salt Flat closed basin) and all perennial tributaries thereto.

A. **Designated Uses**: domestic and municipal water supply, livestock watering, wildlife habitat, marginal coldwater aquatic life and secondary contact.

B. **Criteria**:

(1) In any single sample: pH within the range of 6.6 to 9.0 and temperature 25°C (77°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.805 NMAC - Rp 20 NMAC 6.1.2805, 10-12-00; A, 05-23-05]

20.6.4.806 CLOSED BASINS - Bear canyon reservoir.

A. **Designated Uses:** coldwater aquatic life, irrigation, livestock watering, wildlife habitat and secondary contact.

B. **Criteria:**

(1) In any single sample: specific conductance 300 µmhos/cm or less, pH within the range of 6.6 to 8.8 and temperature 22°C (72°F) or less. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less; single sample 410 cfu/100 mL or less (see Subsection B of 20.6.4.14 NMAC).

[20.6.4.806 NMAC - N, 05-23-05]

20.6.4.807 - 20.6.4.899: [RESERVED]

20.6.4.900 CRITERIA APPLICABLE TO ATTAINABLE OR DESIGNATED USES UNLESS OTHERWISE SPECIFIED IN 20.6.4.97 THROUGH 20.6.4.899 NMAC.

A. **Fish Culture, Water Supply and Storage**: Fish culture and municipal and industrial water supply and storage are designated uses in particular classified waters of the state where these uses are actually being realized. However, no numeric criteria apply uniquely to these uses. Water quality adequate for these uses is ensured by the general criteria and numeric criteria for bacterial quality, pH and temperature that are established for all classified waters of the state listed in 20.6.4.97 through 20.6.4.899 NMAC.

B. **Domestic Water Supply**: Surface waters of the state designated for use as domestic water supplies shall not contain substances in concentrations that create a lifetime cancer risk of more than one cancer per 100,000 exposed persons. Those criteria listed under domestic water supply in Subsection J of this section apply to this use.

C. **Irrigation and Irrigation Storage**: The following numeric criteria and those criteria listed under irrigation in Subsection J of this section apply to this use:

(1)	dissolved selenium	0.13	mg/L
(2)	dissolved selenium in presence of >500 mg/L SO_4	0.25	mg/L

D. **Primary Contact**: The monthly geometric mean of E. coli bacteria of 126 cfu/100 mL and single sample of 410 cfu/100 mL, apply to this use and pH shall be within the range of 6.6 to 9.0.

E. **Secondary Contact:** The monthly geometric mean of E. coli bacteria of 548 cfu/100 mL and single sample of 2507 cfu/100 mL apply to this use.

F. **Livestock Watering**: The criteria listed in Subsection J for livestock watering apply to this use.

G. Wildlife Habitat: Wildlife habitat shall be free from any substances at concentrations that are toxic to or will adversely affect plants and animals that use these environments for feeding, drinking, habitat or propagation; can bioaccumulate; or might impair the community of animals in a watershed or the ecological integrity of surface waters of the state. The discharge of substances that bioaccumulate, in excess of levels listed in Subsection J for wildlife habitat is allowed if, and only to the extent that, the substances are present in the intake waters that are diverted and utilized prior to discharge, and then only if the discharger utilizes best available treatment technology to reduce the amount of bioaccumulating substances that are discharged. The numeric criteria listed in Subsection J for wildlife habitat apply to this use except when a site-specific or segment-specific criterion has been adopted under 20.6.4.101 through 20.6.4.899 NMAC.

H. Aquatic Life: Surface waters of the state with a designated, existing or attainable use of aquatic life shall be free from any substances at concentrations that can impair the community of plants and animals in or the ecological integrity of surface waters of the state. Except as provided in paragraph 6 below, the acute and chronic aquatic life criteria set out in subsections I and J of this section are applicable to this use. In addition, the specific criteria for aquatic life subcategories in the following paragraphs shall apply to waters classified under the respective designations

(1) High Quality Coldwater: Dissolved oxygen 6.0 mg/L or more, temperature 20°C (68°F) or less, pH within the range of 6.6 to 8.8 and specific conductance a limit varying between 300 µmhos/cm and 1,500 µmhos /cm depending on the natural background in particular surface waters of the state (the intent of this criterion is to prevent excessive increases in dissolved solids which would result in changes in community structure). The total ammonia criteria set out in Subsections K, L and M of this section and the human health criteria for pollutants listed in Subsection J of this section are applicable to this use.

(2) Coldwater: Dissolved oxygen 6.0 mg/L or more, temperature 20°C (68°F) or less and pH within the range of 6.6 to 8.8. The total ammonia criteria set out in Subsections K, L and M of this section and the human health criteria listed in Subsection J of this section are applicable to this use.

(3) Marginal Coldwater: Dissolved oxygen than 6 mg/L or more, on a case by case basis maximum temperatures may exceed 25°C (77°F) and the pH may range from 6.6 to 9.0. The total ammonia criteria set out in Subsections K, L and M of this section and the human health criteria listed in Subsection J of this section are applicable to this use.

(4) Warmwater: Dissolved oxygen 5 mg/L or more, temperature 32.2°C (90°F) or less, and pH within the range of 6.6 to 9.0. The total ammonia criteria set out in Subsections K, L and M of this section and the human health criteria listed in Subsection J of this section are applicable to this use.

(5) Marginal Warmwater: Dissolved oxygen 5 mg/L or more, pH within the range of 6.6 to 9.0 and on a case by case basis maximum temperatures may exceed 32.2°C (90°F). The total ammonia criteria set out in Subsections K, L and M of this section and the human health criteria listed in Subsection J of this section are applicable to this use.

(6) Limited Aquatic Life: Criteria shall be developed on a segment-specific basis. The acute aquatic life criteria of Subsections I and J of this section shall apply. Chronic aquatic life criteria do not apply unless adopted on a segment specific basis.

I. The following schedule of equations for the determination of numeric criteria for the substances listed and those criteria listed in Subsection J for aquatic life shall apply to the subcategories of aquatic life identified in this section.

(1) Acute criteria:

(a) dissolved silver $0.85\ e^{(1.72(\ln(\text{hardness}))-6.59)}$ µg/L

(b) dissolved cadmium $(e^{(1.0166(\ln(\text{hardness}))-3.924)})\text{cf}$ µg/L, the hardness-dependent formulae for cadmium must be multiplied by a conversion factor (cf) to be expressed as dissolved values; the acute factor for cadmium is cf = 1.136672 - ((ln hardness)(0.041838))

(c) dissolved chromium $0.316\ e^{(0.819(\ln(\text{hardness}))+3.7256)}$ µg/L

(d) dissolved copper $0.960\ e^{(0.9422(\ln(\text{hardness}))-1.700)}$ µg/L

(e) dissolved lead $(e^{(1.273(\ln(\text{hardness}))-1.46)})\text{cf}$ µg/L, the hardness-dependent formulae for lead must be multiplied by a conversion factor (cf) to be expressed as dissolved values; the acute and chronic factor for lead is cf = 1.46203 - ((ln hardness)(0.145712))

(f) dissolved nickel $0.998\ e^{(0.8460(\ln(\text{hardness}))+2.255)}$ µg/L

(g) dissolved zinc $0.978\ e^{(0.8473(\ln(\text{hardness}))+0.884)}$ µg/L

(2) Chronic criteria:

(a) dissolved cadmium $(e^{(0.7409(\ln(\text{hardness}))-4.719)})\text{cf}$ µg/L, the hardness-dependent formulae for cadmium must be multiplied by a conversion factor (cf) to be expressed as dissolved values; the chronic factor for cadmium is cf = 1.101672 - ((ln hardness)(0.041838))

(b) dissolved chromium $0.860\ e^{(0.819(\ln(\text{hardness}))+0.6848)}$ µg/L

(c) dissolved copper $0.960\ e^{(0.8545(\ln(\text{hardness}))-1.702)}$ µg/L

(d) dissolved lead $(e^{(1.273(\ln(\text{hardness}))-4.705)})\text{cf}$ µg/L, the hardness-dependent formulae for lead must be multiplied by a conversion factor (cf) to be expressed as dissolved values; the acute and chronic factor for lead is cf = 1.46203 - ((ln hardness)(0.145712))

(e) dissolved nickel $0.997\ e^{(0.846(\ln(\text{hardness}))+0.0584)}$ µg/L

(f) dissolved zinc $0.986\ e^{(0.8473(\ln(hardness))+0.884)}$ µg/L

J. Numeric criteria. The following table sets forth the numeric criteria adopted by the commission to protect existing, designated and attainable uses. Additional criteria that are not compatible with this table are found in Subsections A through I of this section.

Pollutant total, unless indicated	**CAS Number**	**Domestic Water Supply** µg/L unless indicated	**Irrigation** µg/L unless indicated	**Livestock Watering** µg/L unless indicated	**Wildlife Habitat** µg/L unless indicated	**Aquatic Life**	
						Acute µg/L	**Chrc** µg/
Aluminum, dissolved	7429-90-5		5,000			750	87
Antimony, dissolved	7440-36-0	5.6					
Arsenic, dissolved	7440-38-2	2.3	100	200		340	15
Asbestos	1332-21-4	7,000,000 fibers/L					
Barium, dissolved	7440-39-3	2,000					
Beryllium, dissolved	7440-41-7	4					
Boron, dissolved	7440-42-8		750	5,000			
Cadmium, dissolved	7440-43-9	5	10	50		see 20.6.4.900.I	se 20.6.4
Chlorine residual	7782-50-5				11	19	11
Chromium, dissolved	18540-29-9	100	100	1,000		see 20.6.4.900.I	se 20.6.4
Cobalt, dissolved	7440-48-4		50	1,000			
Copper, dissolved	7440-50-8	1300	200	500		see 20.6.4.900.I	se 20.6.4
Cyanide, dissolved	57-12-5	200					
Cyanide, weak acid dissociable	57-12-5	700			5.2	22.0	5.2
Lead, dissolved	7439-92-1	50	5,000	100		see 20.6.4.900.I	se 20.6.4
Mercury	7439-97-6	2		10	0.77		
Mercury, dissolved	7439-97-6					1.4	0.7
Methymercury	22967-92-6						
Molybdenum, dissolved	7439-98-7		1,000				
Nickel, dissolved	7440-02-0	100				see 20.6.4.900.I	se 20.6.4
Nitrate as N		10 mg/L					
Nitrite + Nitrate				132 mg/L			
Selenium, dissolved	7782-49-2	50	see 20.6.4.900.C	50			
Selenium, total recoverable	7782-49-2				5.0	20.0	5.0
Silver, dissolved	7440-22-4					see 20.6.4.900.I	
Thallium, dissolved	7440-28-0	1.7					
Uranium, dissolved	7440-61-1	5,000					
Vanadium, dissolved	7440-62-2		100	100			
						see	se

Zinc, dissolved	7440-66-6	7,400	2,000	25,000		20.6.4.900.I	20.6.4
Adjusted gross alpha (see 20.6.4.900.B and .F)		15 pCi/L		15 pCi/L			
Radium 226 + Radium 228		5 pCi/L		30.0 pCi/L			
Strontium 90		8 pCi/L					
Tritium		20,000 pCi/L		20,000 pCi/L			
Acenaphthene	83-32-9	670					
Acrolein	107-02-8	190					
Acrylonitrile	107-13-1	0.51					
Aldrin	309-00-2	0.00049				3.0	
Anthracene	120-12-7	8,300					
Benzene	71-43-2	22					
Benzidine	92-87-5	0.00086					
Benzo(a)anthracene	56-55-3	0.038					
Benzo(a)pyrene	50-32-8	0.038					
Benzo(b) fluoranthene	205-99-2	0.038					
Benzo(k) fluoranthene	207-08-9	0.038					
alpha-BHC	319-84-6	0.026					
beta-BHC	319-85-7	0.091					
Gamma-BHC (Lindane)	58-89-9	0.19				0.95	
Bis(2-chloroethyl) ether	111-44-4	0.30					
Bis(2-chloroisopropyl) ether	108-60-1	1,400					
Bis(2-ethylhexyl) phthalate	117817	12					
Bromoform	75-25-2	43					
Butylbenzyl phthalate	85-68-7	1,500					
Carbon tetrachloride	56-23-5	2.3					
Chlordane	57-74-9	0.0080				2.4	0.00
Chlorobenzene	108-90-7	680					
Chlorodibromomethane	124-48-1	4.0					
Chloroform	67-66-3	57					
2-Chloronaphthalene	91-58-7	1,000					
2-Chlorophenol	95-57-8	81					
Chrysene	218-01-9	0.038					
4,4'-DDT and derivatives		0.0022			0.001	1.1	0.0(
Dibenzo(a,h) anthracene	53-70-3	0.038					
Dibutyl phthalate	84-74-2	2,000					
1,2-Dichlorobenzene	95-50-1	2,700					
1,3-Dichlorobenzene	541-73-1	320					
1,4-							

Dichlorobenzene	106-46-7	400					
3,3'-Dichlorobenzidine	91-94-1	0.21					
Dichlorobromomethane	75-27-4	5.5					
1,2-Dichloroethane	107-06-2	3.8					
1,1-Dichloroethylene	75-35-4	0.57					
2,4-Dichlorophenol	120-83-2	77					
1,2-Dichloropropane	78-87-5	5.0					
1,3-Dichloropropene	542-75-6	10					
Dieldrin	60-57-1	0.00052				0.24	0.0
Diethyl phthalate	84-66-2	17,000					
Dimethyl phthalate	131-11-3	270,000					
2,4-Dimethylphenol	105-67-9	380					
2,4-Dinitrophenol	51-28-5	69					
2,4-Dinitrotoluene	121-14-2	1.1					
2,3,7,8-TCDD Dioxin	1746-01-6	5.0E-08					
1,2-Diphenylhydrazine	122-66-7	0.36					
alpha-Endosulfan	959-98-8	62				0.22	0.0
beta-Endosulfan	33213-65-9	62				0.22	0.0
Endosulfan sulfate	1031-07-8	62					
Endrin	72-20-8	0.76				0.086	0.0
Endrin aldehyde	7421-93-4	0.29					
Ethylbenzene	100-41-4	3,100					
Fluoranthene	206-44-0	130					
Fluorene	86-73-7	1,100					
Heptachlor	76-44-8	0.00079				0.52	0.00
Heptachlor epoxide	1024-57-3	0.00039				0.52	0.00
Hexachlorobenzene	118-74-1	0.0028					
Hexachlorobutadiene	87-68-3	4.4					
Hexachlorocyclopentadiene	77-47-4	240					
Hexachloroethane	67-72-1	14					
Ideno(1,2,3-cd) pyrene	193-39-5	0.038					
Isophorone	78-59-1	350					
Methyl bromide	74-83-9	47					
2-Methyl-4,6-dinitrophenol	534-52-1	13					
Methylene chloride	75-09-2	46					
Nitrobenzene	98-95-3	17					
N-Nitrosodimethylamine	62-75-9	0.0069					
N-Nitrosodi-n-propylamine	621-64-7	0.050					
N-Nitrosodiphenylamine	86-30-6	33					
PCBs	1336-36-3	0.00064			0.014		0.0
Pentachlorophenol	87-86-5	2.7				19	1
Phenol	108-95-2	21,000					
Pyrene	129-00-0	830					

1,1,2,2-Tetrachloroethane	79-34-5	1.7					
Tetrachloroethylene	127-18-4	6.9					
Toluene	108-88-3	6,800					
Toxaphene	8001-35-2	0.0028				0.73	0.00
1,2-Trans-dichloroethylene	156-60-5	700					
1,2,4-Trichlorobenzene	120-82-1	260					
1,1,2-Trichloroethane	79-00-5	5.9					
Trichloroethylene	79-01-6	25					
2,4,6-Trichlorophenol	88-06-2	14					
Vinyl chloride	75-01-4	20					

K. Acute Criteria, Total Ammonia (mg/L as N)

pH	Salmonids Present	Salmonids Absent
6.5	32.6	48.8
6.6	31.3	46.8
6.7	29.8	44.6
6.8	28.1	42.0
6.9	26.2	39.1
7.0	24.1	36.1
7.1	22.0	32.8
7.2	19.7	29.5
7.3	17.5	26.2
7.4	15.4	23.0
7.5	13.3	19.9
7.6	11.4	17.0
7.7	9.65	14.4
7.8	8.11	12.1
7.9	6.77	10.1
8.0	5.62	8.40
8.1	4.64	6.95
8.2	3.83	5.72
8.3	3.15	4.71
8.4	2.59	3.88
8.5	2.14	3.20
8.6	1.77	2.65
8.7	1.47	2.20
8.8	1.23	1.84
8.9	1.04	1.56
9.0	0.885	1.32

L. Chronic Criteria, Total Ammonia (mg/L as N), Fish Early Life Stages Present

pH	Temperature (°C)										
	0	14	15	16	18	20	22	24	26	28	30
6.5	6.67	6.67	6.46	6.06	5.33	4.68	4.12	3.62	3.18	2.80	2.46
6.6	6.57	6.57	6.36	5.97	5.25	4.61	4.05	3.56	3.13	2.75	2.42
6.7	6.44	6.44	6.25	5.86	5.15	4.52	3.98	3.50	3.07	2.70	2.37
6.8	6.29	6.29	6.10	5.72	5.03	4.42	3.89	3.42	3.00	2.64	2.32
6.9	6.12	6.12	5.93	5.56	4.89	4.30	3.78	3.32	2.92	2.57	2.25
7.0	5.91	5.91	5.73	5.37	4.72	4.15	3.65	3.21	2.82	2.48	2.18

7.1	5.67	5.67	5.49	5.15	4.53	3.98	3.50	3.08	2.70	2.38	2.09
7.2	5.39	5.39	5.22	4.90	4.31	3.78	3.33	2.92	2.57	2.26	1.99
7.3	5.08	5.08	4.92	4.61	4.06	3.57	3.13	2.76	2.42	2.13	1.87
7.4	4.73	4.73	4.59	4.30	3.78	3.32	2.92	2.57	2.26	1.98	1.74
7.5	4.36	4.36	4.23	3.97	3.49	3.06	2.69	2.37	2.08	1.83	1.61
7.6	3.98	3.98	3.85	3.61	3.18	2.79	2.45	2.16	1.90	1.67	1.47
7.7	3.58	3.58	3.47	3.25	2.86	2.51	2.21	1.94	1.71	1.50	1.32
7.8	3.18	3.18	3.09	2.89	2.54	2.23	1.96	1.73	1.52	1.33	1.17
7.9	2.80	2.80	2.71	2.54	2.24	1.96	1.73	1.52	1.33	1.17	1.03
8.0	2.43	2.43	2.36	2.21	1.94	1.71	1.50	1.32	1.16	1.02	0.897
8.1	2.10	2.10	2.03	1.91	1.68	1.47	1.29	1.14	1.00	0.879	0.773
8.2	1.79	1.79	1.74	1.63	1.43	1.26	1.11	0.973	0.855	0.752	0.661
8.3	1.52	1.52	1.48	1.39	1.22	1.07	0.941	0.827	0.727	0.639	0.562
8.4	1.29	1.29	1.25	1.17	1.03	0.906	0.796	0.700	0.615	0.541	0.475
8.5	1.09	1.09	1.06	0.990	0.870	0.765	0.672	0.591	0.520	0.457	0.401
8.6	0.920	0.920	0.892	0.836	0.735	0.646	0.568	0.499	0.439	0.386	0.339
8.7	0.778	0.778	0.754	0.707	0.622	0.547	0.480	0.422	0.371	0.326	0.287
8.8	0.661	0.661	0.641	0.601	0.528	0.464	0.408	0.359	0.315	0.277	0.244
8.9	0.565	0.565	0.548	0.513	0.451	0.397	0.349	0.306	0.269	0.237	0.208
9.0	0.486	0.486	0.471	0.442	0.389	0.342	0.300	0.264	0.232	0.204	0.179

M. Chronic Criteria, Total Ammonia (mg/L as N), Fish Early Life Stages Absent

pH	Temperature (°C)									
	0	7	8	9	10	11	12	13	14	15
6.5	10.8	10.8	10.1	9.51	8.92	8.36	7.84	7.35	6.89	6.46
6.6	10.7	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79	6.36
6.7	10.5	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66	6.25
6.8	10.2	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51	6.10
6.9	9.93	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33	5.93
7.0	9.60	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11	5.73
7.1	9.20	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86	5.49
7.2	8.75	8.75	8.20	7.69	7.21	6.76	6.34	5.94	5.57	5.22
7.3	8.24	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25	4.92
7.4	7.69	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89	4.59
7.5	7.09	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51	4.23
7.6	6.46	6.46	6.05	5.67	5.32	4.99	4.68	4.38	4.11	3.85
7.7	5.81	5.81	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47
7.8	5.17	5.17	4.84	4.54	4.26	3.99	3.74	3.51	3.29	3.09
7.9	4.54	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	2.71
8.0	3.95	3.95	3.70	3.47	3.26	3.05	2.86	2.68	2.52	2.36
8.1	3.41	3.41	3.19	2.99	2.81	2.63	2.47	2.31	2.17	2.03
8.2	2.91	2.91	2.73	2.56	2.40	2.25	2.11	1.98	1.85	1.74
8.3	2.47	2.47	2.32	2.18	2.04	1.91	1.79	1.68	1.58	1.48
8.4	2.09	2.09	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25
8.5	1.77	1.77	1.66	1.55	1.46	1.37	1.28	1.20	1.13	1.06
8.6	1.49	1.49	1.40	1.31	1.23	1.15	1.08	1.01	0.951	0.892
8.7	1.26	1.26	1.18	1.11	1.04	0.976	0.915	0.858	0.805	0.754
8.8	1.07	1.07	1.01	0.944	0.855	0.829	0.778	0.729	0.684	0.641
8.9	0.917	0.917	0.860	0.806	0.756	0.709	0.664	0.623	0.584	0.548
9.0	0.790	0.790	0.740	0.694	0.651	0.610	0.572	0.536	0.503	0.471
At 15° C and above, the criterion for fish early life stages absent is the same as the criterion for fish early life stages present (refer to Subsection L of 20.6.4.900 NMAC).										

N. Dissolved oxygen saturation based on temperature and elevation.

(1) Elevation 5,000 feet or less:

	Elevation (feet)

		0	500	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000
Temperature (°C)	0	14.6	14.3	14.1	13.8	13.6	13.3	13.1	12.8	12.6	12.3	12.1
	1	14.2	13.9	13.7	13.4	13.2	12.9	12.7	12.5	12.2	12.0	11.8
	2	13.8	13.6	13.3	13.1	12.8	12.6	12.4	12.1	11.9	11.7	11.5
	3	13.4	13.2	13.0	12.7	12.5	12.3	12.0	11.8	11.6	11.4	11.1
	4	13.1	12.8	12.6	12.4	12.2	11.9	11.7	11.5	11.3	11.1	10.9
	5	12.7	12.5	12.3	12.1	11.8	11.6	11.4	11.2	11.0	10.8	10.6
	6	12.4	12.2	12.0	11.8	11.5	11.3	11.1	10.9	10.7	10.5	10.3
	7	12.1	11.9	11.7	11.5	11.3	11.1	10.8	10.6	10.4	10.2	10.1
	8	11.8	11.6	11.4	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8
	9	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.8	9.6
	10	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.4
	11	11.0	10.8	10.6	10.4	10.2	10.0	9.9	9.7	9.5	9.3	9.1
	12	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.5	9.3	9.1	8.9
	13	10.5	10.3	10.1	9.9	9.8	9.6	9.4	9.2	9.1	8.9	8.7
	14	10.3	10.1	9.9	9.7	9.6	9.4	9.2	9.0	8.9	8.7	8.5
	15	10.1	9.9	9.7	9.5	9.3	9.2	9.0	8.8	8.7	8.5	8.4
	16	9.8	9.7	9.5	9.3	9.2	9.0	8.8	8.7	8.5	8.3	8.2
	17	9.6	9.5	9.3	9.1	9.0	8.8	8.6	8.5	8.3	8.2	8.0
	18	9.4	9.3	9.1	8.9	8.8	8.6	8.5	8.3	8.1	8.0	7.8
	19	9.3	9.1	8.9	8.8	8.6	8.4	8.3	8.1	8.0	7.8	7.7
	20	9.1	8.9	8.7	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5
	21	8.9	8.7	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5	7.4
	22	8.7	8.6	8.4	8.2	8.1	8.0	7.8	7.7	7.5	7.4	7.2
	23	8.6	8.4	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1
	24	8.4	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0
	25	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8
	26	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7
	27	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6
	28	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.9	6.7	6.6	6.5
	29	7.7	7.5	7.4	7.3	7.1	7.0	6.9	6.7	6.6	6.5	6.4
	30	7.5	7.4	7.3	7.1	7.0	6.9	6.7	6.6	6.5	6.4	6.3

(2) Elevation greater than 5,000 feet:

		Elevation (feet)									
		5,500	6,000	6,500	7,000	7,500	8,000	8,500	9,000	9,500	10,000
Temperature (°C)	0	11.9	11.6	11.4	11.2	11.0	10.8	10.6	10.3	10.1	9.9
	1	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7
	2	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4
	3	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.3	9.1
	4	10.7	10.4	10.2	10.0	9.8	9.7	9.5	9.3	9.1	8.9
	5	10.4	10.2	10.0	9.8	9.6	9.4	9.2	9.0	8.9	8.7
	6	10.1	9.9	9.7	9.5	9.4	9.2	9.0	8.8	8.6	8.5
	7	9.9	9.7	9.5	9.3	9.1	8.9	8.8	8.6	8.4	8.2
	8	9.6	9.4	9.3	9.1	8.9	8.7	8.6	8.4	8.2	8.0
	9	9.4	9.2	9.0	8.9	8.7	8.5	8.3	8.2	8.0	7.8
	10	9.2	9.0	8.8	8.7	8.5	8.3	8.1	8.0	7.8	7.7
	11	9.0	8.8	8.6	8.5	8.3	8.1	8.0	7.8	7.6	7.5
	12	8.8	8.6	8.4	8.3	8.1	7.9	7.8	7.6	7.5	7.3
	13	8.6	8.4	8.2	8.1	7.9	7.8	7.6	7.5	7.3	7.2
	14	8.4	8.2	8.1	7.9	7.7	7.6	7.4	7.3	7.1	7.0
	15	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8
	16	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8	6.7
	17	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8	6.7	6.6
	18	7.7	7.5	7.4	7.3	7.1	7.0	6.8	6.7	6.6	6.4
	19	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3

	20	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2
	21	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.0
	22	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9
	23	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9	5.8
	24	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9	5.8	5.7
	25	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.8	5.7	5.6
	26	6.6	6.5	6.3	6.2	6.1	6.0	5.8	5.7	5.6	5.5
	27	6.5	6.3	6.2	6.1	6.0	5.9	5.7	5.6	5.5	5.4
	28	6.4	6.2	6.1	6.0	5.9	5.8	5.6	5.5	5.4	5.3
	29	6.2	6.1	6.0	5.9	5.8	5.7	5.5	5.4	5.3	5.2
	30	6.1	6.0	5.9	5.8	5.7	5.6	5.4	5.3	5.2	5.1

[20.6.4.900 NMAC - Rp 20 NMAC 6.1.3100, 10-12-00; A, 10-11-02; A, 05-23-05; A, 07-17-05]

20.6.4.901 PUBLICATION REFERENCES: These documents are intended as guidance and are available for public review during regular business hours at the offices of the surface water quality bureau and the New Mexico environment department public library. Copies of these documents have also been filed with the New Mexico state records center in order to provide greater access to this information.

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[20.6.4.901 NMAC - Rp 20 NMAC 6.1.4000, 10-12-00; A, 05-23-05]

HISTORY of 20.6.4 NMAC:

Pre-NMAC History:

Material in the part was derived from that previously filed with the commission of public records - state records center and archives:

WQC 67-1, Water Quality Standards, filed 7-17-67, effective 8-18-67
WQC 67-1, Amendment Nos. 1-6, filed 3-21-68, effective 4-22-68
WQC 67-1, Amendment No. 7, filed 2-27-69, effective 3-30-69
WQC 67-1, Amendment No. 8, filed 7-14-69, effective 8-15-69
WQC 70-1, Water Quality Standards for Intrastate Waters and Tributaries to Interstate Streams, filed July 17, 1970;
WQC 67-1, Amendment Nos. 9 and 10, filed 2-12-71, effective 3-15-71

WQC 67-1, Amendment No. 11, filed 3-4-71, effe
WQC 73-1, New Mexico Water Quality Standards
WQC 73-1, Amendment Nos. 1 and 2, filed 10-3- ctive 4-5-71
WQC 73-1, Amendment No. 3, filed 1-19-76, eff , filed 9-17-73, effective 10-23-73
WQC 77-2, Amended Water Quality Standards 75, effective 11-4-75
WQC 77-2, Amendment No. 1, filed 3-23-7 ective 2-14-76
3-11-77 for Interstate and Intrastate Streams in New Mexico, filed 2-24-77, effective
WQC 77-2, Amendment No. 2, filed 6-1 8, effective 4-24-78
WQCC 80-1, Water Quality Standar 2-79, effective 7-13-79
WQCC 81-1, Water Qualit s for Interstate and Intrastate Streams in New Mexico, filed 8-28-80, effective 9-28-80
WQCC 81-1, Amend y Standards for Interstate and Intrastate Streams in New Mexico, filed 5-5-81, effective 6-4-81
WQCC 81-1, Amendment No. 1, filed 5-19-82, effective 6-18-82
WQCC 81-1 Amendment No. 2, filed 6-24-82, effective 7-26-82
WQCC Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 1-16-85, effective 2-15-85
WQCC 85-1, Amendment No. 1, filed 8-28-87, effective 9-28-87
WQCC 88-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 3-24-88, effective 4-25-88
WQCC 91-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, filed 5-29-91, effective 6-29-91
WQCC 91-1, Amendment No. 1, filed 10-11-91, effective 11-12-91

History of the Repealed Material:
WQC 67-1, Water Quality Standards, - Superseded, 10-23-73
WQC 73-1, New Mexico Water Quality Standards, - Superseded, 3-11-77
WQC 77-2, Amended Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 9-28-80
WQCC 80-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 6-4-81
WQCC 81-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 2-15-85
WQCC 85-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 4-25-88
WQCC 88-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 6-29-91
WQCC 91-1, Water Quality Standards for Interstate and Intrastate Streams in New Mexico, - Superseded, 1-23-95
20 NMAC 6.1, Standards for Interstate and Intrastate Streams, - Repealed, 2-23-00
20 NMAC 6.1, Standards for Interstate and Intrastate Surface Waters, - Repealed, 10-12-00

MCL's

EPA National Primary Drinking Water Standards

	Contaminant	MCL or TT[1] (mg/L)[2]	Potential health effects from exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal
OC	Acrylamide	TT[8]	Nervous system or blood problems;	Added to water during sewage/wastewater increased risk of cancer treatment	zero
OC	Alachlor	0.002	Eye, liver, kidney or spleen problems; anemia; increased risk of cancer	Runoff from herbicide used on row crops	zero
R	Alpha particles	15 picocuries per Liter (pCi/L)	Increased risk of cancer	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation	zero
IOC	Antimony	0.006	Increase in blood cholesterol; decrease in blood sugar	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	0.006
IOC	Arsenic	0.010 as of 1/23/06	Skin damage or problems with circulatory systems, and may have increased risk of getting cancer	Erosion of natural deposits; runoff from orchards, runoff from glass & electronics production wastes	0
IOC	Asbestos (fibers >10 micrometers)	7 million fibers per Liter (MFL)	Increased risk of developing benign intestinal polyps	Decay of asbestos cement in water mains; erosion of natural deposits	7 MFL
OC	Atrazine	0.003	Cardiovascular system or reproductive problems	Runoff from herbicide used on row crops	0.003
IOC	Barium	2	Increase in blood pressure	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	2
OC	Benzene	0.005	Anemia; decrease in blood platelets; increased risk of cancer	Discharge from factories; leaching from gas storage tanks and landfills	zero
OC	Benzo(a)pyrene (PAHs)	0.0002	Reproductive difficulties; increased risk of cancer	Leaching from linings of water storage tanks and distribution lines	zero
IOC	Beryllium	0.004	Intestinal lesions	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries	0.004
R	Beta particles and photon emitters	4 millirems per year	Increased risk of cancer	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation	zero
DBP	Bromate	0.010	Increased risk of cancer	Byproduct of drinking water disinfection	zero
IOC	Cadmium	0.005	Kidney damage	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints	0.005
OC	Carbofuran	0.04	Problems with blood, nervous system, or reproductive system	Leaching of soil fumigant used on rice and alfalfa	0.04
OC	Carbon tetrachloride	0.005	Liver problems; increased risk of cancer	Discharge from chemical plants and other industrial activities	zero
D	Chloramines (as Cl_2)	MRDL=4.0[1]	Eye/nose irritation; stomach discomfort, anemia	Water additive used to control microbes	MRDLG=4[1]

LEGEND

D Dinsinfectant

DBP Disinfection Byproduct

IOC Inorganic Chemical

M Microorganism

OC Organic Chemical

R Radionuclides

	Contaminant	MCL or TT[1] (mg/L)[2]	Potential health effects from exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal
OC	Chlordane	0.002	Liver or nervous system problems; increased risk of cancer	Residue of banned termiticide	zero
D	Chlorine (as Cl_2)	MRDL=4.0[1]	Eye/nose irritation; stomach discomfort	Water additive used to control microbes	MRDLG=4[1]
D	Chlorine dioxide (as ClO_2)	MRDL=0.8[1]	Anemia; infants & young children: nervous system effects	Water additive used to control microbes	MRDLG=0.8[1]
DBP	Chlorite	1.0	Anemia; infants & young children: nervous system effects	Byproduct of drinking water disinfection	0.8
OC	Chlorobenzene	0.1	Liver or kidney problems	Discharge from chemical and agricultural chemical factories	0.1
IOC	Chromium (total)	0.1	Allergic dermatitis	Discharge from steel and pulp mills; erosion of natural deposits	0.1
IOC	Copper	TT[7]; Action Level = 1.3	Short term exposure: Gastrointestinal distress. Long term exposure: Liver or kidney damage. People with Wilson's Disease should consult their personal doctor if the amount of copper in their water exceeds the action level	Corrosion of household plumbing systems; erosion of natural deposits	1.3
M	*Cryptosporidium*	TT[3]	Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)	Human and animal fecal waste	zero
IOC	Cyanide (as free cyanide)	0.2	Nerve damage or thyroid problems	Discharge from steel/metal factories; discharge from plastic and fertilizer factories	0.2
OC	2,4-D	0.07	Kidney, liver, or adrenal gland problems	Runoff from herbicide used on row crops	0.07
OC	Dalapon	0.2	Minor kidney changes	Runoff from herbicide used on rights of way	0.2
OC	1,2-Dibromo-3-chloropropane (DBCP)	0.0002	Reproductive difficulties; increased risk of cancer	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards	zero
OC	o-Dichlorobenzene	0.6	Liver, kidney, or circulatory system problems	Discharge from industrial chemical factories	0.6
OC	p-Dichlorobenzene	0.075	Anemia; liver, kidney or spleen damage; changes in blood	Discharge from industrial chemical factories	0.075
OC	1,2-Dichloroethane	0.005	Increased risk of cancer	Discharge from industrial chemical factories	zero
OC	1,1-Dichloroethylene	0.007	Liver problems	Discharge from industrial chemical factories	0.007
OC	cis-1,2-Dichloroethylene	0.07	Liver problems	Discharge from industrial chemical factories	0.07
OC	trans-1,2-Dichloroethylene	0.1	Liver problems	Discharge from industrial chemical factories	0.1
OC	Dichloromethane	0.005	Liver problems; increased risk of cancer	Discharge from drug and chemical factories	zero
OC	1,2-Dichloropropane	0.005	Increased risk of cancer	Discharge from industrial chemical factories	zero
OC	Di(2-ethylhexyl) adipate	0.4	Weight loss, live problems, or possible reproductive difficulties	Discharge from chemical factories	0.4
OC	Di(2-ethylhexyl) phthalate	0.006	Reproductive difficulties; liver problems; increased risk of cancer	Discharge from rubber and chemical factories	zero
OC	Dinoseb	0.007	Reproductive difficulties	Runoff from herbicide used on soybeans and vegetables	0.007
OC	Dioxin (2,3,7,8-TCDD)	0.00000003	Reproductive difficulties; increased risk of cancer	Emissions from waste incineration and other combustion; discharge from chemical factories	zero
OC	Diquat	0.02	Cataracts	Runoff from herbicide use	0.02
OC	Endothall	0.1	Stomach and intestinal problems	Runoff from herbicide use	0.1

LEGEND

D Dinsinfectant
DBP Disinfection Byproduct
IOC Inorganic Chemical
M Microorganism
OC Organic Chemical
R Radionuclides

	Contaminant	MCL or TT[1] (mg/L)[2]	Potential health effects from exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal
OC	Endrin	0.002	Liver problems	Residue of banned insecticide	0.002
OC	Epichlorohydrin	TT[8]	Increased cancer risk, and over a long period of time, stomach problems	Discharge from industrial chemical factories; an impurity of some water treatment chemicals	zero
OC	Ethylbenzene	0.7	Liver or kidneys problems	Discharge from petroleum refineries	0.7
OC	Ethylene dibromide	0.00005	Problems with liver, stomach, reproductive system, or kidneys; increased risk of cancer	Discharge from petroleum refineries	zero
IOC	Fluoride	4.0	Bone disease (pain and tenderness of the bones); Children may get mottled teeth	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories	4.0
M	*Giardia lamblia*	TT[3]	Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)	Human and animal fecal waste	zero
OC	Glyphosate	0.7	Kidney problems; reproductive difficulties	Runoff from herbicide use	0.7
DBP	Haloacetic acids (HAA5)	0.060	Increased risk of cancer	Byproduct of drinking water disinfection	n/a[6]
OC	Heptachlor	0.0004	Liver damage; increased risk of cancer	Residue of banned termiticide	zero
OC	Heptachlor epoxide	0.0002	Liver damage; increased risk of cancer	Breakdown of heptachlor	zero
M	Heterotrophic plate count (HPC)	TT[3]	HPC has no health effects; it is an analytic method used to measure the variety of bacteria that are common in water. The lower the concentration of bacteria in drinking water, the better maintained the water system is.	HPC measures a range of bacteria that are naturally present in the environment	n/a
OC	Hexachlorobenzene	0.001	Liver or kidney problems; reproductive difficulties; increased risk of cancer	Discharge from metal refineries and agricultural chemical factories	zero
OC	Hexachlorocyclopentadiene	0.05	Kidney or stomach problems	Discharge from chemical factories	0.05
IOC	Lead	TT[7]; Action Level = 0.015	Infants and children: Delays in physical or mental development; children could show slight deficits in attention span and learning abilities; Adults: Kidney problems; high blood pressure	Corrosion of household plumbing systems; erosion of natural deposits	zero
M	*Legionella*	TT[3]	Legionnaire's Disease, a type of pneumonia	Found naturally in water; multiplies in heating systems	zero
OC	Lindane	0.0002	Liver or kidney problems	Runoff/leaching from insecticide used on cattle, lumber, gardens	0.0002
IOC	Mercury (inorganic)	0.002	Kidney damage	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands	0.002
OC	Methoxychlor	0.04	Reproductive difficulties	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock	0.04
IOC	Nitrate (measured as Nitrogen)	10	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	10
IOC	Nitrite (measured as Nitrogen)	1	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	1

LEGEND

D Dinsinfectant
DBP Disinfection Byproduct
IOC Inorganic Chemical
M Microorganism
OC Organic Chemical
R Radionuclides

	Contaminant	MCL or TT1 (mg/L)2	Potential health effects from exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal
OC	Oxamyl (Vydate)	0.2	Slight nervous system effects	Runoff/leaching from insecticide used on apples, potatoes, and tomatoes	0.2
OC	Pentachlorophenol	0.001	Liver or kidney problems; increased cancer risk	Discharge from wood preserving factories	zero
OC	Picloram	0.5	Liver problems	Herbicide runoff	0.5
OC	Polychlorinated biphenyls (PCBs)	0.0005	Skin changes; thymus gland problems; immune deficiencies; reproductive or nervous system difficulties; increased risk of cancer	Runoff from landfills; discharge of waste chemicals	zero
R	Radium 226 and Radium 228 (combined)	5 pCi/L	Increased risk of cancer	Erosion of natural deposits	zero
IOC	Selenium	0.05	Hair or fingernail loss; numbness in fingers or toes; circulatory problems	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines	0.05
OC	Simazine	0.004	Problems with blood	Herbicide runoff	0.004
OC	Styrene	0.1	Liver, kidney, or circulatory system problems	Discharge from rubber and plastic factories; leaching from landfills	0.1
OC	Tetrachloroethylene	0.005	Liver problems; increased risk of cancer	Discharge from factories and dry cleaners	zero
IOC	Thallium	0.002	Hair loss; changes in blood; kidney, intestine, or liver problems	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories	0.0005
OC	Toluene	1	Nervous system, kidney, or liver problems	Discharge from petroleum factories	1
M	Total Coliforms (including fecal coliform and *E. coli*)	5.0%4	Not a health threat in itself; it is used to indicate whether other potentially harmful bacteria may be present5	Coliforms are naturally present in the environment as well as feces; fecal coliforms and *E. coli* only come from human and animal fecal waste.	zero
DBP	Total Trihalomethanes (TTHMs)	0.10 0.080 after 12/31/03	Liver, kidney or central nervous system problems; increased risk of cancer	Byproduct of drinking water disinfection	n/a6
OC	Toxaphene	0.003	Kidney, liver, or thyroid problems; increased risk of cancer	Runoff/leaching from insecticide used on cotton and cattle	zero
OC	2,4,5-TP (Silvex)	0.05	Liver problems	Residue of banned herbicide	0.05
OC	1,2,4-Trichlorobenzene	0.07	Changes in adrenal glands	Discharge from textile finishing factories	0.07
OC	1,1,1-Trichloroethane	0.2	Liver, nervous system, or circulatory problems	Discharge from metal degreasing sites and other factories	0.20
OC	1,1,2-Trichloroethane	0.005	Liver, kidney, or immune system problems	Discharge from industrial chemical factories	0.003
OC	Trichloroethylene	0.005	Liver problems; increased risk of cancer	Discharge from metal degreasing sites and other factories	zero
M	Turbidity	TT3	Turbidity is a measure of the cloudiness of water. It is used to indicate water quality and filtration effectiveness (e.g., whether disease-causing organisms are present). Higher turbidity levels are often associated with higher levels of disease-causing micro-organisms such as viruses, parasites and some bacteria. These organisms can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.	Soil runoff	n/a
R	Uranium	30 ug/L as of 12/08/03	Increased risk of cancer, kidney toxicity	Erosion of natural deposits	zero

LEGEND

D Dinsinfectant
DBP Disinfection Byproduct
IOC Inorganic Chemical
M Microorganism
OC Organic Chemical
R Radionuclides

	Contaminant	MCL or TT[1] (mg/L)[2]	Potential health effects from exposure above the MCL	Common sources of contaminant in drinking water	Public Health Goal
OC	Vinyl chloride	0.002	Increased risk of cancer	Leaching from PVC pipes; discharge from plastic factories	zero
M	Viruses (enteric)	TT[3]	Gastrointestinal illness (e.g., diarrhea, vomiting, cramps)	Human and animal fecal waste	zero
OC	Xylenes (total)	10	Nervous system damage	Discharge from petroleum factories; discharge from chemical factories	10

NOTES

1 Definitions

- Maximum Contaminant Level Goal (MCLG)--The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.
- Maximum Contaminant Level (MCL)—The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.
- Maximum Residual Disinfectant Level Goal (MRDLG)—The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- Maximum Residual Disinfectant Level (MRDL)—The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Treatment Technique (TT)--A required process intended to reduce the level of a contaminant in drinking water.

2 Units are in milligrams per liter (mg/L) unless otherwise noted. Milligrams per liter are equivalent to parts per million (ppm).

3 EPA's surface water treatment rules require systems using surface water or ground water under the direct influence of surface water to (1) disinfect their water, and (2) filter their water or meet criteria for avoiding filtration so that the following contaminants are controlled at the following levels:

- *Cryptosporidium* (as of 1/1/02 for systems serving >10,000 and 1/14/05 for systems serving <10,000) 99% removal.
- *Giardia lamblia*: 99.9% removal/inactivation
- Viruses: 99.99% removal/inactivation
- *Legionella*: No limit, but EPA believes that if *Giardia* and viruses are removed/inactivated, *Legionella* will also be controlled.
- Turbidity: At no time can turbidity (cloudiness of water) go above 5 nephelolometric turbidity units (NTU); systems that filter must ensure that the turbidity go no higher than 1 NTU (0.5 NTU for conventional or direct filtration) in at least 95% of the daily samples in any month. As of January 1, 2002, for systems servicing >10,000, and January 14, 2005, for systems servicing <10,000, turbidity may never exceed 1 NTU, and must not exceed 0.3 NTU in 95% of daily samples in any month.
- HPC: No more than 500 bacterial colonies per milliliter
- Long Term 1 Enhanced Surface Water Treatment (Effective Date: January 14, 2005); Surface water systems or (GWUDI) systems serving fewer than 10,000 people must comply with the applicable Long Term 1 Enhanced Surface Water Treatment Rule provisions (e.g. turbidity standards, individual filter monitoring, *Cryptosporidium* removal requirements, updated watershed control requirements for unfiltered systems).
- Filter Backwash Recycling: The Filter Backwash Recycling Rule requires systems that recycle to return specific recycle flows through all processes of the system's existing conventional or direct filtration system or at an alternate location approved by the state.

4 No more than 5.0% samples total coliform-positive in a month. (For water systems that collect fewer than 40 routine samples per month, no more than one sample can be total coliform-positive per month.) Every sample that has total coliform must be analyzed for either fecal coliforms or *E. coli* if two consecutive TC-positive samples, and one is also positive for *E. coli* fecal coliforms, system has an acute MCL violation.

5 Fecal coliform and *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Disease-causing microbes (pathogens) in these wastes can cause diarrhea, cramps, nausea, headaches, or other symptoms. These pathogens may pose a special health risk for infants, young children, and people with severely compromised immune systems.

6 Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants:

- Haloacetic acids: dichloroacetic acid (zero); trichloroacetic acid (0.3 mg/L)
- Trihalomethanes: bromodichloromethane (zero); bromoform (zero); dibromochloromethane (0.06 mg/L)

7 Lead and copper are regulated by a Treatment Technique that requires systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water systems must take additional steps. For copper, the action level is 1.3 mg/L, and for lead is 0.015 mg/L.

8 Each water system must certify, in writing, to the state (using third-party or manufacturers certification) that when it uses acrylamide and/or epichlorohydrin to treat water, the combination (or product) of dose and monomer level does not exceed the levels specified, as follows: Acrylamide = 0.05% dosed at 1 mg/L (or equivalent); Epichlorohydrin = 0.01% dosed at 20 mg/L (or equivalent).

LEGEND

D	Dinsinfectant	IOC	Inorganic Chemical	OC	Organic Chemical
DBP	Disinfection Byproduct	M	Microorganism	R	Radionuclides

National Secondary Drinking Water Standards

National Secondary Drinking Water Standards are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. EPA recommends secondary standards to water systems but does not require systems to comply. However, states may choose to adopt them as enforceable standards.

Contaminant	Secondary Standard
Aluminum	0.05 to 0.2 mg/L
Chloride	250 mg/L
Color	15 (color units)
Copper	1.0 mg/L
Corrosivity	noncorrosive
Fluoride	2.0 mg/L
Foaming Agents	0.5 mg/L
Iron	0.3 mg/L
Manganese	0.05 mg/L
Odor	3 threshold odor number
pH	6.5-8.5
Silver	0.10 mg/L
Sulfate	250 mg/L
Total Dissolved Solids	500 mg/L
Zinc	5 mg/L

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4. Groundwater Monitoring Results

Results of the annual groundwater sampling are summarized in tables presented in this section. The main focus of this section is to present data from wells, as well as some limited data on sampling from surface ponds. **There are numerous other effluent and surface water sampling activities also performed during the year that have been presented in Section 3b of the attached Binder 2 to this report.**

In 2007, monitoring conducted between December 27-31, 2007 (and January 1, 2008, as inclement weather prevented completion of sampling of some wells within December 2007)) **showed that in Potable Well #3 the contaminant 2-Methylnapthalene was at a level of 0.032 mg/l. This level exceeds the current NM Water Quality Control Commission standard of 0.03 mg/l for 2-Methylnapthalene.**

In 2007, monitoring conducted between December 27-31, 2007 (and January 1, 2008, as inclement weather prevented completion of sampling of some wells within December 2007)) **showed that Methyl Tetra-Butyl Ether (MTBE) contamination had entered the shallow perched groundwater at OW-14 and OW-30. The levels of MTBE were 0.92 mg/l in OW-14 and 0.29 mg/l in OW-30. These levels exceed the current U.S. EPA Maximum Contaminant level (MCL) of 0.20 mg/l and the current NM Water Quality Control Commission standard of 0.1 mg/l.** . The monitoring in 2006 and 2005 had also shown that MTBE contamination had entered the shallow perched groundwater at OW-14 and OW-30.[5] The sampling in 2007, as had been found in 2006, established that the MTBE contamination was limited in extent and had not migrated significantly to other nearby wells (OW-12 had a level of non-detect, OW-13 a level of 0.0013 mg/l, and OW-29 had a level of 0.0043 mg/l). **The monitoring of well OW-14 also found that Benzene was elevated. The benzene concentration in this sample was 0.014 mg/l, exceeding the NM Water Quality Control Commission standard of 0.01 mg/l and the U.S. EPA Maximum Contaminant level (MCL) of 0.005 mg/l.** The highest level of Benzene in this well in 2006 was 0.0042 mg/l, but in 2005 the level was 0.017 mg/l. In 2007, Benzene was not detected in nearby wells (OW-12, OW-13, OW29 and OW-30 had no detectable levels of Benzene.) In 2007, 2-Methylnapthalene was found in the sample taken from OW 14. The level of 2-Methylnapthalene was at 0.027 mg/l, which is below the NM WQCC standard of 0.03 mg/l.

The monitoring of the Inlet of Evaporation Pond #1 found Benzene at a level of 0.13 mg/l which exceeds the NM Water Quality Control Commission standard of 0.01 mg/l and the U.S. EPA Maximum Contaminant level (MCL) of 0.005 mg/l. The level of Benzene in the Inlet of Evaporation Pond # 1 in 2006 was less than 0.01 mg/l on 10/30/2006 and at 0.21 mg/l on 3/30/2006. **The levels of Napthalene, 1-Mthylnapthalene, and 2-Methylnapthalene were also found to be elevated at 0.2, 0.25, and 0.39 mg/l respectively, and above the NM WQCC standards of 0.03 mg/l.**

The monitoring of the Inlet of Evaporation Pond #2 also found Benzene at a level of 0.13 mg/l which exceeds the NM Water Quality Control Commission standard of 0.01 mg/l and the U.S. EPA Maximum Contaminant level (MCL) of 0.005 mg/l. The level of Benzene in the Inlet of Evaporation Pond # 2 on 10/27/2006 was less than 0.01 mg/l. **The levels of Napthalene,**

[5] On 9/27/2005, OW-14 had MTBE levels of 0.077 mg/l, and OW-30 of <0.0025 mg/l. On 10/27/2006, OW-14 had MTBE at a level of 0.18 mg/l, and OW-30 a level of 0.018 mg/l. On 12/28/2006, OW-14 was at level of 0.18 mg/l of MTBE.

1-Mthylnapthalene, and 2-Methylnapthalene were also found to be elevated at 0.25, 0.46 and 0.75 mg/l, respectively, and above the NM WQCC standards of 0.03 mg/l.

Western Refining conducted annual sampling of GWM-1 on May 24, 2007. The benzene concentration in this sample was 0.016 mg/l, exceeding the NM Water Quality Control Commission standard of 0.01 mg/l and the U.S. EPA Maximum Contaminant level (MCL) of 0.005 mg/l. In 2006, the benzene concentration in this sample was 0.012 mg/l. In 2005, monitoring of well GWM-1 had also shown benzene in elevated concentrations (June 2005 = 0.010 mg/l and September 2005 = 0.081 mg/l) **In 2007, MTBE levels were found in GWM-1, at a concentration of 0.23 mg/l, exceeding the U.S. EPA Maximum Contaminant level (MCL) of 0.20 mg/l and the NM Water Quality Control Commission standard of 0.1 mg/l.**[6] In 2006, the MTBE levels were found and reported as 0.16 mg/l, in 2005 as 0.17 mg/l and in 2004 as 0.048 mg/l.

Arsenic was found in the May 2007 analysis of water from GWM-1 at 0.081 mg/l which exceeds the NMWQS of 0.050 mg/l, and the U.S. EPA MCL of 0.01 mg/l. Arsenic was found in the December 2007 analysis of water from MW-1 at 0.02 mg/l which exceeds the U.S. EPA MCL of 0.01 mg/l.

Elevated levels of fluoride have shown up in some of the boundary wells in 2007, 2006, 2005 and 2004. Chloride was detected in elevated concentration in GWM-1 in 2007 at 1,800 mg/l (3,700 mg/l in 2006 and 2,000 mg/l in 2005).

[6] In 2008, the MTBE results in GWM-1 are lesser and a level of 0.12 mg/l.

TABLE 1: Levels of Benzene, Toluene, Ethyl-benzene, Xylene, and MTBE in Potable Water Wells – all units of concentrations are in mg/l. (For wells not sampled in 2007, data are presented from previous years.)

	Year[7]	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylene	MTBE
PW#2	2004	12-9-2004	<0.001	<0.001	<0.001	<0.0015	Not analyzed
PW#4	2004	8-4-2004	<0.001	<0.001	<0.001	<0.0015	Not analyzed
PW#3	2006	10-27-2006	<0.001	<0.001	<0.001	<0.0015	<0.001
	2007	Sampling activities were primarily conducted from December 27-31, 2007 (Sampling of this well was completed on 1-1-2008 because of inclement weather.)	<0.001	<0.001	<0.001	<0.0015	<0.001
EPA MCLs			0.005	1	0.7	10.0	0.100
NMWQS			0.01	0.75	0.75	0.62	0.200

TABLE 2: Levels of All Contaminants in Potable Well # 3 found at least above Levels of Detection in 2007- all units of concentrations are in mg/l. (Note: Contaminants not presented were not detected. For a complete list of contaminants analyzed, see section 5.0.)

Contaminant	Concentration Levels (mg/l)	EPA MCLs	NMWQS MCLs
Barium	0.014	2.0	1.0
Iron	0.20		
Lead	0.0056	0.015	0.05
Magnesium	42		
Manganese	0.015		
Potassium	1.2		
Sodium	15		
Zinc	0.041		
2,4 Dimethylphenol	0.016		
2-Methylnaphthalene	**0.032**		0.03
2-Methylphenol	0.210		
3+4-Methylphenol	0.360		
Phenanthrene	0.017		
Phenols	0.8		

Note: Levels over regulatory standards in 2007 are high-lighted

[7] No potable wells were sampled in 2005.

TABLE 3: Levels of Benzene, Toluene, Ethyl-benzene, Xylene, and MTBE in Observation Wells and Monitoring Well (GWM-1) – all units of concentrations are in mg/l

	Year	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylene	MTBE
OW#12	2007	12-27-2007	<0.001	<0.001	<0.001	<0.0015	<0.001
	2006	10-27-2006	<0.001	<0.001	<0.001	<0.001	<0.0025
OW#13	2007	12-27-2007	<0.001	<0.001	<0.001	<0.0015	0.0013
	2006	10-27-2006	<0.001	<0.001	<0.001	<0.001	<0.0025
OW#14	2007	1-1-2008	**0.014**	<0.001	<0.001	<0.0015	**0.92**
	2006	12-28-2006	0.0042	<0.001	0.0025	<0.003	**0.18**
	2006	10-27-2006	0.0034	<0.001	<0.001	<0.003	0.016
	2005	9-27-2005	**0.017**	0.0022	0.0023	0.0014	0.077
OW#29	2007	12-28-2007	<0.001	<0.001	<0.001	<0.0015	0.0043
	2006	10-27-2006	<0.001	<0.001	<0.001	<0.003	<0.0025
	2005	9-27-2005	<0.001	<0.001	<0.001	<0.0005	<0.0025
OW#30	2007	12-28-2007	<0.001	<0.001	<0.001	<0.0015	**0.29**
	2006	10-27-2006	<0.001	<0.001	<0.001	<0.003	<0.0025
	2005	9-27-2005	<0.001	<0.001	<0.001	<0.0005	0.018
GWM-1	2007	5-24-2007	**0.016**	<0.001	<0.001	<0.0015	**0.23**
	2006	10-27-2006	**0.012**	<0.001	<0.001	<0.0015	**0.16**
EPA MCLs			0.005	1	0.7	10.0	0.100
NMWQS			0.01	0.75	0.75	0.62	0.200

Note: Levels over regulatory standards in 2007, 2006 and 2005 are high-lighted

TABLE 5: Levels of Benzene, Toluene, Ethyl-benzene, Xylene, and MTBE in Boundary Wells – all units of concentrations are in mg/l

	Year	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylene	MTBE
OW-11	2007	12/27/2007	<0.001	<0.001	<0.001	<0.0015	<0.001
	2006	10/27/2006	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-1C	2007	12/31/2007	<0.001	<0.001	<0.001	<0.0015	<0.001
	2006	10/27/2006	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-2A	2007	12/31/2007	<0.001	<0.001	<0.001	<0.0015	<0.001
	2006	10/27/2006	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-2B	2007	12/31/2007	<0.001	<0.001	<0.001	<0.0015	<0.001
	2006	10/27/2006	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-2C	2007	12/31/2007	<0.001	<0.001	<0.001	<0.0015	<0.001
	2006	10/27/2006	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-3B	2007	12/31/2007	<0.001	<0.001	<0.001	<0.0015	<0.001
	2006	10/27/2006	<0.001	<0.001	<0.001	<0.0015	<0.001
BW-3C	2007	12/31/2007	<0.001	<0.001	<0.001	<0.0015	<0.001
	2006	10/27/2006	<0.001	<0.001	<0.001	<0.0015	<0.001
EPA MCLs			0.005	1	0.7	10.0	0.100
NMWQS			0.01	0.75	0.75	0.62	0.200

TABLE 6: Levels of Benzene, Toluene, Ethyl-benzene, Xylene, MTBE, Diesel Range Organics, and Gasoline Range Organics in Monitoring Wells – all units of concentrations are in mg/l. (Only Well SMW-2 has contaminants above the level of non-detection: MTBE at 0.0099 significantly below regulatory standards, and Gasoline Range Organics at 0.69 mg/l. All other wells have non-detectable levels of contaminants. No Motor Range Organics were detected.)

	Year	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylene	MTBE	Diesel Range Organics	Gasoline Range Organics
MW-1	2007	12/29/2007	<0.001	<0.001	<0.001	<0.0015	<0.001	<1.0	<0.05
	2006	10/26/2006	<0.001	<0.001	<0.001	<0.0015	<0.0015	<1.0	<0.05
MW-4	2007	12/29/2007	<0.001	<0.001	<0.001	<0.0015	<0.001	<1.0	<0.05
	2005	10/12/2005	<0.001	<0.001	<0.001	<0.0015	<0.0015	<1.0	<0.05
MW-5	2007	12/29/2007	<0.001	<0.001	<0.001	<0.0015	<0.001	<1.0	<0.05
	2005	10/12/2005	<0.001	<0.001	<0.001	<0.0015	<0.0015	<1.0	<0.05
SMW-2	2007	1/1/2008	<0.001	<0.001	<0.001	<0.0015	0.0099	<1.0	0.69
	2005	10/12/2005	<0.001	<0.001	<0.001	<0.0015	<0.0015	<1.0	<0.05
SMW-4	2007	12/29/2007	<0.001	<0.001	<0.001	<0.0015	<0.001	<1.0	<0.05
	2005	10/12/2005	<0.001	<0.001	<0.001	<0.0015	<0.0015	<1.0	<0.05
EPA MCLs			0.005	1	0.7	10.0	0.100		
NMWQS			0.01	0.75	0.75	0.62	0.200		

TABLE 7: Anions and Select Parameters in Boundary Wells (All units are in mg/l, except for pH and Specific Conductivity)

	Year	Date Sampled	Fluoride	Chloride	Nitrate (as N) + Nitrite	Phosphorous, Orthophosphate (as P)	Sulfate	pH	Specific Conductivity microSiemens/cm
OW-11	2007	12/27/07	Not analyzed:	Not analyzed:	Not analyzed:	Not analyzed	Not analyzed	Not analyzed:	Not analyzed:
	2006	10/27/06	2.5	86		<0.5	1100	8.4	3100
BW-1C	2007	12/31/07	**2.6**	35	<1.0	<0.5	270	8.5	1400
	2006	10/27/06	2.7	36	<0.5	<0.5		8.39	1400
BW-2A	2007	12/31/07	1.3	42	<1.0	0.70	7.7	7.76	1400
	2006	10/27/06	1.3	39	<0.5	0.64	7.5	8.27	1400
BW-2B	2007	12/31/07	**1.8**	30	<1.0	<0.5	150	7.77	2400
	2006	10/27/06	1.9	31	<0.5	<0.5	140	8.1	1400
BW-2C	2007	12/31/07	**2.3**	45	<1.0	<0.5	290	8.73	1400
	2006	10/27/06	2.4	42	<0.5	<0.5	270	8.52	1300
BW-3B	2007	12/31/07	**1.6**	35	<1.0	1.1	51	7.93	1600
	2006	10/27/06	1.7	33	<0.5	1.1	250	8.5	1600
BW-3C	2007	12/31/07	**1.8**	38	<1.0	<0.5	300	8.59	1500
	2006	10/27/06	1.9	37	<0.5	<0.5	280	8.39	1400
EPA MCLs			4.0					6-9	
NMW QS			1.6	250 (domestic water)	10		600	6.5 – 8.5	

Note: Levels over regulatory standards in 2007 are high-lighted

TABLE 8: Detected Total Recoverable Metals in Boundary Wells (Note: Only data for detected contaminants are presented. For a complete list of all metals analyzed see section 5.0. All units are in mg/l.)

	Year	Date Sampled	Ba	Ca	Fe	Mg	Mn	K	Na	U
OW-11	2007	12/27/2007	<0.01	11	<0.05	1.3	0.016	1.6	690	0.22
	2006	10/28/2006	<0.02	12	<0.05	1.4				
BW-1C	2007	12/31/2007	0.023	3.6	<0.05	0.74	0.01	<1.0	360	<0.1
	2006	10/28/2006	<0.02	3.4	<0.05	<1.0				
BW-2A	2007	12/31/2007	0.18	11	0.7	3.9	0.22	<1/0	380	<0.1
	2006	10/28/2006	0.15	10	<0.05					
BW-2B	2007	12/31/2007	0.07	16	0.62	3.6	0.29	1.6	640	<0.1
	2006	10/28/2006	0.071	23	<0.05					
BW-2C	2007	12/31/2007	0.026	2.9	0.16	0.68	0.024	<1.0	340	<0.1
	2006	10/28/2006	0.031	5.6	<0.05	<1.0				
BW-3B	2007	12/31/2007	0.099	9.0	0.64	2.9	0.13	<1.0	430	<0.1
	2006	10/28/2006	0.11	9.0	<0.05					
BW-3C	2007	12/31/2007	0.068	4.2	0.14	0.81	0.015	1.1	360	<0.1
	2006	10/28/2006	0.029	6.0	<0.05					
EPA MCLs			2.0							0.03
NMWQS			1.0							

TABLE 9: Anions and Select Parameters in Monitoring Wells (All units are in mg/l, except for pH and Specific Conductivity)

	Year	Date Sampled	Fluoride	Chloride	Nitrate (as N) + Nitrite	Phosphorous, Orthophosphate (as P)	Sulfate	pH	Specific Conductivity microSiemens /cm
GWM-1	2007	5/24/07	**1.9**	**1800**	<2.0	<0.5	120	6.8	8100
	2006	10/26/06	2.0	3700	<2.0	<2.5	120	6.87	
MW-1	2007	12/29/07	0.69	53	<1.0	<0.5	170	8.89	1100
	2006	10/26/06	0.84	46	<0.5	<0.5	150	8.98	
MW-4	2007	12/29/07	0.42	17	<1.0	<0.5	160	8.63	1200
MW-5	2007	12/29/07							
SMW-2	2007	1/1/08							
SMW-4	2007	12/29/07	**1.4**	60	<1.0	<0.5	160	8.34	1300
EPA MCLs			4.0					6-9	
NMWQS			1.6	250 (drinking water)	Nitrate – 10; Nitrite - 1		600	6.5 – 8.5	

Note: Wells MW-4, MW-5, SMW-2 and SMW-4 were not sampled in 2006. Levels over regulatory standards in 2007 are high-lighted

TABLE 10: Detected Total Recoverable Metals in Monitoring Wells (Note: Only data for detected contaminants are presented. For a complete list of all metals analyzed see section 5.0. All units are in mg/l.)

Well No.	Year	Date Sampled	As	Ba	Ca	Cr	Mg	Mn	Ni	K	Na
GWM-1	2007	5/24/07	**0.081**	0.44	360	<0.006	87	Not analyzed	<0.01	3.7	1300
	2006	10/26/06	0.077	0.53	380	<0.006	93	Not analyzed	<0.01	4.2	1400
MW-1	2007	12/29/07	**0.020**	<0.02	3.2	<0.006	<1.0	0.018	Not analyzed	<1.0	230
	2006	10/26/06	<0.02			<0.006		Not analyzed	<0.01		
MW-4	2007	12/29/07	<0.02	0.021	1.9	<0.006	<1.0	0.0052	<0.01	<1.0	320
MW-5	2007	12/29/07	<0.02	<0.02	1.4	<0.006	<1.0	0.0045	Not analyzed	<1.0	290
SMW-2	2007	1/1/08	<0.02	<0.02	200	0.055	69	Not analyzed	0.026	1.1	2200
SMW-4	2007	12/29/07	<0.02	0.024	4.6	<0.006	1.2	Not analyzed	<0.01	<1.0	340
EPA MCLs			0.01	2.0							
NMWQS			0.05	1.0							

Note: Wells MW-4, MW-5, SMW-2 and SMW-4 were not sampled in 2006. Levels over regulatory standards in 2007 are high-lighted

TABLE 11: Detected Dissolved Metals in Monitoring Wells (Note: Only data for detected contaminants are presented. For a complete list of all metals analyzed see section 5.0. All units are in mg/l.)

Well No.	Year	Date Sampled	Calcium	Magnesium	Potassium	Sodium
MW-1	2007	12/29/07	1.9	<1.0	<1.0	230
MW-4	2007	12/29/07	1.9	<1.0	<1.0	250
MW-5	2007	12/29/07	1.4	<1.0	<1.0	240
SMW-2	2007	1/1/08	190	64	1.1	1700
SMW-4	2007	12/29/07	3.6	<1.0	<1.0	250
EPA MCLs						
NMWQS						

Note: Analyses for dissolved metals were not conducted in 2006.

TABLE 12: Levels of Benzene, Toluene, Ethyl-benzene, Xylene, and MTBE in Inlets to Evaporation Ponds 1 and 2 and from within Ponds 1-8 – all units of concentrations are in mg/l

	Year	Date Sampled	Benzene	Toluene	Ethyl-benzene	Xylene	MTBE
Evaporation Pond 1 – Inlet	2007	1/1/2008	**0.13**	0.22	0.39	0.22	0.0052
	2006	10/30/2006	<0.01	<0.01	<0.01	0.062	<0.015
	2006	3/30/2006	0.21	0.44	0.06	0.43	<0.075
Evaporation Pond 2 – Inlet	2007	1/1/2008	**0.13**	0.26	0.044	0.26	0.0052
	2006	10/27/2006	<0.01	0.022	<0.01	0.045	0.018
Pond 1	2007	11/29/2007	0.064	0.23	0.048	0.31	<0.01
Pond 2	2007	11/29/2007	0.021	0.079	0.02	0.13	<0.01
Pond 3	2007	11/29/2007	<0.01	0.025	<0.01	0.038	<0.01
Pond 4	2007	11/29/2007	<0.01	0.011	<0.01	<0.015	<0.01
Pond 5	2007	11/29/2007	<0.01	<0.01	<0.01	<0.015	<0.01
Pond 6	2007	11/29/2007	<0.01	<0.01	<0.01	<0.015	<0.01
Pond 7	2007	11/29/2007	<0.01	<0.01	<0.01	<0.015	<0.01
Pond 8	2007	11/29/2007	<0.01	<0.01	<0.01	<0.015	<0.01
EPA MCLs			0.005	1	0.7	10.0	0.100
NMWQS			0.01	0.75	0.75	0.62	0.200

Note: Levels over regulatory standards in 2007 are high-lighted

TABLE 13: Levels of All Contaminants in Inlets to Evaporation Ponds 1 and 2 found at least above Levels of Detection in 2007 (sampling completed on 1/1/2008) - all units of concentrations are in mg/l (Note: Contaminants not presented were not detected. For a complete list of contaminants analyzed, see section 5.0.)

Contaminant	Evaporation Pond 1 – Inlet Concentration Levels (mg/l)	Evaporation Pond 2 – Inlet Concentration Levels (mg/l)	EPA MCLs	NMWQS
Diesel Range Organics	91	150		
Gasoline Range Organics	2.2	2.6		
Barium	0.067	Not analyzed	2.0	1.0
Calcium	45	Not analyzed		
Chromium	0.01	Not analyzed		
Iron	4.1	Not analyzed		
Magnesium	14	Not analyzed		
Manganese	0.11	Not analyzed		
Potassium	51	Not analyzed		
Sodium	530	Not analyzed		
Zinc	0.69	Not analyzed		
2,4 Dimethylphenol	0.31	Not analyzed		
Fluorene	0.074	Not analyzed		
2-Methylnaphthalene (Semi-volatiles)	**0.69**	Not analyzed		0.03
2-Methylphenol	2.2	Not analyzed		
3+4-Methylphenol	3.5	Not analyzed		
Phenanthrene	0.21	Not analyzed		
Phenols	4.1	Not analyzed		
1,2,4 Trimethylbenzene	0.083	0.17		
1,3,5 Trimethylbenzene	0.022	0.047		
Napthalene	**0.2**	**0.25**		0.03
1-Methylnaphthalene	**0.25**	**0.46**		0.03
2-Methylnaphthalene (Volatiles)	**0.39**	**0.75**		0.03
Carbon Disulfide	0.032	0.14		
Isopropylbenzene	0.0033	0.0063		
4-Isopropyltoluene	<0.002	0.007		
n-Butylbenzene	0.011	0.044		
n-Propylbenzene	0.0086	0.019		
seo-Butylbenzene	<0.002	0.0071		

Note: Levels over regulatory standards in 2007 are high-lighted

TABLE 14: Levels of All Contaminants in Evaporation Ponds 1 through 8 found at least above Levels of Detection in 2007- all units of concentrations are in mg/l (Note: Contaminants not presented were not detected. For a complete list of contaminants analyzed, see section 5.0.)

Contaminant	Pond 1	Pond 2	Pond 3	Pond 4	Pond 5	Pond 6	Pond 7	Pond 8	EPA MCLs	NMWQS
Fluoride	**170**	**73**	**62**	**61**	**47**	**31**	**51**	**94**	**4.0**	1.6
Chloride	**180**	**1800**	**2000**	**2000**	**3000**	**8000**	**69000**	**200000**		250 (domestic water)
Nitrate (as N) Nitrite (as N)	<1.0	<10	<4.0	<4.0	<4.0	26	<100	<200		10
Phosphorous	<5.0	<0.5	<0.5	<0.5	<0.5	<5.0	<100	<250		
Sulfate	**850**	**1100**	**1100**	**1100**	**1300**	**3100**	**14000**	**28000**		600
Barium	0.073	0.043	0.033	0.035	0.054	0.094	0.10	<0.5	2.0	1.0
Calcium	32	110	93	96	160	500	800	580		
Chromium	0.013	0.0071	0.0078	0.008	0.0074	<0.006	<0.06	<0.3		
Copper	0.0061	<0.006	<0.006	<0.006	<0.006	<0.006	<0.06	<0.3		
Magnesium	12	47	55	56	79	210	1400	11000		
Manganese	0.22	0.22	0.3	0.31	0.43	0.96	7.1	120		
Potassium	71	64	78	82	110	230	1500	16000		
Sodium	530	1400	1600	1700	2200	5500	41000	120000		
Zinc	0.51	0.16	0.094	0.092	0.084	0.028	<0.2	<1.0		
1,2,4 Trimethylbenzene	0.180	0.081	0.027	0.013	<0.01	<0.01	<0.01	<0.01		
1,3,5 Trimethylbenzene	0.048	0.021	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Napthalene	0.240	0.12	0.052	0.029	<0.02	<0.02	<0.02	<0.02		0.03
1-Methylnaphthalene	0.360	0.22	0.099	0.062	<0.04	<0.04	<0.04	<0.04		0.03
2-Methylnaphthalene (Volatiles)	**0.580**	**0.34**	**0.16**	**0.092**	<0.04	<0.04	<0.04	<0.04		0.03
Acetone	0.8	1.2	0.93	0.8	0.22	<0.1	<0.1	<0.1		
2-Butanone	0.4	0.18	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		
Carbon Disulfide	<0.1	<0.1	0.11	0.11	<0.1	<0.1	<0.1	<0.1		
n-Butylbenzene	0.048	0.023	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
n-Propylbenzene	0.018	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
pH	8.47	7.96	7.71	7.73	7.7	7.46	7.22	5.49		
Specific Conductivity (microSiemens/cm)	5500	9400	9800	9800	12000	14000	180000	780000		
Chemical Oxygen Demand	878	561	463	512	488	927	4390	2200		
Biochemical Oxygen Demand	783	302	209	163	103	47.8	<64	<64		
E-Coli (CFU/100 ml	727	63.1	27`	18	<1	<1	<1	<1		

Note: Levels over regulatory standards in 2007 are high-lighted

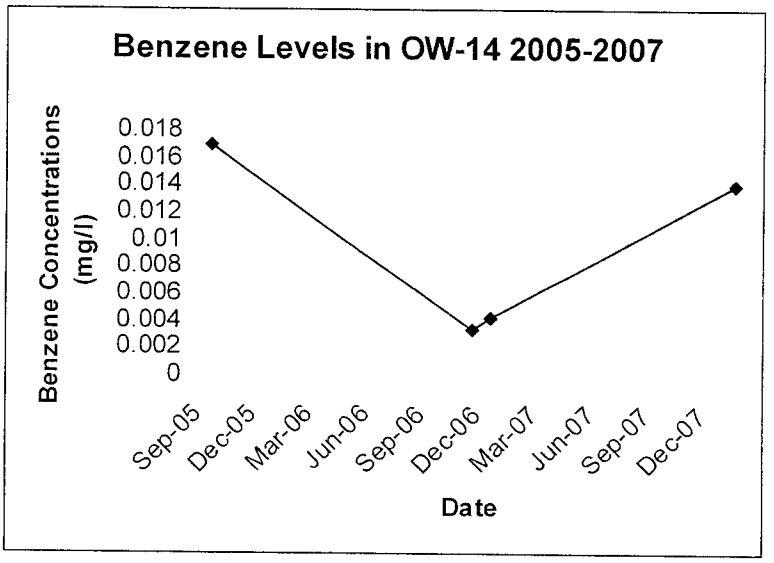

Figure 1: Benzene levels in OW-14 between 2005 and 2007

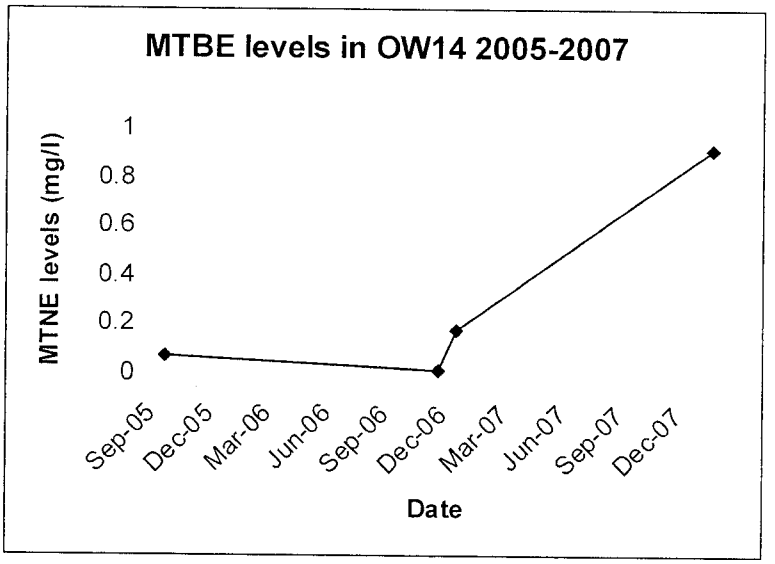

Figure 2: MTBE levels in OW-14 between 2005 and 2007

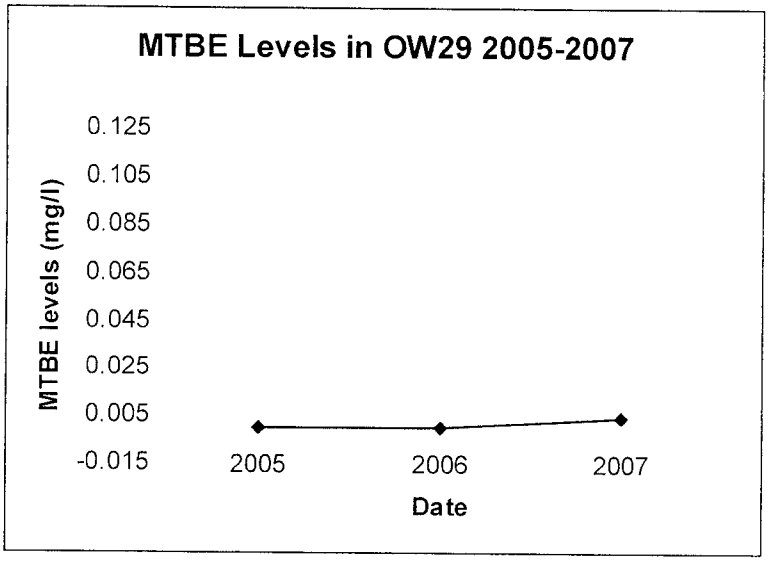

Figure 3: MTBE levels in OW-29 between 2005 and 2007

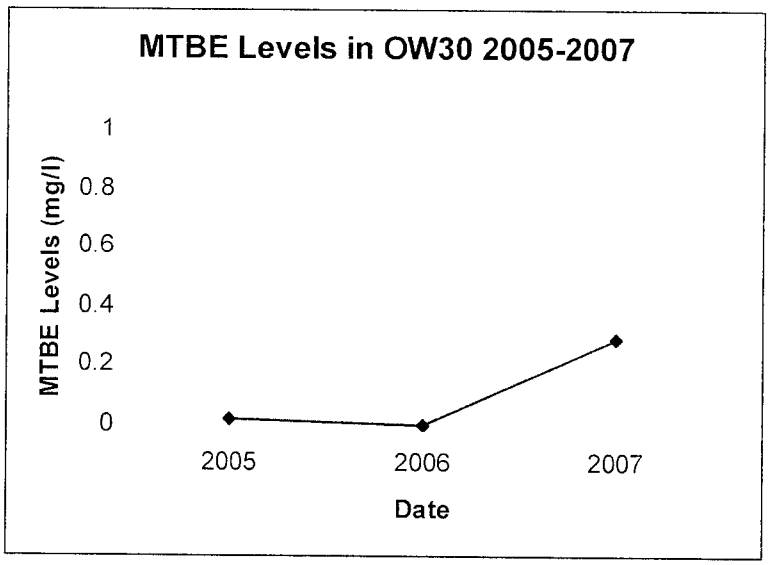

Figure 4: MTBE levels in OW-30 between 2005 and 2007

5. Groundwater Chemical Analytical Data

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, June 19, 2007

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: GWM-1 Annual 2007

Order No.: 0705390

Dear Ed Riege:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 5/25/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0705390	**Collection Date:**	5/24/2007 9:04:00 AM
Project:	GWM-1 Annual 2007	**Date Received:**	5/25/2007
Lab ID:	0705390-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: KS
Fluoride	1.9	0.10		mg/L	1	5/29/2007 5:45:18 PM
Chloride	1800	10		mg/L	100	6/16/2007 11:08:38 AM
Nitrate (As N)+Nitrite (As N)	ND	2.0		mg/L	10	6/13/2007 9:04:06 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	5/29/2007 5:45:18 PM
Sulfate	120	2.5		mg/L	5	5/29/2007 6:02:42 PM
EPA METHOD 7470: MERCURY						Analyst: IC
Mercury	ND	0.00020		mg/L	1	5/30/2007
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	0.081	0.020		mg/L	1	6/1/2007 10:39:23 AM
Barium	0.44	0.020		mg/L	1	6/1/2007 10:39:23 AM
Cadmium	ND	0.0020		mg/L	1	6/1/2007 10:39:23 AM
Calcium	360	100		mg/L	100	6/1/2007 11:45:59 AM
Chromium	ND	0.0060		mg/L	1	6/1/2007 10:39:23 AM
Lead	ND	0.0050		mg/L	1	6/1/2007 10:39:23 AM
Magnesium	87	1.0		mg/L	1	6/1/2007 10:39:23 AM
Potassium	3.7	1.0		mg/L	1	6/1/2007 10:39:23 AM
Selenium	ND	0.050		mg/L	1	6/1/2007 1:54:30 PM
Silver	ND	0.0050		mg/L	1	6/1/2007 10:39:23 AM
Sodium	1300	100		mg/L	100	6/1/2007 11:45:59 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	10		µg/L	1	6/7/2007
Acenaphthylene	ND	10		µg/L	1	6/7/2007
Aniline	ND	20		µg/L	1	6/7/2007
Anthracene	ND	10		µg/L	1	6/7/2007
Azobenzene	ND	10		µg/L	1	6/7/2007
Benz(a)anthracene	ND	15		µg/L	1	6/7/2007
Benzo(a)pyrene	ND	10		µg/L	1	6/7/2007
Benzo(b)fluoranthene	ND	15		µg/L	1	6/7/2007
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/7/2007
Benzo(k)fluoranthene	ND	10		µg/L	1	6/7/2007
Benzoic acid	ND	50		µg/L	1	6/7/2007
Benzyl alcohol	ND	20		µg/L	1	6/7/2007
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/7/2007
Bis(2-chloroethyl)ether	ND	15		µg/L	1	6/7/2007
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	6/7/2007
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	6/7/2007
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/7/2007
Butyl benzyl phthalate	ND	15		µg/L	1	6/7/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0705390	**Collection Date:**	5/24/2007 9:04:00 AM
Project:	GWM-1 Annual 2007	**Date Received:**	5/25/2007
Lab ID:	0705390-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Carbazole	ND	10		µg/L	1	6/7/2007
4-Chloro-3-methylphenol	ND	20		µg/L	1	6/7/2007
4-Chloroaniline	ND	20		µg/L	1	6/7/2007
2-Chloronaphthalene	ND	10		µg/L	1	6/7/2007
2-Chlorophenol	ND	10		µg/L	1	6/7/2007
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	6/7/2007
Chrysene	ND	15		µg/L	1	6/7/2007
Di-n-butyl phthalate	ND	10		µg/L	1	6/7/2007
Di-n-octyl phthalate	ND	15		µg/L	1	6/7/2007
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/7/2007
Dibenzofuran	ND	10		µg/L	1	6/7/2007
1,2-Dichlorobenzene	ND	10		µg/L	1	6/7/2007
1,3-Dichlorobenzene	ND	10		µg/L	1	6/7/2007
1,4-Dichlorobenzene	ND	10		µg/L	1	6/7/2007
3,3'-Dichlorobenzidine	ND	15		µg/L	1	6/7/2007
Diethyl phthalate	ND	10		µg/L	1	6/7/2007
Dimethyl phthalate	ND	10		µg/L	1	6/7/2007
2,4-Dichlorophenol	ND	10		µg/L	1	6/7/2007
2,4-Dimethylphenol	ND	10		µg/L	1	6/7/2007
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	6/7/2007
2,4-Dinitrophenol	ND	50		µg/L	1	6/7/2007
2,4-Dinitrotoluene	ND	10		µg/L	1	6/7/2007
2,6-Dinitrotoluene	ND	10		µg/L	1	6/7/2007
Fluoranthene	ND	10		µg/L	1	6/7/2007
Fluorene	ND	10		µg/L	1	6/7/2007
Hexachlorobenzene	ND	10		µg/L	1	6/7/2007
Hexachlorobutadiene	ND	10		µg/L	1	6/7/2007
Hexachlorocyclopentadiene	ND	50		µg/L	1	6/7/2007
Hexachloroethane	ND	10		µg/L	1	6/7/2007
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/7/2007
Isophorone	ND	10		µg/L	1	6/7/2007
2-Methylnaphthalene	ND	10		µg/L	1	6/7/2007
2-Methylphenol	ND	15		µg/L	1	6/7/2007
3+4-Methylphenol	ND	20		µg/L	1	6/7/2007
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/7/2007
N-Nitrosodimethylamine	ND	10		µg/L	1	6/7/2007
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/7/2007
Naphthalene	ND	10		µg/L	1	6/7/2007
2-Nitroaniline	ND	50		µg/L	1	6/7/2007
3-Nitroaniline	ND	50		µg/L	1	6/7/2007
4-Nitroaniline	ND	20		µg/L	1	6/7/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0705390	**Collection Date:**	5/24/2007 9:04:00 AM
Project:	GWM-1 Annual 2007	**Date Received:**	5/25/2007
Lab ID:	0705390-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Nitrobenzene	ND	10		µg/L	1	6/7/2007
2-Nitrophenol	ND	15		µg/L	1	6/7/2007
4-Nitrophenol	ND	50		µg/L	1	6/7/2007
Pentachlorophenol	ND	50		µg/L	1	6/7/2007
Phenanthrene	ND	10		µg/L	1	6/7/2007
Phenol	ND	10		µg/L	1	6/7/2007
Pyrene	ND	15		µg/L	1	6/7/2007
Pyridine	ND	30		µg/L	1	6/7/2007
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/7/2007
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/7/2007
2,4,6-Trichlorophenol	ND	15		µg/L	1	6/7/2007
Surr: 2,4,6-Tribromophenol	78.5	16.6-150		%REC	1	6/7/2007
Surr: 2-Fluorobiphenyl	68.6	19.6-134		%REC	1	6/7/2007
Surr: 2-Fluorophenol	46.9	9.54-113		%REC	1	6/7/2007
Surr: 4-Terphenyl-d14	74.5	22.7-145		%REC	1	6/7/2007
Surr: Nitrobenzene-d5	68.3	14.6-134		%REC	1	6/7/2007
Surr: Phenol-d5	38.0	10.7-80.3		%REC	1	6/7/2007
EPA METHOD 8260B: VOLATILES						Analyst: SMP
Benzene	16	10		µg/L	10	6/6/2007 2:13:58 PM
Toluene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Ethylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Methyl tert-butyl ether (MTBE)	230	10		µg/L	10	6/6/2007 2:13:58 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Naphthalene	ND	20		µg/L	10	6/6/2007 2:13:58 PM
1-Methylnaphthalene	ND	40		µg/L	10	6/6/2007 2:13:58 PM
2-Methylnaphthalene	ND	40		µg/L	10	6/6/2007 2:13:58 PM
Acetone	ND	100		µg/L	10	6/6/2007 2:13:58 PM
Bromobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Bromochloromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Bromodichloromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Bromoform	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Bromomethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
2-Butanone	ND	100		µg/L	10	6/6/2007 2:13:58 PM
Carbon disulfide	ND	100		µg/L	10	6/6/2007 2:13:58 PM
Carbon Tetrachloride	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Chlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Chloroethane	ND	20		µg/L	10	6/6/2007 2:13:58 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

CLIENT:	Giant Refining Co	Client Sample ID:	GWM-1
Lab Order:	0705390	Collection Date:	5/24/2007 9:04:00 AM
Project:	GWM-1 Annual 2007	Date Received:	5/25/2007
Lab ID:	0705390-01	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: SMP
Chloroform	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Chloromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
2-Chlorotoluene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
4-Chlorotoluene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
cis-1,2-DCE	ND	10		µg/L	10	6/6/2007 2:13:58 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/6/2007 2:13:58 PM
Dibromochloromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Dibromomethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Dichlorodifluoromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1-Dichloroethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1-Dichloroethene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2-Dichloropropane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,3-Dichloropropane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
2,2-Dichloropropane	ND	20		µg/L	10	6/6/2007 2:13:58 PM
1,1-Dichloropropene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Hexachlorobutadiene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
2-Hexanone	ND	100		µg/L	10	6/6/2007 2:13:58 PM
Isopropylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
4-Isopropyltoluene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	6/6/2007 2:13:58 PM
Methylene Chloride	ND	10		µg/L	10	6/6/2007 2:13:58 PM
n-Butylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
n-Propylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
sec-Butylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Styrene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
tert-Butylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/6/2007 2:13:58 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/6/2007 2:13:58 PM
trans-1,2-DCE	ND	10		µg/L	10	6/6/2007 2:13:58 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1,2-Trichloroethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Trichloroethene (TCE)	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Trichlorofluoromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0705390	**Collection Date:**	5/24/2007 9:04:00 AM
Project:	GWM-1 Annual 2007	**Date Received:**	5/25/2007
Lab ID:	0705390-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: SMP
1,2,3-Trichloropropane	ND	20		µg/L	10	6/6/2007 2:13:58 PM
Vinyl chloride	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Xylenes, Total	ND	15		µg/L	10	6/6/2007 2:13:58 PM
Surr: 1,2-Dichloroethane-d4	114	76.6-113	S	%REC	10	6/6/2007 2:13:58 PM
Surr: 4-Bromofluorobenzene	122	77-117	S	%REC	10	6/6/2007 2:13:58 PM
Surr: Dibromofluoromethane	113	72.3-121		%REC	10	6/6/2007 2:13:58 PM
Surr: Toluene-d8	108	73-113		%REC	10	6/6/2007 2:13:58 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: LMM
Specific Conductance	8100	0.010		µmhos/cm	1	6/1/2007
EPA METHOD 150.1: PH						Analyst: LMM
pH	6.80	0.010		pH units	1	5/25/2007

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007 **Work Order:** 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E300									
Sample ID: MBLK		*MBLK*			Batch ID:	R23842	Analysis Date:	5/29/2007 3:43:27 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	R23935	Analysis Date:	6/9/2007 7:41:09 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	R23969	Analysis Date:	6/12/2007 8:41:53 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	R24020	Analysis Date:	6/16/2007 7:39:42 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS ST300-07001		*LCS*			Batch ID:	R23842	Analysis Date:	5/29/2007 4:00:51 PM	
Fluoride	0.4741	mg/L	0.10	94.8	90	110			
Chloride	4.787	mg/L	0.10	95.7	90	110			
Nitrate (As N)+Nitrite (As N)	3.388	mg/L	0.20	96.8	90	110			
Phosphorus, Orthophosphate (As P)	4.724	mg/L	0.50	94.5	90	110			
Sulfate	9.745	mg/L	0.50	97.4	90	110			
Sample ID: LCS ST300-07013		*LCS*			Batch ID:	R23935	Analysis Date:	6/9/2007 7:58:33 PM	
Fluoride	0.4548	mg/L	0.10	91.0	90	110			
Chloride	4.853	mg/L	0.10	97.1	90	110			
Nitrate (As N)+Nitrite (As N)	3.472	mg/L	0.20	99.2	90	110			
Phosphorus, Orthophosphate (As P)	4.645	mg/L	0.50	92.9	90	110			
Sulfate	9.827	mg/L	0.50	98.3	90	110			
Sample ID: LCS ST300-07014		*LCS*			Batch ID:	R23969	Analysis Date:	6/12/2007 8:59:17 AM	
Fluoride	0.4766	mg/L	0.10	95.3	90	110			
Chloride	4.786	mg/L	0.10	95.7	90	110			
Nitrate (As N)+Nitrite (As N)	3.446	mg/L	0.20	98.5	90	110			
Phosphorus, Orthophosphate (As P)	4.624	mg/L	0.50	92.5	90	110			
Sulfate	9.518	mg/L	0.50	95.2	90	110			
Sample ID: LCS ST300-07014		*LCS*			Batch ID:	R24020	Analysis Date:	6/16/2007 7:57:07 AM	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	[illegible] recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007 **Work Order:** 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E300									
Sample ID: LCS ST300-07014		*LCS*			Batch ID:	R24020	Analysis Date:		6/16/2007 7:57:07 AM
Fluoride	0.5700	mg/L	0.10	114	90	110			S
Chloride	4.770	mg/L	0.10	95.4	90	110			
Nitrate (As N)+Nitrite (As N)	3.399	mg/L	0.20	97.1	90	110			
Phosphorus, Orthophosphate (As P)	4.741	mg/L	0.50	94.8	90	110			
Sulfate	9.834	mg/L	0.50	98.3	90	110			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
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R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007 **Work Order:** 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-13084		*MBLK*			Batch ID:	13084	Analysis Date:		6/7/2007
Acenaphthene	ND	µg/L	10						
Acenaphthylene	ND	µg/L	10						
Aniline	ND	µg/L	20						
Anthracene	ND	µg/L	10						
Azobenzene	ND	µg/L	10						
Benz(a)anthracene	ND	µg/L	15						
Benzo(a)pyrene	ND	µg/L	10						
Benzo(b)fluoranthene	ND	µg/L	15						
Benzo(g,h,i)perylene	ND	µg/L	10						
Benzo(k)fluoranthene	ND	µg/L	10						
Benzoic acid	ND	µg/L	50						
Benzyl alcohol	ND	µg/L	20						
Bis(2-chloroethoxy)methane	ND	µg/L	10						
Bis(2-chloroethyl)ether	ND	µg/L	15						
Bis(2-chloroisopropyl)ether	ND	µg/L	15						
Bis(2-ethylhexyl)phthalate	ND	µg/L	15						
4-Bromophenyl phenyl ether	ND	µg/L	10						
Butyl benzyl phthalate	ND	µg/L	15						
rbazole	ND	µg/L	10						
4-Chloro-3-methylphenol	ND	µg/L	20						
4-Chloroaniline	ND	µg/L	20						
2-Chloronaphthalene	ND	µg/L	10						
2-Chlorophenol	ND	µg/L	10						
4-Chlorophenyl phenyl ether	ND	µg/L	15						
Chrysene	ND	µg/L	15						
Di-n-butyl phthalate	ND	µg/L	10						
Di-n-octyl phthalate	ND	µg/L	15						
Dibenz(a,h)anthracene	ND	µg/L	10						
Dibenzofuran	ND	µg/L	10						
1,2-Dichlorobenzene	ND	µg/L	10						
1,3-Dichlorobenzene	ND	µg/L	10						
1,4-Dichlorobenzene	ND	µg/L	10						
3,3'-Dichlorobenzidine	ND	µg/L	15						
Diethyl phthalate	ND	µg/L	10						
Dimethyl phthalate	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	50						
2,4-Dinitrophenol	ND	µg/L	50						
2,4-Dinitrotoluene	ND	µg/L	10						
2,6-Dinitrotoluene	ND	µg/L	10						
Fluoranthene	ND	µg/L	10						
Fluorene	ND	µg/L	10						
Hexachlorobenzene	ND	µg/L	10						

Qualifiers:

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R	RPD outside accepted recovery limits	S	[illegible] recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007 **Work Order:** 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-13084		*MBLK*			Batch ID:	13084	Analysis Date:		6/7/2007
Hexachlorobutadiene	ND	µg/L	10						
Hexachlorocyclopentadiene	ND	µg/L	50						
Hexachloroethane	ND	µg/L	10						
Indeno(1,2,3-cd)pyrene	ND	µg/L	10						
Isophorone	ND	µg/L	10						
2-Methylnaphthalene	ND	µg/L	10						
2-Methylphenol	ND	µg/L	15						
3+4-Methylphenol	ND	µg/L	20						
N-Nitrosodi-n-propylamine	ND	µg/L	10						
N-Nitrosodimethylamine	ND	µg/L	10						
N-Nitrosodiphenylamine	ND	µg/L	10						
Naphthalene	ND	µg/L	10						
2-Nitroaniline	ND	µg/L	50						
3-Nitroaniline	ND	µg/L	50						
4-Nitroaniline	ND	µg/L	20						
Nitrobenzene	ND	µg/L	10						
2-Nitrophenol	ND	µg/L	15						
4-Nitrophenol	ND	µg/L	50						
entachlorophenol	ND	µg/L	50						
Phenanthrene	ND	µg/L	10						
Phenol	ND	µg/L	10						
Pyrene	ND	µg/L	15						
Pyridine	ND	µg/L	30						
1,2,4-Trichlorobenzene	ND	µg/L	10						
2,4,5-Trichlorophenol	ND	µg/L	10						
2,4,6-Trichlorophenol	ND	µg/L	15						
Sample ID: LCS-13084		*LCS*			Batch ID:	13084	Analysis Date:		6/7/2007
Acenaphthene	78.52	µg/L	10	78.5	11	123			
4-Chloro-3-methylphenol	150.4	µg/L	20	75.2	15.4	119			
2-Chlorophenol	140.8	µg/L	10	70.4	12.2	122			
1,4-Dichlorobenzene	58.80	µg/L	10	58.8	16.9	100			
2,4-Dinitrotoluene	61.22	µg/L	10	61.2	13	138			
N-Nitrosodi-n-propylamine	68.12	µg/L	10	68.1	9.93	122			
4-Nitrophenol	65.32	µg/L	50	32.7	12.5	87.4			
Pentachlorophenol	151.8	µg/L	50	75.9	3.55	114			
Phenol	86.48	µg/L	10	43.2	7.53	73.1			
Pyrene	82.68	µg/L	15	82.7	12.6	140			
1,2,4-Trichlorobenzene	57.80	µg/L	10	57.8	17.4	98.7			
Sample ID: LCSD-13084		*LCSD*			Batch ID:	13084	Analysis Date:		6/7/2007
Acenaphthene	75.96	µg/L	10	76.0	11	123	3.31	30.5	
4-Chloro-3-methylphenol	152.4	µg/L	20	76.2	15.4	119	1.28	28.6	
2-Chlorophenol	135.3	µg/L	10	67.6	12.2	122	4.03	107	
1,4-Dichlorobenzene	55.14	µg/L	10	55.1	16.9	100	6.42	62.1	
2,4-Dinitrotoluene	63.18	µg/L	10	63.2	13	138	3.15	14.7	

Qualifiers:

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QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007 **Work Order:** 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: LCSD-13084		*LCSD*			Batch ID:	13084	Analysis Date:		6/7/2007
N-Nitrosodi-n-propylamine	63.86	µg/L	10	63.9	9.93	122	6.46	30.3	
4-Nitrophenol	70.54	µg/L	50	35.3	12.5	87.4	7.68	36.3	
Pentachlorophenol	153.5	µg/L	50	76.7	3.55	114	1.10	49	
Phenol	82.98	µg/L	10	41.5	7.53	73.1	4.13	52.4	
Pyrene	80.56	µg/L	15	80.6	12.6	140	2.60	16.3	
1,2,4-Trichlorobenzene	58.54	µg/L	10	58.5	17.4	98.7	1.27	36.4	
Method: SW7470									
Sample ID: MB-13077		*MBLK*			Batch ID:	13077	Analysis Date:		5/30/2007
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-13077		*LCS*			Batch ID:	13077	Analysis Date:		5/30/2007
Mercury	0.005044	mg/L	0.00020	101	80	120			
Method: SW6010A									
Sample ID: MB-13076		*MBLK*			Batch ID:	13076	Analysis Date:		6/1/2007 9:04:59 AM
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Cadmium	ND	mg/L	0.0020						
Calcium	ND	mg/L	1.0						
Chromium	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Silver	ND	mg/L	0.0050						
Sodium	ND	mg/L	1.0						
Sample ID: LCS-13076		*LCS*			Batch ID:	13076	Analysis Date:		6/1/2007 9:08:02 AM
Arsenic	0.4875	mg/L	0.020	97.5	80	120			
Barium	0.4854	mg/L	0.020	97.1	80	120			
Cadmium	0.4855	mg/L	0.0020	97.1	80	120			
Calcium	50.75	mg/L	1.0	101	80	120			
Chromium	0.4941	mg/L	0.0060	98.8	80	120			
Lead	0.4788	mg/L	0.0050	95.8	80	120			
Magnesium	51.02	mg/L	1.0	102	80	120			
Potassium	53.56	mg/L	1.0	107	80	120			
Silver	0.5020	mg/L	0.0050	100	80	120			
Sodium	54.78	mg/L	1.0	110	80	120			

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007 **Work Order:** 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R23881	Analysis Date:	6/6/2007 7:01:43 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007 **Work Order:** 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R23881	Analysis Date:	6/6/2007 7:01:43 AM	
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	1.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
richlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	R23881	Analysis Date:	6/6/2007 8:59:30 AM	
Benzene	20.46	µg/L	1.0	102	82.4	128			
Toluene	21.09	µg/L	1.0	105	77.2	115			
Chlorobenzene	20.48	µg/L	1.0	102	78.3	117			
1,1-Dichloroethene	23.61	µg/L	1.0	118	90.7	132			
Trichloroethene (TCE)	19.79	µg/L	1.0	98.9	71.8	113			

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S [illegible] covery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 5/25/2007

Work Order Number 0705390

Received by TLS

Checklist completed by _____ 5/25/07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	5°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: added 1ml HNO3 for acceptable pH / AT 5/25/07

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: Giant Refining Co.
Ciniza Refinery
Address: Rt 3 Box 7
Gallup, NM 87301

email: cjohnson@giant.com
Phone #: 505-722-0231
Fax #: 505-722-0210

Project Name: GWM-1 Annual 2007
Project #:
Project Manager: Ed Riege
Sampler: Cheryl Johnson
Sample Temperature: 5°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative: H_2SO_4	HEAL No. 0705390
5/24/07	0904	H_2O	GWM-1	1L	unpreserved			-1
	~~0911~~			1L Glass Amber	unpreserved			
	~~0913~~			1/500ml		X		
	~~0914~~			1/500ml		X		
	~~0918~~			1/500ml			X	
	~~0920~~			3/VOA			HCl	-1
	~~0922~~							

ANALYSIS REQUEST

Date	Time	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	GEN CHEM Anions Cations pH, ec				Air Bubbles or Headspace (Y or N)
5/24/07	0904													X				
	~~0911~~												X					
	~~0913~~								X									
	~~0914~~													X				
	~~0918~~													X				
	~~0920~~											X						
	~~0922~~																	

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
5/24/07	0945		
5/24/07	15:30		5/24/07 1530

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Wednesday, December 19, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Ponds #1 through #8-4 Qtr 2007

Order No.: 0711469

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 8 sample(s) on 11/29/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #1
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SMP
Fluoride	170	10		mg/L	100	11/30/2007 9:34:45 AM
Chloride	180	1.0		mg/L	10	11/29/2007 5:10:19 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	12/8/2007 1:08:51 PM
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	11/29/2007 5:10:19 PM
Sulfate	850	10		mg/L	20	11/30/2007 9:17:21 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Arsenic	ND	0.020		mg/L	1	12/4/2007 3:12:16 PM
Barium	0.073	0.010		mg/L	1	12/4/2007 3:12:16 PM
Cadmium	ND	0.0020		mg/L	1	12/4/2007 3:12:16 PM
Calcium	32	0.50		mg/L	1	12/4/2007 3:12:16 PM
Chromium	0.013	0.0060		mg/L	1	12/4/2007 3:12:16 PM
Copper	0.0061	0.0060		mg/L	1	12/7/2007 12:39:51 PM
Lead	ND	0.0050		mg/L	1	12/4/2007 3:12:16 PM
Magnesium	12	0.50		mg/L	1	12/4/2007 3:12:16 PM
Manganese	0.22	0.0020		mg/L	1	12/4/2007 3:12:16 PM
Potassium	71	1.0		mg/L	1	12/4/2007 3:12:16 PM
Selenium	ND	0.050		mg/L	1	12/4/2007 3:12:16 PM
Silver	ND	0.0050		mg/L	1	12/4/2007 3:12:16 PM
Sodium	530	5.0		mg/L	10	12/7/2007 2:32:56 PM
Uranium	ND	0.10		mg/L	1	12/4/2007 3:12:16 PM
Zinc	0.51	0.020		mg/L	1	12/4/2007 3:12:16 PM
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	64	10		µg/L	10	12/7/2007 12:18:26 PM
Toluene	230	10		µg/L	10	12/7/2007 12:18:26 PM
Ethylbenzene	48	10		µg/L	10	12/7/2007 12:18:26 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2,4-Trimethylbenzene	180	10		µg/L	10	12/7/2007 12:18:26 PM
1,3,5-Trimethylbenzene	48	10		µg/L	10	12/7/2007 12:18:26 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Naphthalene	240	20		µg/L	10	12/7/2007 12:18:26 PM
1-Methylnaphthalene	360	40		µg/L	10	12/7/2007 12:18:26 PM
2-Methylnaphthalene	580	40		µg/L	10	12/7/2007 12:18:26 PM
Acetone	800	200		µg/L	20	12/10/2007 11:10:18 AM
Bromobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Bromoform	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
2-Butanone	400	100		µg/L	10	12/7/2007 12:18:26 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #1
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Carbon disulfide	ND	100		µg/L	10	12/7/2007 12:18:26 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 12:18:26 PM
Chloroform	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 12:18:26 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 12:18:26 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 12:18:26 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 12:18:26 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 12:18:26 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 12:18:26 PM
n-Butylbenzene	48	10		µg/L	10	12/7/2007 12:18:26 PM
n-Propylbenzene	18	10		µg/L	10	12/7/2007 12:18:26 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Styrene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 12:18:26 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 12:18:26 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 12:18:26 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #1
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 12:18:26 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Xylenes, Total	310	15		µg/L	10	12/7/2007 12:18:26 PM
Surr: 1,2-Dichloroethane-d4	98.1	68.1-123		%REC	10	12/7/2007 12:18:26 PM
Surr: 4-Bromofluorobenzene	98.6	53.2-145		%REC	10	12/7/2007 12:18:26 PM
Surr: Dibromofluoromethane	102	68.5-119		%REC	10	12/7/2007 12:18:26 PM
Surr: Toluene-d8	102	64-131		%REC	10	12/7/2007 12:18:26 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	5500	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	8.47	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #2
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	73	2.0		mg/L	20	11/30/2007 9:52:10 AM
Chloride	1800	10		mg/L	100	11/30/2007 10:09:35 AM
Nitrate (As N)+Nitrite (As N)	ND	10		mg/L	50	12/9/2007 9:32:57 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/29/2007 5:27:44 PM
Sulfate	1100	10		mg/L	20	11/30/2007 9:52:10 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/4/2007 3:16:19 PM
Barium	0.043	0.010		mg/L	1	12/4/2007 3:16:19 PM
Cadmium	ND	0.0020		mg/L	1	12/4/2007 3:16:19 PM
Calcium	110	2.5		mg/L	5	12/7/2007 2:36:02 PM
Chromium	0.0071	0.0060		mg/L	1	12/4/2007 3:16:19 PM
Copper	ND	0.0060		mg/L	1	12/7/2007 12:45:22 PM
Lead	ND	0.0050		mg/L	1	12/4/2007 3:16:19 PM
Magnesium	47	0.50		mg/L	1	12/4/2007 3:16:19 PM
Manganese	0.22	0.0020		mg/L	1	12/4/2007 3:16:19 PM
Potassium	64	1.0		mg/L	1	12/4/2007 3:16:19 PM
Selenium	ND	0.050		mg/L	1	12/4/2007 3:16:19 PM
Silver	ND	0.0050		mg/L	1	12/4/2007 3:16:19 PM
Sodium	1400	25		mg/L	50	12/7/2007 2:43:08 PM
Uranium	ND	0.10		mg/L	1	12/4/2007 3:16:19 PM
Zinc	0.16	0.020		mg/L	1	12/4/2007 3:16:19 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	21	10		µg/L	10	12/7/2007 12:48:56 PM
Toluene	79	10		µg/L	10	12/7/2007 12:48:56 PM
Ethylbenzene	20	10		µg/L	10	12/7/2007 12:48:56 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2,4-Trimethylbenzene	81	10		µg/L	10	12/7/2007 12:48:56 PM
1,3,5-Trimethylbenzene	21	10		µg/L	10	12/7/2007 12:48:56 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Naphthalene	120	20		µg/L	10	12/7/2007 12:48:56 PM
1-Methylnaphthalene	220	40		µg/L	10	12/7/2007 12:48:56 PM
2-Methylnaphthalene	340	40		µg/L	10	12/7/2007 12:48:56 PM
Acetone	1200	100		µg/L	10	12/7/2007 12:48:56 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Bromoform	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
2-Butanone	180	100		µg/L	10	12/7/2007 12:48:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #2
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	ND	100		µg/L	10	12/7/2007 12:48:56 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 12:48:56 PM
Chloroform	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 12:48:56 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 12:48:56 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 12:48:56 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 12:48:56 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 12:48:56 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 12:48:56 PM
n-Butylbenzene	23	10		µg/L	10	12/7/2007 12:48:56 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Styrene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 12:48:56 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 12:48:56 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 12:48:56 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #2
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 12:48:56 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Xylenes, Total	130	15		µg/L	10	12/7/2007 12:48:56 PM
Surr: 1,2-Dichloroethane-d4	104	68.1-123		%REC	10	12/7/2007 12:48:56 PM
Surr: 4-Bromofluorobenzene	98.2	53.2-145		%REC	10	12/7/2007 12:48:56 PM
Surr: Dibromofluoromethane	97.2	68.5-119		%REC	10	12/7/2007 12:48:56 PM
Surr: Toluene-d8	111	64-131		%REC	10	12/7/2007 12:48:56 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	9400	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.96	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #3
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	62	2.0		mg/L	20	11/30/2007 10:26:59 AM
Chloride	2000	10		mg/L	100	11/30/2007 10:44:24 AM
Nitrate (As N)+Nitrite (As N)	ND	4.0		mg/L	20	12/13/2007 8:35:22 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/29/2007 6:02:32 PM
Sulfate	1100	10		mg/L	20	11/30/2007 10:26:59 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/4/2007 5:23:28 PM
Barium	0.033	0.010		mg/L	1	12/4/2007 5:23:28 PM
Cadmium	ND	0.0020		mg/L	1	12/4/2007 5:23:28 PM
Calcium	93	0.50		mg/L	1	12/4/2007 5:23:28 PM
Chromium	0.0078	0.0060		mg/L	1	12/4/2007 5:23:28 PM
Copper	ND	0.0060		mg/L	1	12/7/2007 12:49:28 PM
Lead	ND	0.0050		mg/L	1	12/4/2007 5:23:28 PM
Magnesium	55	0.50		mg/L	1	12/4/2007 5:23:28 PM
Manganese	0.30	0.0020		mg/L	1	12/4/2007 5:23:28 PM
Potassium	78	1.0		mg/L	1	12/4/2007 5:23:28 PM
Selenium	ND	0.050		mg/L	1	12/4/2007 5:23:28 PM
Silver	ND	0.0050		mg/L	1	12/4/2007 5:23:28 PM
Sodium	1600	25		mg/L	50	12/7/2007 3:53:45 PM
Uranium	ND	0.10		mg/L	1	12/4/2007 5:23:28 PM
Zinc	0.094	0.020		mg/L	1	12/4/2007 5:23:28 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Toluene	25	10		µg/L	10	12/7/2007 1:19:25 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2,4-Trimethylbenzene	27	10		µg/L	10	12/7/2007 1:19:25 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Naphthalene	52	20		µg/L	10	12/7/2007 1:19:25 PM
1-Methylnaphthalene	99	40		µg/L	10	12/7/2007 1:19:25 PM
2-Methylnaphthalene	160	40		µg/L	10	12/7/2007 1:19:25 PM
Acetone	930	100		µg/L	10	12/7/2007 1:19:25 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Bromoform	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 1:19:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #3
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	110	100		µg/L	10	12/7/2007 1:19:25 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 1:19:25 PM
Chloroform	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 1:19:25 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 1:19:25 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 1:19:25 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 1:19:25 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 1:19:25 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 1:19:25 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Styrene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 1:19:25 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 1:19:25 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 1:19:25 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #3
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 1:19:25 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Xylenes, Total	38	15		µg/L	10	12/7/2007 1:19:25 PM
Surr: 1,2-Dichloroethane-d4	103	68.1-123		%REC	10	12/7/2007 1:19:25 PM
Surr: 4-Bromofluorobenzene	97.5	53.2-145		%REC	10	12/7/2007 1:19:25 PM
Surr: Dibromofluoromethane	108	68.5-119		%REC	10	12/7/2007 1:19:25 PM
Surr: Toluene-d8	110	64-131		%REC	10	12/7/2007 1:19:25 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	9800	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.71	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #4
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	61	2.0		mg/L	20	11/30/2007 11:01:48 AM
Chloride	2000	10		mg/L	100	12/3/2007 11:09:14 AM
Nitrate (As N)+Nitrite (As N)	ND	4.0		mg/L	20	12/18/2007 7:27:09 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/29/2007 6:37:21 PM
Sulfate	1100	10		mg/L	20	11/30/2007 11:01:48 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/4/2007 5:27:20 PM
Barium	0.035	0.010		mg/L	1	12/4/2007 5:27:20 PM
Cadmium	ND	0.0020		mg/L	1	12/4/2007 5:27:20 PM
Calcium	96	0.50		mg/L	1	12/4/2007 5:27:20 PM
Chromium	0.0080	0.0060		mg/L	1	12/4/2007 5:27:20 PM
Copper	ND	0.0060		mg/L	1	12/7/2007 12:53:33 PM
Lead	ND	0.0050		mg/L	1	12/4/2007 5:27:20 PM
Magnesium	56	0.50		mg/L	1	12/4/2007 5:27:20 PM
Manganese	0.31	0.0020		mg/L	1	12/4/2007 5:27:20 PM
Potassium	82	1.0		mg/L	1	12/4/2007 5:27:20 PM
Selenium	ND	0.050		mg/L	1	12/4/2007 5:27:20 PM
Silver	ND	0.0050		mg/L	1	12/4/2007 5:27:20 PM
Sodium	1700	25		mg/L	50	12/7/2007 3:50:40 PM
Uranium	ND	0.10		mg/L	1	12/4/2007 5:27:20 PM
Zinc	0.092	0.020		mg/L	1	12/4/2007 5:27:20 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Toluene	11	10		µg/L	10	12/7/2007 1:49:53 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2,4-Trimethylbenzene	13	10		µg/L	10	12/7/2007 1:49:53 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Naphthalene	29	20		µg/L	10	12/7/2007 1:49:53 PM
1-Methylnaphthalene	62	40		µg/L	10	12/7/2007 1:49:53 PM
2-Methylnaphthalene	92	40		µg/L	10	12/7/2007 1:49:53 PM
Acetone	800	100		µg/L	10	12/7/2007 1:49:53 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Bromoform	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 1:49:53 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #4
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	110	100		µg/L	10	12/7/2007 1:49:53 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 1:49:53 PM
Chloroform	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 1:49:53 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 1:49:53 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 1:49:53 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 1:49:53 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 1:49:53 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 1:49:53 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Styrene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 1:49:53 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 1:49:53 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 1:49:53 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #4
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 1:49:53 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Xylenes, Total	ND	15		µg/L	10	12/7/2007 1:49:53 PM
Surr: 1,2-Dichloroethane-d4	94.6	68.1-123		%REC	10	12/7/2007 1:49:53 PM
Surr: 4-Bromofluorobenzene	102	53.2-145		%REC	10	12/7/2007 1:49:53 PM
Surr: Dibromofluoromethane	99.4	68.5-119		%REC	10	12/7/2007 1:49:53 PM
Surr: Toluene-d8	106	64-131		%REC	10	12/7/2007 1:49:53 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	9800	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.73	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #5
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	47	2.0		mg/L	20	11/30/2007 12:11:26 PM
Chloride	3000	10		mg/L	100	11/30/2007 12:28:51 PM
Nitrate (As N)+Nitrite (As N)	ND	4.0		mg/L	20	12/18/2007 9:11:35 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/29/2007 7:12:10 PM
Sulfate	1300	10		mg/L	20	11/30/2007 12:11:26 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/4/2007 5:31:15 PM
Barium	0.054	0.010		mg/L	1	12/4/2007 5:31:15 PM
Cadmium	ND	0.0020		mg/L	1	12/4/2007 5:31:15 PM
Calcium	150	2.5		mg/L	5	12/7/2007 2:57:20 PM
Chromium	0.0074	0.0060		mg/L	1	12/4/2007 5:31:15 PM
Copper	ND	0.0060		mg/L	1	12/7/2007 12:57:39 PM
Lead	ND	0.0050		mg/L	1	12/4/2007 5:31:15 PM
Magnesium	79	0.50		mg/L	1	12/4/2007 5:31:15 PM
Manganese	0.43	0.0020		mg/L	1	12/4/2007 5:31:15 PM
Potassium	110	5.0		mg/L	5	12/7/2007 2:57:20 PM
Selenium	ND	0.050		mg/L	1	12/4/2007 5:31:15 PM
Silver	ND	0.0050		mg/L	1	12/4/2007 5:31:15 PM
Sodium	2200	25		mg/L	50	12/7/2007 3:03:13 PM
Uranium	ND	0.10		mg/L	1	12/4/2007 5:31:15 PM
Zinc	0.084	0.020		mg/L	1	12/4/2007 5:31:15 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Toluene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Naphthalene	ND	20		µg/L	10	12/7/2007 2:20:18 PM
1-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 2:20:18 PM
2-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 2:20:18 PM
Acetone	220	100		µg/L	10	12/7/2007 2:20:18 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Bromoform	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 2:20:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #5
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Carbon disulfide	ND	100		µg/L	10	12/7/2007 2:20:18 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 2:20:18 PM
Chloroform	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 2:20:18 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 2:20:18 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 2:20:18 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 2:20:18 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 2:20:18 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 2:20:18 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Styrene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 2:20:18 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 2:20:18 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 2:20:18 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #5
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 2:20:18 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Xylenes, Total	ND	15		µg/L	10	12/7/2007 2:20:18 PM
Surr: 1,2-Dichloroethane-d4	101	68.1-123		%REC	10	12/7/2007 2:20:18 PM
Surr: 4-Bromofluorobenzene	102	53.2-145		%REC	10	12/7/2007 2:20:18 PM
Surr: Dibromofluoromethane	105	68.5-119		%REC	10	12/7/2007 2:20:18 PM
Surr: Toluene-d8	104	64-131		%REC	10	12/7/2007 2:20:18 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	12000	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.70	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #6
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	31	1.0		mg/L	10	11/29/2007 8:39:12 PM
Chloride	8000	50		mg/L	500	12/3/2007 11:26:39 AM
Nitrate (As N)+Nitrite (As N)	26	10		mg/L	50	12/9/2007 9:50:21 AM
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	11/29/2007 8:39:12 PM
Sulfate	3100	25		mg/L	50	11/30/2007 12:46:15 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/7/2007 1:19:40 PM
Barium	0.094	0.010		mg/L	1	12/7/2007 1:19:40 PM
Cadmium	ND	0.0020		mg/L	1	12/7/2007 1:19:40 PM
Calcium	500	5.0		mg/L	10	12/7/2007 3:06:15 PM
Chromium	ND	0.0060		mg/L	1	12/7/2007 1:19:40 PM
Copper	ND	0.0060		mg/L	1	12/7/2007 1:19:40 PM
Lead	ND	0.0050		mg/L	1	12/7/2007 1:19:40 PM
Magnesium	210	5.0		mg/L	10	12/7/2007 3:06:15 PM
Manganese	0.96	0.0020		mg/L	1	12/7/2007 1:19:40 PM
Potassium	230	10		mg/L	10	12/7/2007 3:06:15 PM
Selenium	ND	0.050		mg/L	1	12/7/2007 1:19:40 PM
Silver	ND	0.0050		mg/L	1	12/7/2007 1:19:40 PM
Sodium	5500	50		mg/L	100	12/7/2007 3:47:37 PM
Uranium	ND	0.10		mg/L	1	12/11/2007 11:32:53 AM
Zinc	0.028	0.020		mg/L	1	12/7/2007 1:19:40 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Toluene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Naphthalene	ND	20		µg/L	10	12/7/2007 2:50:45 PM
1-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 2:50:45 PM
2-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 2:50:45 PM
Acetone	ND	100		µg/L	10	12/7/2007 2:50:45 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Bromoform	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 2:50:45 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #6
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Carbon disulfide	ND	100		µg/L	10	12/7/2007 2:50:45 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 2:50:45 PM
Chloroform	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 2:50:45 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 2:50:45 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 2:50:45 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 2:50:45 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 2:50:45 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 2:50:45 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Styrene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 2:50:45 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 2:50:45 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 2:50:45 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #6
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 2:50:45 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Xylenes, Total	ND	15		µg/L	10	12/7/2007 2:50:45 PM
Surr: 1,2-Dichloroethane-d4	96.1	68.1-123		%REC	10	12/7/2007 2:50:45 PM
Surr: 4-Bromofluorobenzene	97.8	53.2-145		%REC	10	12/7/2007 2:50:45 PM
Surr: Dibromofluoromethane	98.6	68.5-119		%REC	10	12/7/2007 2:50:45 PM
Surr: Toluene-d8	104	64-131		%REC	10	12/7/2007 2:50:45 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	14000	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.46	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #7
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SMP
Fluoride	51	20		mg/L	200	11/30/2007 1:21:04 PM
Chloride	69000	200		mg/L	2000	12/3/2007 11:44:03 AM
Nitrate (As N)+Nitrite (As N)	ND	100		mg/L	500	12/9/2007 12:27:04 PM
Phosphorus, Orthophosphate (As P)	ND	100		mg/L	200	11/30/2007 1:21:04 PM
Sulfate	14000	250		mg/L	500	11/30/2007 1:38:28 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Arsenic	ND	0.20		mg/L	10	12/7/2007 3:13:25 PM
Barium	0.10	0.10		mg/L	10	12/7/2007 3:13:25 PM
Cadmium	ND	0.020		mg/L	10	12/7/2007 3:13:25 PM
Calcium	800	5.0		mg/L	10	12/7/2007 3:13:25 PM
Chromium	ND	0.060		mg/L	10	12/7/2007 3:13:25 PM
Copper	ND	0.060		mg/L	10	12/7/2007 3:13:25 PM
Lead	ND	0.050		mg/L	10	12/7/2007 3:13:25 PM
Magnesium	1400	25		mg/L	50	12/7/2007 3:17:35 PM
Manganese	7.1	0.020		mg/L	10	12/7/2007 3:13:25 PM
Potassium	1500	50		mg/L	50	12/7/2007 3:17:35 PM
Selenium	ND	0.50		mg/L	10	12/7/2007 3:13:25 PM
Silver	ND	0.050		mg/L	10	12/7/2007 3:13:25 PM
Sodium	41000	250		mg/L	500	12/7/2007 3:56:39 PM
Uranium	ND	1.0		mg/L	10	12/11/2007 12:06:09 PM
Zinc	ND	0.20		mg/L	10	12/7/2007 3:13:25 PM
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Toluene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Naphthalene	ND	20		µg/L	10	12/7/2007 3:21:18 PM
1-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 3:21:18 PM
2-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 3:21:18 PM
Acetone	ND	100		µg/L	10	12/7/2007 3:21:18 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Bromoform	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 3:21:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #7
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	ND	100		µg/L	10	12/7/2007 3:21:18 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 3:21:18 PM
Chloroform	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 3:21:18 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 3:21:18 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 3:21:18 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 3:21:18 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 3:21:18 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 3:21:18 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Styrene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 3:21:18 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 3:21:18 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 3:21:18 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #7
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 3:21:18 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Xylenes, Total	ND	15		µg/L	10	12/7/2007 3:21:18 PM
Surr: 1,2-Dichloroethane-d4	101	68.1-123		%REC	10	12/7/2007 3:21:18 PM
Surr: 4-Bromofluorobenzene	109	53.2-145		%REC	10	12/7/2007 3:21:18 PM
Surr: Dibromofluoromethane	101	68.5-119		%REC	10	12/7/2007 3:21:18 PM
Surr: Toluene-d8	105	64-131		%REC	10	12/7/2007 3:21:18 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	180000	0.10		µmhos/cm	10	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.22	0.1		pH units	1	11/30/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #8
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	94	50		mg/L	500	11/30/2007 2:13:17 PM
Chloride	200000	500		mg/L	5000	12/3/2007 12:01:28 PM
Nitrate (As N)+Nitrite (As N)	ND	200		mg/L	1000	12/9/2007 6:15:17 PM
Phosphorus, Orthophosphate (As P)	ND	250		mg/L	500	11/30/2007 2:13:17 PM
Sulfate	28000	250		mg/L	500	11/30/2007 2:13:17 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	1.0		mg/L	5	12/11/2007 10:20:03 AM
Barium	ND	0.50		mg/L	5	12/11/2007 10:20:03 AM
Cadmium	ND	0.10		mg/L	5	12/11/2007 10:20:03 AM
Calcium	580	25		mg/L	5	12/11/2007 10:20:03 AM
Chromium	ND	0.30		mg/L	5	12/11/2007 10:20:03 AM
Copper	ND	0.30		mg/L	5	12/11/2007 10:20:03 AM
Lead	ND	0.25		mg/L	5	12/11/2007 10:20:03 AM
Magnesium	11000	250		mg/L	50	12/11/2007 10:24:15 AM
Manganese	120	1.0		mg/L	50	12/11/2007 10:24:15 AM
Potassium	16000	500		mg/L	50	12/11/2007 10:24:15 AM
Selenium	ND	2.5		mg/L	5	12/11/2007 10:20:03 AM
Silver	ND	0.25		mg/L	5	12/11/2007 10:20:03 AM
Sodium	120000	1000		mg/L	200	12/11/2007 3:26:30 PM
Uranium	ND	5.0		mg/L	5	12/11/2007 10:20:03 AM
Zinc	ND	1.0		mg/L	5	12/11/2007 10:20:03 AM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Toluene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Naphthalene	ND	20		µg/L	10	12/7/2007 3:51:55 PM
1-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 3:51:55 PM
2-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 3:51:55 PM
Acetone	100	100		µg/L	10	12/7/2007 3:51:55 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Bromoform	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 3:51:55 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #8
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	ND	100		µg/L	10	12/7/2007 3:51:55 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 3:51:55 PM
Chloroform	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 3:51:55 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 3:51:55 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 3:51:55 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 3:51:55 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 3:51:55 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 3:51:55 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Styrene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 3:51:55 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 3:51:55 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 3:51:55 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #8
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 3:51:55 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Xylenes, Total	ND	15		µg/L	10	12/7/2007 3:51:55 PM
Surr: 1,2-Dichloroethane-d4	99.8	68.1-123		%REC	10	12/7/2007 3:51:55 PM
Surr: 4-Bromofluorobenzene	106	53.2-145		%REC	10	12/7/2007 3:51:55 PM
Surr: Dibromofluoromethane	102	68.5-119		%REC	10	12/7/2007 3:51:55 PM
Surr: Toluene-d8	110	64-131		%REC	10	12/7/2007 3:51:55 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	780000	1.0		µmhos/cm	100	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	5.49	0.1		pH units	1	11/30/2007

Qualifiers:

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

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847 HAL03** Receipt: **11-29-07**

William P. Blava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0711469-01D POND#1*** Collected: *11-29-07 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-001A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.15	C-004	Chemical Oxygen Demand	878	mg/L	1	10		12-07-07	12-07-07

Sample: ***0711469-01E POND#1*** Collected: *11-29-07 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.12	10-26-4	Biochemical Oxygen Demand	783	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711469-01F POND#1*** Collected: *11-29-07 8:30:00* By:
Matrix: ***AQUEOUS*** *SR8307*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-003A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.12		E. coli	727	CFU/100 ml	91	1		11-29-07	11-30-07

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847 HAL03** Receipt: **11-29-07**

Sample: ***0711469-02D POND#2*** Collected: *11-29-07 8:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-004A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.16	C-004	Chemical Oxygen Demand	561	mg/L	1	10		12-07-07	12-07-07

Sample: ***0711469-02E POND#2*** Collected: *11-29-07 8:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-005A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.13	10-26-4	Biochemical Oxygen Demand	302	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711469-02F POND#2*** Collected: *11-29-07 8:50:00* By:
Matrix: ***AQUEOUS*** *SR8308*

Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-006A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.13		E. coli	63.1	CFU/100 ml	9	1		11-29-07	11-30-07

Sample: ***0711469-03D POND#3*** Collected: *11-29-07 9:10:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-007A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.17	C-004	Chemical Oxygen Demand	463	mg/L	1	10		12-07-07	12-07-07

Sample: ***0711469-03E POND#3*** Collected: *11-29-07 9:10:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-008A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.14	10-26-4	Biochemical Oxygen Demand	209	mg/L	1	2	1	11-30-07	12-05-07

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847** **HAL03** Receipt: **11-29-07**

Sample: ***0711469-03F POND#3*** Collected: *11-29-07 9:10:00* By:
Matrix: ***AQUEOUS*** *SR8309*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-009A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.14		E. coli	27.0	CFU/100 ml	9	1		11-29-07	11-30-07

Sample: ***0711469-04D POND#4*** Collected: *11-29-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-010A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.18	C-004	Chemical Oxygen Demand	512	mg/L	1	10		12-07-07	12-07-07

Sample: ***0711469-04E POND#4*** Collected: *11-29-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-011A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.15	10-26-4	Biochemical Oxygen Demand	163	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711469-04F POND#4*** Collected: *11-29-07 9:30:00* By:
Matrix: ***AQUEOUS*** *SR8310*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-012A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.16		E. coli	18.0	CFU/100 ml	9	1		11-29-07	11-30-07

Sample: ***0711469-05D POND#5*** Collected: *11-29-07 9:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-013A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.19	C-004	Chemical Oxygen Demand	488	mg/L	1	10		12-07-07	12-07-07

Assalgal Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847** **HAL03** Receipt: **11-29-07**

Sample: ***0711469-05E POND#5*** Collected: *11-29-07 9:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-014A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.16	10-26-4	Biochemical Oxygen Demand	103	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711469-05F POND#5*** Collected: *11-29-07 9:50:00* By:
Matrix: ***AQUEOUS*** *SR8311*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-015A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.17		E. coli	ND	CFU/100 ml	10	1		11-29-07	11-30-07

Sample: ***0711469-06D POND#6*** Collected: *11-29-07 10:10:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-016A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.20	C-004	Chemical Oxygen Demand	927	mg/L	1	10		12-07-07	12-07-07

Sample: ***0711469-06E POND#6*** Collected: *11-29-07 10:10:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-017A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.17	10-26-4	Biochemical Oxygen Demand	47.8	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711469-06F POND#6*** Collected; *11-29-07 10:10:00* By:
Matrix: ***AQUEOUS*** *SR8312*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-018A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.18		E. coli	ND	CFU/100 ml	10	1		11-29-07	11-30-07

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Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847 HAL03** Receipt: **11-29-07**

Sample: ***0711469-07D POND#7*** Collected: *11-29-07 10:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-019A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.23	C-004	Chemical Oxygen Demand	4390	mg/L	10	10		12-07-07	12-07-07

Sample: ***0711469-07E POND#7*** Collected: *11-29-07 10:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-020A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.18	10-26-4	Biochemical Oxygen Demand	Less Than 64.0	mg/L	1	2		11-30-07	12-05-07

Sample: ***0711469-07F POND#7*** Collected: *11-29-07 10:30:00* By:
Matrix: ***AQUEOUS*** *SR8313*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-021A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.20		E. coli	ND	CFU/100 ml	10	1		11-29-07	11-30-07

Sample: ***0711469-08D POND#8*** Collected: *11-29-07 10:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-022A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.24	C-004	Chemical Oxygen Demand	2200	mg/L	100	10		12-07-07	12-07-07

Sample: ***0711469-08E POND#8*** Collected: *11-29-07 10:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-023A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.19	10-26-4	Biochemical Oxygen Demand	Less Than 64.0	mg/L	1	2	1	11-30-07	12-05-07

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847** **HAL03** Receipt: **11-29-07**

Sample: ***0711469-08F POND#8*** Collected: *11-29-07 10:50:00* By:
Matrix: ***AQUEOUS*** *SR8314*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-024A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.21		E. coli	ND	CFU/100 ml	10	1		11-29-07	11-30-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 116% and 120% respectively. These recoveries are above the QC acceptance limits of 84.6-115.4%. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MBLK		*MBLK*			Batch ID:	**R26303**	Analysis Date:	11/30/2007 8:42:32 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R26322**	Analysis Date:	12/3/2007 10:34:25 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK 112907A		*MBLK*			Batch ID:	**R26325**	Analysis Date:	11/29/2007 6:26:12 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
ple ID: MBLK		*MBLK*			Batch ID:	**R26422**	Analysis Date:	12/8/2007 10:14:20 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R26424**	Analysis Date:	12/9/2007 8:58:08 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK-B		*MBLK*			Batch ID:	**R26509**	Analysis Date:	12/12/2007 2:48:24 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R26528**	Analysis Date:	12/13/2007 5:47:28 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS		*LCS*			Batch ID:	**R26303**	Analysis Date:	11/30/2007 8:59:57 AM	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: LCS		*LCS*			Batch ID:	**R26303**	Analysis Date:	11/30/2007 8:59:57 AM	
Fluoride	0.5036	mg/L	0.10	101	90	110			
Chloride	4.732	mg/L	0.10	94.6	90	110			
Nitrate (As N)+Nitrite (As N)	3.372	mg/L	0.20	96.3	90	110			
Phosphorus, Orthophosphate (As P)	4.790	mg/L	0.50	95.8	90	110			
Sulfate	9.653	mg/L	0.50	96.5	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26322**	Analysis Date:	12/3/2007 2:03:20 PM	
Fluoride	0.4937	mg/L	0.10	98.7	90	110			
Chloride	4.728	mg/L	0.10	94.6	90	110			
Nitrate (As N)+Nitrite (As N)	3.334	mg/L	0.20	95.3	90	110			
Phosphorus, Orthophosphate (As P)	4.739	mg/L	0.50	94.8	90	110			
Sulfate	9.740	mg/L	0.50	97.4	90	110			
Sample ID: LCS ST300-07069 1		*LCS*			Batch ID:	**R26325**	Analysis Date:	11/29/2007 1:58:51 PM	
Fluoride	0.5369	mg/L	0.10	107	90	110			
Chloride	4.981	mg/L	0.10	99.6	90	110			
Nitrate (As N)+Nitrite (As N)	3.506	mg/L	0.20	100	90	110			
Phosphorus, Orthophosphate (As P)	5.022	mg/L	0.50	100	90	110			
Sulfate	10.13	mg/L	0.50	101	90	110			
ple ID: LCS		*LCS*			Batch ID:	**R26422**	Analysis Date:	12/8/2007 10:31:44 AM	
Fluoride	0.5389	mg/L	0.10	108	90	110			
Chloride	5.032	mg/L	0.10	101	90	110			
Nitrate (As N)+Nitrite (As N)	3.452	mg/L	0.20	98.6	90	110			
Phosphorus, Orthophosphate (As P)	5.024	mg/L	0.50	100	90	110			
Sulfate	10.13	mg/L	0.50	101	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26424**	Analysis Date:	12/9/2007 9:15:33 AM	
Fluoride	0.5482	mg/L	0.10	110	90	110			
Chloride	5.061	mg/L	0.10	101	90	110			
Nitrate (As N)+Nitrite (As N)	3.609	mg/L	0.20	103	90	110			
Phosphorus, Orthophosphate (As P)	5.086	mg/L	0.50	102	90	110			
Sulfate	10.26	mg/L	0.50	103	90	110			
Sample ID: LCS-B		*LCS*			Batch ID:	**R26509**	Analysis Date:	12/12/2007 3:05:49 PM	
Fluoride	0.5220	mg/L	0.10	104	90	110			
Chloride	4.936	mg/L	0.10	98.7	90	110			
Nitrate (As N)+Nitrite (As N)	3.436	mg/L	0.20	98.2	90	110			
Phosphorus, Orthophosphate (As P)	5.200	mg/L	0.50	104	90	110			
Sulfate	10.05	mg/L	0.50	100	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26528**	Analysis Date:	12/13/2007 6:04:52 AM	
Fluoride	0.5272	mg/L	0.10	105	90	110			
Chloride	4.947	mg/L	0.10	98.9	90	110			
Nitrate (As N)+Nitrite (As N)	3.458	mg/L	0.20	98.8	90	110			
Phosphorus, Orthophosphate (As P)	4.793	mg/L	0.50	95.9	90	110			
Sulfate	9.960	mg/L	0.50	99.6	90	110			
Sample ID: LCS 12/17/07		*LCS*			Batch ID:	**R26586**	Analysis Date:	12/18/2007 7:16:00 AM	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: LCS 12/17/07		*LCS*			Batch ID:	**R26586**	Analysis Date:		12/18/2007 7:16:00 AM
Fluoride	0.5806	mg/L	0.10	116	90	110			S
Chloride	5.268	mg/L	0.10	105	90	110			
Nitrate (As N)+Nitrite (As N)	3.692	mg/L	0.20	105	90	110			
Phosphorus, Orthophosphate (As P)	5.255	mg/L	0.50	105	90	110			
Sulfate	10.55	mg/L	0.50	106	90	110			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 6010B: Total Recoverable Metals									
Sample ID: MB-14537		*MBLK*			Batch ID:	**14537**	Analysis Date:	12/4/2007 2:43:13 PM	
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.010						
Cadmium	ND	mg/L	0.0020						
Calcium	ND	mg/L	0.50						
Chromium	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Magnesium	ND	mg/L	0.50						
Manganese	ND	mg/L	0.0020						
Potassium	ND	mg/L	1.0						
Selenium	ND	mg/L	0.050						
Silver	ND	mg/L	0.0050						
Sodium	ND	mg/L	0.50						
Uranium	ND	mg/L	0.10						
Zinc	ND	mg/L	0.020						
Sample ID: MB-14537		*MBLK*			Batch ID:	**14537**	Analysis Date:	12/7/2007 12:22:59 PM	
Copper	ND	mg/L	0.0060						
Zinc	ND	mg/L	0.020						
Sample ID: MB-14575		*MBLK*			Batch ID:	**14575**	Analysis Date:	12/10/2007 5:00:51 PM	
Barium	ND	mg/L	0.010						
Cadmium	ND	mg/L	0.0020						
Calcium	ND	mg/L	0.50						
Chromium	ND	mg/L	0.0060						
Copper	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Magnesium	ND	mg/L	0.50						
Manganese	ND	mg/L	0.0020						
Potassium	ND	mg/L	1.0						
Silver	ND	mg/L	0.0050						
Sodium	ND	mg/L	0.50						
Zinc	ND	mg/L	0.020						
Sample ID: LCS-14537		*LCS*			Batch ID:	**14537**	Analysis Date:	12/4/2007 2:46:18 PM	
Arsenic	0.5153	mg/L	0.020	103	80	120			
Barium	0.4883	mg/L	0.010	97.7	80	120			
Cadmium	0.4914	mg/L	0.0020	98.3	80	120			
Calcium	49.74	mg/L	0.50	99.5	80	120			
Chromium	0.4930	mg/L	0.0060	98.6	80	120			
Lead	0.4864	mg/L	0.0050	97.3	80	120			
Magnesium	50.03	mg/L	0.50	100	80	120			
Manganese	0.4889	mg/L	0.0020	97.8	80	120			
Potassium	52.72	mg/L	1.0	105	80	120			
Selenium	0.4904	mg/L	0.050	98.1	80	120			
Silver	0.5037	mg/L	0.0050	101	80	120			
Sodium	52.75	mg/L	0.50	105	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 6010B: Total Recoverable Metals									
Sample ID: LCS-14537		*LCS*			Batch ID:	**14537**	Analysis Date:	12/4/2007 2:46:18 PM	
Uranium	0.4453	mg/L	0.10	89.1	80	120			
Zinc	0.4908	mg/L	0.020	98.2	80	120			
Sample ID: LCS-14537		*LCS*			Batch ID:	**14537**	Analysis Date:	12/7/2007 12:25:59 PM	
Copper	0.5327	mg/L	0.0060	107	80	120			
Zinc	0.4807	mg/L	0.020	96.1	80	120			
Sample ID: LCS-14575		*LCS*			Batch ID:	**14575**	Analysis Date:	12/10/2007 5:03:55 PM	
Barium	0.4876	mg/L	0.010	97.5	80	120			
Cadmium	0.4986	mg/L	0.0020	99.7	80	120			
Calcium	51.71	mg/L	0.50	103	80	120			
Chromium	0.4976	mg/L	0.0060	99.5	80	120			
Copper	0.5129	mg/L	0.0060	103	80	120			
Lead	0.4877	mg/L	0.0050	97.5	80	120			
Magnesium	52.67	mg/L	0.50	105	80	120			
Manganese	0.4903	mg/L	0.0020	98.1	80	120			
Potassium	56.24	mg/L	1.0	112	80	120			
Silver	0.5066	mg/L	0.0050	101	80	120			
Sodium	54.84	mg/L	0.50	110	80	120			
[illegible]	0.4809	mg/L	0.020	96.2	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Method: EPA Method 8260B: VOLATILES
Sample ID: 5mL rb *MBLK* Batch ID: **R26402** Analysis Date: 12/6/2007 11:33:13 AM

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone (MEK)	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26402**	Analysis Date:	12/6/2007 11:33:13 AM	
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26434**	Analysis Date:	12/7/2007 11:17:24 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Method: EPA Method 8260B: VOLATILES
Sample ID: 5mL rb *MBLK* Batch ID: **R26434** Analysis Date: 12/7/2007 11:17:24 AM

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
Dichloropropane	ND	µg/L	1.0						
-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26434**	Analysis Date:	12/7/2007 11:17:24 AM	
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26460**	Analysis Date:	12/10/2007 8:31:36 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
moform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
achlorobutadiene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26460**	Analysis Date:	12/10/2007 8:31:36 AM	
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
,1-Trichloroethane	ND	µg/L	1.0						
,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26402**	Analysis Date:	12/6/2007 1:44:35 PM	
Benzene	19.82	µg/L	1.0	99.1	72.4	126			
Toluene	20.06	µg/L	1.0	100	79.2	115			
Chlorobenzene	19.39	µg/L	1.0	96.9	83.1	111			
1,1-Dichloroethene	19.83	µg/L	1.0	99.2	81.4	122			
Trichloroethene (TCE)	15.37	µg/L	1.0	76.8	64.4	118			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26434**	Analysis Date:	12/7/2007 10:49:10 AM	
Benzene	18.78	µg/L	1.0	93.9	72.4	126			
Toluene	20.31	µg/L	1.0	102	79.2	115			
Chlorobenzene	19.97	µg/L	1.0	99.9	83.1	111			
1,1-Dichloroethene	19.77	µg/L	1.0	98.8	81.4	122			
Trichloroethene (TCE)	15.20	µg/L	1.0	76.0	64.4	118			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26460**	Analysis Date:	12/10/2007 10:11:15 AM	
Benzene	18.85	µg/L	1.0	94.2	72.4	126			
Toluene	19.28	µg/L	1.0	96.4	79.2	115			
Chlorobenzene	19.01	µg/L	1.0	95.0	83.1	111			
1,1-Dichloroethene	19.12	µg/L	1.0	95.6	81.4	122			
Trichloroethene (TCE)	15.38	µg/L	1.0	76.9	64.4	118			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

lall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **GIANTREFIN** Date Received: **11/29/2007**

Work Order Number **0711469** Received by: TLS

Sample ID labels checked by TS
Initials

Checklist completed by: Signature 11/29/07 Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 5057223833
Fax #: 5057220210

Project Name: Evap. Ponds #1 Through #8 - 4Qtr. 2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 4/H 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl2	Preservative HNO3	Preservative	HEAL No. 0711469	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	[redacted] Metals WQCC Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Gen Chem	BOD-COD	E. coli Bacteria	Enumerated	Air Bubbles or Headspace (Y or N)
11-29-07	0830	Water	Pond #1					-1								X			X		X	X	X		
"	0850	"	Pond #2					-2								X			X		X	X	X		
"	0910	"	Pond #3					-3								X			X		X	X	X		
"	0930	"	Pond #4					-4								X			X		X	X	X		
"	0950	"	Pond #5					-5								X			X		X	X	X		
"	1010	"	Pond #6					-6								X			X		X	X	X		
"	1030	"	Pond #7					-7								X			X		X	X	X		
"	1050	"	Pond #8					-8								X			X		X	X	X		

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
11-29-07	1340	Steve Morris	Tonya Shomin 11/29/07 1340
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Gen Chem = Cations, anions, pH, and Conductivity

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, June 19, 2007

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: GWM-1 Annual 2007

Order No.: 0705390

Dear Ed Riege:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 5/25/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0705390	**Collection Date:**	5/24/2007 9:04:00 AM
Project:	GWM-1 Annual 2007	**Date Received:**	5/25/2007
Lab ID:	0705390-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: KS
Fluoride	1.9	0.10		mg/L	1	5/29/2007 5:45:18 PM
Chloride	1800	10		mg/L	100	6/16/2007 11:08:38 AM
Nitrate (As N)+Nitrite (As N)	ND	2.0		mg/L	10	6/13/2007 9:04:06 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	5/29/2007 5:45:18 PM
Sulfate	120	2.5		mg/L	5	5/29/2007 6:02:42 PM
EPA METHOD 7470: MERCURY						Analyst: IC
Mercury	ND	0.00020		mg/L	1	5/30/2007
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	0.081	0.020		mg/L	1	6/1/2007 10:39:23 AM
Barium	0.44	0.020		mg/L	1	6/1/2007 10:39:23 AM
Cadmium	ND	0.0020		mg/L	1	6/1/2007 10:39:23 AM
Calcium	360	100		mg/L	100	6/1/2007 11:45:59 AM
Chromium	ND	0.0060		mg/L	1	6/1/2007 10:39:23 AM
Lead	ND	0.0050		mg/L	1	6/1/2007 10:39:23 AM
Magnesium	87	1.0		mg/L	1	6/1/2007 10:39:23 AM
Potassium	3.7	1.0		mg/L	1	6/1/2007 10:39:23 AM
Selenium	ND	0.050		mg/L	1	6/1/2007 1:54:30 PM
Silver	ND	0.0050		mg/L	1	6/1/2007 10:39:23 AM
Sodium	1300	100		mg/L	100	6/1/2007 11:45:59 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	10		µg/L	1	6/7/2007
Acenaphthylene	ND	10		µg/L	1	6/7/2007
Aniline	ND	20		µg/L	1	6/7/2007
Anthracene	ND	10		µg/L	1	6/7/2007
Azobenzene	ND	10		µg/L	1	6/7/2007
Benz(a)anthracene	ND	15		µg/L	1	6/7/2007
Benzo(a)pyrene	ND	10		µg/L	1	6/7/2007
Benzo(b)fluoranthene	ND	15		µg/L	1	6/7/2007
Benzo(g,h,i)perylene	ND	10		µg/L	1	6/7/2007
Benzo(k)fluoranthene	ND	10		µg/L	1	6/7/2007
Benzoic acid	ND	50		µg/L	1	6/7/2007
Benzyl alcohol	ND	20		µg/L	1	6/7/2007
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	6/7/2007
Bis(2-chloroethyl)ether	ND	15		µg/L	1	6/7/2007
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	6/7/2007
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	6/7/2007
4-Bromophenyl phenyl ether	ND	10		µg/L	1	6/7/2007
Butyl benzyl phthalate	ND	15		µg/L	1	6/7/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0705390	**Collection Date:**	5/24/2007 9:04:00 AM
Project:	GWM-1 Annual 2007	**Date Received:**	5/25/2007
Lab ID:	0705390-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Carbazole	ND	10		µg/L	1	6/7/2007
4-Chloro-3-methylphenol	ND	20		µg/L	1	6/7/2007
4-Chloroaniline	ND	20		µg/L	1	6/7/2007
2-Chloronaphthalene	ND	10		µg/L	1	6/7/2007
2-Chlorophenol	ND	10		µg/L	1	6/7/2007
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	6/7/2007
Chrysene	ND	15		µg/L	1	6/7/2007
Di-n-butyl phthalate	ND	10		µg/L	1	6/7/2007
Di-n-octyl phthalate	ND	15		µg/L	1	6/7/2007
Dibenz(a,h)anthracene	ND	10		µg/L	1	6/7/2007
Dibenzofuran	ND	10		µg/L	1	6/7/2007
1,2-Dichlorobenzene	ND	10		µg/L	1	6/7/2007
1,3-Dichlorobenzene	ND	10		µg/L	1	6/7/2007
1,4-Dichlorobenzene	ND	10		µg/L	1	6/7/2007
3,3'-Dichlorobenzidine	ND	15		µg/L	1	6/7/2007
Diethyl phthalate	ND	10		µg/L	1	6/7/2007
Dimethyl phthalate	ND	10		µg/L	1	6/7/2007
2,4-Dichlorophenol	ND	10		µg/L	1	6/7/2007
2,4-Dimethylphenol	ND	10		µg/L	1	6/7/2007
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	6/7/2007
2,4-Dinitrophenol	ND	50		µg/L	1	6/7/2007
2,4-Dinitrotoluene	ND	10		µg/L	1	6/7/2007
2,6-Dinitrotoluene	ND	10		µg/L	1	6/7/2007
Fluoranthene	ND	10		µg/L	1	6/7/2007
Fluorene	ND	10		µg/L	1	6/7/2007
Hexachlorobenzene	ND	10		µg/L	1	6/7/2007
Hexachlorobutadiene	ND	10		µg/L	1	6/7/2007
Hexachlorocyclopentadiene	ND	50		µg/L	1	6/7/2007
Hexachloroethane	ND	10		µg/L	1	6/7/2007
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	6/7/2007
Isophorone	ND	10		µg/L	1	6/7/2007
2-Methylnaphthalene	ND	10		µg/L	1	6/7/2007
2-Methylphenol	ND	15		µg/L	1	6/7/2007
3+4-Methylphenol	ND	20		µg/L	1	6/7/2007
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	6/7/2007
N-Nitrosodimethylamine	ND	10		µg/L	1	6/7/2007
N-Nitrosodiphenylamine	ND	10		µg/L	1	6/7/2007
Naphthalene	ND	10		µg/L	1	6/7/2007
2-Nitroaniline	ND	50		µg/L	1	6/7/2007
3-Nitroaniline	ND	50		µg/L	1	6/7/2007
4-Nitroaniline	ND	20		µg/L	1	6/7/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0705390	**Collection Date:**	5/24/2007 9:04:00 AM
Project:	GWM-1 Annual 2007	**Date Received:**	5/25/2007
Lab ID:	0705390-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Nitrobenzene	ND	10		µg/L	1	6/7/2007
2-Nitrophenol	ND	15		µg/L	1	6/7/2007
4-Nitrophenol	ND	50		µg/L	1	6/7/2007
Pentachlorophenol	ND	50		µg/L	1	6/7/2007
Phenanthrene	ND	10		µg/L	1	6/7/2007
Phenol	ND	10		µg/L	1	6/7/2007
Pyrene	ND	15		µg/L	1	6/7/2007
Pyridine	ND	30		µg/L	1	6/7/2007
1,2,4-Trichlorobenzene	ND	10		µg/L	1	6/7/2007
2,4,5-Trichlorophenol	ND	10		µg/L	1	6/7/2007
2,4,6-Trichlorophenol	ND	15		µg/L	1	6/7/2007
Surr: 2,4,6-Tribromophenol	78.5	16.6-150		%REC	1	6/7/2007
Surr: 2-Fluorobiphenyl	68.6	19.6-134		%REC	1	6/7/2007
Surr: 2-Fluorophenol	46.9	9.54-113		%REC	1	6/7/2007
Surr: 4-Terphenyl-d14	74.5	22.7-145		%REC	1	6/7/2007
Surr: Nitrobenzene-d5	68.3	14.6-134		%REC	1	6/7/2007
Surr: Phenol-d5	38.0	10.7-80.3		%REC	1	6/7/2007
EPA METHOD 8260B: VOLATILES						Analyst: SMP
Benzene	16	10		µg/L	10	6/6/2007 2:13:58 PM
Toluene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Ethylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Methyl tert-butyl ether (MTBE)	230	10		µg/L	10	6/6/2007 2:13:58 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Naphthalene	ND	20		µg/L	10	6/6/2007 2:13:58 PM
1-Methylnaphthalene	ND	40		µg/L	10	6/6/2007 2:13:58 PM
2-Methylnaphthalene	ND	40		µg/L	10	6/6/2007 2:13:58 PM
Acetone	ND	100		µg/L	10	6/6/2007 2:13:58 PM
Bromobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Bromochloromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Bromodichloromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Bromoform	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Bromomethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
2-Butanone	ND	100		µg/L	10	6/6/2007 2:13:58 PM
Carbon disulfide	ND	100		µg/L	10	6/6/2007 2:13:58 PM
Carbon Tetrachloride	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Chlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Chloroethane	ND	20		µg/L	10	6/6/2007 2:13:58 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

CLIENT:	Giant Refining Co	Client Sample ID:	GWM-1
Lab Order:	0705390	Collection Date:	5/24/2007 9:04:00 AM
Project:	GWM-1 Annual 2007	Date Received:	5/25/2007
Lab ID:	0705390-01	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: SMP
Chloroform	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Chloromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
2-Chlorotoluene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
4-Chlorotoluene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
cis-1,2-DCE	ND	10		µg/L	10	6/6/2007 2:13:58 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	6/6/2007 2:13:58 PM
Dibromochloromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Dibromomethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Dichlorodifluoromethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1-Dichloroethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1-Dichloroethene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2-Dichloropropane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,3-Dichloropropane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
2,2-Dichloropropane	ND	20		µg/L	10	6/6/2007 2:13:58 PM
1,1-Dichloropropene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Hexachlorobutadiene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
2-Hexanone	ND	100		µg/L	10	6/6/2007 2:13:58 PM
Isopropylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
4-Isopropyltoluene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	6/6/2007 2:13:58 PM
Methylene Chloride	ND	10		µg/L	10	6/6/2007 2:13:58 PM
n-Butylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
n-Propylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
sec-Butylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Styrene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
tert-Butylbenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	6/6/2007 2:13:58 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	6/6/2007 2:13:58 PM
trans-1,2-DCE	ND	10		µg/L	10	6/6/2007 2:13:58 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
1,1,2-Trichloroethane	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Trichloroethene (TCE)	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Trichlorofluoromethane	ND	10		µg/L	10	6/6/2007 2:13:58 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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0705390	**Collection Date:**	5/24/2007 9:04:00 AM
Project:	GWM-1 Annual 2007	**Date Received:**	5/25/2007
Lab ID:	0705390-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: SMP
1,2,3-Trichloropropane	ND	20		µg/L	10	6/6/2007 2:13:58 PM
Vinyl chloride	ND	10		µg/L	10	6/6/2007 2:13:58 PM
Xylenes, Total	ND	15		µg/L	10	6/6/2007 2:13:58 PM
Surr: 1,2-Dichloroethane-d4	114	76.6-113	S	%REC	10	6/6/2007 2:13:58 PM
Surr: 4-Bromofluorobenzene	122	77-117	S	%REC	10	6/6/2007 2:13:58 PM
Surr: Dibromofluoromethane	113	72.3-121		%REC	10	6/6/2007 2:13:58 PM
Surr: Toluene-d8	108	73-113		%REC	10	6/6/2007 2:13:58 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: LMM
Specific Conductance	8100	0.010		µmhos/cm	1	6/1/2007
EPA METHOD 150.1: PH						Analyst: LMM
pH	6.80	0.010		pH units	1	5/25/2007

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007
Work Order: 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E300									
Sample ID: MBLK		*MBLK*			Batch ID:	R23842	Analysis Date:	5/29/2007 3:43:27 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	R23935	Analysis Date:	6/9/2007 7:41:09 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	R23969	Analysis Date:	6/12/2007 8:41:53 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
ample ID: MB		*MBLK*			Batch ID:	R24020	Analysis Date:	6/16/2007 7:39:42 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS ST300-07001		*LCS*			Batch ID:	R23842	Analysis Date:	5/29/2007 4:00:51 PM	
Fluoride	0.4741	mg/L	0.10	94.8	90	110			
Chloride	4.787	mg/L	0.10	95.7	90	110			
Nitrate (As N)+Nitrite (As N)	3.388	mg/L	0.20	96.8	90	110			
Phosphorus, Orthophosphate (As P)	4.724	mg/L	0.50	94.5	90	110			
Sulfate	9.745	mg/L	0.50	97.4	90	110			
Sample ID: LCS ST300-07013		*LCS*			Batch ID:	R23935	Analysis Date:	6/9/2007 7:58:33 PM	
Fluoride	0.4548	mg/L	0.10	91.0	90	110			
Chloride	4.853	mg/L	0.10	97.1	90	110			
Nitrate (As N)+Nitrite (As N)	3.472	mg/L	0.20	99.2	90	110			
Phosphorus, Orthophosphate (As P)	4.645	mg/L	0.50	92.9	90	110			
Sulfate	9.827	mg/L	0.50	98.3	90	110			
Sample ID: LCS ST300-07014		*LCS*			Batch ID:	R23969	Analysis Date:	6/12/2007 8:59:17 AM	
Fluoride	0.4766	mg/L	0.10	95.3	90	110			
Chloride	4.786	mg/L	0.10	95.7	90	110			
Nitrate (As N)+Nitrite (As N)	3.446	mg/L	0.20	98.5	90	110			
Phosphorus, Orthophosphate (As P)	4.624	mg/L	0.50	92.5	90	110			
Sulfate	9.518	mg/L	0.50	95.2	90	110			
Sample ID: LCS ST300-07014		*LCS*			Batch ID:	R24020	Analysis Date:	6/16/2007 7:57:07 AM	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	[illegible] recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007 **Work Order:** 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E300									
Sample ID: LCS ST300-07014		*LCS*			Batch ID:	R24020	Analysis Date:		6/16/2007 7:57:07 AM
Fluoride	0.5700	mg/L	0.10	114	90	110			S
Chloride	4.770	mg/L	0.10	95.4	90	110			
Nitrate (As N)+Nitrite (As N)	3.399	mg/L	0.20	97.1	90	110			
Phosphorus, Orthophosphate (As P)	4.741	mg/L	0.50	94.8	90	110			
Sulfate	9.834	mg/L	0.50	98.3	90	110			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007 **Work Order:** 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-13084		*MBLK*			Batch ID:	13084	Analysis Date:		6/7/2007
Acenaphthene	ND	µg/L	10						
Acenaphthylene	ND	µg/L	10						
Aniline	ND	µg/L	20						
Anthracene	ND	µg/L	10						
Azobenzene	ND	µg/L	10						
Benz(a)anthracene	ND	µg/L	15						
Benzo(a)pyrene	ND	µg/L	10						
Benzo(b)fluoranthene	ND	µg/L	15						
Benzo(g,h,i)perylene	ND	µg/L	10						
Benzo(k)fluoranthene	ND	µg/L	10						
Benzoic acid	ND	µg/L	50						
Benzyl alcohol	ND	µg/L	20						
Bis(2-chloroethoxy)methane	ND	µg/L	10						
Bis(2-chloroethyl)ether	ND	µg/L	15						
Bis(2-chloroisopropyl)ether	ND	µg/L	15						
Bis(2-ethylhexyl)phthalate	ND	µg/L	15						
4-Bromophenyl phenyl ether	ND	µg/L	10						
ıtyl benzyl phthalate	ND	µg/L	15						
ɔarbazole	ND	µg/L	10						
4-Chloro-3-methylphenol	ND	µg/L	20						
4-Chloroaniline	ND	µg/L	20						
2-Chloronaphthalene	ND	µg/L	10						
2-Chlorophenol	ND	µg/L	10						
4-Chlorophenyl phenyl ether	ND	µg/L	15						
Chrysene	ND	µg/L	15						
Di-n-butyl phthalate	ND	µg/L	10						
Di-n-octyl phthalate	ND	µg/L	15						
Dibenz(a,h)anthracene	ND	µg/L	10						
Dibenzofuran	ND	µg/L	10						
1,2-Dichlorobenzene	ND	µg/L	10						
1,3-Dichlorobenzene	ND	µg/L	10						
1,4-Dichlorobenzene	ND	µg/L	10						
3,3'-Dichlorobenzidine	ND	µg/L	15						
Diethyl phthalate	ND	µg/L	10						
Dimethyl phthalate	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	50						
2,4-Dinitrophenol	ND	µg/L	50						
2,4-Dinitrotoluene	ND	µg/L	10						
2,6-Dinitrotoluene	ND	µg/L	10						
Fluoranthene	ND	µg/L	10						
Fluorene	ND	µg/L	10						
Hexachlorobenzene	ND	µg/L	10						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	[illegible] recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007 **Work Order:** 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-13084		*MBLK*			Batch ID:	13084	Analysis Date:		6/7/2007
Hexachlorobutadiene	ND	µg/L	10						
Hexachlorocyclopentadiene	ND	µg/L	50						
Hexachloroethane	ND	µg/L	10						
Indeno(1,2,3-cd)pyrene	ND	µg/L	10						
Isophorone	ND	µg/L	10						
2-Methylnaphthalene	ND	µg/L	10						
2-Methylphenol	ND	µg/L	15						
3+4-Methylphenol	ND	µg/L	20						
N-Nitrosodi-n-propylamine	ND	µg/L	10						
N-Nitrosodimethylamine	ND	µg/L	10						
N-Nitrosodiphenylamine	ND	µg/L	10						
Naphthalene	ND	µg/L	10						
2-Nitroaniline	ND	µg/L	50						
3-Nitroaniline	ND	µg/L	50						
4-Nitroaniline	ND	µg/L	20						
Nitrobenzene	ND	µg/L	10						
2-Nitrophenol	ND	µg/L	15						
-Nitrophenol	ND	µg/L	50						
-entachlorophenol	ND	µg/L	50						
Phenanthrene	ND	µg/L	10						
Phenol	ND	µg/L	10						
Pyrene	ND	µg/L	15						
Pyridine	ND	µg/L	30						
1,2,4-Trichlorobenzene	ND	µg/L	10						
2,4,5-Trichlorophenol	ND	µg/L	10						
2,4,6-Trichlorophenol	ND	µg/L	15						
Sample ID: LCS-13084		*LCS*			Batch ID:	13084	Analysis Date:		6/7/2007
Acenaphthene	78.52	µg/L	10	78.5	11	123			
4-Chloro-3-methylphenol	150.4	µg/L	20	75.2	15.4	119			
2-Chlorophenol	140.8	µg/L	10	70.4	12.2	122			
1,4-Dichlorobenzene	58.80	µg/L	10	58.8	16.9	100			
2,4-Dinitrotoluene	61.22	µg/L	10	61.2	13	138			
N-Nitrosodi-n-propylamine	68.12	µg/L	10	68.1	9.93	122			
4-Nitrophenol	65.32	µg/L	50	32.7	12.5	87.4			
Pentachlorophenol	151.8	µg/L	50	75.9	3.55	114			
Phenol	86.48	µg/L	10	43.2	7.53	73.1			
Pyrene	82.68	µg/L	15	82.7	12.6	140			
1,2,4-Trichlorobenzene	57.80	µg/L	10	57.8	17.4	98.7			
Sample ID: LCSD-13084		*LCSD*			Batch ID:	13084	Analysis Date:		6/7/2007
Acenaphthene	75.96	µg/L	10	76.0	11	123	3.31	30.5	
4-Chloro-3-methylphenol	152.4	µg/L	20	76.2	15.4	119	1.28	28.6	
2-Chlorophenol	135.3	µg/L	10	67.6	12.2	122	4.03	107	
1,4-Dichlorobenzene	55.14	µg/L	10	55.1	16.9	100	6.42	62.1	
2,4-Dinitrotoluene	63.18	µg/L	10	63.2	13	138	3.15	14.7	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007
Work Order: 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: LCSD-13084		*LCSD*			Batch ID:	13084	Analysis Date:		6/7/2007
N-Nitrosodi-n-propylamine	63.86	µg/L	10	63.9	9.93	122	6.46	30.3	
4-Nitrophenol	70.54	µg/L	50	35.3	12.5	87.4	7.68	36.3	
Pentachlorophenol	153.5	µg/L	50	76.7	3.55	114	1.10	49	
Phenol	82.98	µg/L	10	41.5	7.53	73.1	4.13	52.4	
Pyrene	80.56	µg/L	15	80.6	12.6	140	2.60	16.3	
1,2,4-Trichlorobenzene	58.54	µg/L	10	58.5	17.4	98.7	1.27	36.4	
Method: SW7470									
Sample ID: MB-13077		*MBLK*			Batch ID:	13077	Analysis Date:		5/30/2007
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-13077		*LCS*			Batch ID:	13077	Analysis Date:		5/30/2007
Mercury	0.005044	mg/L	0.00020	101	80	120			
Method: SW6010A									
Sample ID: MB-13076		*MBLK*			Batch ID:	13076	Analysis Date:		6/1/2007 9:04:59 AM
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Cadmium	ND	mg/L	0.0020						
Calcium	ND	mg/L	1.0						
Chromium	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Silver	ND	mg/L	0.0050						
Sodium	ND	mg/L	1.0						
Sample ID: LCS-13076		*LCS*			Batch ID:	13076	Analysis Date:		6/1/2007 9:08:02 AM
Arsenic	0.4875	mg/L	0.020	97.5	80	120			
Barium	0.4854	mg/L	0.020	97.1	80	120			
Cadmium	0.4855	mg/L	0.0020	97.1	80	120			
Calcium	50.75	mg/L	1.0	101	80	120			
Chromium	0.4941	mg/L	0.0060	98.8	80	120			
Lead	0.4788	mg/L	0.0050	95.8	80	120			
Magnesium	51.02	mg/L	1.0	102	80	120			
Potassium	53.56	mg/L	1.0	107	80	120			
Silver	0.5020	mg/L	0.0050	100	80	120			
Sodium	54.78	mg/L	1.0	110	80	120			

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Jun-07*

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007

Work Order: 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R23881	Analysis Date:	6/6/2007 7:01:43 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2007
Work Order: 0705390

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R23881	Analysis Date:	6/6/2007 7:01:43 AM	
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	1.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	R23881	Analysis Date:	6/6/2007 8:59:30 AM	
Benzene	20.46	µg/L	1.0	102	82.4	128			
Toluene	21.09	µg/L	1.0	105	77.2	115			
Chlorobenzene	20.48	µg/L	1.0	102	78.3	117			
1,1-Dichloroethene	23.61	µg/L	1.0	118	90.7	132			
Trichloroethene (TCE)	19.79	µg/L	1.0	98.9	71.8	113			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	[illegible]covery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 5/25/2007

Work Order Number 0705390

Received by TLS

Checklist completed by _____ Signature _____ Date 5/25/07

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	5°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: added 1ml HNO3 for acceptable pH / AT 5/25/07

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Co. Ciniza Refinery
Address: Rt 3 Box 7 Gallup, NM 87301
email: cjohnson@giant.com
Phone #: 505-722-0231
Fax #: 505-722-0210

Project Name: GWM-1 Annual 2007
Project #:
Project Manager: Ed Riege
Sampler: Cheryl Johnson
Sample Temperature: 5°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl2	Preservative HNO3	Preservative H2SO4	HEAL No. 0705390	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	GEN CHEM Anions Cations pH, ec				Air Bubbles or Headspace (Y or N)
5/24/07	0904	H_2O	GWM-1	1L	unpreserved			-1													X				
	~~0911~~			1L Glass Amber	unpreserved			-1												X					
	~~0913~~			1/500ml		X										X									
	~~0914~~			1/500ml		X															X				
	~~0918~~			1/500ml			X														X				
	~~0920~~			3/VOA			HCl	-1											X						
	~~0922~~																								

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
5/24/07	0945		
5/24/07	15:30		5/24/07 1530

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, January 21, 2008

Jim Lieb
Western Refining Southwest, Gallup
Rt. 3 Box 7
Gallup, NM 87301

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

RE: 2007 Annual GW Samples

Order No.: 0801006

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 20 sample(s) on 1/2/2008 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc. **Date:** *21-Jan-08*

CLIENT: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples
Lab Order: 0801006

CASE NARRATIVE

Analytical Comments for METHOD 8015GRO_W, SAMPLE 0801006-10A: Elevated surrogate due to matrix interference. Analytical Comments for METHOD 8260_W, SAMPLE 0801006-18a: Sample had sheen. Analytical Comments for METHOD 8260_W, SAMPLE 0801006-19a: Sample had sheen.

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-11
Lab Order:	0801006	**Collection Date:**	12/27/2007 9:15:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:08:19 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	1/15/2008 4:43:21 PM
Barium	ND	0.010		mg/L	1	1/15/2008 4:43:21 PM
Cadmium	ND	0.0020		mg/L	1	1/15/2008 4:43:21 PM
Calcium	11	0.50		mg/L	1	1/15/2008 4:43:21 PM
Chromium	ND	0.0060		mg/L	1	1/15/2008 4:43:21 PM
Copper	ND	0.0060		mg/L	1	1/15/2008 4:43:21 PM
Iron	ND	0.050		mg/L	1	1/15/2008 4:43:21 PM
Lead	ND	0.0050		mg/L	1	1/15/2008 4:43:21 PM
Magnesium	1.3	0.50		mg/L	1	1/15/2008 4:43:21 PM
Manganese	0.016	0.0020		mg/L	1	1/15/2008 4:43:21 PM
Potassium	1.6	1.0		mg/L	1	1/15/2008 4:43:21 PM
Selenium	ND	0.050		mg/L	1	1/15/2008 4:43:21 PM
Silver	ND	0.0050		mg/L	1	1/15/2008 4:43:21 PM
Sodium	690	5.0		mg/L	10	1/18/2008 6:21:32 PM
Uranium	0.22	0.10		mg/L	1	1/15/2008 4:43:21 PM
Zinc	ND	0.020		mg/L	1	1/15/2008 4:43:21 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 3:57:39 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 3:57:39 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 3:57:39 PM
Acetone	ND	10		µg/L	1	1/7/2008 3:57:39 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 3:57:39 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 3:57:39 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-11
Lab Order:	0801006	**Collection Date:**	12/27/2007 9:15:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Chloroethane	ND	2.0		µg/L	1	1/7/2008 3:57:39 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 3:57:39 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 3:57:39 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
2-Hexanone	ND	10		µg/L	1	1/7/2008 3:57:39 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 3:57:39 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 3:57:39 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 3:57:39 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-11
Lab Order:	0801006	**Collection Date:**	12/27/2007 9:15:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 3:57:39 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 3:57:39 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 3:57:39 PM
Surr: 1,2-Dichloroethane-d4	113	68.1-123		%REC	1	1/7/2008 3:57:39 PM
Surr: 4-Bromofluorobenzene	118	53.2-145		%REC	1	1/7/2008 3:57:39 PM
Surr: Dibromofluoromethane	110	68.5-119		%REC	1	1/7/2008 3:57:39 PM
Surr: Toluene-d8	114	64-131		%REC	1	1/7/2008 3:57:39 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-12
Lab Order:	0801006	**Collection Date:**	12/27/2007 11:45:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 4:25:51 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 4:25:51 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 4:25:51 PM
Acetone	ND	10		µg/L	1	1/7/2008 4:25:51 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 4:25:51 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 4:25:51 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 4:25:51 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 4:25:51 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 4:25:51 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-12
Lab Order:	0801006	**Collection Date:**	12/27/2007 11:45:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
2-Hexanone	ND	10		µg/L	1	1/7/2008 4:25:51 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 4:25:51 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 4:25:51 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 4:25:51 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 4:25:51 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 4:25:51 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 4:25:51 PM
Surr: 1,2-Dichloroethane-d4	119	68.1-123		%REC	1	1/7/2008 4:25:51 PM
Surr: 4-Bromofluorobenzene	114	53.2-145		%REC	1	1/7/2008 4:25:51 PM
Surr: Dibromofluoromethane	112	68.5-119		%REC	1	1/7/2008 4:25:51 PM
Surr: Toluene-d8	115	64-131		%REC	1	1/7/2008 4:25:51 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-13
Lab Order:	0801006	**Collection Date:**	12/27/2007 2:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Methyl tert-butyl ether (MTBE)	1.3	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 4:53:54 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 4:53:54 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 4:53:54 PM
Acetone	ND	10		µg/L	1	1/7/2008 4:53:54 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 4:53:54 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 4:53:54 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 4:53:54 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 4:53:54 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 4:53:54 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-13
Lab Order:	0801006	**Collection Date:**	12/27/2007 2:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
2-Hexanone	ND	10		µg/L	1	1/7/2008 4:53:54 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 4:53:54 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 4:53:54 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 4:53:54 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 4:53:54 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 4:53:54 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 4:53:54 PM
Surr: 1,2-Dichloroethane-d4	118	68.1-123		%REC	1	1/7/2008 4:53:54 PM
Surr: 4-Bromofluorobenzene	112	53.2-145		%REC	1	1/7/2008 4:53:54 PM
Surr: Dibromofluoromethane	113	68.5-119		%REC	1	1/7/2008 4:53:54 PM
Surr: Toluene-d8	113	64-131		%REC	1	1/7/2008 4:53:54 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-14
Lab Order:	0801006	**Collection Date:**	1/1/2008 2:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	14	5.0		µg/L	5	1/10/2008 1:56:18 PM
Toluene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Ethylbenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Methyl tert-butyl ether (MTBE)	920	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Naphthalene	ND	10		µg/L	5	1/10/2008 1:56:18 PM
1-Methylnaphthalene	27	20		µg/L	5	1/10/2008 1:56:18 PM
2-Methylnaphthalene	ND	20		µg/L	5	1/10/2008 1:56:18 PM
Acetone	ND	50		µg/L	5	1/10/2008 1:56:18 PM
Bromobenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Bromochloromethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Bromodichloromethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Bromoform	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Bromomethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
2-Butanone	ND	50		µg/L	5	1/10/2008 1:56:18 PM
Carbon disulfide	ND	50		µg/L	5	1/10/2008 1:56:18 PM
Carbon Tetrachloride	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Chlorobenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Chloroethane	ND	10		µg/L	5	1/10/2008 1:56:18 PM
Chloroform	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Chloromethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
2-Chlorotoluene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
4-Chlorotoluene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
cis-1,2-DCE	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	1/10/2008 1:56:18 PM
Dibromochloromethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Dibromomethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Dichlorodifluoromethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,1-Dichloroethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,1-Dichloroethene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,2-Dichloropropane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,3-Dichloropropane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
2,2-Dichloropropane	ND	10		µg/L	5	1/10/2008 1:56:18 PM
1,1-Dichloropropene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Hexachlorobutadiene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-14
Lab Order:	0801006	**Collection Date:**	1/1/2008 2:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
2-Hexanone	ND	50		µg/L	5	1/10/2008 1:56:18 PM
Isopropylbenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
4-Isopropyltoluene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
4-Methyl-2-pentanone	ND	50		µg/L	5	1/10/2008 1:56:18 PM
Methylene Chloride	ND	15		µg/L	5	1/10/2008 1:56:18 PM
n-Butylbenzene	52	5.0		µg/L	5	1/10/2008 1:56:18 PM
n-Propylbenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
sec-Butylbenzene	5.7	5.0		µg/L	5	1/10/2008 1:56:18 PM
Styrene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
tert-Butylbenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	1/10/2008 1:56:18 PM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
trans-1,2-DCE	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Trichloroethene (TCE)	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Trichlorofluoromethane	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
1,2,3-Trichloropropane	ND	10		µg/L	5	1/10/2008 1:56:18 PM
Vinyl chloride	ND	5.0		µg/L	5	1/10/2008 1:56:18 PM
Xylenes, Total	ND	7.5		µg/L	5	1/10/2008 1:56:18 PM
Surr: 1,2-Dichloroethane-d4	99.1	68.1-123		%REC	5	1/10/2008 1:56:18 PM
Surr: 4-Bromofluorobenzene	103	53.2-145		%REC	5	1/10/2008 1:56:18 PM
Surr: Dibromofluoromethane	102	68.5-119		%REC	5	1/10/2008 1:56:18 PM
Surr: Toluene-d8	100	64-131		%REC	5	1/10/2008 1:56:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-29
Lab Order:	0801006	**Collection Date:**	12/28/2007 12:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Methyl tert-butyl ether (MTBE)	4.3	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 5:52:22 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 5:52:22 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 5:52:22 PM
Acetone	ND	10		µg/L	1	1/7/2008 5:52:22 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 5:52:22 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 5:52:22 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 5:52:22 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 5:52:22 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 5:52:22 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-29
Lab Order:	0801006	**Collection Date:**	12/28/2007 12:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
2-Hexanone	ND	10		µg/L	1	1/7/2008 5:52:22 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 5:52:22 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 5:52:22 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 5:52:22 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 5:52:22 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 5:52:22 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 5:52:22 PM
Surr: 1,2-Dichloroethane-d4	120	68.1-123		%REC	1	1/7/2008 5:52:22 PM
Surr: 4-Bromofluorobenzene	102	53.2-145		%REC	1	1/7/2008 5:52:22 PM
Surr: Dibromofluoromethane	113	68.5-119		%REC	1	1/7/2008 5:52:22 PM
Surr: Toluene-d8	108	64-131		%REC	1	1/7/2008 5:52:22 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-30
Lab Order:	0801006	**Collection Date:**	12/28/2007 2:25:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Methyl tert-butyl ether (MTBE)	290	5.0		µg/L	5	1/10/2008 1:25:46 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,2-Dichloroethane (EDC)	1.2	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 6:20:27 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 6:20:27 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 6:20:27 PM
Acetone	ND	10		µg/L	1	1/7/2008 6:20:27 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 6:20:27 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 6:20:27 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 6:20:27 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 6:20:27 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 6:20:27 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	OW-30
Lab Order:	0801006	**Collection Date:**	12/28/2007 2:25:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
2-Hexanone	ND	10		µg/L	1	1/7/2008 6:20:27 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 6:20:27 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 6:20:27 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 6:20:27 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 6:20:27 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 6:20:27 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 6:20:27 PM
Surr: 1,2-Dichloroethane-d4	119	68.1-123		%REC	1	1/7/2008 6:20:27 PM
Surr: 4-Bromofluorobenzene	105	53.2-145		%REC	1	1/7/2008 6:20:27 PM
Surr: Dibromofluoromethane	112	68.5-119		%REC	1	1/7/2008 6:20:27 PM
Surr: Toluene-d8	113	64-131		%REC	1	1/7/2008 6:20:27 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-1
Lab Order:	0801006	**Collection Date:**	12/29/2007 9:10:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2008 11:41:00 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	1/3/2008 11:41:00 AM
Surr: DNOP	114	58-140		%REC	1	1/3/2008 11:41:00 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/4/2008 7:35:37 PM
Surr: BFB	102	79.2-121		%REC	1	1/4/2008 7:35:37 PM
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	0.89	0.10		mg/L	1	1/3/2008 3:14:37 PM
Chloride	53	1.0		mg/L	10	1/3/2008 3:32:02 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/3/2008 10:01:17 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/3/2008 3:14:37 PM
Sulfate	170	5.0		mg/L	10	1/3/2008 3:32:02 PM
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:10:05 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/14/2008 8:41:01 AM
Barium	ND	0.020		mg/L	1	1/14/2008 8:41:01 AM
Cadmium	ND	0.0020		mg/L	1	1/14/2008 8:41:01 AM
Calcium	1.9	1.0		mg/L	1	1/14/2008 8:41:01 AM
Chromium	ND	0.0060		mg/L	1	1/14/2008 8:41:01 AM
Lead	ND	0.0050		mg/L	1	1/14/2008 8:41:01 AM
Magnesium	ND	1.0		mg/L	1	1/14/2008 8:41:01 AM
Potassium	ND	1.0		mg/L	1	1/14/2008 8:41:01 AM
Selenium	ND	0.050		mg/L	1	1/14/2008 8:41:01 AM
Silver	ND	0.0050		mg/L	1	1/14/2008 8:41:01 AM
Sodium	230	10		mg/L	10	1/14/2008 12:17:02 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	0.020	0.020		mg/L	1	1/12/2008 3:23:29 PM
Barium	ND	0.020		mg/L	1	1/12/2008 3:23:29 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 3:23:29 PM
Calcium	3.2	1.0		mg/L	1	1/12/2008 3:23:29 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 3:23:29 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 3:23:29 PM
Iron	0.092	0.050		mg/L	1	1/12/2008 3:23:29 PM
Lead	ND	0.0050		mg/L	1	1/12/2008 3:23:29 PM
Magnesium	ND	1.0		mg/L	1	1/12/2008 3:23:29 PM
Manganese	0.018	0.0020		mg/L	1	1/12/2008 3:23:29 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-1
Lab Order:	0801006	**Collection Date:**	12/29/2007 9:10:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Potassium	ND	1.0		mg/L	1	1/12/2008 3:23:29 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 3:23:29 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 3:23:29 PM
Sodium	280	5.0		mg/L	5	1/15/2008 11:25:26 AM
Uranium	ND	0.10		mg/L	1	1/12/2008 3:23:29 PM
Zinc	ND	0.050		mg/L	1	1/12/2008 3:23:29 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	1/9/2008
Acenaphthylene	ND	10		µg/L	1	1/9/2008
Aniline	ND	10		µg/L	1	1/9/2008
Anthracene	ND	10		µg/L	1	1/9/2008
Azobenzene	ND	10		µg/L	1	1/9/2008
Benz(a)anthracene	ND	10		µg/L	1	1/9/2008
Benzo(a)pyrene	ND	10		µg/L	1	1/9/2008
Benzo(b)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzo(g,h,i)perylene	ND	10		µg/L	1	1/9/2008
Benzo(k)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzoic acid	ND	20		µg/L	1	1/9/2008
Benzyl alcohol	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	1/9/2008
4-Bromophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Butyl benzyl phthalate	ND	10		µg/L	1	1/9/2008
Carbazole	ND	10		µg/L	1	1/9/2008
4-Chloro-3-methylphenol	ND	10		µg/L	1	1/9/2008
4-Chloroaniline	ND	10		µg/L	1	1/9/2008
2-Chloronaphthalene	ND	10		µg/L	1	1/9/2008
2-Chlorophenol	ND	10		µg/L	1	1/9/2008
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Chrysene	ND	10		µg/L	1	1/9/2008
Di-n-butyl phthalate	ND	10		µg/L	1	1/9/2008
Di-n-octyl phthalate	ND	10		µg/L	1	1/9/2008
Dibenz(a,h)anthracene	ND	10		µg/L	1	1/9/2008
Dibenzofuran	ND	10		µg/L	1	1/9/2008
1,2-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,3-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,4-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
3,3'-Dichlorobenzidine	ND	10		µg/L	1	1/9/2008
Diethyl phthalate	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-1
Lab Order:	0801006	**Collection Date:**	12/29/2007 9:10:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Dimethyl phthalate	ND	10		µg/L	1	1/9/2008
2,4-Dichlorophenol	ND	10		µg/L	1	1/9/2008
2,4-Dimethylphenol	ND	10		µg/L	1	1/9/2008
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	1/9/2008
2,4-Dinitrophenol	ND	20		µg/L	1	1/9/2008
2,4-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
2,6-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
Fluoranthene	ND	10		µg/L	1	1/9/2008
Fluorene	ND	10		µg/L	1	1/9/2008
Hexachlorobenzene	ND	10		µg/L	1	1/9/2008
Hexachlorobutadiene	ND	10		µg/L	1	1/9/2008
Hexachlorocyclopentadiene	ND	10		µg/L	1	1/9/2008
Hexachloroethane	ND	10		µg/L	1	1/9/2008
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	1/9/2008
Isophorone	ND	10		µg/L	1	1/9/2008
2-Methylnaphthalene	ND	10		µg/L	1	1/9/2008
2-Methylphenol	ND	10		µg/L	1	1/9/2008
3+4-Methylphenol	ND	10		µg/L	1	1/9/2008
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodimethylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodiphenylamine	ND	10		µg/L	1	1/9/2008
Naphthalene	ND	10		µg/L	1	1/9/2008
2-Nitroaniline	ND	10		µg/L	1	1/9/2008
3-Nitroaniline	ND	10		µg/L	1	1/9/2008
4-Nitroaniline	ND	10		µg/L	1	1/9/2008
Nitrobenzene	ND	10		µg/L	1	1/9/2008
2-Nitrophenol	ND	10		µg/L	1	1/9/2008
4-Nitrophenol	ND	10		µg/L	1	1/9/2008
Pentachlorophenol	ND	10		µg/L	1	1/9/2008
Phenanthrene	ND	10		µg/L	1	1/9/2008
Phenol	ND	10		µg/L	1	1/9/2008
Pyrene	ND	10		µg/L	1	1/9/2008
Pyridine	ND	10		µg/L	1	1/9/2008
1,2,4-Trichlorobenzene	ND	10		µg/L	1	1/9/2008
2,4,5-Trichlorophenol	ND	10		µg/L	1	1/9/2008
2,4,6-Trichlorophenol	ND	10		µg/L	1	1/9/2008
Surr: 2,4,6-Tribromophenol	51.7	16.6-150		%REC	1	1/9/2008
Surr: 2-Fluorobiphenyl	62.6	19.6-134		%REC	1	1/9/2008
Surr: 2-Fluorophenol	40.0	9.54-113		%REC	1	1/9/2008
Surr: 4-Terphenyl-d14	89.6	22.7-145		%REC	1	1/9/2008
Surr: Nitrobenzene-d5	57.8	14.6-134		%REC	1	1/9/2008
Surr: Phenol-d5	28.6	10.7-80.3		%REC	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-1
Lab Order:	0801006	**Collection Date:**	12/29/2007 9:10:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 6:48:28 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 6:48:28 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 6:48:28 PM
Acetone	ND	10		µg/L	1	1/7/2008 6:48:28 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 6:48:28 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 6:48:28 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 6:48:28 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 6:48:28 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 6:48:28 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-1
Lab Order:	0801006	**Collection Date:**	12/29/2007 9:10:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
2-Hexanone	ND	10		µg/L	1	1/7/2008 6:48:28 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 6:48:28 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 6:48:28 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 6:48:28 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 6:48:28 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 6:48:28 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 6:48:28 PM
Surr: 1,2-Dichloroethane-d4	120	68.1-123		%REC	1	1/7/2008 6:48:28 PM
Surr: 4-Bromofluorobenzene	110	53.2-145		%REC	1	1/7/2008 6:48:28 PM
Surr: Dibromofluoromethane	110	68.5-119		%REC	1	1/7/2008 6:48:28 PM
Surr: Toluene-d8	117	64-131		%REC	1	1/7/2008 6:48:28 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	1100	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	8.89	0.1		pH units	1	1/2/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-4
Lab Order:	0801006	**Collection Date:**	12/29/2007 4:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2008 12:11:58 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	1/3/2008 12:11:58 PM
Surr: DNOP	111	58-140		%REC	1	1/3/2008 12:11:58 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/4/2008 8:35:45 PM
Surr: BFB	104	79.2-121		%REC	1	1/4/2008 8:35:45 PM
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	0.42	0.10		mg/L	1	1/3/2008 3:49:27 PM
Chloride	17	0.10		mg/L	1	1/3/2008 3:49:27 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/3/2008 12:03:07 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/3/2008 3:49:27 PM
Sulfate	160	5.0		mg/L	10	1/3/2008 4:06:52 PM
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:11:50 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/14/2008 8:45:11 AM
Barium	ND	0.020		mg/L	1	1/14/2008 8:45:11 AM
Cadmium	ND	0.0020		mg/L	1	1/14/2008 8:45:11 AM
Calcium	1.9	1.0		mg/L	1	1/14/2008 8:45:11 AM
Chromium	ND	0.0060		mg/L	1	1/14/2008 8:45:11 AM
Lead	ND	0.0050		mg/L	1	1/14/2008 8:45:11 AM
Magnesium	ND	1.0		mg/L	1	1/14/2008 8:45:11 AM
Potassium	ND	1.0		mg/L	1	1/14/2008 8:45:11 AM
Selenium	ND	0.050		mg/L	1	1/14/2008 8:45:11 AM
Silver	ND	0.0050		mg/L	1	1/14/2008 8:45:11 AM
Sodium	250	10		mg/L	10	1/14/2008 12:20:05 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	1/12/2008 3:27:36 PM
Barium	0.021	0.020		mg/L	1	1/12/2008 3:27:36 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 3:27:36 PM
Calcium	1.9	1.0		mg/L	1	1/12/2008 3:27:36 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 3:27:36 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 3:27:36 PM
Iron	ND	0.050		mg/L	1	1/12/2008 3:27:36 PM
Lead	ND	0.0050		mg/L	1	1/12/2008 3:27:36 PM
Magnesium	ND	1.0		mg/L	1	1/12/2008 3:27:36 PM
Manganese	0.0052	0.0020		mg/L	1	1/12/2008 3:27:36 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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-4
Lab Order:	0801006	**Collection Date:**	12/29/2007 4:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Potassium	ND	1.0		mg/L	1	1/12/2008 3:27:36 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 3:27:36 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 3:27:36 PM
Sodium	320	5.0		mg/L	5	1/15/2008 11:28:22 AM
Uranium	ND	0.10		mg/L	1	1/12/2008 3:27:36 PM
Zinc	ND	0.050		mg/L	1	1/12/2008 3:27:36 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	1/9/2008
Acenaphthylene	ND	10		µg/L	1	1/9/2008
Aniline	ND	10		µg/L	1	1/9/2008
Anthracene	ND	10		µg/L	1	1/9/2008
Azobenzene	ND	10		µg/L	1	1/9/2008
Benz(a)anthracene	ND	10		µg/L	1	1/9/2008
Benzo(a)pyrene	ND	10		µg/L	1	1/9/2008
Benzo(b)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzo(g,h,i)perylene	ND	10		µg/L	1	1/9/2008
Benzo(k)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzoic acid	ND	20		µg/L	1	1/9/2008
Benzyl alcohol	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	1/9/2008
4-Bromophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Butyl benzyl phthalate	ND	10		µg/L	1	1/9/2008
Carbazole	ND	10		µg/L	1	1/9/2008
4-Chloro-3-methylphenol	ND	10		µg/L	1	1/9/2008
4-Chloroaniline	ND	10		µg/L	1	1/9/2008
2-Chloronaphthalene	ND	10		µg/L	1	1/9/2008
2-Chlorophenol	ND	10		µg/L	1	1/9/2008
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Chrysene	ND	10		µg/L	1	1/9/2008
Di-n-butyl phthalate	ND	10		µg/L	1	1/9/2008
Di-n-octyl phthalate	ND	10		µg/L	1	1/9/2008
Dibenz(a,h)anthracene	ND	10		µg/L	1	1/9/2008
Dibenzofuran	ND	10		µg/L	1	1/9/2008
1,2-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,3-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,4-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
3,3'-Dichlorobenzidine	ND	10		µg/L	1	1/9/2008
Diethyl phthalate	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-4
Lab Order:	0801006	**Collection Date:**	12/29/2007 4:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Dimethyl phthalate	ND	10		µg/L	1	1/9/2008
2,4-Dichlorophenol	ND	10		µg/L	1	1/9/2008
2,4-Dimethylphenol	ND	10		µg/L	1	1/9/2008
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	1/9/2008
2,4-Dinitrophenol	ND	20		µg/L	1	1/9/2008
2,4-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
2,6-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
Fluoranthene	ND	10		µg/L	1	1/9/2008
Fluorene	ND	10		µg/L	1	1/9/2008
Hexachlorobenzene	ND	10		µg/L	1	1/9/2008
Hexachlorobutadiene	ND	10		µg/L	1	1/9/2008
Hexachlorocyclopentadiene	ND	10		µg/L	1	1/9/2008
Hexachloroethane	ND	10		µg/L	1	1/9/2008
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	1/9/2008
Isophorone	ND	10		µg/L	1	1/9/2008
2-Methylnaphthalene	ND	10		µg/L	1	1/9/2008
2-Methylphenol	ND	10		µg/L	1	1/9/2008
3+4-Methylphenol	ND	10		µg/L	1	1/9/2008
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodimethylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodiphenylamine	ND	10		µg/L	1	1/9/2008
Naphthalene	ND	10		µg/L	1	1/9/2008
2-Nitroaniline	ND	10		µg/L	1	1/9/2008
3-Nitroaniline	ND	10		µg/L	1	1/9/2008
4-Nitroaniline	ND	10		µg/L	1	1/9/2008
Nitrobenzene	ND	10		µg/L	1	1/9/2008
2-Nitrophenol	ND	10		µg/L	1	1/9/2008
4-Nitrophenol	ND	10		µg/L	1	1/9/2008
Pentachlorophenol	ND	10		µg/L	1	1/9/2008
Phenanthrene	ND	10		µg/L	1	1/9/2008
Phenol	ND	10		µg/L	1	1/9/2008
Pyrene	ND	10		µg/L	1	1/9/2008
Pyridine	ND	10		µg/L	1	1/9/2008
1,2,4-Trichlorobenzene	ND	10		µg/L	1	1/9/2008
2,4,5-Trichlorophenol	ND	10		µg/L	1	1/9/2008
2,4,6-Trichlorophenol	ND	10		µg/L	1	1/9/2008
Surr: 2,4,6-Tribromophenol	14.8	16.6-150	S	%REC	1	1/9/2008
Surr: 2-Fluorobiphenyl	72.6	19.6-134		%REC	1	1/9/2008
Surr: 2-Fluorophenol	48.5	9.54-113		%REC	1	1/9/2008
Surr: 4-Terphenyl-d14	88.7	22.7-145		%REC	1	1/9/2008
Surr: Nitrobenzene-d5	69.5	14.6-134		%REC	1	1/9/2008
Surr: Phenol-d5	35.8	10.7-80.3		%REC	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-4
Lab Order:	0801006	**Collection Date:**	12/29/2007 4:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 7:16:29 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 7:16:29 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 7:16:29 PM
Acetone	ND	10		µg/L	1	1/7/2008 7:16:29 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 7:16:29 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 7:16:29 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 7:16:29 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 7:16:29 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 7:16:29 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-4
Lab Order:	0801006	**Collection Date:**	12/29/2007 4:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
2-Hexanone	ND	10		µg/L	1	1/7/2008 7:16:29 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 7:16:29 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 7:16:29 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 7:16:29 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 7:16:29 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 7:16:29 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 7:16:29 PM
Surr: 1,2-Dichloroethane-d4	118	68.1-123		%REC	1	1/7/2008 7:16:29 PM
Surr: 4-Bromofluorobenzene	97.4	53.2-145		%REC	1	1/7/2008 7:16:29 PM
Surr: Dibromofluoromethane	118	68.5-119		%REC	1	1/7/2008 7:16:29 PM
Surr: Toluene-d8	113	64-131		%REC	1	1/7/2008 7:16:29 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	1200	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	8.63	0.1		pH units	1	1/2/2008

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-5
Lab Order:	0801006	**Collection Date:**	12/29/2007 12:45:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2008 12:42:51 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	1/3/2008 12:42:51 PM
Surr: DNOP	119	58-140		%REC	1	1/3/2008 12:42:51 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/4/2008 9:05:54 PM
Surr: BFB	101	79.2-121		%REC	1	1/4/2008 9:05:54 PM
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	0.91	0.10		mg/L	1	1/3/2008 4:24:17 PM
Chloride	65	1.0		mg/L	10	1/3/2008 4:41:41 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/3/2008 12:20:32 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/3/2008 4:24:17 PM
Sulfate	180	5.0		mg/L	10	1/3/2008 4:41:41 PM
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:13:37 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/14/2008 8:49:18 AM
Barium	ND	0.020		mg/L	1	1/14/2008 8:49:18 AM
Cadmium	ND	0.0020		mg/L	1	1/14/2008 8:49:18 AM
Calcium	1.4	1.0		mg/L	1	1/14/2008 8:49:18 AM
Chromium	ND	0.0060		mg/L	1	1/14/2008 8:49:18 AM
Lead	ND	0.0050		mg/L	1	1/14/2008 8:49:18 AM
Magnesium	ND	1.0		mg/L	1	1/14/2008 8:49:18 AM
Potassium	ND	1.0		mg/L	1	1/14/2008 8:49:18 AM
Selenium	ND	0.050		mg/L	1	1/14/2008 8:49:18 AM
Silver	ND	0.0050		mg/L	1	1/14/2008 8:49:18 AM
Sodium	240	10		mg/L	10	1/14/2008 12:23:07 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	1/12/2008 3:31:44 PM
Barium	ND	0.020		mg/L	1	1/12/2008 3:31:44 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 3:31:44 PM
Calcium	1.5	1.0		mg/L	1	1/12/2008 3:31:44 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 3:31:44 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 3:31:44 PM
Iron	ND	0.050		mg/L	1	1/12/2008 3:31:44 PM
Lead	ND	0.0050		mg/L	1	1/12/2008 3:31:44 PM
Magnesium	ND	1.0		mg/L	1	1/12/2008 3:31:44 PM
Manganese	0.0045	0.0020		mg/L	1	1/12/2008 3:31:44 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-5
Lab Order:	0801006	**Collection Date:**	12/29/2007 12:45:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Potassium	ND	1.0		mg/L	1	1/12/2008 3:31:44 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 3:31:44 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 3:31:44 PM
Sodium	290	5.0		mg/L	5	1/15/2008 11:31:18 AM
Uranium	ND	0.10		mg/L	1	1/12/2008 3:31:44 PM
Zinc	ND	0.050		mg/L	1	1/12/2008 3:31:44 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	1/9/2008
Acenaphthylene	ND	10		µg/L	1	1/9/2008
Aniline	ND	10		µg/L	1	1/9/2008
Anthracene	ND	10		µg/L	1	1/9/2008
Azobenzene	ND	10		µg/L	1	1/9/2008
Benz(a)anthracene	ND	10		µg/L	1	1/9/2008
Benzo(a)pyrene	ND	10		µg/L	1	1/9/2008
Benzo(b)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzo(g,h,i)perylene	ND	10		µg/L	1	1/9/2008
Benzo(k)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzoic acid	ND	20		µg/L	1	1/9/2008
Benzyl alcohol	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	1/9/2008
4-Bromophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Butyl benzyl phthalate	ND	10		µg/L	1	1/9/2008
Carbazole	ND	10		µg/L	1	1/9/2008
4-Chloro-3-methylphenol	ND	10		µg/L	1	1/9/2008
4-Chloroaniline	ND	10		µg/L	1	1/9/2008
2-Chloronaphthalene	ND	10		µg/L	1	1/9/2008
2-Chlorophenol	ND	10		µg/L	1	1/9/2008
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Chrysene	ND	10		µg/L	1	1/9/2008
Di-n-butyl phthalate	ND	10		µg/L	1	1/9/2008
Di-n-octyl phthalate	ND	10		µg/L	1	1/9/2008
Dibenz(a,h)anthracene	ND	10		µg/L	1	1/9/2008
Dibenzofuran	ND	10		µg/L	1	1/9/2008
1,2-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,3-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,4-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
3,3'-Dichlorobenzidine	ND	10		µg/L	1	1/9/2008
Diethyl phthalate	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-5
Lab Order:	0801006	**Collection Date:**	12/29/2007 12:45:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Dimethyl phthalate	ND	10		µg/L	1	1/9/2008
2,4-Dichlorophenol	ND	10		µg/L	1	1/9/2008
2,4-Dimethylphenol	ND	10		µg/L	1	1/9/2008
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	1/9/2008
2,4-Dinitrophenol	ND	20		µg/L	1	1/9/2008
2,4-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
2,6-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
Fluoranthene	ND	10		µg/L	1	1/9/2008
Fluorene	ND	10		µg/L	1	1/9/2008
Hexachlorobenzene	ND	10		µg/L	1	1/9/2008
Hexachlorobutadiene	ND	10		µg/L	1	1/9/2008
Hexachlorocyclopentadiene	ND	10		µg/L	1	1/9/2008
Hexachloroethane	ND	10		µg/L	1	1/9/2008
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	1/9/2008
Isophorone	ND	10		µg/L	1	1/9/2008
2-Methylnaphthalene	ND	10		µg/L	1	1/9/2008
2-Methylphenol	ND	10		µg/L	1	1/9/2008
3+4-Methylphenol	ND	10		µg/L	1	1/9/2008
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodimethylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodiphenylamine	ND	10		µg/L	1	1/9/2008
Naphthalene	ND	10		µg/L	1	1/9/2008
2-Nitroaniline	ND	10		µg/L	1	1/9/2008
3-Nitroaniline	ND	10		µg/L	1	1/9/2008
4-Nitroaniline	ND	10		µg/L	1	1/9/2008
Nitrobenzene	ND	10		µg/L	1	1/9/2008
2-Nitrophenol	ND	10		µg/L	1	1/9/2008
4-Nitrophenol	ND	10		µg/L	1	1/9/2008
Pentachlorophenol	ND	10		µg/L	1	1/9/2008
Phenanthrene	ND	10		µg/L	1	1/9/2008
Phenol	ND	10		µg/L	1	1/9/2008
Pyrene	ND	10		µg/L	1	1/9/2008
Pyridine	ND	10		µg/L	1	1/9/2008
1,2,4-Trichlorobenzene	ND	10		µg/L	1	1/9/2008
2,4,5-Trichlorophenol	ND	10		µg/L	1	1/9/2008
2,4,6-Trichlorophenol	ND	10		µg/L	1	1/9/2008
Surr: 2,4,6-Tribromophenol	15.9	16.6-150	S	%REC	1	1/9/2008
Surr: 2-Fluorobiphenyl	83.2	19.6-134		%REC	1	1/9/2008
Surr: 2-Fluorophenol	55.2	9.54-113		%REC	1	1/9/2008
Surr: 4-Terphenyl-d14	112	22.7-145		%REC	1	1/9/2008
Surr: Nitrobenzene-d5	79.3	14.6-134		%REC	1	1/9/2008
Surr: Phenol-d5	39.4	10.7-80.3		%REC	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-5
Lab Order:	0801006	**Collection Date:**	12/29/2007 12:45:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 7:44:34 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 7:44:34 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 7:44:34 PM
Acetone	ND	10		µg/L	1	1/7/2008 7:44:34 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 7:44:34 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 7:44:34 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 7:44:34 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 7:44:34 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 7:44:34 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	MW-5
Lab Order:	0801006	**Collection Date:**	12/29/2007 12:45:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
2-Hexanone	ND	10		µg/L	1	1/7/2008 7:44:34 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 7:44:34 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 7:44:34 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 7:44:34 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 7:44:34 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 7:44:34 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 7:44:34 PM
Surr: 1,2-Dichloroethane-d4	114	68.1-123		%REC	1	1/7/2008 7:44:34 PM
Surr: 4-Bromofluorobenzene	105	53.2-145		%REC	1	1/7/2008 7:44:34 PM
Surr: Dibromofluoromethane	108	68.5-119		%REC	1	1/7/2008 7:44:34 PM
Surr: Toluene-d8	112	64-131		%REC	1	1/7/2008 7:44:34 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	1200	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	8.93	0.1		pH units	1	1/2/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	SMW-2
Lab Order:	0801006	**Collection Date:**	1/1/2008 10:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-10	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: **JAT**
1,2-Dibromoethane	ND	0.010		µg/L	1	1/8/2008 1:51:37 PM
Surr: 1,2,3-Trichloropropane	122	54.9-135		%REC	1	1/8/2008 1:51:37 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2008 1:13:49 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	1/3/2008 1:13:49 PM
Surr: DNOP	114	58-140		%REC	1	1/3/2008 1:13:49 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.69	0.050		mg/L	1	1/7/2008 1:23:17 PM
Surr: BFB	143	79.2-121	S	%REC	1	1/7/2008 1:23:17 PM
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	0.36	0.10		mg/L	1	1/3/2008 11:28:18 AM
Chloride	2000	10		mg/L	100	1/9/2008 2:25:18 PM
Nitrate (As N)+Nitrite (As N)	ND	2.0		mg/L	10	1/4/2008 9:02:32 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/3/2008 11:28:18 AM
Sulfate	1600	50		mg/L	100	1/9/2008 2:25:18 PM
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:15:24 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/14/2008 11:13:08 AM
Barium	ND	0.020		mg/L	1	1/14/2008 11:13:08 AM
Cadmium	ND	0.0020		mg/L	1	1/14/2008 11:13:08 AM
Calcium	190	100		mg/L	100	1/14/2008 12:27:50 PM
Chromium	ND	0.0060		mg/L	1	1/14/2008 11:13:08 AM
Lead	ND	0.0050		mg/L	1	1/14/2008 11:13:08 AM
Magnesium	64	1.0		mg/L	1	1/14/2008 11:13:08 AM
Potassium	1.1	1.0		mg/L	1	1/14/2008 11:13:08 AM
Selenium	ND	0.050		mg/L	1	1/14/2008 11:13:08 AM
Silver	ND	0.0050		mg/L	1	1/14/2008 11:13:08 AM
Sodium	1700	100		mg/L	100	1/14/2008 12:27:50 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	1/12/2008 3:50:24 PM
Barium	ND	0.020		mg/L	1	1/12/2008 3:50:24 PM
Beryllium	ND	0.0030		mg/L	1	1/12/2008 3:50:24 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 3:50:24 PM
Calcium	200	5.0		mg/L	5	1/15/2008 11:38:30 AM
Chromium	0.055	0.0060		mg/L	1	1/12/2008 3:50:24 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	SMW-2
Lab Order:	0801006	**Collection Date:**	1/1/2008 10:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-10	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Cobalt	ND	0.0060		mg/L	1	1/15/2008 11:34:14 AM
Lead	ND	0.0050		mg/L	1	1/12/2008 3:50:24 PM
Magnesium	69	1.0		mg/L	1	1/12/2008 3:50:24 PM
Nickel	0.026	0.010		mg/L	1	1/12/2008 3:50:24 PM
Potassium	1.1	1.0		mg/L	1	1/12/2008 3:50:24 PM
Selenium	ND	0.25		mg/L	5	1/15/2008 11:38:30 AM
Silver	ND	0.0050		mg/L	1	1/12/2008 3:50:24 PM
Sodium	2200	50		mg/L	50	1/15/2008 11:44:14 AM
Vanadium	ND	0.050		mg/L	1	1/12/2008 3:50:24 PM
Zinc	ND	0.050		mg/L	1	1/12/2008 3:50:24 PM
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Methyl tert-butyl ether (MTBE)	9.9	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 8:43:21 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 8:43:21 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 8:43:21 PM
Acetone	ND	10		µg/L	1	1/7/2008 8:43:21 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 8:43:21 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 8:43:21 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 8:43:21 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 8:43:21 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	SMW-2
Lab Order:	0801006	**Collection Date:**	1/1/2008 10:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-10	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 8:43:21 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
2-Hexanone	ND	10		µg/L	1	1/7/2008 8:43:21 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 8:43:21 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 8:43:21 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 8:43:21 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 8:43:21 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 8:43:21 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 8:43:21 PM
Surr: 1,2-Dichloroethane-d4	119	68.1-123		%REC	1	1/7/2008 8:43:21 PM
Surr: 4-Bromofluorobenzene	107	53.2-145		%REC	1	1/7/2008 8:43:21 PM
Surr: Dibromofluoromethane	109	68.5-119		%REC	1	1/7/2008 8:43:21 PM
Surr: Toluene-d8	114	64-131		%REC	1	1/7/2008 8:43:21 PM

EPA 120.1: SPECIFIC CONDUCTANCE Analyst: NSB

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	SMW-2
Lab Order:	0801006	**Collection Date:**	1/1/2008 10:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-10	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	9200	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	7.29	0.1		pH units	1	1/2/2008

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

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

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

Batch #: 080104017
Project Name: 0801006

Analytical Results Report

Sample Number	080104017-004	**Sampling Date**	1/1/2008	**Date/Time Received**	1/4/2008	11:00 AM
Client Sample ID	0801006-10B / SMW-2	**Sampling Time**	10:30 AM	**Extraction Date**	1/4/2008	
Matrix:	Water					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2,4-Trichlorobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1,2-Dichlorobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1,2-Diphenyl hydrazine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1,3-Dichlorobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1,4-Dichlorobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1-Methylnaphthalene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,3,4,6-Tetrachlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,3,5,6-Tetrachlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4,5-Trichlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4,6-Trichlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4-Dichlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4-Dimethylphenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4-Dinitrophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4-Dinitrotoluene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,6-Dinitrotoluene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Chloronaphthalene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Chlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Methylnaphthalene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Methylphenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Nitroaniline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Nitrophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
3,3'-Dichlorobenzidine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
3+4-Methylphenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
3-Nitroaniline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4,6-Dinitro-2-methylphenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Bromophenyl-phenylether	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Chloro-3-methylphenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Chloroaniline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Chlorophenyl-phenylether	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Nitroaniline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Nitrophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Acenaphthene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Acenaphthylene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Aniline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	

Comments:

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

Client:	HALL ENVIRONMENTAL ANALYSIS LAB	**Batch #:**	080104017
Address:	4901 HAWKINS NE SUITE D ALBUQUERQUE, NM 87109	**Project Name:**	0801006
Attn:	ANDY FREEMAN		

Analytical Results Report

Sample Number	080104017-004	**Sampling Date**	1/1/2008	**Date/Time Received**	1/4/2008	11:00 AM
Client Sample ID	0801006-10B / SMW-2	**Sampling Time**	10:30 AM	**Extraction Date**	1/4/2008	
Matrix:	Water					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Anthracene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzidine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzo(ghi)perylene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzo[a]anthracene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzo[a]pyrene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzo[b]fluoranthene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzo[k]fluoranthene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzyl alcohol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
bis(2-Chloroethoxy)methane	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
bis(2-Chloroethyl)ether	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
bis(2-chloroisopropyl)ether	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
bis(2-Ethylhexyl)phthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Butylbenzylphthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Carbazole	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Chrysene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Dibenz[a,h]anthracene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Dibenzofuran	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Diethylphthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Dimethylphthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Di-n-butylphthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Di-n-octylphthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Fluoranthene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Fluorene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Hexachlorobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Hexachlorobutadiene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Hexachlorocyclopentadiene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Hexachloroethane	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Isophorone	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Naphthalene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Nitrobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Nitrosodimethylamine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
n-Nitroso-di-n-propylamine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
n-Nitrosodiphenylamine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Pentachlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Phenanthrene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	

Comments:

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

Batch #: 080104017
Project Name: 0801006

Analytical Results Report

Sample Number	080104017-004	**Sampling Date**	1/1/2008	**Date/Time Received**	1/4/2008	11:00 AM
Client Sample ID	0801006-10B / SMW-2	**Sampling Time**	10:30 AM	**Extraction Date**	1/4/2008	
Matrix:	Water					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Phenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Pyrene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Pyridine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1,4-Dioxane	14.8	ug/L	5	1/16/2008	EMP	EPA 8270CMOD	
Benzenethiole	0.19	ug/L	0.1	1/16/2008	EMP	EPA 8270CMOD	
Quinoline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270CMOD	

Surrogate Data

Sample Number 080104017-004

Surrogate Standard	Method	Percent Recovery	Control Limits
2,4,6-Tribromophenol	EPA 8270C	100.7	10-123
2-Fluorobiphenyl	EPA 8270C	97.7	19-130
2-Fluorophenol	EPA 8270C	91.9	21-110
Nitrobenzene-d5	EPA 8270C	121.6	25-130
Phenol-d5	EPA 8270C	86.0	10-110
Terphenyl-d14	EPA 8270C	115.4	10-125
Terphenyl-d14	EPA 8270CMOD	98.1	10-125

Comments:

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	SMW-4
Lab Order:	0801006	**Collection Date:**	12/29/2007 10:15:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-11	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 504.1: EDB						Analyst: **JAT**
1,2-Dibromoethane	ND	0.010		µg/L	1	1/8/2008 2:09:37 PM
Surr: 1,2,3-Trichloropropane	115	54.9-135		%REC	1	1/8/2008 2:09:37 PM
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	1.0		mg/L	1	1/3/2008 2:14:39 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	1/3/2008 2:14:39 PM
Surr: DNOP	121	58-140		%REC	1	1/3/2008 2:14:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	1/5/2008 12:39:02 AM
Surr: BFB	99.6	79.2-121		%REC	1	1/5/2008 12:39:02 AM
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	1.4	0.10		mg/L	1	1/3/2008 4:59:06 PM
Chloride	60	1.0		mg/L	10	1/3/2008 5:51:20 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/3/2008 12:37:56 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/3/2008 4:59:06 PM
Sulfate	180	5.0		mg/L	10	1/3/2008 5:51:20 PM
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:17:12 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/14/2008 11:18:58 AM
Barium	ND	0.020		mg/L	1	1/14/2008 11:18:58 AM
Cadmium	ND	0.0020		mg/L	1	1/14/2008 11:18:58 AM
Calcium	3.6	1.0		mg/L	1	1/14/2008 11:18:58 AM
Chromium	ND	0.0060		mg/L	1	1/14/2008 11:18:58 AM
Lead	ND	0.0050		mg/L	1	1/14/2008 11:18:58 AM
Magnesium	ND	1.0		mg/L	1	1/14/2008 11:18:58 AM
Potassium	ND	1.0		mg/L	1	1/14/2008 11:18:58 AM
Selenium	ND	0.050		mg/L	1	1/14/2008 11:18:58 AM
Silver	ND	0.0050		mg/L	1	1/14/2008 11:18:58 AM
Sodium	260	10		mg/L	10	1/14/2008 12:30:56 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	1/12/2008 3:54:44 PM
Barium	0.024	0.020		mg/L	1	1/12/2008 3:54:44 PM
Beryllium	ND	0.0030		mg/L	1	1/12/2008 3:54:44 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 3:54:44 PM
Calcium	4.6	1.0		mg/L	1	1/12/2008 3:54:44 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 3:54:44 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	SMW-4
Lab Order:	0801006	**Collection Date:**	12/29/2007 10:15:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-11	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Cobalt	ND	0.0060		mg/L	1	1/15/2008 11:47:07 AM
Lead	ND	0.0050		mg/L	1	1/12/2008 3:54:44 PM
Magnesium	1.2	1.0		mg/L	1	1/12/2008 3:54:44 PM
Nickel	ND	0.010		mg/L	1	1/12/2008 3:54:44 PM
Potassium	ND	1.0		mg/L	1	1/12/2008 3:54:44 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 3:54:44 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 3:54:44 PM
Sodium	340	5.0		mg/L	5	1/15/2008 11:51:07 AM
Vanadium	ND	0.050		mg/L	1	1/12/2008 3:54:44 PM
Zinc	ND	0.050		mg/L	1	1/12/2008 3:54:44 PM
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 9:39:46 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 9:39:46 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 9:39:46 PM
Acetone	ND	10		µg/L	1	1/7/2008 9:39:46 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 9:39:46 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 9:39:46 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 9:39:46 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 9:39:46 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	SMW-4
Lab Order:	0801006	**Collection Date:**	12/29/2007 10:15:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-11	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 9:39:46 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
2-Hexanone	ND	10		µg/L	1	1/7/2008 9:39:46 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 9:39:46 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 9:39:46 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 9:39:46 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 9:39:46 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 9:39:46 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 9:39:46 PM
Surr: 1,2-Dichloroethane-d4	113	68.1-123		%REC	1	1/7/2008 9:39:46 PM
Surr: 4-Bromofluorobenzene	104	53.2-145		%REC	1	1/7/2008 9:39:46 PM
Surr: Dibromofluoromethane	111	68.5-119		%REC	1	1/7/2008 9:39:46 PM
Surr: Toluene-d8	112	64-131		%REC	1	1/7/2008 9:39:46 PM

EPA 120.1: SPECIFIC CONDUCTANCE Analyst: NSB

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	SMW-4
Lab Order:	0801006	**Collection Date:**	12/29/2007 10:15:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-11	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	1300	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	8.34	0.1		pH units	1	1/2/2008

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

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

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

Batch #: 080104017
Project Name: 0801006

Analytical Results Report

Sample Number	080104017-006	**Sampling Date**	12/29/2007	**Date/Time Received**	1/4/2008	11:00 AM
Client Sample ID	0801006-11B / SMW-4	**Sampling Time**	10:15 AM	**Extraction Date**	1/4/2008	
Matrix:	Water					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
1,2,4-Trichlorobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1,2-Dichlorobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1,2-Diphenyl hydrazine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1,3-Dichlorobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1,4-Dichlorobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1-Methylnaphthalene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,3,4,6-Tetrachlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,3,5,6-Tetrachlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4,5-Trichlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4,6-Trichlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4-Dichlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4-Dimethylphenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4-Dinitrophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,4-Dinitrotoluene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2,6-Dinitrotoluene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Chloronaphthalene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Chlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Methylnaphthalene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Methylphenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Nitroaniline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
2-Nitrophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
3,3'-Dichlorobenzidine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
3+4-Methylphenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
3-Nitroaniline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4,6-Dinitro-2-methylphenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Bromophenyl-phenylether	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Chloro-3-methylphenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Chloroaniline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Chlorophenyl-phenylether	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Nitroaniline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
4-Nitrophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Acenaphthene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Acenaphthylene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Aniline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Anthracene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzidine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	

Comments:

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

Batch #: 080104017
Project Name: 0801006

Analytical Results Report

Sample Number	080104017-006	**Sampling Date**	12/29/2007	**Date/Time Received**	1/4/2008	11:00 AM
Client Sample ID	0801006-11B / SMW-4	**Sampling Time**	10:15 AM	**Extraction Date**	1/4/2008	
Matrix:	Water					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Benzo(ghi)perylene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzo[a]anthracene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzo[a]pyrene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzo[b]fluoranthene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzo[k]fluoranthene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Benzyl alcohol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
bis(2-Chloroethoxy)methane	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
bis(2-Chloroethyl)ether	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
bis(2-chloroisopropyl)ether	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
bis(2-Ethylhexyl)phthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Butylbenzylphthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Carbazole	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Chrysene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Dibenz[a,h]anthracene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Dibenzofuran	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Diethylphthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Dimethylphthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Di-n-butylphthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Di-n-octylphthalate	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Fluoranthene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Fluorene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Hexachlorobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Hexachlorobutadiene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Hexachlorocyclopentadiene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Hexachloroethane	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Indeno[1,2,3-cd]pyrene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Isophorone	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Naphthalene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Nitrobenzene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Nitrosodimethylamine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
n-Nitroso-di-n-propylamine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
n-Nitrosodiphenylamine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Pentachlorophenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Phenanthrene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Phenol	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
Pyrene	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	

Comments:

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

Batch #: 080104017
Project Name: 0801006

Analytical Results Report

Sample Number	080104017-006	**Sampling Date**	12/29/2007	**Date/Time Received**	1/4/2008	11:00 AM
Client Sample ID	0801006-11B / SMW-4	**Sampling Time**	10:15 AM	**Extraction Date**	1/4/2008	
Matrix:	Water					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Pyridine	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270C	
1,4-Dioxane	ND	ug/L	5	1/16/2008	EMP	EPA 8270CMOD	
Benzenethiole	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270CMOD	
Quinoline	ND	ug/L	0.1	1/16/2008	EMP	EPA 8270CMOD	

Surrogate Data

Sample Number 080104017-006

Surrogate Standard	Method	Percent Recovery	Control Limits
2,4,6-Tribromophenol	EPA 8270C	84.7	10-123
2-Fluorobiphenyl	EPA 8270C	100.4	19-130
2-Fluorophenol	EPA 8270C	81.3	21-110
Nitrobenzene-d5	EPA 8270C	120.6	25-130
Phenol-d5	EPA 8270C	75.3	10-110
Terphenyl-d14	EPA 8270C	124.6	10-125
Terphenyl-d14	EPA 8270CMOD	108.7	10-125

Authorized Signature John W. Cobb

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

Comments:

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-1C
Lab Order:	0801006	**Collection Date:**	12/31/2007 10:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-12	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	2.6	0.10		mg/L	1	1/3/2008 6:08:44 PM
Chloride	35	0.10		mg/L	1	1/3/2008 6:08:44 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/3/2008 12:55:20 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/3/2008 6:08:44 PM
Sulfate	270	5.0		mg/L	10	1/3/2008 6:26:08 PM
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:19:00 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	1/12/2008 3:58:52 PM
Barium	0.023	0.010		mg/L	1	1/12/2008 3:58:52 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 3:58:52 PM
Calcium	3.6	0.50		mg/L	1	1/12/2008 3:58:52 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 3:58:52 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 3:58:52 PM
Iron	ND	0.050		mg/L	1	1/12/2008 3:58:52 PM
Lead	ND	0.0050		mg/L	1	1/12/2008 3:58:52 PM
Magnesium	0.74	0.50		mg/L	1	1/12/2008 3:58:52 PM
Manganese	0.010	0.0020		mg/L	1	1/12/2008 3:58:52 PM
Potassium	ND	1.0		mg/L	1	1/12/2008 3:58:52 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 3:58:52 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 3:58:52 PM
Sodium	360	2.5		mg/L	5	1/15/2008 11:54:00 AM
Uranium	ND	0.10		mg/L	1	1/12/2008 3:58:52 PM
Zinc	ND	0.020		mg/L	1	1/12/2008 3:58:52 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	1/9/2008
Acenaphthylene	ND	10		µg/L	1	1/9/2008
Aniline	ND	10		µg/L	1	1/9/2008
Anthracene	ND	10		µg/L	1	1/9/2008
Azobenzene	ND	10		µg/L	1	1/9/2008
Benz(a)anthracene	ND	10		µg/L	1	1/9/2008
Benzo(a)pyrene	ND	10		µg/L	1	1/9/2008
Benzo(b)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzo(g,h,i)perylene	ND	10		µg/L	1	1/9/2008
Benzo(k)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzoic acid	ND	20		µg/L	1	1/9/2008
Benzyl alcohol	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethyl)ether	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-1C
Lab Order:	0801006	**Collection Date:**	12/31/2007 10:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-12	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	1/9/2008
4-Bromophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Butyl benzyl phthalate	ND	10		µg/L	1	1/9/2008
Carbazole	ND	10		µg/L	1	1/9/2008
4-Chloro-3-methylphenol	ND	10		µg/L	1	1/9/2008
4-Chloroaniline	ND	10		µg/L	1	1/9/2008
2-Chloronaphthalene	ND	10		µg/L	1	1/9/2008
2-Chlorophenol	ND	10		µg/L	1	1/9/2008
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Chrysene	ND	10		µg/L	1	1/9/2008
Di-n-butyl phthalate	ND	10		µg/L	1	1/9/2008
Di-n-octyl phthalate	ND	10		µg/L	1	1/9/2008
Dibenz(a,h)anthracene	ND	10		µg/L	1	1/9/2008
Dibenzofuran	ND	10		µg/L	1	1/9/2008
1,2-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,3-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,4-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
3,3'-Dichlorobenzidine	ND	10		µg/L	1	1/9/2008
Diethyl phthalate	ND	10		µg/L	1	1/9/2008
Dimethyl phthalate	ND	10		µg/L	1	1/9/2008
2,4-Dichlorophenol	ND	10		µg/L	1	1/9/2008
2,4-Dimethylphenol	ND	10		µg/L	1	1/9/2008
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	1/9/2008
2,4-Dinitrophenol	ND	20		µg/L	1	1/9/2008
2,4-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
2,6-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
Fluoranthene	ND	10		µg/L	1	1/9/2008
Fluorene	ND	10		µg/L	1	1/9/2008
Hexachlorobenzene	ND	10		µg/L	1	1/9/2008
Hexachlorobutadiene	ND	10		µg/L	1	1/9/2008
Hexachlorocyclopentadiene	ND	10		µg/L	1	1/9/2008
Hexachloroethane	ND	10		µg/L	1	1/9/2008
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	1/9/2008
Isophorone	ND	10		µg/L	1	1/9/2008
2-Methylnaphthalene	ND	10		µg/L	1	1/9/2008
2-Methylphenol	ND	10		µg/L	1	1/9/2008
3+4-Methylphenol	ND	10		µg/L	1	1/9/2008
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodimethylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodiphenylamine	ND	10		µg/L	1	1/9/2008
Naphthalene	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-1C
Lab Order:	0801006	**Collection Date:**	12/31/2007 10:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-12	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitroaniline	ND	10		µg/L	1	1/9/2008
3-Nitroaniline	ND	10		µg/L	1	1/9/2008
4-Nitroaniline	ND	10		µg/L	1	1/9/2008
Nitrobenzene	ND	10		µg/L	1	1/9/2008
2-Nitrophenol	ND	10		µg/L	1	1/9/2008
4-Nitrophenol	ND	10		µg/L	1	1/9/2008
Pentachlorophenol	ND	10		µg/L	1	1/9/2008
Phenanthrene	ND	10		µg/L	1	1/9/2008
Phenol	ND	10		µg/L	1	1/9/2008
Pyrene	ND	10		µg/L	1	1/9/2008
Pyridine	ND	10		µg/L	1	1/9/2008
1,2,4-Trichlorobenzene	ND	10		µg/L	1	1/9/2008
2,4,5-Trichlorophenol	ND	10		µg/L	1	1/9/2008
2,4,6-Trichlorophenol	ND	10		µg/L	1	1/9/2008
Surr: 2,4,6-Tribromophenol	13.9	16.6-150	S	%REC	1	1/9/2008
Surr: 2-Fluorobiphenyl	89.8	19.6-134		%REC	1	1/9/2008
Surr: 2-Fluorophenol	62.1	9.54-113		%REC	1	1/9/2008
Surr: 4-Terphenyl-d14	81.8	22.7-145		%REC	1	1/9/2008
Surr: Nitrobenzene-d5	88.1	14.6-134		%REC	1	1/9/2008
Surr: Phenol-d5	44.2	10.7-80.3		%REC	1	1/9/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 10:08:01 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 10:08:01 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 10:08:01 PM
Acetone	ND	10		µg/L	1	1/7/2008 10:08:01 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 10:08:01 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 10:08:01 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-1C
Lab Order:	0801006	**Collection Date:**	12/31/2007 10:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-12	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 10:08:01 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 10:08:01 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 10:08:01 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
2-Hexanone	ND	10		µg/L	1	1/7/2008 10:08:01 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 10:08:01 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 10:08:01 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 10:08:01 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-1C
Lab Order:	0801006	**Collection Date:**	12/31/2007 10:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-12	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 10:08:01 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 10:08:01 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 10:08:01 PM
Surr: 1,2-Dichloroethane-d4	114	68.1-123		%REC	1	1/7/2008 10:08:01 PM
Surr: 4-Bromofluorobenzene	107	53.2-145		%REC	1	1/7/2008 10:08:01 PM
Surr: Dibromofluoromethane	111	68.5-119		%REC	1	1/7/2008 10:08:01 PM
Surr: Toluene-d8	113	64-131		%REC	1	1/7/2008 10:08:01 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	1400	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	8.50	0.1		pH units	1	1/2/2008

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2A
Lab Order:	0801006	**Collection Date:**	12/31/2007 12:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-13	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	1.3	0.10		mg/L	1	1/3/2008 6:43:33 PM
Chloride	42	1.0		mg/L	10	1/3/2008 7:00:58 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/3/2008 1:12:45 PM
Phosphorus, Orthophosphate (As P)	0.70	0.50	H	mg/L	1	1/3/2008 6:43:33 PM
Sulfate	7.7	0.50		mg/L	1	1/3/2008 6:43:33 PM
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:26:21 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	1/12/2008 4:03:01 PM
Barium	0.18	0.010		mg/L	1	1/12/2008 4:03:01 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 4:03:01 PM
Calcium	11	0.50		mg/L	1	1/12/2008 4:03:01 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 4:03:01 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 4:03:01 PM
Iron *	0.70	0.050		mg/L	1	1/12/2008 4:03:01 PM
Lead	ND	0.0050		mg/L	1	1/12/2008 4:03:01 PM
Magnesium	3.9	0.50		mg/L	1	1/12/2008 4:03:01 PM
Manganese	0.22	0.0020		mg/L	1	1/12/2008 4:03:01 PM
Potassium	ND	1.0		mg/L	1	1/12/2008 4:03:01 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 4:03:01 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 4:03:01 PM
Sodium	380	2.5		mg/L	5	1/15/2008 11:56:55 AM
Uranium	ND	0.10		mg/L	1	1/12/2008 4:03:01 PM
Zinc	ND	0.020		mg/L	1	1/12/2008 4:03:01 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	1/9/2008
Acenaphthylene	ND	10		µg/L	1	1/9/2008
Aniline	ND	10		µg/L	1	1/9/2008
Anthracene	ND	10		µg/L	1	1/9/2008
Azobenzene	ND	10		µg/L	1	1/9/2008
Benz(a)anthracene	ND	10		µg/L	1	1/9/2008
Benzo(a)pyrene	ND	10		µg/L	1	1/9/2008
Benzo(b)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzo(g,h,i)perylene	ND	10		µg/L	1	1/9/2008
Benzo(k)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzoic acid	ND	20		µg/L	1	1/9/2008
Benzyl alcohol	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethyl)ether	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2A
Lab Order:	0801006	**Collection Date:**	12/31/2007 12:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-13	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	1/9/2008
4-Bromophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Butyl benzyl phthalate	ND	10		µg/L	1	1/9/2008
Carbazole	ND	10		µg/L	1	1/9/2008
4-Chloro-3-methylphenol	ND	10		µg/L	1	1/9/2008
4-Chloroaniline	ND	10		µg/L	1	1/9/2008
2-Chloronaphthalene	ND	10		µg/L	1	1/9/2008
2-Chlorophenol	ND	10		µg/L	1	1/9/2008
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Chrysene	ND	10		µg/L	1	1/9/2008
Di-n-butyl phthalate	ND	10		µg/L	1	1/9/2008
Di-n-octyl phthalate	ND	10		µg/L	1	1/9/2008
Dibenz(a,h)anthracene	ND	10		µg/L	1	1/9/2008
Dibenzofuran	ND	10		µg/L	1	1/9/2008
1,2-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,3-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,4-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
3,3'-Dichlorobenzidine	ND	10		µg/L	1	1/9/2008
Diethyl phthalate	ND	10		µg/L	1	1/9/2008
Dimethyl phthalate	ND	10		µg/L	1	1/9/2008
2,4-Dichlorophenol	ND	10		µg/L	1	1/9/2008
2,4-Dimethylphenol	ND	10		µg/L	1	1/9/2008
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	1/9/2008
2,4-Dinitrophenol	ND	20		µg/L	1	1/9/2008
2,4-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
2,6-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
Fluoranthene	ND	10		µg/L	1	1/9/2008
Fluorene	ND	10		µg/L	1	1/9/2008
Hexachlorobenzene	ND	10		µg/L	1	1/9/2008
Hexachlorobutadiene	ND	10		µg/L	1	1/9/2008
Hexachlorocyclopentadiene	ND	10		µg/L	1	1/9/2008
Hexachloroethane	ND	10		µg/L	1	1/9/2008
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	1/9/2008
Isophorone	ND	10		µg/L	1	1/9/2008
2-Methylnaphthalene	ND	10		µg/L	1	1/9/2008
2-Methylphenol	ND	10		µg/L	1	1/9/2008
3+4-Methylphenol	ND	10		µg/L	1	1/9/2008
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodimethylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodiphenylamine	ND	10		µg/L	1	1/9/2008
Naphthalene	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2A
Lab Order:	0801006	**Collection Date:**	12/31/2007 12:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-13	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitroaniline	ND	10		µg/L	1	1/9/2008
3-Nitroaniline	ND	10		µg/L	1	1/9/2008
4-Nitroaniline	ND	10		µg/L	1	1/9/2008
Nitrobenzene	ND	10		µg/L	1	1/9/2008
2-Nitrophenol	ND	10		µg/L	1	1/9/2008
4-Nitrophenol	ND	10		µg/L	1	1/9/2008
Pentachlorophenol	ND	10		µg/L	1	1/9/2008
Phenanthrene	ND	10		µg/L	1	1/9/2008
Phenol	ND	10		µg/L	1	1/9/2008
Pyrene	ND	10		µg/L	1	1/9/2008
Pyridine	ND	10		µg/L	1	1/9/2008
1,2,4-Trichlorobenzene	ND	10		µg/L	1	1/9/2008
2,4,5-Trichlorophenol	ND	10		µg/L	1	1/9/2008
2,4,6-Trichlorophenol	ND	10		µg/L	1	1/9/2008
Surr: 2,4,6-Tribromophenol	17.3	16.6-150		%REC	1	1/9/2008
Surr: 2-Fluorobiphenyl	81.9	19.6-134		%REC	1	1/9/2008
Surr: 2-Fluorophenol	49.8	9.54-113		%REC	1	1/9/2008
Surr: 4-Terphenyl-d14	67.4	22.7-145		%REC	1	1/9/2008
Surr: Nitrobenzene-d5	77.2	14.6-134		%REC	1	1/9/2008
Surr: Phenol-d5	36.3	10.7-80.3		%REC	1	1/9/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Toluene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Ethylbenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Naphthalene	ND	2.0		µg/L	1	1/7/2008 10:36:17 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 10:36:17 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/7/2008 10:36:17 PM
Acetone	ND	10		µg/L	1	1/7/2008 10:36:17 PM
Bromobenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Bromochloromethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Bromoform	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Bromomethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
2-Butanone	ND	10		µg/L	1	1/7/2008 10:36:17 PM
Carbon disulfide	ND	10		µg/L	1	1/7/2008 10:36:17 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2A
Lab Order:	0801006	**Collection Date:**	12/31/2007 12:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-13	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Chlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Chloroethane	ND	2.0		µg/L	1	1/7/2008 10:36:17 PM
Chloroform	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Chloromethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/7/2008 10:36:17 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Dibromomethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/7/2008 10:36:17 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
2-Hexanone	ND	10		µg/L	1	1/7/2008 10:36:17 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/7/2008 10:36:17 PM
Methylene Chloride	ND	3.0		µg/L	1	1/7/2008 10:36:17 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Styrene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/7/2008 10:36:17 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2A
Lab Order:	0801006	**Collection Date:**	12/31/2007 12:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-13	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Trichlorofluoromethane	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/7/2008 10:36:17 PM
Vinyl chloride	ND	1.0		µg/L	1	1/7/2008 10:36:17 PM
Xylenes, Total	ND	1.5		µg/L	1	1/7/2008 10:36:17 PM
Surr: 1,2-Dichloroethane-d4	119	68.1-123		%REC	1	1/7/2008 10:36:17 PM
Surr: 4-Bromofluorobenzene	107	53.2-145		%REC	1	1/7/2008 10:36:17 PM
Surr: Dibromofluoromethane	109	68.5-119		%REC	1	1/7/2008 10:36:17 PM
Surr: Toluene-d8	114	64-131		%REC	1	1/7/2008 10:36:17 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	1400	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	7.76	0.1		pH units	1	1/2/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2B
Lab Order:	0801006	**Collection Date:**	12/31/2007 2:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-14	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SMP
Fluoride	1.8	0.10		mg/L	1	1/3/2008 7:18:23 PM
Chloride	30	0.10		mg/L	1	1/3/2008 7:18:23 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/3/2008 1:30:09 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/3/2008 7:18:23 PM
Sulfate	150	5.0		mg/L	10	1/3/2008 7:35:48 PM
EPA METHOD 7470: MERCURY						Analyst: SLB
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:28:10 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Arsenic	ND	0.020		mg/L	1	1/12/2008 4:07:09 PM
Barium	0.070	0.010		mg/L	1	1/12/2008 4:07:09 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 4:07:09 PM
Calcium	16	0.50		mg/L	1	1/12/2008 4:07:09 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 4:07:09 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 4:07:09 PM
Iron	0.62	0.050		mg/L	1	1/12/2008 4:07:09 PM
Lead	ND	0.0050		mg/L	1	1/12/2008 4:07:09 PM
Magnesium	3.6	0.50		mg/L	1	1/12/2008 4:07:09 PM
Manganese	0.29	0.0020		mg/L	1	1/12/2008 4:07:09 PM
Potassium	1.6	1.0		mg/L	1	1/12/2008 4:07:09 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 4:07:09 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 4:07:09 PM
Sodium	640	5.0		mg/L	10	1/15/2008 12:08:41 PM
Uranium	ND	0.10		mg/L	1	1/12/2008 4:07:09 PM
Zinc	ND	0.020		mg/L	1	1/12/2008 4:07:09 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	1/9/2008
Acenaphthylene	ND	10		µg/L	1	1/9/2008
Aniline	ND	10		µg/L	1	1/9/2008
Anthracene	ND	10		µg/L	1	1/9/2008
Azobenzene	ND	10		µg/L	1	1/9/2008
Benz(a)anthracene	ND	10		µg/L	1	1/9/2008
Benzo(a)pyrene	ND	10		µg/L	1	1/9/2008
Benzo(b)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzo(g,h,i)perylene	ND	10		µg/L	1	1/9/2008
Benzo(k)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzoic acid	ND	20		µg/L	1	1/9/2008
Benzyl alcohol	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethyl)ether	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2B
Lab Order:	0801006	**Collection Date:**	12/31/2007 2:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-14	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	1/9/2008
4-Bromophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Butyl benzyl phthalate	ND	10		µg/L	1	1/9/2008
Carbazole	ND	10		µg/L	1	1/9/2008
4-Chloro-3-methylphenol	ND	10		µg/L	1	1/9/2008
4-Chloroaniline	ND	10		µg/L	1	1/9/2008
2-Chloronaphthalene	ND	10		µg/L	1	1/9/2008
2-Chlorophenol	ND	10		µg/L	1	1/9/2008
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Chrysene	ND	10		µg/L	1	1/9/2008
Di-n-butyl phthalate	ND	10		µg/L	1	1/9/2008
Di-n-octyl phthalate	ND	10		µg/L	1	1/9/2008
Dibenz(a,h)anthracene	ND	10		µg/L	1	1/9/2008
Dibenzofuran	ND	10		µg/L	1	1/9/2008
1,2-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,3-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,4-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
3,3'-Dichlorobenzidine	ND	10		µg/L	1	1/9/2008
Diethyl phthalate	ND	10		µg/L	1	1/9/2008
Dimethyl phthalate	ND	10		µg/L	1	1/9/2008
2,4-Dichlorophenol	ND	10		µg/L	1	1/9/2008
2,4-Dimethylphenol	ND	10		µg/L	1	1/9/2008
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	1/9/2008
2,4-Dinitrophenol	ND	20		µg/L	1	1/9/2008
2,4-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
2,6-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
Fluoranthene	ND	10		µg/L	1	1/9/2008
Fluorene	ND	10		µg/L	1	1/9/2008
Hexachlorobenzene	ND	10		µg/L	1	1/9/2008
Hexachlorobutadiene	ND	10		µg/L	1	1/9/2008
Hexachlorocyclopentadiene	ND	10		µg/L	1	1/9/2008
Hexachloroethane	ND	10		µg/L	1	1/9/2008
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	1/9/2008
Isophorone	ND	10		µg/L	1	1/9/2008
2-Methylnaphthalene	ND	10		µg/L	1	1/9/2008
2-Methylphenol	ND	10		µg/L	1	1/9/2008
3+4-Methylphenol	ND	10		µg/L	1	1/9/2008
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodimethylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodiphenylamine	ND	10		µg/L	1	1/9/2008
Naphthalene	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2B
Lab Order:	0801006	**Collection Date:**	12/31/2007 2:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-14	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitroaniline	ND	10		µg/L	1	1/9/2008
3-Nitroaniline	ND	10		µg/L	1	1/9/2008
4-Nitroaniline	ND	10		µg/L	1	1/9/2008
Nitrobenzene	ND	10		µg/L	1	1/9/2008
2-Nitrophenol	ND	10		µg/L	1	1/9/2008
4-Nitrophenol	ND	10		µg/L	1	1/9/2008
Pentachlorophenol	ND	10		µg/L	1	1/9/2008
Phenanthrene	ND	10		µg/L	1	1/9/2008
Phenol	ND	10		µg/L	1	1/9/2008
Pyrene	ND	10		µg/L	1	1/9/2008
Pyridine	ND	10		µg/L	1	1/9/2008
1,2,4-Trichlorobenzene	ND	10		µg/L	1	1/9/2008
2,4,5-Trichlorophenol	ND	10		µg/L	1	1/9/2008
2,4,6-Trichlorophenol	ND	10		µg/L	1	1/9/2008
Surr: 2,4,6-Tribromophenol	24.8	16.6-150		%REC	1	1/9/2008
Surr: 2-Fluorobiphenyl	98.8	19.6-134		%REC	1	1/9/2008
Surr: 2-Fluorophenol	63.6	9.54-113		%REC	1	1/9/2008
Surr: 4-Terphenyl-d14	87.1	22.7-145		%REC	1	1/9/2008
Surr: Nitrobenzene-d5	92.9	14.6-134		%REC	1	1/9/2008
Surr: Phenol-d5	46.2	10.7-80.3		%REC	1	1/9/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Toluene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Ethylbenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Naphthalene	ND	2.0		µg/L	1	1/8/2008 12:57:39 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/8/2008 12:57:39 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/8/2008 12:57:39 AM
Acetone	ND	10		µg/L	1	1/8/2008 12:57:39 AM
Bromobenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Bromochloromethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Bromoform	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Bromomethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
2-Butanone	ND	10		µg/L	1	1/8/2008 12:57:39 AM
Carbon disulfide	ND	10		µg/L	1	1/8/2008 12:57:39 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2B
Lab Order:	0801006	**Collection Date:**	12/31/2007 2:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-14	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Chlorobenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Chloroethane	ND	2.0		µg/L	1	1/8/2008 12:57:39 AM
Chloroform	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Chloromethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/8/2008 12:57:39 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Dibromomethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/8/2008 12:57:39 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
2-Hexanone	ND	10		µg/L	1	1/8/2008 12:57:39 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/8/2008 12:57:39 AM
Methylene Chloride	ND	3.0		µg/L	1	1/8/2008 12:57:39 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Styrene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/8/2008 12:57:39 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2B
Lab Order:	0801006	**Collection Date:**	12/31/2007 2:00:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-14	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Trichlorofluoromethane	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/8/2008 12:57:39 AM
Vinyl chloride	ND	1.0		µg/L	1	1/8/2008 12:57:39 AM
Xylenes, Total	ND	1.5		µg/L	1	1/8/2008 12:57:39 AM
Surr: 1,2-Dichloroethane-d4	120	68.1-123		%REC	1	1/8/2008 12:57:39 AM
Surr: 4-Bromofluorobenzene	106	53.2-145		%REC	1	1/8/2008 12:57:39 AM
Surr: Dibromofluoromethane	112	68.5-119		%REC	1	1/8/2008 12:57:39 AM
Surr: Toluene-d8	117	64-131		%REC	1	1/8/2008 12:57:39 AM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	2400	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	7.77	0.1		pH units	1	1/2/2008

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2C
Lab Order:	0801006	**Collection Date:**	12/31/2007 11:00:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-15	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SMP
Fluoride	2.3	0.10		mg/L	1	1/3/2008 7:53:12 PM
Chloride	45	1.0		mg/L	10	1/3/2008 8:10:37 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/3/2008 2:22:23 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/3/2008 7:53:12 PM
Sulfate	290	5.0		mg/L	10	1/3/2008 8:10:37 PM
EPA METHOD 7470: MERCURY						Analyst: SLB
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:29:58 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Arsenic	ND	0.020		mg/L	1	1/12/2008 4:12:58 PM
Barium	0.026	0.010		mg/L	1	1/12/2008 4:12:58 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 4:12:58 PM
Calcium	2.9	0.50		mg/L	1	1/12/2008 4:12:58 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 4:12:58 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 4:12:58 PM
Iron	0.16	0.050		mg/L	1	1/12/2008 4:12:58 PM
Lead	ND	0.0050		mg/L	1	1/12/2008 4:12:58 PM
Magnesium	0.68	0.50		mg/L	1	1/12/2008 4:12:58 PM
Manganese	0.024	0.0020		mg/L	1	1/12/2008 4:12:58 PM
Potassium	ND	1.0		mg/L	1	1/12/2008 4:12:58 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 4:12:58 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 4:12:58 PM
Sodium	340	5.0		mg/L	10	1/15/2008 12:11:35 PM
Uranium	ND	0.10		mg/L	1	1/12/2008 4:12:58 PM
Zinc	ND	0.020		mg/L	1	1/12/2008 4:12:58 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	1/9/2008
Acenaphthylene	ND	10		µg/L	1	1/9/2008
Aniline	ND	10		µg/L	1	1/9/2008
Anthracene	ND	10		µg/L	1	1/9/2008
Azobenzene	ND	10		µg/L	1	1/9/2008
Benz(a)anthracene	ND	10		µg/L	1	1/9/2008
Benzo(a)pyrene	ND	10		µg/L	1	1/9/2008
Benzo(b)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzo(g,h,i)perylene	ND	10		µg/L	1	1/9/2008
Benzo(k)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzoic acid	ND	20		µg/L	1	1/9/2008
Benzyl alcohol	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethyl)ether	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2C
Lab Order:	0801006	**Collection Date:**	12/31/2007 11:00:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-15	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	1/9/2008
4-Bromophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Butyl benzyl phthalate	ND	10		µg/L	1	1/9/2008
Carbazole	ND	10		µg/L	1	1/9/2008
4-Chloro-3-methylphenol	ND	10		µg/L	1	1/9/2008
4-Chloroaniline	ND	10		µg/L	1	1/9/2008
2-Chloronaphthalene	ND	10		µg/L	1	1/9/2008
2-Chlorophenol	ND	10		µg/L	1	1/9/2008
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Chrysene	ND	10		µg/L	1	1/9/2008
Di-n-butyl phthalate	ND	10		µg/L	1	1/9/2008
Di-n-octyl phthalate	ND	10		µg/L	1	1/9/2008
Dibenz(a,h)anthracene	ND	10		µg/L	1	1/9/2008
Dibenzofuran	ND	10		µg/L	1	1/9/2008
1,2-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,3-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,4-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
3,3'-Dichlorobenzidine	ND	10		µg/L	1	1/9/2008
Diethyl phthalate	ND	10		µg/L	1	1/9/2008
Dimethyl phthalate	ND	10		µg/L	1	1/9/2008
2,4-Dichlorophenol	ND	10		µg/L	1	1/9/2008
2,4-Dimethylphenol	ND	10		µg/L	1	1/9/2008
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	1/9/2008
2,4-Dinitrophenol	ND	20		µg/L	1	1/9/2008
2,4-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
2,6-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
Fluoranthene	ND	10		µg/L	1	1/9/2008
Fluorene	ND	10		µg/L	1	1/9/2008
Hexachlorobenzene	ND	10		µg/L	1	1/9/2008
Hexachlorobutadiene	ND	10		µg/L	1	1/9/2008
Hexachlorocyclopentadiene	ND	10		µg/L	1	1/9/2008
Hexachloroethane	ND	10		µg/L	1	1/9/2008
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	1/9/2008
Isophorone	ND	10		µg/L	1	1/9/2008
2-Methylnaphthalene	ND	10		µg/L	1	1/9/2008
2-Methylphenol	ND	10		µg/L	1	1/9/2008
3+4-Methylphenol	ND	10		µg/L	1	1/9/2008
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodimethylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodiphenylamine	ND	10		µg/L	1	1/9/2008
Naphthalene	ND	10		µg/L	1	1/9/2008

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2C
Lab Order:	0801006	**Collection Date:**	12/31/2007 11:00:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-15	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitroaniline	ND	10		µg/L	1	1/9/2008
3-Nitroaniline	ND	10		µg/L	1	1/9/2008
4-Nitroaniline	ND	10		µg/L	1	1/9/2008
Nitrobenzene	ND	10		µg/L	1	1/9/2008
2-Nitrophenol	ND	10		µg/L	1	1/9/2008
4-Nitrophenol	ND	10		µg/L	1	1/9/2008
Pentachlorophenol	ND	10		µg/L	1	1/9/2008
Phenanthrene	ND	10		µg/L	1	1/9/2008
Phenol	ND	10		µg/L	1	1/9/2008
Pyrene	ND	10		µg/L	1	1/9/2008
Pyridine	ND	10		µg/L	1	1/9/2008
1,2,4-Trichlorobenzene	ND	10		µg/L	1	1/9/2008
2,4,5-Trichlorophenol	ND	10		µg/L	1	1/9/2008
2,4,6-Trichlorophenol	ND	10		µg/L	1	1/9/2008
Surr: 2,4,6-Tribromophenol	22.0	16.6-150		%REC	1	1/9/2008
Surr: 2-Fluorobiphenyl	81.5	19.6-134		%REC	1	1/9/2008
Surr: 2-Fluorophenol	49.0	9.54-113		%REC	1	1/9/2008
Surr: 4-Terphenyl-d14	85.3	22.7-145		%REC	1	1/9/2008
Surr: Nitrobenzene-d5	75.5	14.6-134		%REC	1	1/9/2008
Surr: Phenol-d5	37.3	10.7-80.3		%REC	1	1/9/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Toluene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Ethylbenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Naphthalene	ND	2.0		µg/L	1	1/8/2008 1:25:50 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/8/2008 1:25:50 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/8/2008 1:25:50 AM
Acetone	ND	10		µg/L	1	1/8/2008 1:25:50 AM
Bromobenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Bromochloromethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Bromoform	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Bromomethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
2-Butanone	ND	10		µg/L	1	1/8/2008 1:25:50 AM
Carbon disulfide	ND	10		µg/L	1	1/8/2008 1:25:50 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2C
Lab Order:	0801006	**Collection Date:**	12/31/2007 11:00:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-15	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Chlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Chloroethane	ND	2.0		µg/L	1	1/8/2008 1:25:50 AM
Chloroform	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Chloromethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/8/2008 1:25:50 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Dibromomethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/8/2008 1:25:50 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
2-Hexanone	ND	10		µg/L	1	1/8/2008 1:25:50 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/8/2008 1:25:50 AM
Methylene Chloride	ND	3.0		µg/L	1	1/8/2008 1:25:50 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Styrene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/8/2008 1:25:50 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-2C
Lab Order:	0801006	**Collection Date:**	12/31/2007 11:00:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-15	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Trichlorofluoromethane	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/8/2008 1:25:50 AM
Vinyl chloride	ND	1.0		µg/L	1	1/8/2008 1:25:50 AM
Xylenes, Total	ND	1.5		µg/L	1	1/8/2008 1:25:50 AM
Surr: 1,2-Dichloroethane-d4	118	68.1-123		%REC	1	1/8/2008 1:25:50 AM
Surr: 4-Bromofluorobenzene	104	53.2-145		%REC	1	1/8/2008 1:25:50 AM
Surr: Dibromofluoromethane	112	68.5-119		%REC	1	1/8/2008 1:25:50 AM
Surr: Toluene-d8	112	64-131		%REC	1	1/8/2008 1:25:50 AM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	1400	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	8.73	0.1		pH units	1	1/2/2008

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-3B
Lab Order:	0801006	**Collection Date:**	12/31/2007 3:15:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-16	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	1.6	0.10		mg/L	1	1/3/2008 8:28:02 PM
Chloride	35	0.10		mg/L	1	1/3/2008 8:28:02 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/3/2008 2:39:48 PM
Phosphorus, Orthophosphate (As P)	1.1	0.50	H	mg/L	1	1/3/2008 8:28:02 PM
Sulfate	51	0.50		mg/L	1	1/3/2008 8:28:02 PM
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:31:48 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	1/12/2008 4:17:07 PM
Barium	0.099	0.010		mg/L	1	1/12/2008 4:17:07 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 4:17:07 PM
Calcium	9.0	0.50		mg/L	1	1/12/2008 4:17:07 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 4:17:07 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 4:17:07 PM
Iron	0.64	0.050		mg/L	1	1/12/2008 4:17:07 PM
Lead	ND	0.0050		mg/L	1	1/12/2008 4:17:07 PM
Magnesium	2.9	0.50		mg/L	1	1/12/2008 4:17:07 PM
Manganese	0.13	0.0020		mg/L	1	1/12/2008 4:17:07 PM
Potassium	ND	1.0		mg/L	1	1/12/2008 4:17:07 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 4:17:07 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 4:17:07 PM
Sodium	430	5.0		mg/L	10	1/15/2008 12:14:29 PM
Uranium	ND	0.10		mg/L	1	1/12/2008 4:17:07 PM
Zinc	ND	0.020		mg/L	1	1/12/2008 4:17:07 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	1/9/2008
Acenaphthylene	ND	10		µg/L	1	1/9/2008
Aniline	ND	10		µg/L	1	1/9/2008
Anthracene	ND	10		µg/L	1	1/9/2008
Azobenzene	ND	10		µg/L	1	1/9/2008
Benz(a)anthracene	ND	10		µg/L	1	1/9/2008
Benzo(a)pyrene	ND	10		µg/L	1	1/9/2008
Benzo(b)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzo(g,h,i)perylene	ND	10		µg/L	1	1/9/2008
Benzo(k)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzoic acid	ND	20		µg/L	1	1/9/2008
Benzyl alcohol	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethyl)ether	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-3B
Lab Order:	0801006	**Collection Date:**	12/31/2007 3:15:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-16	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	1/9/2008
4-Bromophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Butyl benzyl phthalate	ND	10		µg/L	1	1/9/2008
Carbazole	ND	10		µg/L	1	1/9/2008
4-Chloro-3-methylphenol	ND	10		µg/L	1	1/9/2008
4-Chloroaniline	ND	10		µg/L	1	1/9/2008
2-Chloronaphthalene	ND	10		µg/L	1	1/9/2008
2-Chlorophenol	ND	10		µg/L	1	1/9/2008
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Chrysene	ND	10		µg/L	1	1/9/2008
Di-n-butyl phthalate	ND	10		µg/L	1	1/9/2008
Di-n-octyl phthalate	ND	10		µg/L	1	1/9/2008
Dibenz(a,h)anthracene	ND	10		µg/L	1	1/9/2008
Dibenzofuran	ND	10		µg/L	1	1/9/2008
1,2-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,3-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,4-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
3,3'-Dichlorobenzidine	ND	10		µg/L	1	1/9/2008
Diethyl phthalate	ND	10		µg/L	1	1/9/2008
Dimethyl phthalate	ND	10		µg/L	1	1/9/2008
2,4-Dichlorophenol	ND	10		µg/L	1	1/9/2008
2,4-Dimethylphenol	ND	10		µg/L	1	1/9/2008
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	1/9/2008
2,4-Dinitrophenol	ND	20		µg/L	1	1/9/2008
2,4-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
2,6-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
Fluoranthene	ND	10		µg/L	1	1/9/2008
Fluorene	ND	10		µg/L	1	1/9/2008
Hexachlorobenzene	ND	10		µg/L	1	1/9/2008
Hexachlorobutadiene	ND	10		µg/L	1	1/9/2008
Hexachlorocyclopentadiene	ND	10		µg/L	1	1/9/2008
Hexachloroethane	ND	10		µg/L	1	1/9/2008
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	1/9/2008
Isophorone	ND	10		µg/L	1	1/9/2008
2-Methylnaphthalene	ND	10		µg/L	1	1/9/2008
2-Methylphenol	ND	10		µg/L	1	1/9/2008
3+4-Methylphenol	ND	10		µg/L	1	1/9/2008
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodimethylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodiphenylamine	ND	10		µg/L	1	1/9/2008
Naphthalene	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-3B
Lab Order:	0801006	**Collection Date:**	12/31/2007 3:15:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-16	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitroaniline	ND	10		µg/L	1	1/9/2008
3-Nitroaniline	ND	10		µg/L	1	1/9/2008
4-Nitroaniline	ND	10		µg/L	1	1/9/2008
Nitrobenzene	ND	10		µg/L	1	1/9/2008
2-Nitrophenol	ND	10		µg/L	1	1/9/2008
4-Nitrophenol	ND	10		µg/L	1	1/9/2008
Pentachlorophenol	ND	10		µg/L	1	1/9/2008
Phenanthrene	ND	10		µg/L	1	1/9/2008
Phenol	ND	10		µg/L	1	1/9/2008
Pyrene	ND	10		µg/L	1	1/9/2008
Pyridine	ND	10		µg/L	1	1/9/2008
1,2,4-Trichlorobenzene	ND	10		µg/L	1	1/9/2008
2,4,5-Trichlorophenol	ND	10		µg/L	1	1/9/2008
2,4,6-Trichlorophenol	ND	10		µg/L	1	1/9/2008
Surr: 2,4,6-Tribromophenol	53.0	16.6-150		%REC	1	1/9/2008
Surr: 2-Fluorobiphenyl	87.7	19.6-134		%REC	1	1/9/2008
Surr: 2-Fluorophenol	56.3	9.54-113		%REC	1	1/9/2008
Surr: 4-Terphenyl-d14	74.9	22.7-145		%REC	1	1/9/2008
Surr: Nitrobenzene-d5	85.9	14.6-134		%REC	1	1/9/2008
Surr: Phenol-d5	41.6	10.7-80.3		%REC	1	1/9/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Toluene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Ethylbenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Naphthalene	ND	2.0		µg/L	1	1/8/2008 1:54:05 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/8/2008 1:54:05 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/8/2008 1:54:05 AM
Acetone	ND	10		µg/L	1	1/8/2008 1:54:05 AM
Bromobenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Bromochloromethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Bromoform	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Bromomethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
2-Butanone	ND	10		µg/L	1	1/8/2008 1:54:05 AM
Carbon disulfide	ND	10		µg/L	1	1/8/2008 1:54:05 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-3B
Lab Order:	0801006	**Collection Date:**	12/31/2007 3:15:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-16	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Chlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Chloroethane	ND	2.0		µg/L	1	1/8/2008 1:54:05 AM
Chloroform	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Chloromethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/8/2008 1:54:05 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Dibromomethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/8/2008 1:54:05 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
2-Hexanone	ND	10		µg/L	1	1/8/2008 1:54:05 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/8/2008 1:54:05 AM
Methylene Chloride	ND	3.0		µg/L	1	1/8/2008 1:54:05 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Styrene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/8/2008 1:54:05 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-3B
Lab Order:	0801006	**Collection Date:**	12/31/2007 3:15:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-16	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Trichlorofluoromethane	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/8/2008 1:54:05 AM
Vinyl chloride	ND	1.0		µg/L	1	1/8/2008 1:54:05 AM
Xylenes, Total	ND	1.5		µg/L	1	1/8/2008 1:54:05 AM
Surr: 1,2-Dichloroethane-d4	117	68.1-123		%REC	1	1/8/2008 1:54:05 AM
Surr: 4-Bromofluorobenzene	106	53.2-145		%REC	1	1/8/2008 1:54:05 AM
Surr: Dibromofluoromethane	110	68.5-119		%REC	1	1/8/2008 1:54:05 AM
Surr: Toluene-d8	114	64-131		%REC	1	1/8/2008 1:54:05 AM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	1600	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	7.93	0.1		pH units	1	1/2/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-3C
Lab Order:	0801006	**Collection Date:**	12/31/2007 4:40:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-17	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	1.8	0.10		mg/L	1	1/3/2008 9:37:40 PM
Chloride	38	0.10		mg/L	1	1/3/2008 9:37:40 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/3/2008 2:57:12 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/3/2008 9:37:40 PM
Sulfate	300	5.0		mg/L	10	1/3/2008 9:55:04 PM
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:33:38 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	1/12/2008 4:21:19 PM
Barium	0.068	0.010		mg/L	1	1/12/2008 4:21:19 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 4:21:19 PM
Calcium	4.2	0.50		mg/L	1	1/12/2008 4:21:19 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 4:21:19 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 4:21:19 PM
Iron	0.14	0.050		mg/L	1	1/12/2008 4:21:19 PM
Lead	ND	0.0050		mg/L	1	1/12/2008 4:21:19 PM
Magnesium	0.81	0.50		mg/L	1	1/12/2008 4:21:19 PM
Manganese	0.015	0.0020		mg/L	1	1/12/2008 4:21:19 PM
Potassium	1.1	1.0		mg/L	1	1/12/2008 4:21:19 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 4:21:19 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 4:21:19 PM
Sodium	360	2.5		mg/L	5	1/15/2008 12:19:06 PM
Uranium	ND	0.10		mg/L	1	1/12/2008 4:21:19 PM
Zinc	ND	0.020		mg/L	1	1/12/2008 4:21:19 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	1/9/2008
Acenaphthylene	ND	10		µg/L	1	1/9/2008
Aniline	ND	10		µg/L	1	1/9/2008
Anthracene	ND	10		µg/L	1	1/9/2008
Azobenzene	ND	10		µg/L	1	1/9/2008
Benz(a)anthracene	ND	10		µg/L	1	1/9/2008
Benzo(a)pyrene	ND	10		µg/L	1	1/9/2008
Benzo(b)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzo(g,h,i)perylene	ND	10		µg/L	1	1/9/2008
Benzo(k)fluoranthene	ND	10		µg/L	1	1/9/2008
Benzoic acid	ND	20		µg/L	1	1/9/2008
Benzyl alcohol	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	1/9/2008
Bis(2-chloroethyl)ether	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-3C
Lab Order:	0801006	**Collection Date:**	12/31/2007 4:40:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-17	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	1/9/2008
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	1/9/2008
4-Bromophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Butyl benzyl phthalate	ND	10		µg/L	1	1/9/2008
Carbazole	ND	10		µg/L	1	1/9/2008
4-Chloro-3-methylphenol	ND	10		µg/L	1	1/9/2008
4-Chloroaniline	ND	10		µg/L	1	1/9/2008
2-Chloronaphthalene	ND	10		µg/L	1	1/9/2008
2-Chlorophenol	ND	10		µg/L	1	1/9/2008
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	1/9/2008
Chrysene	ND	10		µg/L	1	1/9/2008
Di-n-butyl phthalate	ND	10		µg/L	1	1/9/2008
Di-n-octyl phthalate	ND	10		µg/L	1	1/9/2008
Dibenz(a,h)anthracene	ND	10		µg/L	1	1/9/2008
Dibenzofuran	ND	10		µg/L	1	1/9/2008
1,2-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,3-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
1,4-Dichlorobenzene	ND	10		µg/L	1	1/9/2008
3,3'-Dichlorobenzidine	ND	10		µg/L	1	1/9/2008
Diethyl phthalate	ND	10		µg/L	1	1/9/2008
Dimethyl phthalate	ND	10		µg/L	1	1/9/2008
2,4-Dichlorophenol	ND	10		µg/L	1	1/9/2008
2,4-Dimethylphenol	ND	10		µg/L	1	1/9/2008
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	1/9/2008
2,4-Dinitrophenol	ND	20		µg/L	1	1/9/2008
2,4-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
2,6-Dinitrotoluene	ND	10		µg/L	1	1/9/2008
Fluoranthene	ND	10		µg/L	1	1/9/2008
Fluorene	ND	10		µg/L	1	1/9/2008
Hexachlorobenzene	ND	10		µg/L	1	1/9/2008
Hexachlorobutadiene	ND	10		µg/L	1	1/9/2008
Hexachlorocyclopentadiene	ND	10		µg/L	1	1/9/2008
Hexachloroethane	ND	10		µg/L	1	1/9/2008
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	1/9/2008
Isophorone	ND	10		µg/L	1	1/9/2008
2-Methylnaphthalene	ND	10		µg/L	1	1/9/2008
2-Methylphenol	ND	10		µg/L	1	1/9/2008
3+4-Methylphenol	ND	10		µg/L	1	1/9/2008
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodimethylamine	ND	10		µg/L	1	1/9/2008
N-Nitrosodiphenylamine	ND	10		µg/L	1	1/9/2008
Naphthalene	ND	10		µg/L	1	1/9/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-3C
Lab Order:	0801006	**Collection Date:**	12/31/2007 4:40:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-17	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitroaniline	ND	10		µg/L	1	1/9/2008
3-Nitroaniline	ND	10		µg/L	1	1/9/2008
4-Nitroaniline	ND	10		µg/L	1	1/9/2008
Nitrobenzene	ND	10		µg/L	1	1/9/2008
2-Nitrophenol	ND	10		µg/L	1	1/9/2008
4-Nitrophenol	ND	10		µg/L	1	1/9/2008
Pentachlorophenol	ND	10		µg/L	1	1/9/2008
Phenanthrene	ND	10		µg/L	1	1/9/2008
Phenol	ND	10		µg/L	1	1/9/2008
Pyrene	ND	10		µg/L	1	1/9/2008
Pyridine	ND	10		µg/L	1	1/9/2008
1,2,4-Trichlorobenzene	ND	10		µg/L	1	1/9/2008
2,4,5-Trichlorophenol	ND	10		µg/L	1	1/9/2008
2,4,6-Trichlorophenol	ND	10		µg/L	1	1/9/2008
Surr: 2,4,6-Tribromophenol	53.1	16.6-150		%REC	1	1/9/2008
Surr: 2-Fluorobiphenyl	87.9	19.6-134		%REC	1	1/9/2008
Surr: 2-Fluorophenol	46.5	9.54-113		%REC	1	1/9/2008
Surr: 4-Terphenyl-d14	72.0	22.7-145		%REC	1	1/9/2008
Surr: Nitrobenzene-d5	84.1	14.6-134		%REC	1	1/9/2008
Surr: Phenol-d5	36.4	10.7-80.3		%REC	1	1/9/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Toluene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Ethylbenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Naphthalene	ND	2.0		µg/L	1	1/8/2008 2:22:21 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/8/2008 2:22:21 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/8/2008 2:22:21 AM
Acetone	ND	10		µg/L	1	1/8/2008 2:22:21 AM
Bromobenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Bromochloromethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Bromoform	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Bromomethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
2-Butanone	ND	10		µg/L	1	1/8/2008 2:22:21 AM
Carbon disulfide	ND	10		µg/L	1	1/8/2008 2:22:21 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-3C
Lab Order:	0801006	**Collection Date:**	12/31/2007 4:40:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-17	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Chlorobenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Chloroethane	ND	2.0		µg/L	1	1/8/2008 2:22:21 AM
Chloroform	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Chloromethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/8/2008 2:22:21 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Dibromomethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/8/2008 2:22:21 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
2-Hexanone	ND	10		µg/L	1	1/8/2008 2:22:21 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/8/2008 2:22:21 AM
Methylene Chloride	ND	3.0		µg/L	1	1/8/2008 2:22:21 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Styrene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/8/2008 2:22:21 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	BW-3C
Lab Order:	0801006	**Collection Date:**	12/31/2007 4:40:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-17	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Trichlorofluoromethane	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/8/2008 2:22:21 AM
Vinyl chloride	ND	1.0		µg/L	1	1/8/2008 2:22:21 AM
Xylenes, Total	ND	1.5		µg/L	1	1/8/2008 2:22:21 AM
Surr: 1,2-Dichloroethane-d4	116	68.1-123		%REC	1	1/8/2008 2:22:21 AM
Surr: 4-Bromofluorobenzene	104	53.2-145		%REC	1	1/8/2008 2:22:21 AM
Surr: Dibromofluoromethane	110	68.5-119		%REC	1	1/8/2008 2:22:21 AM
Surr: Toluene-d8	116	64-131		%REC	1	1/8/2008 2:22:21 AM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	1500	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: **NSB**
pH	8.59	0.1		pH units	1	1/2/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP-2 Inlet
Lab Order:	0801006	**Collection Date:**	1/1/2008 12:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-18	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	150	10		mg/L	10	1/4/2008 6:43:32 AM
Motor Oil Range Organics (MRO)	ND	50		mg/L	10	1/4/2008 6:43:32 AM
Surr: DNOP	0	58-140	S	%REC	10	1/4/2008 6:43:32 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	2.6	1.0		mg/L	20	1/7/2008 2:23:45 PM
Surr: BFB	121	79.2-121		%REC	20	1/7/2008 2:23:45 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	130	5.0		µg/L	5	1/8/2008 3:21:02 AM
Toluene	260	5.0		µg/L	5	1/8/2008 3:21:02 AM
Ethylbenzene	44	5.0		µg/L	5	1/8/2008 3:21:02 AM
Methyl tert-butyl ether (MTBE)	5.2	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,2,4-Trimethylbenzene	170	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,3,5-Trimethylbenzene	47	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Naphthalene	250	100		µg/L	50	1/8/2008 2:11:20 PM
1-Methylnaphthalene	460	200		µg/L	50	1/8/2008 2:11:20 PM
2-Methylnaphthalene	750	200		µg/L	50	1/8/2008 2:11:20 PM
Acetone	ND	50		µg/L	5	1/8/2008 3:21:02 AM
Bromobenzene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Bromochloromethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Bromodichloromethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Bromoform	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Bromomethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
2-Butanone	ND	50		µg/L	5	1/8/2008 3:21:02 AM
Carbon disulfide	140	50		µg/L	5	1/8/2008 3:21:02 AM
Carbon Tetrachloride	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Chlorobenzene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Chloroethane	ND	10		µg/L	5	1/8/2008 3:21:02 AM
Chloroform	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Chloromethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
2-Chlorotoluene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
4-Chlorotoluene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
cis-1,2-DCE	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	1/8/2008 3:21:02 AM
Dibromochloromethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Dibromomethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP-2 Inlet
Lab Order:	0801006	**Collection Date:**	1/1/2008 12:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-18	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
1,4-Dichlorobenzene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Dichlorodifluoromethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,1-Dichloroethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,1-Dichloroethene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,2-Dichloropropane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,3-Dichloropropane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
2,2-Dichloropropane	ND	10		µg/L	5	1/8/2008 3:21:02 AM
1,1-Dichloropropene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Hexachlorobutadiene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
2-Hexanone	ND	50		µg/L	5	1/8/2008 3:21:02 AM
Isopropylbenzene	6.3	5.0		µg/L	5	1/8/2008 3:21:02 AM
4-Isopropyltoluene	7.0	5.0		µg/L	5	1/8/2008 3:21:02 AM
4-Methyl-2-pentanone	ND	50		µg/L	5	1/8/2008 3:21:02 AM
Methylene Chloride	ND	15		µg/L	5	1/8/2008 3:21:02 AM
n-Butylbenzene	44	5.0		µg/L	5	1/8/2008 3:21:02 AM
n-Propylbenzene	19	5.0		µg/L	5	1/8/2008 3:21:02 AM
sec-Butylbenzene	7.1	5.0		µg/L	5	1/8/2008 3:21:02 AM
Styrene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
tert-Butylbenzene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	1/8/2008 3:21:02 AM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
trans-1,2-DCE	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Trichloroethene (TCE)	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Trichlorofluoromethane	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
1,2,3-Trichloropropane	ND	10		µg/L	5	1/8/2008 3:21:02 AM
Vinyl chloride	ND	5.0		µg/L	5	1/8/2008 3:21:02 AM
Xylenes, Total	260	7.5		µg/L	5	1/8/2008 3:21:02 AM
Surr: 1,2-Dichloroethane-d4	112	68.1-123		%REC	5	1/8/2008 3:21:02 AM
Surr: 4-Bromofluorobenzene	109	53.2-145		%REC	5	1/8/2008 3:21:02 AM
Surr: Dibromofluoromethane	110	68.5-119		%REC	5	1/8/2008 3:21:02 AM
Surr: Toluene-d8	106	64-131		%REC	5	1/8/2008 3:21:02 AM
SM 2540C: TDS						Analyst: TAF
Total Dissolved Solids	2200	400		mg/L	1	1/3/2008

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP-1 Inlet
Lab Order:	0801006	**Collection Date:**	1/1/2008 11:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-19	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	91	10		mg/L	10	1/4/2008 7:10:57 AM
Motor Oil Range Organics (MRO)	ND	50		mg/L	10	1/4/2008 7:10:57 AM
Surr: DNOP	0	58-140	S	%REC	10	1/4/2008 7:10:57 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	2.2	0.50		mg/L	10	1/7/2008 3:23:46 PM
Surr: BFB	118	79.2-121		%REC	10	1/7/2008 3:23:46 PM
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	190	10		mg/L	100	1/9/2008 2:42:43 PM
Chloride	170	0.50		mg/L	5	1/3/2008 11:10:53 AM
Nitrogen, Nitrate (As N)	ND	0.50		mg/L	5	1/3/2008 11:10:53 AM
Phosphorus, Orthophosphate (As P)	ND	2.5	H	mg/L	5	1/3/2008 11:10:53 AM
Sulfate	730	10		mg/L	20	1/3/2008 9:26:28 AM
EPA METHOD 7470: MERCURY						Analyst: **SLB**
Mercury	0.00022	0.00020		mg/L	1	1/3/2008 3:35:29 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	1/12/2008 4:25:32 PM
Barium	0.067	0.010		mg/L	1	1/12/2008 4:25:32 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 4:25:32 PM
Calcium	45	0.50		mg/L	1	1/12/2008 4:25:32 PM
Chromium	0.010	0.0060		mg/L	1	1/12/2008 4:25:32 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 4:25:32 PM
Iron	4.1	0.50		mg/L	10	1/15/2008 12:27:58 PM
Lead	ND	0.0050		mg/L	1	1/12/2008 4:25:32 PM
Magnesium	14	0.50		mg/L	1	1/12/2008 4:25:32 PM
Manganese	0.11	0.0020		mg/L	1	1/12/2008 4:25:32 PM
Potassium	51	1.0		mg/L	1	1/12/2008 4:25:32 PM
Selenium	ND	0.050		mg/L	1	1/12/2008 4:25:32 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 4:25:32 PM
Sodium	530	5.0		mg/L	10	1/15/2008 12:27:58 PM
Uranium	ND	0.10		mg/L	1	1/12/2008 4:25:32 PM
Zinc	0.59	0.020		mg/L	1	1/12/2008 4:25:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	50		µg/L	1	1/10/2008
Acenaphthylene	ND	50		µg/L	1	1/10/2008
Aniline	ND	50		µg/L	1	1/10/2008
Anthracene	ND	50		µg/L	1	1/10/2008
Azobenzene	ND	50		µg/L	1	1/10/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP-1 Inlet
Lab Order:	0801006	**Collection Date:**	1/1/2008 11:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-19	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Benz(a)anthracene	ND	50		µg/L	1	1/10/2008
Benzo(a)pyrene	ND	50		µg/L	1	1/10/2008
Benzo(b)fluoranthene	ND	50		µg/L	1	1/10/2008
Benzo(g,h,i)perylene	ND	50		µg/L	1	1/10/2008
Benzo(k)fluoranthene	ND	50		µg/L	1	1/10/2008
Benzoic acid	140	100		µg/L	1	1/10/2008
Benzyl alcohol	ND	50		µg/L	1	1/10/2008
Bis(2-chloroethoxy)methane	ND	50		µg/L	1	1/10/2008
Bis(2-chloroethyl)ether	ND	50		µg/L	1	1/10/2008
Bis(2-chloroisopropyl)ether	ND	50		µg/L	1	1/10/2008
Bis(2-ethylhexyl)phthalate	ND	50		µg/L	1	1/10/2008
4-Bromophenyl phenyl ether	ND	50		µg/L	1	1/10/2008
Butyl benzyl phthalate	ND	50		µg/L	1	1/10/2008
Carbazole	ND	50		µg/L	1	1/10/2008
4-Chloro-3-methylphenol	ND	50		µg/L	1	1/10/2008
4-Chloroaniline	ND	50		µg/L	1	1/10/2008
2-Chloronaphthalene	ND	50		µg/L	1	1/10/2008
2-Chlorophenol	ND	50		µg/L	1	1/10/2008
4-Chlorophenyl phenyl ether	ND	50		µg/L	1	1/10/2008
Chrysene	ND	50		µg/L	1	1/10/2008
Di-n-butyl phthalate	ND	50		µg/L	1	1/10/2008
Di-n-octyl phthalate	ND	50		µg/L	1	1/10/2008
Dibenz(a,h)anthracene	ND	50		µg/L	1	1/10/2008
Dibenzofuran	ND	50		µg/L	1	1/10/2008
1,2-Dichlorobenzene	ND	50		µg/L	1	1/10/2008
1,3-Dichlorobenzene	ND	50		µg/L	1	1/10/2008
1,4-Dichlorobenzene	ND	50		µg/L	1	1/10/2008
3,3'-Dichlorobenzidine	ND	50		µg/L	1	1/10/2008
Diethyl phthalate	ND	50		µg/L	1	1/10/2008
Dimethyl phthalate	ND	50		µg/L	1	1/10/2008
2,4-Dichlorophenol	ND	50		µg/L	1	1/10/2008
2,4-Dimethylphenol	310	50		µg/L	1	1/10/2008
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	1/10/2008
2,4-Dinitrophenol	ND	100		µg/L	1	1/10/2008
2,4-Dinitrotoluene	ND	50		µg/L	1	1/10/2008
2,6-Dinitrotoluene	ND	50		µg/L	1	1/10/2008
Fluoranthene	ND	50		µg/L	1	1/10/2008
Fluorene	74	50		µg/L	1	1/10/2008
Hexachlorobenzene	ND	50		µg/L	1	1/10/2008
Hexachlorobutadiene	ND	50		µg/L	1	1/10/2008
Hexachlorocyclopentadiene	ND	50		µg/L	1	1/10/2008
Hexachloroethane	ND	50		µg/L	1	1/10/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP-1 Inlet
Lab Order:	0801006	**Collection Date:**	1/1/2008 11:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-19	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Indeno(1,2,3-cd)pyrene	ND	50		µg/L	1	1/10/2008
Isophorone	ND	50		µg/L	1	1/10/2008
2-Methylnaphthalene	690	50		µg/L	1	1/10/2008
2-Methylphenol	2200	500		µg/L	10	1/11/2008
3+4-Methylphenol	3500	500		µg/L	10	1/11/2008
N-Nitrosodi-n-propylamine	ND	50		µg/L	1	1/10/2008
N-Nitrosodimethylamine	ND	50		µg/L	1	1/10/2008
N-Nitrosodiphenylamine	ND	50		µg/L	1	1/10/2008
Naphthalene	240	50		µg/L	1	1/10/2008
2-Nitroaniline	ND	50		µg/L	1	1/10/2008
3-Nitroaniline	ND	50		µg/L	1	1/10/2008
4-Nitroaniline	ND	50		µg/L	1	1/10/2008
Nitrobenzene	ND	50		µg/L	1	1/10/2008
2-Nitrophenol	ND	50		µg/L	1	1/10/2008
4-Nitrophenol	ND	50		µg/L	1	1/10/2008
Pentachlorophenol	ND	50		µg/L	1	1/10/2008
Phenanthrene	210	50		µg/L	1	1/10/2008
Phenol	4100	500		µg/L	10	1/11/2008
Pyrene	ND	50		µg/L	1	1/10/2008
Pyridine	ND	50		µg/L	1	1/10/2008
1,2,4-Trichlorobenzene	ND	50		µg/L	1	1/10/2008
2,4,5-Trichlorophenol	ND	50		µg/L	1	1/10/2008
2,4,6-Trichlorophenol	ND	50		µg/L	1	1/10/2008
Surr: 2,4,6-Tribromophenol	55.0	16.6-150		%REC	1	1/10/2008
Surr: 2-Fluorobiphenyl	76.9	19.6-134		%REC	1	1/10/2008
Surr: 2-Fluorophenol	3.49	9.54-113	S	%REC	1	1/10/2008
Surr: 4-Terphenyl-d14	58.5	22.7-145		%REC	1	1/10/2008
Surr: Nitrobenzene-d5	92.8	14.6-134		%REC	1	1/10/2008
Surr: Phenol-d5	13.4	10.7-80.3		%REC	1	1/10/2008
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	130	50		µg/L	50	1/8/2008 2:41:47 PM
Toluene	220	50		µg/L	50	1/8/2008 2:41:47 PM
Ethylbenzene	39	2.0		µg/L	2	1/8/2008 4:19:50 AM
Methyl tert-butyl ether (MTBE)	5.3	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,2,4-Trimethylbenzene	83	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,3,5-Trimethylbenzene	22	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,2-Dichloroethane (EDC)	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,2-Dibromoethane (EDB)	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Naphthalene	200	100		µg/L	50	1/8/2008 2:41:47 PM
1-Methylnaphthalene	250	200		µg/L	50	1/8/2008 2:41:47 PM
2-Methylnaphthalene	390	200		µg/L	50	1/8/2008 2:41:47 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP-1 Inlet
Lab Order:	0801006	**Collection Date:**	1/1/2008 11:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-19	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Acetone	ND	20		µg/L	2	1/8/2008 4:19:50 AM
Bromobenzene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Bromochloromethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Bromodichloromethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Bromoform	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Bromomethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
2-Butanone	ND	20		µg/L	2	1/8/2008 4:19:50 AM
Carbon disulfide	32	20		µg/L	2	1/8/2008 4:19:50 AM
Carbon Tetrachloride	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Chlorobenzene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Chloroethane	ND	4.0		µg/L	2	1/8/2008 4:19:50 AM
Chloroform	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Chloromethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
2-Chlorotoluene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
4-Chlorotoluene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
cis-1,2-DCE	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
cis-1,3-Dichloropropene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,2-Dibromo-3-chloropropane	ND	4.0		µg/L	2	1/8/2008 4:19:50 AM
Dibromochloromethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Dibromomethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,2-Dichlorobenzene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,3-Dichlorobenzene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,4-Dichlorobenzene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Dichlorodifluoromethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,1-Dichloroethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,1-Dichloroethene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,2-Dichloropropane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,3-Dichloropropane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
2,2-Dichloropropane	ND	4.0		µg/L	2	1/8/2008 4:19:50 AM
1,1-Dichloropropene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Hexachlorobutadiene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
2-Hexanone	ND	20		µg/L	2	1/8/2008 4:19:50 AM
Isopropylbenzene	3.3	2.0		µg/L	2	1/8/2008 4:19:50 AM
4-Isopropyltoluene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
4-Methyl-2-pentanone	ND	20		µg/L	2	1/8/2008 4:19:50 AM
Methylene Chloride	ND	6.0		µg/L	2	1/8/2008 4:19:50 AM
n-Butylbenzene	11	2.0		µg/L	2	1/8/2008 4:19:50 AM
n-Propylbenzene	8.6	2.0		µg/L	2	1/8/2008 4:19:50 AM
sec-Butylbenzene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Styrene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
tert-Butylbenzene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,1,1,2-Tetrachloroethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	EP-1 Inlet
Lab Order:	0801006	**Collection Date:**	1/1/2008 11:30:00 AM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-19	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
1,1,2,2-Tetrachloroethane	ND	4.0		µg/L	2	1/8/2008 4:19:50 AM
Tetrachloroethene (PCE)	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
trans-1,2-DCE	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
trans-1,3-Dichloropropene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,2,3-Trichlorobenzene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,2,4-Trichlorobenzene	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,1,1-Trichloroethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,1,2-Trichloroethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Trichloroethene (TCE)	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Trichlorofluoromethane	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
1,2,3-Trichloropropane	ND	4.0		µg/L	2	1/8/2008 4:19:50 AM
Vinyl chloride	ND	2.0		µg/L	2	1/8/2008 4:19:50 AM
Xylenes, Total	220	3.0		µg/L	2	1/8/2008 4:19:50 AM
Surr: 1,2-Dichloroethane-d4	92.7	68.1-123		%REC	2	1/8/2008 4:19:50 AM
Surr: 4-Bromofluorobenzene	117	53.2-145		%REC	2	1/8/2008 4:19:50 AM
Surr: Dibromofluoromethane	109	68.5-119		%REC	2	1/8/2008 4:19:50 AM
Surr: Toluene-d8	108	64-131		%REC	2	1/8/2008 4:19:50 AM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: NSB
Specific Conductance	4400	0.010		µmhos/cm	1	1/2/2008
SM4500-H+B: PH						Analyst: NSB
pH	8.46	0.1		pH units	1	1/2/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	PW-3
Lab Order:	0801006	**Collection Date:**	1/1/2008 3:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-20	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SMP
Nitrate (As N)+Nitrite (As N)	ND	0.20		mg/L	1	1/3/2008 10:53:29 AM
EPA METHOD 7470: MERCURY						Analyst: SLB
Mercury	ND	0.00020		mg/L	1	1/3/2008 3:37:13 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Arsenic	ND	0.020		mg/L	1	1/12/2008 4:29:40 PM
Barium	0.014	0.010		mg/L	1	1/12/2008 4:29:40 PM
Cadmium	ND	0.0020		mg/L	1	1/12/2008 4:29:40 PM
Calcium	190	5.0		mg/L	10	1/15/2008 12:30:56 PM
Chromium	ND	0.0060		mg/L	1	1/12/2008 4:29:40 PM
Copper	ND	0.0060		mg/L	1	1/12/2008 4:29:40 PM
Iron	0.20	0.050		mg/L	1	1/12/2008 4:29:40 PM
Lead	0.0056	0.0050		mg/L	1	1/12/2008 4:29:40 PM
Magnesium	42	0.50		mg/L	1	1/12/2008 4:29:40 PM
Manganese	0.015	0.0020		mg/L	1	1/12/2008 4:29:40 PM
Potassium	1.2	1.0		mg/L	1	1/12/2008 4:29:40 PM
Selenium	ND	0.50		mg/L	10	1/15/2008 12:30:56 PM
Silver	ND	0.0050		mg/L	1	1/12/2008 4:29:40 PM
Sodium	15	0.50		mg/L	1	1/12/2008 4:29:40 PM
Uranium	ND	0.10		mg/L	1	1/12/2008 4:29:40 PM
Zinc	0.041	0.020		mg/L	1	1/12/2008 4:29:40 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	1/10/2008
Acenaphthylene	ND	10		µg/L	1	1/10/2008
Aniline	ND	10		µg/L	1	1/10/2008
Anthracene	ND	10		µg/L	1	1/10/2008
Azobenzene	ND	10		µg/L	1	1/10/2008
Benz(a)anthracene	ND	10		µg/L	1	1/10/2008
Benzo(a)pyrene	ND	10		µg/L	1	1/10/2008
Benzo(b)fluoranthene	ND	10		µg/L	1	1/10/2008
Benzo(g,h,i)perylene	ND	10		µg/L	1	1/10/2008
Benzo(k)fluoranthene	ND	10		µg/L	1	1/10/2008
Benzoic acid	ND	20		µg/L	1	1/10/2008
Benzyl alcohol	ND	10		µg/L	1	1/10/2008
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	1/10/2008
Bis(2-chloroethyl)ether	ND	10		µg/L	1	1/10/2008
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	1/10/2008
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	1/10/2008
4-Bromophenyl phenyl ether	ND	10		µg/L	1	1/10/2008
Butyl benzyl phthalate	ND	10		µg/L	1	1/10/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	PW-3
Lab Order:	0801006	**Collection Date:**	1/1/2008 3:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-20	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Carbazole	ND	10		µg/L	1	1/10/2008
4-Chloro-3-methylphenol	ND	10		µg/L	1	1/10/2008
4-Chloroaniline	ND	10		µg/L	1	1/10/2008
2-Chloronaphthalene	ND	10		µg/L	1	1/10/2008
2-Chlorophenol	ND	10		µg/L	1	1/10/2008
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	1/10/2008
Chrysene	ND	10		µg/L	1	1/10/2008
Di-n-butyl phthalate	ND	10		µg/L	1	1/10/2008
Di-n-octyl phthalate	ND	10		µg/L	1	1/10/2008
Dibenz(a,h)anthracene	ND	10		µg/L	1	1/10/2008
Dibenzofuran	ND	10		µg/L	1	1/10/2008
1,2-Dichlorobenzene	ND	10		µg/L	1	1/10/2008
1,3-Dichlorobenzene	ND	10		µg/L	1	1/10/2008
1,4-Dichlorobenzene	ND	10		µg/L	1	1/10/2008
3,3'-Dichlorobenzidine	ND	10		µg/L	1	1/10/2008
Diethyl phthalate	ND	10		µg/L	1	1/10/2008
Dimethyl phthalate	ND	10		µg/L	1	1/10/2008
2,4-Dichlorophenol	ND	10		µg/L	1	1/10/2008
2,4-Dimethylphenol	16	10		µg/L	1	1/10/2008
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	1/10/2008
2,4-Dinitrophenol	ND	20		µg/L	1	1/10/2008
2,4-Dinitrotoluene	ND	10		µg/L	1	1/10/2008
2,6-Dinitrotoluene	ND	10		µg/L	1	1/10/2008
Fluoranthene	ND	10		µg/L	1	1/10/2008
Fluorene	ND	10		µg/L	1	1/10/2008
Hexachlorobenzene	ND	10		µg/L	1	1/10/2008
Hexachlorobutadiene	ND	10		µg/L	1	1/10/2008
Hexachlorocyclopentadiene	ND	10		µg/L	1	1/10/2008
Hexachloroethane	ND	10		µg/L	1	1/10/2008
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	1/10/2008
Isophorone	ND	10		µg/L	1	1/10/2008
2-Methylnaphthalene	32	10		µg/L	1	1/10/2008
2-Methylphenol	210	10		µg/L	1	1/10/2008
3+4-Methylphenol	360	50		µg/L	5	1/11/2008
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	1/10/2008
N-Nitrosodimethylamine	ND	10		µg/L	1	1/10/2008
N-Nitrosodiphenylamine	ND	10		µg/L	1	1/10/2008
Naphthalene	ND	10		µg/L	1	1/10/2008
2-Nitroaniline	ND	10		µg/L	1	1/10/2008
3-Nitroaniline	ND	10		µg/L	1	1/10/2008
4-Nitroaniline	ND	10		µg/L	1	1/10/2008
Nitrobenzene	ND	10		µg/L	1	1/10/2008

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	PW-3
Lab Order:	0801006	**Collection Date:**	1/1/2008 3:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-20	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2-Nitrophenol	ND	10		µg/L	1	1/10/2008
4-Nitrophenol	ND	10		µg/L	1	1/10/2008
Pentachlorophenol	ND	10		µg/L	1	1/10/2008
Phenanthrene	17	10		µg/L	1	1/10/2008
Phenol	800	50		µg/L	5	1/11/2008
Pyrene	ND	10		µg/L	1	1/10/2008
Pyridine	ND	10		µg/L	1	1/10/2008
1,2,4-Trichlorobenzene	ND	10		µg/L	1	1/10/2008
2,4,5-Trichlorophenol	ND	10		µg/L	1	1/10/2008
2,4,6-Trichlorophenol	ND	10		µg/L	1	1/10/2008
Surr: 2,4,6-Tribromophenol	98.0	16.6-150		%REC	1	1/10/2008
Surr: 2-Fluorobiphenyl	128	19.6-134		%REC	1	1/10/2008
Surr: 2-Fluorophenol	76.5	9.54-113		%REC	1	1/10/2008
Surr: 4-Terphenyl-d14	117	22.7-145		%REC	1	1/10/2008
Surr: Nitrobenzene-d5	106	14.6-134		%REC	1	1/10/2008
Surr: Phenol-d5	64.3	10.7-80.3		%REC	1	1/10/2008
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Toluene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Ethylbenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Naphthalene	ND	2.0		µg/L	1	1/8/2008 3:37:39 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/8/2008 3:37:39 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/8/2008 3:37:39 PM
Acetone	ND	10		µg/L	1	1/8/2008 3:37:39 PM
Bromobenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Bromochloromethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Bromoform	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Bromomethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
2-Butanone	ND	10		µg/L	1	1/8/2008 3:37:39 PM
Carbon disulfide	ND	10		µg/L	1	1/8/2008 3:37:39 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Chlorobenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Chloroethane	ND	2.0		µg/L	1	1/8/2008 3:37:39 PM
Chloroform	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Chloromethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	PW-3
Lab Order:	0801006	**Collection Date:**	1/1/2008 3:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-20	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
2-Chlorotoluene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/8/2008 3:37:39 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Dibromomethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/8/2008 3:37:39 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
2-Hexanone	ND	10		µg/L	1	1/8/2008 3:37:39 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/8/2008 3:37:39 PM
Methylene Chloride	ND	3.0		µg/L	1	1/8/2008 3:37:39 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Styrene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/8/2008 3:37:39 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/8/2008 3:37:39 PM
Vinyl chloride	ND	1.0		µg/L	1	1/8/2008 3:37:39 PM
Xylenes, Total	ND	1.5		µg/L	1	1/8/2008 3:37:39 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Jan-08*

CLIENT:	Western Refining Southwest, Gallup	**Client Sample ID:**	PW-3
Lab Order:	0801006	**Collection Date:**	1/1/2008 3:30:00 PM
Project:	2007 Annual GW Samples	**Date Received:**	1/2/2008
Lab ID:	0801006-20	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Surr: 1,2-Dichloroethane-d4	110	68.1-123		%REC	1	1/8/2008 3:37:39 PM
Surr: 4-Bromofluorobenzene	104	53.2-145		%REC	1	1/8/2008 3:37:39 PM
Surr: Dibromofluoromethane	99.7	68.5-119		%REC	1	1/8/2008 3:37:39 PM
Surr: Toluene-d8	114	64-131		%REC	1	1/8/2008 3:37:39 PM

Qualifiers:

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

Anatek Labs, Inc.

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504 E Sprague Ste. D • Spokane WA 99202 • (509) 838-3999 • Fax (509) 838-4433 • email spokane@anateklabs.com

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

Batch #: 080104018
Project Name: 0801006

Analytical Results Report

Sample Number 080104018-001 **Sampling Date** 1/1/2008 **Date/Time Received** 1/4/2008 11:00 AM
Client Sample ID 0801006-10G / SMW-2 **Sampling Time** 10:30 AM
Matrix: Water

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Antimony	ND	mg/L	0.001	1/8/2008	DMB	EPA 200.8	

Sample Number 080104018-002 **Sampling Date** 1/1/2008 **Date/Time Received** 1/4/2008 11:00 AM
Client Sample ID 0801006-10H / SMW-2 **Sampling Time** 10:30 AM
Matrix: Water

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Dissolved Antimony	ND	mg/L	0.001	1/8/2008	DMB	EPA 200.8	

Sample Number 080104018-003 **Sampling Date** 12/29/2007 **Date/Time Received** 1/4/2008 11:00 AM
Client Sample ID 0801006-11G / SMW-4 **Sampling Time** 10:15 AM
Matrix: Water

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Antimony	ND	mg/L	0.001	1/8/2008	DMB	EPA 200.8	

Comments:

Anatek Labs, Inc.

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

Batch #: 080104018
Project Name: 0801006

Analytical Results Report

Sample Number	080104018-004	**Sampling Date**	12/29/2007	**Date/Time Received**	1/4/2008	11:00 AM
Client Sample ID	0801006-11H / SMW-4	**Sampling Time**	10:15 AM			
Matrix:	Water					

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Dissolved Antimony	ND	mg/L	0.001	1/8/2008	DMB	EPA 200.8	

uthorized Signature

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

Comments:

Anatek Labs, Inc.

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

Batch #: 080104017
Project Name: 0801006

Analytical Results Report

Sample Number 080104017-001 **Sampling Date** 12/29/2007 **Date/Time Received** 1/4/2008 11:00 AM
Client Sample ID 0801006-07F / MW-1 **Sampling Time** 9:10 AM
Matrix: Water

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	1/9/2008	ETL	SM4500CNE	

Sample Number 080104017-002 **Sampling Date** 12/29/2007 **Date/Time Received** 1/4/2008 11:00 AM
Client Sample ID 0801006-08F / MW-4 **Sampling Time** 4:00 PM
Matrix: Water

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	1/9/2008	ETL	SM4500CNE	

Sample Number 080104017-003 **Sampling Date** 12/29/2007 **Date/Time Received** 1/4/2008 11:00 AM
Client Sample ID 0801006-09F / MW-5 **Sampling Time** 12:45 PM
Matrix: Water

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	1/9/2008	ETL	SM4500CNE	

Sample Number 080104017-005 **Sampling Date** 1/1/2008 **Date/Time Received** 1/4/2008 11:00 AM
Client Sample ID 0801006-10F / SMW-2 **Sampling Time** 10:30 AM
Matrix: Water

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	0.0651	mg/L	0.01	1/9/2008	ETL	SM4500CNE	

Comments:

Anatek Labs, Inc.

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

Batch #: 080104017
Project Name: 0801006

Analytical Results Report

Sample Number 080104017-007 **Sampling Date** 12/29/2007 **Date/Time Received** 1/4/2008 11:00 AM
Client Sample ID 0801006-11F / SMW-4 **Sampling Time** 10:15 AM
Matrix: Water

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	1/9/2008	ETL	SM4500CNE	

Sample Number 080104017-008 **Sampling Date** 1/1/2008 **Date/Time Received** 1/4/2008 11:00 AM
Client Sample ID 0801006-20E / PW-3 **Sampling Time** 3:30 PM
Matrix: Water

Parameter	Result	Units	PQL	Analysis Date	Analyst	Method	Qualifier
Cyanide	ND	mg/L	0.01	1/9/2008	ETL	SM4500CNE	

Authorized Signature John W. Cobb

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

Comments:

ASSAIGAI ANALYTICAL LABORATORIES, INC. A WOMAN OWNED SMALL BUSINESS
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6400 Airport, Bldg. B, Suite J • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result Is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0801006**
Order: **08010028** **HAL03** Receipt: **01-03-08**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0801006-18C EP-2 INLET*** Collected: *01-01-08 12:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
08010028-001A		EPA 410.1 Chemical Oxygen Demand					By:	NJL		
WCOD07078	WC.2008.60.6	C-004	Chemical Oxygen Demand	1000	mg/L	1	10		01-08-08	01-09-08

Sample: ***0801006-18D EP-2 INLET*** Collected: *01-01-08 12:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
08010028-002A		EPA 405.1 Biochemical Oxygen Demand					By:	MJN		
BOD08002	WC.2008.58.6	10-26-4	Biochemical Oxygen Demand	798	mg/L	1	2		01-03-08	01-08-08

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

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QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples
Work Order: 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: 0801006-07c msd		*MSD*			Batch ID:	**R26784**	Analysis Date:	1/3/2008 10:47:17 PM	
Fluoride	1.427	mg/L	0.10	107	80	120	0	20	
Phosphorus, Orthophosphate (As P)	5.286	mg/L	0.50	106	80	120	0	20	
Sample ID: 0801006-12c msd		*MSD*			Batch ID:	**R26784**	Analysis Date:	1/3/2008 11:22:06 PM	
Fluoride	3.014	mg/L	0.10	85.6	80	120	0.116	20	
Phosphorus, Orthophosphate (As P)	5.333	mg/L	0.50	107	80	120	0.266	20	
Sample ID: MB		*MBLK*			Batch ID:	**R26784**	Analysis Date:	1/3/2008 6:32:34 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R26794**	Analysis Date:	1/4/2008 5:18:01 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R26827**	Analysis Date:	1/8/2008 5:40:37 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R26844**	Analysis Date:	1/9/2008 3:17:32 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS		*LCS*			Batch ID:	**R26784**	Analysis Date:	1/3/2008 8:51:38 AM	
Fluoride	0.5463	mg/L	0.10	109	90	110			
Chloride	4.906	mg/L	0.10	98.1	90	110			
Nitrogen, Nitrate (As N)	2.465	mg/L	0.10	98.6	90	110			
Nitrate (As N)+Nitrite (As N)	3.483	mg/L	0.20	99.5	90	110			
Phosphorus, Orthophosphate (As P)	4.853	mg/L	0.50	97.1	90	110			
Sulfate	9.774	mg/L	0.50	97.7	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26794**	Analysis Date:	1/4/2008 5:35:26 AM	
Fluoride	0.5408	mg/L	0.10	108	90	110			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: LCS		*LCS*			Batch ID:	**R26794**	Analysis Date:	1/4/2008 5:35:26 AM	
Chloride	5.147	mg/L	0.10	103	90	110			
Nitrogen, Nitrate (As N)	2.574	mg/L	0.10	103	90	110			
Nitrate (As N)+Nitrite (As N)	3.602	mg/L	0.20	103	90	110			
Phosphorus, Orthophosphate (As P)	5.187	mg/L	0.50	104	90	110			
Sulfate	10.34	mg/L	0.50	103	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26827**	Analysis Date:	1/8/2008 6:28:28 AM	
Fluoride	0.5250	mg/L	0.10	105	90	110			
Chloride	4.865	mg/L	0.10	97.3	90	110			
Nitrogen, Nitrate (As N)	2.476	mg/L	0.10	99.0	90	110			
Nitrate (As N)+Nitrite (As N)	3.512	mg/L	0.20	100	90	110			
Phosphorus, Orthophosphate (As P)	4.836	mg/L	0.50	96.7	90	110			
Sulfate	9.701	mg/L	0.50	97.0	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26844**	Analysis Date:	1/9/2008 3:34:57 PM	
Chloride	5.388	mg/L	0.10	108	90	110			
Nitrate (As N)+Nitrite (As N)	3.837	mg/L	0.20	110	90	110			
Phosphorus, Orthophosphate (As P)	5.465	mg/L	0.50	109	90	110			
Sample ID: 0801006-07c ms		*MS*			Batch ID:	**R26784**	Analysis Date:	1/3/2008 10:29:53 PM	
Fluoride	1.399	mg/L	0.10	102	80	120			
Phosphorus, Orthophosphate (As P)	5.251	mg/L	0.50	105	80	120			
Sample ID: 0801006-12c ms		*MS*			Batch ID:	**R26784**	Analysis Date:	1/3/2008 11:04:42 PM	
Fluoride	3.011	mg/L	0.10	84.9	80	120			
Phosphorus, Orthophosphate (As P)	5.319	mg/L	0.50	106	80	120			
Method: EPA Method 504.1: EDB									
Sample ID: MB-14818		*MBLK*			Batch ID:	**14818**	Analysis Date:	1/8/2008 12:57:04 PM	
1,2-Dibromoethane	ND	µg/L	0.010						
Sample ID: LCS-14818		*LCS*			Batch ID:	**14818**	Analysis Date:	1/8/2008 1:15:12 PM	
1,2-Dibromoethane	0.1100	µg/L	0.010	110	70	130			
Sample ID: LCSD-14818		*LCSD*			Batch ID:	**14818**	Analysis Date:	1/8/2008 1:33:23 PM	
1,2-Dibromoethane	0.1200	µg/L	0.010	120	70	130	8.70	13.5	
Method: EPA Method 8015B: Diesel Range									
Sample ID: MB-14780		*MBLK*			Batch ID:	**14780**	Analysis Date:	1/3/2008 8:36:20 AM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-14780		*LCS*			Batch ID:	**14780**	Analysis Date:	1/3/2008 9:06:59 AM	
Diesel Range Organics (DRO)	5.571	mg/L	1.0	111	74	157			
Sample ID: LCSD-14780		*LCSD*			Batch ID:	**14780**	Analysis Date:	1/3/2008 9:37:43 AM	
Diesel Range Organics (DRO)	6.056	mg/L	1.0	121	74	157	8.33	23	

Qualifiers:

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R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R26789**	Analysis Date:	1/4/2008 10:03:32 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 5ML RB-B		*MBLK*			Batch ID:	**R26807**	Analysis Date:	1/7/2008 10:22:44 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS-R		*LCS*			Batch ID:	**R26807**	Analysis Date:	1/7/2008 11:53:01 AM	
Gasoline Range Organics (GRO)	0.4696	mg/L	0.050	88.7	80	115			
Sample ID: 2.5UG GRO LCSD-R		*LCSD*			Batch ID:	**R26807**	Analysis Date:	1/7/2008 12:23:10 PM	
Gasoline Range Organics (GRO)	0.4606	mg/L	0.050	86.9	80	115	1.94	8.39	

alifiers:

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QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-14786		*MBLK*			Batch ID:	14786	Analysis Date:		1/9/2008
Acenaphthene	ND	µg/L	10						
Acenaphthylene	ND	µg/L	10						
Aniline	ND	µg/L	10						
Anthracene	ND	µg/L	10						
Azobenzene	ND	µg/L	10						
Benz(a)anthracene	ND	µg/L	10						
Benzo(a)pyrene	ND	µg/L	10						
Benzo(b)fluoranthene	ND	µg/L	10						
Benzo(g,h,i)perylene	ND	µg/L	10						
Benzo(k)fluoranthene	ND	µg/L	10						
Benzoic acid	ND	µg/L	20						
Benzyl alcohol	ND	µg/L	10						
Bis(2-chloroethoxy)methane	ND	µg/L	10						
Bis(2-chloroethyl)ether	ND	µg/L	10						
Bis(2-chloroisopropyl)ether	ND	µg/L	10						
Bis(2-ethylhexyl)phthalate	ND	µg/L	10						
4-Bromophenyl phenyl ether	ND	µg/L	10						
Butyl benzyl phthalate	ND	µg/L	10						
·rbazole	ND	µg/L	10						
Chloro-3-methylphenol	ND	µg/L	10						
4-Chloroaniline	ND	µg/L	10						
2-Chloronaphthalene	ND	µg/L	10						
2-Chlorophenol	ND	µg/L	10						
4-Chlorophenyl phenyl ether	ND	µg/L	10						
Chrysene	ND	µg/L	10						
Di-n-butyl phthalate	ND	µg/L	10						
Di-n-octyl phthalate	ND	µg/L	10						
Dibenz(a,h)anthracene	ND	µg/L	10						
Dibenzofuran	ND	µg/L	10						
1,2-Dichlorobenzene	ND	µg/L	10						
1,3-Dichlorobenzene	ND	µg/L	10						
1,4-Dichlorobenzene	ND	µg/L	10						
3,3'-Dichlorobenzidine	ND	µg/L	10						
Diethyl phthalate	ND	µg/L	10						
Dimethyl phthalate	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	10						
2,4-Dinitrophenol	ND	µg/L	20						
2,4-Dinitrotoluene	ND	µg/L	10						
2,6-Dinitrotoluene	ND	µg/L	10						
Fluoranthene	ND	µg/L	10						
Fluorene	ND	µg/L	10						
Hexachlorobenzene	ND	µg/L	10						

ıalifiers:

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R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-14786		*MBLK*			Batch ID:	14786	Analysis Date:		1/9/2008
Hexachlorobutadiene	ND	µg/L	10						
Hexachlorocyclopentadiene	ND	µg/L	10						
Hexachloroethane	ND	µg/L	10						
Indeno(1,2,3-cd)pyrene	ND	µg/L	10						
Isophorone	ND	µg/L	10						
2-Methylnaphthalene	ND	µg/L	10						
2-Methylphenol	ND	µg/L	10						
3+4-Methylphenol	ND	µg/L	10						
N-Nitrosodi-n-propylamine	ND	µg/L	10						
N-Nitrosodimethylamine	ND	µg/L	10						
N-Nitrosodiphenylamine	ND	µg/L	10						
Naphthalene	ND	µg/L	10						
2-Nitroaniline	ND	µg/L	10						
3-Nitroaniline	ND	µg/L	10						
4-Nitroaniline	ND	µg/L	10						
Nitrobenzene	ND	µg/L	10						
2-Nitrophenol	ND	µg/L	10						
4-Nitrophenol	ND	µg/L	10						
ntachlorophenol	ND	µg/L	10						
nenanthrene	ND	µg/L	10						
Phenol	ND	µg/L	10						
Pyrene	ND	µg/L	10						
Pyridine	ND	µg/L	10						
1,2,4-Trichlorobenzene	ND	µg/L	10						
2,4,5-Trichlorophenol	ND	µg/L	10						
2,4,6-Trichlorophenol	ND	µg/L	10						
Sample ID: lcs-14786		*LCS*			Batch ID:	14786	Analysis Date:		1/9/2008
Acenaphthene	93.72	µg/L	10	93.7	11	123			
4-Chloro-3-methylphenol	183.7	µg/L	10	91.9	15.4	119			
2-Chlorophenol	151.8	µg/L	10	75.9	12.2	122			
1,4-Dichlorobenzene	62.28	µg/L	10	62.3	16.9	100			
2,4-Dinitrotoluene	94.04	µg/L	10	94.0	13	138			
N-Nitrosodi-n-propylamine	78.32	µg/L	10	78.3	9.93	122			
4-Nitrophenol	127.5	µg/L	10	63.7	12.5	87.4			
Pentachlorophenol	173.0	µg/L	10	86.5	3.55	114			
Phenol	88.98	µg/L	10	44.5	7.53	73.1			
Pyrene	94.74	µg/L	10	94.7	12.6	140			
1,2,4-Trichlorobenzene	60.80	µg/L	10	60.8	17.4	98.7			
Sample ID: LCSD-14786		*LCSD*			Batch ID:	14786	Analysis Date:		1/9/2008
Acenaphthene	88.34	µg/L	10	88.3	11	123	5.91	30.5	
4-Chloro-3-methylphenol	173.9	µg/L	10	87.0	15.4	119	5.48	28.6	
2-Chlorophenol	172.6	µg/L	10	86.3	12.2	122	12.8	107	
1,4-Dichlorobenzene	73.58	µg/L	10	73.6	16.9	100	16.6	62.1	
2,4-Dinitrotoluene	85.26	µg/L	10	85.3	13	138	9.79	14.7	

ualifiers:

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QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: LCSD-14786		*LCSD*			Batch ID:	**14786**	Analysis Date:		1/9/2008
N-Nitrosodi-n-propylamine	89.10	µg/L	10	89.1	9.93	122	12.9	30.3	
4-Nitrophenol	88.32	µg/L	10	44.2	12.5	87.4	36.3	36.3	
Pentachlorophenol	144.7	µg/L	10	72.3	3.55	114	17.8	49	
Phenol	102.3	µg/L	10	51.2	7.53	73.1	13.9	52.4	
Pyrene	81.66	µg/L	10	81.7	12.6	140	14.8	16.3	
1,2,4-Trichlorobenzene	69.76	µg/L	10	69.8	17.4	98.7	13.7	36.4	
Method: EPA Method 7470: Mercury									
Sample ID: 0801006-20C MSD		*MSD*			Batch ID:	**14781**	Analysis Date:		1/3/2008 3:40:42 PM
Mercury	0.004811	mg/L	0.00020	96.2	75	125	1.01	20	
Sample ID: MB-14781		*MBLK*			Batch ID:	**14781**	Analysis Date:		1/3/2008 3:03:04 PM
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-14781		*LCS*			Batch ID:	**14781**	Analysis Date:		1/3/2008 3:04:49 PM
Mercury	0.005029	mg/L	0.00020	101	80	120			
Sample ID: 0801006-20C MS		*MS*			Batch ID:	**14781**	Analysis Date:		1/3/2008 3:38:57 PM
Mercury	0.004860	mg/L	0.00020	97.2	75	125			
Method: EPA Method 6010B: Dissolved Metals									
mple ID: MB		*MBLK*			Batch ID:	**R26893**	Analysis Date:		1/14/2008 8:17:51 AM
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Cadmium	ND	mg/L	0.0020						
Calcium	ND	mg/L	1.0						
Chromium	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Selenium	ND	mg/L	0.050						
Silver	ND	mg/L	0.0050						
Sodium	ND	mg/L	1.0						
Sample ID: LCS		*LCS*			Batch ID:	**R26893**	Analysis Date:		1/14/2008 8:20:54 AM
Arsenic	0.4681	mg/L	0.020	93.6	80	120			
Barium	0.4717	mg/L	0.020	94.3	80	120			
Cadmium	0.4757	mg/L	0.0020	95.1	80	120			
Calcium	52.00	mg/L	1.0	103	80	120			
Chromium	0.4795	mg/L	0.0060	95.9	80	120			
Lead	0.4631	mg/L	0.0050	92.6	80	120			
Magnesium	51.75	mg/L	1.0	102	80	120			
Potassium	55.16	mg/L	1.0	100	80	120			
Selenium	0.4619	mg/L	0.050	92.4	80	120			
Silver	0.4701	mg/L	0.0050	94.0	80	120			
Sodium	54.97	mg/L	1.0	109	80	120			

ualifiers:

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R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples
Work Order: 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 6010B: Total Recoverable Metals									
Sample ID: 0801006-17D MSD		*MSD*			Batch ID:	14784	Analysis Date:	1/12/2008 4:55:47 PM	
Arsenic	0.5601	mg/L	0.020	112	75	125	2.22	20	
Barium	0.5957	mg/L	0.010	106	75	125	2.84	20	
Cadmium	0.5464	mg/L	0.0020	109	75	125	1.76	20	
Calcium	59.40	mg/L	0.50	110	75	125	2.33	20	
Chromium	0.5397	mg/L	0.0060	107	75	125	1.63	20	
Copper	0.5728	mg/L	0.0060	115	75	125	1.90	20	
Iron	0.7385	mg/L	0.050	121	75	125	3.82	20	
Lead	0.5152	mg/L	0.0050	103	75	125	2.36	20	
Magnesium	57.76	mg/L	0.50	114	75	125	2.35	20	
Manganese	0.5447	mg/L	0.0020	106	75	125	1.96	20	
Potassium	60.60	mg/L	1.0	119	75	125	3.46	20	
Selenium	0.5308	mg/L	0.050	106	75	125	0.661	20	
Silver	0.5325	mg/L	0.0050	107	75	125	2.10	20	
Uranium	0.4989	mg/L	0.10	99.8	75	125	1.27	20	
Zinc	0.5314	mg/L	0.020	105	75	125	2.34	20	
Sample ID: MB-14784		*MBLK*			Batch ID:	14784	Analysis Date:	1/12/2008 3:13:23 PM	
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.010						
Cadmium	ND	mg/L	0.0020						
Calcium	ND	mg/L	0.50						
Chromium	ND	mg/L	0.0060						
Copper	ND	mg/L	0.0060						
Iron	ND	mg/L	0.050						
Lead	ND	mg/L	0.0050						
Magnesium	ND	mg/L	0.50						
Manganese	ND	mg/L	0.0020						
Nickel	ND	mg/L	0.010						
Potassium	ND	mg/L	1.0						
Selenium	ND	mg/L	0.050						
Silver	ND	mg/L	0.0050						
Sodium	ND	mg/L	0.50						
Uranium	ND	mg/L	0.10						
Zinc	ND	mg/L	0.020						
Sample ID: LCS-14784		*LCS*			Batch ID:	14784	Analysis Date:	1/12/2008 3:16:26 PM	
Arsenic	0.5270	mg/L	0.020	105	80	120			
Barium	0.5149	mg/L	0.010	103	80	120			
Cadmium	0.5300	mg/L	0.0020	106	80	120			
Calcium	52.93	mg/L	0.50	106	80	120			
Chromium	0.5298	mg/L	0.0060	106	80	120			
Copper	0.5290	mg/L	0.0060	106	80	120			
Iron	0.5332	mg/L	0.050	107	80	120			
Lead	0.5207	mg/L	0.0050	104	80	120			
Magnesium	54.06	mg/L	0.50	108	80	120			
Manganese	0.5153	mg/L	0.0020	103	80	120			

Qualifiers:

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R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 6010B: Total Recoverable Metals									
Sample ID: LCS-14784		*LCS*			Batch ID:	**14784**	Analysis Date:	1/12/2008 3:16:26 PM	
Nickel	0.4995	mg/L	0.010	99.9	80	120			
Potassium	57.07	mg/L	1.0	114	80	120			
Selenium	0.5506	mg/L	0.050	110	80	120			
Silver	0.5213	mg/L	0.0050	104	80	120			
Sodium	57.38	mg/L	0.50	115	80	120			
Uranium	0.4905	mg/L	0.10	98.1	80	120			
Zinc	0.5194	mg/L	0.020	104	80	120			
Sample ID: 0801006-17D MS		*MS*			Batch ID:	**14784**	Analysis Date:	1/12/2008 4:51:30 PM	
Arsenic	0.5726	mg/L	0.020	115	75	125			
Barium	0.6129	mg/L	0.010	109	75	125			
Cadmium	0.5561	mg/L	0.0020	111	75	125			
Calcium	60.80	mg/L	0.50	113	75	125			
Chromium	0.5486	mg/L	0.0060	109	75	125			
Copper	0.5837	mg/L	0.0060	117	75	125			
Iron	0.7109	mg/L	0.050	115	75	125			
Lead	0.5274	mg/L	0.0050	105	75	125			
Magnesium	59.13	mg/L	0.50	117	75	125			
Manganese	0.5555	mg/L	0.0020	108	75	125			
ssium	62.74	mg/L	1.0	123	75	125			
Selenium	0.5273	mg/L	0.050	105	75	125			
Silver	0.5438	mg/L	0.0050	109	75	125			
Uranium	0.5053	mg/L	0.10	101	75	125			
Zinc	0.5440	mg/L	0.020	107	75	125			
Method: SM 2540C: TDS									
Sample ID: MB-14788		*MBLK*			Batch ID:	**14788**	Analysis Date:	1/3/2008	
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-14788		*LCS*			Batch ID:	**14788**	Analysis Date:	1/3/2008	
Total Dissolved Solids	1020	mg/L	20	101	80	120			

Qualifiers:

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R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 0801006-07a msd		*MSD*			Batch ID:	**R26808**	Analysis Date:	1/7/2008 11:32:50 PM	
Benzene	21.99	µg/L	1.0	110	72.4	126	3.60	15	
Toluene	20.87	µg/L	1.0	104	79.2	115	2.75	15	
Chlorobenzene	21.00	µg/L	1.0	105	83.1	111	0.295	15	
1,1-Dichloroethene	24.46	µg/L	1.0	122	81.4	122	2.06	17.8	S
Trichloroethene (TCE)	21.26	µg/L	1.0	106	64.4	118	2.06	19.8	
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26808**	Analysis Date:	1/7/2008 8:54:19 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26808**	Analysis Date:	1/7/2008 8:54:19 AM	
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
is-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26826**	Analysis Date:	1/8/2008 9:58:50 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26826**	Analysis Date:	1/8/2008 9:58:50 AM	
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26826**	Analysis Date:	1/8/2008 9:58:50 AM	
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R26863**	Analysis Date:	1/10/2008 10:31:12 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R26863**	Analysis Date:	1/10/2008 10:31:12 AM	
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
trachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs-b		*LCS*			Batch ID:	**R26808**	Analysis Date:	1/7/2008 12:33:47 PM	
Benzene	22.83	µg/L	1.0	114	72.4	126			
Toluene	22.03	µg/L	1.0	110	79.2	115			
Chlorobenzene	21.50	µg/L	1.0	107	83.1	111			
1,1-Dichloroethene	25.67	µg/L	1.0	128	81.4	122			S
Trichloroethene (TCE)	22.86	µg/L	1.0	114	64.4	118			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26826**	Analysis Date:	1/8/2008 12:13:56 PM	
Benzene	20.80	µg/L	1.0	104	72.4	126			
Toluene	20.50	µg/L	1.0	102	79.2	115			
Chlorobenzene	21.12	µg/L	1.0	106	83.1	111			
1,1-Dichloroethene	23.99	µg/L	1.0	120	81.4	122			
Trichloroethene (TCE)	18.82	µg/L	1.0	94.1	64.4	118			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26863**	Analysis Date:	1/10/2008 12:14:39 PM	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Gallup
Project: 2007 Annual GW Samples **Work Order:** 0801006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26863**	Analysis Date:	1/10/2008 12:14:39 PM	
Benzene	19.22	µg/L	1.0	96.1	72.4	126			
Toluene	18.05	µg/L	1.0	90.2	79.2	115			
Chlorobenzene	19.27	µg/L	1.0	96.4	83.1	111			
1,1-Dichloroethene	21.56	µg/L	1.0	108	81.4	122			
Trichloroethene (TCE)	19.03	µg/L	1.0	95.2	64.4	118			
Sample ID: 0801006-07a ms		*MS*			Batch ID:	**R26808**	Analysis Date:	1/7/2008 11:04:34 PM	
Benzene	22.80	µg/L	1.0	114	72.4	126			
Toluene	21.45	µg/L	1.0	107	79.2	115			
Chlorobenzene	21.06	µg/L	1.0	105	83.1	111			
1,1-Dichloroethene	24.96	µg/L	1.0	125	81.4	122			S
Trichloroethene (TCE)	21.70	µg/L	1.0	109	64.4	118			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date Received: 1/2/2008

Work Order Number 0801006

Received by: AMF

Sample ID labels checked by AS (Initials)

Checklist completed by: Janye Thomas (Signature) 1/2/08 (Date)

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	7°	<6° C *Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: Added 1ml HNO_3 to samples SMW-2 & BW-2B for acceptable ph. AS ~~1-2~~ 1-2-08
Sample OW-11 had frozen 1 hr amb. and 500 ml p. pl. upon arrival. Can't run sample for 8270, anions, ph, conductivity. TS 1/2/08

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other: 1 of 4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: 2007 Annual Groundwater Sampler
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 7°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3		HEAL No. 0801006	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Gen Chem	WQCC Metals Total			Air Bubbles or Headspace (Y or N)
12-27-07	0915	H_2O	OW-11					1											X	X	X	X			
"	1145	"	OW-12					2											X						
"	1430	"	OW-13					3											X						
1-1-08	1430	"	OW-14					4											X						
12-28-07	1200	"	OW-29					5											X						
"	1425	"	OW-30					6											X						

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-2-08	1025	Steve Morris	1/2/08 10:25
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Gen Chem = Cations, anions, pH, and Conductivity.
see sample checklist with comments.

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐
Other: 2 of 4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: 2007 Annual Groundwater Samples
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 7°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals Total + Dissolved	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Gen Chem Cyanide			Air Bubbles or Headspace (Y or N)
								0801010																
12-29-07	0910	H_2O	MW-1					7			X					X			X	X	X	X		
12-29-07	1600	"	MW-4					8			X					X			X	X	X	X		
12-29-07	1245	"	MW-5					9			X					X			X	X	X	X		
1-1-08	1030	"	SMW-2					10			X					X			X	X	X	X		
12-29-07	1015	"	SMW-4					11			X					X			X	X	X	X		

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
1-2-08	1025	Steve Morris	[signature]	1/2/08 10:25
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks: Gen Chem = Cations, Anions, pH, and Conductivity
SMW-2 & SMW-4 - was subcontracted for 8270 Skinner low lvl Sb & CN. & See Skinner list

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other: 3 of 4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Annual Groundwater sampling 2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 7°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl$_2$	Preservative HNO$_3$	Preservative	HEAL No. 0801006	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	Metals w/QCC Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Gen Chem				Air Bubbles or Headspace (Y or N)
12-31-07	1030	H_2O	BW-1C					12								X			X	X	X				
"	1230	"	BW-2A					13								X			X	X	X				
"	1400	"	BW-2B					14								X			X	X	X				
"	1100	"	BW-2C					15								X			X	X	X				
"	1515	"	BW-3B					16								X			X	X	X				
"	1640	"	BW-3C					17								X			X	X	X				

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-2-08	1025	Steve Morris	[signature] 1/2/08 10:25
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Gen Chem = Cations, Anions, pH, + Conductivity.

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other: 4 of 4

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Project Name: Annual Groundwater Sample 2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 7°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl2	Preservative HNO3	Preservative	HEAL No. 0801004	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	~~RCRA~~ Metals W/QCC Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD - COD - TDS	Gen Chem	Cyanide	Nitrate	Air Bubbles or Headspace (Y or N)
1-1-08	1230	H_2O	EP-2 Inlet					18			X								X		X				
"	1130	"	EP-1 Inlet					19			X					X			X	X		X			
1-1-08	1530	"	PW-3					20								X			X	X			X	X	

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-2-08	1025	Steve Morris	[signature] 1/2/08 10:25
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Gen Chem = Cations, Anions, pH, and Conductivity

6. Recommendations Based on Groudwater Testing

OW-11

A grab sample from OW-11 was taken on December 27, 2007. The sample was analyzed for Mercury (EPA Method 7470), Total Recoverable Metals (EPA Method 6010B), and Volatiles (EPA Method 8260B). No mercury was detected. No metals or volatiles were found at levels exceeding applicable MCLs, NM ground water, and NM TPH screening levels. In 2006, the general chemistry results showed that fluoride (2.5 mg/l) and sulfate (1,100 mg/l) were present at levels greater than the NMWQS for fluoride (1.6 mg/l) and sulfate (600 mg/l). However, these analyses could not be conducted in 2007, as the sample was frozen by the time it reached the analytical laboratory.

RECOMMENDATION: *Western Refining will continue to test OW-11 on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry. It is imperative that analyses for Anions be conducted as some of these were elevated in 2006. In future, Western refining will conduct the annual groundwater sampling exercise earlier in the calendar year. (In 2008, sampling has been conducted in July and August.)*

OW-12

OW-12 was sampled on December 27, 2007 and analyzed for Volatiles (EPA Method 8260B). The laboratory analyses showed all parameters at non-detectable levels.

RECOMMENDATION: *Western Refining will continue to monitor OW-12 on an annual basis for Volatiles.*

OW-13

OW-13 was sampled on December 27, 2007 and analyzed for Volatiles (EPA Method 8260B. The laboratory analyses showed all parameters at non-detectable levels, except for MTBE which was detected at extremely low levels.

RECOMMENDATION: *Western Refining will monitor OW-13 on a quarterly basis for Volatiles. For more details see Recommendation for OW-14 and OW-30.*

OW-14

OW-14 was sampled on 1/1/2008 and analyzed for Volatiles (EPA Method 8260B. Inclement weather prevented completion of sampling of this well within December 2007. The results **showed that Methyl Tetra-Butyl Ether (MTBE) contamination had entered the shallow perched groundwater at OW-14. The levels of MTBE were 0.92 mg/l in OW-14. This level exceeds the current U.S. EPA MCL of 0.20 mg/l and the current NM Water Quality Control Commission standard of 0.1 mg/l.** The monitoring in 2006 had also shown that MTBE contamination had entered the shallow perched groundwater at OW-14. **The monitoring of well OW-14 also found that Benzene was elevated. The benzene concentration in this sample was 0.014 mg/l, exceeding the NM Water Quality Control Commission standard of 0.01 mg/l and the U.S. EPA MCL of 0.005 mg/l.** The highest level of Benzene in this well in 2006 was 0.0042 mg/l. **Benzene had shown up at levels exceeding the NMWQS in the 2004 and 2005 samplings.**

The MTBE detected in OW-14 and OW-30 appears to be migrating generally to the north (downgradient), but does not appear to be threatening any receptors at this time. Because MTBE is reportedly no longer used or stored at the refinery, the MTBE source appears to have been removed and is no longer contributing MTBE to the groundwater. However, MTBE is present in these two wells above the WQCC standard. In addition, benzene is present in OW-14 above WQCC the standard. Because the source has been removed, no receptors are immediately threatened, and the MTBE concentration in OW-14 appears to be decreasing, Western Refining recommends continued monitoring of OW-14 and OW-30 to asses the trend of the contaminants and evaluates the need for a Stage 1 Abatement Plan.

RECOMMENDATION: *Quarterly monitoring in OW-13, OW-14, OW-30, and OW-29 to monitor the contaminant plume and evaluate the need for abatement of the MTBE. If the source has been removed, the contaminant concentration in OW-14 should be expected to continue declining, and the concentration in OW-30 should increase slightly as the plume passes, and then also decrease. OW-29 is downgradient from OW-14 and OW-30, and can be used as a sentinel well to monitor the MTBE before it migrates off the refinery boundary. The analytical report for the groundwater sampling conducted on January 2, 2008 shows MTBE in OW-13 and OW-29, although both are below the WQCC standard. MTBE in OW-29 was at a concentration of 4.3 µg/1, whereas the standard is 100 µg/1. The MTBE detections in OW-13 and OW-29 may indicate a larger area of MTBE in groundwater than just the area around OW-14. And although 1-2 Dichloroethane (EDC) was below WQCC standard, it was detected in OW-14, and should be monitored since it is a compound commonly associated with gasoline.*

OW-29

OW-29 was sampled on December 27, 2007 and analyzed for Volatiles (EPA Method 8260B. The laboratory analyses showed all parameters at non-detectable levels, except for MTBE which was detected at extremely low levels.

RECOMMENDATION: *Western Refining recommends monitoring OW-29 on a quarterly basis for Volatiles. For more details see recommendation for OW-14 and OW-30.*

OW-30

OW-30 was sampled on 1/1/2008 and analyzed for Volatiles (EPA Method 8260B. Inclement weather prevented completion of sampling of this well within December 2007. **In 2007, monitoring** conducted between December 27-31, 2007 (and January 1, 2008, as inclement weather prevented completion of sampling of some wells within December 2007)) **showed that Methyl Tetra-Butyl Ether (MTBE) contamination had entered the shallow perched groundwater at OW-30. The level of MTBE was 0.29 mg/l in OW-30. This level exceeds the current U.S. EPA Maximum Contaminant level (MCL) of 0.20 mg/l and the current NM Water Quality Control Commission standard of 0.1 mg/l.** The monitoring in 2006 had also shown that MTBE contamination had entered the shallow perched groundwater at OW-30. The sampling in 2007, as had been found in 2006, established that the MTBE contamination was limited in extent and had not migrated significantly to other nearby wells (OW-12 had a level of non-detect, OW-13 a level of 0.0013 mg/l, and OW-29 had a level of 0.0043 mg/l). OW-30 had no detectable levels of Benzene.

The MTBE detected in OW-14 and OW-30 appears to be migrating generally to the north (downgradient), but does not appear to be threatening any receptors at this time. Because MTBE is reportedly no longer used or stored at the refinery, the MTBE source appears to have been removed and is no longer contributing MTBE to the groundwater. However, MTBE is present in these two wells above the WQCC standard. In addition, benzene is present in OW-14 above WQCC the standard. Because the source has been removed, no receptors are immediately threatened, and the MTBE concentration in OW-14 appears to be decreasing, Western Refining recommends continued monitoring of OW-14 and OW-30 to asses the trend of the contaminants and evaluates the need for a Stage 1 Abatement Plan.

RECOMMENDATION: *Quarterly monitoring in OW-13, OW-14, OW-30, and OW-29 to monitor the contaminant plume and evaluate the need for abatement of the MTBE. If the source has been removed, the contaminant concentration in OW-14 should be expected to continue declining, and the concentration in OW-30 should increase slightly as the plume passes, and then also decrease. OW-29 is downgradient from OW-14 and OW-30, and can be used as a sentinel well to monitor the MTBE before it migrates off the refinery boundary. The analytical report for the groundwater sampling conducted on January 2, 2008 shows MTBE in OW-13 and OW-29, although both are below the WQCC standard. MTBE in OW-29 was at a concentration of 4.3µg/1, whereas the standard is 100µg/1. The MTBE detections in OW-13 and OW-29 may indicate a larger area of MTBE in groundwater than just the area around OW-14.*

BW-1-A

BW-1-A is a dry well and therefore was not sampled in 2007.

RECOMMENDATION: *Giant Gallup will continue to visually inspect BW-1-A annually for any liquids. If liquids are observed, then sampling will occur. All samples will be analyzed for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry.*

BW-1-B

BW-1-B is a dry well and therefore was not sampled in 2007.

RECOMMENDATION: *Giant Gallup will continue to visually inspect BW-1-B annually for any liquids. If liquids appear, samples will be analyzed for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry.*

BW-1-C

BW-1-C was sampled on December 31, 2007 and analyzed for VOC, SVOC, BTEX, MTBE, metals, and General Chemistry. Lab analysis showed concentrations less than (all non-detect) the NMWQS for benzene, toluene, ethylbenzene, xylene, and MTBE. However, lab results showed fluoride (2.6 mg/l) was greater than the NMWQS (1.6 mg/l).

RECOMMENDATION: *Western Refining will continue to monitor BW-1-C on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry*

BW-2-A

BW-2-A was sampled on December 31, 2007 and analyzed for VOC, SVOC, BTEX, MTBE, total recoverable metals, and General Chemistry. Lab results showed all parameters less than NMWQS.

RECOMMENDATION: *Western Refining will continue to monitor BW-2-A on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry*

BW-2-B

BW-2-B was sampled on December 31, 2007 and analyzed for VOC, SVOC, BTEX, MTBE, total recoverable metals, and General Chemistry. The laboratory results showed all parameters less than NMWQS, except fluoride which was greater (1.8 mg/l) than the NMWQS (1.6 mg/l).

RECOMMENDATION: *Western Refining will continue to monitor BW-2-B on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry*

BW-2-C

BW-2-C was sampled on December 31, 2007 and analyzed for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry. Lab results showed concentrations less than the NMWQS for all parameters except fluoride which was greater (2.3 mg/l) than the NMWQS (1.6 mg/l).

RECOMMENDATION: *Western Refining will continue to monitor BW-2-C on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry.*

BW-3-A

BW-3-A was dry and therefore could not be sampled.

RECOMMENDATION: *Western Refining will continue to visually inspect BW-3-A for any liquids. If liquids appear, samples will be analyzed for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry.*

BW-3-B

BW-3-B was sampled on December 31, 2007 and analyzed for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry. Lab results showed concentrations less than the NMWQS for all parameters except fluoride which was equal (1.6 mg/l) to the NMWQS (1.6 mg/l).

RECOMMENDATION: *Western Refining will continue to monitor BW-3-B on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry*

BW-3-C

BW-3-C was sampled on December 31, 2007 and analyzed for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry. Lab results showed concentrations less than the NMWQS for all parameters except fluoride (1.9 mg/l) which was present at greater than the NMWQS (1.6 mg/l).

RECOMMENDATION: *Giant Gallup will continue to monitor BW-3-C on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry*

GWM-1

Western Refining conducted annual sampling of GWM-1 on May 24, 2007. The benzene concentration in this sample was 0.016 mg/l, exceeding the NM Water Quality Control Commission standard of 0.01 mg/l and the U.S. EPA Maximum Contaminant level (MCL) of 0.005 mg/l. In 2006, the benzene concentration in this sample was 0.012 mg/l. In 2005, monitoring of well GWM-1 had also shown benzene in elevated concentrations (June 2005 = 0.010 mg/l and September 2005 = 0.081 mg/l) **In 2007, MTBE levels were found in GWM-1, at a concentration of 0.23 mg/l, exceeding the U.S. EPA Maximum Contaminant level (MCL) of 0.20 mg/l and the NM Water Quality Control Commission standard of 0.1 mg/l.**[5] In 2006, the MTBE levels were found and reported as 0.16 mg/l, in 2005 as 0.17 mg/l and in 2004 as 0.048 mg/l. **Arsenic was found in the May 2007 analysis of water from GWM-1 at 0.081 mg/l which exceeds the NMWQS of 0.050 mg/l.**

RECOMMENDATION: *Western Refining will monitor GWM-1 on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry.*

Pond #1 Inlet and Pond #2 Inlet

Pond #1 and Pond #2 inlets were sampled on 1/1/2008 as a carry-over from sampling conducted between December 27-31, 2007 for VOCs, Semi-VOCs and total recoverable metals. Benzene, and 2-methylnaphthalene exceeded the NMWQS; all other parameters were less than the NMWQS. In addition, these inlets were sampled on a quarterly and a monthly basis for various parameters as required by the discharge permit.

RECOMMENDATION: *Western Refining will continue to monitor Pond 1 and Pond 2 inlets on a semi-annual, quarterly and monthly basis for VOCs, SVOCs and Total Recoverable Metals.*

Ponds 1 through 8

Ponds 1 through 8 were sampled on 11/29/2008. For Ponds 1 and 2, the locations were a significant distance away from the inlets that were sampled as a separate activity.
(TO BE COMPLETED.)

PW-2

PW-2 was not required to be sampled in 2007.

RECOMMENDATION: *Western Refining will continue to monitor PW-2 according to the discharge plan for VOC, SVOC, Metals, Cyanide, and Nitrates. The next scheduled sampling will take place in 2008*

PW-3

PW-3 was sampled in 2007. All parameters are less than the applicable NMWQS and MCLs, except for 2-Methylnapthalene which was found at 0.032 mg/l to be greater than the NMWQS of 0.03 mg/l.

RECOMMENDATION: *Western Refining will monitor PW-3 according to the discharge plan. Sampling will be conducted every 3 years beginning in 2006*

[5] In 2008, the MTBE results in GWM-1 are lesser and a level of 0.12 mg/l.

PW-4

PW-4 was not required to be sampled in 2006.

RECOMMENDATION: *Giant Gallup will continue to monitor PW-4 according to the discharge plan for VOC, SVOC, Metals, Cyanide, and Nitrates and is scheduled for sampling in 2007*

OW-1 and OW-10

These wells will be visually checked on a quarterly basis starting the 4th quarter of 2004. In 2006 the wells were visually inspected on March 9, June 27, July 26, and October 13.

RECOMMENDATION: *Giant Gallup will continue to visually inspect OW-1 and OW-10 for artesian flow quarterly*

MW-1, MW-4, MW-5, SMW-2 AND SMW-4

MW-1 was sampled on October 26, 2006. MW-4, MW-5, SMW-2 and SMW-4 were not required to be sampled in 2006. Lab results for MW-1 showed concentrations less than the NMWQS on all parameters.

RECOMMENDATION: *Giant Gallup will sample MW-1 annually. MW-4, MW-5, SMW-2 and SMW-4 will be sampled in 2007 and 2009 and biennially thereafter.*

7. List of Tables

- Plots of Water Table Elevations
- Volume of Product Recovered
- Well Data Summary Table
- Well Inspection Logs

Plots of Water Table Elevations

GROUND WATER DEPTH TO WATER 2007

WELL #	DTW:		DATE:
BW-1A	DRY		12-13
BW-1B	67.55		"
BW-1C	7.07		"
BW-2A	31.85		"
BW-2B	27.64		"
BW-2C	20.22		"
BW-3A	DRY		"
BW-3B	32.74		"
BW-3C	8.29		"
OW-11	21.40		12-12-07
OW-12	49.28		"
OW-13	24.55		"
OW-14	27.41		"
OW-29	22.00		"
OW-30	26.47		"
MW-1	7.43		12-13-07
MW-4	8.1		"
MW-5	11.67		"
SMW-2	25.92		"
SMW-4	29.65		"

WELL PUMPING & SAMPLING LOG

TD .78 133.02 TD .163 72.72 2007

WELL #	MW-1	MW-4	MW-5	SMW-2	SMW-4							
PURGE DATE	12-29	12-29	12-29	1-1	12-29							
PURGE TIME		1330	1100	0900	0930							
OVA READING												
LIQUID DEPTH	7.33	8.02	12.29	26.24	29.61							
PUMP DEPTH												
IMMISC. LAYER												
FLOW RATE												
PUMP TIME												

SAMPLE DAY	12-29	12-29	12-29	1-1	12-29							
SAMPLE TIME	0910	1600	1245	1030	1015							
OVA READING												
LIQUID DEPTH	7.33	8.02	12.29	26.24	29.61							
TEMP. F	56	56	56	57	56							
pH	9.06	8.62	8.84	7.50	8.46							
SP. COND.	1209	1293	1240	6620	1350							
2) TEMP. F	56	56	56	56	57							
pH	9.17	8.55	8.81	7.41	8.37							
SP. COND.	1222	1265	1221	6570	1372							
3) TEMP. F	56	56	56	56	57							
pH	9.13	8.53	8.79	7.34	8.35							
SP. COND.	1213	1253	1223	6380	1347							
4) TEMP. F	56	56	56	56	57							
pH	9.10	8.53	8.82	7.34	8.38							
SP. COND.	1200	1274	1228	6540	1344							

WELL PUMPING & SAMPLING LOG

...L #	OW-12	OW-13	OW-14	OW29	OW-30	OW-11						
PURGE DATE	12-27	12-27	1-1	12/28	12/28	12-27						
PURGE TIME	1030		1330		1:30	0800						
OVA READING												
LIQUID DEPTH	49.12	24.45	27.34	21.97	26.41	21.15						
PUMP DEPTH												
IMMISC. LAYER												
FLOW RATE												
PUMP TIME												

SAMPLE DAY				12-28	12-28	12-27						
SAMPLE TIME			1430	1200	1425							
OVA READING												
LIQUID DEPTH												
...MP. F	57	57	56	56	55	56						
pH	8.95	8.06		12.99	7.61	8.30						
SP. COND.	12.16	1374		743	1692	2844						
2) TEMP. F	56	56	56	56	55	56						
pH	9.04	7.92		9.12	7.20	8.26						
SP. COND.	12.02	1349		1230	1725	2840						
3) TEMP. F	56	56	56	56	55	56						
pH	9.09	7.86		7.17	7.08	8.32						
SP. COND.	11.94	1352		1534	1707	2838						
4) TEMP. F	57	56	56	56	55	56						
pH	9.17	7.86		7.20	7.06	8.31						
SP. COND.	12.06	1395		1758	1732	2842						

WELL PUMPING & SAMPLING LOG

LL #	BW-1-C	BW-2-A	BW-2B	BW-2-C	BW-3-B	BW-2-C						
PURGE DATE	12-31	12-31	12-31	12-31	12-31	12-31						
PURGE TIME	0900	1200	1300	1000	1430	1545						
OVA READING												
LIQUID DEPTH	7.00	31.78	27.72	24.28	32.71	8.28						
PUMP DEPTH												
IMMISC. LAYER												
FLOW RATE												
PUMP TIME												
PUMP METHOD												
DISP. AREA												

SAMPLE DAY	12-31	12-31	12-31	12-31	12-31	12-31						
SAMPLE TIME	1030	1230	1400	11:00	1515	1640						
READING												
LIQUID DEPTH	7.00	31.78	27.72	24.28	32.71	8.28						
1) TEMP. F	56	56	56	56	56	56						
pH	8.46	7.79	7.88	8.79	8.12	8.70						
SP. COND.	1276	1261	2250	1252	1560	1444						
2) TEMP. F	56	56	56	56	56	56						
pH	8.39	7.69	7.82	8.74	8.07	8.60						
SP. COND.	1275	1260	2242	1253	1550	1460						
3) TEMP. F	56	56	56	56	56	56						
pH	8.36	7.64	7.80	8.73	8.12	8.66						
SP. COND.	1267	1278	2260	1245	1558	1452						
4) TEMP. F	56	56	56	56	56	56						
pH	8.42	7.63	7.76	8.73	8.10	8.61						
SP. COND.	1253	1273	2256	1267	1555	1448						

WELL VOLUME SHEET

WELL	TOTAL DEPTH	DEPTH TO WATER	CAPACITY PER FOOT	ONE WELL VOLUME	THREE WELL VOLUME
MW-1	132.02		1.02		
MW-2	140.24		1.02		
MW-4	122.14		1.02		
MW-5	133.02		0.74		
SMW-1			0.163		
SMW-2	57.34		0.163		
SMW-3	45.86		0.163		
SMW-4	72.22		0.163		
SMW-5	76.22		0.163		
SMW-6	73.11		0.163		
OW-1	94.04		0.74		
OW-2	61.0		0.74		
OW-3	66.73		0.74		
OW-11	66.62		0.74		
OW-29	52.00		0.74		
OW-30	48.00		0.74		
OW-24	65.0		0.74		

TABLE 1

-5-91**

ELEVATION

WELL	CASING DIAMETER	T.O.C. *	B.O.C. *	CAPACITY PER FOOT	TOTAL DEPTH
MW-1	5	6878.52	6746.5	1.02	132.02
MW-2	5	6880.84	6740.6	1.02	140.24
MW-4	5	6882.54	6760.4	1.02	122.14
MW-5	4	6883.32	6750.3	0.74	133.02
SMW-1	2	6883.29	6834.20	0.163	
SMW-2	2	6884.44	6827.10	0.163	
SMW-3	2	6884.56	6838.70	0.163	45.86
SMW-4	2	6880.08	6807.80	0.163	72.22
SMW-5	2	6878.02	6801.80	0.163	76.22
SMW-6	2	6880.71	6807.60	0.163	73.11
OW-1	4	6868.00	6773.96	0.74	94.04
OW-2	4	6871.00	6810.00	0.74	61.0
OW-3	4	6876.00	6809.30	0.74	66.73
OW-11	4	6923.89	6857.27	0.74	66.62
OW-24	4	6880.00	6815.00	0.74	65.0

* T.O.C. - Top of Casing
B.O.C. - Bottom of Casing

** Update of 1989 Sample and Analysis Plan.

Steve these are the depths for the wells

BW1a - 40
BW1b - 65.2
BW1c - 157

BW2a - 65
BW2b 90.5
BW2c - 151

BW3a - 50
BW3b - 72
BW3c - 155

GWM1 - 24

Attached are the well completion diagrams and the logs. The closeouts will
be sent when completed.

Nathan

12-27-07

0800 OW-11 DTW 21.15 3WVs = 100.94 gal
0915 Purged 101 gal + sampled

1030 OW-12 DTW 49.12 ft 3WVs = 212.85 gal.
Purged 50 gallons + lost suction.
1145 Sampled for 8260

1300 OW-13 DTW 24.45 ft 3WVs = 167.72

1030 OW-29 DTW 21.79 ft 3WVs = 66.66
water looks murky, reddish
1200 Purged + sampled

130 OW30 DTW 26.41 ft 3WVs = 117.9

1425 purged + sampled

12-29-07
0800 MW-1 DTW 7.33 ft 3WV = 381.5 gal
0900 Purged 190 gallons + lost suction
0910 Sampled well

OVER

0930 SMW-4 DTW 29.61 3WVs = 20.83 gal
Purged 7 gal + lost suction
1015 Sampled well

1100 MW-5 DTW 12.29 ft 3WVs = 2.68 gal
1245 Purged + sampled well

1330 MW-4 DTW 8.02 3WVs = 349.2

12-31-07
0900 BW-1C 7.00 ft DTW 3WVs = 73.35 gal.
Purged 6 gallons + lost suction.
1030 Sampled Well

24.28
1000 BW-2C DTW 24.28 3WVs = 61.97 gal
1100 Sampled Well

1200 BW-2A DTW 31.78 ft 3WVs = 16.24 gal
1230 Purged 17 gal + sampled

1300 BW-2B DTW 27.72 3WVs = 30.7 gal
Purged 18 gal + lost suction
1400 Sampled Well
→

12-31-07 Cont

1430 BW-3B DTW 32.71 3WVs = 41.01 gal
Purged 15 gal + lost suction
1515 Sampled well

1545 BW-3C DTW 8.28 ft 3WVs = 71.74 gal
Purged 16 gal + lost suction
1640 Sampled well

1-1-08

0900 SMW-2 DTW 26.24 ft 3WVs = 11.74 gal.
Purged 4 gal + lost suction
1030 Sampled well

1330 OW-14 DTW 27.34 3WVs = 39.20
Purged 40 gal
1430 Sampled well

Volume of Product Recovered

RW-1 HYDROCARBON RECOVERY LOG
2/22/05 TO 11/26/07

Date of measurement	Time	Quarter	Well #	Depth to Product (feet)	Depth to Water (feet)	Product Level Thickness (feet)	Volume of Product Bailed/ Pumped (gallons)	Water Gallons
2/22/2005	0830	1st.	RW-1	32'-5 1/2"	36'-6"	4'-0 1/2"	14	
3/2/2005	0745	1st.	RW-1	32'-5"	36'-5 1/4"	4'-0 1/4"	9	
3/8/2005	0830	1st.	RW-1	31'-11"	36'-4 1/4"	4'-5 1/4"	15	
3/9/2005	0830	1st.	RW-1	31'-11"	37'-6"	5'-7"	4	
3/11 to 3/18/05		1st.	RW-1	Started Pumping Well on 3/11/05			74	
3/18 to 3/23/05		1st.	RW-1	Continue Pumping			48	
3/23 to 4/1/05		1st.	RW-1	Continue Pumping			62	
4/1 To 4/4/05		2nd	RW-1	Pump shut down to measure well			27	
4/5/2005	11:30Hrs	2nd	RW-1	34'-9"	38'-11"	4'-2"		
4/4 TO 4/15/05	11:00Hrs	2nd	RW-1	Continue Pumping			50	
4-15 to 5-5-05	1230 Hrs	2nd	RW-1	Continue Pumping			45	154
5-5 to 6-17-05	1130 Hrs	2nd	RW-1	Continue Pumping			24	196
6/27/2005	1400 Hrs	2nd	RW-1	Pump shut down to measure well				
6/28/2005	1100 Hrs	2nd	RW-1	32' 5 1/2"	33' 3"	0' 9 1/2"		
6/28/2005		2nd	RW-1	Continue Pumping				
6/17 to 7/8/2005	1030 Hrs	2nd	RW-1	Continue Pumping			18	146
7/8 to 8/9/2005	1330 Hrs	3rd	RW-1	Continue Pumping			28	350
8/9 to 9/16/2005	1135 Hrs	3rd	RW-1	36'- 5 1/2"	36' - 6 1/2"	0' - 1"	8	240
12/5/2005	1315 Hrs	4th	RW-1	31'-11"	34'-8 1/2"	2'-9 1/2"		
12/8/2005	1400 Hrs	4th	RW-1	Start Pumping				
12/22/2005	1530 Hrs	4th	RW-1	Pulled Pump			5	120
12/29/2005	1400 Hrs	4th	RW-1	Hand Bailed			0.5	4.5
3/16/2006	1300 Hrs.	1st.	RW-1	32'-2 3/4"	34'-5 3/4"	2'-3"		
3/16/2006	1430 Hrs.	1st.	RW-1	Start Pumping				
3/23/2006	1430 Hrs.	1st.	RW-1	Shut Off Pump				
3/27/2006	1530 Hrs.	1st.	RW-1	Start Pumping				
3/31/2006	1130 Hrs.	1st.	RW-1	Continue Pumping			7	174
4/3/2006	1130 Hrs.	2nd	RW-1	Stopped Pumping			1	38
4/4/2006	1100 Hrs.	2nd	RW-1	32'-9"	33'-1"	0'-4"		
6/6/2006	1300 Hrs.	2nd	RW-1	32'-4 3/4"	34'-6 1/2"	2'-1 3/4"		
6/8/2006	1500 Hrs.	2nd	RW-1	Start Pumping (Intermittingly)				
6/29/2006	1000 Hrs.	2nd	RW-1	Stopped Pumping			8	365
7/31/2006	1145 Hrs	3rd	RW-1	33'-0 3/4"	33'-5 3/4"	0'-5"		
7/31/2006	1145 Hrs	3rd	RW-1	Start Pumping				
8/3/2006	1420 Hrs	3rd	RW-1	Stopped Pumping			2	87
8/8/2006	0900 Hrs.	3rd	RW-1	Start Pumping				
8/10/2006	1530 HRS	3rd	RW-1	Start pumping				
8/22/2006	0900 Hrs.	3rd	RW-1	Pulled pump			4.9	373
8/22/2006	0945 HRS	3rd	RW-1	33'10"	33'4"	0.6"		
12/21/2006	1555	4th	RW-1	35'2"	36'	1'1/4"	1.5	70
2/21/2007	1015	1st	RW-1	33'5"	34' 6"	1' 11"	0.625	53.5
6/5/2007	1000	2nd	RW-1	32' 5"	32' 8-1/2"	2-1/2"		
6/5/2007	1010			Hand Bailed			0.125	9
6/6/2007	840			Hand Bailed			0.25	11
6/13/2007	1400			Hand Bailed			0.25	12
6/14/2007	1040			Hand Bailed			0.125	8
7/10/2007	1008	3rd	RW-1	32'5"	32' 8-1/2"	2-1/2"	0.75	18
7/11/2007	925	3rd	RW-1	Hand Bailed			0.5	12.5
7/23/2007	1000	3RD	RW-1	Hand Bailed			0.25	5.5
11/26/2007	1050	4th	RW-1	Hand Bailed	30'9-1/8"	36' 5-3/8"	1.2	37
					Total Gallons		459.975	2484

Well Data Summary Table

.Vell Data Summary Table - REVISED
2007 Annual Groundwater Discharge Report
Giant Refining - Ciniza Refinery
August 2008 by Gaurav Rajen

Well ID Number	Measurement Date	A Well Casing Rim Elevations (ft)	Well Casing Bottom Elevations (ft)	Total Well Depth (ft)	Depth to SPH (ft)*	B SPH Thickness (ft)	C Depth to Water (ft)	D = A - C Groundwater Elevation (ft)	= 0.8B + D Corrected Water Table Elevation (ft)**
BW-1A	13-Dec-07	6,876.73	6,836.73	40.00	na	na	dry	dry	na
BW-1B	13-Dec-07	6,876.91	6,811.71	67.55	na	na	67.55	6,809.36	na
BW-1C	13-Dec-07	6,876.75	6,719.75	157.00	na	na	7.07	6,869.68	na
BW-2A	13-Dec-07	6,874.72	6,809.22	65.50	na	na	31.85	6,842.87	na
BW-2B	13-Dec-07	6,874.58	6,784.08	90.50	na	na	27.64	6,846.94	na
BW-2C	13-Dec-07	6,875.40	6,724.40	151.00	na	na	20.22	6,855.18	na
BW-3A	13-Dec-07	6,878.22	6,828.22	52.60	na	na	dry	dry	na
BW-3B	13-Dec-07	6,878.79	6,803.79	75.00	na	na	32.74	6,846.05	na
BW-3C	13-Dec-07	6,878.08	6,723.08	155.00	na	na	8.29	6,869.79	na
OW-1	9-Mar-06	6,868.00	6,773.96	94.04	na	na	0.00	6,868.00	na
OW-1	27-Jun-06	6,868.00	6,773.96	94.04	na	na	0.40	6,867.60	na
OW-1	26-Jul-06	6,868.00	6,773.96	94.04	na	na	0.83	6,867.17	na
OW-1	13-Oct-06	6,868.00	6,773.96	94.04	na	na	0.25	6,867.75	na
OW-10	9-Mar-06	6,872.00	6,804.00	68.00	na	na	2.70	6,869.30	na
OW-10	27-Jun-06	6,872.00	6,804.00	68.00	na	na	3.43	6,868.57	na
OW-10	26-Jul-06	6,872.00	6,804.00	68.00	na	na	3.95	6,868.05	na
OW-10	13-Oct-06	6,872.00	6,804.00	68.00	na	na	2.90	6,869.10	na
OW-11	12-Dec-07	6,923.89	6,857.27	66.62	na	na	21.40	6,902.49	na
OW-12	12-Dec-07	6,940.43	6,795.43	145.00	na	na	49.28	6,891.15	na
OW-13	12-Dec-07	6,920.12	6,820.12	100.00	na	na	24.55	6,895.57	na
OW-14	12-Dec-07	6,926.64	6,881.64	45.00	na	na	27.41	6,899.23	na
OW-29	12-Dec-07	6,913.50	6,864.50	49.00	na	na	22.00	6891.5	na
OW-30	12-Dec-07	6,921.60	6,873.20	48.4	na	na	26.49	6,895.11	na
MW-1	13-Dec-07	6,878.52	6,746.50	132.02	na	na	7.43	6,871.09	na
MW-4	13-Dec-07	6,882.54	6,760.40	122.14	na	na	8.10	6,874.44	na
MW-5	13-Dec-07	6,883.32	6,750.30	133.02	na	na	11.67	6,871.65	na
RW-1 (OW-27)	21-Feb-07	6,943.50			33.42	1.08	34.50	6,909.00	6909.864
	5-Jun-07				32.48	0.24	32.71	6,910.79	6910.982
	31-Jul-07				32.48	0.24	32.71	6,910.79	6910.982
	11/26/12007				30.76	5.58	36.45	6,907.05	6911.514
RW-2 (OW-28)	8-Feb-07	6,927.20			na	0	27.90	6,899.30	6899.3
	30-Apr-07				na	0	27.98	6,899.22	6899.22
	10-Jul-07				na	0	28.23	6,898.97	6898.97
	26-Nov-07				na	0	28.23	6,898.97	6898.97

Well ID Number	Measurement Date	A Well Casing Rim Elevations (ft)	Well Casing Bottom Elevations (ft)	Total Well Depth (ft)	Depth to SPH (ft)*	B SPH Thickness (ft)	C Depth to Water (ft)	D = A - C Groundwater Elevation (ft)	= 0.8B + D Corrected Water Table Elevation (ft)**
RW-5	16-Mar-06	6,942.50	40.00		32.58	1.08	33.00	6,909.50	6910.364
	June 1,2006				32.79	0.75	33.17	6,909.33	6909.93
	26-Jul-06				32.90	0.33	33.31	6,909.19	6909.454
	16-Oct-06				32.73	1.08	33.42	6,909.08	6909.944
RW-6	17-Mar-06	6,972.60	38.80		32.67	1.38	33.75	6,938.85	6939.954
	June 7,2006				32.92	1.19	34.04	6,938.56	6939.512
	26-Jul-06				33.00	0.85	34.12	6,938.48	6939.16
	16-Oct-06				33.71	1.19	34.64	6,937.96	6938.912
SMW-2	13-Dec-07	6,884.44	6,827.10	57.34	na	na	25.92	6,858.52	na
SMW-4	13-Dec-07	6,882.54	6,760.40	122.14	na	na	29.65	6,852.89	na
SMW-6	not sampled	6,880.71	6,807.60	73.11	na	na	not sampled	not sampled	na
GWM-1	9-Mar-06	6,912.65	6,888.95	23.7	na	na	20.25	6892.4	na
	26-May-06	6,912.65	6,888.95	23.7	na	na	20.16	6892.49	na
	26-Jul-06	6,912.65	6,888.95	23.7	na	na	20.72	6891.93	na
	13-Oct-06	6,912.65	6,888.95	23.7	na	na	20.61	6892.04	na
GWM-2	9-Mar-06	6,913.17	6,896.97	18.97	na	na	DRY	DRY	DRY
	26-May-06	6,913.17	6,896.97	18.97	na	na	DRY	DRY	DRY
	26-Jul-06	6,913.17	6,896.97	18.97	na	na	DRY	DRY	DRY
	13-Oct-06	6,913.17	6,896.97	18.97	na	na	DRY	DRY	DRY
GWM-3	9-Mar-06	6,912.65	6,896.15	17.94	na	na	DRY	DRY	DRY
	26-May-06	6,912.65	6,896.15	17.94	na	na	DRY	DRY	DRY
	26-Jul-06	6,912.65	6,896.15	17.94	na	na	DRY	DRY	DRY
	13-Oct-06	6,912.65	6,896.15	17.94	na	na	DRY	DRY	DRY

*SPH = Separate Phase Hydrocarbons
**Corrected water table elevations are only provided if SPH was detected.
na = If no SPH was detected then this is shown on the table as *na* (not applicable).
Water was not observed in GWM-2, and GWM-3 in 2006.

Well Closures

Well ID No.	Year Closed
OW-2	2004
OW-3	2004
OW-7	2004
OW-9	2004
OW-24	2004
SMW-1	2004
SMW-3	2004
SMW-5	2004

Well Inspection Logs

GIANT CINIZA REFINERY

Permit Requirement: GW-032

Condition Permit ID # : OCD Sect. 9, Item 4

Monitoring Required: 2007 Quarterly measurement of product layer thickness and bailing of product.

Equipment Identification: RW-1, RW-2, RW-5, RW-6

Date of measurement	Time	Quarter	Well #	Depth to Product (feet)	Depth to Water (feet)	Product Level Thickness (feet)	Volume of Product Bailed (gallons)
2/21/2007	1015 hrs	1st	**RW-1**	33'5"	34'6"	1'1"	0.75
2/8/2007	1430 hrs	1st	**RW-2**	No Product	28'1"	0	0
2/13/2007	0900 hrs	1st	**RW-5**	32'2"	33'95"	1'.75"	3/8
2/21/2007	0950 hrs	1st	**RW-6**	33'31/2"	34'6"	1' 2-1/2"	3/4
6/5/2007	0840 hrs	2nd	**RW-1**	32'5"	32'-8-1/2"	2-1/2"	0.75
4/30/2007	1140 hrs	2nd	**RW-2**	No Product	28'1"	0	0
4/30/2007	1120 hrs	2nd	**RW-5**	33'0"	33'10"	10"	2.1/2 "
4/30/2007	1125 hrs	2nd	**RW-6**	34'7"	34'5"	2"	1/4
7/31/2007	1050 hrs	3rd	**RW-1**	32'5"	32'-8-1/2"	2-1/2"	1"
7/10/2007	0950 hrs	3rd	**RW-2**	No Product	27'6"	0	0
7/10/2007	1015 hrs	3rd	**RW-5**	33' 1-1/4"	33'11"	9-3/4"	2-1/2"
7/10/2007	1008 hrs	3rd	**RW-6**	33' 3-1/2"	34'7"	1'-3-1/2"	6-7/8"
11/26/2007	1050 hrs	4th	**RW-1**	30' 9-1/8"	36' 5-3/8"	5' 7-1/4"	1"
11/26/2007	0950 hrs	4th	**RW-2**	No Product	27' 7-3/4"	0	0
11/26/2007	0800 hrs	4th	**RW-5**	33' 1/8"	33' 10-11/16"	9-9/16"	1-3/4"
11/28/2007	810	4th	**RW-6**	33' 3"	34' 5-5/8"	1' 1-5/8"	4 1/2"

Name and Title of person who performed measurement:
Cheryl Johnson (Environmental Specialist)

Signature: _____

GIANT CINIZA REFINERY

Permit Requirement: GW-032

Condition Permit ID # : OCD Sect. 9, Item 4

Monitoring Required: Quarterly measurement of product layer thickness and bailing of product.

Equipment Identification: RW-1, RW-2, RW-5, RW-6

Date of measurement	Time	Quarter	Well #	Depth to Product (feet)	Depth to Water (feet)	Product Level Thickness (feet)	Volume of Product Bailed (gallons)
11/26/2007	1050	4th	**RW-1**	30' 9-1/8"	36' 5-3/8"	5' 7-1/4"	1"
11/26/2007	0950 hrs	4th	**RW-2**	No Product	27' 7-3/4"	0	0
11/28/2007	0800 hrs	4th	**RW-5**	33' 1/8"	33' 10-11/16"	9-9/16"	1-3/4"
11/28/2007	0810 hrs	4th	**RW-6**	33' 3"	34' 5-5/8"	1' 1-5/8"	4.5"
Name and Title of person who performed measurement: Cheryl Johnson (Environmental Specialist)							

Signature: _____

CC: Ed Riege

GIANT CINIZA REFINERY

Permit Requirement: GW-032

Condition Permit ID # : OCD Sect. 9, Item 4

Monitoring Required: 2007 Quarterly measurement of product layer thickness and bailing of product.

Equipment Identification: RW-1, RW-2, RW-5, RW-6

Date of measurement	Time	Quarter	Well #	Depth to Product (feet)	Depth to Water (feet)	Product Level Thickness (feet)	Volume of Product Bailed (gallons)
2/21/2007	1015 hrs	1st	**RW-1**	33'5"	34'6"	1'1"	0.75
2/8/2007	1430 hrs	1st	**RW-2**	No Product	28'1"	0	0
2/13/2007	0900 hrs	1st	**RW-5**	32'2"	33'95"	1'.75"	3/8
2/21/2007	0950 hrs	1st	**RW-6**	33'31/2"	34'6"	1' 2-1/2"	3/4
6/5/2007	0840 hrs	2nd	**RW-1**	32'5"	32'-8-1/2"	2-1/2"	0.75
4/30/2007	1140 hrs	2nd	**RW-2**	No Product	28'1"	0	0
4/30/2007	1120 hrs	2nd	**RW-5**	33'0"	33'10"	10"	2.1/2 "
4/30/2007	1125 hrs	2nd	**RW-6**	34'7"	34'5"	2"	1/4
7/31/2007	1050 hrs	3rd	**RW-1**	32'5"	32'-8-1/2"	2-1/2"	1"
7/10/2007	0950 hrs	3rd	**RW-2**	No Product	27'6"	0	0
7/10/2007	1015 hrs	3rd	**RW-5**	33' 1-1/4"	33'11"	9-3/4"	2-1/2"
7/10/2007	1008 hrs	3rd	**RW-6**	33' 3-1/2"	34'7"	1'-3-1/2"	6-7/8"
11/26/2007	1050 hrs	4th	**RW-1**	30' 9-1/8"	36' 5-3/8"	5' 7-1/4"	1"
11/26/2007	0950 hrs	4th	**RW-2**	No Product	27' 7-3/4"	0	0
11/26/2007	0800 hrs	4th	**RW-5**	33' 1/8"	33' 10-11/16"	9-9/16"	1-3/4"
11/28/2007	810	4th	**RW-6**	33' 3"	34' 5-5/8"	1' 1-5/8"	4 1/2"

Name and Title of person who performed measurement:
Cheryl Johnson (Environmental Specialist)

Signature: _____

GIANT CINIZA REFINERY

Permit Requirement: GW-032

Condition Permit ID # : OCD Sect. 9, Item 4

Monitoring Required: Quarterly measurement of product layer thickness and bailing of product.

Equipment Identification: RW-1, RW-2, RW-5, RW-6

Date of measurement	Time	Quarter	Well #	Depth to Product (feet)	Depth to Water (feet)	Product Level Thickness (feet)	Volume of Product Bailed (gallons)
11/26/2007	1050	4th	**RW-1**	30' 9-1/8"	36' 5-3/8"	5' 7-1/4"	1"
11/26/2007	0950 hrs	4th	**RW-2**	No Product	27' 7-3/4"	0	0
11/28/2007	0800 hrs	4th	**RW-5**	33' 1/8"	33' 10-11/16"	9-9/16"	1-3/4"
11/28/2007	0810 hrs	4th	**RW-6**	33' 3"	34' 5-5/8"	1' 1-5/8"	4.5"

Name and Title of person who performed measurement:
Cheryl Johnson (Environmental Specialist)

Signature: _____

CC: Ed Riege

GIANT CINIZA REFINERY

Permit Requirement: GW-032

Condition Permit ID # : OCD Sect. 9, Item 4

Monitoring Required: Quarterly measurement of product layer thickness and bailing of product.

Equipment Identification: RW-1, RW-2, RW-5, RW-6

Date of measurement	Time	Quarter	Well #	Depth to Product (feet)	Depth to Water (feet)	Product Level Thickness (feet)	Volume of Product Bailed (gallons)
7/31/2007	1050	3rd	**RW-1**	32'5"	32'-8-1/2"	2-1/2"	1"
7/10/2007	950	3rd	**RW-2**	No Product	27'6"	0	0
7/10/2007	1015	3rd	**RW-5**	33' 1-1/4"	33'11"	9-3/4"	2-1/2"
7/10/2007	1008	3rd	**RW-6**	33' 3-1/2"	34'7"	1'-3-1/2"	6-7/8"

Name and Title of person who performed measurement:
Cheryl Johnson (Environmental Specialist)

Signature: _____

CC: Ed Riege

GIANT CINIZA REFINERY

Permit Requirement: GW-032

Condition Permit ID # : OCD Sect. 9, Item 4

Monitoring Required: Quarterly measurement of product layer thickness and bailing of product.

Equipment Identification: RW-1, RW-2, RW-5, RW-6

Date of measurement	Time	Quarter	Well #	Depth to Product (feet)	Depth to Water (feet)	Product Level Thickness (feet)	Volume of Product Bailed (gallons)
6/5/2007	0840 hrs	2nd	**RW-1**	32'5"	32'-8-1/2"	2-1/2"	0.75
4/30/2007	1140 hrs	2nd	**RW-2**	No Product	28'1"	0	0
4/30/2007	1120 hrs	2nd	**RW-5**	33'0"	33'10"	10"	2 1/2
4/30/2007	1125 hrs	2nd	**RW-6**	34'7"	34'5"	2"	1/4

Name and Title of person who performed measurement:
Cheryl Johnson (Environmental Specialist)

Signature: _____

CC: Ed Riege

GIANT CINIZA REFINERY

Permit Requirement: GW-032

Condition Permit ID # : OCD Sect. 9, Item 4

Monitoring Required: Quarterly measurement of product layer thickness and bailing of product.

Equipment Identification: RW-1, RW-2, RW-5, RW-6

Date of measurement	Time	Quarter	Well #	Depth to Product (feet)	Depth to Water (feet)	Product Level Thickness (feet)	Volume of Product Bailed (gallons)
2/21/2007	1015 hrs	1st	**RW-1**	33'5"	34'6"	1'1"	0.75
2/8/2007	1430 hrs	1st	**RW-2**	No Product	28'1"	0	0
2/13/2007	900hrs	1st	**RW-5**	32'2"	33'95"	1'.75"	3/8
2/21/2007	0950 hrs	1st	**RW-6**	33'31/2"	34'6"	1' 2-1/2"	3/4

Name and Title of person who performed measurement:
Cheryl Johnson (Environmental Specialist)

Signature:

CC: Ed Riege

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
OW-1 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Check well OW-1 for artesian flow condition

Date	Time	Quarter	Depth to Water (feet)	Comments
2/2/2007	1430 hrs	1st	2"	to top of plastic casing
4/30/2007	1010	2nd	Full	to top of plastic casing
7/10/2007	915	3rd	1' 9-1/2"	to top of plastic casing
11/26/2007	1402	4th	1' 7.94"	to top of plastic casing
Name & Title of person who performed measurement: Cheryl Johnson, Environmental Specialist				

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
OW-1 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Check well OW-1 for artesian flow condition

Date	Time	Quarter	Depth to Water (feet)	Comments
11/26/2007	1402	4th	1' 7.94"	to top of plastic casing
Name & Title of person who performed measurement: Cheryl Johnson, Environmental Specialist				

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
OW-1 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Check well OW-1 for artesian flow condition

Date	Time	Quarter	Depth to Water (feet)	Comments
7/10/2007	915	3rd	1' 9-1/2"	to top of plastic casing
Name & Title of person who performed measurement: Cheryl Johnson, Environmental Specialist				

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
OW-1 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Check well OW-1 for artesian flow condition Quarterly

Date	Time	Quarter	Depth to Water (feet)	Comments
4/30/2007	1010	2nd	Full	Casing Full of Water
Name & Title of person who performed measurement: Cheryl Johnson, Environmental Specialist				

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
OW-1 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Check well OW-1 for artesian flow condition

Date	Time	Quarter	Depth to Water (feet)	Comments
2/2/2007	1430 hrs	1st	2"	to top of plastic casing
Name & Title of person who performed measurement: Cheryl Johnson, Environmental Specialist				

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
OW-10 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Quarterly water level on OW-10

Date	Time	Quarter	Depth to Water (feet)	Comments
1/29/2007	1335	1st	2'71/2"	To top of plastic casing
4/30/2007	1000	2nd	2' 1"	To top of plastic casing
7/10/2007	906	3rd	3' 1-1/2"	To top of plastic casing
11/26/2007	1347	4th	2' 9.45"	To top of plastic casing
Name & Title of person who performed measurement: Cheryl Johnson, Environmental Specialist				

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
OW-10 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Quarterly water level on OW-10

Date	Time	Quarter	Depth to Water (feet)	Comments
11/26/2007	1347	4th	2' 9.45"	To top of plastic casing

Name & Title of person who performed measurement: Cheryl Johnson, Environmental Specialist

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
OW-10 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Quarterly water level on OW-10

Date	Time	Quarter	Depth to Water (feet)	Comments
7/10/2007	906	3rd	3' 1-1/2"	To top of plastic casing
Name & Title of person who performed measurement: Cheryl Johnson, Environmental Specialist				

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
OW-10 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Quarterly water level on OW-10

Date	Time	Quarter	Depth to Water (feet)	Comments
4/30/2007	1000	2nd	2'- 1"	Top of Plastic Casing
Name & Title of person who performed measurement: Cheryl Johnson, Environmental Specialist				

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
OW-10 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Quarterly water level on OW-10

Date	Time	Quarter	Depth to Water (feet)	Comments
1/29/2007	1335	1st	2'71/2"	To top of plastic casing
Name & Title of person who performed measurement: Cheryl Johnson, Environmental Specialist				

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-1 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Quarterly water level on GWM-1

Date	Time	Quarter	Depth to Water (feet)	Comments
2/8/2007	1105 hrs	1st	20' 2-1/2"	To top of plastic Casing.
4/30/2007	1037	2nd	20' 2-1/2"	To top of plastic Casing.
7/10/2007	932	3rd	20' 7-1/2"	To top of plastic Casing.
9/14/2007	1500	*	20.82"	To top of plastic Casing.
11/26/2007	1414	4th	20'.56"	To top of plastic Casing.
5/24/2007	**900**	**2nd**		**Collected annual water samples**
Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist				

* Requested another gauge check per Hope M. = NMED

Signature: _____

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-1 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Quarterly water level on GWM-1

Date	Time	Quarter	Depth to Water (feet)	Comments
11/26/2007	1414	4th	20' 56"	To top of plastic Casing.
5/24/2007	**900**	**2nd**		**Collected annual water samples**

Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-1 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Quarterly water level on GWM-1

Date	Time	Quarter	Depth to Water (feet)	Comments
7/10/2007	932	3rd	20' 7-1/2"	To top of plastic Casing.
5/24/2007	**900**	**2nd**		**Collected annual water samples**

Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT

GWM-1 WELL INSPECTION (aerators)

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Quarterly water level on GWM-1

Date	Time	Quarter	Depth to Water (feet)	Comments
4/30/2007	1037	2nd	20'-1-1/2"	Top of plastic casing
5/24/2007	9:00am	Collect Annual Water Samples		
Name & Title of person who performed measurement:				

Signature:

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-1 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 4

Monitoring Requirement: Quarterly water level on GWM-1

Date	Time	Quarter	Depth to Water (feet)	Comments
2/8/2007	1105 hrs	1st	20' 2-1/2"	To top of plastic Casing.
Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist				

Signature:_____

CC: Ed Riege

File: (S:)\env-share\Wells OW-1,OW-10 GWM-1 Form

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-2 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2007

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
2/8/2007	1100 hrs	1st	18 97'	DRY: (To top of plastic casing)
4/30/2007	1045	2nd	18 9.7	DRY: (To top of plastic casing)
7/10/2007	935	3rd	18 9.7	DRY: (To top of plastic casing)
11/26/2007	1409	4th	18 9.7	DRY: (To top of plastic casing)
Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist				

Signature:

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-2 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2007

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
11/26/2007	1409	4th	18 9.7	DRY: (To top of plastic casing)

Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist

Signature:

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-2 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2007

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
7/10/2007	935	3rd	18' 9.7	DRY: (To top of plastic casing)

Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist

Signature:

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-2 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly start 2007

Date	Time	Quarter	Depth to Bottom (feet)	Comments (Dry?)
4/30/2007	1045	2nd	18 9.7'	Dry

Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist

Signature:

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-2 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2007

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
2/8/2007	1100 hrs	1st	18 97	DRY: (To top of plastic casing)

Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist

Signature: _____

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-3 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2007

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
2/8/2007	1100 hrs	1st	18 97	DRY: (To top of plastic casing)
4/30/2007	1048	2nd	17'94	DRY: (To top of plastic casing)
7/10/2007	926	3rd	17'94	DRY: (To top of plastic casing)
11/26/2007	1419	4th	17'94	DRY: (To top of plastic casing)
Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist				

Signature:

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-3 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2007

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
11/26/2007	1419	4th	17'94	DRY: (To top of plastic casing)

Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist

Signature:

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-3 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2007

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
7/10/2007	926	3rd	17'94	DRY: (To top of plastic casing)

Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist

Signature:

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-3 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2007

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
4/30/2007	1048	2nd	17.9'- 4	Dry

Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist

Signature:

GIANT CINIZA REFINERY

GROUNDWATER DISCHARGE PERMIT
GWM-3 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2007

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
2/8/2007	1011 hrs	1st	17' 94"	DRY: (To top of plastic casing)
Name & Title of person who performed measurement: Cheryl Johnson / Environmental Specialist				

Signature:

8. List of Figures

- Figure 1 – Regional Map
- Figure 2 – Topographic Map of the Refinery Site
- Figure 3 – Well Locations, Z-02-180
- Figure 4 – Alluvium/Chinle Group Interface Water Piezometric Surface, Z-02-181
- Figure 5, - SPH (Separate Phase Hydrocarbon Thickness) Map, Z-02-182
- Figure 6 – Sonsela Water Piezometric Surface, Z-02-183
- Figure 7 – Isopleth of 0.005ppm Benzene, Z-02-184

Figure 1
Regional Map

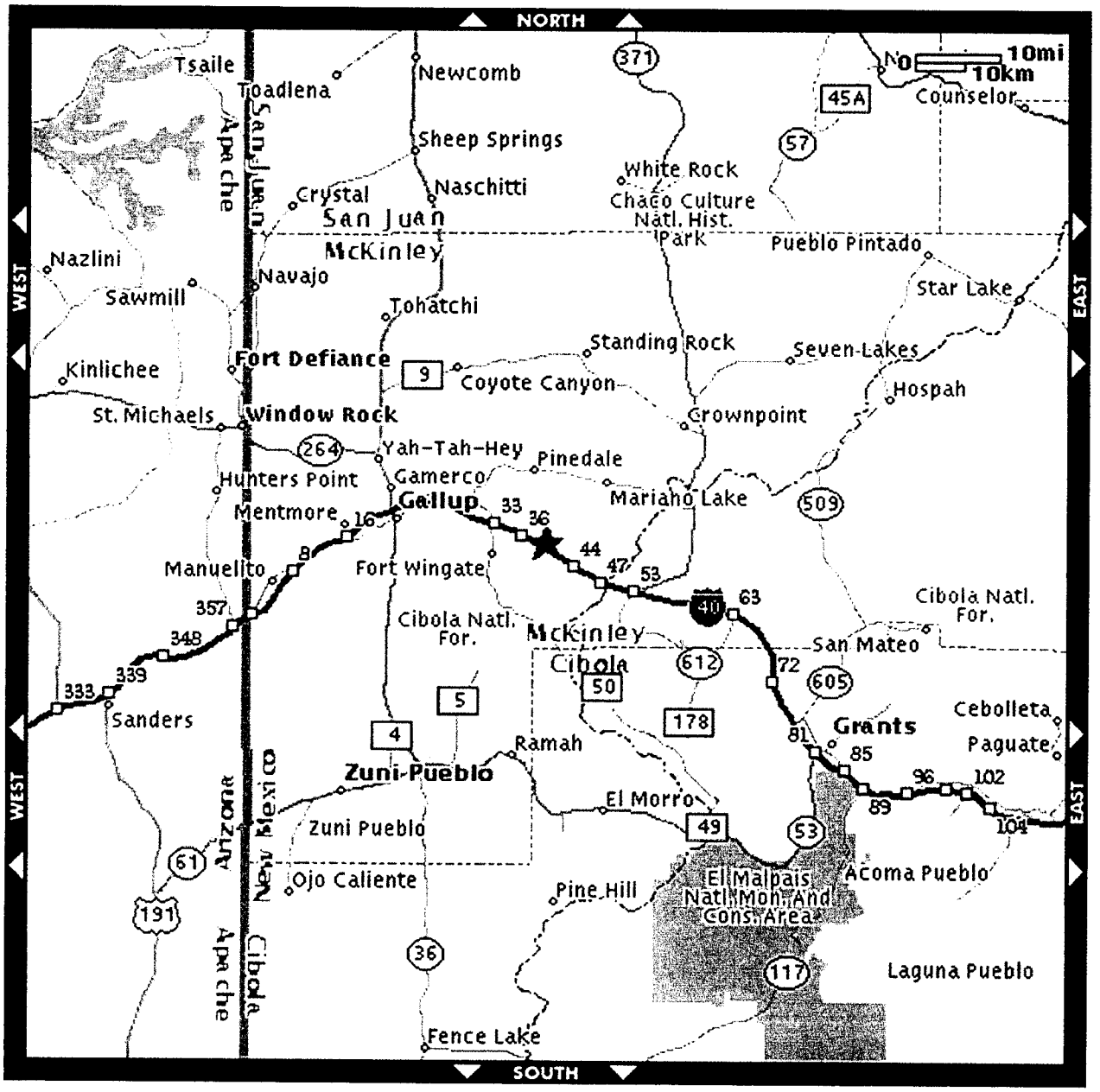
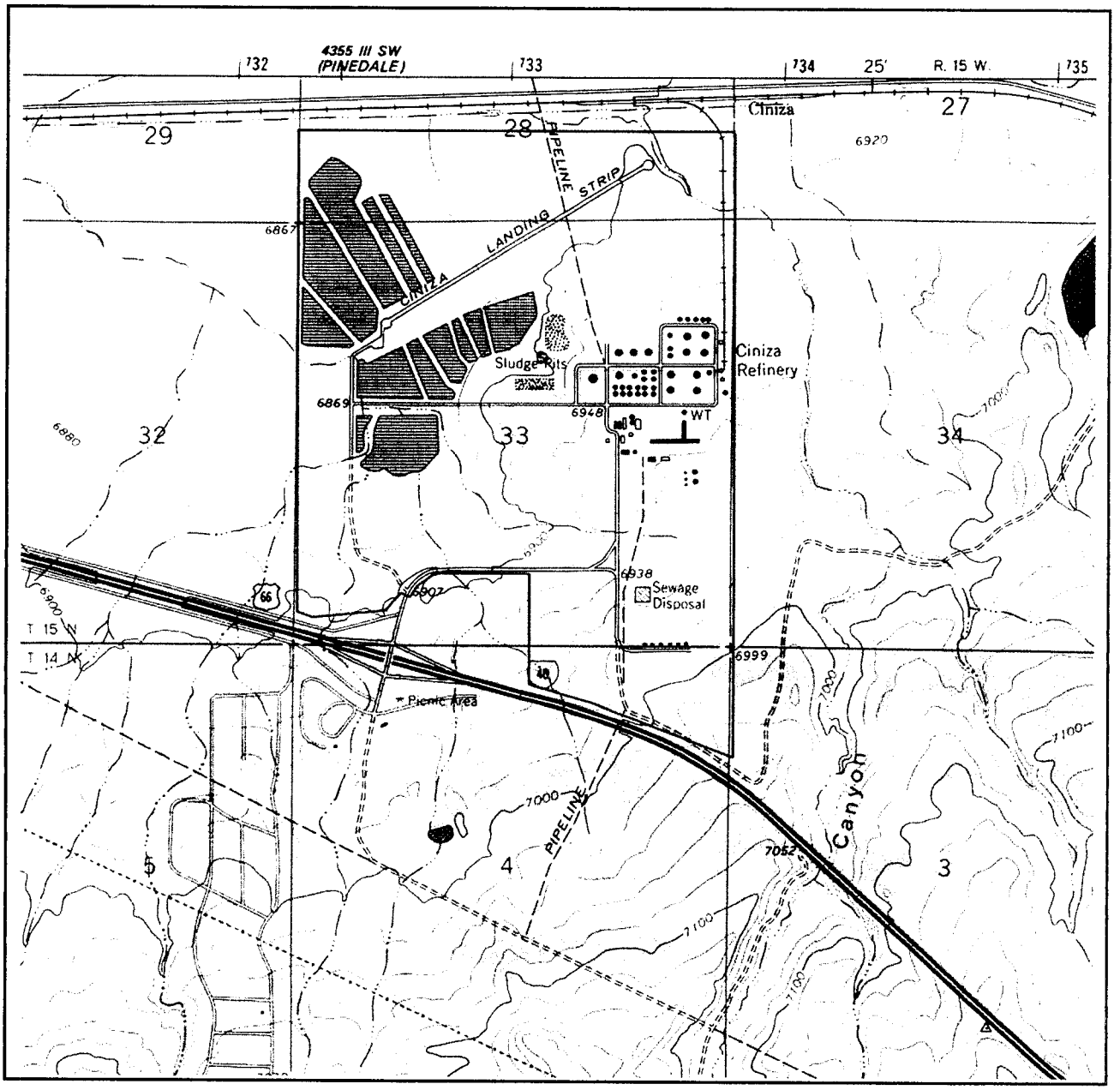
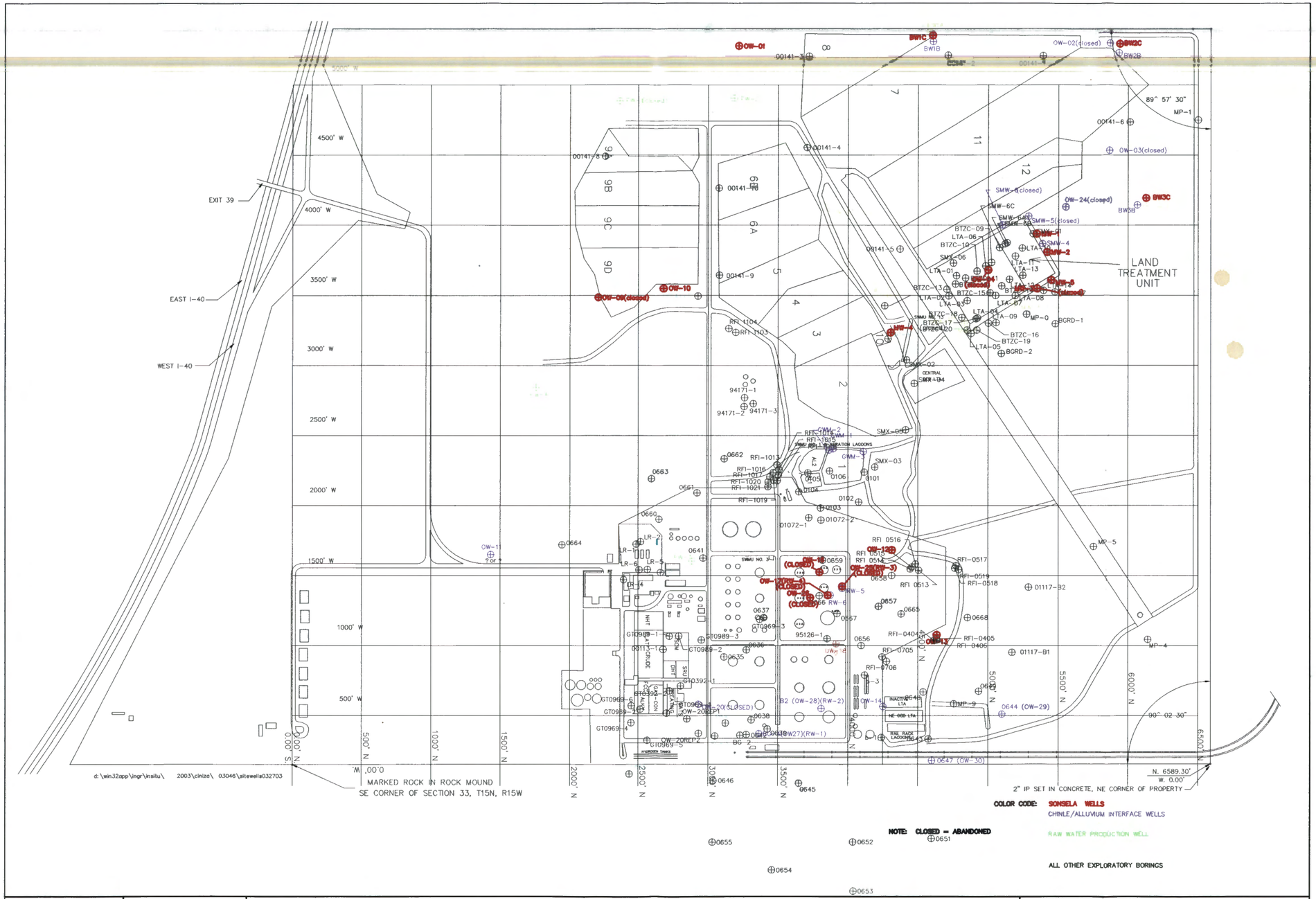


Figure 2 - Topographic Map of the Refinery Site

Locality Map
USGS Topographical Map - Gallup Quadrangle (Revised 1980)



Well and Boring Locations Map



Western Refining

1" = 500'

File 06-054

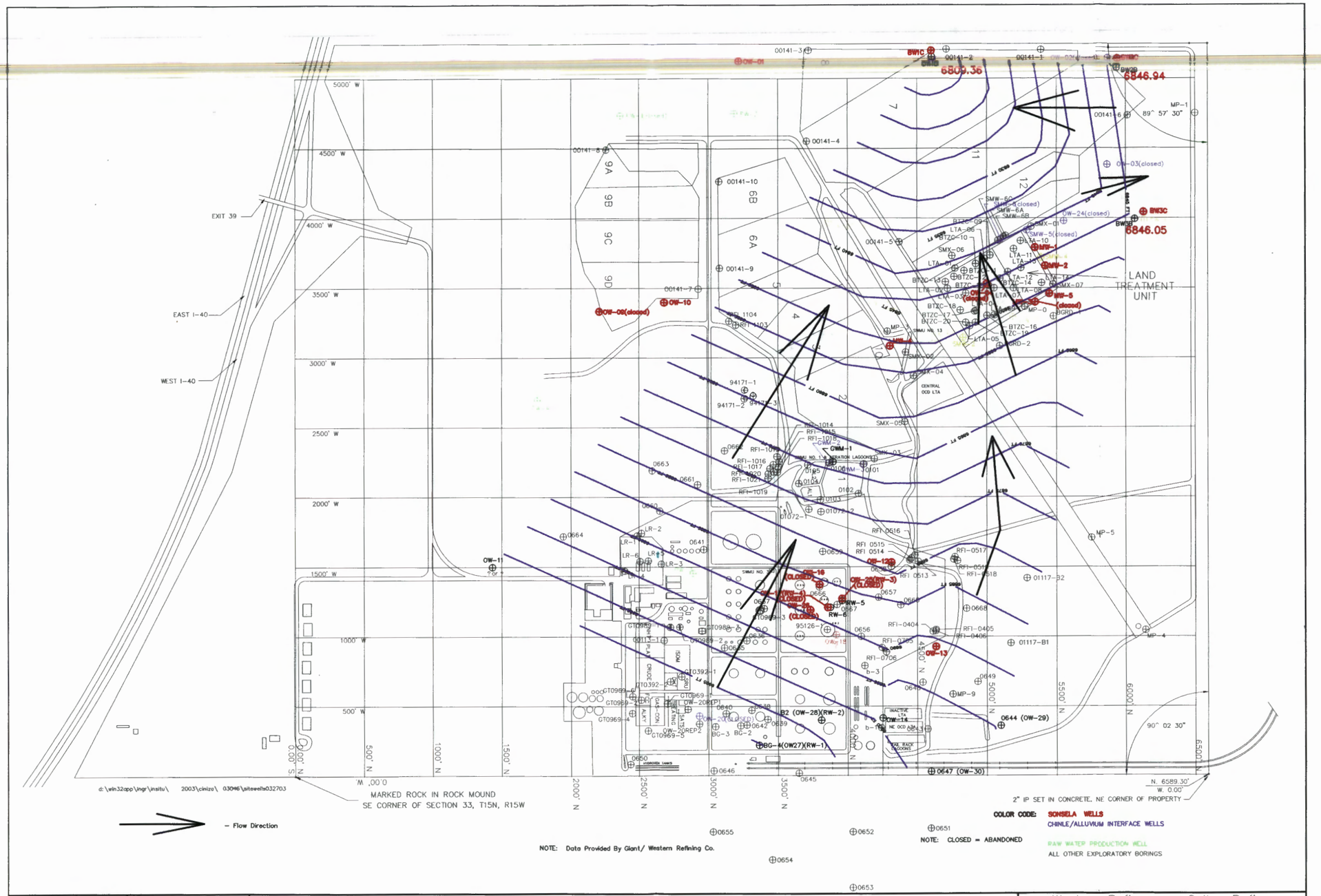
Figure 3
Well Locations

Western Refinery, – Gallup Refinery
Interstate 40, Exit 39
Jamestown, New Mexico 87347
Date: August 22, 2007

DWG NO. Z-02-180

REV 1

Potentiometric Elevation Map
(Alluvium – Chinle Group Interface Water Levels)



Western Refining

1" = 500'

File 06-054

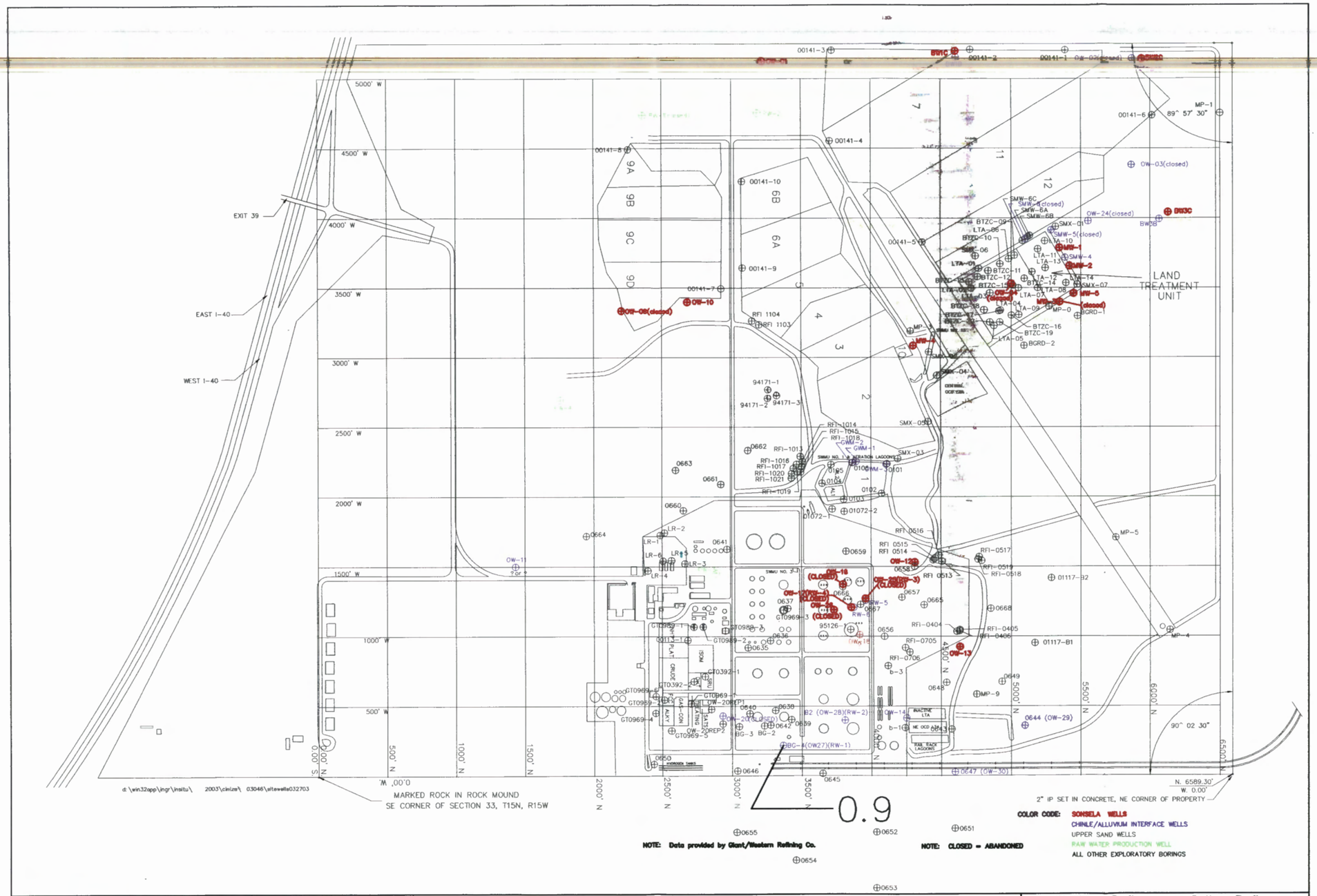
Figure 4
Alluvium/Chinle Group Interface Water
Piezometric Surface (December 2007)

Western Refinery, - Gallup Refinery
Interstate 40, Exit 39
Jamestown, New Mexico 87347
Date: August 22, 2007

DWG NO. Z-02-181

REV 1

Annual Product Thickness Map
(Separate Phase Hydrocarbon Thickness)



Western Refining

1" = 500'

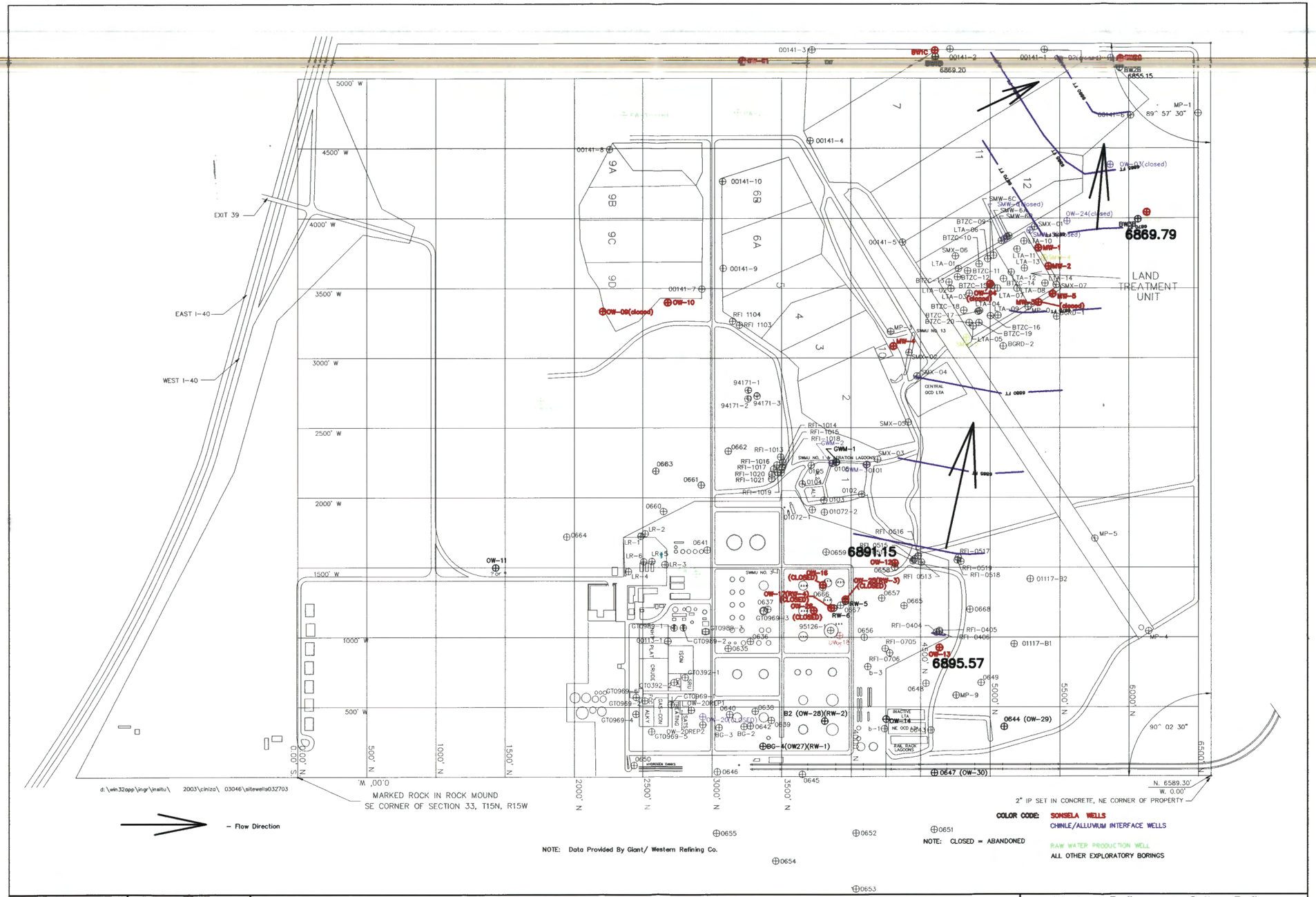
File 06-054

Figure 5
SPH Thickness Map (2007)

Western Refinery, – Gallup Refinery
Interstate 40, Exit 39
Jamestown, New Mexico 87347
Date: August 22, 2007

DWG NO. Z-02-182

REV 1



Western Refining

1" = 500'

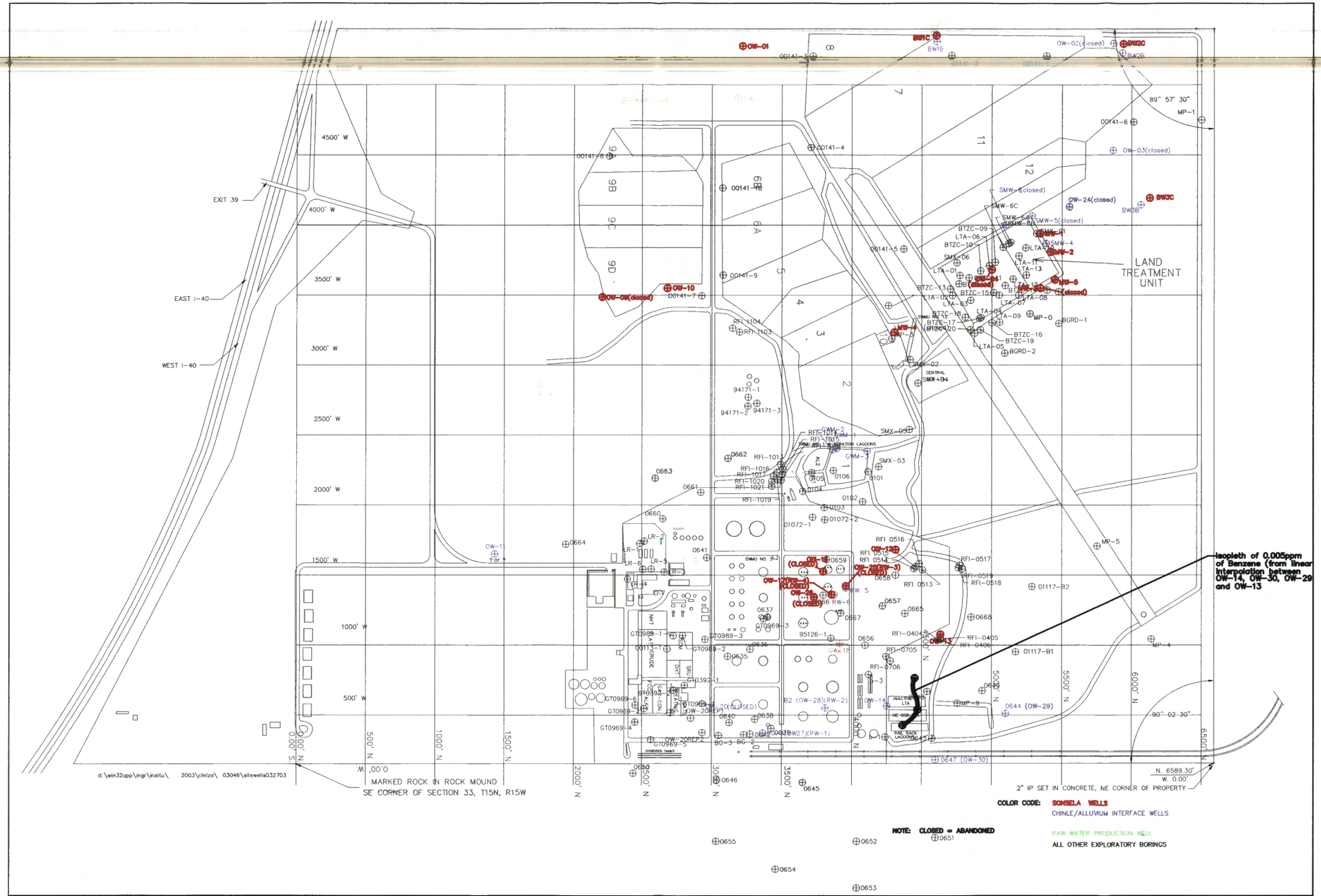
File 06-054

Figure 6
Sonsela Water
Piezometric Surface

Western Refinery, - Gallup Refinery
Interstate 40, Exit 39
Jamestown, New Mexico 87347
Date: August 22, 2007

DWG NO. Z-02-183

REV 1



1" = 500'

File 06-054

Figure 7
Isopleth of 0.005ppm Benzene

Western Refinery, – Gallup Refinery
Interstate 40, Exit 39
Jamestown, New Mexico 87347
Date: August 22, 2007

DWG NO. Z-02-184

REV 1

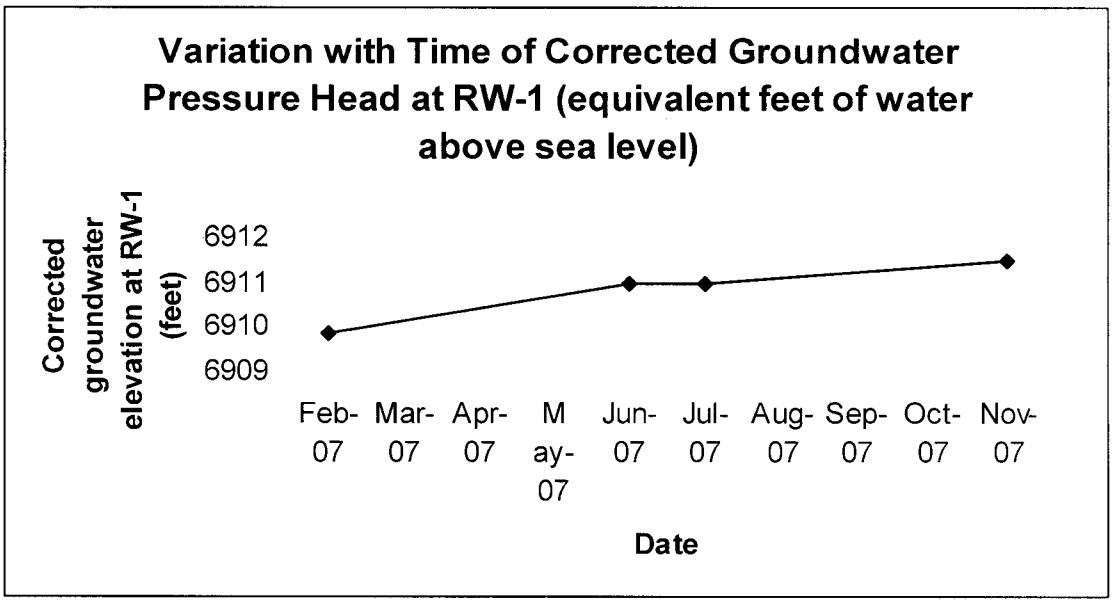


Figure 8: Variation with Time of Corrected Groundwater pressure head at RW-1 (measured height of water column plus equivalent height in terms of feet of water of the hydrocarbon column – provided in units of feet above sea level)

Appendix A: Gallup Field Sampling Collection and Handling Procedures

Field Data Collection

All facility monitoring wells and recovery wells were gauged in January, March, May, June, July, and October of 2007. Gallup does not have any recovery well pumps that need to be shut off and removed prior to water elevation measurements.

All water/product levels are measured to an accuracy of the nearest 0.01 foot using an electrical Conductivity based meter. After determining water levels, well volumes are calculated using the conversion factors listed (under the heading *Capacity gallons per foot*) in Table 1 in Section 7.

Generally, at least three well volumes are purged from each well prior to sampling. Wells that don't have sufficient recovery to obtain 3 well volumes are pumped until loss of suction then sampled.

Electrical Conductivity (E.C.), pH, and temperature are monitored during purging using a meter. The wells are considered satisfactorily purged when the pH, E.C., and temperatures values did not vary by more than 10 percent for at least three measurements.

Filed data and well elevations can be found in Section 8 – Well Data Summary Table.

Purged well water from wells that have shown prior contamination is collected in fifty five gallon drums. The water is treated in the refinery's waste water treatment system. Purged water from historically non-contaminated wells is drained onto the ground.

Sampling Equipment at Gallup

The following sampling equipment is maintained at Gallup and used by the sampling personnel:

- Heron Instruments 100 ft. DipperT electric water depth tape complying with US GGG-T-106E, EEC Class II.
- Pall Corporation Acro 50A 0.45 micron disposable filter used with 60 ml. disposable syringe for filtering water in the field.
- Myron L Company Model DCH4 pH 4 & 10 for gain, and Hach NaCl 1990 Micro-siemens for conductivity calibration.
- Grundfos 2-inch pumps with Grundfos 115-volt AC–to-Dc converter.

Groundwater Elevation

All water/product levels are measured using DipperT electric water depth tape. The technician records separate phase hydrocarbon (SPH), depth to water (DTW), and total well depth using the tape. Wash probe on DipperT electric water depth tape first with non-phosphate soap water then with deionized or distilled water before lowering into the well casing. Recovery wells with free product are checked using a reel gauge with water and hydrocarbon finding paste.

Water Quality/Groundwater Sampling

Water quality parameters are measured using a meter. Electrical Conductivity, pH, and temperature are monitored during purging.

Field Procedure for Purging Monitor Wells

In order to assure that the sample collected is representative of actual aquifer conditions, it is necessary to purge the well of stagnant water in the casing. This is accomplished by pumping three casing volumes of water from the well or until it is bailed dry, whichever occurs first. If a well can be pumped dry, it requires only that sufficient time elapse for an adequate volume of water to accumulate for the sampling event.

The casing volume is calculated according to the following formula:

One casing volume = L x F where

L = Length of water column = total depth – depth to water

F = gallons water per foot of well, based on the well casing diameter

F is provided on the *Well Volume Sheet* for the monitoring wells at Gallup provided at the end of this appendix.

The volume to be purged from each well is determined as follows:

Purge volume = casing volume x 3

Document the following information:

a. The amount of water purged from each well.
b. Weather conditions (dry or wet).
c. Depth to Water (DTW).
d. Purge date.
e. Purge time.

Well Evacuation

Before sample collection can begin, the water collected from each monitoring well must be fresh aquifer water. Well evacuation replaces stagnant well water with fresh aquifer water. The water level in the well, total depth of well and thickness of floating product (if any) will be measured using the DipperT electric water depth tape. A transparent bailer will be used to check for the presence and measure the thickness of floating product. If product is present, a ground water sample is typically not obtained.

Recovery wells are evacuated by use of an air driven pump. Wells MW-1, MW-2, MW-4, MW-5, BW-1C, BW-2A, BW-2B, BW-3B, and SMW-4 are each equipped with a dedicated electrical pump. The remaining wells were purged using a portable Grundfos pump in 2006.

In low yielding wells, the standing water will be removed until the well is essentially dry. The water level in the well will be allowed to recover until a sufficient volume is present to obtain a sample.

The first sample should be tested for pH, temperature, and specific Conductivity. Samples should then be collected and containerized in the order of the parameter's volatilization sensitivity (see *Order of Collection* below). The well should be retested for pH, temperature and specific Conductivity after sampling as a measure of purging efficiency and as a check on the stability of the water samples over time. All well evacuation information should be recorded in a log book.

Hand Bailing

Hand bailing is only used to remove free product from recovery wells. Hand bailing is performed by lowering a Teflon™ bailer slowly into the well, allowing water to enter the bailer, and lifting the bailer out of the well. The bailer is positioned just below the top of the standing water in the well, so that the bailed product is removed from the top of the water column.

Pumping

An electric pump is used to remove water from all wells other than recovery wells with free product in them. Wells MW-1, MW-2, MW-4, MW-5, BW-1C, BW-2A, BW-2B, BW-3B, and SMW-4 are each equipped with a dedicated electrical pump. The other wells, except for recovery wells, are pumped using a portable 2-inch Grundfos pump. During sample collection, a maximum flow rate of 100 milliliters/minute should be used. The actual flow rate should be measured using a graduated container and timed using a stop watch or a watch with a second hand. This rate can change as the water level in the well drops. The flow rate can be determined by:

$$\text{Flow rate (gpm)} = \frac{\text{volume collected (gallons) x 60 seconds per minute}}{\text{Time to fill container (seconds)}}$$

Bottle Filling Procedure

If the well was not bailed dry and the water level is recovering to provide sufficient water to fill all the sample bottles, then samples should be collected immediately. If the well was completely evacuated and/or recovery is slow, wait for a sufficient volume of water to recover in the well to fill all of the sample bottles before beginning to collect samples. Do not overfill the bottles as this will dilute the preservative. When filling VOA and TOX containers, slowly fill the container until the meniscus is just above the lip of the container. Place the cap on the container and tighten. Check for air bubbles by inverting the container and tapping gently. There should be no headspace (air) in the container. If headspace is present, the sample should be discarded and the container refilled (add sufficient preservative if required by sample test).

Do not touch the inside of bottle caps or the inside of the containers. If a cap is accidentally dropped, it should be rinsed with de-ionized or distilled water followed by a rinse with the sample prior to being placed on the container. Record in the field notes whether this happens.
Filled containers should be placed on ice in the coolers immediately upon collection. Replace well cap and lock the cap.

Order of Collection

Samples should be collected in the order listed below:

Parameter	Bottle Type
Volatile Organics	VOA vials with septa cap of Teflon™
TOX	Pint amber glass with septa cap, H2SO4
TOC, Phenols, Nitrate, Ammonia	Quart glass jar, H2SO4
Extractable Organics	Quart glass jar with Teflon™ cap

Chloride and Sulfate	Quart plastic, no preservative
Cyanide	Quart glass, NaOH
Radionuclides	Quart plastic, HNO3
Metals*	Pint plastic

* Prefiltration bottle for dissolved metals which is subsequently filtered and transferred to a pint Plastic with HNO3.

Filtration

Ground water samples are filtered prior to *dissolved metals* analysis. For dissolved metals, sample water is poured into a jar and then extracted with a syringe. The syringe is then used to force the sample water through a 0.45 micron pore filter paper filter into the proper sample bottle to collect dissolved metals samples. Filtration must be performed within two hours of sample collection. Pour the filtrate into a sample bottle containing HNO3 preservative.

For samples destined for *total metals* analysis, do not filter the sample, and preserve with HNO3 to pH <2 in the field.

Gallup sampling personnel carry a cell phone when gathering groundwater and other water samples. While sampling procedures are generally well known and the appropriate sample bottles are ordered to match each sampling event, occasional questions do arise from unforeseen circumstances which may develop during sampling. At such times, sampling personnel contact Hall Environmental Analytical Laboratory to verify that sampling is correctly performed.

General Well Sampling and Sample Handling Procedures

For safety protection and sampling purity, rubber gloves are worn and changed between each activity.

Prepare for sampling event by making out sample bottle labels and have bottles separated into plastic bags for each well to be sampled and place in ice chest ready to take into the field.

Bring along a note book and sample log.

Starting with well MW-1, document weather conditions, sample date and time.

Fill in label with location, date, time, analysis, preservative, and your name.

Start sampling by adjusting converter speed for each well.

Affix sample label and fill bottle according to lab instructions. For samples intended for VOC analysis, use bottles with septa lids, fill bottle to neck and add final amount of water with cap to form meniscus. Turn bottles upside down to examine for bubbles. If bubbles show repeat previous sentence. If no bubbles show, secure lids and pack in bubble wrap and place in cooler until sampling is completed.

Decontaminate equipment that is not dedicated for use in a particular well. Decontaminate by first washing with a non-phosphate soapy water mixture then triple rinse with distilled or deionized water.

Refrigerate completed samples until shipping to lab. Be sure to check holding times and arrange the appropriate shipping.

Equipment Calibration Procedures

Myron L Digital PH and Conductivity Meter:
Conductivity Calibration:

1. Select 20 mS (micro Siemens) range. Remove bottom cover of instrument.
2. Rinse the cell cup three times with 442-15,000 standard solution and refill.
3. Press and hold the black button on instrument.
4. Adjust the calibration control the reading is correct. Discard the used solution.

pH Calibration:

1. Using pH 7 buffer, adjust "zero" control to read 7.00
2. Using pH 4 or 10 buffer, adjust "gain" control to read 4.00 or 10.00

TO VIEW THE MAP AND/OR MAPS WITH THIS DOCUMENT, PLEASE CALL THE HAZARDOUS WASTE BUREAU AT 505-476-6000 TO MAKE AN APPOINTMENT

OIL CONSERVATION DIVISION
2007 ANNUAL GROUNDWATER REPORT

Binder 2: OCD Addendum to Annual Groundwater Report

Western Refining – Gallup Refinery

McKinley County, New Mexico

September 1, 2008

EPA ID No. NMD000333211

Discharge Permit No. GW-032

Prepared By: Gaurav Rajen, Environmental Engineer, Western Refining – Gallup Refinery

Signature: Gaurav Rajen, Date: 8/28/08

Certified By: Mark Turri, Refinery Manager, Western Refining – Gallup Refinery

Signature: Mark S. Turri, Date: 8/28/08

II. OCD Addendum (Binder 2)

Permit Condition 19A (Examples of Weekly Pond Inspections)

CINIZA REFINERY
OCD DISCHARGE PLAN GW-032
WEEKLY POND INSPECTION

DATE: 1/4/07

INSPECTED BY: JIM LIEB

POND #	FREEBOARD	DIKE CONDITION	IMMEDIATE ACTION NEEDED
1	OK	OK	no
2			
3			
4			
5			
6a			
6b			
7		some Gullys (west side)	no
8		some Gullys (west side)	no
9a		OK	
9b			
9c			
9d			
11			
12a			
12b			

COMMENTS: _____

Check all ponds weekly for dike condition and freeboards. Check also for unusual flow from or into the ponds.

OCD Permit Condition 21:

A. Summary of all Major Refinery Activities or Events in 2007

January:

- The OCD and NMED completed review of NAPIS Leakage Correction Plan with conditions.

February:

- The Overflow Ditch and Fan-out Area, Railroad Rack Lagoon (SWMU 8) Subsurface Investigation Report was submitted to OCD/NMED.

March:

- Submitted work plan for monitoring well installation around the new API separator to OCD/NMED.

April:

- No major activities.

May:

- On May 31, Western Refining Inc. and Giant Industries Inc. closed a transaction under which Western acquired all of the outstanding shares of stock of Giant Industries Inc. which then became a subsidiary of Western. The Giant Ciniza refinery is now known as the Western Refining Gallup refinery.

June:

- No major activities.

July:

- No major activities.

August:

- The annual groundwater report was completed and submitted to OCD/NMED.
- Work plan for Tank 101 and 102 subsurface investigation was submitted to OCD/NMED. Work was performed in August by Trihydro.
- OCD approved the Discharge Permit renewal for the Gallup refinery.
- Monitor Well Installation Report submitted to OCD/NMED regarding three weels around ne API separator.

September:

- The OCD approved a "Minor Modification" for new completion schedule.
- On September 12, the refinery experienced a fire in the FCC unit. The fire was the result of a hole that opened up in the riser section of the unit. Approximately 7,000 gallons of well water was used to extinguish the fire.

- An EPA/NMED hazardous waste inspection was conducted at the refinery on September 11 through 13.

October:

- No major activities.

November:

- The fan-out area near the railroad rack lagoon was assessed for determining the area of contamination. Soil samples were taken at varying depths and across the suspected contaminated area. This area will be excavated in 2008, based on NMED/OCD approvals.

December:

- The annual HAZWOPER training refresher for 15 Gallup employees was completed at UNM Gallup campus.
- The Evaporation Pond Closure Plan was submitted to OCD/NMED.
- The fuel oil loading rack concrete secondary containment project was 95% complete.
- The west bay of the NAPIS stainless steel liner installation was completed.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, January 18, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #1 and #2 1-4-2007 per OCD

Order No.: 0701044

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 1/4/2007 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

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-1
Lab Order:	0701044	**Collection Date:**	1/4/2007 10:30:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: MAP
Mercury	0.0032	0.00020		mg/L	1	1/8/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: IC
Arsenic	ND	0.020		mg/L	1	1/15/2007 12:02:36 PM
Barium	0.18	0.020		mg/L	1	1/15/2007 12:02:36 PM
Cadmium	ND	0.0020		mg/L	1	1/15/2007 12:02:36 PM
Chromium	0.010	0.0060		mg/L	1	1/15/2007 12:02:36 PM
Lead	0.0075	0.0050		mg/L	1	1/15/2007 12:02:36 PM
Selenium	ND	0.050		mg/L	1	1/15/2007 12:02:36 PM
Silver	ND	0.0050		mg/L	1	1/15/2007 12:02:36 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	250		µg/L	5	1/16/2007
Acenaphthylene	ND	250		µg/L	5	1/16/2007
Aniline	ND	500		µg/L	5	1/16/2007
Anthracene	ND	250		µg/L	5	1/16/2007
Azobenzene	ND	250		µg/L	5	1/16/2007
Benz(a)anthracene	ND	380		µg/L	5	1/16/2007
Benzo(a)pyrene	ND	250		µg/L	5	1/16/2007
Benzo(b)fluoranthene	ND	380		µg/L	5	1/16/2007
Benzo(g,h,i)perylene	ND	250		µg/L	5	1/16/2007
Benzo(k)fluoranthene	ND	250		µg/L	5	1/16/2007
Benzoic acid	ND	1200		µg/L	5	1/16/2007
Benzyl alcohol	ND	500		µg/L	5	1/16/2007
Bis(2-chloroethoxy)methane	ND	250		µg/L	5	1/16/2007
Bis(2-chloroethyl)ether	ND	380		µg/L	5	1/16/2007
Bis(2-chloroisopropyl)ether	ND	380		µg/L	5	1/16/2007
Bis(2-ethylhexyl)phthalate	ND	380		µg/L	5	1/16/2007
4-Bromophenyl phenyl ether	ND	250		µg/L	5	1/16/2007
Butyl benzyl phthalate	ND	380		µg/L	5	1/16/2007
Carbazole	ND	250		µg/L	5	1/16/2007
4-Chloro-3-methylphenol	ND	500		µg/L	5	1/16/2007
4-Chloroaniline	ND	500		µg/L	5	1/16/2007
2-Chloronaphthalene	ND	250		µg/L	5	1/16/2007
2-Chlorophenol	ND	250		µg/L	5	1/16/2007
4-Chlorophenyl phenyl ether	ND	380		µg/L	5	1/16/2007
Chrysene	ND	380		µg/L	5	1/16/2007
Di-n-butyl phthalate	ND	250		µg/L	5	1/16/2007
Di-n-octyl phthalate	ND	380		µg/L	5	1/16/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

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Lab ID:	0701044-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Dibenz(a,h)anthracene	ND	250		µg/L	5	1/16/2007
Dibenzofuran	ND	250		µg/L	5	1/16/2007
1,2-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
1,3-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
1,4-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
3,3'-Dichlorobenzidine	ND	380		µg/L	5	1/16/2007
Diethyl phthalate	ND	250		µg/L	5	1/16/2007
Dimethyl phthalate	ND	250		µg/L	5	1/16/2007
2,4-Dichlorophenol	ND	250		µg/L	5	1/16/2007
2,4-Dimethylphenol	ND	250		µg/L	5	1/16/2007
4,6-Dinitro-2-methylphenol	ND	1200		µg/L	5	1/16/2007
2,4-Dinitrophenol	ND	1200		µg/L	5	1/16/2007
2,4-Dinitrotoluene	ND	250		µg/L	5	1/16/2007
2,6-Dinitrotoluene	ND	250		µg/L	5	1/16/2007
Fluoranthene	ND	250		µg/L	5	1/16/2007
Fluorene	ND	250		µg/L	5	1/16/2007
Hexachlorobenzene	ND	250		µg/L	5	1/16/2007
Hexachlorobutadiene	ND	250		µg/L	5	1/16/2007
Hexachlorocyclopentadiene	ND	1200		µg/L	5	1/16/2007
Hexachloroethane	ND	250		µg/L	5	1/16/2007
Indeno(1,2,3-cd)pyrene	ND	250		µg/L	5	1/16/2007
Isophorone	ND	250		µg/L	5	1/16/2007
2-Methylnaphthalene	530	250		µg/L	5	1/16/2007
2-Methylphenol	990	380		µg/L	5	1/16/2007
3+4-Methylphenol	1500	500		µg/L	5	1/16/2007
N-Nitrosodi-n-propylamine	ND	250		µg/L	5	1/16/2007
N-Nitrosodimethylamine	ND	250		µg/L	5	1/16/2007
N-Nitrosodiphenylamine	ND	250		µg/L	5	1/16/2007
Naphthalene	ND	250		µg/L	5	1/16/2007
2-Nitroaniline	ND	1200		µg/L	5	1/16/2007
3-Nitroaniline	ND	1200		µg/L	5	1/16/2007
4-Nitroaniline	ND	500		µg/L	5	1/16/2007
Nitrobenzene	ND	250		µg/L	5	1/16/2007
2-Nitrophenol	ND	380		µg/L	5	1/16/2007
4-Nitrophenol	ND	1200		µg/L	5	1/16/2007
Pentachlorophenol	ND	1200		µg/L	5	1/16/2007
Phenanthrene	360	250		µg/L	5	1/16/2007
Phenol	3300	250		µg/L	5	1/16/2007
Pyrene	ND	380		µg/L	5	1/16/2007
Pyridine	ND	750		µg/L	5	1/16/2007

Qualifiers:

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Lab ID:	0701044-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
1,2,4-Trichlorobenzene	ND	250		µg/L	5	1/16/2007
2,4,5-Trichlorophenol	ND	250		µg/L	5	1/16/2007
2,4,6-Trichlorophenol	ND	380		µg/L	5	1/16/2007
Surr: 2,4,6-Tribromophenol	109	16.6-150		%REC	5	1/16/2007
Surr: 2-Fluorobiphenyl	91.2	19.6-134		%REC	5	1/16/2007
Surr: 2-Fluorophenol	56.3	9.54-113		%REC	5	1/16/2007
Surr: 4-Terphenyl-d14	73.6	22.7-145		%REC	5	1/16/2007
Surr: Nitrobenzene-d5	84.4	14.6-134		%REC	5	1/16/2007
Surr: Phenol-d5	43.2	10.7-80.3		%REC	5	1/16/2007
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Benzene	27	10		µg/L	10	1/5/2007
Toluene	79	10		µg/L	10	1/5/2007
Ethylbenzene	15	10		µg/L	10	1/5/2007
Methyl tert-butyl ether (MTBE)	ND	15		µg/L	10	1/5/2007
1,2,4-Trimethylbenzene	77	10		µg/L	10	1/5/2007
1,3,5-Trimethylbenzene	25	10		µg/L	10	1/5/2007
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	1/5/2007
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	1/5/2007
Naphthalene	120	20		µg/L	10	1/5/2007
1-Methylnaphthalene	740	40		µg/L	10	1/5/2007
2-Methylnaphthalene	1000	200		µg/L	50	1/5/2007
Acetone	ND	100		µg/L	10	1/5/2007
Bromobenzene	ND	10		µg/L	10	1/5/2007
Bromochloromethane	ND	10		µg/L	10	1/5/2007
Bromodichloromethane	ND	10		µg/L	10	1/5/2007
Bromoform	ND	10		µg/L	10	1/5/2007
Bromomethane	ND	20		µg/L	10	1/5/2007
2-Butanone	ND	100		µg/L	10	1/5/2007
Carbon disulfide	ND	100		µg/L	10	1/5/2007
Carbon Tetrachloride	ND	20		µg/L	10	1/5/2007
Chlorobenzene	ND	10		µg/L	10	1/5/2007
Chloroethane	ND	20		µg/L	10	1/5/2007
Chloroform	ND	10		µg/L	10	1/5/2007
Chloromethane	ND	10		µg/L	10	1/5/2007
2-Chlorotoluene	ND	10		µg/L	10	1/5/2007
4-Chlorotoluene	ND	10		µg/L	10	1/5/2007
cis-1,2-DCE	ND	10		µg/L	10	1/5/2007
cis-1,3-Dichloropropene	ND	10		µg/L	10	1/5/2007
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	1/5/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

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Lab Order:	0701044	**Collection Date:**	1/4/2007 10:30:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Dibromochloromethane	ND	10		µg/L	10	1/5/2007
Dibromomethane	ND	20		µg/L	10	1/5/2007
1,2-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
1,3-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
1,4-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
Dichlorodifluoromethane	ND	10		µg/L	10	1/5/2007
1,1-Dichloroethane	ND	20		µg/L	10	1/5/2007
1,1-Dichloroethene	ND	10		µg/L	10	1/5/2007
1,2-Dichloropropane	ND	10		µg/L	10	1/5/2007
1,3-Dichloropropane	ND	10		µg/L	10	1/5/2007
2,2-Dichloropropane	ND	20		µg/L	10	1/5/2007
1,1-Dichloropropene	ND	10		µg/L	10	1/5/2007
Hexachlorobutadiene	ND	20		µg/L	10	1/5/2007
2-Hexanone	ND	100		µg/L	10	1/5/2007
Isopropylbenzene	ND	10		µg/L	10	1/5/2007
4-Isopropyltoluene	ND	10		µg/L	10	1/5/2007
4-Methyl-2-pentanone	ND	100		µg/L	10	1/5/2007
Methylene Chloride	ND	30		µg/L	10	1/5/2007
n-Butylbenzene	ND	10		µg/L	10	1/5/2007
n-Propylbenzene	ND	10		µg/L	10	1/5/2007
sec-Butylbenzene	ND	20		µg/L	10	1/5/2007
Styrene	ND	15		µg/L	10	1/5/2007
tert-Butylbenzene	ND	10		µg/L	10	1/5/2007
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	1/5/2007
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	1/5/2007
Tetrachloroethene (PCE)	ND	10		µg/L	10	1/5/2007
trans-1,2-DCE	ND	10		µg/L	10	1/5/2007
trans-1,3-Dichloropropene	ND	10		µg/L	10	1/5/2007
1,2,3-Trichlorobenzene	ND	10		µg/L	10	1/5/2007
1,2,4-Trichlorobenzene	ND	10		µg/L	10	1/5/2007
1,1,1-Trichloroethane	ND	10		µg/L	10	1/5/2007
1,1,2-Trichloroethane	ND	10		µg/L	10	1/5/2007
Trichloroethene (TCE)	ND	10		µg/L	10	1/5/2007
Trichlorofluoromethane	ND	10		µg/L	10	1/5/2007
1,2,3-Trichloropropane	ND	20		µg/L	10	1/5/2007
Vinyl chloride	ND	10		µg/L	10	1/5/2007
Xylenes, Total	110	30		µg/L	10	1/5/2007
Surr: 1,2-Dichloroethane-d4	92.5	76.6-113		%REC	10	1/5/2007
Surr: 4-Bromofluorobenzene	108	77-117		%REC	10	1/5/2007
Surr: Dibromofluoromethane	101	72.3-121		%REC	10	1/5/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-1
Lab Order:	0701044	**Collection Date:**	1/4/2007 10:30:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Surr: Toluene-d8	97.0	73-113		%REC	10	1/5/2007
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	8800	1000		µg/L	50	1/24/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2
Lab Order:	0701044	**Collection Date:**	1/4/2007 11:00:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: MAP
Mercury	0.0020	0.00020		mg/L	1	1/8/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: IC
Arsenic	ND	0.020		mg/L	1	1/15/2007 12:06:36 PM
Barium	0.081	0.020		mg/L	1	1/15/2007 12:06:36 PM
Cadmium	ND	0.0020		mg/L	1	1/15/2007 12:06:36 PM
Chromium	ND	0.0060		mg/L	1	1/15/2007 12:06:36 PM
Lead	ND	0.0050		mg/L	1	1/15/2007 12:06:36 PM
Selenium	ND	0.050		mg/L	1	1/15/2007 12:06:36 PM
Silver	ND	0.0050		mg/L	1	1/15/2007 12:06:36 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	250		µg/L	5	1/16/2007
Acenaphthylene	ND	250		µg/L	5	1/16/2007
Aniline	ND	500		µg/L	5	1/16/2007
Anthracene	ND	250		µg/L	5	1/16/2007
Azobenzene	ND	250		µg/L	5	1/16/2007
Benz(a)anthracene	ND	380		µg/L	5	1/16/2007
Benzo(a)pyrene	ND	250		µg/L	5	1/16/2007
Benzo(b)fluoranthene	ND	380		µg/L	5	1/16/2007
Benzo(g,h,i)perylene	ND	250		µg/L	5	1/16/2007
Benzo(k)fluoranthene	ND	250		µg/L	5	1/16/2007
Benzoic acid	ND	1200		µg/L	5	1/16/2007
Benzyl alcohol	ND	500		µg/L	5	1/16/2007
Bis(2-chloroethoxy)methane	ND	250		µg/L	5	1/16/2007
Bis(2-chloroethyl)ether	ND	380		µg/L	5	1/16/2007
Bis(2-chloroisopropyl)ether	ND	380		µg/L	5	1/16/2007
Bis(2-ethylhexyl)phthalate	ND	380		µg/L	5	1/16/2007
4-Bromophenyl phenyl ether	ND	250		µg/L	5	1/16/2007
Butyl benzyl phthalate	ND	380		µg/L	5	1/16/2007
Carbazole	ND	250		µg/L	5	1/16/2007
4-Chloro-3-methylphenol	ND	500		µg/L	5	1/16/2007
4-Chloroaniline	ND	500		µg/L	5	1/16/2007
2-Chloronaphthalene	ND	250		µg/L	5	1/16/2007
2-Chlorophenol	ND	250		µg/L	5	1/16/2007
4-Chlorophenyl phenyl ether	ND	380		µg/L	5	1/16/2007
Chrysene	ND	380		µg/L	5	1/16/2007
Di-n-butyl phthalate	ND	250		µg/L	5	1/16/2007
Di-n-octyl phthalate	400	380		µg/L	5	1/16/2007

Qualifiers:

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Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

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Lab Order:	0701044	**Collection Date:**	1/4/2007 11:00:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Dibenz(a,h)anthracene	ND	250		µg/L	5	1/16/2007
Dibenzofuran	ND	250		µg/L	5	1/16/2007
1,2-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
1,3-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
1,4-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
3,3'-Dichlorobenzidine	ND	380		µg/L	5	1/16/2007
Diethyl phthalate	ND	250		µg/L	5	1/16/2007
Dimethyl phthalate	ND	250		µg/L	5	1/16/2007
2,4-Dichlorophenol	ND	250		µg/L	5	1/16/2007
2,4-Dimethylphenol	ND	250		µg/L	5	1/16/2007
4,6-Dinitro-2-methylphenol	ND	1200		µg/L	5	1/16/2007
2,4-Dinitrophenol	ND	1200		µg/L	5	1/16/2007
2,4-Dinitrotoluene	ND	250		µg/L	5	1/16/2007
2,6-Dinitrotoluene	ND	250		µg/L	5	1/16/2007
Fluoranthene	ND	250		µg/L	5	1/16/2007
Fluorene	ND	250		µg/L	5	1/16/2007
Hexachlorobenzene	ND	250		µg/L	5	1/16/2007
Hexachlorobutadiene	ND	250		µg/L	5	1/16/2007
Hexachlorocyclopentadiene	ND	1200		µg/L	5	1/16/2007
Hexachloroethane	ND	250		µg/L	5	1/16/2007
Indeno(1,2,3-cd)pyrene	ND	250		µg/L	5	1/16/2007
Isophorone	ND	250		µg/L	5	1/16/2007
2-Methylnaphthalene	ND	250		µg/L	5	1/16/2007
2-Methylphenol	460	380		µg/L	5	1/16/2007
3+4-Methylphenol	610	500		µg/L	5	1/16/2007
N-Nitrosodi-n-propylamine	ND	250		µg/L	5	1/16/2007
N-Nitrosodimethylamine	ND	250		µg/L	5	1/16/2007
N-Nitrosodiphenylamine	ND	250		µg/L	5	1/16/2007
Naphthalene	ND	250		µg/L	5	1/16/2007
2-Nitroaniline	ND	1200		µg/L	5	1/16/2007
3-Nitroaniline	ND	1200		µg/L	5	1/16/2007
4-Nitroaniline	ND	500		µg/L	5	1/16/2007
Nitrobenzene	ND	250		µg/L	5	1/16/2007
2-Nitrophenol	ND	380		µg/L	5	1/16/2007
4-Nitrophenol	ND	1200		µg/L	5	1/16/2007
Pentachlorophenol	ND	1200		µg/L	5	1/16/2007
Phenanthrene	ND	250		µg/L	5	1/16/2007
Phenol	1600	250		µg/L	5	1/16/2007
Pyrene	ND	380		µg/L	5	1/16/2007
Pyridine	ND	750		µg/L	5	1/16/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2
Lab Order:	0701044	**Collection Date:**	1/4/2007 11:00:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
1,2,4-Trichlorobenzene	ND	250		µg/L	5	1/16/2007
2,4,5-Trichlorophenol	ND	250		µg/L	5	1/16/2007
2,4,6-Trichlorophenol	ND	380		µg/L	5	1/16/2007
Surr: 2,4,6-Tribromophenol	88.3	16.6-150		%REC	5	1/16/2007
Surr: 2-Fluorobiphenyl	75.3	19.6-134		%REC	5	1/16/2007
Surr: 2-Fluorophenol	50.2	9.54-113		%REC	5	1/16/2007
Surr: 4-Terphenyl-d14	63.9	22.7-145		%REC	5	1/16/2007
Surr: Nitrobenzene-d5	68.7	14.6-134		%REC	5	1/16/2007
Surr: Phenol-d5	38.2	10.7-80.3		%REC	5	1/16/2007
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Benzene	15	10		µg/L	10	1/5/2007
Toluene	47	10		µg/L	10	1/5/2007
Ethylbenzene	10	10		µg/L	10	1/5/2007
Methyl tert-butyl ether (MTBE)	ND	15		µg/L	10	1/5/2007
1,2,4-Trimethylbenzene	61	10		µg/L	10	1/5/2007
1,3,5-Trimethylbenzene	18	10		µg/L	10	1/5/2007
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	1/5/2007
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	1/5/2007
Naphthalene	69	20		µg/L	10	1/5/2007
1-Methylnaphthalene	420	40		µg/L	10	1/5/2007
2-Methylnaphthalene	610	40		µg/L	10	1/5/2007
Acetone	ND	100		µg/L	10	1/5/2007
Bromobenzene	ND	10		µg/L	10	1/5/2007
Bromochloromethane	ND	10		µg/L	10	1/5/2007
Bromodichloromethane	ND	10		µg/L	10	1/5/2007
Bromoform	ND	10		µg/L	10	1/5/2007
Bromomethane	ND	20		µg/L	10	1/5/2007
2-Butanone	ND	100		µg/L	10	1/5/2007
Carbon disulfide	ND	100		µg/L	10	1/5/2007
Carbon Tetrachloride	ND	20		µg/L	10	1/5/2007
Chlorobenzene	ND	10		µg/L	10	1/5/2007
Chloroethane	ND	20		µg/L	10	1/5/2007
Chloroform	ND	10		µg/L	10	1/5/2007
Chloromethane	ND	10		µg/L	10	1/5/2007
2-Chlorotoluene	ND	10		µg/L	10	1/5/2007
4-Chlorotoluene	ND	10		µg/L	10	1/5/2007
cis-1,2-DCE	ND	10		µg/L	10	1/5/2007
cis-1,3-Dichloropropene	ND	10		µg/L	10	1/5/2007
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	1/5/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2
Lab Order:	0701044	**Collection Date:**	1/4/2007 11:00:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Dibromochloromethane	ND	10		µg/L	10	1/5/2007
Dibromomethane	ND	20		µg/L	10	1/5/2007
1,2-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
1,3-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
1,4-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
Dichlorodifluoromethane	ND	10		µg/L	10	1/5/2007
1,1-Dichloroethane	ND	20		µg/L	10	1/5/2007
1,1-Dichloroethene	ND	10		µg/L	10	1/5/2007
1,2-Dichloropropane	ND	10		µg/L	10	1/5/2007
1,3-Dichloropropane	ND	10		µg/L	10	1/5/2007
2,2-Dichloropropane	ND	20		µg/L	10	1/5/2007
1,1-Dichloropropene	ND	10		µg/L	10	1/5/2007
Hexachlorobutadiene	ND	20		µg/L	10	1/5/2007
2-Hexanone	ND	100		µg/L	10	1/5/2007
Isopropylbenzene	ND	10		µg/L	10	1/5/2007
4-Isopropyltoluene	ND	10		µg/L	10	1/5/2007
4-Methyl-2-pentanone	ND	100		µg/L	10	1/5/2007
Methylene Chloride	ND	30		µg/L	10	1/5/2007
n-Butylbenzene	ND	10		µg/L	10	1/5/2007
n-Propylbenzene	ND	10		µg/L	10	1/5/2007
sec-Butylbenzene	ND	20		µg/L	10	1/5/2007
Styrene	ND	15		µg/L	10	1/5/2007
tert-Butylbenzene	ND	10		µg/L	10	1/5/2007
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	1/5/2007
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	1/5/2007
Tetrachloroethene (PCE)	ND	10		µg/L	10	1/5/2007
trans-1,2-DCE	ND	10		µg/L	10	1/5/2007
trans-1,3-Dichloropropene	ND	10		µg/L	10	1/5/2007
1,2,3-Trichlorobenzene	ND	10		µg/L	10	1/5/2007
1,2,4-Trichlorobenzene	ND	10		µg/L	10	1/5/2007
1,1,1-Trichloroethane	ND	10		µg/L	10	1/5/2007
1,1,2-Trichloroethane	ND	10		µg/L	10	1/5/2007
Trichloroethene (TCE)	ND	10		µg/L	10	1/5/2007
Trichlorofluoromethane	ND	10		µg/L	10	1/5/2007
1,2,3-Trichloropropane	ND	20		µg/L	10	1/5/2007
Vinyl chloride	ND	10		µg/L	10	1/5/2007
Xylenes, Total	66	30		µg/L	10	1/5/2007
Surr: 1,2-Dichloroethane-d4	96.1	76.6-113		%REC	10	1/5/2007
Surr: 4-Bromofluorobenzene	119	77-117	S	%REC	10	1/5/2007
Surr: Dibromofluoromethane	101	72.3-121		%REC	10	1/5/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2
Lab Order:	0701044	**Collection Date:**	1/4/2007 11:00:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **NSB**
Surr: Toluene-d8	95.0	73-113		%REC	10	1/5/2007
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: **JAT**
Phenolics, Total Recoverable	6100	1000		µg/L	50	1/24/2007

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E420.1									
Sample ID: MB-12090		*MBLK*			Batch ID:	**12102**	Analysis Date:		1/11/2007
Phenolics, Total Recoverable	ND	µg/L	3.0						
Sample ID: MB-12181		*MBLK*			Batch ID:	**12184**	Analysis Date:		1/24/2007
Phenolics, Total Recoverable	ND	µg/L	3.0						
Sample ID: LCS-12090		*LCS*			Batch ID:	**12102**	Analysis Date:		1/11/2007
Phenolics, Total Recoverable	18.30	µg/L	3.0	91.5	51.7	133			
Sample ID: LCS-12181		*LCS*			Batch ID:	**12184**	Analysis Date:		1/24/2007
Phenolics, Total Recoverable	27.64	µg/L	3.0	138	51.7	133			S

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID: **R22029**		Analysis Date:		1/5/2007
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.5						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	2.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	2.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	2.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	2.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	2.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R22029	Analysis Date:		1/5/2007
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	2.0						
Styrene	ND	µg/L	1.5						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 100ng lcs		*LCS*			Batch ID:	R22029	Analysis Date:		1/5/2007
Benzene	18.48	µg/L	1.0	92.4	75.6	111			
Toluene	19.19	µg/L	1.0	96.0	69.6	113			
Chlorobenzene	19.08	µg/L	1.0	95.4	79.7	112			
1,1-Dichloroethene	20.62	µg/L	1.0	103	72.5	121			
Trichloroethene (TCE)	18.81	µg/L	1.0	94.1	63.7	123			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-12081		*MBLK*			Batch ID:	12081	Analysis Date:		1/16/2007
Acenaphthene	ND	µg/L	10						
Acenaphthylene	ND	µg/L	10						
Aniline	ND	µg/L	20						
Anthracene	ND	µg/L	10						
Azobenzene	ND	µg/L	10						
Benz(a)anthracene	ND	µg/L	15						
Benzo(a)pyrene	ND	µg/L	10						
Benzo(b)fluoranthene	ND	µg/L	15						
Benzo(g,h,i)perylene	ND	µg/L	10						
Benzo(k)fluoranthene	ND	µg/L	10						
Benzoic acid	ND	µg/L	50						
Benzyl alcohol	ND	µg/L	20						
Bis(2-chloroethoxy)methane	ND	µg/L	10						
Bis(2-chloroethyl)ether	ND	µg/L	15						
Bis(2-chloroisopropyl)ether	ND	µg/L	15						
Bis(2-ethylhexyl)phthalate	ND	µg/L	15						
4-Bromophenyl phenyl ether	ND	µg/L	10						
Butyl benzyl phthalate	ND	µg/L	15						
Carbazole	ND	µg/L	10						
4-Chloro-3-methylphenol	ND	µg/L	20						
4-Chloroaniline	ND	µg/L	20						
2-Chloronaphthalene	ND	µg/L	10						
2-Chlorophenol	ND	µg/L	10						
4-Chlorophenyl phenyl ether	ND	µg/L	15						
Chrysene	ND	µg/L	15						
Di-n-butyl phthalate	ND	µg/L	10						
Di-n-octyl phthalate	ND	µg/L	15						
Dibenz(a,h)anthracene	ND	µg/L	10						
Dibenzofuran	ND	µg/L	10						
1,2-Dichlorobenzene	ND	µg/L	10						
1,3-Dichlorobenzene	ND	µg/L	10						
1,4-Dichlorobenzene	ND	µg/L	10						
3,3'-Dichlorobenzidine	ND	µg/L	15						
Diethyl phthalate	ND	µg/L	10						
Dimethyl phthalate	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	50						
2,4-Dinitrophenol	ND	µg/L	50						
2,4-Dinitrotoluene	ND	µg/L	10						
2,6-Dinitrotoluene	ND	µg/L	10						
Fluoranthene	ND	µg/L	10						
Fluorene	ND	µg/L	10						
Hexachlorobenzene	ND	µg/L	10						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-12081		*MBLK*			Batch ID:	12081	Analysis Date:		1/16/2007
Hexachlorobutadiene	ND	µg/L	10						
Hexachlorocyclopentadiene	ND	µg/L	50						
Hexachloroethane	ND	µg/L	10						
Indeno(1,2,3-cd)pyrene	ND	µg/L	10						
Isophorone	ND	µg/L	10						
2-Methylnaphthalene	ND	µg/L	10						
2-Methylphenol	ND	µg/L	15						
3+4-Methylphenol	ND	µg/L	20						
N-Nitrosodi-n-propylamine	ND	µg/L	10						
N-Nitrosodimethylamine	ND	µg/L	10						
N-Nitrosodiphenylamine	ND	µg/L	10						
Naphthalene	ND	µg/L	10						
2-Nitroaniline	ND	µg/L	50						
3-Nitroaniline	ND	µg/L	50						
4-Nitroaniline	ND	µg/L	20						
Nitrobenzene	ND	µg/L	10						
2-Nitrophenol	ND	µg/L	15						
4-Nitrophenol	ND	µg/L	50						
Pentachlorophenol	ND	µg/L	50						
Phenanthrene	ND	µg/L	10						
Phenol	ND	µg/L	10						
Pyrene	ND	µg/L	15						
Pyridine	ND	µg/L	30						
1,2,4-Trichlorobenzene	ND	µg/L	10						
2,4,5-Trichlorophenol	ND	µg/L	10						
2,4,6-Trichlorophenol	ND	µg/L	15						
Sample ID: LCS-12081		*LCS*			Batch ID:	12081	Analysis Date:		1/16/2007
Acenaphthene	64.88	µg/L	10	64.9	11	123			
4-Chloro-3-methylphenol	129.7	µg/L	20	64.9	15.4	119			
2-Chlorophenol	117.8	µg/L	10	58.9	12.2	122			
1,4-Dichlorobenzene	52.30	µg/L	10	52.3	16.9	100			
2,4-Dinitrotoluene	63.66	µg/L	10	63.7	13	138			
N-Nitrosodi-n-propylamine	63.66	µg/L	10	63.7	9.93	122			
4-Nitrophenol	62.94	µg/L	50	31.5	12.5	87.4			
Pentachlorophenol	98.00	µg/L	50	49.0	3.55	114			
Phenol	74.58	µg/L	10	37.3	7.53	73.1			
Pyrene	71.42	µg/L	15	71.4	12.6	140			
1,2,4-Trichlorobenzene	56.38	µg/L	10	56.4	17.4	98.7			
Sample ID: LCSD-12081		*LCSD*			Batch ID:	12081	Analysis Date:		1/16/2007
Acenaphthene	68.18	µg/L	10	68.2	11	123	4.96	30.5	
4-Chloro-3-methylphenol	130.0	µg/L	20	65.0	15.4	119	0.216	28.6	
2-Chlorophenol	120.0	µg/L	10	60.0	12.2	122	1.83	107	
1,4-Dichlorobenzene	53.84	µg/L	10	53.8	16.9	100	2.90	62.1	
2,4-Dinitrotoluene	69.02	µg/L	10	69.0	13	138	8.08	14.7	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: LCSD-12081		*LCSD*			Batch ID:	12081	Analysis Date:		1/16/2007
N-Nitrosodi-n-propylamine	62.76	µg/L	10	62.8	9.93	122	1.42	30.3	
4-Nitrophenol	64.80	µg/L	50	32.4	12.5	87.4	2.91	36.3	
Pentachlorophenol	110.3	µg/L	50	55.2	3.55	114	11.8	49	
Phenol	73.86	µg/L	10	36.9	7.53	73.1	0.970	52.4	
Pyrene	70.84	µg/L	15	70.8	12.6	140	0.815	16.3	
1,2,4-Trichlorobenzene	56.38	µg/L	10	56.4	17.4	98.7	0	36.4	
Method: SW7470									
Sample ID: MB-12083		*MBLK*			Batch ID:	12083	Analysis Date:		1/8/2006
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-12083		*LCS*			Batch ID:	12083	Analysis Date:		1/8/2006
Mercury	0.004758	mg/L	0.00020	95.2	80	120			
Method: SW6010A									
Sample ID: MB-12116		*MBLK*			Batch ID:	12116	Analysis Date:		1/15/2007 12:31:50 PM
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
ead	ND	mg/L	0.0050						
Selenium	ND	mg/L	0.050						
Silver	ND	mg/L	0.0050						
Sample ID: LCS-12116		*LCS*			Batch ID:	12116	Analysis Date:		1/15/2007 11:59:22 AM
Arsenic	0.5242	mg/L	0.020	105	80	120			
Barium	0.4748	mg/L	0.020	94.8	80	120			
Cadmium	0.4907	mg/L	0.0020	98.0	80	120			
Chromium	0.4845	mg/L	0.0060	96.9	80	120			
Lead	0.4861	mg/L	0.0050	97.2	80	120			
Selenium	0.5057	mg/L	0.050	101	80	120			
Silver	0.4816	mg/L	0.0050	96.1	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 1/4/2007

Work Order Number 0701044 | Received by TLS

Checklist completed by Tamy Sha (Signature) Jan 4, 07 (Date)

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water – VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water – pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 1° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap Pond #1 + #2 1-4-2007 per QCD
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 1°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl$_2$	Preservative HNO$_3$	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA) Phenolics				Air Bubbles or Headspace (Y or N)
1-4-07	1030	Water	EP-1	6				0701044-1								X			X	X	X			
"	1100	"	EP-2	6				2								X			X	X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-4-07	1445	Steve Morris	Jimmy Shoe 1/4/07 1445
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, January 12, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet AL-1,EP-1 Phenolics 1

Order No.: 0701043

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 1/4/2007 for the analyses presented in the following report.

This report is an addendum to the report dated January 12, 2007. The phenol results have been updated.

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

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Feb-07*

CLIENT:	Giant Refining Co
Project:	Evap. Pond #2 Inlet AL-1,EP-1 Phenolics 1-4-2
Lab Order:	0701043

CASE NARRATIVE

Analytical Notes for EPA Method 420.3:

Hall Environmental Analysis Laboratory (HEAL) would like to info you that the total phenolic results in this report are estimated values. HEAL discovered at the end of January 2007 that these samples likely contained interferences that prevented the accurate reporting of total phenolics by EPA Method 420.3. The interferences in these samples, and the high level of total phenolics, make the accurate reporting of total phenolics by this method difficult. EPA Method 420.3 states that the method is capable of detecting total phenolics up to1,000 ug/L. The values in this report are both over 5,000ug/l.

HEAL generally uses EPA Method 420.3 to analyze samples for low levels of total phenolic compounds (3-50ug/L). HEAL recommends that all samples, suspected of being over 50 ug/l, be analyzed for phenols using EPA Method 8270C.

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Feb-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-1 Inlet
Lab Order:	0701043	**Collection Date:**	1/4/2007 9:45:00 AM
Project:	Evap. Pond #2 Inlet AL-1,EP-1 Phenolics 1-4-2	**Date Received:**	1/4/2007
Lab ID:	0701043-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: JMP
Phenolics, Total Recoverable	5200	3800		µg/L	50	1/29/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Feb-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-1 Inlet
Lab Order:	0701043	**Collection Date:**	1/4/2007 10:00:00 AM
Project:	Evap. Pond #2 Inlet AL-1,EP-1 Phenolics 1-4-2	**Date Received:**	1/4/2007
Lab ID:	0701043-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: JMP
Phenolics, Total Recoverable	6200	3800		µg/L	50	1/29/2007

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

ASSAIGAI ANALYTICAL LABORATORIES, INC.
4301 Masthead NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, Ste. N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0701043
Order: 0701082 HAL03 Receipt: 01-04-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0701043-01A POND 2 INLET* Collected: *01-04-07 9:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0701082-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07003	WC.2007.62.13	C-004	Chemical Oxygen Demand	1980	mg/L	10	10		01-09-07	01-10-00

Sample: *0701043-01B POND 2 INLET* Collected: *01-04-07 9:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0701082-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07001	WC.2007.64.12	10-26-4	Biochemical Oxygen Demand	510	mg/L	1	2	1	01-05-07	01-10-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 74.8% and 76.3% respectively. These recoveries are below the QC acceptance limits of 84.6-115.4% and are most likely due to a poor performing seed capsule used for this batch. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

Report Date: 1/11/2007 1:37:02 PM

REPRODUCTION OF THIS REPORT IN LESS THAN FULL REQUIRES THE WRITTEN CONSENT OF AAL.
THIS REPORT MAY NOT BE USED IN ANY MANNER CLIENT OR ANY OTHER THIRD PARTY TO CLAIM
PRODUCT ENDORSEMENT BY THE NATIONAL VC TY LABORATORY ACCREDITATION PROGRAM.

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #:
Fax #:

Project Name: Evap pond #2 Inlet and AL-1 Inlet + EP-1 Inlet Phenolics 1-4-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 1°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3		HEAL No. 0701043	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD	Phenolics		Air Bubbles or Headspace (Y or N)
1-4-07	0930	Water	Pond 2 Inlet	2				1													X	X			
"	0945	"	AL-1 Inlet	1				2															X		
"	1030	"	EP-1 Inlet	1				3															X		

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-4-07	1448	Steve Morris	Tonya Shan 1/4/07 14:48
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, January 18, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #1 and #2 1-4-2007 per OCD

Order No.: 0701044

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 1/4/2007 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

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-1
Lab Order:	0701044	**Collection Date:**	1/4/2007 10:30:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: MAP
Mercury	0.0032	0.00020		mg/L	1	1/8/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: IC
Arsenic	ND	0.020		mg/L	1	1/15/2007 12:02:36 PM
Barium	0.18	0.020		mg/L	1	1/15/2007 12:02:36 PM
Cadmium	ND	0.0020		mg/L	1	1/15/2007 12:02:36 PM
Chromium	0.010	0.0060		mg/L	1	1/15/2007 12:02:36 PM
Lead	0.0075	0.0050		mg/L	1	1/15/2007 12:02:36 PM
Selenium	ND	0.050		mg/L	1	1/15/2007 12:02:36 PM
Silver	ND	0.0050		mg/L	1	1/15/2007 12:02:36 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	250		µg/L	5	1/16/2007
Acenaphthylene	ND	250		µg/L	5	1/16/2007
Aniline	ND	500		µg/L	5	1/16/2007
Anthracene	ND	250		µg/L	5	1/16/2007
Azobenzene	ND	250		µg/L	5	1/16/2007
Benz(a)anthracene	ND	380		µg/L	5	1/16/2007
Benzo(a)pyrene	ND	250		µg/L	5	1/16/2007
Benzo(b)fluoranthene	ND	380		µg/L	5	1/16/2007
Benzo(g,h,i)perylene	ND	250		µg/L	5	1/16/2007
Benzo(k)fluoranthene	ND	250		µg/L	5	1/16/2007
Benzoic acid	ND	1200		µg/L	5	1/16/2007
Benzyl alcohol	ND	500		µg/L	5	1/16/2007
Bis(2-chloroethoxy)methane	ND	250		µg/L	5	1/16/2007
Bis(2-chloroethyl)ether	ND	380		µg/L	5	1/16/2007
Bis(2-chloroisopropyl)ether	ND	380		µg/L	5	1/16/2007
Bis(2-ethylhexyl)phthalate	ND	380		µg/L	5	1/16/2007
4-Bromophenyl phenyl ether	ND	250		µg/L	5	1/16/2007
Butyl benzyl phthalate	ND	380		µg/L	5	1/16/2007
Carbazole	ND	250		µg/L	5	1/16/2007
4-Chloro-3-methylphenol	ND	500		µg/L	5	1/16/2007
4-Chloroaniline	ND	500		µg/L	5	1/16/2007
2-Chloronaphthalene	ND	250		µg/L	5	1/16/2007
2-Chlorophenol	ND	250		µg/L	5	1/16/2007
4-Chlorophenyl phenyl ether	ND	380		µg/L	5	1/16/2007
Chrysene	ND	380		µg/L	5	1/16/2007
Di-n-butyl phthalate	ND	250		µg/L	5	1/16/2007
Di-n-octyl phthalate	ND	380		µg/L	5	1/16/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-1
Lab Order:	0701044	**Collection Date:**	1/4/2007 10:30:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Dibenz(a,h)anthracene	ND	250		µg/L	5	1/16/2007
Dibenzofuran	ND	250		µg/L	5	1/16/2007
1,2-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
1,3-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
1,4-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
3,3'-Dichlorobenzidine	ND	380		µg/L	5	1/16/2007
Diethyl phthalate	ND	250		µg/L	5	1/16/2007
Dimethyl phthalate	ND	250		µg/L	5	1/16/2007
2,4-Dichlorophenol	ND	250		µg/L	5	1/16/2007
2,4-Dimethylphenol	ND	250		µg/L	5	1/16/2007
4,6-Dinitro-2-methylphenol	ND	1200		µg/L	5	1/16/2007
2,4-Dinitrophenol	ND	1200		µg/L	5	1/16/2007
2,4-Dinitrotoluene	ND	250		µg/L	5	1/16/2007
2,6-Dinitrotoluene	ND	250		µg/L	5	1/16/2007
Fluoranthene	ND	250		µg/L	5	1/16/2007
Fluorene	ND	250		µg/L	5	1/16/2007
Hexachlorobenzene	ND	250		µg/L	5	1/16/2007
Hexachlorobutadiene	ND	250		µg/L	5	1/16/2007
Hexachlorocyclopentadiene	ND	1200		µg/L	5	1/16/2007
Hexachloroethane	ND	250		µg/L	5	1/16/2007
Indeno(1,2,3-cd)pyrene	ND	250		µg/L	5	1/16/2007
Isophorone	ND	250		µg/L	5	1/16/2007
2-Methylnaphthalene	530	250		µg/L	5	1/16/2007
2-Methylphenol	990	380		µg/L	5	1/16/2007
3+4-Methylphenol	1500	500		µg/L	5	1/16/2007
N-Nitrosodi-n-propylamine	ND	250		µg/L	5	1/16/2007
N-Nitrosodimethylamine	ND	250		µg/L	5	1/16/2007
N-Nitrosodiphenylamine	ND	250		µg/L	5	1/16/2007
Naphthalene	ND	250		µg/L	5	1/16/2007
2-Nitroaniline	ND	1200		µg/L	5	1/16/2007
3-Nitroaniline	ND	1200		µg/L	5	1/16/2007
4-Nitroaniline	ND	500		µg/L	5	1/16/2007
Nitrobenzene	ND	250		µg/L	5	1/16/2007
2-Nitrophenol	ND	380		µg/L	5	1/16/2007
4-Nitrophenol	ND	1200		µg/L	5	1/16/2007
Pentachlorophenol	ND	1200		µg/L	5	1/16/2007
Phenanthrene	360	250		µg/L	5	1/16/2007
Phenol	3300	250		µg/L	5	1/16/2007
Pyrene	ND	380		µg/L	5	1/16/2007
Pyridine	ND	750		µg/L	5	1/16/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-1
Lab Order:	0701044	**Collection Date:**	1/4/2007 10:30:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
1,2,4-Trichlorobenzene	ND	250		µg/L	5	1/16/2007
2,4,5-Trichlorophenol	ND	250		µg/L	5	1/16/2007
2,4,6-Trichlorophenol	ND	380		µg/L	5	1/16/2007
Surr: 2,4,6-Tribromophenol	109	16.6-150		%REC	5	1/16/2007
Surr: 2-Fluorobiphenyl	91.2	19.6-134		%REC	5	1/16/2007
Surr: 2-Fluorophenol	56.3	9.54-113		%REC	5	1/16/2007
Surr: 4-Terphenyl-d14	73.6	22.7-145		%REC	5	1/16/2007
Surr: Nitrobenzene-d5	84.4	14.6-134		%REC	5	1/16/2007
Surr: Phenol-d5	43.2	10.7-80.3		%REC	5	1/16/2007
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Benzene	27	10		µg/L	10	1/5/2007
Toluene	79	10		µg/L	10	1/5/2007
Ethylbenzene	15	10		µg/L	10	1/5/2007
Methyl tert-butyl ether (MTBE)	ND	15		µg/L	10	1/5/2007
1,2,4-Trimethylbenzene	77	10		µg/L	10	1/5/2007
1,3,5-Trimethylbenzene	25	10		µg/L	10	1/5/2007
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	1/5/2007
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	1/5/2007
Naphthalene	120	20		µg/L	10	1/5/2007
1-Methylnaphthalene	740	40		µg/L	10	1/5/2007
2-Methylnaphthalene	1000	200		µg/L	50	1/5/2007
Acetone	ND	100		µg/L	10	1/5/2007
Bromobenzene	ND	10		µg/L	10	1/5/2007
Bromochloromethane	ND	10		µg/L	10	1/5/2007
Bromodichloromethane	ND	10		µg/L	10	1/5/2007
Bromoform	ND	10		µg/L	10	1/5/2007
Bromomethane	ND	20		µg/L	10	1/5/2007
2-Butanone	ND	100		µg/L	10	1/5/2007
Carbon disulfide	ND	100		µg/L	10	1/5/2007
Carbon Tetrachloride	ND	20		µg/L	10	1/5/2007
Chlorobenzene	ND	10		µg/L	10	1/5/2007
Chloroethane	ND	20		µg/L	10	1/5/2007
Chloroform	ND	10		µg/L	10	1/5/2007
Chloromethane	ND	10		µg/L	10	1/5/2007
2-Chlorotoluene	ND	10		µg/L	10	1/5/2007
4-Chlorotoluene	ND	10		µg/L	10	1/5/2007
cis-1,2-DCE	ND	10		µg/L	10	1/5/2007
cis-1,3-Dichloropropene	ND	10		µg/L	10	1/5/2007
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	1/5/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-1
Lab Order:	0701044	**Collection Date:**	1/4/2007 10:30:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Dibromochloromethane	ND	10		µg/L	10	1/5/2007
Dibromomethane	ND	20		µg/L	10	1/5/2007
1,2-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
1,3-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
1,4-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
Dichlorodifluoromethane	ND	10		µg/L	10	1/5/2007
1,1-Dichloroethane	ND	20		µg/L	10	1/5/2007
1,1-Dichloroethene	ND	10		µg/L	10	1/5/2007
1,2-Dichloropropane	ND	10		µg/L	10	1/5/2007
1,3-Dichloropropane	ND	10		µg/L	10	1/5/2007
2,2-Dichloropropane	ND	20		µg/L	10	1/5/2007
1,1-Dichloropropene	ND	10		µg/L	10	1/5/2007
Hexachlorobutadiene	ND	20		µg/L	10	1/5/2007
2-Hexanone	ND	100		µg/L	10	1/5/2007
Isopropylbenzene	ND	10		µg/L	10	1/5/2007
4-Isopropyltoluene	ND	10		µg/L	10	1/5/2007
4-Methyl-2-pentanone	ND	100		µg/L	10	1/5/2007
Methylene Chloride	ND	30		µg/L	10	1/5/2007
n-Butylbenzene	ND	10		µg/L	10	1/5/2007
n-Propylbenzene	ND	10		µg/L	10	1/5/2007
sec-Butylbenzene	ND	20		µg/L	10	1/5/2007
Styrene	ND	15		µg/L	10	1/5/2007
tert-Butylbenzene	ND	10		µg/L	10	1/5/2007
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	1/5/2007
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	1/5/2007
Tetrachloroethene (PCE)	ND	10		µg/L	10	1/5/2007
trans-1,2-DCE	ND	10		µg/L	10	1/5/2007
trans-1,3-Dichloropropene	ND	10		µg/L	10	1/5/2007
1,2,3-Trichlorobenzene	ND	10		µg/L	10	1/5/2007
1,2,4-Trichlorobenzene	ND	10		µg/L	10	1/5/2007
1,1,1-Trichloroethane	ND	10		µg/L	10	1/5/2007
1,1,2-Trichloroethane	ND	10		µg/L	10	1/5/2007
Trichloroethene (TCE)	ND	10		µg/L	10	1/5/2007
Trichlorofluoromethane	ND	10		µg/L	10	1/5/2007
1,2,3-Trichloropropane	ND	20		µg/L	10	1/5/2007
Vinyl chloride	ND	10		µg/L	10	1/5/2007
Xylenes, Total	110	30		µg/L	10	1/5/2007
Surr: 1,2-Dichloroethane-d4	92.5	76.6-113		%REC	10	1/5/2007
Surr: 4-Bromofluorobenzene	108	77-117		%REC	10	1/5/2007
Surr: Dibromofluoromethane	101	72.3-121		%REC	10	1/5/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-1
Lab Order:	0701044	**Collection Date:**	1/4/2007 10:30:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Surr: Toluene-d8	97.0	73-113		%REC	10	1/5/2007
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	8800	1000		µg/L	50	1/24/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2
Lab Order:	0701044	**Collection Date:**	1/4/2007 11:00:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: MAP
Mercury	0.0020	0.00020		mg/L	1	1/8/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: IC
Arsenic	ND	0.020		mg/L	1	1/15/2007 12:06:36 PM
Barium	0.081	0.020		mg/L	1	1/15/2007 12:06:36 PM
Cadmium	ND	0.0020		mg/L	1	1/15/2007 12:06:36 PM
Chromium	ND	0.0060		mg/L	1	1/15/2007 12:06:36 PM
Lead	ND	0.0050		mg/L	1	1/15/2007 12:06:36 PM
Selenium	ND	0.050		mg/L	1	1/15/2007 12:06:36 PM
Silver	ND	0.0050		mg/L	1	1/15/2007 12:06:36 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	250		µg/L	5	1/16/2007
Acenaphthylene	ND	250		µg/L	5	1/16/2007
Aniline	ND	500		µg/L	5	1/16/2007
Anthracene	ND	250		µg/L	5	1/16/2007
Azobenzene	ND	250		µg/L	5	1/16/2007
Benz(a)anthracene	ND	380		µg/L	5	1/16/2007
Benzo(a)pyrene	ND	250		µg/L	5	1/16/2007
Benzo(b)fluoranthene	ND	380		µg/L	5	1/16/2007
Benzo(g,h,i)perylene	ND	250		µg/L	5	1/16/2007
Benzo(k)fluoranthene	ND	250		µg/L	5	1/16/2007
Benzoic acid	ND	1200		µg/L	5	1/16/2007
Benzyl alcohol	ND	500		µg/L	5	1/16/2007
Bis(2-chloroethoxy)methane	ND	250		µg/L	5	1/16/2007
Bis(2-chloroethyl)ether	ND	380		µg/L	5	1/16/2007
Bis(2-chloroisopropyl)ether	ND	380		µg/L	5	1/16/2007
Bis(2-ethylhexyl)phthalate	ND	380		µg/L	5	1/16/2007
4-Bromophenyl phenyl ether	ND	250		µg/L	5	1/16/2007
Butyl benzyl phthalate	ND	380		µg/L	5	1/16/2007
Carbazole	ND	250		µg/L	5	1/16/2007
4-Chloro-3-methylphenol	ND	500		µg/L	5	1/16/2007
4-Chloroaniline	ND	500		µg/L	5	1/16/2007
2-Chloronaphthalene	ND	250		µg/L	5	1/16/2007
2-Chlorophenol	ND	250		µg/L	5	1/16/2007
4-Chlorophenyl phenyl ether	ND	380		µg/L	5	1/16/2007
Chrysene	ND	380		µg/L	5	1/16/2007
Di-n-butyl phthalate	ND	250		µg/L	5	1/16/2007
Di-n-octyl phthalate	400	380		µg/L	5	1/16/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2
Lab Order:	0701044	**Collection Date:**	1/4/2007 11:00:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Dibenz(a,h)anthracene	ND	250		µg/L	5	1/16/2007
Dibenzofuran	ND	250		µg/L	5	1/16/2007
1,2-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
1,3-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
1,4-Dichlorobenzene	ND	250		µg/L	5	1/16/2007
3,3'-Dichlorobenzidine	ND	380		µg/L	5	1/16/2007
Diethyl phthalate	ND	250		µg/L	5	1/16/2007
Dimethyl phthalate	ND	250		µg/L	5	1/16/2007
2,4-Dichlorophenol	ND	250		µg/L	5	1/16/2007
2,4-Dimethylphenol	ND	250		µg/L	5	1/16/2007
4,6-Dinitro-2-methylphenol	ND	1200		µg/L	5	1/16/2007
2,4-Dinitrophenol	ND	1200		µg/L	5	1/16/2007
2,4-Dinitrotoluene	ND	250		µg/L	5	1/16/2007
2,6-Dinitrotoluene	ND	250		µg/L	5	1/16/2007
Fluoranthene	ND	250		µg/L	5	1/16/2007
Fluorene	ND	250		µg/L	5	1/16/2007
Hexachlorobenzene	ND	250		µg/L	5	1/16/2007
Hexachlorobutadiene	ND	250		µg/L	5	1/16/2007
Hexachlorocyclopentadiene	ND	1200		µg/L	5	1/16/2007
Hexachloroethane	ND	250		µg/L	5	1/16/2007
Indeno(1,2,3-cd)pyrene	ND	250		µg/L	5	1/16/2007
Isophorone	ND	250		µg/L	5	1/16/2007
2-Methylnaphthalene	ND	250		µg/L	5	1/16/2007
2-Methylphenol	460	380		µg/L	5	1/16/2007
3+4-Methylphenol	610	500		µg/L	5	1/16/2007
N-Nitrosodi-n-propylamine	ND	250		µg/L	5	1/16/2007
N-Nitrosodimethylamine	ND	250		µg/L	5	1/16/2007
N-Nitrosodiphenylamine	ND	250		µg/L	5	1/16/2007
Naphthalene	ND	250		µg/L	5	1/16/2007
2-Nitroaniline	ND	1200		µg/L	5	1/16/2007
3-Nitroaniline	ND	1200		µg/L	5	1/16/2007
4-Nitroaniline	ND	500		µg/L	5	1/16/2007
Nitrobenzene	ND	250		µg/L	5	1/16/2007
2-Nitrophenol	ND	380		µg/L	5	1/16/2007
4-Nitrophenol	ND	1200		µg/L	5	1/16/2007
Pentachlorophenol	ND	1200		µg/L	5	1/16/2007
Phenanthrene	ND	250		µg/L	5	1/16/2007
Phenol	1600	250		µg/L	5	1/16/2007
Pyrene	ND	380		µg/L	5	1/16/2007
Pyridine	ND	750		µg/L	5	1/16/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2
Lab Order:	0701044	**Collection Date:**	1/4/2007 11:00:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
1,2,4-Trichlorobenzene	ND	250		µg/L	5	1/16/2007
2,4,5-Trichlorophenol	ND	250		µg/L	5	1/16/2007
2,4,6-Trichlorophenol	ND	380		µg/L	5	1/16/2007
Surr: 2,4,6-Tribromophenol	88.3	16.6-150		%REC	5	1/16/2007
Surr: 2-Fluorobiphenyl	75.3	19.6-134		%REC	5	1/16/2007
Surr: 2-Fluorophenol	50.2	9.54-113		%REC	5	1/16/2007
Surr: 4-Terphenyl-d14	63.9	22.7-145		%REC	5	1/16/2007
Surr: Nitrobenzene-d5	68.7	14.6-134		%REC	5	1/16/2007
Surr: Phenol-d5	38.2	10.7-80.3		%REC	5	1/16/2007
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Benzene	15	10		µg/L	10	1/5/2007
Toluene	47	10		µg/L	10	1/5/2007
Ethylbenzene	10	10		µg/L	10	1/5/2007
Methyl tert-butyl ether (MTBE)	ND	15		µg/L	10	1/5/2007
1,2,4-Trimethylbenzene	61	10		µg/L	10	1/5/2007
1,3,5-Trimethylbenzene	18	10		µg/L	10	1/5/2007
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	1/5/2007
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	1/5/2007
Naphthalene	69	20		µg/L	10	1/5/2007
1-Methylnaphthalene	420	40		µg/L	10	1/5/2007
2-Methylnaphthalene	610	40		µg/L	10	1/5/2007
Acetone	ND	100		µg/L	10	1/5/2007
Bromobenzene	ND	10		µg/L	10	1/5/2007
Bromochloromethane	ND	10		µg/L	10	1/5/2007
Bromodichloromethane	ND	10		µg/L	10	1/5/2007
Bromoform	ND	10		µg/L	10	1/5/2007
Bromomethane	ND	20		µg/L	10	1/5/2007
2-Butanone	ND	100		µg/L	10	1/5/2007
Carbon disulfide	ND	100		µg/L	10	1/5/2007
Carbon Tetrachloride	ND	20		µg/L	10	1/5/2007
Chlorobenzene	ND	10		µg/L	10	1/5/2007
Chloroethane	ND	20		µg/L	10	1/5/2007
Chloroform	ND	10		µg/L	10	1/5/2007
Chloromethane	ND	10		µg/L	10	1/5/2007
2-Chlorotoluene	ND	10		µg/L	10	1/5/2007
4-Chlorotoluene	ND	10		µg/L	10	1/5/2007
cis-1,2-DCE	ND	10		µg/L	10	1/5/2007
cis-1,3-Dichloropropene	ND	10		µg/L	10	1/5/2007
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	1/5/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2
Lab Order:	0701044	**Collection Date:**	1/4/2007 11:00:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Dibromochloromethane	ND	10		µg/L	10	1/5/2007
Dibromomethane	ND	20		µg/L	10	1/5/2007
1,2-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
1,3-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
1,4-Dichlorobenzene	ND	10		µg/L	10	1/5/2007
Dichlorodifluoromethane	ND	10		µg/L	10	1/5/2007
1,1-Dichloroethane	ND	20		µg/L	10	1/5/2007
1,1-Dichloroethene	ND	10		µg/L	10	1/5/2007
1,2-Dichloropropane	ND	10		µg/L	10	1/5/2007
1,3-Dichloropropane	ND	10		µg/L	10	1/5/2007
2,2-Dichloropropane	ND	20		µg/L	10	1/5/2007
1,1-Dichloropropene	ND	10		µg/L	10	1/5/2007
Hexachlorobutadiene	ND	20		µg/L	10	1/5/2007
2-Hexanone	ND	100		µg/L	10	1/5/2007
Isopropylbenzene	ND	10		µg/L	10	1/5/2007
4-Isopropyltoluene	ND	10		µg/L	10	1/5/2007
4-Methyl-2-pentanone	ND	100		µg/L	10	1/5/2007
Methylene Chloride	ND	30		µg/L	10	1/5/2007
n-Butylbenzene	ND	10		µg/L	10	1/5/2007
n-Propylbenzene	ND	10		µg/L	10	1/5/2007
sec-Butylbenzene	ND	20		µg/L	10	1/5/2007
Styrene	ND	15		µg/L	10	1/5/2007
tert-Butylbenzene	ND	10		µg/L	10	1/5/2007
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	1/5/2007
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	1/5/2007
Tetrachloroethene (PCE)	ND	10		µg/L	10	1/5/2007
trans-1,2-DCE	ND	10		µg/L	10	1/5/2007
trans-1,3-Dichloropropene	ND	10		µg/L	10	1/5/2007
1,2,3-Trichlorobenzene	ND	10		µg/L	10	1/5/2007
1,2,4-Trichlorobenzene	ND	10		µg/L	10	1/5/2007
1,1,1-Trichloroethane	ND	10		µg/L	10	1/5/2007
1,1,2-Trichloroethane	ND	10		µg/L	10	1/5/2007
Trichloroethene (TCE)	ND	10		µg/L	10	1/5/2007
Trichlorofluoromethane	ND	10		µg/L	10	1/5/2007
1,2,3-Trichloropropane	ND	20		µg/L	10	1/5/2007
Vinyl chloride	ND	10		µg/L	10	1/5/2007
Xylenes, Total	66	30		µg/L	10	1/5/2007
Surr: 1,2-Dichloroethane-d4	96.1	76.6-113		%REC	10	1/5/2007
Surr: 4-Bromofluorobenzene	119	77-117	S	%REC	10	1/5/2007
Surr: Dibromofluoromethane	101	72.3-121		%REC	10	1/5/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *25-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2
Lab Order:	0701044	**Collection Date:**	1/4/2007 11:00:00 AM
Project:	Evap. Pond #1 and #2 1-4-2007 per OCD	**Date Received:**	1/4/2007
Lab ID:	0701044-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Surr: Toluene-d8	95.0	73-113		%REC	10	1/5/2007
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	6100	1000		µg/L	50	1/24/2007

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E420.1									
Sample ID: MB-12090		*MBLK*			Batch ID:	**12102**	Analysis Date:		1/11/2007
Phenolics, Total Recoverable	ND	µg/L	3.0						
Sample ID: MB-12181		*MBLK*			Batch ID:	**12184**	Analysis Date:		1/24/2007
Phenolics, Total Recoverable	ND	µg/L	3.0						
Sample ID: LCS-12090		*LCS*			Batch ID:	**12102**	Analysis Date:		1/11/2007
Phenolics, Total Recoverable	18.30	µg/L	3.0	91.5	51.7	133			
Sample ID: LCS-12181		*LCS*			Batch ID:	**12184**	Analysis Date:		1/24/2007
Phenolics, Total Recoverable	27.64	µg/L	3.0	138	51.7	133			S

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R22029	Analysis Date:		1/5/2007
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.5						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	2.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	2.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	2.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	2.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	2.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R22029**	Analysis Date:		1/5/2007
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	2.0						
Styrene	ND	µg/L	1.5						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	1.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R22029**	Analysis Date:		1/5/2007
Benzene	18.48	µg/L	1.0	92.4	75.6	111			
Toluene	19.19	µg/L	1.0	96.0	69.6	113			
Chlorobenzene	19.08	µg/L	1.0	95.4	79.7	112			
1,1-Dichloroethene	20.62	µg/L	1.0	103	72.5	121			
Trichloroethene (TCE)	18.81	µg/L	1.0	94.1	63.7	123			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-12081		*MBLK*			Batch ID:	12081	Analysis Date:		1/16/2007
Acenaphthene	ND	µg/L	10						
Acenaphthylene	ND	µg/L	10						
Aniline	ND	µg/L	20						
Anthracene	ND	µg/L	10						
Azobenzene	ND	µg/L	10						
Benz(a)anthracene	ND	µg/L	15						
Benzo(a)pyrene	ND	µg/L	10						
Benzo(b)fluoranthene	ND	µg/L	15						
Benzo(g,h,i)perylene	ND	µg/L	10						
Benzo(k)fluoranthene	ND	µg/L	10						
Benzoic acid	ND	µg/L	50						
Benzyl alcohol	ND	µg/L	20						
Bis(2-chloroethoxy)methane	ND	µg/L	10						
Bis(2-chloroethyl)ether	ND	µg/L	15						
Bis(2-chloroisopropyl)ether	ND	µg/L	15						
Bis(2-ethylhexyl)phthalate	ND	µg/L	15						
4-Bromophenyl phenyl ether	ND	µg/L	10						
Butyl benzyl phthalate	ND	µg/L	15						
Carbazole	ND	µg/L	10						
4-Chloro-3-methylphenol	ND	µg/L	20						
4-Chloroaniline	ND	µg/L	20						
2-Chloronaphthalene	ND	µg/L	10						
2-Chlorophenol	ND	µg/L	10						
4-Chlorophenyl phenyl ether	ND	µg/L	15						
Chrysene	ND	µg/L	15						
Di-n-butyl phthalate	ND	µg/L	10						
Di-n-octyl phthalate	ND	µg/L	15						
Dibenz(a,h)anthracene	ND	µg/L	10						
Dibenzofuran	ND	µg/L	10						
1,2-Dichlorobenzene	ND	µg/L	10						
1,3-Dichlorobenzene	ND	µg/L	10						
1,4-Dichlorobenzene	ND	µg/L	10						
3,3'-Dichlorobenzidine	ND	µg/L	15						
Diethyl phthalate	ND	µg/L	10						
Dimethyl phthalate	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	50						
2,4-Dinitrophenol	ND	µg/L	50						
2,4-Dinitrotoluene	ND	µg/L	10						
2,6-Dinitrotoluene	ND	µg/L	10						
Fluoranthene	ND	µg/L	10						
Fluorene	ND	µg/L	10						
Hexachlorobenzene	ND	µg/L	10						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-12081		*MBLK*			Batch ID:	12081	Analysis Date:		1/16/2007
Hexachlorobutadiene	ND	µg/L	10						
Hexachlorocyclopentadiene	ND	µg/L	50						
Hexachloroethane	ND	µg/L	10						
Indeno(1,2,3-cd)pyrene	ND	µg/L	10						
Isophorone	ND	µg/L	10						
2-Methylnaphthalene	ND	µg/L	10						
2-Methylphenol	ND	µg/L	15						
3+4-Methylphenol	ND	µg/L	20						
N-Nitrosodi-n-propylamine	ND	µg/L	10						
N-Nitrosodimethylamine	ND	µg/L	10						
N-Nitrosodiphenylamine	ND	µg/L	10						
Naphthalene	ND	µg/L	10						
2-Nitroaniline	ND	µg/L	50						
3-Nitroaniline	ND	µg/L	50						
4-Nitroaniline	ND	µg/L	20						
Nitrobenzene	ND	µg/L	10						
2-Nitrophenol	ND	µg/L	15						
4-Nitrophenol	ND	µg/L	50						
Pentachlorophenol	ND	µg/L	50						
Phenanthrene	ND	µg/L	10						
Phenol	ND	µg/L	10						
Pyrene	ND	µg/L	15						
Pyridine	ND	µg/L	30						
1,2,4-Trichlorobenzene	ND	µg/L	10						
2,4,5-Trichlorophenol	ND	µg/L	10						
2,4,6-Trichlorophenol	ND	µg/L	15						
Sample ID: LCS-12081		*LCS*			Batch ID:	12081	Analysis Date:		1/16/2007
Acenaphthene	64.88	µg/L	10	64.9	11	123			
4-Chloro-3-methylphenol	129.7	µg/L	20	64.9	15.4	119			
2-Chlorophenol	117.8	µg/L	10	58.9	12.2	122			
1,4-Dichlorobenzene	52.30	µg/L	10	52.3	16.9	100			
2,4-Dinitrotoluene	63.66	µg/L	10	63.7	13	138			
N-Nitrosodi-n-propylamine	63.66	µg/L	10	63.7	9.93	122			
4-Nitrophenol	62.94	µg/L	50	31.5	12.5	87.4			
Pentachlorophenol	98.00	µg/L	50	49.0	3.55	114			
Phenol	74.58	µg/L	10	37.3	7.53	73.1			
Pyrene	71.42	µg/L	15	71.4	12.6	140			
1,2,4-Trichlorobenzene	56.38	µg/L	10	56.4	17.4	98.7			
Sample ID: LCSD-12081		*LCSD*			Batch ID:	12081	Analysis Date:		1/16/2007
Acenaphthene	68.18	µg/L	10	68.2	11	123	4.96	30.5	
4-Chloro-3-methylphenol	130.0	µg/L	20	65.0	15.4	119	0.216	28.6	
2-Chlorophenol	120.0	µg/L	10	60.0	12.2	122	1.83	107	
1,4-Dichlorobenzene	53.84	µg/L	10	53.8	16.9	100	2.90	62.1	
2,4-Dinitrotoluene	69.02	µg/L	10	69.0	13	138	8.08	14.7	

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #1 and #2 1-4-2007 per OCD **Work Order:** 0701044

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: LCSD-12081		*LCSD*			Batch ID:	12081	Analysis Date:		1/16/2007
N-Nitrosodi-n-propylamine	62.76	µg/L	10	62.8	9.93	122	1.42	30.3	
4-Nitrophenol	64.80	µg/L	50	32.4	12.5	87.4	2.91	36.3	
Pentachlorophenol	110.3	µg/L	50	55.2	3.55	114	11.8	49	
Phenol	73.86	µg/L	10	36.9	7.53	73.1	0.970	52.4	
Pyrene	70.84	µg/L	15	70.8	12.6	140	0.815	16.3	
1,2,4-Trichlorobenzene	56.38	µg/L	10	56.4	17.4	98.7	0	36.4	
Method: SW7470									
Sample ID: MB-12083		*MBLK*			Batch ID:	12083	Analysis Date:		1/8/2006
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-12083		*LCS*			Batch ID:	12083	Analysis Date:		1/8/2006
Mercury	0.004758	mg/L	0.00020	95.2	80	120			
Method: SW6010A									
Sample ID: MB-12116		*MBLK*			Batch ID:	12116	Analysis Date:		1/15/2007 12:31:50 PM
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Selenium	ND	mg/L	0.050						
Silver	ND	mg/L	0.0050						
Sample ID: LCS-12116		*LCS*			Batch ID:	12116	Analysis Date:		1/15/2007 11:59:22 AM
Arsenic	0.5242	mg/L	0.020	105	80	120			
Barium	0.4748	mg/L	0.020	94.8	80	120			
Cadmium	0.4907	mg/L	0.0020	98.0	80	120			
Chromium	0.4845	mg/L	0.0060	96.9	80	120			
Lead	0.4861	mg/L	0.0050	97.2	80	120			
Selenium	0.5057	mg/L	0.050	101	80	120			
Silver	0.4816	mg/L	0.0050	96.1	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 1/4/2007

Work Order Number 0701044 | Received by TLS

Checklist completed by Tamy Shea (Signature) Jan 4, 07 (Date)

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 1° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐
Other:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap Ponds #1 + #2 1-4-2007 per OCD
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 1°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Phenolics				Air Bubbles or Headspace (Y or N)
1-4-07	1030	Water	EP-1	6				0701044 1								X			X	X	X				
"	1100	"	EP-2	6				2								X			X	X	X				

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-4-07	1445	Steve Morris	Tonya Shaw 1/4/07 1445
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, January 23, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 1-11-2007

Order No.: 0701155

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 1/11/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0701155
Order: 0701292 HAL03 Receipt: 01-11-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0701155-01A POND 2 INLET* Collected: *01-11-07 11:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0701292-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07004	WC.2007.149.10	C-004	Chemical Oxygen Demand	2200	mg/L	10	10		01-19-07	01-22-07

Sample: *0701155-01B POND 2 INLET* Collected: *01-11-07 11:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0701292-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07004	WC.2007.113.9	10-26-4	Biochemical Oxygen Demand	282	mg/L	1	2		01-12-07	01-17-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 1/23/2007 3:47:57 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 1/11/2007

Work Order Number 0701155 | Received by GLS

Checklist completed by B Schlupp (Signature) 1-11-07 (Date)

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 2° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 7223833
Fax #: 505 7220210

Project Name: Evap. Pond #2 duplicate 1-11-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 2°C

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0701155	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
1-11-07	1130	H_2O	Pond 2 dulet	2				-1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-11-07	1408	Steve Morris	[signature] 1-11-07 1408
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, February 15, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 1/30/2007

Order No.: 0701362

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 1/31/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0701362
Order: 0701782 HAL03 Receipt: 01-31-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0701362-01A POND 2 INLET* Collected: *01-30-07 14:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0701782-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07009	WC.2007.366.8	C-004	Chemical Oxygen Demand	1860	mg/L	10	10		02-12-00	02-13-07

Sample: *0701362-01B POND 2 INLET* Collected: *01-30-07 14:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0701782-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07009	WC.2007.320.5	10-26-4	Biochemical Oxygen Demand	666	mg/L	1	2		01-31-07	02-05-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 2/15/2007 3:29:03 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 1/31/2007

Work Order Number 0701362

Received by AT

Checklist completed by _____ Signature | Date 1/31/07

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	6°	*4° C ± 2 Acceptable* if given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza

Address: Route 3 Box 7 Gallup, NM 87301

Phone #: 505 722 3833

Fax #: 505 722 0210

Project Name: Evap. Pond # 2 drlet 1-30-07

Project #:

Project Manager: Steve Morris

Sampler: Steve Morris

Sample Temperature: 6°C

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0701362	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
1-30-07	1400	H_2O	Pond 2 drlet	2				-1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
1-31-07	0900	Steve Morris	1/31/07 0900
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, February 01, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 1/18/2007

Order No.: 0701233

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 1/18/2007 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

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■Suite D ■Albuquerque, NM 87109
505.345.3975 ■Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	Analyte Detected in Method Blank
E	Result is Estimated
H	Analyzed Out of Hold Time
N	Tentatively Identified Compound
S	Subcontracted
1-9	See Footnote

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0701233
Order: 0701453 HAL03 Receipt: 01-18-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0701233-01A POND 2 INLET* Collected: *01-18-07 10:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0701453-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07006	WC.2007.225.7	C-004	Chemical Oxygen Demand	965	mg/L	1	10		01-29-07	01-30-07

Sample: *0701233-01B POND 2 INLET* Collected: *01-18-07 10:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0701453-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07006	WC.2007.248.5	10-26-4	Biochemical Oxygen Demand	368	mg/L	1	2		01-19-07	01-24-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 2/1/2007 11:24:32 AM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 1/18/2007

Work Order Number 0701233 | Received by TLS

Checklist completed by Tanya Shon (Signature) Jan 18,07 (Date)

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 1° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 1-18-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 1°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
								0701233																	
1-18-07	1030	Water	Pond 2 Inlet	2				1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
1-18-07	1410	Steve Morris	Janye Thomas 1/18/07 1410
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, February 05, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 1/25/2007

Order No.: 0701300

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 1/25/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0701300
Order: 0701651 HAL03 Receipt: 01-25-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0701300-01A POND 2 INLET* Collected: *01-25-07 10:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0701651-0001A		**EPA 410.1 Chemical Oxygen Demand**					By:	RKA		
WCOD07006	WC.2007.225.9	C-004	Chemical Oxygen Demand	1410	mg/L	10	10		01-29-07	01-30-07

Sample: *0701300-01B POND 2 INLET* Collected: *01-25-07 10:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0701651-0002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	RKA		
BOD07008	WC.2007.274.17	10-26-4	Biochemical Oxygen Demand	446	mg/L	1	2		01-26-07	01-31-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 1/25/2007

Work Order Number 0701300

Received by AT

Checklist completed by Janye Shomo (Signature) Jan 25, 07 (Date)

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☐	No ☑		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 1° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 drlet 1-25-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 1°C

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
1-25-07	1090	H_2O	Pond 2 drlet	2				0701300 1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
1-25-07	1512	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
			1/25/07 1512

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, February 21, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #3 2-20-2007

Order No.: 0702217

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 2/20/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *21-Feb-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 3 Water
Lab Order:	0702217	**Collection Date:**	2/20/2007 11:15:00 AM
Project:	Evap. Pond #3 2-20-2007	**Date Received:**	2/20/2007
Lab ID:	0702217-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 160.1: TDS						Analyst: KS
Total Dissolved Solids	4800	20		mg/L	1	2/20/2007

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #3 2-20-2007 **Work Order:** 0702217

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E160.1									
Sample ID: MB-12344		*MBLK*			Batch ID:	12344	Analysis Date:		2/20/2007
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-12344		*LCS*			Batch ID:	12344	Analysis Date:		2/20/2007
Total Dissolved Solids	999.0	mg/L	20	99.9	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 2/20/2007

Work Order Number 0702217

Received by AT

Checklist completed by _____ Signature _____ Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	4°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #3 2-20-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 4°C

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	160.1 TDS				Air Bubbles or Headspace (Y or N)
2-20-07	1115	H_2O	Pond 3 Water	1			0702217-1													X				

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
2-20-07	1425	Steve Morris	Anne Morris 2/20/07
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1425

Remarks: RUSH
2 DAY TAT

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, March 05, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet &AL-1 In/AL-2 Out Ph

Order No.: 0702175

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 2/15/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Mar-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-1 In
Lab Order:	0702175	**Collection Date:**	2/15/2007 11:00:00 AM
Project:	Evap. Pond #2 Inlet &AL-1 In/AL-2 Out Phenol	**Date Received:**	2/15/2007
Lab ID:	0702175-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Chloro-3-methylphenol	ND	100		µg/L	1	3/1/2007
2-Chlorophenol	ND	50		µg/L	1	3/1/2007
2,4-Dichlorophenol	ND	50		µg/L	1	3/1/2007
2,4-Dimethylphenol	330	50		µg/L	1	3/1/2007
4,6-Dinitro-2-methylphenol	ND	250		µg/L	1	3/1/2007
2,4-Dinitrophenol	ND	250		µg/L	1	3/1/2007
2-Methylphenol	2700	1500		µg/L	20	3/3/2007
3+4-Methylphenol	4600	2000		µg/L	20	3/3/2007
2-Nitrophenol	ND	75		µg/L	1	3/1/2007
4-Nitrophenol	ND	250		µg/L	1	3/1/2007
Pentachlorophenol	ND	250		µg/L	1	3/1/2007
Phenol	9200	1000		µg/L	20	3/3/2007
Surr: 2,4,6-Tribromophenol	97.7	16.6-150		%REC	1	3/1/2007
Surr: 2-Fluorobiphenyl	88.8	19.6-134		%REC	1	3/1/2007
Surr: 2-Fluorophenol	61.8	9.54-113		%REC	1	3/1/2007
Surr: 4-Terphenyl-d14	87.2	22.7-145		%REC	1	3/1/2007
Surr: Nitrobenzene-d5	104	14.6-134		%REC	1	3/1/2007
Surr: Phenol-d5	51.0	10.7-80.3		%REC	1	3/1/2007
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	37000	7500		µg/L	1	2/21/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Mar-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 Out
Lab Order:	0702175	**Collection Date:**	2/15/2007 11:15:00 AM
Project:	Evap. Pond #2 Inlet &AL-1 In/AL-2 Out Phenol	**Date Received:**	2/15/2007
Lab ID:	0702175-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Chloro-3-methylphenol	ND	100		µg/L	1	3/1/2007
2-Chlorophenol	ND	50		µg/L	1	3/1/2007
2,4-Dichlorophenol	ND	50		µg/L	1	3/1/2007
2,4-Dimethylphenol	210	50		µg/L	1	3/1/2007
4,6-Dinitro-2-methylphenol	ND	250		µg/L	1	3/1/2007
2,4-Dinitrophenol	ND	250		µg/L	1	3/1/2007
2-Methylphenol	2100	750		µg/L	10	3/3/2007
3+4-Methylphenol	4000	1000		µg/L	10	3/3/2007
2-Nitrophenol	ND	75		µg/L	1	3/1/2007
4-Nitrophenol	ND	250		µg/L	1	3/1/2007
Pentachlorophenol	ND	250		µg/L	1	3/1/2007
Phenol	7900	500		µg/L	10	3/3/2007
Surr: 2,4,6-Tribromophenol	102	16.6-150		%REC	1	3/1/2007
Surr: 2-Fluorobiphenyl	88.1	19.6-134		%REC	1	3/1/2007
Surr: 2-Fluorophenol	60.9	9.54-113		%REC	1	3/1/2007
Surr: 4-Terphenyl-d14	92.2	22.7-145		%REC	1	3/1/2007
Surr: Nitrobenzene-d5	89.2	14.6-134		%REC	1	3/1/2007
Surr: Phenol-d5	46.6	10.7-80.3		%REC	1	3/1/2007
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	34000	7500		µg/L	1	2/21/2007

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

ASSAIGAI ANALYTICAL LABORATORIES, INC.

4301 Masthead NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259

3332 Wedgewood, Ste. N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0702175
Order: 0702442 HAL03 Receipt: 02-16-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0702175-01A POND 2 INLET* Collected: *02-15-07 11:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0702442-0001A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07017	WC.2007.448.5	10-26-4	Biochemical Oxygen Demand	827	mg/L	1	2	1	02-16-07	02-21-07

Sample: *0702175-01B POND 2 INLET* Collected: *02-15-07 11:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0702442-0002A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07010	WC.2007.431.7	C-004	Chemical Oxygen Demand	2050	mg/L	10	10		02-23-07	02-23-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 79.3% and 80.1% respectively. These recoveries are below the QC acceptance limits of 84.6-115.4% and are most likely due to a poor performing seed capsule used for this batch. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

REPRODUCTION OF THIS REPORT IN LESS THAN FULL REQUIRES THE WRITTEN CONSENT OF AAL. THIS REPORT MAY NOT BE USED IN ANY MANNER BY THE CLIENT OR ANY OTHER THIRD PARTY TO CLAIM PRODUCT ENDORSEMENT BY THE NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM.

0702 142

Hall Environmental Analysis Laboratory, Inc.
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109-4372
TEL: *5053453975* FAX: *5053454107*

CHAIN-OF-CUSTODY RECORD

ORIGINAL

Subcontractor:
Assaigai
7300 Jefferson, NE
Albuquqeque, NM 87109

TEL: (505) 345-8964
FAX: (505) 345-7259
Acct #:

Project Name 0702175

15-Feb-07

Lab ID	Client Sample ID	Matrix	Collection Date	Bottle Type	Requested Tests
0702175-01A	Pond 2 Inlet	Aqueous	2/15/2007 11:30:00 AM	1LHDPE	SEE BELOW
0702175-01B	Pond 2 Inlet	Aqueous	2/15/2007 11:30:00 AM	500HDPEH2SO4	SEE BELOW

4/6

ANALYTICAL COMMENTS: RKA **BOD, COD**

Comments: Standard TAT. Please fax (505) 345-4107 results when completed, or email to lab@hallenvironmental.com. Thank you.

		Date/Time			Date/Time
Relinquished by:	[signature]	2/15/07 1030	**Received by:**	[signature]	2/16/07 846
Relinquished by:			**Received by:**		

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #2 Inlet &AL-1 In/AL-2 Out Phenol **Work Order:** 0702175

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E420.1									
Sample ID: MB-12342		*MBLK*			Batch ID:	12360	Analysis Date:		2/21/2007
Phenolics, Total Recoverable	ND	µg/L	3.0						
Sample ID: LCS-12342		*LCS*			Batch ID:	12360	Analysis Date:		2/21/2007
Phenolics, Total Recoverable	14.87	µg/L	3.0	74.4	51.7	133			
Method: SW8270C									
Sample ID: MB-12338		*MBLK*			Batch ID:	12338	Analysis Date:		3/1/2007
4-Chloro-3-methylphenol	ND	µg/L	20						
2-Chlorophenol	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	50						
2,4-Dinitrophenol	ND	µg/L	50						
2-Methylphenol	ND	µg/L	15						
3+4-Methylphenol	ND	µg/L	20						
2-Nitrophenol	ND	µg/L	15						
4-Nitrophenol	ND	µg/L	50						
Pentachlorophenol	ND	µg/L	50						
Phenol	ND	µg/L	10						
Sample ID: LCS-12338		*LCS*			Batch ID:	12338	Analysis Date:		3/1/2007
-Chloro-3-methylphenol	153.4	µg/L	20	76.7	15.4	119			
2-Chlorophenol	109.9	µg/L	10	55.0	12.2	122			
4-Nitrophenol	ND	µg/L	50	14.1	12.5	87.4			
Pentachlorophenol	83.04	µg/L	50	41.5	3.55	114			
Phenol	74.76	µg/L	10	37.4	7.53	73.1			
Sample ID: LCSD-12338		*LCSD*			Batch ID:	12338	Analysis Date:		3/1/2007
4-Chloro-3-methylphenol	158.7	µg/L	20	79.3	15.4	119	3.37	28.6	
2-Chlorophenol	143.2	µg/L	10	71.6	12.2	122	26.3	107	
4-Nitrophenol	94.08	µg/L	50	47.0	12.5	87.4	108	36.3	R
Pentachlorophenol	151.1	µg/L	50	75.6	3.55	114	58.2	49	R
Phenol	84.00	µg/L	10	42.0	7.53	73.1	11.6	52.4	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN — Date and Time Received: 2/15/2007

Work Order Number 0702175 — Received by AT

Checklist completed by _____ Signature — 2/15/07 Date

Matrix — Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 9210

Project Name: Evap Pond #2 dulet and AL-1 dn / AL-2 Out Phenolics
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 4°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0702175	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA) Phenols only	BOD	COD			Air Bubbles or Headspace (Y or N)
2/15/07	1130	H_2O	Pond 2 dulet					-1													X	X			
"	1100	"	AL-1 dn					-2												X					
"	1115	"	AL-2 Out					-3												X					

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
2/15/07	1520	Steve Morris	2/15/07 1520
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, February 15, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 2-8-2007

Order No.: 0702083

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 2/8/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0702083
Order: 0702208 HAL03 Receipt: 02-08-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0702083-01A POND 2 INLET* Collected: *02-08-07 10:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0702208-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07009	WC.2007.366.10	C-004	Chemical Oxygen Demand	3490	mg/L	10	10		02-12-00	02-13-07

Sample: *0702083-01B POND 2 INLET* Collected: *02-08-07 10:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0702208-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07014	WC.2007.370.5	10-26-4	Biochemical Oxygen Demand	1290	mg/L	1	2		02-09-07	02-14-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 2/8/2007

Work Order Number 0702083

Received by AT

Checklist completed by D Schlippe (Signature) 2-8-07 (Date)

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Outlet 2-8-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
2/8/07	1030	H_2O	Pond 2 Outlet	2				0702083 1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
2-8-07	1410	Steve Morris	2/8/07
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
			1410

Remarks: Rush

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, March 05, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 2-20-2007

Order No.: 0702216

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 2/20/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

ASSAIGAI ANALYTICAL LABORATORIES, INC.
4301 Masthead NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, Ste. N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result Is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0702216**
Order: **0702499** **HAL03** Receipt: **02-20-07**

William P. Biava, President of Assaigai Analytical Laboratories, Inc.

Sample: ***0702216-01A POND 2 INLET*** Collected: *02-20-07 11:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0702499-0001A		**EPA 410.1 Chemical Oxygen Demand**					By:	RKA		
WCOD07010	WC.2007.431.6	C-004	Chemical Oxygen Demand	1800	mg/L	10	10		02-23-07	02-23-07

Sample: ***0702216-01B POND 2 INLET*** Collected: *02-20-07 11:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0702499-0002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	RKA		
BOD07019	WC.2007.466.7	10-26-4	Biochemical Oxygen Demand	743	mg/L	1	2		02-22-07	02-27-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: *2/28/2007 3:01:27 PM*

REPRODUCTION OF THIS REPORT IN LESS THAN FULL REQUIRES THE WRITTEN CONSENT OF AAL.
THIS REPORT MAY NOT BE USED IN ANY MANNER BY THE CLIENT OR ANY OTHER THIRD PARTY TO CLAIM PRODUCT ENDORSEMENT BY THE NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 2/20/2007

Work Order Number 0702216

Received by AT

Checklist completed by D Schlepp 2-20-07
Signature Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐
Other:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 2-20-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 4°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
2-20-07	1100	H_2O	Pond 2 Inlet	2				0702216-1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
2-20-07	1426	Steve Morris	Anne Morris 2/20/07 1426
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, April 02, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED Monthly NAPIS Release Samples 3-

Order No.: 0703456

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 3/29/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Apr-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 Outlet
Lab Order:	0703456	**Collection Date:**	3/29/2007 10:30:00 AM
Project:	NMED Monthly NAPIS Release Samples 3-29-	**Date Received:**	3/29/2007
Lab ID:	0703456-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	780	30		mg/L	10	4/2/2007 7:51:23 AM
Motor Oil Range Organics (MRO)	160	150		mg/L	10	4/2/2007 7:51:23 AM
Surr: DNOP	116	58-140		%REC	10	4/2/2007 7:51:23 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	5.1	2.5		mg/L	50	3/30/2007 8:38:06 PM
Surr: BFB	113	79.2-121		%REC	50	3/30/2007 8:38:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	120		µg/L	50	3/30/2007 8:38:06 PM
Benzene	ND	50		µg/L	50	3/30/2007 8:38:06 PM
Toluene	230	50		µg/L	50	3/30/2007 8:38:06 PM
Ethylbenzene	ND	50		µg/L	50	3/30/2007 8:38:06 PM
Xylenes, Total	320	100		µg/L	50	3/30/2007 8:38:06 PM
1,2,4-Trimethylbenzene	160	50		µg/L	50	3/30/2007 8:38:06 PM
1,3,5-Trimethylbenzene	ND	50		µg/L	50	3/30/2007 8:38:06 PM
Surr: 4-Bromofluorobenzene	88.6	70.2-105		%REC	50	3/30/2007 8:38:06 PM

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

Hall Environmental Analysis Laboratory, Inc.

Date: *02-Apr-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2 Inlet
Lab Order:	0703456	**Collection Date:**	3/29/2007 11:00:00 AM
Project:	NMED Monthly NAPIS Release Samples 3-29-	**Date Received:**	3/29/2007
Lab ID:	0703456-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	820	30		mg/L	10	4/2/2007 8:25:45 AM
Motor Oil Range Organics (MRO)	160	150		mg/L	10	4/2/2007 8:25:45 AM
Surr: DNOP	125	58-140		%REC	10	4/2/2007 8:25:45 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	5.0	1.0		mg/L	20	3/30/2007 10:38:24 PM
Surr: BFB	119	79.2-121		%REC	20	3/30/2007 10:38:24 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	3/30/2007 10:38:24 PM
Benzene	ND	20		µg/L	20	3/30/2007 10:38:24 PM
Toluene	80	20		µg/L	20	3/30/2007 10:38:24 PM
Ethylbenzene	24	20		µg/L	20	3/30/2007 10:38:24 PM
Xylenes, Total	220	40		µg/L	20	3/30/2007 10:38:24 PM
1,2,4-Trimethylbenzene	170	20		µg/L	20	3/30/2007 10:38:24 PM
1,3,5-Trimethylbenzene	56	20		µg/L	20	3/30/2007 10:38:24 PM
Surr: 4-Bromofluorobenzene	91.4	70.2-105		%REC	20	3/30/2007 10:38:24 PM

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Monthly NAPIS Release Samples 3-29- **Work Order:** 0703456

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: MB-12617		*MBLK*			Batch ID:	12617	Analysis Date:	3/31/2007 1:54:38 AM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-12617		*LCS*			Batch ID:	12617	Analysis Date:	3/31/2007 2:28:25 AM	
Diesel Range Organics (DRO)	5.524	mg/L	1.0	110	74	157			
Sample ID: LCSD-12617		*LCSD*			Batch ID:	12617	Analysis Date:	3/31/2007 10:11:30 AM	
Diesel Range Organics (DRO)	5.061	mg/L	1.0	101	74	157	8.75	23	
Method: SW8015									
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23054	Analysis Date:	3/30/2007 7:30:47 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	R23054	Analysis Date:	3/31/2007 6:39:04 AM	
Gasoline Range Organics (GRO)	0.4320	mg/L	0.050	81.4	80	115			
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID:	R23054	Analysis Date:	3/31/2007 7:09:02 AM	
Gasoline Range Organics (GRO)	0.4318	mg/L	0.050	81.3	80	115	0.0463	8.39	
Method: SW8021									
Sample ID: b 7		*MBLK*			Batch ID:	R23054	Analysis Date:	3/30/2007 11:01:30 AM	
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5						
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	R23054	Analysis Date:	3/30/2007 7:07:58 PM	
Methyl tert-butyl ether (MTBE)	19.43	µg/L	2.5	97.2	51.2	138			
Benzene	19.80	µg/L	1.0	99.0	85.9	113			
Toluene	20.21	µg/L	1.0	99.6	86.4	113			
Ethylbenzene	20.21	µg/L	1.0	101	83.5	118			
Xylenes, Total	60.54	µg/L	2.0	101	83.4	122			
1,2,4-Trimethylbenzene	19.65	µg/L	1.0	98.3	83.5	115			
1,3,5-Trimethylbenzene	19.41	µg/L	1.0	97.1	85.2	113			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/29/2007

Work Order Number 0703456

Received by AT

Checklist completed by _____ Signature _____ Date 3/29/07

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☑	No ☐	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	5°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: NMED Weekly NAPIS Release Sampler 3-29-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 5

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0703456	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
3/29/07	1030	H_2O	AL-2 Outlet	6				-1	X		X														
"	1100	"	EP-2 Outlet	6				-2	X		X														

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
3/29/07	1515	Steve Morris	3/29/07 1515
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, April 13, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet & Phenolics 3-15-2007

Order No.: 0703232

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 3/16/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc. Date: *16-Apr-07*

CLIENT: Giant Refining Co
Project: Evap. Pond #2 Inlet & Phenolics 3-15-2007
Lab Order: 0703232

CASE NARRATIVE

Phenolics Analysis:

Hall Environmental analyzed samples AL-1 Inlet and AL-2 Outlet for phenols by Methods 8270 and 420.3. Due to the very high amounts of petroleum hydrocarbons Hall Environmental is reporting the phenols using EPA Method 420.3.

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-1 Inlet
Lab Order:	0703232	**Collection Date:**	3/15/2007 9:45:00 AM
Project:	Evap. Pond #2 Inlet & Phenolics 3-15-2007	**Date Received:**	3/16/2007
Lab ID:	0703232-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	47000	30		µg/L	1	4/10/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 Outlet
Lab Order:	0703232	**Collection Date:**	3/15/2007 10:00:00 AM
Project:	Evap. Pond #2 Inlet & Phenolics 3-15-2007	**Date Received:**	3/16/2007
Lab ID:	0703232-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: **JAT**
Phenolics, Total Recoverable	60000	7500		µg/L	1	4/10/2007

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

ASSAIGAI ANALYTICAL LABORATORIES, INC.
4301 Masthead NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, Ste. N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0703232
Order: 0703456 HAL03 Receipt: 03-16-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0703232-01A POND 2 INLET* Collected: *03-15-07 9:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0703456-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07016	WC.2007.731.11	C-004	Chemical Oxygen Demand	2170	mg/L	10	10		03-26-07	03-26-07

Sample: *0703232-01B POND 2 INLET* Collected: *03-15-07 9:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0703456-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07029	WC.2007.682.12	10-26-4	Biochemical Oxygen Demand	553	mg/L	1	2		03-16-07	03-21-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 3/28/2007 9:16:00 AM

REPRODUCTION OF THIS REPORT IN LESS THAN FULL REQUIRES THE WRITTEN CONSENT OF AAL.
THIS REPORT MAY NOT BE USED IN ANY MANNER CLIENT OR ANY OTHER THIRD PARTY TO CLAIM
PRODUCT ENDORSEMENT BY THE NATIONAL V RY LABORATORY ACCREDITATION PROGRAM.

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #2 Inlet & Phenolics 3-15-2007 **Work Order:** 0703232

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E420.3									
Sample ID: MB-12680		*MBLK*			Batch ID:	**12692**	Analysis Date:		4/10/2007
Phenolics, Total Recoverable	ND	µg/L	3.0						
Sample ID: MB-12699		*MBLK*			Batch ID:	**12700**	Analysis Date:		4/10/2007
Phenolics, Total Recoverable	ND	µg/L	3.0						
Sample ID: LCS-12680		*LCS*			Batch ID:	**12692**	Analysis Date:		4/10/2007
Phenolics, Total Recoverable	18.66	µg/L	3.0	93.3	51.7	133			
Sample ID: LCS-12699		*LCS*			Batch ID:	**12700**	Analysis Date:		4/10/2007
Phenolics, Total Recoverable	17.84	µg/L	3.0	89.2	51.7	133			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 3/16/2007

Work Order Number 0703232 | Received by AT

Checklist completed by _____ Signature _____ Date 3/16/07

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Project Name: Evap. Pond #2 Inlet and Phenolics 3-15-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 4°

Phone #: 505 722 3833
Fax #: 505 722 0210

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl2	Preservative HNO3	Preservative	HEAL No. 0703232	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA) Phenolics	~~BOD~~	COD			Air Bubbles or Headspace (Y or N)
3/15/07	0930	H_2O	Pond 2 Inlet					-1													X	X			
"	0945	"	AL-1 Inlet					-2												X					
"	1000	"	AL-2 Outlet					-3												X					

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
3/15/07	1455	Steve Morris	Anna Thorn 3/15/07
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1455

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, April 19, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 3/29/2007

Order No.: 0703458

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 3/29/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0703458**
Order: **0703898** **HAL03** Receipt: **03-30-07**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0703458-01A POND 2 INLET*** Collected: *03-29-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0703898-0001A		**EPA 410.1 Chemical Oxygen Demand**					By:	RKA		
WCOD07018	WC.2007.899.9	C-004	Chemical Oxygen Demand	2120	mg/L	10	10		04-11-07	04-13-07

Sample: ***0703458-01B POND 2 INLET*** Collected: *03-29-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0703898-0002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	RKA		
BOD07036	WC.2007.829.10	10-26-4	Biochemical Oxygen Demand	836	mg/L	1	2		03-30-07	04-04-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 4/19/2007 11:16:34 AM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/29/2007

Work Order Number 0703458

Received by AT

Checklist completed by Tamy S (Signature) March 29, 07 (Date)

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	5°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond # 2 Outlet 3-29-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 5°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No. 0703458	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
3/29/07	0930	H_2O	Pond 2 Outlet	2				1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
3/29/07	1505	Steve Morris	3/29/07
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1505

Remarks: Rush

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, April 03, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 3/22/2007

Order No.: 0703352

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 3/22/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0703352
Order: 0703684 HAL03 Receipt: 03-23-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0703352-01A POND 2 INLET* Collected: *03-22-07 11:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0703684-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07016	WC.2007.731.10	C-004	Chemical Oxygen Demand	1180	mg/L	1	10		03-26-07	03-26-07

Sample: *0703352-01B POND 2 INLET* Collected: *03-22-07 11:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0703684-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07032	WC.2007.741.16	10-26-4	Biochemical Oxygen Demand	412	mg/L	1	2	1	03-23-07	03-28-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 69.9% and 63.8% respectively. These recoveries are below the QC acceptance limits of 84.6-115.4 and are most likely due to a poor performing seed capsule used for this batch. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

Report Date: 4/3/2007 11:32:29 AM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/22/2007

Work Order Number 0703352

Received by TLS

Checklist completed by _____ March 22, 07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	2°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond # 2 drlt 3-22-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 2°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
3/22/07	1100	H_2O	Pond 2 drlt	2				0703352 1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
3/22/07	1527	Steve Morris	3/22/07 1630
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, March 26, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 3/8/07

Order No.: 0703110

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 3/9/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0703110
Order: 0703251 HAL03 Receipt: 03-09-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0703110-01A POND 2 INLET* Collected: *03-08-07 11:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0703251-0001A		**EPA 410.1 Chemical Oxygen Demand**						By: RKA		
WCOD07015	WC.2007.671.9	C-004	Chemical Oxygen Demand	1980	mg/L	10	10		03-20-07	03-21-07
0703251-0001B		**EPA 405.1 Biochemical Oxygen Demand**						By: RKA		
BOD07026	WC.2007.664.12	10-26-4	Biochemical Oxygen Demand	Less Than 4.0	mg/L	1	2	1	03-09-07	03-14-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 71.7% and 64.9% respectively. These recoveries are below the QC acceptance limits of 84.6-115.4 and are most likely due to a poor performing seed capsule used for this batch. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/9/2007

Work Order Number 0703110

Received by AT

Checklist completed by _____ Signature _____ Date 3/9/07

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package.
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 drlet 3-8-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0703110	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
3/8/07	1100	H_2O	Pond 2 drlet	2				-1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
3-9-07	0941	Steve Morris	3/9/07 0941
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, March 26, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 3/8/07

Order No.: 0703110

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 3/9/2007 for the analyses presented in the following report.

This report is an addendum to the report dated March 26, 2007. BOD data has been updated in this report.

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

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

ASSAIGAI ANALYTICAL LABORATORIES, INC.
4301 Masthead NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, Ste. N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

REVISED 3/21/07 01:55

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0703110
Order: 0703251 HAL03 Receipt: 03-09-07

William P. Blava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0703110-01A POND 2 INLET* Collected: *03-08-07 11:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0703251-0001A		**EPA 410.1 Chemical Oxygen Demand**					By:	RKA		
WCOD07015	WC.2007.671.9	C-004	Chemical Oxygen Demand	1980	mg/L	10	10		03-20-07	03-21-07
0703251-0001B		**EPA 405.1 Biochemical Oxygen Demand**					By:	RKA		
BOD07028	WC.2007.664.12	10-26-4	Biochemical Oxygen Demand	596	mg/L	1	2	1	03-09-07	03-14-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 71.7% and 64.9% respectively. These recoveries are below the QC acceptance limits of 84.6-115.4% and are most likely due to a poor performing seed capsule used for this batch. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

Report Date: 4/11/2007 1:34:00 PM

REPRODUCTION OF THIS REPORT IN LESS THAN FULL REQUIRES THE WRITTEN CONSENT OF AAL.
THIS REPORT MAY NOT BE USED IN ANY MANNER BY THE CLIENT OR ANY OTHER THIRD PARTY TO CLAIM PRODUCT ENDORSEMENT BY THE NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM.

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Project Name: Evap. Pond #2 drlet 3-8-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 3°

Phone #: 505 722 3833
Fax #: 505 722 0210

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0703110	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
3/8/07	1100	H_2O	Pond 2 drlet	2				-1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
3-9-07	0941	Steve Morris	[signature]	3/9/07 0941
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, March 21, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 3-1-2007

Order No.: 0703011

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 3/1/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0703011
Order: 0703070 HAL03 Receipt: 03-02-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0703011-01A POND 2 INLET* Collected: *03-01-07 11:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0703070-0001A		**EPA 410.1 Chemical Oxygen Demand**					By:	RKA		
WCOD07012	WC.2007.546.7	C-004	Chemical Oxygen Demand	2440	mg/L	10	10		03-05-07	03-08-07

Sample: *0703011-01B POND 2 INLET* Collected: *03-01-07 11:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0703070-0002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	RKA		
BOD07023	WC.2007.600.5	10-26-4	Biochemical Oxygen Demand	334	mg/L	1	2	1	03-02-07	03-07-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 68.9% and 66.1% respectively. These recoveries are below the QC acceptance limits of 84.6-115.4 and are most likely due to a poor performing seed capsule used for this batch. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/1/2007

Work Order Number 0703011

Received by GLS

Checklist completed by Tanya Shorn (Signature) March 1, 07 (Date)

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza

Address: Route 3 Box 7 Gallup NM 87301

Phone #: 505 722 3833

Fax #: 505 722 0219

Project Name: Evap. Pond #2 Inlet 3-1-2007

Project #:

Project Manager: Steve Morris

Sampler: Steve Morris

Sample Temperature: 4°C

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0703011	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
3-1-07	1100	H_2O	Pond 2 Inlet	2				1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
3-1-07	1405	Steve Morris	3-1-07 1405
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, April 18, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 4-5-2007

Order No.: 0704094

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 4/6/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	Analyte Detected in Method Blank
E	Result is Estimated
H	Analyzed Out of Hold Time
N	Tentatively Identified Compound
S	Subcontracted
1-9	See Footnote

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0704094
Order: 0704133 HAL03 Receipt: 04-06-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0704094-01A POND 2 INLET* Collected: *04-05-07 10:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0704133-0001A		EPA 410.1 Chemical Oxygen Demand						By: RKA		
WCOD07019	WC.2007.930.19	C-004	Chemical Oxygen Demand	3840	mg/L	10	10		04-16-07	04-17-07

Sample: *0704094-01B POND 2 INLET* Collected: *04-05-07 10:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0704133-0002A		EPA 405.1 Biochemical Oxygen Demand						By: RKA		
BOD07039	WC.2007.885.5	10-26-4	Biochemical Oxygen Demand	786	mg/L	1	2		04-06-07	04-11-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 4/18/2007 4:36:39 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 4/6/2007

Work Order Number 0704094

Received by AT

Checklist completed by _____ 4/6/07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☑	No ☐	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	2°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #:

Project Name: Evap Pond #2 inlet 4-5-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 2°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No. 0704094	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	CAD			Air Bubbles or Headspace (Y or N)
4-5-07	1030	H_2O	Pond 2 inlet	2				-1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
4-6-07	0905	Steve Morris	Anne Thorn 4/6/07 0905
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, April 27, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 4/12/2007

Order No.: 0704192

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 4/12/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0704192
Order: 0704365 HAL03 Receipt: 04-13-07

William P. Blava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0704192-01A POND 2 INLET* Collected: *04-12-07 11:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0704365-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07021	WC.2007.979.12	C-004	Chemical Oxygen Demand	2960	mg/L	10	10		04-19-07	04-23-07

Sample: *0704192-01B POND 2 INLET* Collected: *04-12-07 11:30:00* By:
Matrix: *AQUEOUS* *SR9398*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0704365-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07042	WC.2007.953.8	10-26-4	Biochemical Oxygen Demand	443	mg/L	1	2		04-13-07	04-18-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 4/27/2007 5:21:58 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 4/12/2007

Work Order Number 0704192

Received by GLS

Checklist completed by B Schlepp 4-12-07
Signature Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	6°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM. 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap Pond #2 Inlet 4-12-07
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 6°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
4/12/07	1130	H_2O	Pond 2 Inlet	2				0704192-1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
4-12-07	1412	Steve Morris	[signature] 4-12-07 @ 1412
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, May 10, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 4-19-2007

Order No.: 0704299

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 4/19/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0704299
Order: 0704537 HAL03 Receipt: 04-20-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0704299-01A POND 2 INLET* Collected: *04-19-07 10:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0704537-0001A		EPA 410.1 Chemical Oxygen Demand						By: RKA		
WCOD07024	WC.2007.1111.9	C-004	Chemical Oxygen Demand	1710	mg/L	10	10		05-01-07	05-02-07

Sample: *0704299-01B POND 2 INLET* Collected: *04-19-07 10:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0704537-0002A		EPA 405.1 Biochemical Oxygen Demand						By: RKA		
BOD07045	WC.2007.1025.9	10-26-4	Biochemical Oxygen Demand	635	mg/L	1	2		04-20-07	04-25-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 5/9/2007 6:04:21 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 4/19/2007

Work Order Number 0704299

Received by TLS

Checklist completed by _____ Signature _____ Date 4/19/07

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted	☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 3° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Project Name: Evap. Pond # 2 Inlet 4-19-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 3

Phone #: 505 722 3833
Fax #: 505 722 0210

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
4-19-07	1000	H_2O	Pond 2 Inlet	2				0704299-1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
4/19/07	1405	Steve Morris	[illegible]	4/19/07 1405
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, May 14, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet & Monthly Phenolics

Order No.: 0704356

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 4/24/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *21-May-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-1 Inlet
Lab Order:	0704356	**Collection Date:**	4/24/2007 7:30:00 AM
Project:	Evap. Pond #2 Inlet & Monthly Phenolics	**Date Received:**	4/24/2007
Lab ID:	0704356-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Chloro-3-methylphenol	ND	200		µg/L	1	5/3/2007
2-Chlorophenol	ND	100		µg/L	1	5/3/2007
2,4-Dichlorophenol	ND	100		µg/L	1	5/3/2007
2,4-Dimethylphenol	120	100		µg/L	1	5/3/2007
4,6-Dinitro-2-methylphenol	ND	500		µg/L	1	5/3/2007
2,4-Dinitrophenol	ND	500		µg/L	1	5/3/2007
2-Methylphenol	2100	150		µg/L	1	5/3/2007
3+4-Methylphenol	4400	2000		µg/L	10	5/7/2007
2-Nitrophenol	ND	150		µg/L	1	5/3/2007
4-Nitrophenol	ND	500		µg/L	1	5/3/2007
Pentachlorophenol	ND	500		µg/L	1	5/3/2007
Phenol	12000	1000		µg/L	10	5/7/2007
Surr: 2,4,6-Tribromophenol	90.5	16.6-150		%REC	1	5/3/2007
Surr: 2-Fluorobiphenyl	81.7	19.6-134		%REC	1	5/3/2007
Surr: 2-Fluorophenol	49.6	9.54-113		%REC	1	5/3/2007
Surr: 4-Terphenyl-d14	88.5	22.7-145		%REC	1	5/3/2007
Surr: Nitrobenzene-d5	69.3	14.6-134		%REC	1	5/3/2007
Surr: Phenol-d5	37.9	10.7-80.3		%REC	1	5/3/2007
EPA METHOD 160.1: TDS						Analyst: KS
Total Dissolved Solids	1200	20		mg/L	1	4/26/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: *21-May-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 Outlet
Lab Order:	0704356	**Collection Date:**	4/24/2007 7:45:00 AM
Project:	Evap. Pond #2 Inlet & Monthly Phenolics	**Date Received:**	4/24/2007
Lab ID:	0704356-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Chloro-3-methylphenol	ND	200		µg/L	1	5/3/2007
2-Chlorophenol	ND	100		µg/L	1	5/3/2007
2,4-Dichlorophenol	ND	100		µg/L	1	5/3/2007
2,4-Dimethylphenol	210	100		µg/L	1	5/3/2007
4,6-Dinitro-2-methylphenol	ND	500		µg/L	1	5/3/2007
2,4-Dinitrophenol	ND	500		µg/L	1	5/3/2007
2-Methylphenol	2500	750		µg/L	5	5/7/2007
3+4-Methylphenol	4400	1000		µg/L	5	5/7/2007
2-Nitrophenol	ND	150		µg/L	1	5/3/2007
4-Nitrophenol	ND	500		µg/L	1	5/3/2007
Pentachlorophenol	ND	500		µg/L	1	5/3/2007
Phenol	9300	500		µg/L	5	5/7/2007
Surr: 2,4,6-Tribromophenol	90.0	16.6-150		%REC	1	5/3/2007
Surr: 2-Fluorobiphenyl	67.0	19.6-134		%REC	1	5/3/2007
Surr: 2-Fluorophenol	44.2	9.54-113		%REC	1	5/3/2007
Surr: 4-Terphenyl-d14	58.8	22.7-145		%REC	1	5/3/2007
Surr: Nitrobenzene-d5	66.0	14.6-134		%REC	1	5/3/2007
Surr: Phenol-d5	34.5	10.7-80.3		%REC	1	5/3/2007
EPA METHOD 160.1: TDS						Analyst: KS
Total Dissolved Solids	1600	20		mg/L	1	4/26/2007

Qualifiers:

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

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0704356
Order: 0704713 HAL03 Receipt: 04-24-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0704356-01A POND 2 INLET* Collected: *04-24-07 7:15:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0704713-0001A		EPA 410.1 Chemical Oxygen Demand						By: RKA		
WCOD07025	WC.2007.1143.7	C-004	Chemical Oxygen Demand	1420	mg/L	1	10		05-03-07	05-04-07

Sample: *0704356-01B POND 2 INLET* Collected: *04-24-07 7:15:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0704713-0002A		EPA 405.1 Biochemical Oxygen Demand						By: RKA		
BOD07047	WC.2007.1110.16	10-26-4	Biochemical Oxygen Demand	537	mg/L	1	2	1	04-26-07	05-01-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 116% and 119% respectively. These recoveries are above the QC acceptance limits of 84.6-115.4% and are most likely due to a poor performing seed capsule used for this batch. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #2 Inlet & Monthly Phenolics
Work Order: 0704356

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-12834		*MBLK*			Batch ID:	12834	Analysis Date:		5/3/2007
4-Chloro-3-methylphenol	ND	µg/L	20						
2-Chlorophenol	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	50						
2,4-Dinitrophenol	ND	µg/L	50						
2-Methylphenol	ND	µg/L	15						
3+4-Methylphenol	ND	µg/L	20						
2-Nitrophenol	ND	µg/L	15						
4-Nitrophenol	ND	µg/L	50						
Pentachlorophenol	ND	µg/L	50						
Phenol	ND	µg/L	10						
Sample ID: LCS-12834		*LCS*			Batch ID:	12834	Analysis Date:		5/3/2007
4-Chloro-3-methylphenol	115.2	µg/L	20	57.6	15.4	119			
2-Chlorophenol	98.54	µg/L	10	49.3	12.2	122			
4-Nitrophenol	70.74	µg/L	50	35.4	12.5	87.4			
Pentachlorophenol	128.9	µg/L	50	64.4	3.55	114			
Phenol	59.28	µg/L	10	29.6	7.53	73.1			
Sample ID: LCSD-12834		*LCSD*			Batch ID:	12834	Analysis Date:		5/3/2007
-Chloro-3-methylphenol	123.5	µg/L	20	61.8	15.4	119	6.99	28.6	
2-Chlorophenol	122.8	µg/L	10	61.4	12.2	122	21.9	107	
4-Nitrophenol	72.88	µg/L	50	36.4	12.5	87.4	2.98	36.3	
Pentachlorophenol	142.1	µg/L	50	71.0	3.55	114	9.77	49	
Phenol	75.62	µg/L	10	37.8	7.53	73.1	24.2	52.4	
Method: E160.1									
Sample ID: MB-12813		*MBLK*			Batch ID:	12813	Analysis Date:		4/26/2007
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-12813		*LCS*			Batch ID:	12813	Analysis Date:		4/26/2007
Total Dissolved Solids	1038	mg/L	20	103	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 4/24/2007

Work Order Number 0704356

Received by AT

Checklist completed by [signature] 4/24/07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Project Name: Evap Pond #2 Inlet and Monthly Phenolics -
Project #:
Project Manager: Steve Morris
Sampler:
Sample Temperature: 3°

Phone #: 505 722 3833
Fax #: 505 722 0210

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl2	Preservative HNO3	Preservative	HEAL No. 0704356	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_2, NO_3, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA) Phenolics	BOD	COD	TDS		Air Bubbles or Headspace (Y or N)
4/24/07	0715	H_2O	Pond 2 Inlet	2				-1													X	X			
"	0730	"	AL-1 Inlet	2				-2												X			X		
"	0745	"	AL-2 Outlet	2				-3												X			X		

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
4/24/07	1430	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 4/24/07 1430

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, April 10, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED Weekly NAPIS Relase Samples 4/5/

Order No.: 0704097

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 4/6/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Apr-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 Outlet
Lab Order:	0704097	**Collection Date:**	4/5/2007 11:00:00 AM
Project:	NMED Weekly NAPIS Relase Samples 4/5/07	**Date Received:**	4/6/2007
Lab ID:	0704097-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	560	30		mg/L	10	4/9/2007 9:26:51 AM
Motor Oil Range Organics (MRO)	ND	150		mg/L	10	4/9/2007 9:26:51 AM
Surr: DNOP	128	58-140		%REC	10	4/9/2007 9:26:51 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: LMM
Gasoline Range Organics (GRO)	4.8	0.25		mg/L	5	4/8/2007 1:29:07 AM
Surr: BFB	140	79.2-121	S	%REC	5	4/8/2007 1:29:07 AM
EPA METHOD 8021B: VOLATILES						Analyst: LMM
Methyl tert-butyl ether (MTBE)	ND	12		µg/L	5	4/8/2007 1:29:07 AM
Benzene	21	5.0		µg/L	5	4/8/2007 1:29:07 AM
Toluene	65	5.0		µg/L	5	4/8/2007 1:29:07 AM
Ethylbenzene	14	5.0		µg/L	5	4/8/2007 1:29:07 AM
Xylenes, Total	84	10		µg/L	5	4/8/2007 1:29:07 AM
1,2,4-Trimethylbenzene	61	5.0		µg/L	5	4/8/2007 1:29:07 AM
1,3,5-Trimethylbenzene	22	5.0		µg/L	5	4/8/2007 1:29:07 AM
Surr: 4-Bromofluorobenzene	91.5	70.2-105		%REC	5	4/8/2007 1:29:07 AM

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

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Apr-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2 Inlet
Lab Order:	0704097	**Collection Date:**	4/5/2007 11:30:00 AM
Project:	NMED Weekly NAPIS Relase Samples 4/5/07	**Date Received:**	4/6/2007
Lab ID:	0704097-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	1700	30		mg/L	10	4/9/2007 10:00:57 AM
Motor Oil Range Organics (MRO)	270	150		mg/L	10	4/9/2007 10:00:57 AM
Surr: DNOP	151	58-140	S	%REC	10	4/9/2007 10:00:57 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: LMM
Gasoline Range Organics (GRO)	2.0	0.25		mg/L	5	4/9/2007 9:58:24 AM
Surr: BFB	118	79.2-121		%REC	5	4/9/2007 9:58:24 AM
EPA METHOD 8021B: VOLATILES						Analyst: LMM
Methyl tert-butyl ether (MTBE)	ND	12		µg/L	5	4/9/2007 9:58:24 AM
Benzene	9.7	5.0		µg/L	5	4/9/2007 9:58:24 AM
Toluene	41	5.0		µg/L	5	4/9/2007 9:58:24 AM
Ethylbenzene	9.4	5.0		µg/L	5	4/9/2007 9:58:24 AM
Xylenes, Total	74	10		µg/L	5	4/9/2007 9:58:24 AM
1,2,4-Trimethylbenzene	47	5.0		µg/L	5	4/9/2007 9:58:24 AM
1,3,5-Trimethylbenzene	15	5.0		µg/L	5	4/9/2007 9:58:24 AM
Surr: 4-Bromofluorobenzene	90.0	70.2-105		%REC	5	4/9/2007 9:58:24 AM

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Weekly NAPIS Relase Samples 4/5/07 **Work Order:** 0704097

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: MB-12679		*MBLK*			Batch ID:	12679	Analysis Date:	4/9/2007 7:44:37 AM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-12679		*LCS*			Batch ID:	12679	Analysis Date:	4/9/2007 8:18:44 AM	
Diesel Range Organics (DRO)	5.173	mg/L	1.0	103	74	157			
Sample ID: LCSD-12679		*LCSD*			Batch ID:	12679	Analysis Date:	4/9/2007 8:52:47 AM	
Diesel Range Organics (DRO)	5.908	mg/L	1.0	118	74	157	13.3	23	
Method: SW8015									
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23139	Analysis Date:	4/6/2007 9:30:14 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23144	Analysis Date:	4/7/2007 3:11:02 PM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23152	Analysis Date:	4/9/2007 8:27:59 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	R23139	Analysis Date:	4/6/2007 11:42:13 AM	
Gasoline Range Organics (GRO)	0.4978	mg/L	0.050	99.6	80	115			
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	R23144	Analysis Date:	4/7/2007 5:11:52 PM	
Gasoline Range Organics (GRO)	0.4782	mg/L	0.050	95.6	80	115			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Weekly NAPIS Relase Samples 4/5/07 **Work Order:** 0704097

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23139	Analysis Date:	4/6/2007 9:30:14 AM	
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5						
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23144	Analysis Date:	4/7/2007 3:11:02 PM	
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5						
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23152	Analysis Date:	4/9/2007 8:27:59 AM	
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5						
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	R23139	Analysis Date:	4/6/2007 11:12:13 AM	
Methyl tert-butyl ether (MTBE)	18.45	µg/L	2.5	46.1	51.2	138			S
Benzene	18.88	µg/L	1.0	94.4	85.9	113			
Toluene	19.42	µg/L	1.0	97.1	86.4	113			
Ethylbenzene	19.64	µg/L	1.0	98.2	83.5	118			
Xylenes, Total	59.10	µg/L	2.0	98.5	83.4	122			
1,2,4-Trimethylbenzene	19.01	µg/L	1.0	95.0	83.5	115			
1,3,5-Trimethylbenzene	18.82	µg/L	1.0	94.1	85.2	113			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	R23144	Analysis Date:	4/7/2007 4:41:35 PM	
Methyl tert-butyl ether (MTBE)	19.30	µg/L	2.5	48.2	51.2	138			S
Benzene	19.18	µg/L	1.0	95.9	85.9	113			
Toluene	19.60	µg/L	1.0	98.0	86.4	113			
Ethylbenzene	19.77	µg/L	1.0	98.9	83.5	118			
Xylenes, Total	59.26	µg/L	2.0	98.8	83.4	122			
1,2,4-Trimethylbenzene	19.02	µg/L	1.0	95.1	83.5	115			
1,3,5-Trimethylbenzene	18.89	µg/L	1.0	94.4	85.2	113			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 4/6/2007

Work Order Number 0704097

Received by AT

Checklist completed by Anne Thorn 4/6/07
Signature Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	

Container/Temp Blank temperature? 2° *4° C ± 2 Acceptable*
If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Project Name: NMED Weekly NAPL Release Samples 4-5-07
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 2

Phone #: 505 722 3833
Fax #: 505 722 0210

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0704097	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
4/5/07	1100	H_2O	RL-2 Outlet	6				-1	X		X														
"	1130	"	EP-2 Outlet	6				-2	X		X														

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
4-6-07	0903	Steve Morris	Anne Thomas 4/6/07
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 0903

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, April 16, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED Weekly NAPIS Release 4-12-2007

Order No.: 0704190

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 4/12/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 Outlet
Lab Order:	0704190	**Collection Date:**	4/12/2007 10:00:00 AM
Project:	NMED Weekly NAPIS Release 4-12-2007	**Date Received:**	4/12/2007
Lab ID:	0704190-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	200	30		mg/L	10	4/16/2007 3:14:28 AM
Motor Oil Range Organics (MRO)	ND	150		mg/L	10	4/16/2007 3:14:28 AM
Surr: DNOP	118	58-140		%REC	10	4/16/2007 3:14:28 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	2.6	0.50		mg/L	10	4/13/2007 3:57:08 PM
Surr: BFB	120	79.2-121		%REC	10	4/13/2007 3:57:08 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	25		µg/L	10	4/13/2007 3:57:08 PM
Benzene	ND	10		µg/L	10	4/13/2007 3:57:08 PM
Toluene	11	10		µg/L	10	4/13/2007 3:57:08 PM
Ethylbenzene	ND	10		µg/L	10	4/13/2007 3:57:08 PM
Xylenes, Total	22	20		µg/L	10	4/13/2007 3:57:08 PM
Surr: 4-Bromofluorobenzene	91.7	70.2-105		%REC	10	4/13/2007 3:57:08 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *16-Apr-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	EP-2 Inlet
Lab Order:	0704190	**Collection Date:**	4/12/2007 10:30:00 AM
Project:	NMED Weekly NAPIS Release 4-12-2007	**Date Received:**	4/12/2007
Lab ID:	0704190-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	510	30		mg/L	10	4/16/2007 3:48:34 AM
Motor Oil Range Organics (MRO)	ND	150		mg/L	10	4/16/2007 3:48:34 AM
Surr: DNOP	111	58-140		%REC	10	4/16/2007 3:48:34 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1.2	0.50		mg/L	10	4/13/2007 5:02:33 PM
Surr: BFB	115	79.2-121		%REC	10	4/13/2007 5:02:33 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	25		µg/L	10	4/13/2007 5:02:33 PM
Benzene	ND	10		µg/L	10	4/13/2007 5:02:33 PM
Toluene	16	10		µg/L	10	4/13/2007 5:02:33 PM
Ethylbenzene	ND	10		µg/L	10	4/13/2007 5:02:33 PM
Xylenes, Total	32	20		µg/L	10	4/13/2007 5:02:33 PM
Surr: 4-Bromofluorobenzene	90.0	70.2-105		%REC	10	4/13/2007 5:02:33 PM

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Weekly NAPIS Release 4-12-2007 **Work Order:** 0704190

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: MB-12723		*MBLK*			Batch ID:	12723	Analysis Date:	4/15/2007 10:41:32 PM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-12723		*LCS*			Batch ID:	12723	Analysis Date:	4/15/2007 11:15:38 PM	
Diesel Range Organics (DRO)	4.655	mg/L	1.0	93.1	74	157			
Sample ID: LCSD-12723		*LCSD*			Batch ID:	12723	Analysis Date:	4/15/2007 11:49:43 PM	
Diesel Range Organics (DRO)	4.864	mg/L	1.0	97.3	74	157	4.41	23	
Method: SW8015									
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23225	Analysis Date:	4/13/2007 8:41:38 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	R23225	Analysis Date:	4/13/2007 2:54:23 PM	
Gasoline Range Organics (GRO)	0.4478	mg/L	0.050	86.5	80	115			
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID:	R23225	Analysis Date:	4/13/2007 3:24:30 PM	
Gasoline Range Organics (GRO)	0.4326	mg/L	0.050	83.5	80	115	3.45	8.39	
Method: SW8021									
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23225	Analysis Date:	4/13/2007 8:41:38 AM	
Methyl tert-butyl ether (MTBE)	ND	µg/L	2.5						
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	2.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	R23225	Analysis Date:	4/14/2007 7:07:44 AM	
Methyl tert-butyl ether (MTBE)	19.37	µg/L	2.5	96.8	51.2	138			
Benzene	19.40	µg/L	1.0	97.0	85.9	113			
Toluene	19.73	µg/L	1.0	98.6	86.4	113			
Ethylbenzene	20.31	µg/L	1.0	102	83.5	118			
Xylenes, Total	60.22	µg/L	2.0	100	83.4	122			
Sample ID: 100NG BTEX LCSD		*LCSD*			Batch ID:	R23225	Analysis Date:	4/14/2007 7:37:39 AM	
Methyl tert-butyl ether (MTBE)	18.63	µg/L	2.5	93.2	51.2	138	3.89	28	
Benzene	19.11	µg/L	1.0	95.6	85.9	113	1.50	27	
Toluene	19.37	µg/L	1.0	96.9	86.4	113	1.82	19	
Ethylbenzene	19.52	µg/L	1.0	97.6	83.5	118	3.99	10	
Xylenes, Total	57.74	µg/L	2.0	96.2	83.4	122	4.19	13	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 4/12/2007

Work Order Number 0704190 | Received by GLS

Checklist completed by [signature] (Signature) 4-12-07 (Date)

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	6°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Project Name: NMED Weekly NAPIS Release 4-12-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 6°

Phone #: 505 722 3833
Fax #: 505 722 0210

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0704190	BTEX + MTBE + ~~TMB~~'s (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
4/12/07	1000	H_2O	AL-2 Outlet					-1	X		X														
"	1030		EP-2 Inlet					-2	X		X														

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	Date	Time
4-12-07	1410	Steve Morris	[signature]	4-12-07	1410
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)		

Remarks: RUSH
2 DAY TAT

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, May 10, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED Quarterly Water 2nd Qtr 2007

Order No.: 0704300

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 4/19/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *10-May-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0704300	**Collection Date:**	4/18/2007 2:00:00 PM
Project:	NMED Quarterly Water 2nd Qtr 2007	**Date Received:**	4/19/2007
Lab ID:	0704300-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	250	30		mg/L	10	4/24/2007 11:30:46 AM
Motor Oil Range Organics (MRO)	160	150		mg/L	10	4/24/2007 11:30:46 AM
Surr: DNOP	126	58-140		%REC	10	4/24/2007 11:30:46 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	1.4	0.50		mg/L	10	4/24/2007 11:21:40 AM
Surr: BFB	117	79.2-121		%REC	10	4/24/2007 11:21:40 AM
EPA METHOD 7470: MERCURY						Analyst: MAP
Mercury	ND	0.00020		mg/L	1	5/8/2007
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	5/1/2007 12:55:57 PM
Barium	0.046	0.020		mg/L	1	5/1/2007 10:05:24 AM
Cadmium	ND	0.0020		mg/L	1	5/1/2007 10:05:24 AM
Chromium	0.011	0.0060		mg/L	1	5/1/2007 10:05:24 AM
Lead	ND	0.0050		mg/L	1	5/1/2007 10:05:24 AM
Selenium	ND	0.050		mg/L	1	5/8/2007 2:26:20 PM
Silver	ND	0.0050		mg/L	1	5/1/2007 10:05:24 AM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Toluene	22	10		µg/L	10	4/26/2007 7:22:54 PM
Ethylbenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,2,4-Trimethylbenzene	26	10		µg/L	10	4/26/2007 7:22:54 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Naphthalene	51	20		µg/L	10	4/26/2007 7:22:54 PM
1-Methylnaphthalene	120	40		µg/L	10	4/26/2007 7:22:54 PM
2-Methylnaphthalene	160	40		µg/L	10	4/26/2007 7:22:54 PM
Acetone	2000	500		µg/L	50	4/20/2007 7:11:14 PM
Bromobenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Bromochloromethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Bromodichloromethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Bromoform	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Bromomethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
2-Butanone	340	100		µg/L	10	4/26/2007 7:22:54 PM
Carbon disulfide	ND	100		µg/L	10	4/26/2007 7:22:54 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *10-May-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0704300	**Collection Date:**	4/18/2007 2:00:00 PM
Project:	NMED Quarterly Water 2nd Qtr 2007	**Date Received:**	4/19/2007
Lab ID:	0704300-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Carbon Tetrachloride	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Chlorobenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Chloroethane	ND	20		µg/L	10	4/26/2007 7:22:54 PM
Chloroform	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Chloromethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
2-Chlorotoluene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
4-Chlorotoluene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
cis-1,2-DCE	ND	10		µg/L	10	4/26/2007 7:22:54 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/26/2007 7:22:54 PM
Dibromochloromethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Dibromomethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Dichlorodifluoromethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,1-Dichloroethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,1-Dichloroethene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,2-Dichloropropane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,3-Dichloropropane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
2,2-Dichloropropane	ND	20		µg/L	10	4/26/2007 7:22:54 PM
1,1-Dichloropropene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Hexachlorobutadiene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
2-Hexanone	ND	100		µg/L	10	4/26/2007 7:22:54 PM
Isopropylbenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
4-Isopropyltoluene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	4/26/2007 7:22:54 PM
Methylene Chloride	ND	10		µg/L	10	4/26/2007 7:22:54 PM
n-Butylbenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
n-Propylbenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
sec-Butylbenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Styrene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
tert-Butylbenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	4/26/2007 7:22:54 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/26/2007 7:22:54 PM
trans-1,2-DCE	ND	10		µg/L	10	4/26/2007 7:22:54 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	4/26/2007 7:22:54 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

Hall Environmental Analysis Laboratory, Inc.

Date: *10-May-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0704300	**Collection Date:**	4/18/2007 2:00:00 PM
Project:	NMED Quarterly Water 2nd Qtr 2007	**Date Received:**	4/19/2007
Lab ID:	0704300-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
1,1,2-Trichloroethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Trichloroethene (TCE)	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Trichlorofluoromethane	ND	10		µg/L	10	4/26/2007 7:22:54 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	4/26/2007 7:22:54 PM
Vinyl chloride	ND	10		µg/L	10	4/26/2007 7:22:54 PM
Xylenes, Total	37	15		µg/L	10	4/26/2007 7:22:54 PM
Surr: 1,2-Dichloroethane-d4	111	76.6-113		%REC	10	4/26/2007 7:22:54 PM
Surr: 4-Bromofluorobenzene	94.0	77-117		%REC	10	4/26/2007 7:22:54 PM
Surr: Dibromofluoromethane	107	72.3-121		%REC	10	4/26/2007 7:22:54 PM
Surr: Toluene-d8	94.8	73-113		%REC	10	4/26/2007 7:22:54 PM

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

Hall Environmental Analysis Laboratory, Inc.

Date: *10-May-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot T. C. Eff.
Lab Order:	0704300	**Collection Date:**	4/18/2007 2:45:00 PM
Project:	NMED Quarterly Water 2nd Qtr 2007	**Date Received:**	4/19/2007
Lab ID:	0704300-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	35	3.0		mg/L	1	4/24/2007 10:56:40 AM
Motor Oil Range Organics (MRO)	34	15		mg/L	1	4/24/2007 10:56:40 AM
Surr: DNOP	138	58-140		%REC	1	4/24/2007 10:56:40 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	0.13	0.050		mg/L	1	4/23/2007 9:24:36 PM
Surr: BFB	129	79.2-121	S	%REC	1	4/23/2007 9:24:36 PM
EPA METHOD 7470: MERCURY						Analyst: MAP
Mercury	ND	0.00020		mg/L	1	5/8/2007
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	5/1/2007 12:54:16 PM
Barium	ND	0.020		mg/L	1	5/1/2007 10:09:22 AM
Cadmium	ND	0.0020		mg/L	1	5/1/2007 10:09:22 AM
Chromium	ND	0.0060		mg/L	1	5/1/2007 10:09:22 AM
Lead	ND	0.0050		mg/L	1	5/1/2007 10:09:22 AM
Selenium	ND	0.050		mg/L	1	5/8/2007 2:30:12 PM
Silver	ND	0.0050		mg/L	1	5/1/2007 10:09:22 AM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Toluene	20	5.0		µg/L	5	4/27/2007 1:34:37 PM
Ethylbenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Methyl tert-butyl ether (MTBE)	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,2-Dichloroethane (EDC)	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,2-Dibromoethane (EDB)	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Naphthalene	ND	10		µg/L	5	4/27/2007 1:34:37 PM
1-Methylnaphthalene	ND	20		µg/L	5	4/27/2007 1:34:37 PM
2-Methylnaphthalene	ND	20		µg/L	5	4/27/2007 1:34:37 PM
Acetone	900	50		µg/L	5	4/27/2007 1:34:37 PM
Bromobenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Bromochloromethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Bromodichloromethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Bromoform	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Bromomethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
2-Butanone	ND	50		µg/L	5	4/27/2007 1:34:37 PM
Carbon disulfide	ND	50		µg/L	5	4/27/2007 1:34:37 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *10-May-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot T. C. Eff.
Lab Order:	0704300	**Collection Date:**	4/18/2007 2:45:00 PM
Project:	NMED Quarterly Water 2nd Qtr 2007	**Date Received:**	4/19/2007
Lab ID:	0704300-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Carbon Tetrachloride	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Chlorobenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Chloroethane	ND	10		µg/L	5	4/27/2007 1:34:37 PM
Chloroform	18	5.0		µg/L	5	4/27/2007 1:34:37 PM
Chloromethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
2-Chlorotoluene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
4-Chlorotoluene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
cis-1,2-DCE	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,2-Dibromo-3-chloropropane	ND	10		µg/L	5	4/27/2007 1:34:37 PM
Dibromochloromethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Dibromomethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Dichlorodifluoromethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,1-Dichloroethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,1-Dichloroethene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,2-Dichloropropane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,3-Dichloropropane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
2,2-Dichloropropane	ND	10		µg/L	5	4/27/2007 1:34:37 PM
1,1-Dichloropropene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Hexachlorobutadiene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
2-Hexanone	ND	50		µg/L	5	4/27/2007 1:34:37 PM
Isopropylbenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
4-Isopropyltoluene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
4-Methyl-2-pentanone	ND	50		µg/L	5	4/27/2007 1:34:37 PM
Methylene Chloride	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
n-Butylbenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
n-Propylbenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
sec-Butylbenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Styrene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
tert-Butylbenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,1,1,2-Tetrachloroethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,1,2,2-Tetrachloroethane	ND	10		µg/L	5	4/27/2007 1:34:37 PM
Tetrachloroethene (PCE)	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
trans-1,2-DCE	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,2,3-Trichlorobenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *10-May-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot T. C. Eff.
Lab Order:	0704300	**Collection Date:**	4/18/2007 2:45:00 PM
Project:	NMED Quarterly Water 2nd Qtr 2007	**Date Received:**	4/19/2007
Lab ID:	0704300-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
1,1,2-Trichloroethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Trichloroethene (TCE)	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Trichlorofluoromethane	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
1,2,3-Trichloropropane	ND	10		µg/L	5	4/27/2007 1:34:37 PM
Vinyl chloride	ND	5.0		µg/L	5	4/27/2007 1:34:37 PM
Xylenes, Total	ND	7.5		µg/L	5	4/27/2007 1:34:37 PM
Surr: 1,2-Dichloroethane-d4	110	76.6-113		%REC	5	4/27/2007 1:34:37 PM
Surr: 4-Bromofluorobenzene	98.3	77-117		%REC	5	4/27/2007 1:34:37 PM
Surr: Dibromofluoromethane	122	72.3-121	S	%REC	5	4/27/2007 1:34:37 PM
Surr: Toluene-d8	96.7	73-113		%REC	5	4/27/2007 1:34:37 PM

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

Hall Environmental Analysis Laboratory, Inc.

Date: *10-May-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Eff
Lab Order:	0704300	**Collection Date:**	4/18/2007 3:00:00 PM
Project:	NMED Quarterly Water 2nd Qtr 2007	**Date Received:**	4/19/2007
Lab ID:	0704300-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	280	30		mg/L	10	4/24/2007 12:05:11 PM
Motor Oil Range Organics (MRO)	160	150		mg/L	10	4/24/2007 12:05:11 PM
Surr: DNOP	136	58-140		%REC	10	4/24/2007 12:05:11 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	22	2.5		mg/L	50	4/23/2007 10:27:29 PM
Surr: BFB	115	79.2-121		%REC	50	4/23/2007 10:27:29 PM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	1700	50		µg/L	50	4/20/2007 8:20:40 PM
Toluene	2600	50		µg/L	50	4/20/2007 8:20:40 PM
Ethylbenzene	330	50		µg/L	50	4/20/2007 8:20:40 PM
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,2,4-Trimethylbenzene	730	50		µg/L	50	4/20/2007 8:20:40 PM
1,3,5-Trimethylbenzene	230	50		µg/L	50	4/20/2007 8:20:40 PM
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Naphthalene	420	100		µg/L	50	4/20/2007 8:20:40 PM
1-Methylnaphthalene	360	200		µg/L	50	4/20/2007 8:20:40 PM
2-Methylnaphthalene	560	200		µg/L	50	4/20/2007 8:20:40 PM
Acetone	11000	1000		µg/L	100	4/26/2007 8:32:47 PM
Bromobenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Bromochloromethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Bromodichloromethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Bromoform	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Bromomethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
2-Butanone	2000	500		µg/L	50	4/20/2007 8:20:40 PM
Carbon disulfide	ND	500		µg/L	50	4/20/2007 8:20:40 PM
Carbon Tetrachloride	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Chlorobenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Chloroethane	ND	100		µg/L	50	4/20/2007 8:20:40 PM
Chloroform	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Chloromethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
2-Chlorotoluene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
4-Chlorotoluene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
cis-1,2-DCE	ND	50		µg/L	50	4/20/2007 8:20:40 PM
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/20/2007 8:20:40 PM
Dibromochloromethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Dibromomethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,2-Dichlorobenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *10-May-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Eff
Lab Order:	0704300	**Collection Date:**	4/18/2007 3:00:00 PM
Project:	NMED Quarterly Water 2nd Qtr 2007	**Date Received:**	4/19/2007
Lab ID:	0704300-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
1,3-Dichlorobenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,4-Dichlorobenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Dichlorodifluoromethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,1-Dichloroethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,1-Dichloroethene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,2-Dichloropropane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,3-Dichloropropane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
2,2-Dichloropropane	ND	100		µg/L	50	4/20/2007 8:20:40 PM
1,1-Dichloropropene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Hexachlorobutadiene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
2-Hexanone	ND	500		µg/L	50	4/20/2007 8:20:40 PM
Isopropylbenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
4-Isopropyltoluene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
4-Methyl-2-pentanone	ND	500		µg/L	50	4/20/2007 8:20:40 PM
Methylene Chloride	ND	50		µg/L	50	4/20/2007 8:20:40 PM
n-Butylbenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
n-Propylbenzene	74	50		µg/L	50	4/20/2007 8:20:40 PM
sec-Butylbenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Styrene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
tert-Butylbenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,1,2,2-Tetrachloroethane	ND	100		µg/L	50	4/20/2007 8:20:40 PM
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/20/2007 8:20:40 PM
trans-1,2-DCE	ND	50		µg/L	50	4/20/2007 8:20:40 PM
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,1,1-Trichloroethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,1,2-Trichloroethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Trichloroethene (TCE)	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Trichlorofluoromethane	ND	50		µg/L	50	4/20/2007 8:20:40 PM
1,2,3-Trichloropropane	ND	100		µg/L	50	4/20/2007 8:20:40 PM
Vinyl chloride	ND	50		µg/L	50	4/20/2007 8:20:40 PM
Xylenes, Total	2300	75		µg/L	50	4/20/2007 8:20:40 PM
Surr: 1,2-Dichloroethane-d4	111	76.6-113		%REC	50	4/20/2007 8:20:40 PM
Surr: 4-Bromofluorobenzene	99.7	77-117		%REC	50	4/20/2007 8:20:40 PM
Surr: Dibromofluoromethane	115	72.3-121		%REC	50	4/20/2007 8:20:40 PM
Surr: Toluene-d8	106	73-113		%REC	50	4/20/2007 8:20:40 PM

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Quarterly Water 2nd Qtr 2007 **Work Order:** 0704300

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: MB-12789		*MBLK*			Batch ID:	12789	Analysis Date:	4/24/2007 8:05:11 AM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-12789		*LCS*			Batch ID:	12789	Analysis Date:	4/24/2007 8:39:19 AM	
Diesel Range Organics (DRO)	4.898	mg/L	1.0	98.0	74	157			
Sample ID: LCSD-12789		*LCSD*			Batch ID:	12789	Analysis Date:	4/24/2007 9:13:40 AM	
Diesel Range Organics (DRO)	5.364	mg/L	1.0	107	74	157	9.07	23	
Method: SW8015									
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	R23331	Analysis Date:	4/23/2007 7:52:09 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	R23331	Analysis Date:	4/24/2007 8:18:46 AM	
Gasoline Range Organics (GRO)	0.4296	mg/L	0.050	82.5	80	115			
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID:	R23331	Analysis Date:	4/24/2007 8:48:47 AM	
Gasoline Range Organics (GRO)	0.4250	mg/L	0.050	81.6	80	115	1.08	8.39	
Method: SW7470									
Sample ID: MB-12845		*MBLK*			Batch ID:	12845	Analysis Date:	5/1/2007	
Mercury	ND	mg/L	0.00020						
ample ID: MB-12885		*MBLK*			Batch ID:	12885	Analysis Date:	5/8/2007	
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-12845		*LCS*			Batch ID:	12845	Analysis Date:	5/1/2007	
Mercury	0.005073	mg/L	0.00020	101	80	120			
Sample ID: LCS-12885		*LCS*			Batch ID:	12885	Analysis Date:	5/8/2007	
Mercury	0.004802	mg/L	0.00020	96.0	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Quarterly Water 2nd Qtr 2007
Work Order: 0704300

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW6010A									
Sample ID: 0704300-02B MSD		*MSD*			Batch ID:	12882	Analysis Date:		5/8/2007 2:34:37 PM
Selenium	0.3160	mg/L	0.050	63.2	75	125	3.82	20	S
Sample ID: MB-12808		*MBLK*			Batch ID:	12808	Analysis Date:		5/1/2007 12:45:05 PM
Arsenic	ND	mg/L	0.020						
Sample ID: MB-12808		*MBLK*			Batch ID:	12808	Analysis Date:		5/1/2007 9:53:12 AM
Barium	ND	mg/L	0.020						
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Silver	ND	mg/L	0.0050						
Sample ID: MB-12882		*MBLK*			Batch ID:	12882	Analysis Date:		5/8/2007 2:15:29 PM
Selenium	ND	mg/L	0.050						
Sample ID: LCS-12808		*LCS*			Batch ID:	12808	Analysis Date:		5/1/2007 12:46:46 PM
Arsenic	0.4625	mg/L	0.020	92.5	80	120			
Sample ID: LCS-12808		*LCS*			Batch ID:	12808	Analysis Date:		5/1/2007 9:16:33 AM
Barium	0.4906	mg/L	0.020	98.1	80	120			
Cadmium	0.4824	mg/L	0.0020	96.4	80	120			
Chromium	0.4962	mg/L	0.0060	99.2	80	120			
ead	0.4827	mg/L	0.0050	96.5	80	120			
Silver	0.5071	mg/L	0.0050	101	80	120			
Sample ID: LCS-12882		*LCS*			Batch ID:	12882	Analysis Date:		5/8/2007 2:18:07 PM
Selenium	0.4690	mg/L	0.050	93.8	80	120			
Sample ID: 0704300-02B MS		*MS*			Batch ID:	12882	Analysis Date:		5/8/2007 2:32:23 PM
Selenium	0.3283	mg/L	0.050	65.7	75	125			S

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Quarterly Water 2nd Qtr 2007 **Work Order:** 0704300

Method: SW8260B
Sample ID: 5mL rb *MBLK* Batch ID: R23320 Analysis Date: 4/20/2007 10:10:27 AM

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
arbon disulfide	ND	µg/L	10						
arbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Quarterly Water 2nd Qtr 2007 **Work Order:** 0704300

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	R23320	Analysis Date:	4/20/2007 10:10:27 AM	
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	1.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: b1		*MBLK*			Batch ID:	R23376	Analysis Date:	4/26/2007 12:00:12 PM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Quarterly Water 2nd Qtr 2007
Work Order: 0704300

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: b1		*MBLK*			Batch ID: R23376		Analysis Date: 4/26/2007 12:00:12 PM		
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2-Dichloropropane	ND	µg/L	2.0						
1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	1.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Quarterly Water 2nd Qtr 2007 **Work Order:** 0704300

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: b1		*MBLK*			Batch ID:	R23376	Analysis Date:	4/26/2007 12:00:12 PM	
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5mL rb-b		*MBLK*			Batch ID:	R23399	Analysis Date:	4/27/2007 9:12:21 PM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Quarterly Water 2nd Qtr 2007

Work Order: 0704300

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb-b		*MBLK*			Batch ID:	R23399	Analysis Date:	4/27/2007 9:12:21 PM	
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	1.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	R23320	Analysis Date:	4/20/2007 11:20:28 AM	
Benzene	21.34	µg/L	1.0	107	82.4	128			
Toluene	18.21	µg/L	1.0	91.0	77.2	115			
Chlorobenzene	19.11	µg/L	1.0	95.5	78.3	117			
1,1-Dichloroethene	20.55	µg/L	1.0	103	90.7	132			
Trichloroethene (TCE)	17.92	µg/L	1.0	89.6	71.8	113			
Sample ID: 100ng ICV		*LCS*			Batch ID:	R23376	Analysis Date:	4/26/2007 10:44:03 AM	
Benzene	21.41	µg/L	1.0	107	82.4	128			
Toluene	19.67	µg/L	1.0	98.3	77.2	115			
Chlorobenzene	18.73	µg/L	1.0	93.7	78.3	117			
1,1-Dichloroethene	23.75	µg/L	1.0	119	90.7	132			
Trichloroethene (TCE)	20.61	µg/L	1.0	103	71.8	113			
Sample ID: 100ng lcs		*LCS*			Batch ID:	R23399	Analysis Date:	4/27/2007 10:57:11 PM	
Benzene	20.58	µg/L	1.0	103	82.4	128			
Toluene	17.84	µg/L	1.0	89.2	77.2	115			
Chlorobenzene	17.35	µg/L	1.0	86.8	78.3	117			
1,1-Dichloroethene	21.31	µg/L	1.0	107	90.7	132			
Trichloroethene (TCE)	17.61	µg/L	1.0	88.1	71.8	113			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 4/19/2007

Work Order Number 0704300

Received by AT

Checklist completed by _____ Signature _____ Date 4/19/07

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☐	No ☑		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	3°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Project Name: NMED Quarterly Water 2nd Qtr. 2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 3°

Phone #: 505 722 3833
Fax #: 505 722 0210

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No. 0704300	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
4/18/07	1400	H_2O	AL-2 & EP-1					-1			X					X			X						
"	1445	"	Pilot T.C. Eff.					-2			X					X			X						
~~"~~	~~1500~~	~~"~~	~~NAPIS Eff.~~	~~Scan~~							~~X~~	~~X~~							~~X~~	~~X~~					

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
4/19/07	1400	Steve Morris	Tony [illegible] 4/19/07 1400
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza

Address: Route 3 Box 7 Gallup, NM 87301

Phone #: 505 722 3833

Fax #: 505 722 0210

Project Name: NMED Quarterly Water 2nd QTR. 2007 Page 2

Project #:

Project Manager: Steve Morris

Sampler: Steve Morris

Sample Temperature: 6°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
4/18/07	1500	H_2O	NAPIS Eff.					0704300-3			X								X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
4/20/07	0745	Steve Morris	[signature] 4-20-07 @ 1100
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, May 16, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 5/3/2007

Order No.: 0705061

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 5/3/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0705061
Order: 0705120 HAL03 Receipt: 05-03-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0705061-01A POND 2 INLET* Collected: *05-03-07 9:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0705120-0001A		EPA 410.1 Chemical Oxygen Demand					By:	MJN		
WCOD-07-027	WC.2007.1205.9	C-004	Chemical Oxygen Demand	2120	mg/L	10	10		05-11-17	05-14-07

Sample: *0705061-01B POND 2 INLET* Collected: *05-03-07 9:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0705120-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07052	WC.2007.1210.10	10-26-4	Biochemical Oxygen Demand	587	mg/L	1	2		05-04-07	05-09-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 5/15/2007 5:14:13 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 5/3/2007

Work Order Number 0705061

Received by AT

Checklist completed by Amy Sie (Signature) May 3 07 (Date)

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	5°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 5-3-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 5°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
5-3-07	0900	H_2O	Pond 2 Inlet	2				0705061 1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
5-3-07	1340	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 5/3/07 1340

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, May 24, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet

Order No.: 0705138

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 5/10/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	Analyte Detected in Method Blank
E	Result is Estimated
H	Analyzed Out of Hold Time
N	Tentatively Identified Compound
S	Subcontracted
1-9	See Footnote

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0705138
Order: 0705363 HAL03 Receipt: 05-10-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0705138-01A POND 2 INLET* Collected: *05-09-07 14:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0705363-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07030	WC.2007.1288.12	C-004	Chemical Oxygen Demand	1690	mg/L	10	10		05-21-07	05-22-07

Sample: *0705138-01B POND 2 INLET* Collected: *05-09-07 14:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0705363-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07054	WC.2007.1263.10	10-26-4	Biochemical Oxygen Demand	636	mg/L	1	2		05-10-07	05-15-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 5/23/2007 4:25:47 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 5/10/2007

Work Order Number 0705138

Received by AT

Checklist completed by Tamye Shon May 10,07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted	☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 3° *4° C ± 2 Acceptable*
If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond # 2 Inlet
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
5/9/07	1430	H_2O	Pond 2 Inlet	2				0705138-1													X	X			

Remarks: R45H

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
5/10/07	0900	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 5/10/07 0900

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, June 06, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 5/17/07 & Monthly Phenolics

Order No.: 0705252

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 5/17/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *06-Jun-07*

CLIENT:	Giant Refining Co	Client Sample ID:	AL-1 Inlet
Lab Order:	0705252	Collection Date:	5/17/2007 10:00:00 AM
Project:	Evap. Pond #2 Inlet 5/17/07 & Monthly Phenoli	Date Received:	5/17/2007
Lab ID:	0705252-02	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Chloro-3-methylphenol	ND	2000		µg/L	50	5/29/2007
2-Chlorophenol	ND	1000		µg/L	50	5/29/2007
2,4-Dichlorophenol	ND	1000		µg/L	50	5/29/2007
2,4-Dimethylphenol	ND	1000		µg/L	50	5/29/2007
4,6-Dinitro-2-methylphenol	ND	5000		µg/L	50	5/29/2007
2,4-Dinitrophenol	ND	5000		µg/L	50	5/29/2007
2-Methylphenol	4300	1500		µg/L	50	5/29/2007
3+4-Methylphenol	7400	2000		µg/L	50	5/29/2007
2-Nitrophenol	ND	1500		µg/L	50	5/29/2007
4-Nitrophenol	ND	5000		µg/L	50	5/29/2007
Pentachlorophenol	ND	5000		µg/L	50	5/29/2007
Phenol	15000	1000		µg/L	50	5/29/2007
Surr: 2,4,6-Tribromophenol	123	16.6-150		%REC	50	5/29/2007
Surr: 2-Fluorobiphenyl	39.0	19.6-134		%REC	50	5/29/2007
Surr: 2-Fluorophenol	90.5	9.54-113		%REC	50	5/29/2007
Surr: 4-Terphenyl-d14	264	22.7-145	S	%REC	50	5/29/2007
Surr: Nitrobenzene-d5	91.1	14.6-134		%REC	50	5/29/2007
Surr: Phenol-d5	32.0	10.7-80.3		%REC	50	5/29/2007
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	36000	3.0		µg/L	1	6/5/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *06-Jun-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 Outlet
Lab Order:	0705252	**Collection Date:**	5/17/2007 10:30:00 AM
Project:	Evap. Pond #2 Inlet 5/17/07 & Monthly Phenoli	**Date Received:**	5/17/2007
Lab ID:	0705252-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Chloro-3-methylphenol	ND	100		µg/L	1	5/29/2007
2-Chlorophenol	ND	50		µg/L	1	5/29/2007
2,4-Dichlorophenol	ND	50		µg/L	1	5/29/2007
2,4-Dimethylphenol	210	50		µg/L	1	5/29/2007
4,6-Dinitro-2-methylphenol	ND	250		µg/L	1	5/29/2007
2,4-Dinitrophenol	ND	250		µg/L	1	5/29/2007
2-Methylphenol	1600	150		µg/L	2	5/30/2007
3+4-Methylphenol	690	100		µg/L	1	5/29/2007
2-Nitrophenol	ND	75		µg/L	1	5/29/2007
4-Nitrophenol	ND	250		µg/L	1	5/29/2007
Pentachlorophenol	ND	250		µg/L	1	5/29/2007
Phenol	ND	50		µg/L	1	5/29/2007
Surr: 2,4,6-Tribromophenol	86.6	16.6-150		%REC	1	5/29/2007
Surr: 2-Fluorobiphenyl	81.1	19.6-134		%REC	1	5/29/2007
Surr: 2-Fluorophenol	52.6	9.54-113		%REC	1	5/29/2007
Surr: 4-Terphenyl-d14	69.3	22.7-145		%REC	1	5/29/2007
Surr: Nitrobenzene-d5	86.3	14.6-134		%REC	1	5/29/2007
Surr: Phenol-d5	44.2	10.7-80.3		%REC	1	5/29/2007
EPA METHOD 420.3: TOTAL PHENOLICS						Analyst: JAT
Phenolics, Total Recoverable	6800	3.0		µg/L	1	6/5/2007

Qualifiers:

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

ASSAIGAI ANALYTICAL LABORATORIES, INC.
4301 Masthead NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, Ste. N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0705252
Order: 0705595 HAL03 Receipt: 05-17-07

William P. Blaya, President of Assaigai Analytical Laboratories, Inc.

Sample: *0705252-01A POND 2 INLET* Collected: *05-17-07 9:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0705595-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07031	WC.2007.1357.13	C-004	Chemical Oxygen Demand	2350	mg/L	10	10		05-29-00	05-30-07

Sample: *0705252-01B POND 2 INLET* Collected: *05-17-07 9:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0705595-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07058	WC.2007.1309.8	10-26-4	Biochemical Oxygen Demand	497	mg/L	1	2		05-18-07	05-23-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

REPRODUCTION OF THIS REPORT IN LESS THA REQUIRES THE WRITTEN CONSENT OF AAL.
THIS REPORT MAY NOT BE USED IN ANY MANNER CLIENT OR ANY OTHER THIRD PARTY TO CLAIM
PRODUCT ENDORSEMENT BY THE NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM.

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Evap. Pond #2 Inlet 5/17/07 & Monthly Phenoli
Work Order: 0705252

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E420.3									
Sample ID: MB-13097		*MBLK*			Batch ID:	13108	Analysis Date:		6/5/2007
Phenolics, Total Recoverable	ND	µg/L	3.0						
Sample ID: LCS-13097		*LCS*			Batch ID:	13108	Analysis Date:		6/5/2007
Phenolics, Total Recoverable	18.08	µg/L	3.0	90.4	51.7	133			
Sample ID: LCSD-13097		*LCSD*			Batch ID:	13108	Analysis Date:		6/5/2007
Phenolics, Total Recoverable	17.88	µg/L	3.0	89.4	51.7	133			
Method: SW8270C									
Sample ID: MB-13021		*MBLK*			Batch ID:	13021	Analysis Date:		5/29/2007
4-Chloro-3-methylphenol	ND	µg/L	20						
2-Chlorophenol	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	50						
2,4-Dinitrophenol	ND	µg/L	50						
2-Methylphenol	ND	µg/L	15						
3+4-Methylphenol	ND	µg/L	20						
2-Nitrophenol	ND	µg/L	15						
4-Nitrophenol	ND	µg/L	50						
Pentachlorophenol	ND	µg/L	50						
Phenol	ND	µg/L	10						
Sample ID: LCS-13021		*LCS*			Batch ID:	13021	Analysis Date:		5/29/2007
4-Chloro-3-methylphenol	148.6	µg/L	20	74.3	15.4	119			
2-Chlorophenol	128.4	µg/L	10	64.2	12.2	122			
4-Nitrophenol	79.18	µg/L	50	39.6	12.5	87.4			
Pentachlorophenol	155.7	µg/L	50	77.8	3.55	114			
Phenol	77.38	µg/L	10	38.7	7.53	73.1			
Sample ID: LCSD-13021		*LCSD*			Batch ID:	13021	Analysis Date:		5/30/2007
4-Chloro-3-methylphenol	141.3	µg/L	20	70.7	15.4	119	5.02	28.6	
2-Chlorophenol	113.3	µg/L	10	56.7	12.2	122	12.5	107	
4-Nitrophenol	67.54	µg/L	50	33.8	12.5	87.4	15.9	36.3	
Pentachlorophenol	176.1	µg/L	50	88.1	3.55	114	12.3	49	
Phenol	65.22	µg/L	10	32.6	7.53	73.1	17.1	52.4	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN — Date and Time Received: 5/17/2007

Work Order Number 0705252 — Received by ARS

Checklist completed by [signature] (Signature) May 17,07 (Date)

Matrix — Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	14°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 5-17-2007 and Monthly Phenolics
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 14°C

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl$_2$	Preservative HNO$_3$	Preservative	HEAL No. 0705252	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO$_3$, NO$_2$, PO$_4$, SO$_4$)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD	Phenolics		Air Bubbles or Headspace (Y or N)
5/17/07	0930	H_2O	Pond 2 Inlet	2				1													X	X			
"	1000	"	AL-1 Inlet	2				2															X		
"	1030	"	AL-2 Outlet	2				3															X		

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
5/17/07	1420	Steve Morris	5/17/07 14:20 [signature]
~~5/17/07~~	~~14:20~~	~~[signature]~~	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, June 04, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 5/24/07

Order No.: 0705389

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 5/24/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0705389
Order: 0705828 HAL03 Receipt: 05-25-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0705389-01A POND 2 INLET* Collected: *05-24-07 10:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0705828-0001A		**EPA 410.1 Chemical Oxygen Demand**						By: RKA		
WCOD07032	WC.2007.1383.11	C-004	Chemical Oxygen Demand	1950	mg/L	10	10		06-01-07	06-04-07

Sample: *0705389-01B POND 2 INLET* Collected: *05-24-07 10:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0705828-0002A		**EPA 405.1 Biochemical Oxygen Demand**						By: RKA		
BOD07060	WC.2007.1361.14	10-26-4	Biochemical Oxygen Demand	412	mg/L	1	2		05-25-07	05-30-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 5/24/2007

Work Order Number 0705389

Received by TLS

Checklist completed by [signature] May 24, 07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	5°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza

Address: Route 3 Box 7 Gallup, NM 87301

Phone #: 505 722 3833

Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 5-24-2007

Project #:

Project Manager: Steve Morris

Sampler: Steve Morris

Sample Temperature: 5°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
5/24/07	1030	H_2O	Pond 2 Inlet	2				0705389 1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
5/24/07	1215	Steve Morris	[signature]
5/24/07	15:30	[signature]	[signature] 5/24/07 1530

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, June 12, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 5/30/2007

Order No.: 0705451

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 5/30/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0705451
Order: 0705933 HAL03 Receipt: 05-31-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0705451-01A POND 2 INLET* Collected: *05-30-07 15:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0705933-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07033	WC.2007.1456.9	C-004	Chemical Oxygen Demand	1900	mg/L	10	10		06-11-07	06-12-07

Sample: *0705451-01B POND 2 INLET* Collected: *05-30-07 15:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0705933-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07063	WC.2007.1415.8	10-26-4	Biochemical Oxygen Demand	461	mg/L	1	2		06-01-07	06-06-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 6/12/2007 5:42:59 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 5/30/2007

Work Order Number 0705451 | Received by TLS

Checklist completed by Amya SL (Signature) May 30,07 (Date)

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted | Date contacted: | Person contacted

Contacted by: | Regarding

Comments: Client had diff. times on bottles and chain. Called to confirm correct times. 5/31/07 TJ

Corrective Action

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 drlet 5-30-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 4°

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl$_2$	Preservative HNO$_3$		HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
5/30/07	~~1530~~ 1430 TS	H_2O	Pond 2 drlet	2				0705451 1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
5/30/07	1650	Steve Morris	Amy [illegible] 5/30/07 1650
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

ANALYSIS REQUEST

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, June 12, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 6/5/2007

Order No.: 0706070

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 6/5/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0706070
Order: 0706124 HAL03 Receipt: 06-05-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0706070-01A POND 2 INLET* Collected: *06-05-07 10:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0706124-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07033	WC.2007.1456.10	C-004	Chemical Oxygen Demand	1900	mg/L	10	10		06-11-07	06-12-07

Sample: *0706070-01B POND 2 INLET* Collected: *06-05-07 10:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0706124-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07064	WC.2007.1461.7	10-26-4	Biochemical Oxygen Demand	526	mg/L	1	2	1	06-06-07	06-11-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 76.9% and 67.8% respectively. These recoveries are above the QC acceptance limits of 84.6-115.4 and are most likely due to a poor performing seed capsule used for this batch. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 6/5/2007

Work Order Number 0706070

Received by AT

Checklist completed by Amy C. S. (Signature) 6/5/07 (Date)

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	11°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 drilet 6-5-2007
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 11°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_2, NO_3, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
6/5/07	1000	H_2O	Pond 2 drilet	2				0706070 1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
6/5/07	1310	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 6/5/07 1310

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, August 03, 2007

Jim Lieb
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Ciniza Drinking Water Copper & Lead 7-24-2007

Order No.: 0707323

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 5 sample(s) on 7/25/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *03-Aug-07*

CLIENT: Giant Refining Co
Project: Ciniza Drinking Water Copper & Lead 7-24-20

Lab Order: 0707323

Lab ID: 0707323-01 **Collection Date:** 7/24/2007 7:00:00 AM
Client Sample ID: Co House #5 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 200.7: METALS						Analyst: NMO
Copper	0.13	0.0060		mg/L	1	8/1/2007 7:31:29 AM
Lead	ND	0.0050		mg/L	1	8/1/2007 7:31:29 AM

Lab ID: 0707323-02 **Collection Date:** 7/24/2007 7:10:00 AM
Client Sample ID: Change House Sink **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 200.7: METALS						Analyst: NMO
Copper	0.19	0.0060		mg/L	1	8/1/2007 7:34:02 AM
Lead	ND	0.0050		mg/L	1	8/1/2007 7:34:02 AM

Lab ID: 0707323-03 **Collection Date:** 7/24/2007 7:20:00 AM
Client Sample ID: Main Office Janitor Sink **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 200.7: METALS						Analyst: NMO
Copper	0.065	0.0060		mg/L	1	8/1/2007 7:36:05 AM
Lead	0.013	0.0050		mg/L	1	8/1/2007 7:36:05 AM

Lab ID: 0707323-04 **Collection Date:** 7/24/2007 7:30:00 AM
Client Sample ID: Co House #6 **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 200.7: METALS						Analyst: NMO
Copper	0.042	0.0060		mg/L	1	8/1/2007 7:38:38 AM
Lead	ND	0.0050		mg/L	1	8/1/2007 7:38:38 AM

Lab ID: 0707323-05 **Collection Date:** 7/24/2007 7:40:00 AM
Client Sample ID: Safety Bldg Sink **Matrix:** AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 200.7: METALS						Analyst: NMO
Copper	0.57	0.0060		mg/L	1	8/1/2007 7:41:10 AM
Lead	ND	0.0050		mg/L	1	8/1/2007 7:41:10 AM

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Ciniza Drinking Water Copper & Lead 7-24-20 **Work Order:** 0707323

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E200.7									
Sample ID: MB		*MBLK*			Batch ID:	13475	Analysis Date:	8/1/2007 7:26:25 AM	
Copper	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Sample ID: LCS		*LCS*			Batch ID:	13475	Analysis Date:	8/1/2007 7:28:53 AM	
Copper	0.5159	mg/L	0.0060	103	80	120			
Lead	0.5061	mg/L	0.0050	101	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 7/25/2007

Work Order Number 0707323

Received by AT

Checklist completed by Signature

Date 7/25/07

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 6° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted Date contacted: Person contacted

Contacted by: Regarding

Comments:

Corrective Action

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Ciniza Drinking Water Copper and Lead 7-24-2007
Project #:
Project Manager: Jim ~~Lob~~ Lieb
Sampler: Steve Morris
Sample Temperature: 6

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl$_2$	Preservative HNO$_3$		HEAL No. 0707323	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO$_2$, NO$_3$, PO$_4$, SO$_4$)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Total Copper + Lead				Air Bubbles or Headspace (Y or N)
7/24/07	0700	H$_2$O	G. House #5					-1													X				
"	0710	"	Change House Sink					-2													X				
"	0720	"	Main Office Janitor Sink					-3													X				
"	0730	"	G. House #6					-4													X				
"	0740	"	Safety Bldg. Sink					-5													X				

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
7/25/07	0847	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 7/25/07 0847

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, August 06, 2007

Jim Lieb
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 7/19/2007

Order No.: 0707265

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 7/20/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0707265**
Order: **0707681** **HAL03** Receipt: **07-20-07**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0707265-01A POND 2 INLET*** Collected: *07-19-07 11:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0707681-0001A		**EPA 410.1 Chemical Oxygen Demand**						By: RKA		
WCOD07046	WC.2007.1997.6	C-004	Chemical Oxygen Demand	1010	mg/L	1	10		08-03-07	08-03-07

Sample: ***0707265-01B POND 2 INLET*** Collected: *07-19-07 11:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0707681-0002A		**EPA 405.1 Biochemical Oxygen Demand**						By: RKA		
BOD07088	WC.2007.1899.10	10-26-4	Biochemical Oxygen Demand	436	mg/L	1	2		07-20-07	07-25-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 7/20/2007

Work Order Number 0707265

Received by AT

Checklist completed by _____ 7/20/07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package.
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 7-19-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 4°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
7/19/07	1100	H_2O	Pond 2 Inlet	2				0707265-1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
7/20/07	1050	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 7/20/07 1050

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, August 07, 2007

Jim Lieb
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 7/24/2007

Order No.: 0707322

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 7/25/2007 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

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0707322
Order: 0707869 HAL03 Receipt: 07-25-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0707322-01A POND 2 INLET* Collected: *07-24-07 14:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0707869-0001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07046	WC.2007.1988.9	C-004	Chemical Oxygen Demand	1120	mg/L	1	10		08-02-07	08-02-07

Sample: *0707322-01B POND 2 INLET* Collected: *07-24-07 14:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0707869-0002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07090	WC.2007.1957.7	10-26-4	Biochemical Oxygen Demand	340	mg/L	1	2		07-26-07	07-31-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 8/7/2007 10:05:23 AM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 7/25/2007

Work Order Number 0707322

Received by AT

Checklist completed by 7/25/07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	6°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted Date contacted: Person contacted

Contacted by: Regarding

Comments:

Corrective Action

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 drlet 7-24-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 6

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No. 0707322	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
7/24/07	1400	H_2O	Pond 2 drlet	2				-1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
7/25/07	0845	Steve Morris	Clare [illegible]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 7/25/07 0845

Remarks:

Contractor Work Manpower Report

Date	Mon 8/25			Tue 8/26			Wed 8/27			Thur 8/28			Fri 8/29			Sat 8/30			Sun 8/31			Mon 9/1		
	Maint	CapX	Tech	Maint	CapX	Tech	Maint	CapX	Tech	Maint	CapX	Tech	Maint	CapX	Tech	Maint	CapX	Tech	Maint	CapX	Tech	Maint	CapX	Tech
IMI		10			11																			
Sunfab	7	11		8	11																			
Lenny B -Drafting			1			1																		
Petro-Chem Insp.			2			2																		
Consolidated Inspection			3			3																		
Western Insul.	2			2																				
RDY (PSM)			1			1																		
EnGlobal			5			5																		
Veolia	2			2																				
EM (electrical)	2	2		2	3																			
Altair Strickland	3	4		3	4																			
John Lyle EE			0			0																		
Gallup Security			6			6																		
EMS (LDAR)			4			4																		
Atlantic Scaffolding	5			2	3																			
JW Services	2																							
Steve Morris (ENV)			1			1																		
Total	23	27	23	19	32	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, August 16, 2007

Jim Lieb
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 8/2/2007

Order No.: 0708036

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 8/2/2007 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

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result Is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assalgai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0708036
Order: 07080079 HAL03 Receipt: 08-02-07

William P. Blava: President of Assalgai Analytical Laboratories, Inc.

Sample: *0708036-01A POND 2 INLET* Collected: *08-02-07 10:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07080079-001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07048	WC.2007.2033.15	C-004	Chemical Oxygen Demand	1120	mg/L	1	10		08-08-07	08-08-07

Sample: *0708036-01B POND 2 INLET* Collected: *08-02-07 10:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07080079-002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07094	WC.2007.2037.5	10-26-4	Biochemical Oxygen Demand	281	mg/L	1	2		08-03-07	08-08-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 8/2/2007

Work Order Number 0708036

Received by AT

Checklist completed by Amy Thomas August 2,07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	14°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 inlet 8-2-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 14°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No. 07080316	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
8-2-07	1000	H_2O	Pond 2 inlet	2				1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
8/2/07	1330	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 8/2/07 1330

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, August 23, 2007

Jim Lieb
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 8/9/2007

Order No.: 0708133

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 8/9/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0708133**
Order: **07080290** **HAL03** Receipt: **08-09-07**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0708133-01A POND 2 INLET*** Collected: *08-09-07 10:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07080290-001A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07049	WC.2007.2157.2	C-004	Chemical Oxygen Demand	1070	mg/L	1	10		08-21-07	08-22-07

Sample: ***0708133-01B POND 2 INLET*** Collected: *08-09-07 10:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07080290-002A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07097	WC.2007.2110.9	10-26-4	Biochemical Oxygen Demand	398	mg/L	1	2		08-10-07	08-15-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 8/23/2007 11:12:38 AM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 8/9/2007

Work Order Number 0708133

Received by AT

Checklist completed by Tamye Sl (Signature) Aug 9,07 (Date)

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	18°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted Date contacted: Person contacted

Contacted by: Regarding

Comments:

Corrective Action

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 8-9-2007
Project #:
Project Manager:
Sampler: Jim Lieb, Steve Morris
Sample Temperature: 18°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3		HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
8-9-07	1990	H_2O	Pond 2 Inlet	2				0708133 1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
8/9/07	1335	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 8/9/07 1335

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, August 27, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 8/16/2007

Order No.: 0708221

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 8/16/2007 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

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0708221
Order: 07080536 HAL03 Receipt: 08-17-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0708221-01A POND 2 INLET* Collected: *08-16-07 10:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07080536-001A		EPA 410.1 Chemical Oxygen Demand						By: RKA		
WCOD07049	WC.2007.2157.4	C-004	Chemical Oxygen Demand	1380	mg/L	1	10		08-21-07	08-22-07

Sample: *0708221-01B POND 2 INLET* Collected: *08-16-07 10:30:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07080536-002A		EPA 405.1 Biochemical Oxygen Demand						By: RKA		
BOD07100	WC.2007.2168.6	10-26-4	Biochemical Oxygen Demand	319	mg/L	1	2		08-17-07	08-22-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 8/27/2007 5:14:45 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 8/16/2007

Work Order Number 0708221

Received by TLS

Checklist completed by Janye Shon 8/16/07
Signature Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	8°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond # 2 outlet 8-16-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 8°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0708221	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
8-16-07	1030	H_2O	Pond 2 outlet	2				1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
8/16/07	1345	Steve Morris	Tonia Thomas 8/16/07 1345
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, September 05, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 8-21-2007

Order No.: 0708283

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 8/21/2007 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

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: HALL ENVIRONMENTAL
Project: 0708283
Order: 07080635 HAL03 Receipt: 08-21-07

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0708283-01A POND 2 INLET* Collected: *08-21-07 10:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07080635-001A		EPA 405.1 Biochemical Oxygen Demand					By:	RKA		
BOD07101	WC.2007.2219.17	10-26-4	Biochemical Oxygen Demand	251	mg/L	1	2		08-22-07	08-27-07

Sample: *0708283-02A POND 2 INLET* Collected: *08-21-07 10:00:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07080635-002A		EPA 410.1 Chemical Oxygen Demand					By:	RKA		
WCOD07050	WC.2007.2242.5	C-004	Chemical Oxygen Demand	1050	mg/L	1	10		08-29-07	08-30-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 8/21/2007

Work Order Number 0708283

Received by TLS

Checklist completed by _____ Signature 8/21/07 Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☑		Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	18°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza

Address: Route 3 Box 7
Gallup, NM 87301

Phone #: 505 722 3833

Fax #:

Project Name: Evap. Pond #2 Inlet 8-21-2007

Project #:

Project Manager: Jim Lieb

Sampler: Steve Morris

Sample Temperature: 18°

HEAL No. 0708283

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
8/21/07	1000	H_2O	Pond 2 Inlet	2				1													X	X			

ANALYSIS REQUEST

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
8/21/07	1530	[signature]	[signature] 8/21/07 1530
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, September 07, 2007

Steve Morris
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Tank 101/102 Area

Order No.: 0708286

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 8/22/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Sep-07*

CLIENT: Giant Refining Company
Lab Order: 0708286
Project: Tank 101/102 Area
Lab ID: 0708286-01

Client Sample ID: Seep 1
Collection Date: 8/21/2007 12:30:00 PM
Date Received: 8/22/2007
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	13	1.0		mg/L	1	8/30/2007 11:00:20 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	8/30/2007 11:00:20 PM
Surr: DNOP	135	58-140		%REC	1	8/30/2007 11:00:20 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: SMP
Gasoline Range Organics (GRO)	0.31	0.050		mg/L	1	8/23/2007 4:07:55 PM
Surr: BFB	108	79.2-121		%REC	1	8/23/2007 4:07:55 PM
EPA METHOD 7470: MERCURY						Analyst: SLB
Mercury	ND	0.00020		mg/L	1	8/27/2007 4:44:15 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Arsenic	ND	0.020		mg/L	1	9/6/2007 6:03:09 PM
Barium	0.15	0.020		mg/L	1	9/6/2007 6:03:09 PM
Cadmium	ND	0.0020		mg/L	1	9/6/2007 6:03:09 PM
Chromium	ND	0.0060		mg/L	1	9/6/2007 6:03:09 PM
Lead	ND	0.0050		mg/L	1	9/6/2007 6:03:09 PM
Selenium	ND	0.050		mg/L	1	9/6/2007 6:03:09 PM
Silver	ND	0.0050		mg/L	1	9/6/2007 6:03:09 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Acenaphthene	ND	10		µg/L	1	8/31/2007
Acenaphthylene	ND	10		µg/L	1	8/31/2007
Aniline	ND	20		µg/L	1	8/31/2007
Anthracene	ND	10		µg/L	1	8/31/2007
Azobenzene	ND	10		µg/L	1	8/31/2007
Benz(a)anthracene	ND	15		µg/L	1	8/31/2007
Benzo(a)pyrene	ND	10		µg/L	1	8/31/2007
Benzo(b)fluoranthene	ND	15		µg/L	1	8/31/2007
Benzo(g,h,i)perylene	ND	10		µg/L	1	8/31/2007
Benzo(k)fluoranthene	ND	10		µg/L	1	8/31/2007
Benzoic acid	ND	50		µg/L	1	8/31/2007
Benzyl alcohol	ND	20		µg/L	1	8/31/2007
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	8/31/2007
Bis(2-chloroethyl)ether	ND	15		µg/L	1	8/31/2007
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	8/31/2007
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	8/31/2007
4-Bromophenyl phenyl ether	ND	10		µg/L	1	8/31/2007
Butyl benzyl phthalate	ND	15		µg/L	1	8/31/2007
Carbazole	ND	10		µg/L	1	8/31/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Sep-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Seep 1
Lab Order:	0708286	**Collection Date:**	8/21/2007 12:30:00 PM
Project:	Tank 101/102 Area	**Date Received:**	8/22/2007
Lab ID:	0708286-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
4-Chloro-3-methylphenol	ND	20		µg/L	1	8/31/2007
4-Chloroaniline	ND	20		µg/L	1	8/31/2007
2-Chloronaphthalene	ND	10		µg/L	1	8/31/2007
2-Chlorophenol	ND	10		µg/L	1	8/31/2007
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	8/31/2007
Chrysene	ND	15		µg/L	1	8/31/2007
Di-n-butyl phthalate	ND	10		µg/L	1	8/31/2007
Di-n-octyl phthalate	ND	15		µg/L	1	8/31/2007
Dibenz(a,h)anthracene	ND	10		µg/L	1	8/31/2007
Dibenzofuran	ND	10		µg/L	1	8/31/2007
1,2-Dichlorobenzene	ND	10		µg/L	1	8/31/2007
1,3-Dichlorobenzene	ND	10		µg/L	1	8/31/2007
1,4-Dichlorobenzene	ND	10		µg/L	1	8/31/2007
3,3'-Dichlorobenzidine	ND	15		µg/L	1	8/31/2007
Diethyl phthalate	ND	10		µg/L	1	8/31/2007
Dimethyl phthalate	ND	10		µg/L	1	8/31/2007
2,4-Dichlorophenol	ND	10		µg/L	1	8/31/2007
2,4-Dimethylphenol	ND	10		µg/L	1	8/31/2007
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	8/31/2007
2,4-Dinitrophenol	ND	50		µg/L	1	8/31/2007
2,4-Dinitrotoluene	ND	10		µg/L	1	8/31/2007
2,6-Dinitrotoluene	ND	10		µg/L	1	8/31/2007
Fluoranthene	ND	10		µg/L	1	8/31/2007
Fluorene	ND	10		µg/L	1	8/31/2007
Hexachlorobenzene	ND	10		µg/L	1	8/31/2007
Hexachlorobutadiene	ND	10		µg/L	1	8/31/2007
Hexachlorocyclopentadiene	ND	50		µg/L	1	8/31/2007
Hexachloroethane	ND	10		µg/L	1	8/31/2007
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	8/31/2007
Isophorone	ND	10		µg/L	1	8/31/2007
2-Methylnaphthalene	ND	10		µg/L	1	8/31/2007
2-Methylphenol	ND	15		µg/L	1	8/31/2007
3+4-Methylphenol	ND	20		µg/L	1	8/31/2007
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	8/31/2007
N-Nitrosodimethylamine	ND	10		µg/L	1	8/31/2007
N-Nitrosodiphenylamine	ND	10		µg/L	1	8/31/2007
Naphthalene	ND	10		µg/L	1	8/31/2007
2-Nitroaniline	ND	50		µg/L	1	8/31/2007
3-Nitroaniline	ND	50		µg/L	1	8/31/2007
4-Nitroaniline	ND	20		µg/L	1	8/31/2007
Nitrobenzene	ND	10		µg/L	1	8/31/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Sep-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Seep 1
Lab Order:	0708286	**Collection Date:**	8/21/2007 12:30:00 PM
Project:	Tank 101/102 Area	**Date Received:**	8/22/2007
Lab ID:	0708286-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2-Nitrophenol	ND	15		µg/L	1	8/31/2007
4-Nitrophenol	ND	50		µg/L	1	8/31/2007
Pentachlorophenol	ND	50		µg/L	1	8/31/2007
Phenanthrene	42	10		µg/L	1	8/31/2007
Phenol	ND	10		µg/L	1	8/31/2007
Pyrene	ND	15		µg/L	1	8/31/2007
Pyridine	ND	30		µg/L	1	8/31/2007
1,2,4-Trichlorobenzene	ND	10		µg/L	1	8/31/2007
2,4,5-Trichlorophenol	ND	10		µg/L	1	8/31/2007
2,4,6-Trichlorophenol	ND	15		µg/L	1	8/31/2007
Surr: 2,4,6-Tribromophenol	72.3	16.6-150		%REC	1	8/31/2007
Surr: 2-Fluorobiphenyl	80.2	19.6-134		%REC	1	8/31/2007
Surr: 2-Fluorophenol	49.6	9.54-113		%REC	1	8/31/2007
Surr: 4-Terphenyl-d14	41.1	22.7-145		%REC	1	8/31/2007
Surr: Nitrobenzene-d5	64.0	14.6-134		%REC	1	8/31/2007
Surr: Phenol-d5	60.9	10.7-80.3		%REC	1	8/31/2007
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Toluene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Ethylbenzene	4.5	1.0		µg/L	1	8/24/2007 2:49:36 PM
Methyl tert-butyl ether (MTBE)	33	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Naphthalene	ND	2.0		µg/L	1	8/24/2007 2:49:36 PM
1-Methylnaphthalene	110	20		µg/L	5	8/27/2007 11:49:03 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	8/24/2007 2:49:36 PM
Acetone	12	10		µg/L	1	8/24/2007 2:49:36 PM
Bromobenzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Bromochloromethane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Bromodichloromethane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Bromoform	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Bromomethane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
2-Butanone	ND	10		µg/L	1	8/24/2007 2:49:36 PM
Carbon disulfide	ND	10		µg/L	1	8/24/2007 2:49:36 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Chlorobenzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Chloroethane	ND	2.0		µg/L	1	8/24/2007 2:49:36 PM
Chloroform	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Sep-07*

CLIENT:	Giant Refining Company	Client Sample ID:	Seep 1
Lab Order:	0708286	Collection Date:	8/21/2007 12:30:00 PM
Project:	Tank 101/102 Area	Date Received:	8/22/2007
Lab ID:	0708286-01	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Chloromethane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
2-Chlorotoluene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
4-Chlorotoluene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
cis-1,2-DCE	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	8/24/2007 2:49:36 PM
Dibromochloromethane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Dibromomethane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,1-Dichloroethane	10	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,1-Dichloroethene	1.3	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	8/24/2007 2:49:36 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
2-Hexanone	ND	10		µg/L	1	8/24/2007 2:49:36 PM
Isopropylbenzene	7.0	1.0		µg/L	1	8/24/2007 2:49:36 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	8/24/2007 2:49:36 PM
Methylene Chloride	ND	3.0		µg/L	1	8/24/2007 2:49:36 PM
n-Butylbenzene	1.6	1.0		µg/L	1	8/24/2007 2:49:36 PM
n-Propylbenzene	1.3	1.0		µg/L	1	8/24/2007 2:49:36 PM
sec-Butylbenzene	1.9	1.0		µg/L	1	8/24/2007 2:49:36 PM
Styrene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
tert-Butylbenzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	8/24/2007 2:49:36 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
trans-1,2-DCE	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,1,1-Trichloroethane	2.1	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	8/24/2007 2:49:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Sep-07*

CLIENT:	Giant Refining Company	Client Sample ID:	Seep 1
Lab Order:	0708286	Collection Date:	8/21/2007 12:30:00 PM
Project:	Tank 101/102 Area	Date Received:	8/22/2007
Lab ID:	0708286-01	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: NSB
Vinyl chloride	ND	1.0		µg/L	1	8/24/2007 2:49:36 PM
Xylenes, Total	ND	1.5		µg/L	1	8/24/2007 2:49:36 PM
Surr: 1,2-Dichloroethane-d4	102	68.1-123		%REC	1	8/24/2007 2:49:36 PM
Surr: 4-Bromofluorobenzene	102	53.2-145		%REC	1	8/24/2007 2:49:36 PM
Surr: Dibromofluoromethane	98.7	68.5-119		%REC	1	8/24/2007 2:49:36 PM
Surr: Toluene-d8	99.9	64-131		%REC	1	8/24/2007 2:49:36 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *07-Sep-07*

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Tank 101/102 Area

Work Order: 0708286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: MB-13694		*MBLK*			Batch ID:	13694	Analysis Date:	8/28/2007 3:13:26 PM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: MB-13694		*MBLK*			Batch ID:	13694	Analysis Date:	8/30/2007 5:12:49 PM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: MB-13694		*MBLK*			Batch ID:	13694	Analysis Date:	9/1/2007 2:00:39 PM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-13694		*LCS*			Batch ID:	13694	Analysis Date:	8/28/2007 3:49:35 PM	
Diesel Range Organics (DRO)	6.735	mg/L	1.0	135	74	157			
Sample ID: LCS-13694		*LCS*			Batch ID:	13694	Analysis Date:	8/30/2007 5:44:23 PM	
Diesel Range Organics (DRO)	7.466	mg/L	1.0	149	74	157			
Sample ID: LCS-13694		*LCS*			Batch ID:	13694	Analysis Date:	9/1/2007 2:32:52 PM	
Diesel Range Organics (DRO)	5.878	mg/L	1.0	118	74	157			
Sample ID: LCSD-13694		*LCSD*			Batch ID:	13694	Analysis Date:	8/28/2007 4:25:47 PM	
Diesel Range Organics (DRO)	7.021	mg/L	1.0	140	74	157	4.15	23	
Sample ID: LCSD-13694		*LCSD*			Batch ID:	13694	Analysis Date:	8/30/2007 6:15:59 PM	
Diesel Range Organics (DRO)	6.595	mg/L	1.0	132	74	157	12.4	23	
Sample ID: LCSD-13694		*LCSD*			Batch ID:	13694	Analysis Date:	9/1/2007 3:05:03 PM	
Diesel Range Organics (DRO)	6.300	mg/L	1.0	126	74	157	6.93	23	
Method: SW8015									
Sample ID: 5ML RB		*MBLK*			Batch ID:	R24867	Analysis Date:	8/22/2007 7:41:34 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 5ML RB		*MBLK*			Batch ID:	R24885	Analysis Date:	8/23/2007 9:10:07 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	R24867	Analysis Date:	8/22/2007 9:11:36 AM	
Gasoline Range Organics (GRO)	0.4884	mg/L	0.050	94.3	80	115			
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	R24885	Analysis Date:	8/23/2007 3:37:51 PM	
Gasoline Range Organics (GRO)	0.4696	mg/L	0.050	90.6	80	115			

ualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND 6 / 1 6:ted at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Tank 101/102 Area

Work Order: 0708286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: mb-13706		*MBLK*			Batch ID:	13706	Analysis Date:		8/31/2007
Acenaphthene	ND	µg/L	10						
Acenaphthylene	ND	µg/L	10						
Aniline	ND	µg/L	20						
Anthracene	ND	µg/L	10						
Azobenzene	ND	µg/L	10						
Benz(a)anthracene	ND	µg/L	15						
Benzo(a)pyrene	ND	µg/L	10						
Benzo(b)fluoranthene	ND	µg/L	15						
Benzo(g,h,i)perylene	ND	µg/L	10						
Benzo(k)fluoranthene	ND	µg/L	10						
Benzoic acid	ND	µg/L	50						
Benzyl alcohol	ND	µg/L	20						
Bis(2-chloroethoxy)methane	ND	µg/L	10						
Bis(2-chloroethyl)ether	ND	µg/L	15						
Bis(2-chloroisopropyl)ether	ND	µg/L	15						
Bis(2-ethylhexyl)phthalate	ND	µg/L	15						
4-Bromophenyl phenyl ether	ND	µg/L	10						
Butyl benzyl phthalate	ND	µg/L	15						
Carbazole	ND	µg/L	10						
4-Chloro-3-methylphenol	ND	µg/L	20						
4-Chloroaniline	ND	µg/L	20						
2-Chloronaphthalene	ND	µg/L	10						
2-Chlorophenol	ND	µg/L	10						
4-Chlorophenyl phenyl ether	ND	µg/L	15						
Chrysene	ND	µg/L	15						
Di-n-butyl phthalate	ND	µg/L	10						
Di-n-octyl phthalate	ND	µg/L	15						
Dibenz(a,h)anthracene	ND	µg/L	10						
Dibenzofuran	ND	µg/L	10						
1,2-Dichlorobenzene	ND	µg/L	10						
1,3-Dichlorobenzene	ND	µg/L	10						
1,4-Dichlorobenzene	ND	µg/L	10						
3,3'-Dichlorobenzidine	ND	µg/L	15						
Diethyl phthalate	ND	µg/L	10						
Dimethyl phthalate	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	50						
2,4-Dinitrophenol	ND	µg/L	50						
2,4-Dinitrotoluene	ND	µg/L	10						
2,6-Dinitrotoluene	ND	µg/L	10						
Fluoranthene	ND	µg/L	10						
Fluorene	ND	µg/L	10						
Hexachlorobenzene	ND	µg/L	10						

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND 7 / 1 6 ected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Tank 101/102 Area

Work Order: 0708286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: mb-13706		*MBLK*			Batch ID:	**13706**	Analysis Date:		8/31/2007
Hexachlorobutadiene	ND	µg/L	10						
Hexachlorocyclopentadiene	ND	µg/L	50						
Hexachloroethane	ND	µg/L	10						
Indeno(1,2,3-cd)pyrene	ND	µg/L	10						
Isophorone	ND	µg/L	10						
2-Methylnaphthalene	ND	µg/L	10						
2-Methylphenol	ND	µg/L	15						
3+4-Methylphenol	ND	µg/L	20						
N-Nitrosodi-n-propylamine	ND	µg/L	10						
N-Nitrosodimethylamine	ND	µg/L	10						
N-Nitrosodiphenylamine	ND	µg/L	10						
Naphthalene	ND	µg/L	10						
2-Nitroaniline	ND	µg/L	50						
3-Nitroaniline	ND	µg/L	50						
4-Nitroaniline	ND	µg/L	20						
Nitrobenzene	ND	µg/L	10						
2-Nitrophenol	ND	µg/L	15						
Nitrophenol	ND	µg/L	50						
entachlorophenol	ND	µg/L	50						
Phenanthrene	ND	µg/L	10						
Phenol	ND	µg/L	10						
Pyrene	ND	µg/L	15						
Pyridine	ND	µg/L	30						
1,2,4-Trichlorobenzene	ND	µg/L	10						
2,4,5-Trichlorophenol	ND	µg/L	10						
2,4,6-Trichlorophenol	ND	µg/L	15						
Sample ID: lcs-13706		*LCS*			Batch ID:	**13706**	Analysis Date:		8/31/2007
Acenaphthene	76.44	µg/L	10	76.4	11	123			
4-Chloro-3-methylphenol	164.6	µg/L	20	82.3	15.4	119			
2-Chlorophenol	158.1	µg/L	10	79.1	12.2	122			
1,4-Dichlorobenzene	74.70	µg/L	10	74.7	16.9	100			
2,4-Dinitrotoluene	73.38	µg/L	10	73.4	13	138			
N-Nitrosodi-n-propylamine	77.84	µg/L	10	77.8	9.93	122			
4-Nitrophenol	147.4	µg/L	50	73.7	12.5	87.4			
Pentachlorophenol	147.7	µg/L	50	73.9	3.55	114			
Phenol	156.0	µg/L	10	78.0	7.53	73.1			S
Pyrene	70.52	µg/L	15	70.5	12.6	140			
1,2,4-Trichlorobenzene	74.64	µg/L	10	74.6	17.4	98.7			
Sample ID: lcsd-13706		*LCSD*			Batch ID:	**13706**	Analysis Date:		8/31/2007
Acenaphthene	69.48	µg/L	10	69.5	11	123	9.54	30.5	
4-Chloro-3-methylphenol	143.1	µg/L	20	71.6	15.4	119	14.0	28.6	
2-Chlorophenol	128.5	µg/L	10	64.2	12.2	122	20.7	107	
1,4-Dichlorobenzene	61.02	µg/L	10	61.0	16.9	100	20.2	62.1	
2,4-Dinitrotoluene	69.08	µg/L	10	69.1	13	138	6.04	14.7	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	ected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

8 / 16

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Tank 101/102 Area

Work Order: 0708286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: lcsd-13706		*LCSD*			Batch ID:	13706	Analysis Date:		8/31/2007
N-Nitrosodi-n-propylamine	66.86	µg/L	10	66.9	9.93	122	15.2	30.3	
4-Nitrophenol	139.1	µg/L	50	69.5	12.5	87.4	5.81	36.3	
Pentachlorophenol	141.5	µg/L	50	70.8	3.55	114	4.27	49	
Phenol	128.3	µg/L	10	64.2	7.53	73.1	19.5	52.4	
Pyrene	69.74	µg/L	15	69.7	12.6	140	1.11	16.3	
1,2,4-Trichlorobenzene	62.10	µg/L	10	62.1	17.4	98.7	18.3	36.4	
Method: SW7470									
Sample ID: MB-13698		*MBLK*			Batch ID:	13698	Analysis Date:		8/27/2007 4:06:29 PM
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-13698		*LCS*			Batch ID:	13698	Analysis Date:		8/27/2007 4:08:13 PM
Mercury	0.004864	mg/L	0.00020	97.3	80	120			
Method: SW6010A									
Sample ID: MB-13757		*MBLK*			Batch ID:	13757	Analysis Date:		9/6/2007 3:54:12 PM
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.020						
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Selenium	ND	mg/L	0.050						
Silver	ND	mg/L	0.0050						
Sample ID: LCS-13757		*LCS*			Batch ID:	13757	Analysis Date:		9/6/2007 3:57:14 PM
Arsenic	0.5066	mg/L	0.020	101	80	120			
Barium	0.4847	mg/L	0.020	96.9	80	120			
Cadmium	0.4887	mg/L	0.0020	97.7	80	120			
Chromium	0.4955	mg/L	0.0060	99.1	80	120			
Lead	0.4854	mg/L	0.0050	97.1	80	120			
Selenium	0.4997	mg/L	0.050	99.9	80	120			
Silver	0.4953	mg/L	0.0050	98.6	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	9 / 16 cted at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc. Date: *07-Sep-07*

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Tank 101/102 Area

Work Order: 0708286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID: R24888		Analysis Date: 8/23/2007 10:57:01 AM		
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND 10 / 16 ted at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Tank 101/102 Area

Work Order: 0708286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R24888**	Analysis Date:	8/23/2007 10:57:01 AM	
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R24907**	Analysis Date:	8/24/2007 9:09:40 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND 11 / 16 ted at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Tank 101/102 Area

Work Order: 0708286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R24907	Analysis Date:	8/24/2007 9:09:40 AM	
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	ted at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Tank 101/102 Area

Work Order: 0708286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R24907	Analysis Date:	8/24/2007 9:09:40 AM	
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5ml rb		*MBLK*			Batch ID:	R24931	Analysis Date:	8/27/2007 8:46:34 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
omoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND 13 / 16 ated at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Tank 101/102 Area

Work Order: 0708286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R24931	Analysis Date:	8/27/2007 8:46:34 AM	
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	R24888	Analysis Date:	8/23/2007 12:15:05 PM	
Benzene	19.33	µg/L	1.0	96.6	82.4	128			
Toluene	18.78	µg/L	1.0	93.9	77.2	115			
Chlorobenzene	18.86	µg/L	1.0	94.3	78.3	117			
1,1-Dichloroethene	19.85	µg/L	1.0	99.3	90.7	132			
Trichloroethene (TCE)	17.76	µg/L	1.0	88.8	71.8	113			
Sample ID: 100ng lcs-b		*LCS*			Batch ID:	R24907	Analysis Date:	8/24/2007 1:09:11 PM	
Benzene	20.09	µg/L	1.0	100	82.4	128			
Toluene	19.40	µg/L	1.0	97.0	77.2	115			
Chlorobenzene	19.70	µg/L	1.0	98.5	78.3	117			
1,1-Dichloroethene	21.49	µg/L	1.0	107	90.7	132			
Trichloroethene (TCE)	18.41	µg/L	1.0	92.1	71.8	113			
Sample ID: 100ng lcs		*LCS*			Batch ID:	R24931	Analysis Date:	8/27/2007 10:08:50 AM	
Benzene	18.48	µg/L	1.0	92.4	82.4	128			
Toluene	19.71	µg/L	1.0	98.6	77.2	115			
Chlorobenzene	19.10	µg/L	1.0	95.5	78.3	117			
1,1-Dichloroethene	19.96	µg/L	1.0	99.8	90.7	132			
Trichloroethene (TCE)	18.07	µg/L	1.0	90.4	71.8	113			
Sample ID: 100ng lcsd		*LCSD*			Batch ID:	R24907	Analysis Date:	8/24/2007 11:11:22 PM	

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND 14 / 16 ted at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Tank 101/102 Area

Work Order: 0708286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 100ng lcsd		*LCSD*			Batch ID:	R24907	Analysis Date:	8/24/2007 11:11:22 PM	
Benzene	20.16	µg/L	1.0	101	82.4	128	0.338	11	
Toluene	19.49	µg/L	1.0	97.5	77.2	115	0.483	12.2	
Chlorobenzene	19.72	µg/L	1.0	98.6	78.3	117	0.0812	12	
1,1-Dichloroethene	21.47	µg/L	1.0	107	90.7	132	0.0652	19.3	
Trichloroethene (TCE)	18.92	µg/L	1.0	94.6	71.8	113	2.69	15.5	

Qualifiers:

E Value above quantitation range
J Analyte detected below quantitation limits
R RPD outside accepted recovery limits
H Holding times for preparation or analysis exceeded
ND 15 / 16 ted at the Reporting Limit
S Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 8/22/2007

Work Order Number 0708286

Received by TLS

Checklist completed by [signature] 8/22/07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	23°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted Date contacted: Person contacted

Contacted by: Regarding

Comments: per SM. client name is Giant Refining
8/23/07

Corrective Action

1 of 1

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☒ Level 4 ☐
Other:

Client: Western Refining ~~Grant Refining~~ Gallup Refinery (Ciniza)
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Tank 101/102 Area
Project #:
Project Manager: Steve Morris
Sampler: G. Price / R. Allen
Sample Temperature: 23°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative: HCl	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals + Mercury	Anions (F, Cl, NO_2, NO_3, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
~~8/21/07~~	~~1230~~	~~water~~						0708286																	
8/21/07	1230	W	Seep 1	1 / 1L Amber		NONE		1												X					
8/21/07	1230	W	Seep 1	1 / 500mL		X		1								X									
8/21/07	1230	W	Seep 1	3 / 40mL VOA			X	1											X						
8/21/07	1230	W	Seep 1	3 / 40 ml VOA			X	1			X														

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
8/21/07	1310	Reagna Allen	[signature]
8/21/07	1525	[signature]	Jamila Shemi 8/21/07 1525

Remarks: normal turnaround time

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, October 25, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 10-4-2007

Order No.: 0710111

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 10/5/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	Analyte Detected in Method Blank
E	Result is Estimated
H	Analyzed Out of Hold Time
N	Tentatively Identified Compound
S	Subcontracted
1-9	See Footnote

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0710111**
Order: **07100181** **HAL03** Receipt: **10-05-07**

William P. Blava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0710111-01A POND 2 INLET*** Collected: *10-04-07 10:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07100181-001A		**EPA 405.1 Biochemical Oxygen Demand**						By: RKA		
BOD07120	WC.2007.2623.13	10-26-4	Biochemical Oxygen Demand	265	mg/L	1	2		10-05-07	10-10-07

Sample: ***0710111-01B POND 2 INLET*** Collected: *10-04-07 10:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07100181-002A		**EPA 410.1 Chemical Oxygen Demand**						By: RKA		
WCOD07058	WC.2007.2716.8	C-004	Chemical Oxygen Demand	1050	mg/L	1	10		10-22-07	10-23-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 10/25/2007 8:28:43 AM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 10/5/2007

Work Order Number 0710111

Received by AT

Checklist completed b _____ 10/5/07
Signature Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package: Std ☐ Level 4 ☐
Other:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301
Phone #: 5057223833
Fax #: 505 722 0210

Project Name: Evap Pond #2 Inlet 10-4-2007
Project #:
Project Manager:
Sampler: Jim Lieb, Steve Morris
Sample Temperature: 4

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
10/4/07	1030	H_2O	Pond 2 Inlet	2				0710111 1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
10/4/07	1450	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 10/4/07 1450

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, October 25, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet

Order No.: 0710260

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 10/11/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	Analyte Detected in Method Blank
E	Result is Estimated
H	Analyzed Out of Hold Time
N	Tentatively Identified Compound
S	Subcontracted
1-9	See Footnote

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0710260**
Order: **07100389** **HAL03** Receipt: **10-12-07**

William P. Blave: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0710260-01A POND 2 INLET*** Collected: *10-11-07 10:00:00* By: *SR 6941*
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07100389-001A		**EPA 405.1 Biochemical Oxygen Demand**					By:	MJN		
BOD07122	WC.2007.2676.21	10-26-4	Biochemical Oxygen Demand	525	mg/L	1	2		10-12-07	10-17-07

Sample: ***0710260-01B POND 2 INLET*** Collected: *10-11-07 10:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07100389-002A		**EPA 410.1 Chemical Oxygen Demand**					By:	RKA		
WCOD07058	WC.2007.2716.16	C-004	Chemical Oxygen Demand	951	mg/L	1	10		10-22-07	10-23-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 10/25/2007 11:56:43 AM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 10/11/2007

Work Order Number 0710260

Received by AT

Checklist completed b _____ Signature _____ Date 10/11/07

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? *4° C ± 2 Acceptable*
If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 8°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3		HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
10-11-07	1000	H_2O	Pond 2 Inlet	2				0710260-1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
10-11-07	1405	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 10/11/07 1405

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, November 02, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 10/18/2007

Order No.: 0710376

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 10/18/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assalgai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0710376**
Order: **07100580 HAL03** Receipt: **10-19-07**

William P. Biava: President of Assalgai Analytical Laboratories, Inc.

Sample: ***0710376-01A POND 2 INLET*** Collected: *10-18-07 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07100580-001A		**EPA 410.1 Chemical Oxygen Demand**					By:	RKA		
WCOD07059	WC.2007.2781.11	C-004	Chemical Oxygen Demand	1320	mg/L	1	10		10-29-07	10-29-07

Sample: ***0710376-01B POND 2 INLET*** Collected: *10-18-07 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07100580-002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	RKA		
BOD07126	WC.2007.2744.16	10-26-4	Biochemical Oxygen Demand	382	mg/L	1	2	1	10-19-07	10-24-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 116% and 119% respectively. These recoveries are above the QC acceptance limits of 84.6-115.4%. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

Report Date: 11/2/2007 2:00:14 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **GIANTREFIN** Date and Time Received: **10/18/2007**

Work Order Number **0710376** Received by **AT**

Checklist completed b Janyc S (Signature) 10/18/07 (Date)

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☑		Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	6°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Project Name: Evap Pond #2 Inlet 10-18-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 6° on ice

Phone #: 505 722 3833
Fax #: 505 722 0210

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0710370	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
10-18-07	0830	H_2O	Pond 2 Inlet	2				1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
10-18-07	1330	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 10/18/07 1330

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, November 08, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 10-25-2007

Order No.: 0710503

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 10/25/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assalgal Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0710503**
Order: **07100718 HAL03** Receipt: **10-25-07**

William P. Blava: President of Assalgal Analytical Laboratories, Inc.

Sample: ***0710503-01A POND 2 INLET*** Collected: *10-25-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07100718-001A		**EPA 405.1 Biochemical Oxygen Demand**					By:	RKA		
BOD07129	WC.2007.2812.20	10-26-4	Biochemical Oxygen Demand	358	mg/L	1	2		10-26-07	10-31-07

Sample: ***0710503-01B POND 2 INLET*** Collected: *10-25-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07100718-002A		**EPA 410.1 Chemical Oxygen Demand**					By:	RKA		
WCOD07060	WC.2007.2825.7	C-004	Chemical Oxygen Demand	1220	mg/L	1	10		11-02-07	11-05-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **GIANTREFIN** Date and Time Received: **10/25/2007**

Work Order Number **0710503** Received by **AT**

Checklist completed b _____ Signature _____ Date 10/25/07

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	8°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 10-25-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 8 °C on ice

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0710503	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
10/25/07	0930	H_2O	Pond 2 Inlet	2				1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
10/25/07	1400	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 10/25/07 1400

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, December 12, 2007

Jim Lieb
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Discharge Permit Qtrly. Water Samples 4th Qtr 2007

Order No.: 0711265

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 11/15/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc. **Date:** *12-Dec-07*

CLIENT: Giant Refining Co
Project: Discharge Permit Qtrly. Water Samples 4th Qtr
Lab Order: 0711265

CASE NARRATIVE

Analytical notes:
"S" flags denote that the surrogate was elevated or not recoverable due to sample dilution or matrix interferences.

The nitrate result for NAPIS effluent is reported as 2.2 mg/L. The contiuning standard for this sample was 89% and the acceptable limit is 90%. It is possible that this sample is biased, very slightly, low.

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0711265	**Collection Date:**	11/13/2007 1:00:00 PM
Project:	Discharge Permit Qtrly. Water Samples 4th Qtr	**Date Received:**	11/15/2007
Lab ID:	0711265-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	1200	30		mg/L	10	11/20/2007 1:45:45 AM
Motor Oil Range Organics (MRO)	ND	150		mg/L	10	11/20/2007 1:45:45 AM
Surr: DNOP	86.4	58-140		%REC	10	11/20/2007 1:45:45 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3.0	0.50		mg/L	10	11/22/2007 3:33:05 AM
Surr: BFB	115	79.2-121		%REC	10	11/22/2007 3:33:05 AM
EPA METHOD 8260B: VOLATILES						Analyst: **SMP**
Benzene	77	10		µg/L	10	11/19/2007 12:27:25 PM
Toluene	260	10		µg/L	10	11/19/2007 12:27:25 PM
Ethylbenzene	49	10		µg/L	10	11/19/2007 12:27:25 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,2,4-Trimethylbenzene	140	10		µg/L	10	11/19/2007 12:27:25 PM
1,3,5-Trimethylbenzene	29	10		µg/L	10	11/19/2007 12:27:25 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Naphthalene	250	20		µg/L	10	11/19/2007 12:27:25 PM
1-Methylnaphthalene	450	40		µg/L	10	11/19/2007 12:27:25 PM
2-Methylnaphthalene	690	40		µg/L	10	11/19/2007 12:27:25 PM
Acetone	3100	200		µg/L	20	11/21/2007 12:24:27 PM
Bromobenzene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Bromochloromethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Bromodichloromethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Bromoform	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Bromomethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
2-Butanone	230	100		µg/L	10	11/19/2007 12:27:25 PM
Carbon disulfide	ND	100		µg/L	10	11/19/2007 12:27:25 PM
Carbon Tetrachloride	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Chlorobenzene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Chloroethane	ND	20		µg/L	10	11/19/2007 12:27:25 PM
Chloroform	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Chloromethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
2-Chlorotoluene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
4-Chlorotoluene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
cis-1,2-DCE	ND	10		µg/L	10	11/19/2007 12:27:25 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/19/2007 12:27:25 PM
Dibromochloromethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Dibromomethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	11/19/2007 12:27:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0711265	**Collection Date:**	11/13/2007 1:00:00 PM
Project:	Discharge Permit Qtrly. Water Samples 4th Qtr	**Date Received:**	11/15/2007
Lab ID:	0711265-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **SMP**
1,4-Dichlorobenzene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Dichlorodifluoromethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,1-Dichloroethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,1-Dichloroethene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,2-Dichloropropane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,3-Dichloropropane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
2,2-Dichloropropane	ND	20		µg/L	10	11/19/2007 12:27:25 PM
1,1-Dichloropropene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Hexachlorobutadiene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
2-Hexanone	ND	100		µg/L	10	11/19/2007 12:27:25 PM
Isopropylbenzene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
4-Isopropyltoluene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	11/19/2007 12:27:25 PM
Methylene Chloride	ND	30		µg/L	10	11/19/2007 12:27:25 PM
n-Butylbenzene	25	10		µg/L	10	11/19/2007 12:27:25 PM
n-Propylbenzene	15	10		µg/L	10	11/19/2007 12:27:25 PM
sec-Butylbenzene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Styrene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
tert-Butylbenzene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/19/2007 12:27:25 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/19/2007 12:27:25 PM
trans-1,2-DCE	ND	10		µg/L	10	11/19/2007 12:27:25 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,1,2-Trichloroethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Trichloroethene (TCE)	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Trichlorofluoromethane	ND	10		µg/L	10	11/19/2007 12:27:25 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	11/19/2007 12:27:25 PM
Vinyl chloride	ND	10		µg/L	10	11/19/2007 12:27:25 PM
Xylenes, Total	310	15		µg/L	10	11/19/2007 12:27:25 PM
Surr: 1,2-Dichloroethane-d4	83.9	68.1-123		%REC	10	11/19/2007 12:27:25 PM
Surr: 4-Bromofluorobenzene	100	53.2-145		%REC	10	11/19/2007 12:27:25 PM
Surr: Dibromofluoromethane	88.1	68.5-119		%REC	10	11/19/2007 12:27:25 PM
Surr: Toluene-d8	87.3	64-131		%REC	10	11/19/2007 12:27:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Effluent
Lab Order:	0711265	**Collection Date:**	11/15/2007 8:30:00 AM
Project:	Discharge Permit Qtrly. Water Samples 4th Qtr	**Date Received:**	11/15/2007
Lab ID:	0711265-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	14	1.0		mg/L	1	11/20/2007 7:36:45 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/20/2007 7:36:45 AM
Surr: DNOP	127	58-140		%REC	1	11/20/2007 7:36:45 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.10	0.050		mg/L	1	11/22/2007 4:33:13 AM
Surr: BFB	119	79.2-121		%REC	1	11/22/2007 4:33:13 AM
EPA METHOD 8260B: VOLATILES						Analyst: **SMP**
Benzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Toluene	2.5	1.0		µg/L	1	11/19/2007 12:56:06 PM
Ethylbenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Naphthalene	ND	2.0		µg/L	1	11/19/2007 12:56:06 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	11/19/2007 12:56:06 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	11/19/2007 12:56:06 PM
Acetone	320	100		µg/L	10	11/26/2007 9:37:34 AM
Bromobenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Bromochloromethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Bromodichloromethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Bromoform	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Bromomethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
2-Butanone	ND	10		µg/L	1	11/19/2007 12:56:06 PM
Carbon disulfide	ND	10		µg/L	1	11/19/2007 12:56:06 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Chlorobenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Chloroethane	ND	2.0		µg/L	1	11/19/2007 12:56:06 PM
Chloroform	6.2	1.0		µg/L	1	11/19/2007 12:56:06 PM
Chloromethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
2-Chlorotoluene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
4-Chlorotoluene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
cis-1,2-DCE	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/19/2007 12:56:06 PM
Dibromochloromethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Dibromomethane	1.0	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Effluent
Lab Order:	0711265	**Collection Date:**	11/15/2007 8:30:00 AM
Project:	Discharge Permit Qtrly. Water Samples 4th Qtr	**Date Received:**	11/15/2007
Lab ID:	0711265-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: SMP
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	11/19/2007 12:56:06 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
2-Hexanone	ND	10		µg/L	1	11/19/2007 12:56:06 PM
Isopropylbenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
4-Isopropyltoluene	2.8	1.0		µg/L	1	11/19/2007 12:56:06 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	11/19/2007 12:56:06 PM
Methylene Chloride	ND	3.0		µg/L	1	11/19/2007 12:56:06 PM
n-Butylbenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
n-Propylbenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
sec-Butylbenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Styrene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
tert-Butylbenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/19/2007 12:56:06 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
trans-1,2-DCE	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/19/2007 12:56:06 PM
Vinyl chloride	ND	1.0		µg/L	1	11/19/2007 12:56:06 PM
Xylenes, Total	ND	1.5		µg/L	1	11/19/2007 12:56:06 PM
Surr: 1,2-Dichloroethane-d4	77.6	68.1-123		%REC	1	11/19/2007 12:56:06 PM
Surr: 4-Bromofluorobenzene	95.0	53.2-145		%REC	1	11/19/2007 12:56:06 PM
Surr: Dibromofluoromethane	84.1	68.5-119		%REC	1	11/19/2007 12:56:06 PM
Surr: Toluene-d8	86.7	64-131		%REC	1	11/19/2007 12:56:06 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Effluent
Lab Order:	0711265	**Collection Date:**	11/13/2007 2:00:00 PM
Project:	Discharge Permit Qtrly. Water Samples 4th Qtr	**Date Received:**	11/15/2007
Lab ID:	0711265-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	15000	2000		mg/L	200	11/20/2007 2:54:43 AM
Motor Oil Range Organics (MRO)	ND	10000		mg/L	200	11/20/2007 2:54:43 AM
Surr: DNOP	0	58-140	S	%REC	200	11/20/2007 2:54:43 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	24	5.0		mg/L	100	11/22/2007 5:33:14 AM
Surr: BFB	115	79.2-121		%REC	100	11/22/2007 5:33:14 AM
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	140	2.0	E	mg/L	20	12/5/2007 9:12:06 PM
Chloride	230	2.0		mg/L	20	12/5/2007 9:12:06 PM
Nitrate (As N)+Nitrite (As N)	2.2	1.0		mg/L	5	12/6/2007 2:25:27 AM
Phosphorus, Orthophosphate (As P)	ND	10	H	mg/L	20	12/5/2007 9:12:06 PM
Sulfate	980	10		mg/L	20	12/5/2007 9:12:06 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	11/20/2007
Acenaphthylene	ND	10		µg/L	1	11/20/2007
Aniline	32	10		µg/L	1	11/20/2007
Anthracene	ND	10		µg/L	1	11/20/2007
Azobenzene	ND	10		µg/L	1	11/20/2007
Benz(a)anthracene	ND	10		µg/L	1	11/20/2007
Benzo(a)pyrene	ND	10		µg/L	1	11/20/2007
Benzo(b)fluoranthene	ND	10		µg/L	1	11/20/2007
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/20/2007
Benzo(k)fluoranthene	ND	10		µg/L	1	11/20/2007
Benzoic acid	ND	20		µg/L	1	11/20/2007
Benzyl alcohol	ND	10		µg/L	1	11/20/2007
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/20/2007
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/20/2007
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/20/2007
Bis(2-ethylhexyl)phthalate	ND	10		µg/L	1	11/20/2007
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/20/2007
Butyl benzyl phthalate	ND	10		µg/L	1	11/20/2007
Carbazole	ND	10		µg/L	1	11/20/2007
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/20/2007
4-Chloroaniline	ND	10		µg/L	1	11/20/2007
2-Chloronaphthalene	ND	10		µg/L	1	11/20/2007
2-Chlorophenol	ND	10		µg/L	1	11/20/2007
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/20/2007
Chrysene	ND	10		µg/L	1	11/20/2007
Di-n-butyl phthalate	ND	10		µg/L	1	11/20/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Effluent
Lab Order:	0711265	**Collection Date:**	11/13/2007 2:00:00 PM
Project:	Discharge Permit Qtrly. Water Samples 4th Qtr	**Date Received:**	11/15/2007
Lab ID:	0711265-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Di-n-octyl phthalate	ND	10		µg/L	1	11/20/2007
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/20/2007
Dibenzofuran	ND	10		µg/L	1	11/20/2007
1,2-Dichlorobenzene	ND	10		µg/L	1	11/20/2007
1,3-Dichlorobenzene	ND	10		µg/L	1	11/20/2007
1,4-Dichlorobenzene	ND	10		µg/L	1	11/20/2007
3,3'-Dichlorobenzidine	ND	10		µg/L	1	11/20/2007
Diethyl phthalate	ND	10		µg/L	1	11/20/2007
Dimethyl phthalate	ND	10		µg/L	1	11/20/2007
2,4-Dichlorophenol	ND	10		µg/L	1	11/20/2007
2,4-Dimethylphenol	ND	10		µg/L	1	11/20/2007
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	11/20/2007
2,4-Dinitrophenol	ND	10		µg/L	1	11/20/2007
2,4-Dinitrotoluene	ND	10		µg/L	1	11/20/2007
2,6-Dinitrotoluene	ND	10		µg/L	1	11/20/2007
Fluoranthene	ND	10		µg/L	1	11/20/2007
Fluorene	ND	10		µg/L	1	11/20/2007
Hexachlorobenzene	ND	10		µg/L	1	11/20/2007
Hexachlorobutadiene	ND	10		µg/L	1	11/20/2007
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/20/2007
Hexachloroethane	ND	10		µg/L	1	11/20/2007
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/20/2007
Isophorone	ND	10		µg/L	1	11/20/2007
2-Methylnaphthalene	10	10		µg/L	1	11/20/2007
2-Methylphenol	86	10		µg/L	1	11/20/2007
3+4-Methylphenol	150	10		µg/L	1	11/20/2007
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/20/2007
N-Nitrosodimethylamine	ND	10		µg/L	1	11/20/2007
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/20/2007
Naphthalene	ND	10		µg/L	1	11/20/2007
2-Nitroaniline	ND	10		µg/L	1	11/20/2007
3-Nitroaniline	ND	10		µg/L	1	11/20/2007
4-Nitroaniline	ND	10		µg/L	1	11/20/2007
Nitrobenzene	ND	10		µg/L	1	11/20/2007
2-Nitrophenol	ND	10		µg/L	1	11/20/2007
4-Nitrophenol	ND	10		µg/L	1	11/20/2007
Pentachlorophenol	ND	10		µg/L	1	11/20/2007
Phenanthrene	ND	10		µg/L	1	11/20/2007
Phenol	330	50		µg/L	5	11/20/2007
Pyrene	ND	10		µg/L	1	11/20/2007
Pyridine	ND	10		µg/L	1	11/20/2007
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/20/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Effluent
Lab Order:	0711265	**Collection Date:**	11/13/2007 2:00:00 PM
Project:	Discharge Permit Qtrly. Water Samples 4th Qtr	**Date Received:**	11/15/2007
Lab ID:	0711265-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/20/2007
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/20/2007
Surr: 2,4,6-Tribromophenol	29.4	16.6-150		%REC	1	11/20/2007
Surr: 2-Fluorobiphenyl	72.8	19.6-134		%REC	1	11/20/2007
Surr: 2-Fluorophenol	18.8	9.54-113		%REC	1	11/20/2007
Surr: 4-Terphenyl-d14	94.8	22.7-145		%REC	1	11/20/2007
Surr: Nitrobenzene-d5	76.3	14.6-134		%REC	1	11/20/2007
Surr: Phenol-d5	31.8	10.7-80.3		%REC	1	11/20/2007
EPA METHOD 8260B: VOLATILES						Analyst: SMP
Benzene	1400	100		µg/L	100	11/19/2007 11:58:38 AM
Toluene	2700	100		µg/L	100	11/19/2007 11:58:38 AM
Ethylbenzene	320	10		µg/L	10	11/21/2007 9:58:21 AM
Methyl tert-butyl ether (MTBE)	26	10		µg/L	10	11/21/2007 9:58:21 AM
1,2,4-Trimethylbenzene	520	10		µg/L	10	11/21/2007 9:58:21 AM
1,3,5-Trimethylbenzene	150	10		µg/L	10	11/21/2007 9:58:21 AM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Naphthalene	470	20		µg/L	10	11/21/2007 9:58:21 AM
1-Methylnaphthalene	960	40		µg/L	10	11/21/2007 9:58:21 AM
2-Methylnaphthalene	1400	400		µg/L	100	11/19/2007 11:58:38 AM
Acetone	8400	1000		µg/L	100	11/19/2007 11:58:38 AM
Bromobenzene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Bromochloromethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Bromodichloromethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Bromoform	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Bromomethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
2-Butanone	570	100		µg/L	10	11/21/2007 9:58:21 AM
Carbon disulfide	ND	100		µg/L	10	11/21/2007 9:58:21 AM
Carbon Tetrachloride	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Chlorobenzene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Chloroethane	ND	20		µg/L	10	11/21/2007 9:58:21 AM
Chloroform	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Chloromethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
2-Chlorotoluene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
4-Chlorotoluene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
cis-1,2-DCE	ND	10		µg/L	10	11/21/2007 9:58:21 AM
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/21/2007 9:58:21 AM
Dibromochloromethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Dibromomethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,2-Dichlorobenzene	ND	10		µg/L	10	11/21/2007 9:58:21 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Effluent
Lab Order:	0711265	**Collection Date:**	11/13/2007 2:00:00 PM
Project:	Discharge Permit Qtrly. Water Samples 4th Qtr	**Date Received:**	11/15/2007
Lab ID:	0711265-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **SMP**
1,3-Dichlorobenzene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,4-Dichlorobenzene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Dichlorodifluoromethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,1-Dichloroethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,1-Dichloroethene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,2-Dichloropropane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,3-Dichloropropane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
2,2-Dichloropropane	ND	20		µg/L	10	11/21/2007 9:58:21 AM
1,1-Dichloropropene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Hexachlorobutadiene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
2-Hexanone	ND	100		µg/L	10	11/21/2007 9:58:21 AM
Isopropylbenzene	36	10		µg/L	10	11/21/2007 9:58:21 AM
4-Isopropyltoluene	17	10		µg/L	10	11/21/2007 9:58:21 AM
4-Methyl-2-pentanone	ND	100		µg/L	10	11/21/2007 9:58:21 AM
Methylene Chloride	ND	30		µg/L	10	11/21/2007 9:58:21 AM
n-Butylbenzene	59	10		µg/L	10	11/21/2007 9:58:21 AM
n-Propylbenzene	73	10		µg/L	10	11/21/2007 9:58:21 AM
sec-Butylbenzene	18	10		µg/L	10	11/21/2007 9:58:21 AM
Styrene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
tert-Butylbenzene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/21/2007 9:58:21 AM
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/21/2007 9:58:21 AM
trans-1,2-DCE	ND	10		µg/L	10	11/21/2007 9:58:21 AM
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,1,1-Trichloroethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,1,2-Trichloroethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Trichloroethene (TCE)	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Trichlorofluoromethane	ND	10		µg/L	10	11/21/2007 9:58:21 AM
1,2,3-Trichloropropane	ND	20		µg/L	10	11/21/2007 9:58:21 AM
Vinyl chloride	ND	10		µg/L	10	11/21/2007 9:58:21 AM
Xylenes, Total	1900	15		µg/L	10	11/21/2007 9:58:21 AM
Surr: 1,2-Dichloroethane-d4	95.5	68.1-123		%REC	10	11/21/2007 9:58:21 AM
Surr: 4-Bromofluorobenzene	97.7	53.2-145		%REC	10	11/21/2007 9:58:21 AM
Surr: Dibromofluoromethane	95.9	68.5-119		%REC	10	11/21/2007 9:58:21 AM
Surr: Toluene-d8	90.9	64-131		%REC	10	11/21/2007 9:58:21 AM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	6800	0.010		µmhos/cm	1	11/16/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Effluent
Lab Order:	0711265	**Collection Date:**	11/13/2007 2:00:00 PM
Project:	Discharge Permit Qtrly. Water Samples 4th Qtr	**Date Received:**	11/15/2007
Lab ID:	0711265-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
SM4500-H+B: PH						Analyst: **LMM**
pH	8.65	0.1		pH units	1	11/16/2007

Qualifiers:

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

ASSAIGAI ANALYTICAL LABORATORIES, INC.
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Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711265**
Order: **07110539 HAL03** Receipt: **11-16-07**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0711265-02C PILOT EFFLUENT*** Collected: *11-15-07 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110539-001A		EPA 410.1 Chemical Oxygen Demand					By:	NJL		
VCOD07067	WC.2007.3076.9	C-004	Chemical Oxygen Demand	723	mg/L	1	10		12-03-07	12-03-07

Sample: ***0711265-02D PILOT EFFLUENT*** Collected: *11-15-07 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110539-002A		EPA 405.1 Biochemical Oxygen Demand					By:	NJL		
BOD07140	WC.2007.3002.8	10-26-4	Biochemical Oxygen Demand	434	mg/L	1	2	1	11-17-07	11-22-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 70.7% and 69.9% respectively. These recoveries are below the QC acceptance limits of 84.6-115.4% and are most likely due to a poor performing seed capsule used for this batch. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

Member:
American Coucil of
Independent Laboratories, Inc.

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LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0711265
Lab ID: C07110872-001
Client Sample ID: AL-2 to EP-1

Report Date: 12/05/07
Collection Date: 11/13/07 13:00
DateReceived: 11/20/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Arsenic	0.006	mg/L	D	0.004		SW6020	11/27/07 15:29 / sml
Barium	0.6	mg/L		0.1		SW6020	11/27/07 15:29 / sml
Cadmium	ND	mg/L	D	0.02		SW6020	11/27/07 15:29 / sml
Chromium	ND	mg/L		0.05		SW6020	11/27/07 15:29 / sml
Copper	0.10	mg/L		0.01		SW6020	11/27/07 15:29 / sml
Iron	31.2	mg/L		0.03		SW6010B	11/28/07 21:03 / cp
Lead	ND	mg/L		0.05		SW6020	11/26/07 13:32 / sml
Manganese	0.84	mg/L		0.01		SW6020	11/27/07 15:29 / sml
Mercury	0.003	mg/L		0.001		SW6020	11/26/07 13:32 / sml
Selenium	ND	mg/L	D	0.02		SW6020	11/27/07 15:29 / sml
Silver	ND	mg/L		0.01		SW6020	11/27/07 15:29 / sml
Uranium	ND	mg/L	D	0.002		SW6020	11/26/07 13:32 / sml
Zinc	4.39	mg/L	D	0.02		SW6020	11/27/07 15:29 / sml

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0711265
Lab ID: C07110872-002
Client Sample ID: Pilot Effluent

Report Date: 12/05/07
Collection Date: 11/15/07 08:30
DateReceived: 11/20/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS - TOTAL							
Arsenic	ND	mg/L		0.001		SW6020	11/26/07 14:07 / sml
Barium	ND	mg/L		0.1		SW6020	11/26/07 14:07 / sml
Cadmium	ND	mg/L		0.01		SW6020	11/26/07 14:07 / sml
Chromium	ND	mg/L		0.05		SW6020	11/26/07 14:07 / sml
Copper	0.06	mg/L		0.01		SW6020	11/26/07 14:07 / sml
Iron	0.72	mg/L		0.03		SW6010B	11/28/07 21:07 / cp
Lead	ND	mg/L		0.05		SW6020	11/26/07 14:07 / sml
Manganese	0.07	mg/L		0.01		SW6020	11/26/07 14:07 / sml
Mercury	ND	mg/L		0.001		SW6020	11/26/07 14:07 / sml
Selenium	0.005	mg/L	D	0.004		SW6020	11/26/07 14:07 / sml
Silver	ND	mg/L		0.01		SW6020	11/26/07 14:07 / sml
Uranium	ND	mg/L	D	0.0008		SW6020	11/26/07 14:07 / sml
Zinc	0.18	mg/L		0.01		SW6020	11/26/07 14:07 / sml

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0711265
Lab ID: C07110872-003
Client Sample ID: NAPIS Effluent

Report Date: 12/05/07
Collection Date: 11/13/07 14:00
DateReceived: 11/20/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Calcium	1010	mg/L	D	0.6		SW6010B	11/28/07 21:10 / cp
Magnesium	87.7	mg/L		0.5		SW6010B	11/28/07 21:10 / cp
Potassium	113	mg/L		0.5		SW6010B	11/28/07 21:10 / cp
Sodium	557	mg/L	D	9		SW6010B	11/28/07 21:10 / cp
METALS - TOTAL							
Arsenic	0.365	mg/L	D	0.004		SW6020	11/26/07 14:15 / sml
Barium	2.3	mg/L		0.1		SW6020	11/26/07 14:15 / sml
Cadmium	0.03	mg/L	D	0.02		SW6020	11/26/07 14:15 / sml
Chromium	0.67	mg/L		0.05		SW6020	11/26/07 14:15 / sml
Copper	3.73	mg/L		0.01		SW6020	11/26/07 14:15 / sml
Iron	804	mg/L	D	0.1		SW6010B	11/28/07 21:10 / cp
Lead	0.93	mg/L		0.05		SW6020	11/26/07 14:15 / sml
Manganese	3.42	mg/L		0.01		SW6020	11/26/07 14:15 / sml
Mercury	0.425	mg/L	D	0.003		SW6020	11/26/07 14:15 / sml
Selenium	0.15	mg/L	D	0.02		SW6020	11/26/07 14:15 / sml
Silver	ND	mg/L		0.01		SW6020	11/26/07 14:15 / sml
Uranium	ND	mg/L	D	0.004		SW6020	11/26/07 14:15 / sml
Zinc	144	mg/L	D	0.02		SW6020	11/26/07 14:15 / sml

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
Project: 0711265

Report Date: 12/05/07
Work Order: C07110872

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B									Batch: 16918
Sample ID: MB-16918	Method Blank				Run: ICP2-C_071128A				11/28/07 15:14
Calcium	ND	mg/L	0.06						
Iron	ND	mg/L	0.010						
Magnesium	ND	mg/L	0.04						
Potassium	0.04	mg/L	0.03						
Sodium	ND	mg/L	0.9						
Sample ID: LCS-16918	Laboratory Control Sample				Run: ICP2-C_071128A				11/28/07 15:32
Calcium	47.8	mg/L	0.50	96	85	115			
Iron	0.520	mg/L	0.030	104	85	115			
Magnesium	46.7	mg/L	0.50	93	85	115			
Potassium	51.2	mg/L	0.50	102	85	115			
Sodium	50.8	mg/L	0.95	102	85	115			
Sample ID: C07110888-002AMS	Sample Matrix Spike				Run: ICP2-C_071128A				11/28/07 18:39
Calcium	4020	mg/L	0.50		75	125			A
Iron	0.509	mg/L	0.030	91	75	125			
Magnesium	601	mg/L	0.50		75	125			A
Potassium	182	mg/L	0.50	88	75	125			
Sodium	17300	mg/L	0.95		75	125			A
Sample ID: C07110888-002AMSD	Sample Matrix Spike Duplicate				Run: ICP2-C_071128A				11/28/07 18:42
Calcium	4080	mg/L	0.50		75	125	1.5	20	A
Iron	0.522	mg/L	0.030	94	75	125	2.5	20	
Magnesium	606	mg/L	0.50		75	125	0.8	20	A
Potassium	184	mg/L	0.50	93	75	125	1.4	20	
Sodium	17500	mg/L	0.95		75	125	0.9	20	A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Client: Hall Environmental
Project: 0711265

Report Date: 12/05/07
Work Order: C07110872

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									Batch: 16918
Sample ID: MB-16918	Method Blank				Run: ICPMS1-C_071126A				11/26/07 12:55
Arsenic	ND	mg/L	9E-05						
Barium	ND	mg/L	0.0002						
Cadmium	0.0006	mg/L	0.0004						
Chromium	ND	mg/L	0.0003						
Copper	0.0002	mg/L	0.0001						
Lead	ND	mg/L	9E-05						
Manganese	0.0002	mg/L	0.0001						
Mercury	ND	mg/L	6E-05						
Selenium	0.0008	mg/L	0.0004						
Silver	ND	mg/L	0.0002						
Uranium	ND	mg/L	8E-05						
Zinc	0.003	mg/L	0.0004						
Sample ID: LCS1-16918	Laboratory Control Sample				Run: ICPMS1-C_071126A				11/26/07 13:02
Arsenic	0.0215	mg/L	0.0010	107	75	125			
Barium	0.0224	mg/L	0.10	112	75	125			
Cadmium	0.0210	mg/L	0.010	102	75	125			
Chromium	0.0223	mg/L	0.050	111	75	125			
Copper	0.0227	mg/L	0.010	112	75	125			
Lead	0.0215	mg/L	0.050	108	75	125			
Manganese	0.0222	mg/L	0.010	110	75	125			
Selenium	0.0989	mg/L	0.0010	98	75	125			
Silver	0.0209	mg/L	0.010	104	75	125			
Uranium	0.0204	mg/L	0.00030	102	75	125			
Zinc	0.0240	mg/L	0.010	107	75	125			
Sample ID: C07110872-001AMS4	Post Digestion Spike				Run: ICPMS1-C_071127A				11/27/07 15:36
Arsenic	2.57	mg/L	0.0043	102	75	125			
Barium	3.12	mg/L	0.10	101	75	125			
Cadmium	2.66	mg/L	0.018	106	75	125			
Chromium	2.94	mg/L	0.050	118	75	125			
Copper	3.08	mg/L	0.010	119	75	125			
Lead	2.67	mg/L	0.050	106	75	125			
Manganese	3.81	mg/L	0.010	119	75	125			
Mercury	0.263	mg/L	0.0029	105	75	125			
Selenium	2.44	mg/L	0.018	98	75	125			
Silver	1.04	mg/L	0.010	104	75	125			
Uranium	2.72	mg/L	0.0038	109	75	125			
Zinc	7.32	mg/L	0.022	117	75	125			

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
Project: 0711265

Report Date: 12/05/07
Work Order: C07110872

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									Batch: 16918
Sample ID: C07110872-001AMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_071127A			11/27/07 16:14	
Arsenic	2.63	mg/L	0.0043	105	75	125	2.3	20	
Barium	3.14	mg/L	0.10	102	75	125	0.6	20	
Cadmium	2.69	mg/L	0.018	108	75	125	1.1	20	
Chromium	2.93	mg/L	0.050	117	75	125	0.3	20	
Copper	3.14	mg/L	0.010	122	75	125	1.7	20	
Lead	2.71	mg/L	0.050	107	75	125	1.7	20	
Manganese	3.81	mg/L	0.010	119	75	125	0.1	20	
Mercury	0.262	mg/L	0.0029	105	75	125	0.4	20	
Selenium	2.48	mg/L	0.018	99	75	125	1.6	20	
Silver	1.05	mg/L	0.010	105	75	125	0.9	20	
Uranium	2.71	mg/L	0.0038	108	75	125	0.5	20	
Zinc	7.39	mg/L	0.022	120	75	125	0.9	20	

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Discharge Permit Qtrly. Water Samples 4th Qtr **Work Order:** 0711265

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MBLK		*MBLK*			Batch ID:	**R26386**	Analysis Date:	12/5/2007 2:14:19 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R26399**	Analysis Date:	12/6/2007 11:09:28 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R26479**	Analysis Date:	12/11/2007 6:24:22 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R26492**	Analysis Date:	12/12/2007 10:49:40 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS		*LCS*			Batch ID:	**R26386**	Analysis Date:	12/5/2007 2:31:43 PM	
Fluoride	0.5232	mg/L	0.10	105	90	110			
Chloride	4.987	mg/L	0.10	99.7	90	110			
Nitrate (As N)+Nitrite (As N)	3.521	mg/L	0.20	101	90	110			
Phosphorus, Orthophosphate (As P)	5.032	mg/L	0.50	101	90	110			
Sulfate	10.09	mg/L	0.50	101	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26399**	Analysis Date:	12/6/2007 11:26:52 AM	
Fluoride	0.5334	mg/L	0.10	107	90	110			
Chloride	5.041	mg/L	0.10	101	90	110			
Nitrate (As N)+Nitrite (As N)	3.453	mg/L	0.20	98.7	90	110			
Phosphorus, Orthophosphate (As P)	5.095	mg/L	0.50	102	90	110			
Sulfate	10.14	mg/L	0.50	101	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26479**	Analysis Date:	12/11/2007 6:41:46 AM	
Fluoride	0.5268	mg/L	0.10	105	90	110			
Chloride	5.024	mg/L	0.10	100	90	110			
Nitrate (As N)+Nitrite (As N)	3.519	mg/L	0.20	101	90	110			
Phosphorus, Orthophosphate (As P)	4.990	mg/L	0.50	99.8	90	110			
Sulfate	10.24	mg/L	0.50	102	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26492**	Analysis Date:	12/12/2007 11:24:30 AM	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Discharge Permit Qtrly. Water Samples 4th Qtr **Work Order:** 0711265

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: LCS		*LCS*			Batch ID:	**R26492**	Analysis Date:	12/12/2007 11:24:30 AM	
Fluoride	0.5000	mg/L	0.10	100	90	110			
Chloride	4.857	mg/L	0.10	97.1	90	110			
Phosphorus, Orthophosphate (As P)	4.820	mg/L	0.50	96.4	90	110			
Sulfate	9.845	mg/L	0.50	98.5	90	110			
Method: EPA Method 8015B: Diesel Range									
Sample ID: MB-14430		*MBLK*			Batch ID:	**14430**	Analysis Date:	11/19/2007 12:31:58 PM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-14430		*LCS*			Batch ID:	**14430**	Analysis Date:	11/19/2007 1:06:39 PM	
Diesel Range Organics (DRO)	5.004	mg/L	1.0	100	74	157			
Sample ID: LCSD-14430		*LCSD*			Batch ID:	**14430**	Analysis Date:	11/19/2007 1:41:19 PM	
Diesel Range Organics (DRO)	4.800	mg/L	1.0	96.0	74	157	4.17	23	
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R26192**	Analysis Date:	11/21/2007 9:29:58 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
ıple ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R26192**	Analysis Date:	11/22/2007 1:02:56 PM	
Gasoline Range Organics (GRO)	0.4562	mg/L	0.050	88.1	80	115			
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID:	**R26192**	Analysis Date:	11/22/2007 1:32:55 PM	
Gasoline Range Organics (GRO)	0.4444	mg/L	0.050	85.8	80	115	2.62	8.39	

Qualifiers:

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J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Discharge Permit Qtrly. Water Samples 4th Qtr **Work Order:** 0711265

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-14436		*MBLK*			Batch ID:	**14436**	Analysis Date:		11/20/2007
Acenaphthene	ND	µg/L	10						
Acenaphthylene	ND	µg/L	10						
Aniline	ND	µg/L	10						
Anthracene	ND	µg/L	10						
Azobenzene	ND	µg/L	10						
Benz(a)anthracene	ND	µg/L	10						
Benzo(a)pyrene	ND	µg/L	10						
Benzo(b)fluoranthene	ND	µg/L	10						
Benzo(g,h,i)perylene	ND	µg/L	10						
Benzo(k)fluoranthene	ND	µg/L	10						
Benzoic acid	ND	µg/L	20						
Benzyl alcohol	ND	µg/L	10						
Bis(2-chloroethoxy)methane	ND	µg/L	10						
Bis(2-chloroethyl)ether	ND	µg/L	10						
Bis(2-chloroisopropyl)ether	ND	µg/L	10						
Bis(2-ethylhexyl)phthalate	ND	µg/L	10						
4-Bromophenyl phenyl ether	ND	µg/L	10						
[illegible]yl benzyl phthalate	ND	µg/L	10						
[illegible]azole	ND	µg/L	10						
4-Chloro-3-methylphenol	ND	µg/L	10						
4-Chloroaniline	ND	µg/L	10						
2-Chloronaphthalene	ND	µg/L	10						
2-Chlorophenol	ND	µg/L	10						
4-Chlorophenyl phenyl ether	ND	µg/L	10						
Chrysene	ND	µg/L	10						
Di-n-butyl phthalate	ND	µg/L	10						
Di-n-octyl phthalate	ND	µg/L	10						
Dibenz(a,h)anthracene	ND	µg/L	10						
Dibenzofuran	ND	µg/L	10						
1,2-Dichlorobenzene	ND	µg/L	10						
1,3-Dichlorobenzene	ND	µg/L	10						
1,4-Dichlorobenzene	ND	µg/L	10						
3,3'-Dichlorobenzidine	ND	µg/L	10						
Diethyl phthalate	ND	µg/L	10						
Dimethyl phthalate	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	10						
2,4-Dinitrophenol	ND	µg/L	10						
2,4-Dinitrotoluene	ND	µg/L	10						
2,6-Dinitrotoluene	ND	µg/L	10						
Fluoranthene	ND	µg/L	10						
Fluorene	ND	µg/L	10						
Hexachlorobenzene	ND	µg/L	10						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

lient: Giant Refining Co
Project: Discharge Permit Qtrly. Water Samples 4th Qtr **Work Order:** 0711265

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-14436		*MBLK*			Batch ID:	14436	Analysis Date:		11/20/2007
Hexachlorobutadiene	ND	µg/L	10						
Hexachlorocyclopentadiene	ND	µg/L	10						
Hexachloroethane	ND	µg/L	10						
Indeno(1,2,3-cd)pyrene	ND	µg/L	10						
Isophorone	ND	µg/L	10						
2-Methylnaphthalene	ND	µg/L	10						
2-Methylphenol	ND	µg/L	10						
3+4-Methylphenol	ND	µg/L	10						
N-Nitrosodi-n-propylamine	ND	µg/L	10						
N-Nitrosodimethylamine	ND	µg/L	10						
N-Nitrosodiphenylamine	ND	µg/L	10						
Naphthalene	ND	µg/L	10						
2-Nitroaniline	ND	µg/L	10						
3-Nitroaniline	ND	µg/L	10						
4-Nitroaniline	ND	µg/L	10						
Nitrobenzene	ND	µg/L	10						
2-Nitrophenol	ND	µg/L	10						
4-Nitrophenol	ND	µg/L	10						
ntachlorophenol	ND	µg/L	10						
enanthrene	ND	µg/L	10						
Phenol	ND	µg/L	10						
Pyrene	ND	µg/L	10						
Pyridine	ND	µg/L	10						
1,2,4-Trichlorobenzene	ND	µg/L	10						
2,4,5-Trichlorophenol	ND	µg/L	10						
2,4,6-Trichlorophenol	ND	µg/L	10						
Sample ID: lcsd-14436		*LCS*			Batch ID:	14436	Analysis Date:		11/20/2007
Acenaphthene	71.76	µg/L	10	71.8	11	123	0	0	
4-Chloro-3-methylphenol	144.8	µg/L	10	72.4	15.4	119	0	0	
2-Chlorophenol	129.7	µg/L	10	64.8	12.2	122	0	0	
1,4-Dichlorobenzene	53.84	µg/L	10	53.8	16.9	100	0	0	
2,4-Dinitrotoluene	73.12	µg/L	10	73.1	13	138	0	0	
N-Nitrosodi-n-propylamine	70.40	µg/L	10	70.4	9.93	122	0	0	
4-Nitrophenol	68.46	µg/L	10	34.2	12.5	87.4	0	0	
Pentachlorophenol	126.6	µg/L	10	61.0	3.55	114	0	0	
Phenol	73.76	µg/L	10	36.9	7.53	73.1	0	0	
Pyrene	76.66	µg/L	10	76.7	12.6	140	0	0	
1,2,4-Trichlorobenzene	49.60	µg/L	10	49.6	17.4	98.7	0	0	

alifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Discharge Permit Qtrly. Water Samples 4th Qtr **Work Order:** 0711265

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R26129**	Analysis Date:	11/19/2007 8:08:18 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Discharge Permit Qtrly. Water Samples 4th Qtr **Work Order:** 0711265

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R26129**	Analysis Date:	11/19/2007 8:08:18 AM	
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R26183**	Analysis Date:	11/21/2007 6:38:17 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Discharge Permit Qtrly. Water Samples 4th Qtr **Work Order:** 0711265

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R26183**	Analysis Date:	11/21/2007 6:38:17 AM	
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Discharge Permit Qtrly. Water Samples 4th Qtr **Work Order:** 0711265

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			**Batch ID:**	**R26183**	**Analysis Date:**	11/21/2007 6:38:17 AM	
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5ml rb		*MBLK*			**Batch ID:**	**R26211**	**Analysis Date:**	11/26/2007 6:32:49 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
[illegible]moform	ND	µg/L	1.0						
[illegible]omethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Discharge Permit Qtrly. Water Samples 4th Qtr **Work Order:** 0711265

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R26211**	Analysis Date:	11/26/2007 6:32:49 AM	
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
[illegible]1-Trichloroethane	ND	µg/L	1.0						
[illegible]-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26129**	Analysis Date:	11/19/2007 9:05:31 AM	
Benzene	21.58	µg/L	1.0	108	72.4	126			
Toluene	18.63	µg/L	1.0	93.1	79.2	115			
Chlorobenzene	22.21	µg/L	1.0	111	83.1	111			S
1,1-Dichloroethene	23.09	µg/L	1.0	115	81.4	122			
Trichloroethene (TCE)	21.63	µg/L	1.0	108	64.4	118			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26183**	Analysis Date:	11/21/2007 7:35:44 AM	
Benzene	20.89	µg/L	1.0	104	72.4	126			
Toluene	17.74	µg/L	1.0	88.7	79.2	115			
Chlorobenzene	19.95	µg/L	1.0	99.8	83.1	111			
1,1-Dichloroethene	23.18	µg/L	1.0	116	81.4	122			
Trichloroethene (TCE)	20.43	µg/L	1.0	102	64.4	118			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26211**	Analysis Date:	11/26/2007 7:30:07 AM	
Benzene	22.09	µg/L	1.0	110	72.4	126			
Toluene	18.23	µg/L	1.0	91.1	79.2	115			
Chlorobenzene	20.40	µg/L	1.0	102	83.1	111			
1,1-Dichloroethene	23.66	µg/L	1.0	118	81.4	122			
Trichloroethene (TCE)	21.51	µg/L	1.0	108	64.4	118			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

'all Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date Received: 11/15/2007

Work Order Number 0711265

Received by: AT

Sample ID labels checked by _____ Initials

Checklist completed by: _____ Signature _____ Date 11/15/07

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☑	N/A ☐	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
'l samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Project Name: Discharge Permit Quarterly Water Sample 4th QTR 2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: on ice 3°

Phone #: 505 722 3833
Fax #: 505 722 0210

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl$_2$	Preservative HNO$_3$	Preservative	HEAL No. 0711215	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	Metals WQCC Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD - COD	Gen. Chem.			Air Bubbles or Headspace (Y or N)
11-13-07	1300	H_2O	AL-2 to EP-1					-1			X					X			X						
11-15-07	0830	"	Pilot Effluent					-2			X					X			X		X				
11-13-07	1400	"	NAPIS Effluent					-3			X					X			X	X		X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
11-15-07	1420	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 11/15/07 1420

Remarks: Gen Chem = Cations, Anions, pH, and Conductivity
Pilot Effluent May Contain Bio Hazards.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, December 07, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 11-15-2007

Order No.: 0711268

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/15/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711268**
Order: **07110538 HAL03** Receipt: **11-16-07**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0711268-01A POND 2 INLET*** Collected: *11-15-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110538-001A		**EPA 410.1 Chemical Oxygen Demand**					By:	NJL		
WCOD07067	WC.2007.3076.8	C-004	Chemical Oxygen Demand	723	mg/L	1	10		12-03-07	12-03-07

Sample: ***0711268-01B POND 2 INLET*** Collected: *11-15-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110538-002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07140	WC.2007.3002.5	10-26-4	Biochemical Oxygen Demand	480	mg/L	1	2	1	11-17-07	11-22-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 70.7% and 69.9% respectively. These recoveries are below the QC acceptance limits of 84.6-115.4% and are most likely due to a poor performing seed capsule used for this batch. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

Report Date: 12/7/2007 11:58:19 AM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date Received: 11/15/2007

Work Order Number 0711268

Received by: AT

Sample ID/labels checked by TS (Initials)

Checklist completed by: Signature 11/15/07 Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 7223833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 11-15-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: On ice 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl$_2$	Preservative HNO$_3$	Preservative	HEAL No. 0711268	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
11-15-07	0930	H_2O	Pond 2 Inlet	2				-1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
11-15-07	1420	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 11/15/07 1420

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, November 26, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet

Order No.: 0711137

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/8/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

ASSAIGAI ANALYTICAL LABORATORIES, INC.
P.O. Box 90430 • Albuquerque, New Mexico 87199 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, Ste. N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711137**
Order: **07110224 HAL03** Receipt: **11-08-07**

William P. Bieve: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0711137-01A POND 2 INLET*** Collected: *11-08-07 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110224-001A		**EPA 410.1 Chemical Oxygen Demand**					By:	NJL		
WCO007084	WC.2007.2974.9	C-004	Chemical Oxygen Demand	965	mg/L	1	10		11-19-07	11-20-07

Sample: ***0711137-01B POND 2 INLET*** Collected: *11-08-07 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110224-002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	RKA		
BOD07135	WC.2007.2902.13	10-26-4	Biochemical Oxygen Demand	454	mg/L	1	2		11-09-07	11-14-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 11/21/2007 3:59:47 PM

Member: American Council of Independent Laboratories, Inc.

REPRODUCTION OF THIS REPORT IN LESS THAN FULL REQUIRES THE WRITTEN CONSENT OF AAL. THIS REPORT MAY NOT BE USED IN ANY MANNER BY THE CLIENT OR ANY OTHER THIRD PARTY TO CLAIM PRODUCT ENDORSEMENT BY THE NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 11/8/2007

Work Order Number 0711137 | Received by AT

Checklist completed b Samp Shamin 11/8/07
Signature Date

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? 4° *4° C ± 2 Acceptable*
If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap Pond #2 duplicate
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 4° on ice

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3		HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
11-8-07	0830	H_2O	Pond 2 dupl	2				0711137 1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-8-07	1400	Steve Morris	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 11/8/07 1400

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, November 13, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 11-1-2007

Order No.: 0711026

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/1/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711026**
Order: **07110020 HAL03** Receipt: **11-02-07**

William P. Blava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0711026-01A POND 2 INLET*** Collected: *11-01-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110020-001A		**EPA 410.1 Chemical Oxygen Demand**					By:	NJL		
WCOC07061	WC.2007.2872.6	C-004	Chemical Oxygen Demand	1320	mg/L	1	10		11-09-07	11-12-07

Sample: ***0711026-01B POND 2 INLET*** Collected: *11-01-07 9:30:00* By:
Matrix: ***AQUEOUS*** *SR 7471*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110020-002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	RKA		
BOD07132	WC.2007.2853.12	10-26-4	Biochemical Oxygen Demand	514	mg/L	1	2	1	11-02-07	11-07-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The LCSD is out of criteria low. Batch is validated by the passing of the LCS and the RPD between the LCS/LCSD pair.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 11/1/2007

Work Order Number 0711026

Received by AT

Checklist completed b _____ Signature | Date 11/1/07

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	4°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 11-1-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 4°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
11-1-07	0930	H_2O	Pond 2 Inlet	2				0711026-1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-1-07	1330	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 11/1/07 1330

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, December 13, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 11-29-2007

Order No.: 0711470

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/29/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711470**
Order: **07110844** **HAL03** Receipt: **11-29-07**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0711470-01A POND 2 INLET*** Collected: *11-29-07 8:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110844-001A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.5	10-26-4	Biochemical Oxygen Demand	754	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711470-01B POND 2 INLET*** Collected: *11-29-07 8:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110844-002A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.14	C-004	Chemical Oxygen Demand	829	mg/L	1	10		12-07-07	12-07-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 116% and 120% respectively. These recoveries are above the QC acceptance limits of 84.6-115.4%. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

Report Date: 12/13/2007 10:37:10 AM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date Received: 11/29/2007

Work Order Number 0711470

Received by: TLS

Sample ID labels checked by TB
Initials

Checklist completed by: _____ 11/29/07
Signature Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap Pond #2 Inlet 11-29-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 4°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
11-29-07	0800	Water	Pond 2 Inlet					0711470 1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
11-29-07	1340	Steve Morris	Tanya Shomin 11/29/07 1340
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, December 07, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet

Order No.: 0711326

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/20/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711326**
Order: **07110637** **HAL03** Receipt: **11-21-07**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0711326-01A POND 2 INLET*** Collected: *11-20-07 8:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110637-001A		**EPA 410.1 Chemical Oxygen Demand**					By:	NJL		
WCOD07068	WC.2007.3089.7	C-004	Chemical Oxygen Demand	905	mg/L	1	10		12-03-07	12-04-07

Sample: ***0711326-01B POND 2 INLET*** Collected: *11-20-07 8:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110637-002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07141	WC.2007.3017.6	10-26-4	Biochemical Oxygen Demand	1180	mg/L	1	2		11-21-07	11-26-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 12/7/2007 12:00:41 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date Received: 11/20/2007

Work Order Number 0711326

Received by: AT

Sample ID labels checked by _____ Initials

Checklist completed by: _____ Signature 11/20/07 Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 9210

Project Name: Evap Pond #2 closet 11-20-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 4 on ice

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
11-20-07	0800	H_2O	Pond 2 closet					0711326-1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
11-20-07	1400	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 11/20/07 1400

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, December 19, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Ponds #1 through #8-4 Qtr 2007

Order No.: 0711469

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 8 sample(s) on 11/29/2007 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

ACCREDITED IN ACCORDANCE WITH nelac

4901 Hawkins NE ■ Suite D ■ Albuquerque, NM 87109
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #1
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	170	10		mg/L	100	11/30/2007 9:34:45 AM
Chloride	180	1.0		mg/L	10	11/29/2007 5:10:19 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	12/8/2007 1:08:51 PM
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	11/29/2007 5:10:19 PM
Sulfate	850	10		mg/L	20	11/30/2007 9:17:21 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/4/2007 3:12:16 PM
Barium	0.073	0.010		mg/L	1	12/4/2007 3:12:16 PM
Cadmium	ND	0.0020		mg/L	1	12/4/2007 3:12:16 PM
Calcium	32	0.50		mg/L	1	12/4/2007 3:12:16 PM
Chromium	0.013	0.0060		mg/L	1	12/4/2007 3:12:16 PM
Copper	0.0061	0.0060		mg/L	1	12/7/2007 12:39:51 PM
Lead	ND	0.0050		mg/L	1	12/4/2007 3:12:16 PM
Magnesium	12	0.50		mg/L	1	12/4/2007 3:12:16 PM
Manganese	0.22	0.0020		mg/L	1	12/4/2007 3:12:16 PM
Potassium	71	1.0		mg/L	1	12/4/2007 3:12:16 PM
Selenium	ND	0.050		mg/L	1	12/4/2007 3:12:16 PM
Silver	ND	0.0050		mg/L	1	12/4/2007 3:12:16 PM
Sodium	530	5.0		mg/L	10	12/7/2007 2:32:56 PM
Uranium	ND	0.10		mg/L	1	12/4/2007 3:12:16 PM
Zinc	0.51	0.020		mg/L	1	12/4/2007 3:12:16 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	64	10		µg/L	10	12/7/2007 12:18:26 PM
Toluene	230	10		µg/L	10	12/7/2007 12:18:26 PM
Ethylbenzene	48	10		µg/L	10	12/7/2007 12:18:26 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2,4-Trimethylbenzene	180	10		µg/L	10	12/7/2007 12:18:26 PM
1,3,5-Trimethylbenzene	48	10		µg/L	10	12/7/2007 12:18:26 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Naphthalene	240	20		µg/L	10	12/7/2007 12:18:26 PM
1-Methylnaphthalene	360	40		µg/L	10	12/7/2007 12:18:26 PM
2-Methylnaphthalene	580	40		µg/L	10	12/7/2007 12:18:26 PM
Acetone	800	200		µg/L	20	12/10/2007 11:10:18 AM
Bromobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Bromoform	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
2-Butanone	400	100		µg/L	10	12/7/2007 12:18:26 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #1
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Carbon disulfide	ND	100		µg/L	10	12/7/2007 12:18:26 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 12:18:26 PM
Chloroform	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 12:18:26 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 12:18:26 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 12:18:26 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 12:18:26 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 12:18:26 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 12:18:26 PM
n-Butylbenzene	48	10		µg/L	10	12/7/2007 12:18:26 PM
n-Propylbenzene	18	10		µg/L	10	12/7/2007 12:18:26 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Styrene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 12:18:26 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 12:18:26 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 12:18:26 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #1
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 12:18:26 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 12:18:26 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 12:18:26 PM
Xylenes, Total	310	15		µg/L	10	12/7/2007 12:18:26 PM
Surr: 1,2-Dichloroethane-d4	98.1	68.1-123		%REC	10	12/7/2007 12:18:26 PM
Surr: 4-Bromofluorobenzene	98.6	53.2-145		%REC	10	12/7/2007 12:18:26 PM
Surr: Dibromofluoromethane	102	68.5-119		%REC	10	12/7/2007 12:18:26 PM
Surr: Toluene-d8	102	64-131		%REC	10	12/7/2007 12:18:26 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	5500	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	8.47	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #2
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	73	2.0		mg/L	20	11/30/2007 9:52:10 AM
Chloride	1800	10		mg/L	100	11/30/2007 10:09:35 AM
Nitrate (As N)+Nitrite (As N)	ND	10		mg/L	50	12/9/2007 9:32:57 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/29/2007 5:27:44 PM
Sulfate	1100	10		mg/L	20	11/30/2007 9:52:10 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/4/2007 3:16:19 PM
Barium	0.043	0.010		mg/L	1	12/4/2007 3:16:19 PM
Cadmium	ND	0.0020		mg/L	1	12/4/2007 3:16:19 PM
Calcium	110	2.5		mg/L	5	12/7/2007 2:36:02 PM
Chromium	0.0071	0.0060		mg/L	1	12/4/2007 3:16:19 PM
Copper	ND	0.0060		mg/L	1	12/7/2007 12:45:22 PM
Lead	ND	0.0050		mg/L	1	12/4/2007 3:16:19 PM
Magnesium	47	0.50		mg/L	1	12/4/2007 3:16:19 PM
Manganese	0.22	0.0020		mg/L	1	12/4/2007 3:16:19 PM
Potassium	64	1.0		mg/L	1	12/4/2007 3:16:19 PM
Selenium	ND	0.050		mg/L	1	12/4/2007 3:16:19 PM
Silver	ND	0.0050		mg/L	1	12/4/2007 3:16:19 PM
Sodium	1400	25		mg/L	50	12/7/2007 2:43:08 PM
Uranium	ND	0.10		mg/L	1	12/4/2007 3:16:19 PM
Zinc	0.16	0.020		mg/L	1	12/4/2007 3:16:19 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	21	10		µg/L	10	12/7/2007 12:48:56 PM
Toluene	79	10		µg/L	10	12/7/2007 12:48:56 PM
Ethylbenzene	20	10		µg/L	10	12/7/2007 12:48:56 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2,4-Trimethylbenzene	81	10		µg/L	10	12/7/2007 12:48:56 PM
1,3,5-Trimethylbenzene	21	10		µg/L	10	12/7/2007 12:48:56 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Naphthalene	120	20		µg/L	10	12/7/2007 12:48:56 PM
1-Methylnaphthalene	220	40		µg/L	10	12/7/2007 12:48:56 PM
2-Methylnaphthalene	340	40		µg/L	10	12/7/2007 12:48:56 PM
Acetone	1200	100		µg/L	10	12/7/2007 12:48:56 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Bromoform	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
2-Butanone	180	100		µg/L	10	12/7/2007 12:48:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #2
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:50:00 AM
Project:	Evap. Ponds #1 thr #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	ND	100		µg/L	10	12/7/2007 12:48:56 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 12:48:56 PM
Chloroform	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 12:48:56 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 12:48:56 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 12:48:56 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 12:48:56 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 12:48:56 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 12:48:56 PM
n-Butylbenzene	23	10		µg/L	10	12/7/2007 12:48:56 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Styrene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 12:48:56 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 12:48:56 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 12:48:56 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #2
Lab Order:	0711469	**Collection Date:**	11/29/2007 8:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 12:48:56 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 12:48:56 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 12:48:56 PM
Xylenes, Total	130	15		µg/L	10	12/7/2007 12:48:56 PM
Surr: 1,2-Dichloroethane-d4	104	68.1-123		%REC	10	12/7/2007 12:48:56 PM
Surr: 4-Bromofluorobenzene	98.2	53.2-145		%REC	10	12/7/2007 12:48:56 PM
Surr: Dibromofluoromethane	97.2	68.5-119		%REC	10	12/7/2007 12:48:56 PM
Surr: Toluene-d8	111	64-131		%REC	10	12/7/2007 12:48:56 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	9400	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.96	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #3
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	62	2.0		mg/L	20	11/30/2007 10:26:59 AM
Chloride	2000	10		mg/L	100	11/30/2007 10:44:24 AM
Nitrate (As N)+Nitrite (As N)	ND	4.0		mg/L	20	12/13/2007 8:35:22 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/29/2007 6:02:32 PM
Sulfate	1100	10		mg/L	20	11/30/2007 10:26:59 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/4/2007 5:23:28 PM
Barium	0.033	0.010		mg/L	1	12/4/2007 5:23:28 PM
Cadmium	ND	0.0020		mg/L	1	12/4/2007 5:23:28 PM
Calcium	93	0.50		mg/L	1	12/4/2007 5:23:28 PM
Chromium	0.0078	0.0060		mg/L	1	12/4/2007 5:23:28 PM
Copper	ND	0.0060		mg/L	1	12/7/2007 12:49:28 PM
Lead	ND	0.0050		mg/L	1	12/4/2007 5:23:28 PM
Magnesium	55	0.50		mg/L	1	12/4/2007 5:23:28 PM
Manganese	0.30	0.0020		mg/L	1	12/4/2007 5:23:28 PM
Potassium	78	1.0		mg/L	1	12/4/2007 5:23:28 PM
Selenium	ND	0.050		mg/L	1	12/4/2007 5:23:28 PM
Silver	ND	0.0050		mg/L	1	12/4/2007 5:23:28 PM
Sodium	1600	25		mg/L	50	12/7/2007 3:53:45 PM
Uranium	ND	0.10		mg/L	1	12/4/2007 5:23:28 PM
Zinc	0.094	0.020		mg/L	1	12/4/2007 5:23:28 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Toluene	25	10		µg/L	10	12/7/2007 1:19:25 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2,4-Trimethylbenzene	27	10		µg/L	10	12/7/2007 1:19:25 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Naphthalene	52	20		µg/L	10	12/7/2007 1:19:25 PM
1-Methylnaphthalene	99	40		µg/L	10	12/7/2007 1:19:25 PM
2-Methylnaphthalene	160	40		µg/L	10	12/7/2007 1:19:25 PM
Acetone	930	100		µg/L	10	12/7/2007 1:19:25 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Bromoform	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 1:19:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #3
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	110	100		µg/L	10	12/7/2007 1:19:25 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 1:19:25 PM
Chloroform	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 1:19:25 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 1:19:25 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 1:19:25 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 1:19:25 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 1:19:25 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 1:19:25 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Styrene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 1:19:25 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 1:19:25 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 1:19:25 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #3
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 1:19:25 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 1:19:25 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 1:19:25 PM
Xylenes, Total	38	15		µg/L	10	12/7/2007 1:19:25 PM
Surr: 1,2-Dichloroethane-d4	103	68.1-123		%REC	10	12/7/2007 1:19:25 PM
Surr: 4-Bromofluorobenzene	97.5	53.2-145		%REC	10	12/7/2007 1:19:25 PM
Surr: Dibromofluoromethane	108	68.5-119		%REC	10	12/7/2007 1:19:25 PM
Surr: Toluene-d8	110	64-131		%REC	10	12/7/2007 1:19:25 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	9800	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.71	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #4
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	61	2.0		mg/L	20	11/30/2007 11:01:48 AM
Chloride	2000	10		mg/L	100	12/3/2007 11:09:14 AM
Nitrate (As N)+Nitrite (As N)	ND	4.0		mg/L	20	12/18/2007 7:27:09 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/29/2007 6:37:21 PM
Sulfate	1100	10		mg/L	20	11/30/2007 11:01:48 AM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/4/2007 5:27:20 PM
Barium	0.035	0.010		mg/L	1	12/4/2007 5:27:20 PM
Cadmium	ND	0.0020		mg/L	1	12/4/2007 5:27:20 PM
Calcium	96	0.50		mg/L	1	12/4/2007 5:27:20 PM
Chromium	0.0080	0.0060		mg/L	1	12/4/2007 5:27:20 PM
Copper	ND	0.0060		mg/L	1	12/7/2007 12:53:33 PM
Lead	ND	0.0050		mg/L	1	12/4/2007 5:27:20 PM
Magnesium	56	0.50		mg/L	1	12/4/2007 5:27:20 PM
Manganese	0.31	0.0020		mg/L	1	12/4/2007 5:27:20 PM
Potassium	82	1.0		mg/L	1	12/4/2007 5:27:20 PM
Selenium	ND	0.050		mg/L	1	12/4/2007 5:27:20 PM
Silver	ND	0.0050		mg/L	1	12/4/2007 5:27:20 PM
Sodium	1700	25		mg/L	50	12/7/2007 3:50:40 PM
Uranium	ND	0.10		mg/L	1	12/4/2007 5:27:20 PM
Zinc	0.092	0.020		mg/L	1	12/4/2007 5:27:20 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Toluene	11	10		µg/L	10	12/7/2007 1:49:53 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2,4-Trimethylbenzene	13	10		µg/L	10	12/7/2007 1:49:53 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Naphthalene	29	20		µg/L	10	12/7/2007 1:49:53 PM
1-Methylnaphthalene	62	40		µg/L	10	12/7/2007 1:49:53 PM
2-Methylnaphthalene	92	40		µg/L	10	12/7/2007 1:49:53 PM
Acetone	800	100		µg/L	10	12/7/2007 1:49:53 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Bromoform	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 1:49:53 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #4
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	110	100		µg/L	10	12/7/2007 1:49:53 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 1:49:53 PM
Chloroform	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 1:49:53 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 1:49:53 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 1:49:53 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 1:49:53 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 1:49:53 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 1:49:53 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Styrene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 1:49:53 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 1:49:53 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 1:49:53 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #4
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 1:49:53 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 1:49:53 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 1:49:53 PM
Xylenes, Total	ND	15		µg/L	10	12/7/2007 1:49:53 PM
Surr: 1,2-Dichloroethane-d4	94.6	68.1-123		%REC	10	12/7/2007 1:49:53 PM
Surr: 4-Bromofluorobenzene	102	53.2-145		%REC	10	12/7/2007 1:49:53 PM
Surr: Dibromofluoromethane	99.4	68.5-119		%REC	10	12/7/2007 1:49:53 PM
Surr: Toluene-d8	106	64-131		%REC	10	12/7/2007 1:49:53 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	9800	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.73	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #5
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	47	2.0		mg/L	20	11/30/2007 12:11:26 PM
Chloride	3000	10		mg/L	100	11/30/2007 12:28:51 PM
Nitrate (As N)+Nitrite (As N)	ND	4.0		mg/L	20	12/18/2007 9:11:35 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	11/29/2007 7:12:10 PM
Sulfate	1300	10		mg/L	20	11/30/2007 12:11:26 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/4/2007 5:31:15 PM
Barium	0.054	0.010		mg/L	1	12/4/2007 5:31:15 PM
Cadmium	ND	0.0020		mg/L	1	12/4/2007 5:31:15 PM
Calcium	150	2.5		mg/L	5	12/7/2007 2:57:20 PM
Chromium	0.0074	0.0060		mg/L	1	12/4/2007 5:31:15 PM
Copper	ND	0.0060		mg/L	1	12/7/2007 12:57:39 PM
Lead	ND	0.0050		mg/L	1	12/4/2007 5:31:15 PM
Magnesium	79	0.50		mg/L	1	12/4/2007 5:31:15 PM
Manganese	0.43	0.0020		mg/L	1	12/4/2007 5:31:15 PM
Potassium	110	5.0		mg/L	5	12/7/2007 2:57:20 PM
Selenium	ND	0.050		mg/L	1	12/4/2007 5:31:15 PM
Silver	ND	0.0050		mg/L	1	12/4/2007 5:31:15 PM
Sodium	2200	25		mg/L	50	12/7/2007 3:03:13 PM
Uranium	ND	0.10		mg/L	1	12/4/2007 5:31:15 PM
Zinc	0.084	0.020		mg/L	1	12/4/2007 5:31:15 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Toluene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Naphthalene	ND	20		µg/L	10	12/7/2007 2:20:18 PM
1-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 2:20:18 PM
2-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 2:20:18 PM
Acetone	220	100		µg/L	10	12/7/2007 2:20:18 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Bromoform	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 2:20:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #5
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	ND	100		µg/L	10	12/7/2007 2:20:18 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 2:20:18 PM
Chloroform	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 2:20:18 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 2:20:18 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 2:20:18 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 2:20:18 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 2:20:18 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 2:20:18 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Styrene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 2:20:18 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 2:20:18 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 2:20:18 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #5
Lab Order:	0711469	**Collection Date:**	11/29/2007 9:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 2:20:18 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 2:20:18 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 2:20:18 PM
Xylenes, Total	ND	15		µg/L	10	12/7/2007 2:20:18 PM
Surr: 1,2-Dichloroethane-d4	101	68.1-123		%REC	10	12/7/2007 2:20:18 PM
Surr: 4-Bromofluorobenzene	102	53.2-145		%REC	10	12/7/2007 2:20:18 PM
Surr: Dibromofluoromethane	105	68.5-119		%REC	10	12/7/2007 2:20:18 PM
Surr: Toluene-d8	104	64-131		%REC	10	12/7/2007 2:20:18 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	12000	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.70	0.1		pH units	1	11/30/2007

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #6
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	31	1.0		mg/L	10	11/29/2007 8:39:12 PM
Chloride	8000	50		mg/L	500	12/3/2007 11:26:39 AM
Nitrate (As N)+Nitrite (As N)	26	10		mg/L	50	12/9/2007 9:50:21 AM
Phosphorus, Orthophosphate (As P)	ND	5.0		mg/L	10	11/29/2007 8:39:12 PM
Sulfate	3100	25		mg/L	50	11/30/2007 12:46:15 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	12/7/2007 1:19:40 PM
Barium	0.094	0.010		mg/L	1	12/7/2007 1:19:40 PM
Cadmium	ND	0.0020		mg/L	1	12/7/2007 1:19:40 PM
Calcium	500	5.0		mg/L	10	12/7/2007 3:06:15 PM
Chromium	ND	0.0060		mg/L	1	12/7/2007 1:19:40 PM
Copper	ND	0.0060		mg/L	1	12/7/2007 1:19:40 PM
Lead	ND	0.0050		mg/L	1	12/7/2007 1:19:40 PM
Magnesium	210	5.0		mg/L	10	12/7/2007 3:06:15 PM
Manganese	0.96	0.0020		mg/L	1	12/7/2007 1:19:40 PM
Potassium	230	10		mg/L	10	12/7/2007 3:06:15 PM
Selenium	ND	0.050		mg/L	1	12/7/2007 1:19:40 PM
Silver	ND	0.0050		mg/L	1	12/7/2007 1:19:40 PM
Sodium	5500	50		mg/L	100	12/7/2007 3:47:37 PM
Uranium	ND	0.10		mg/L	1	12/11/2007 11:32:53 AM
Zinc	0.028	0.020		mg/L	1	12/7/2007 1:19:40 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Toluene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Naphthalene	ND	20		µg/L	10	12/7/2007 2:50:45 PM
1-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 2:50:45 PM
2-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 2:50:45 PM
Acetone	ND	100		µg/L	10	12/7/2007 2:50:45 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Bromoform	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 2:50:45 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #6
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	ND	100		µg/L	10	12/7/2007 2:50:45 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 2:50:45 PM
Chloroform	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 2:50:45 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 2:50:45 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 2:50:45 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 2:50:45 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 2:50:45 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 2:50:45 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Styrene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 2:50:45 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 2:50:45 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 2:50:45 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #6
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:10:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 2:50:45 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 2:50:45 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 2:50:45 PM
Xylenes, Total	ND	15		µg/L	10	12/7/2007 2:50:45 PM
Surr: 1,2-Dichloroethane-d4	96.1	68.1-123		%REC	10	12/7/2007 2:50:45 PM
Surr: 4-Bromofluorobenzene	97.8	53.2-145		%REC	10	12/7/2007 2:50:45 PM
Surr: Dibromofluoromethane	98.6	68.5-119		%REC	10	12/7/2007 2:50:45 PM
Surr: Toluene-d8	104	64-131		%REC	10	12/7/2007 2:50:45 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	14000	0.010		µmhos/cm	1	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.46	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #7
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: SMP
Fluoride	51	20		mg/L	200	11/30/2007 1:21:04 PM
Chloride	69000	200		mg/L	2000	12/3/2007 11:44:03 AM
Nitrate (As N)+Nitrite (As N)	ND	100		mg/L	500	12/9/2007 12:27:04 PM
Phosphorus, Orthophosphate (As P)	ND	100		mg/L	200	11/30/2007 1:21:04 PM
Sulfate	14000	250		mg/L	500	11/30/2007 1:38:28 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Arsenic	ND	0.20		mg/L	10	12/7/2007 3:13:25 PM
Barium	0.10	0.10		mg/L	10	12/7/2007 3:13:25 PM
Cadmium	ND	0.020		mg/L	10	12/7/2007 3:13:25 PM
Calcium	800	5.0		mg/L	10	12/7/2007 3:13:25 PM
Chromium	ND	0.060		mg/L	10	12/7/2007 3:13:25 PM
Copper	ND	0.060		mg/L	10	12/7/2007 3:13:25 PM
Lead	ND	0.050		mg/L	10	12/7/2007 3:13:25 PM
Magnesium	1400	25		mg/L	50	12/7/2007 3:17:35 PM
Manganese	7.1	0.020		mg/L	10	12/7/2007 3:13:25 PM
Potassium	1500	50		mg/L	50	12/7/2007 3:17:35 PM
Selenium	ND	0.50		mg/L	10	12/7/2007 3:13:25 PM
Silver	ND	0.050		mg/L	10	12/7/2007 3:13:25 PM
Sodium	41000	250		mg/L	500	12/7/2007 3:56:39 PM
Uranium	ND	1.0		mg/L	10	12/11/2007 12:06:09 PM
Zinc	ND	0.20		mg/L	10	12/7/2007 3:13:25 PM
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Benzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Toluene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Naphthalene	ND	20		µg/L	10	12/7/2007 3:21:18 PM
1-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 3:21:18 PM
2-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 3:21:18 PM
Acetone	ND	100		µg/L	10	12/7/2007 3:21:18 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Bromoform	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 3:21:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #7
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	ND	100		µg/L	10	12/7/2007 3:21:18 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 3:21:18 PM
Chloroform	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 3:21:18 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 3:21:18 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 3:21:18 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 3:21:18 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 3:21:18 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 3:21:18 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Styrene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 3:21:18 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 3:21:18 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 3:21:18 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #7
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:30:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 3:21:18 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 3:21:18 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 3:21:18 PM
Xylenes, Total	ND	15		µg/L	10	12/7/2007 3:21:18 PM
Surr: 1,2-Dichloroethane-d4	101	68.1-123		%REC	10	12/7/2007 3:21:18 PM
Surr: 4-Bromofluorobenzene	109	53.2-145		%REC	10	12/7/2007 3:21:18 PM
Surr: Dibromofluoromethane	101	68.5-119		%REC	10	12/7/2007 3:21:18 PM
Surr: Toluene-d8	105	64-131		%REC	10	12/7/2007 3:21:18 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	180000	0.10		µmhos/cm	10	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.22	0.1		pH units	1	11/30/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #8
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	94	50		mg/L	500	11/30/2007 2:13:17 PM
Chloride	200000	500		mg/L	5000	12/3/2007 12:01:28 PM
Nitrate (As N)+Nitrite (As N)	ND	200		mg/L	1000	12/9/2007 6:15:17 PM
Phosphorus, Orthophosphate (As P)	ND	250		mg/L	500	11/30/2007 2:13:17 PM
Sulfate	28000	250		mg/L	500	11/30/2007 2:13:17 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	1.0		mg/L	5	12/11/2007 10:20:03 AM
Barium	ND	0.50		mg/L	5	12/11/2007 10:20:03 AM
Cadmium	ND	0.10		mg/L	5	12/11/2007 10:20:03 AM
Calcium	580	25		mg/L	5	12/11/2007 10:20:03 AM
Chromium	ND	0.30		mg/L	5	12/11/2007 10:20:03 AM
Copper	ND	0.30		mg/L	5	12/11/2007 10:20:03 AM
Lead	ND	0.25		mg/L	5	12/11/2007 10:20:03 AM
Magnesium	11000	250		mg/L	50	12/11/2007 10:24:15 AM
Manganese	120	1.0		mg/L	50	12/11/2007 10:24:15 AM
Potassium	16000	500		mg/L	50	12/11/2007 10:24:15 AM
Selenium	ND	2.5		mg/L	5	12/11/2007 10:20:03 AM
Silver	ND	0.25		mg/L	5	12/11/2007 10:20:03 AM
Sodium	120000	1000		mg/L	200	12/11/2007 3:26:30 PM
Uranium	ND	5.0		mg/L	5	12/11/2007 10:20:03 AM
Zinc	ND	1.0		mg/L	5	12/11/2007 10:20:03 AM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Toluene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Ethylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2,4-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,3,5-Trimethylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Naphthalene	ND	20		µg/L	10	12/7/2007 3:51:55 PM
1-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 3:51:55 PM
2-Methylnaphthalene	ND	40		µg/L	10	12/7/2007 3:51:55 PM
Acetone	100	100		µg/L	10	12/7/2007 3:51:55 PM
Bromobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Bromochloromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Bromodichloromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Bromoform	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Bromomethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
2-Butanone	ND	100		µg/L	10	12/7/2007 3:51:55 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #8
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: BDH
Carbon disulfide	ND	100		µg/L	10	12/7/2007 3:51:55 PM
Carbon Tetrachloride	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Chlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Chloroethane	ND	20		µg/L	10	12/7/2007 3:51:55 PM
Chloroform	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Chloromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
2-Chlorotoluene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
4-Chlorotoluene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
cis-1,2-DCE	ND	10		µg/L	10	12/7/2007 3:51:55 PM
cis-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	12/7/2007 3:51:55 PM
Dibromochloromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Dibromomethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,3-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,4-Dichlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Dichlorodifluoromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,1-Dichloroethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,1-Dichloroethene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2-Dichloropropane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,3-Dichloropropane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
2,2-Dichloropropane	ND	20		µg/L	10	12/7/2007 3:51:55 PM
1,1-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Hexachlorobutadiene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
2-Hexanone	ND	100		µg/L	10	12/7/2007 3:51:55 PM
Isopropylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
4-Isopropyltoluene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
4-Methyl-2-pentanone	ND	100		µg/L	10	12/7/2007 3:51:55 PM
Methylene Chloride	ND	30		µg/L	10	12/7/2007 3:51:55 PM
n-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
n-Propylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
sec-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Styrene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
tert-Butylbenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	12/7/2007 3:51:55 PM
Tetrachloroethene (PCE)	ND	10		µg/L	10	12/7/2007 3:51:55 PM
trans-1,2-DCE	ND	10		µg/L	10	12/7/2007 3:51:55 PM
trans-1,3-Dichloropropene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,1,1-Trichloroethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *19-Dec-07*

CLIENT:	Giant Refining Company	**Client Sample ID:**	Pond #8
Lab Order:	0711469	**Collection Date:**	11/29/2007 10:50:00 AM
Project:	Evap. Ponds #1 through #8-4 Qtr 2007	**Date Received:**	11/29/2007
Lab ID:	0711469-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
1,1,2-Trichloroethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Trichloroethene (TCE)	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Trichlorofluoromethane	ND	10		µg/L	10	12/7/2007 3:51:55 PM
1,2,3-Trichloropropane	ND	20		µg/L	10	12/7/2007 3:51:55 PM
Vinyl chloride	ND	10		µg/L	10	12/7/2007 3:51:55 PM
Xylenes, Total	ND	15		µg/L	10	12/7/2007 3:51:55 PM
Surr: 1,2-Dichloroethane-d4	99.8	68.1-123		%REC	10	12/7/2007 3:51:55 PM
Surr: 4-Bromofluorobenzene	106	53.2-145		%REC	10	12/7/2007 3:51:55 PM
Surr: Dibromofluoromethane	102	68.5-119		%REC	10	12/7/2007 3:51:55 PM
Surr: Toluene-d8	110	64-131		%REC	10	12/7/2007 3:51:55 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	780000	1.0		µmhos/cm	100	11/30/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	5.49	0.1		pH units	1	11/30/2007

Qualifiers:

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

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847** **HAL03** Receipt: **11-29-07**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0711469-01D POND#1*** Collected: *11-29-07 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-001A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.15	C-004	Chemical Oxygen Demand	878	mg/L	1	10		12-07-07	12-07-07

Sample: ***0711469-01E POND#1*** Collected: *11-29-07 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.12	10-26-4	Biochemical Oxygen Demand	783	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711469-01F POND#1*** Collected: *11-29-07 8:30:00* By:
Matrix: ***AQUEOUS*** *SR8307*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-003A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.12		E. coli	727	CFU/100 ml	91	1		11-29-07	11-30-07

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847** **HAL03** Receipt: **11-29-07**

Sample: ***0711469-02D POND#2*** Collected: *11-29-07 8:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-004A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.16	C-004	Chemical Oxygen Demand	561	mg/L	1	10		12-07-07	12-07-07

Sample: ***0711469-02E POND#2*** Collected: *11-29-07 8:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-005A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.13	10-26-4	Biochemical Oxygen Demand	302	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711469-02F POND#2*** Collected: *11-29-07 8:50:00* By:
Matrix: ***AQUEOUS*** *SR8308*

Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-006A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.13		E. coli	63.1	CFU/100 ml	9	1		11-29-07	11-30-07

Sample: ***0711469-03D POND#3*** Collected: *11-29-07 9:10:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-007A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.17	C-004	Chemical Oxygen Demand	463	mg/L	1	10		12-07-07	12-07-07

Sample: ***0711469-03E POND#3*** Collected: *11-29-07 9:10:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-008A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.14	10-26-4	Biochemical Oxygen Demand	209	mg/L	1	2	1	11-30-07	12-05-07

Assalgai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847** **HAL03** Receipt: **11-29-07**

Sample: ***0711469-03F POND#3*** Collected: *11-29-07 9:10:00* By:
Matrix: ***AQUEOUS*** *SR8309*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-009A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.14		E. coli	27.0	CFU/100 ml	9	1		11-29-07	11-30-07

Sample: ***0711469-04D POND#4*** Collected: *11-29-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-010A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.18	C-004	Chemical Oxygen Demand	512	mg/L	1	10		12-07-07	12-07-07

Sample: ***0711469-04E POND#4*** Collected: *11-29-07 9:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-011A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.15	10-26-4	Biochemical Oxygen Demand	163	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711469-04F POND#4*** Collected: *11-29-07 9:30:00* By:
Matrix: ***AQUEOUS*** *SR8310*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-012A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.16		E. coli	18.0	CFU/100 ml	9	1		11-29-07	11-30-07

Sample: ***0711469-05D POND#5*** Collected: *11-29-07 9:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-013A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.19	C-004	Chemical Oxygen Demand	488	mg/L	1	10		12-07-07	12-07-07

Assalgal Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847 HAL03** Receipt: **11-29-07**

Sample: ***0711469-05E POND#5*** Collected: *11-29-07 9:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-014A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.16	10-26-4	Biochemical Oxygen Demand	103	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711469-05F POND#5*** Collected: *11-29-07 9:50:00* By:
Matrix: ***AQUEOUS*** *SR8311*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-015A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.17		E. coli	ND	CFU/100 ml	10	1		11-29-07	11-30-07

Sample: ***0711469-06D POND#6*** Collected: *11-29-07 10:10:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-016A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.20	C-004	Chemical Oxygen Demand	927	mg/L	1	10		12-07-07	12-07-07

Sample: ***0711469-06E POND#6*** Collected: *11-29-07 10:10:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-017A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.17	10-26-4	Biochemical Oxygen Demand	47.8	mg/L	1	2	1	11-30-07	12-05-07

Sample: ***0711469-06F POND#6*** Collected; *11-29-07 10:10:00* By:
Matrix: ***AQUEOUS*** *SR8312*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-018A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.18		E. coli	ND	CFU/100 ml	10	1		11-29-07	11-30-07

Assalgal Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0711469**
Order: **07110847** **HAL03** Receipt: **11-29-07**

Sample: ***0711469-07D POND#7*** Collected: *11-29-07 10:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-019A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.23	C-004	Chemical Oxygen Demand	4390	mg/L	10	10		12-07-07	12-07-07

Sample: ***0711469-07E POND#7*** Collected: *11-29-07 10:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-020A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.18	10-26-4	Biochemical Oxygen Demand	Less Than 64.0	mg/L	1	2		11-30-07	12-05-07

Sample: ***0711469-07F POND#7*** Collected: *11-29-07 10:30:00* By:
Matrix: ***AQUEOUS*** *SR8313*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-021A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.20		E. coli	ND	CFU/100 ml	10	1		11-29-07	11-30-07

Sample: ***0711469-08D POND#8*** Collected: *11-29-07 10:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-022A		**EPA 410.1 Chemical Oxygen Demand**					By:	FAS		
WCOD07071	WC.2007.3140.24	C-004	Chemical Oxygen Demand	2200	mg/L	100	10		12-07-07	12-07-07

Sample: ***0711469-08E POND#8*** Collected: *11-29-07 10:50:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-023A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07145	WC.2007.3118.19	10-26-4	Biochemical Oxygen Demand	Less Than 64.0	mg/L	1	2	1	11-30-07	12-05-07

STANDARD

Assalgal Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**

Project: **0711469**

Order: **07110847** **HAL03** Receipt: **11-29-07**

Sample: ***0711469-08F POND#8*** Collected: *11-29-07 10:50:00* By:

Matrix: ***AQUEOUS*** *SR8314*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07110847-024A		**EPA 1603**					By:	FAS		
EC07103	BT.2007.797.21		E. coli	ND	CFU/100 ml	10	1		11-29-07	11-30-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

1 The Laboratory Control Spike and the Laboratory Control Spike Duplicate recoveries for the Biochemical Oxygen Demand (BOD) batch of samples, analyzed for this work order, were 116% and 120% respectively. These recoveries are above the QC acceptance limits of 84.6-115.4%. Therefore, the above BOD data may be potentially negatively biased to that extent. This should be taken into account when evaluating the data.

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MBLK		*MBLK*			Batch ID:	**R26303**	Analysis Date:	11/30/2007 8:42:32 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R26322**	Analysis Date:	12/3/2007 10:34:25 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK 112907A		*MBLK*			Batch ID:	**R26325**	Analysis Date:	11/29/2007 6:26:12 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
ıple ID: MBLK		*MBLK*			Batch ID:	**R26422**	Analysis Date:	12/8/2007 10:14:20 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R26424**	Analysis Date:	12/9/2007 8:58:08 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK-B		*MBLK*			Batch ID:	**R26509**	Analysis Date:	12/12/2007 2:48:24 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R26528**	Analysis Date:	12/13/2007 5:47:28 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS		*LCS*			Batch ID:	**R26303**	Analysis Date:	11/30/2007 8:59:57 AM	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: LCS		*LCS*			Batch ID:	**R26303**	Analysis Date:	11/30/2007 8:59:57 AM	
Fluoride	0.5036	mg/L	0.10	101	90	110			
Chloride	4.732	mg/L	0.10	94.6	90	110			
Nitrate (As N)+Nitrite (As N)	3.372	mg/L	0.20	96.3	90	110			
Phosphorus, Orthophosphate (As P)	4.790	mg/L	0.50	95.8	90	110			
Sulfate	9.653	mg/L	0.50	96.5	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26322**	Analysis Date:	12/3/2007 2:03:20 PM	
Fluoride	0.4937	mg/L	0.10	98.7	90	110			
Chloride	4.728	mg/L	0.10	94.6	90	110			
Nitrate (As N)+Nitrite (As N)	3.334	mg/L	0.20	95.3	90	110			
Phosphorus, Orthophosphate (As P)	4.739	mg/L	0.50	94.8	90	110			
Sulfate	9.740	mg/L	0.50	97.4	90	110			
Sample ID: LCS ST300-07069 1		*LCS*			Batch ID:	**R26325**	Analysis Date:	11/29/2007 1:58:51 PM	
Fluoride	0.5369	mg/L	0.10	107	90	110			
Chloride	4.981	mg/L	0.10	99.6	90	110			
Nitrate (As N)+Nitrite (As N)	3.506	mg/L	0.20	100	90	110			
Phosphorus, Orthophosphate (As P)	5.022	mg/L	0.50	100	90	110			
Sulfate	10.13	mg/L	0.50	101	90	110			
ple ID: LCS		*LCS*			Batch ID:	**R26422**	Analysis Date:	12/8/2007 10:31:44 AM	
Fluoride	0.5389	mg/L	0.10	108	90	110			
Chloride	5.032	mg/L	0.10	101	90	110			
Nitrate (As N)+Nitrite (As N)	3.452	mg/L	0.20	98.6	90	110			
Phosphorus, Orthophosphate (As P)	5.024	mg/L	0.50	100	90	110			
Sulfate	10.13	mg/L	0.50	101	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26424**	Analysis Date:	12/9/2007 9:15:33 AM	
Fluoride	0.5482	mg/L	0.10	110	90	110			
Chloride	5.061	mg/L	0.10	101	90	110			
Nitrate (As N)+Nitrite (As N)	3.609	mg/L	0.20	103	90	110			
Phosphorus, Orthophosphate (As P)	5.086	mg/L	0.50	102	90	110			
Sulfate	10.26	mg/L	0.50	103	90	110			
Sample ID: LCS-B		*LCS*			Batch ID:	**R26509**	Analysis Date:	12/12/2007 3:05:49 PM	
Fluoride	0.5220	mg/L	0.10	104	90	110			
Chloride	4.936	mg/L	0.10	98.7	90	110			
Nitrate (As N)+Nitrite (As N)	3.436	mg/L	0.20	98.2	90	110			
Phosphorus, Orthophosphate (As P)	5.200	mg/L	0.50	104	90	110			
Sulfate	10.05	mg/L	0.50	100	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26528**	Analysis Date:	12/13/2007 6:04:52 AM	
Fluoride	0.5272	mg/L	0.10	105	90	110			
Chloride	4.947	mg/L	0.10	98.9	90	110			
Nitrate (As N)+Nitrite (As N)	3.458	mg/L	0.20	98.8	90	110			
Phosphorus, Orthophosphate (As P)	4.793	mg/L	0.50	95.9	90	110			
Sulfate	9.960	mg/L	0.50	99.6	90	110			
Sample ID: LCS 12/17/07		*LCS*			Batch ID:	**R26586**	Analysis Date:	12/18/2007 7:16:00 AM	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: LCS 12/17/07		*LCS*			Batch ID:	**R26586**	Analysis Date:		12/18/2007 7:16:00 AM
Fluoride	0.5806	mg/L	0.10	116	90	110			S
Chloride	5.268	mg/L	0.10	105	90	110			
Nitrate (As N)+Nitrite (As N)	3.692	mg/L	0.20	105	90	110			
Phosphorus, Orthophosphate (As P)	5.255	mg/L	0.50	105	90	110			
Sulfate	10.55	mg/L	0.50	106	90	110			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 6010B: Total Recoverable Metals									
Sample ID: MB-14537		*MBLK*			Batch ID:	**14537**	Analysis Date:	12/4/2007 2:43:13 PM	
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.010						
Cadmium	ND	mg/L	0.0020						
Calcium	ND	mg/L	0.50						
Chromium	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Magnesium	ND	mg/L	0.50						
Manganese	ND	mg/L	0.0020						
Potassium	ND	mg/L	1.0						
Selenium	ND	mg/L	0.050						
Silver	ND	mg/L	0.0050						
Sodium	ND	mg/L	0.50						
Uranium	ND	mg/L	0.10						
Zinc	ND	mg/L	0.020						
Sample ID: MB-14537		*MBLK*			Batch ID:	**14537**	Analysis Date:	12/7/2007 12:22:59 PM	
Copper	ND	mg/L	0.0060						
Zinc	ND	mg/L	0.020						
Sample ID: MB-14575		*MBLK*			Batch ID:	**14575**	Analysis Date:	12/10/2007 5:00:51 PM	
[illegible]ium	ND	mg/L	0.010						
Cadmium	ND	mg/L	0.0020						
Calcium	ND	mg/L	0.50						
Chromium	ND	mg/L	0.0060						
Copper	ND	mg/L	0.0060						
Lead	ND	mg/L	0.0050						
Magnesium	ND	mg/L	0.50						
Manganese	ND	mg/L	0.0020						
Potassium	ND	mg/L	1.0						
Silver	ND	mg/L	0.0050						
Sodium	ND	mg/L	0.50						
Zinc	ND	mg/L	0.020						
Sample ID: LCS-14537		*LCS*			Batch ID:	**14537**	Analysis Date:	12/4/2007 2:46:18 PM	
Arsenic	0.5153	mg/L	0.020	103	80	120			
Barium	0.4883	mg/L	0.010	97.7	80	120			
Cadmium	0.4914	mg/L	0.0020	98.3	80	120			
Calcium	49.74	mg/L	0.50	99.5	80	120			
Chromium	0.4930	mg/L	0.0060	98.6	80	120			
Lead	0.4864	mg/L	0.0050	97.3	80	120			
Magnesium	50.03	mg/L	0.50	100	80	120			
Manganese	0.4889	mg/L	0.0020	97.8	80	120			
Potassium	52.72	mg/L	1.0	105	80	120			
Selenium	0.4904	mg/L	0.050	98.1	80	120			
Silver	0.5037	mg/L	0.0050	101	80	120			
Sodium	52.75	mg/L	0.50	105	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 6010B: Total Recoverable Metals									
Sample ID: LCS-14537		*LCS*			Batch ID:	**14537**	Analysis Date:	12/4/2007 2:46:18 PM	
Uranium	0.4453	mg/L	0.10	89.1	80	120			
Zinc	0.4908	mg/L	0.020	98.2	80	120			
Sample ID: LCS-14537		*LCS*			Batch ID:	**14537**	Analysis Date:	12/7/2007 12:25:59 PM	
Copper	0.5327	mg/L	0.0060	107	80	120			
Zinc	0.4807	mg/L	0.020	96.1	80	120			
Sample ID: LCS-14575		*LCS*			Batch ID:	**14575**	Analysis Date:	12/10/2007 5:03:55 PM	
Barium	0.4876	mg/L	0.010	97.5	80	120			
Cadmium	0.4986	mg/L	0.0020	99.7	80	120			
Calcium	51.71	mg/L	0.50	103	80	120			
Chromium	0.4976	mg/L	0.0060	99.5	80	120			
Copper	0.5129	mg/L	0.0060	103	80	120			
Lead	0.4877	mg/L	0.0050	97.5	80	120			
Magnesium	52.67	mg/L	0.50	105	80	120			
Manganese	0.4903	mg/L	0.0020	98.1	80	120			
Potassium	56.24	mg/L	1.0	112	80	120			
Silver	0.5066	mg/L	0.0050	101	80	120			
Sodium	54.84	mg/L	0.50	110	80	120			
	0.4809	mg/L	0.020	96.2	80	120			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Method: EPA Method 8260B: VOLATILES
Sample ID: 5mL rb *MBLK* Batch ID: **R26402** Analysis Date: 12/6/2007 11:33:13 AM

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26402**	Analysis Date:	12/6/2007 11:33:13 AM	
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26434**	Analysis Date:	12/7/2007 11:17:24 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Method: **EPA Method 8260B: VOLATILES**
Sample ID: **5mL rb** *MBLK* Batch ID: **R26434** Analysis Date: 12/7/2007 11:17:24 AM

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
[illegible] Dichloropropane	ND	µg/L	1.0						
[illegible] Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26434**	Analysis Date:	12/7/2007 11:17:24 AM	
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26460**	Analysis Date:	12/10/2007 8:31:36 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
[illegible]moform	ND	µg/L	1.0						
[illegible]omomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Company
Project: Evap. Ponds #1 through #8-4 Qtr 2007 **Work Order:** 0711469

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R26460**	Analysis Date:	12/10/2007 8:31:36 AM	
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1-Trichloroethane	ND	µg/L	1.0						
1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26402**	Analysis Date:	12/6/2007 1:44:35 PM	
Benzene	19.82	µg/L	1.0	99.1	72.4	126			
Toluene	20.06	µg/L	1.0	100	79.2	115			
Chlorobenzene	19.39	µg/L	1.0	96.9	83.1	111			
1,1-Dichloroethene	19.83	µg/L	1.0	99.2	81.4	122			
Trichloroethene (TCE)	15.37	µg/L	1.0	76.8	64.4	118			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26434**	Analysis Date:	12/7/2007 10:49:10 AM	
Benzene	18.78	µg/L	1.0	93.9	72.4	126			
Toluene	20.31	µg/L	1.0	102	79.2	115			
Chlorobenzene	19.97	µg/L	1.0	99.9	83.1	111			
1,1-Dichloroethene	19.77	µg/L	1.0	98.8	81.4	122			
Trichloroethene (TCE)	15.20	µg/L	1.0	76.0	64.4	118			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26460**	Analysis Date:	12/10/2007 10:11:15 AM	
Benzene	18.85	µg/L	1.0	94.2	72.4	126			
Toluene	19.28	µg/L	1.0	96.4	79.2	115			
Chlorobenzene	19.01	µg/L	1.0	95.0	83.1	111			
1,1-Dichloroethene	19.12	µg/L	1.0	95.6	81.4	122			
Trichloroethene (TCE)	15.38	µg/L	1.0	76.9	64.4	118			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **GIANTREFIN** Date Received: **11/29/2007**

Work Order Number **0711469** Received by: TLS

Sample ID labels checked by TJ (Initials)

Checklist completed by: _____ (Signature) 11/29/07 (Date)

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
ıter - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Ponds #1 Through #8 - 4 Qtr. 2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 4/H 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl2	Preservative HNO3	Preservative	HEAL No. 0711469	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	[redacted] Metals WRCC Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Gen Chem	BOD - COD	E. coli Bacteria Enumerated		Air Bubbles or Headspace (Y or N)
11-29-07	0830	Water	Pond #1					-1								X			X		X	X	X		
"	0850	"	Pond #2					-2								X			X		X	X	X		
"	0910	"	Pond #3					-3								X			X		X	X	X		
"	0930	"	Pond #4					-4								X			X		X	X	X		
"	0950	"	Pond #5					-5								X			X		X	X	X		
"	1010	"	Pond #6					-6								X			X		X	X	X		
"	1030	"	Pond #7					-7								X			X		X	X	X		
"	1050	"	Pond #8					-8								X			X		X	X	X		

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-29-07	1340	Steve Morris	Tonya Shomin 11/29/07 1340
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Gen Chem = Cations, anions, pH, and Conductivity

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, December 26, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 12-4-2007

Order No.: 0712024

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 12/4/2007 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

ACCREDITED IN ACCORDANCE WITH nelac

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505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

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127 Eastgate Drive • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	Analyte Detected In Method Blank
E	Result Is Estimated
H	Analyzed Out of Hold Time
N	Tentatively Identified Compound
S	Subcontracted
1-9	See Footnote

HALL ENVIRONMENTAL
attn: **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0712024**
Order: **07120122 HAL03** Receipt: **12-06-07**

William P. Blake: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0712024-01A POND 2 INLET*** Collected: *12-04-07 8:45:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07120122-001A		EPA 410.1 Chemical Oxygen Demand					By:	NJL		
WCOD07073	WC.2007.3252.21	C-004	Chemical Oxygen Demand	2660	mg/L	10	10		12-18-07	12-20-07

Sample: ***0712024-01B POND 2 INLET*** Collected: *12-04-07 8:45:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07120122-002A		EPA 405.1 Biochemical Oxygen Demand					By:	NJL		
BOD07146	WC.2007.3169.5	10-26-4	Biochemical Oxygen Demand	783	mg/L	1	2		12-06-07	12-11-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

REPRODUCTION OF THIS REPORT IN LESS THAN FULL REQUIRES THE WRITTEN CONSENT OF AAL.
THIS REPORT MAY NOT BE USED IN ANY MANNER BY THE CLIENT OR ANY OTHER THIRD PARTY TO CLAIM PRODUCT ENDORSEMENT BY THE NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date Received: 12/4/2007

Work Order Number 0712024

Received by: AT

Checklist completed by: _____ Signature 12/4/07 Date

Sample ID labels checked by TS Initials

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	6°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 12-4-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 5° on ice

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
12-4-07	0845	H_2O	Pond 2 Inlet					0712024 1													X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
12-4-07	1400	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 12/4/07 1400

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Wednesday, January 02, 2008

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 12-20-2007

Order No.: 0712329

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 12/21/2007 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

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505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

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127 Eastgate Drive • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result Is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0712329**
Order: **07120647** **HAL03** Receipt: **12-21-07**

Tamara Pacheco for
William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0712329-01A POND 2 INLET*** Collected: *12-20-07 11:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07120647-001A		**EPA 410.1 Chemical Oxygen Demand**					By:	NJL		
WCOD07077	WC.2007.3312.3	C-004	Chemical Oxygen Demand	2170	mg/L	10	10	1	12-27-07	12-28-07

Sample: ***0712329-01B POND 2 INLET*** Collected: *12-20-07 11:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07120647-002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07155	WC.2007.3294.16	10-26-4	Biochemical Oxygen Demand	667	mg/L	1	2		12-21-07	12-28-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 12/28/2007 11:38:43 AM

REPRODUCTION OF THIS REPORT IN LESS THAN FULL REQUIRES THE WRITTEN CONSENT OF AAL.
THIS REPORT MAY NOT BE USED IN ANY MANNER BY THE CLIENT OR ANY OTHER THIRD PARTY TO CLAIM
PRODUCT ENDORSEMENT BY THE NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **GIANTREFIN** Date Received: **12/21/2007**

Work Order Number **0712329** Received by: AT

Sample ID labels checked by AT
Initials

Checklist completed by: 12/21/07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☑		Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	3°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

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4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 12-20-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 3.0 on ice

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
12-20-07	1130	H_2O	Pond 2 Inlet					0712329-1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
12-21-07	1910	Steve Morris	12/21/07
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1010

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Wednesday, January 02, 2008

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 12-20-2007

Order No.: 0712329

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 12/21/2007 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

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Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn: **ANDY FREEMAN**
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0712329**
Order: **07120647** **HAL03** Receipt: **12-21-07**

Tamara Pacheco for
William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0712329-01A POND 2 INLET*** Collected: *12-20-07 11:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07120647-001A		**EPA 410.1 Chemical Oxygen Demand**					By:	NJL		
WCOD07077	WC.2007.3312.3	C-004	Chemical Oxygen Demand	2170	mg/L	10	10	1	12-27-07	12-28-07

Sample: ***0712329-01B POND 2 INLET*** Collected: *12-20-07 11:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07120647-002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07155	WC.2007.3294.16	10-26-4	Biochemical Oxygen Demand	667	mg/L	1	2		12-21-07	12-28-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 12/28/2007 11:38:43 AM

REPRODUCTION OF THIS REPORT IN LESS THAN FULL REQUIRES THE WRITTEN CONSENT OF AAL.
THIS REPORT MAY NOT BE USED IN ANY MANNER BY THE CLIENT OR ANY OTHER THIRD PARTY TO CLAIM
PRODUCT ENDORSEMENT BY THE NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM.

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name **GIANTREFIN** Date Received: **12/21/2007**

Work Order Number **0712329** Received by: AT

Sample ID labels checked by AT
Initials

Checklist completed by: 12/21/07
Signature Date

Matrix Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	3°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA/QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond #2 Inlet 12-20-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 3° on ice

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
12-20-07	1130	H_2O	Pond 2 Inlet					0712329-1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
12-21-07	1910	Steve Morris	12/21/07
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1010

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, December 27, 2007

Jim Lieb
Giant Refining Company
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Inlet 12/13/2007

Order No.: 0712185

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 12/13/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Explanation of codes	
B	*Analyte Detected in Method Blank*
E	*Result Is Estimated*
H	*Analyzed Out of Hold Time*
N	*Tentatively Identified Compound*
S	*Subcontracted*
1-9	*See Footnote*

HALL ENVIRONMENTAL
attn ANDY FREEMAN
4901 HAWKINS NE, SUITE D
ALBUQUERQUE NM 87109-4372

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: **HALL ENVIRONMENTAL**
Project: **0712185**
Order: **07120442** **HAL03** Receipt: **12-14-07**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0712185-01A POND 2 INLET*** Collected: *12-13-07 10:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07120442-001A		**EPA 410.1 Chemical Oxygen Demand**					By:	NJL		
WCOD07075	WC.2007.3255.22	C-004	Chemical Oxygen Demand	2170	mg/L	10	10		12-18-07	12-20-07

Sample: ***0712185-01B POND 2 INLET*** Collected: *12-13-07 10:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
07120442-002A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD07153	WC.2007.3244.14	10-26-4	Biochemical Oxygen Demand	656	mg/L	1	2		12-14-07	12-19-07

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or foonotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

Report Date: 12/26/2007 2:06:16 PM

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date Received: 12/13/2007

Work Order Number 0712185 | Received by: AT

Sample ID labels checked by TS (Initials)

Checklist completed by: Jamey Shamin (Signature) 12/13/07 (Date)

Matrix | Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
/ater - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package:
Std ☐ Level 4 ☐
Other:

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 9210

Project Name: Evap. Pond #2 dnbt 12-13-2007
Project #:
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: 4° on ice

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0712185	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD	COD			Air Bubbles or Headspace (Y or N)
12-13-07	1030	H_2O	Pond 2 dnbt	2				1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
12-13-07	1340	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 12/13/07 1340

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, December 11, 2007

Jim Lieb
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Semi Annual Pond 1 In & Boiler Water to Pond 2

Order No.: 0711269

Dear Jim Lieb:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 11/15/2007 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
505.345.3975 ■ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *11-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 1 Inlet
Lab Order:	0711269	**Collection Date:**	11/13/2007 11:30:00 AM
Project:	Semi Annual Pond 1 In & Boiler Water to Pond	**Date Received:**	11/15/2007
Lab ID:	0711269-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	1100	30		mg/L	10	11/20/2007 3:29:08 AM
Motor Oil Range Organics (MRO)	ND	150		mg/L	10	11/20/2007 3:29:08 AM
Surr: DNOP	119	58-140		%REC	10	11/20/2007 3:29:08 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	18	0.50		mg/L	10	11/26/2007 12:39:20 PM
Surr: BFB	158	79.2-121	S	%REC	10	11/26/2007 12:39:20 PM
EPA METHOD 300.0: ANIONS						Analyst: **SMP**
Fluoride	530	20		mg/L	200	12/5/2007 12:57:49 PM
Chloride	240	2.0		mg/L	20	11/26/2007 1:56:45 PM
Nitrate (As N)+Nitrite (As N)	4.1	1.0		mg/L	5	12/5/2007 3:51:54 PM
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	11/16/2007 3:48:14 PM
Sulfate	880	10		mg/L	20	11/26/2007 1:56:45 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
Acenaphthene	ND	10		µg/L	1	11/20/2007
Acenaphthylene	ND	10		µg/L	1	11/20/2007
Aniline	370	50		µg/L	5	11/20/2007
Anthracene	ND	10		µg/L	1	11/20/2007
Azobenzene	ND	10		µg/L	1	11/20/2007
Benz(a)anthracene	ND	10		µg/L	1	11/20/2007
Benzo(a)pyrene	ND	10		µg/L	1	11/20/2007
Benzo(b)fluoranthene	ND	10		µg/L	1	11/20/2007
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/20/2007
Benzo(k)fluoranthene	ND	10		µg/L	1	11/20/2007
Benzoic acid	96	20		µg/L	1	11/20/2007
Benzyl alcohol	ND	10		µg/L	1	11/20/2007
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/20/2007
Bis(2-chloroethyl)ether	ND	10		µg/L	1	11/20/2007
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	11/20/2007
Bis(2-ethylhexyl)phthalate	10	10		µg/L	1	11/20/2007
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/20/2007
Butyl benzyl phthalate	ND	10		µg/L	1	11/20/2007
Carbazole	22	10		µg/L	1	11/20/2007
4-Chloro-3-methylphenol	ND	10		µg/L	1	11/20/2007
4-Chloroaniline	ND	10		µg/L	1	11/20/2007
2-Chloronaphthalene	ND	10		µg/L	1	11/20/2007
2-Chlorophenol	ND	10		µg/L	1	11/20/2007
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	11/20/2007
Chrysene	ND	10		µg/L	1	11/20/2007
Di-n-butyl phthalate	ND	10		µg/L	1	11/20/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *11-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 1 Inlet
Lab Order:	0711269	**Collection Date:**	11/13/2007 11:30:00 AM
Project:	Semi Annual Pond 1 In & Boiler Water to Pond	**Date Received:**	11/15/2007
Lab ID:	0711269-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: JDC
Di-n-octyl phthalate	ND	10		µg/L	1	11/20/2007
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/20/2007
Dibenzofuran	32	10		µg/L	1	11/20/2007
1,2-Dichlorobenzene	ND	10		µg/L	1	11/20/2007
1,3-Dichlorobenzene	ND	10		µg/L	1	11/20/2007
1,4-Dichlorobenzene	ND	10		µg/L	1	11/20/2007
3,3'-Dichlorobenzidine	ND	10		µg/L	1	11/20/2007
Diethyl phthalate	ND	10		µg/L	1	11/20/2007
Dimethyl phthalate	ND	10		µg/L	1	11/20/2007
2,4-Dichlorophenol	ND	10		µg/L	1	11/20/2007
2,4-Dimethylphenol	60	10		µg/L	1	11/20/2007
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	11/20/2007
2,4-Dinitrophenol	ND	10		µg/L	1	11/20/2007
2,4-Dinitrotoluene	ND	10		µg/L	1	11/20/2007
2,6-Dinitrotoluene	ND	10		µg/L	1	11/20/2007
Fluoranthene	ND	10		µg/L	1	11/20/2007
Fluorene	93	10		µg/L	1	11/20/2007
Hexachlorobenzene	ND	10		µg/L	1	11/20/2007
Hexachlorobutadiene	ND	10		µg/L	1	11/20/2007
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/20/2007
Hexachloroethane	ND	10		µg/L	1	11/20/2007
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/20/2007
Isophorone	ND	10		µg/L	1	11/20/2007
2-Methylnaphthalene	530	50		µg/L	5	11/20/2007
2-Methylphenol	930	50		µg/L	5	11/20/2007
3+4-Methylphenol	1600	100		µg/L	10	11/20/2007
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/20/2007
N-Nitrosodimethylamine	ND	10		µg/L	1	11/20/2007
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/20/2007
Naphthalene	160	10		µg/L	1	11/20/2007
2-Nitroaniline	ND	10		µg/L	1	11/20/2007
3-Nitroaniline	ND	10		µg/L	1	11/20/2007
4-Nitroaniline	ND	10		µg/L	1	11/20/2007
Nitrobenzene	ND	10		µg/L	1	11/20/2007
2-Nitrophenol	ND	10		µg/L	1	11/20/2007
4-Nitrophenol	ND	10		µg/L	1	11/20/2007
Pentachlorophenol	ND	10		µg/L	1	11/20/2007
Phenanthrene	200	10		µg/L	1	11/20/2007
Phenol	3800	500		µg/L	50	11/20/2007
Pyrene	31	10		µg/L	1	11/20/2007
Pyridine	12	10		µg/L	1	11/20/2007
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/20/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *11-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 1 Inlet
Lab Order:	0711269	**Collection Date:**	11/13/2007 11:30:00 AM
Project:	Semi Annual Pond 1 In & Boiler Water to Pond	**Date Received:**	11/15/2007
Lab ID:	0711269-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **JDC**
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/20/2007
2,4,6-Trichlorophenol	ND	10		µg/L	1	11/20/2007
Surr: 2,4,6-Tribromophenol	60.8	16.6-150		%REC	1	11/20/2007
Surr: 2-Fluorobiphenyl	89.8	19.6-134		%REC	1	11/20/2007
Surr: 2-Fluorophenol	34.2	9.54-113		%REC	1	11/20/2007
Surr: 4-Terphenyl-d14	85.3	22.7-145		%REC	1	11/20/2007
Surr: Nitrobenzene-d5	107	14.6-134		%REC	1	11/20/2007
Surr: Phenol-d5	29.3	10.7-80.3		%REC	1	11/20/2007
EPA METHOD 8260B: VOLATILES						Analyst: **SMP**
Benzene	63	10		µg/L	10	11/21/2007 9:01:11 AM
Toluene	220	10		µg/L	10	11/21/2007 9:01:11 AM
Ethylbenzene	47	10		µg/L	10	11/21/2007 9:01:11 AM
Methyl tert-butyl ether (MTBE)	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,2,4-Trimethylbenzene	170	10		µg/L	10	11/21/2007 9:01:11 AM
1,3,5-Trimethylbenzene	45	10		µg/L	10	11/21/2007 9:01:11 AM
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Naphthalene	260	20		µg/L	10	11/21/2007 9:01:11 AM
1-Methylnaphthalene	570	40		µg/L	10	11/21/2007 9:01:11 AM
2-Methylnaphthalene	900	40		µg/L	10	11/21/2007 9:01:11 AM
Acetone	ND	100		µg/L	10	11/21/2007 9:01:11 AM
Bromobenzene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Bromochloromethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Bromodichloromethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Bromoform	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Bromomethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
2-Butanone	160	100		µg/L	10	11/21/2007 9:01:11 AM
Carbon disulfide	ND	100		µg/L	10	11/21/2007 9:01:11 AM
Carbon Tetrachloride	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Chlorobenzene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Chloroethane	ND	20		µg/L	10	11/21/2007 9:01:11 AM
Chloroform	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Chloromethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
2-Chlorotoluene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
4-Chlorotoluene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
cis-1,2-DCE	ND	10		µg/L	10	11/21/2007 9:01:11 AM
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/21/2007 9:01:11 AM
Dibromochloromethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Dibromomethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,2-Dichlorobenzene	ND	10		µg/L	10	11/21/2007 9:01:11 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *11-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 1 Inlet
Lab Order:	0711269	**Collection Date:**	11/13/2007 11:30:00 AM
Project:	Semi Annual Pond 1 In & Boiler Water to Pond	**Date Received:**	11/15/2007
Lab ID:	0711269-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **SMP**
1,3-Dichlorobenzene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,4-Dichlorobenzene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Dichlorodifluoromethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,1-Dichloroethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,1-Dichloroethene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,2-Dichloropropane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,3-Dichloropropane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
2,2-Dichloropropane	ND	20		µg/L	10	11/21/2007 9:01:11 AM
1,1-Dichloropropene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Hexachlorobutadiene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
2-Hexanone	ND	100		µg/L	10	11/21/2007 9:01:11 AM
Isopropylbenzene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
4-Isopropyltoluene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
4-Methyl-2-pentanone	ND	100		µg/L	10	11/21/2007 9:01:11 AM
Methylene Chloride	ND	30		µg/L	10	11/21/2007 9:01:11 AM
n-Butylbenzene	37	10		µg/L	10	11/21/2007 9:01:11 AM
n-Propylbenzene	18	10		µg/L	10	11/21/2007 9:01:11 AM
sec-Butylbenzene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Styrene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
tert-Butylbenzene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,1,2,2-Tetrachloroethane	ND	20		µg/L	10	11/21/2007 9:01:11 AM
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/21/2007 9:01:11 AM
trans-1,2-DCE	ND	10		µg/L	10	11/21/2007 9:01:11 AM
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,1,1-Trichloroethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,1,2-Trichloroethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Trichloroethene (TCE)	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Trichlorofluoromethane	ND	10		µg/L	10	11/21/2007 9:01:11 AM
1,2,3-Trichloropropane	ND	20		µg/L	10	11/21/2007 9:01:11 AM
Vinyl chloride	ND	10		µg/L	10	11/21/2007 9:01:11 AM
Xylenes, Total	300	15		µg/L	10	11/21/2007 9:01:11 AM
Surr: 1,2-Dichloroethane-d4	92.6	68.1-123		%REC	10	11/21/2007 9:01:11 AM
Surr: 4-Bromofluorobenzene	91.9	53.2-145		%REC	10	11/21/2007 9:01:11 AM
Surr: Dibromofluoromethane	90.8	68.5-119		%REC	10	11/21/2007 9:01:11 AM
Surr: Toluene-d8	89.2	64-131		%REC	10	11/21/2007 9:01:11 AM
EPA METHOD 9067: TOTAL PHENOLICS						Analyst: **JAT**
Phenolics, Total Recoverable	23000	2.5		µg/L	1	12/7/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *11-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 1 Inlet
Lab Order:	0711269	**Collection Date:**	11/13/2007 11:30:00 AM
Project:	Semi Annual Pond 1 In & Boiler Water to Pond	**Date Received:**	11/15/2007
Lab ID:	0711269-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	6300	0.010		µmhos/cm	1	11/16/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	8.16	0.1		pH units	1	11/16/2007

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *11-Dec-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Boilers to EP-2
Lab Order:	0711269	**Collection Date:**	11/13/2007 12:15:00 PM
Project:	Semi Annual Pond 1 In & Boiler Water to Pond	**Date Received:**	11/15/2007
Lab ID:	0711269-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **KS**
Fluoride	ND	5.0		mg/L	50	11/26/2007 2:14:09 PM
Chloride	32000	100		mg/L	1000	11/26/2007 4:33:27 PM
Nitrate (As N)+Nitrite (As N)	ND	40		mg/L	200	12/5/2007 4:09:18 PM
Phosphorus, Orthophosphate (As P)	ND	25	H	mg/L	50	11/26/2007 2:14:09 PM
Sulfate	1300	25		mg/L	50	11/26/2007 2:14:09 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **LMM**
Specific Conductance	99000	0.10		µmhos/cm	10	11/16/2007
SM4500-H+B: PH						Analyst: **LMM**
pH	7.17	0.1		pH units	1	11/16/2007

Qualifiers:

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

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0711269
Lab ID: C07110888-001
Client Sample ID: Pond 1 Inlet

Report Date: 12/07/07
Collection Date: 11/13/07 11:30
DateReceived: 11/20/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Calcium	48.6	mg/L		0.5		SW6010B	11/28/07 18:32 / cp
Magnesium	11.3	mg/L		0.5		SW6010B	11/28/07 18:32 / cp
Potassium	99.0	mg/L		0.5		SW6010B	11/28/07 17:10 / cp
Sodium	822	mg/L	D	9		SW6010B	11/28/07 17:10 / cp
METALS - TOTAL							
Arsenic	0.020	mg/L	D	0.002		SW6020	11/26/07 13:24 / sml
Barium	0.7	mg/L		0.1		SW6020	11/26/07 13:24 / sml
Cadmium	ND	mg/L		0.01		SW6020	11/26/07 13:24 / sml
Chromium	ND	mg/L		0.05		SW6020	11/26/07 13:24 / sml
Copper	0.11	mg/L		0.01		SW6020	11/26/07 13:24 / sml
Iron	35.9	mg/L	D	0.1		SW6010B	11/28/07 17:10 / cp
Lead	ND	mg/L		0.05		SW6020	11/26/07 13:24 / sml
Manganese	0.90	mg/L		0.01		SW6020	11/26/07 13:24 / sml
Mercury	0.001	mg/L		0.001		SW6020	11/26/07 13:24 / sml
Selenium	0.018	mg/L	D	0.009		SW6020	11/26/07 13:24 / sml
Silver	ND	mg/L		0.01		SW6020	11/26/07 13:24 / sml
Uranium	ND	mg/L	D	0.002		SW6020	11/26/07 13:24 / sml
Zinc	5.00	mg/L		0.01		SW6020	11/26/07 13:24 / sml

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0711269
Lab ID: C07110888-002
Client Sample ID: Boilers to EP-2

Report Date: 12/07/07
Collection Date: 11/13/07 12:15
DateReceived: 11/20/07
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS							
Calcium	4120	mg/L	D	0.6		SW6010B	11/28/07 17:13 / cp
Magnesium	627	mg/L		0.5		SW6010B	11/28/07 17:13 / cp
Potassium	122	mg/L		0.5		SW6010B	11/28/07 17:13 / cp
Sodium	18100	mg/L	D	200		SW6010B	12/03/07 16:49 / cp

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
D - RL increased due to sample matrix interference.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
Project: 0711269

Report Date: 12/07/07
Work Order: C07110888

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B									Batch: 16918
Sample ID: MB-16918	Method Blank				Run: ICP2-C_071128A				11/28/07 15:14
Calcium	ND	mg/L	0.06						
Iron	ND	mg/L	0.010						
Magnesium	ND	mg/L	0.04						
Potassium	0.04	mg/L	0.03						
Sodium	ND	mg/L	0.9						
Sample ID: LCS-16918	Laboratory Control Sample				Run: ICP2-C_071128A				11/28/07 15:32
Calcium	47.8	mg/L	0.50	96	85	115			
Iron	0.520	mg/L	0.030	104	85	115			
Magnesium	46.7	mg/L	0.50	93	85	115			
Potassium	51.2	mg/L	0.50	102	85	115			
Sodium	50.8	mg/L	0.95	102	85	115			
Sample ID: C07110888-002AMS	Sample Matrix Spike				Run: ICP2-C_071128A				11/28/07 18:39
Calcium	4020	mg/L	0.50		75	125			A
Iron	0.509	mg/L	0.030	91	75	125			
Magnesium	601	mg/L	0.50		75	125			A
Potassium	182	mg/L	0.50	88	75	125			
Sodium	17300	mg/L	0.95		75	125			A
Sample ID: C07110888-002AMSD	Sample Matrix Spike Duplicate				Run: ICP2-C_071128A				11/28/07 18:42
Calcium	4080	mg/L	0.50		75	125	1.5	20	A
Iron	0.522	mg/L	0.030	94	75	125	2.5	20	
Magnesium	606	mg/L	0.50		75	125	0.8	20	A
Potassium	184	mg/L	0.50	93	75	125	1.4	20	
Sodium	17500	mg/L	0.95		75	125	0.9	20	A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

A - The analyte level was greater than four times the spike level. In accordance with the method % recovery is not calculated.

QA/QC Summary Report

Client: Hall Environmental
Project: 0711269

Report Date: 12/07/07
Work Order: C07110888

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020									Batch: 16918
Sample ID: MB-16918	Method Blank				Run: ICPMS1-C_071126A				11/26/07 12:55
Arsenic	ND	mg/L	9E-05						
Barium	ND	mg/L	0.0002						
Cadmium	0.0006	mg/L	0.0004						
Chromium	ND	mg/L	0.0003						
Copper	0.0002	mg/L	0.0001						
Lead	ND	mg/L	9E-05						
Manganese	0.0002	mg/L	0.0001						
Mercury	ND	mg/L	6E-05						
Selenium	0.0008	mg/L	0.0004						
Silver	ND	mg/L	0.0002						
Uranium	ND	mg/L	8E-05						
Zinc	0.003	mg/L	0.0004						
Sample ID: LCS-16918	Laboratory Control Sample				Run: ICPMS1-C_071126A				11/26/07 13:10
Arsenic	0.535	mg/L	0.0010	107	90	110			
Barium	0.543	mg/L	0.10	109	90	110			
Cadmium	0.526	mg/L	0.010	105	90	110			
Chromium	0.538	mg/L	0.050	108	90	110			
Copper	0.533	mg/L	0.010	107	90	110			
Lead	0.542	mg/L	0.050	108	90	110			
Manganese	0.552	mg/L	0.010	110	90	110			
Selenium	0.538	mg/L	0.0035	107	90	110			
Silver	0.212	mg/L	0.010	106	90	110			
Uranium	0.532	mg/L	0.00076	106	90	110			
Zinc	0.562	mg/L	0.010	112	90	110			S
Sample ID: C07110884-001AMS4	Post Digestion Spike				Run: ICPMS1-C_071126A				11/26/07 14:37
Arsenic	0.0710	mg/L	0.0010	142	75	125			S
Barium	0.117	mg/L	0.10	146	75	125			S
Cadmium	0.0703	mg/L	0.010	139	75	125			S
Chromium	0.0715	mg/L	0.050	141	75	125			S
Copper	0.0702	mg/L	0.010	138	75	125			S
Lead	0.0736	mg/L	0.050	147	75	125			S
Manganese	0.0758	mg/L	0.010	143	75	125			S
Mercury	0.00598	mg/L	0.0010	120	75	125			
Selenium	0.143	mg/L	0.0010	280	75	125			S
Silver	0.0309	mg/L	0.010	154	75	125			S
Uranium	0.0748	mg/L	0.00030	147	75	125			S
Zinc	0.107	mg/L	0.010	131	75	125			S

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC Summary Report

Client: Hall Environmental
Project: 0711269

Report Date: 12/07/07
Work Order: C07110888

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020								Batch: 16918	
Sample ID: C07110884-001AMSD4	Post Digestion Spike Duplicate				Run: ICPMS1-C_071126A			11/26/07 14:45	
Arsenic	0.0707	mg/L	0.0010	141	75	125	0.4	20	S
Barium	0.114	mg/L	0.10	140	75	125	2.4	20	S
Cadmium	0.0673	mg/L	0.010	133	75	125	4.3	20	S
Chromium	0.0688	mg/L	0.050	136	75	125	3.9	20	S
Copper	0.0695	mg/L	0.010	136	75	125	1.0	20	S
Lead	0.0705	mg/L	0.050	141	75	125	4.3	20	S
Manganese	0.0734	mg/L	0.010	138	75	125	3.2	20	S
Mercury	0.00577	mg/L	0.0010	115	75	125	3.5	20	
Selenium	0.138	mg/L	0.0010	271	75	125	3.4	20	S
Silver	0.0316	mg/L	0.010	158	75	125	2.3	20	S
Uranium	0.0711	mg/L	0.00030	139	75	125	5.1	20	S
Zinc	0.103	mg/L	0.010	125	75	125	3.1	20	

Qualifiers:

RL - Analyte reporting limit.
S - Spike recovery outside of advisory limits.
ND - Not detected at the reporting limit.

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Semi Annual Pond 1 In & Boiler Water to Pond **Work Order:** 0711269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MBLK 111607A		*MBLK*			Batch ID:	**R26186**	Analysis Date:	11/16/2007 12:54:09 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK 112607A		*MBLK*			Batch ID:	**R26258**	Analysis Date:	11/26/2007 9:35:35 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R26377**	Analysis Date:	12/5/2007 6:27:57 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
nple ID: LCS ST300-07069 1		*LCS*			Batch ID:	**R26186**	Analysis Date:	11/16/2007 2:38:37 PM	
Fluoride	0.5176	mg/L	0.10	104	90	110			
Chloride	4.867	mg/L	0.10	97.3	90	110			
Nitrate (As N)+Nitrite (As N)	3.423	mg/L	0.20	97.8	90	110			
Phosphorus, Orthophosphate (As P)	5.089	mg/L	0.50	102	90	110			
Sulfate	9.971	mg/L	0.50	99.7	90	110			
Sample ID: LCS ST300-07069 1		*LCS*			Batch ID:	**R26258**	Analysis Date:	11/26/2007 9:53:00 AM	
Fluoride	0.4842	mg/L	0.10	96.8	90	110			
Chloride	4.650	mg/L	0.10	93.0	90	110			
Nitrate (As N)+Nitrite (As N)	3.272	mg/L	0.20	93.5	90	110			
Phosphorus, Orthophosphate (As P)	4.644	mg/L	0.50	92.9	90	110			
Sulfate	9.535	mg/L	0.50	95.4	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R26377**	Analysis Date:	12/5/2007 6:45:22 AM	
Fluoride	0.5268	mg/L	0.10	105	90	110			
Chloride	4.879	mg/L	0.10	97.6	90	110			
Nitrate (As N)+Nitrite (As N)	3.461	mg/L	0.20	98.9	90	110			
Phosphorus, Orthophosphate (As P)	5.072	mg/L	0.50	101	90	110			
Sulfate	9.990	mg/L	0.50	99.9	90	110			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Semi Annual Pond 1 In & Boiler Water to Pond **Work Order:** 0711269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 9067: Total Phenolics									
Sample ID: MB-14567		*MBLK*			Batch ID:	**14585**	Analysis Date:		12/7/2007
Phenolics, Total Recoverable	ND	µg/L	2.5						
Sample ID: LCS-14567		*LCS*			Batch ID:	**14585**	Analysis Date:		12/7/2007
Phenolics, Total Recoverable	20.03	µg/L	2.5	100	51.7	133			
Sample ID: LCSD-14567		*LCSD*			Batch ID:	**14585**	Analysis Date:		12/7/2007
Phenolics, Total Recoverable	18.76	µg/L	2.5	93.8	51.7	133	6.56	0	
Method: EPA Method 8015B: Diesel Range									
Sample ID: MB-14430		*MBLK*			Batch ID:	**14430**	Analysis Date:		11/19/2007 12:31:58 PM
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-14430		*LCS*			Batch ID:	**14430**	Analysis Date:		11/19/2007 1:06:39 PM
Diesel Range Organics (DRO)	5.004	mg/L	1.0	100	74	157			
Sample ID: LCSD-14430		*LCSD*			Batch ID:	**14430**	Analysis Date:		11/19/2007 1:41:19 PM
Diesel Range Organics (DRO)	4.800	mg/L	1.0	96.0	74	157	4.17	23	
Method: EPA Method 8015B: Gasoline Range									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R26192**	Analysis Date:		11/21/2007 9:29:58 AM
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 5ML RB-B		*MBLK*			Batch ID:	**R26220**	Analysis Date:		11/26/2007 9:16:40 AM
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R26192**	Analysis Date:		11/22/2007 1:02:56 PM
Gasoline Range Organics (GRO)	0.4562	mg/L	0.050	88.1	80	115			
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R26220**	Analysis Date:		11/26/2007 3:39:29 PM
Gasoline Range Organics (GRO)	0.5266	mg/L	0.050	102	80	115			
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID:	**R26192**	Analysis Date:		11/22/2007 1:32:55 PM
Gasoline Range Organics (GRO)	0.4444	mg/L	0.050	85.8	80	115	2.62	8.39	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Semi Annual Pond 1 In & Boiler Water to Pond **Work Order:** 0711269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-14436		*MBLK*			Batch ID:	**14436**	Analysis Date:		11/20/2007
Acenaphthene	ND	µg/L	10						
Acenaphthylene	ND	µg/L	10						
Aniline	ND	µg/L	10						
Anthracene	ND	µg/L	10						
Azobenzene	ND	µg/L	10						
Benz(a)anthracene	ND	µg/L	10						
Benzo(a)pyrene	ND	µg/L	10						
Benzo(b)fluoranthene	ND	µg/L	10						
Benzo(g,h,i)perylene	ND	µg/L	10						
Benzo(k)fluoranthene	ND	µg/L	10						
Benzoic acid	ND	µg/L	20						
Benzyl alcohol	ND	µg/L	10						
Bis(2-chloroethoxy)methane	ND	µg/L	10						
Bis(2-chloroethyl)ether	ND	µg/L	10						
Bis(2-chloroisopropyl)ether	ND	µg/L	10						
Bis(2-ethylhexyl)phthalate	ND	µg/L	10						
4-Bromophenyl phenyl ether	ND	µg/L	10						
·yl benzyl phthalate	ND	µg/L	10						
›azole	ND	µg/L	10						
4-Chloro-3-methylphenol	ND	µg/L	10						
4-Chloroaniline	ND	µg/L	10						
2-Chloronaphthalene	ND	µg/L	10						
2-Chlorophenol	ND	µg/L	10						
4-Chlorophenyl phenyl ether	ND	µg/L	10						
Chrysene	ND	µg/L	10						
Di-n-butyl phthalate	ND	µg/L	10						
Di-n-octyl phthalate	ND	µg/L	10						
Dibenz(a,h)anthracene	ND	µg/L	10						
Dibenzofuran	ND	µg/L	10						
1,2-Dichlorobenzene	ND	µg/L	10						
1,3-Dichlorobenzene	ND	µg/L	10						
1,4-Dichlorobenzene	ND	µg/L	10						
3,3'-Dichlorobenzidine	ND	µg/L	10						
Diethyl phthalate	ND	µg/L	10						
Dimethyl phthalate	ND	µg/L	10						
2,4-Dichlorophenol	ND	µg/L	10						
2,4-Dimethylphenol	ND	µg/L	10						
4,6-Dinitro-2-methylphenol	ND	µg/L	10						
2,4-Dinitrophenol	ND	µg/L	10						
2,4-Dinitrotoluene	ND	µg/L	10						
2,6-Dinitrotoluene	ND	µg/L	10						
Fluoranthene	ND	µg/L	10						
Fluorene	ND	µg/L	10						
›xachlorobenzene	ND	µg/L	10						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Semi Annual Pond 1 In & Boiler Water to Pond **Work Order:** 0711269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8270C: Semivolatiles									
Sample ID: mb-14436		*MBLK*			Batch ID:	**14436**	Analysis Date:		11/20/2007
Hexachlorobutadiene	ND	µg/L	10						
Hexachlorocyclopentadiene	ND	µg/L	10						
Hexachloroethane	ND	µg/L	10						
Indeno(1,2,3-cd)pyrene	ND	µg/L	10						
Isophorone	ND	µg/L	10						
2-Methylnaphthalene	ND	µg/L	10						
2-Methylphenol	ND	µg/L	10						
3+4-Methylphenol	ND	µg/L	10						
N-Nitrosodi-n-propylamine	ND	µg/L	10						
N-Nitrosodimethylamine	ND	µg/L	10						
N-Nitrosodiphenylamine	ND	µg/L	10						
Naphthalene	ND	µg/L	10						
2-Nitroaniline	ND	µg/L	10						
3-Nitroaniline	ND	µg/L	10						
4-Nitroaniline	ND	µg/L	10						
Nitrobenzene	ND	µg/L	10						
2-Nitrophenol	ND	µg/L	10						
Nitrophenol	ND	µg/L	10						
tachlorophenol	ND	µg/L	10						
Phenanthrene	ND	µg/L	10						
Phenol	ND	µg/L	10						
Pyrene	ND	µg/L	10						
Pyridine	ND	µg/L	10						
1,2,4-Trichlorobenzene	ND	µg/L	10						
2,4,5-Trichlorophenol	ND	µg/L	10						
2,4,6-Trichlorophenol	ND	µg/L	10						
Sample ID: lcsd-14436		*LCS*			Batch ID:	**14436**	Analysis Date:		11/20/2007
Acenaphthene	71.76	µg/L	10	71.8	11	123	0	0	
4-Chloro-3-methylphenol	144.8	µg/L	10	72.4	15.4	119	0	0	
2-Chlorophenol	129.7	µg/L	10	64.8	12.2	122	0	0	
1,4-Dichlorobenzene	53.84	µg/L	10	53.8	16.9	100	0	0	
2,4-Dinitrotoluene	73.12	µg/L	10	73.1	13	138	0	0	
N-Nitrosodi-n-propylamine	70.40	µg/L	10	70.4	9.93	122	0	0	
4-Nitrophenol	68.46	µg/L	10	34.2	12.5	87.4	0	0	
Pentachlorophenol	126.6	µg/L	10	61.0	3.55	114	0	0	
Phenol	73.76	µg/L	10	36.9	7.53	73.1	0	0	
Pyrene	76.66	µg/L	10	76.7	12.6	140	0	0	
1,2,4-Trichlorobenzene	49.60	µg/L	10	49.6	17.4	98.7	0	0	

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Semi Annual Pond 1 In & Boiler Water to Pond **Work Order:** 0711269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Method: **EPA Method 8260B: VOLATILES**
Sample ID: **5ml rb** *MBLK* Batch ID: **R26129** Analysis Date: 11/19/2007 8:08:18 AM

Benzene	ND	µg/L	1.0
Toluene	ND	µg/L	1.0
Ethylbenzene	ND	µg/L	1.0
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0
1,2,4-Trimethylbenzene	ND	µg/L	1.0
1,3,5-Trimethylbenzene	ND	µg/L	1.0
1,2-Dichloroethane (EDC)	ND	µg/L	1.0
1,2-Dibromoethane (EDB)	ND	µg/L	1.0
Naphthalene	ND	µg/L	2.0
1-Methylnaphthalene	ND	µg/L	4.0
2-Methylnaphthalene	ND	µg/L	4.0
Acetone	ND	µg/L	10
Bromobenzene	ND	µg/L	1.0
Bromochloromethane	ND	µg/L	1.0
Bromodichloromethane	ND	µg/L	1.0
Bromoform	ND	µg/L	1.0
Bromomethane	ND	µg/L	1.0
utanone	ND	µg/L	10
oon disulfide	ND	µg/L	10
Carbon Tetrachloride	ND	µg/L	1.0
Chlorobenzene	ND	µg/L	1.0
Chloroethane	ND	µg/L	2.0
Chloroform	ND	µg/L	1.0
Chloromethane	ND	µg/L	1.0
2-Chlorotoluene	ND	µg/L	1.0
4-Chlorotoluene	ND	µg/L	1.0
cis-1,2-DCE	ND	µg/L	1.0
cis-1,3-Dichloropropene	ND	µg/L	1.0
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0
Dibromochloromethane	ND	µg/L	1.0
Dibromomethane	ND	µg/L	1.0
1,2-Dichlorobenzene	ND	µg/L	1.0
1,3-Dichlorobenzene	ND	µg/L	1.0
1,4-Dichlorobenzene	ND	µg/L	1.0
Dichlorodifluoromethane	ND	µg/L	1.0
1,1-Dichloroethane	ND	µg/L	1.0
1,1-Dichloroethene	ND	µg/L	1.0
1,2-Dichloropropane	ND	µg/L	1.0
1,3-Dichloropropane	ND	µg/L	1.0
2,2-Dichloropropane	ND	µg/L	2.0
1,1-Dichloropropene	ND	µg/L	1.0
Hexachlorobutadiene	ND	µg/L	1.0
2-Hexanone	ND	µg/L	10
oropylbenzene	ND	µg/L	1.0

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Semi Annual Pond 1 In & Boiler Water to Pond **Work Order:** 0711269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID:	R26129	Analysis Date:	11/19/2007 8:08:18 AM	
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 5ml rb		*MBLK*			Batch ID:	R26183	Analysis Date:	11/21/2007 6:38:17 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromochloromethane	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Semi Annual Pond 1 In & Boiler Water to Pond **Work Order:** 0711269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R26183**	Analysis Date:	11/21/2007 6:38:17 AM	
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
-Dichloropropane	ND	µg/L	1.0						
,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
''nyl chloride	ND	µg/L	1.0						

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Semi Annual Pond 1 In & Boiler Water to Pond **Work Order:** 0711269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R26183**	Analysis Date:	11/21/2007 6:38:17 AM	
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26129**	Analysis Date:	11/19/2007 9:05:31 AM	
Benzene	21.58	µg/L	1.0	108	72.4	126			
Toluene	18.63	µg/L	1.0	93.1	79.2	115			
Chlorobenzene	22.21	µg/L	1.0	111	83.1	111			S
1,1-Dichloroethene	23.09	µg/L	1.0	115	81.4	122			
Trichloroethene (TCE)	21.63	µg/L	1.0	108	64.4	118			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R26183**	Analysis Date:	11/21/2007 7:35:44 AM	
Benzene	20.89	µg/L	1.0	104	72.4	126			
Toluene	17.74	µg/L	1.0	88.7	79.2	115			
Chlorobenzene	19.95	µg/L	1.0	99.8	83.1	111			
1,1-Dichloroethene	23.18	µg/L	1.0	116	81.4	122			
Trichloroethene (TCE)	20.43	µg/L	1.0	102	64.4	118			

Qualifiers:

E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date Received: 11/15/2007

Work Order Number 0711269

Received by: AT

Sample ID labels checked by _____ Initials

Checklist completed by: _____ Signature | 11/15/07 Date

Matrix

Carrier name Client drop-off

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☐	Not Shipped ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

CHAIN-OF-CUSTODY RECORD

QA / QC Package: Std ☐ Level 4 ☐
Other:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Phone #: 505 722 3833
Fax #: 505 722 9210

Project Name: Semi Annual Pond 1 dn and Boiler Water ~~[illegible]~~ to Pond 2.
Project Manager: Jim Lieb
Sampler: Steve Morris
Sample Temperature: On Ice 3°

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	Gen. Chem.	Total Phenolics	WR CC Metals Total		Air Bubbles or Headspace (Y or N)
11-13-07	1130	H_2O	Pond 1 dnlet					0711269 -1			X								X	X	X	X	X		
"	1215		Boiler to EP-2					-2													X				

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
11-15-07	1420	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 11/15/07 1420

Remarks: Gen. Chem. = Cations, Anions, pH, and Conductivity

WELL WATER REPORT 2006-2007-2008

DATE	RAW WATER (gal)	DOMESTIC WATER (gal)	TOTAL WATER (gal)
2006			
1/3/2006	1058756144	198204624	1256960768
2/1/2006	1073056128	199678976	1272735104
3/1/2006	1087694976	200997744	1288692720
4/4/2006	1106827008	202643792	1309470800
5/1/2006	1121755904	203852832	1325608736
6/1/2006	1140083584	205552864	1345636448
7/10/2006	1166162688	207870400	1374033088
8/1/2006	1180774400	209133360	1389907760
9/6/2006	1203538560	211095664	1414634224
10/2/2006	1215826688	212562128	1428388816
11/2/2006	1231298688	213922768	1445221456
12/4/2006	1245251840	213243504	1458495344
2007			
1/2/2007	1260938112	214441184	1475379296
2/1/2007	1276234624	215693824	1491928448
3/1/2007	1291908864	216848096	1508756960
4/2/2007	1311748224	218200592	1529948816
5/1/2007	1328422528	219603056	1548025584
6/1/2007	1346317056	221034448	1567351504
7/1/2007	1365779840	222857680	1588637520
8/1/2007	1386224000	224825472	1611049472
9/1/2007	1409424128	227030352	1636454480
10/4/2007	1430014464	229691360	1659705824
11/1/2007	1446382208	231336656	1677718864
12/4/2007	1471459328	233462000	1704921328
2008			0
1/1/2008	1489984512	234652160	1724636672
2/1/2008	1512380032	236320128	1748700160
3/1/2008	1530734080	237880688	1768614768
4/1/2008	1551844608	239101952	1790946560
5/1/2008	1573723648	240398064	1814121712
6/2/2008	1598431488 536	241826352 31	1840257840
7/1/2008	1620866944 537	243046352 29	1863913296
8/1/2008	1641844352 470 gpm	244592800 35 gpm	1886437152
			0
			0
			0
			0
			0
			0
			0
			0
			0
			0
			0
			0

1 days

2007 WASTE WATER SUMMARY

DATE	TRAVEL CENTER TO PONDS			TOTAL FLOW TO PONDS			RAIN GAUGE INCHES	FREEBOARD AT PONDS											Comments
								2	3	4	5	6	8	7	11	12a	12b	9	
		60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM		feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	
1/2/2007	N/A			34	6	193	**0.5**	1.67	1.58	1.67	n/a	OM	BM	BM	1.25	BM	1.25	BM	
1/3/2007	N/A			31	5	123		1.67	1.58	1.67	n/a	OM	BM	BM	1.25	BM	1.25	BM	
1/4/2007	N/A			30	5	123		1.67	1.58	1.67	n/a	OM	BM	BM	1.25	BM	1.25	BM	
1/8/2007	N/A			30	5	123		1.67	1.75	1.83	2.25	OM	BM	BM	1.5	BM	1.25	BM	
1/9/2007	N/A			29	5	123		1.67	1.75	1.83	2.25	OM	BM	BM	1.5	BM	1.25	BM	
1/10/2007	N/A			28	5	123		1.67	1.75	1.83	2.25	OM	BM	BM	1.5	BM	1.25	BM	
1/11/2007	N/A			26	5	123		1.67	1.75	1.83	2.25	OM	BM	BM	1.5	BM	1.25	BM	
1/15/2007	N/A			26	6	193		1.5	1.5	1.67	1.42	OM	BM	BM	1.58	BM	1.25	BM	
1/16/2007	N/A			24	6	193		1.5	1.5	1.67	1.42	OM	BM	BM	1.58	BM	1.25	BM	
1/17/2007	N/A			24	6	193		1.5	1.5	1.67	1.42	OM	BM	BM	1.58	BM	1.25	BM	
1/18/2007	N/A			22	6	193		1.5	1.5	1.67	1.42	OM	BM	BM	1.58	BM	1.25	BM	
1/22/2007	N/A			28	5	123	**0.5**	1.5	1.5	1.67	n/a	OM	BM	BM	1.5	BM	1.08	BM	
1/23/2007	N/A			28	5	123		1.5	1.5	1.67	n/a	OM	BM	BM	1.5	BM	1.08	BM	
1/24/2007	N/A			28	5	123		1.5	1.5	1.67	n/a	OM	BM	BM	1.5	BM	1.08	BM	
1/25/2007	N/A			29	5	123		1.5	1.5	1.67	n/a	OM	BM	BM	1.5	BM	1.08	BM	
1/29/2007	N/A			28	5	123		1.5	1.5	1.67	2	OM	BM	BM	1.5	2.5	1.08	BM	
1/30/2007	N/A			28	5	123		1.5	1.5	1.67	2	OM	BM	BM	1.5	2.5	1	BM	
1/31/2007	N/A			29	5	123		1.5	1.58	1.67	2	OM	BM	BM	1.5	2.5	1	BM	
2/1/2007	N/A			30	5	123		1.5	1.58	1.75	2	OM	BM	BM	1.5	2.5	1	BM	
2/12/2007	N/A			31	5	123		1.67	1.75	1.83	1.5	OM	BM	BM	1.5	2	1	BM	
2/13/2007	N/A			34	7	284	**0.5**	1.67	1.75	1.75	1.5	OM	BM	BM	1.5	2	1	BM	
2/14/2007	N/A			34	6	193		1.67	1.75	1.75	1.5	OM	BM	BM	1.5	2	1	BM	
2/15/2007	N/A			32	6	193		1.67	1.75	1.83	1.5	OM	BM	BM	1.5	2	1	BM	
2/20/2007	N/A			33	5	123		1.67	1.75	1.83	1.5	OM	BM	BM	1.5	2	1	BM	
2/21/2007	N/A			32	5	123		1.67	1.75	1.83	1.5	OM	BM	BM	1.5	2	1	BM	
2/22/2007	N/A			31	5	123		1.67	1.75	1.83	1.5	OM	BM	BM	1.5	2	1	BM	
2/26/2007	N/A			34	5	123		1.5	1.92	2	1	OM	2	3	1.42	2.5	1.08	BM	
2/27/2007	N/A			34	5	123		1.5	1.92	2	1	OM	2	3	1.42	2.5	1.08	BM	
2/28/2007	N/A			32	5	123		1.5	1.92	2	1	OM	2	3	1.42	2.5	1.08	BM	
3/1/2007	N/A			32	5	123		1.5	1.92	2	1	OM	2	3	1.42	2.5	1.08	BM	
3/5/2007	N/A			N/A				1.5	2	2	1	OM	2	3	1.5	2.5	1	BM	
3/6/2007	N/A			35	5	123		1.5	2	2	1	OM	2	3	1.5	2.5	1	BM	
3/7/2007	N/A			34	5	123		1.5	2	2	1	OM	2	3	1.5	2.5	1	BM	
3/8/2007	N/A			34	5	123		1.5	2	2	1	OM	2	3	1.5	2.5	1.17	BM	
3/12/2007	N/A			35	5	123		1.5	BM	BM	1	OM	1	3	1.5	2.5	1	BM	

DATE		60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM	GAUGE INCHES	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	Comme
3/13/2007	N/A			35	5	123		1.5	BM	BM	1	OM	1	3	1.5	2.5	1	BM	
3/14/2007	N/A			36	5	123		1.5	BM	BM	1	OM	1	3	1.5	2.5	1	BM	
3/15/2007	N/A			35	6	193		1.5	BM	BM	1	OM	1	3	1.5	2.5	1	BM	
3/20/2007	N/A			34	6	193		1.5	1.75	1.92	1.25	OM	1	3	1.58	2.5	1.17	BM	
3/21/2007	N/A			36	5	123		1.5	1.75	1.83	1.25	OM	1	3	1.58	2.5	1.17	BM	
3/22/2007	N/A			36	5	123		1.5	1.75	183	1.25	OM	1	3	1.58	2.5	1.17	BM	
3/26/2007	N/A			38	5	123	**0.5**	1.5	1.75	1.75	1.33	OM	1	3	1.58	2.5	1.25	BM	
3/27/2007	N/A			36	5	123		1.5	1.75	1.75	1.33	OM	1	3	1.58	2.5	1.25	BM	
3/28/2007	N/A			36	6	193		1.5	1.75	1.75	1.33	OM	1	3	1.58	2.5	1.25	BM	
3/29/2007	N/A			36	5	123		1.5	1.75	1.75	1.25	OM	1	3	1.58	2.5	1.25	BM	
4/2/2007	N/A			38	5	123		1.42	1.83	1.92	1.42	OM	1	2.92	1.58	2.5	1	BM	
4/3/2007	N/A			38	5	123		1.5	1.83	1.92	1.42	OM	1	2.92	1.58	2.5	1	BM	
4/4/2007	N/A			40	5	123		1.5	1.83	1.92	1.42	OM	1	2.92	1.58	2.5	1	BM	
4/5/2007	N/A			40	5	123		1.5	1.83	1.92	1.42	OM	1	2.92	1.58	2.5	1	BM	
4/9/2007	N/A			36	5	123	**1**	1.5	1.83	2	1.42	OM	0.67	2.92	1.58	2.5	1	BM	
4/10/2007	N/A			34	5	123		1.5	1.92	2	1.42	OM	0.67	2.92	1.58	2.5	1	BM	
4/11/2007	N/A			36	5	123		1.5	1.92	2	1.42	OM	0.67	2.92	1.58	2.5	1	BM	
4/12/2007	N/A			36	5	123		1.5	1.92	2	1.42	OM	0.67	2.92	1.58	2.5	1	BM	
4/16/2007	N/A			36	5	123	**1.1**	1.5	1.83	1.92	1.58	OM	0.67	2.83	1.75	2.08	1	BM	
4/17/2007	N/A			37	5	123		1.5	1.83	1.92	1.58	OM	0.67	2.83	1.75	2.08	1	BM	
4/18/2007	N/A			36	5	123		1.5	1.83	1.92	1.58	OM	0.67	2.83	1.75	2.08	1	BM	
4/19/2007	N/A			38	5	123		1.5	1.83	1.92	1.58	OM	0.67	2.83	1.75	2.08	1	BM	
4/23/2007	N/A			35	5	123		1.5	BM	2	1.25	OM	1	3	1.58	2.5	1.17	BM	
4/24/2007	N/A			34	5	123		1.5	BM	2	1.25	OM	1	3	1.58	2.5	1.17	BM	
4/26/2007	N/A			36	5	123		1.5	BM	2	1.25	OM	1	3	1.58	2.5	1.17	BM	
4/27/2007	N/A			38	5	123		1.5	BM	2	1.25	OM	1	3	1.58	2.5	1.17	BM	
5/1/2007	N/A			38	6	193		1.5	1.75	2	1.25	OM	1	3	1.5	BM	1.25	BM	
5/2/2007	N/A			38	6	193	**0.2**	1.5	1.75	2	1.25	OM	1	3	1.5	BM	1.25	BM	
5/3/2007	N/A			36	5	123		1.5	1.75	2	1.25	OM	1	3	1.5	BM	1.25	BM	
5/7/2007	N/A			33	5	123	**0.5**	1.5	1.67	1.83	1.5	OM	0.83	3	1.58	BM	1.08	BM	
5/8/2007	N/A			34	5	123		1.5	1.67	1.83	1.5	OM	0.83	3	1.58	BM	1.08	BM	
5/9/2007	N/A			34	6	193	**0.5**	1.5	1.67	1.75	1.5	OM	0.83	3	1.58	BM	1	BM	
5/10/2007	N/A			36	5	123		1.5	1.67	1.75	1.5	OM	0.83	3	1.58	BM	1	BM	
5/14/2007	N/A			37	6	193		1.5	1.67	1.83	1.17	OM	1.08	2.83	1.58	BM	1.08	BM	
5/15/2007	N/A			38	6	193		1.5	1.67	1.83	1.17	OM	1.08	2.83	1.58	BM	1.08	BM	
5/16/2007	N/A			35	6	193		1.5	1.58	1.75	1	OM	1	2.83	1.5	BM	1	BM	
5/17/2007	N/A			36	6	193	**0.1**	1.5	1.58	1.75	1	OM	1	2.83	1.5	BM	1	BM	
5/21/2007	N/A			38	5	123	**0.1**	1.5	1.67	1.75	1	OM	1.17	2.83	1.58	BM	1.17	BM	
5/22/2007	N/A			38	6	193		1.5	1.67	1.75	1	OM	1.17	2.83	1.58	BM	1.17	BM	

DATE		60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM	GAUGE INCHES	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	Comme
5/23/2007	N/A			36	5	123		1.5	1.67	1.75	1	OM	1.17	2.83	1.58	BM	1.17	BM	
5/24/2007	N/A			38	5	123		1.5	1.67	1.75	1	OM	1.17	2.83	1.58	BM	1.17	BM	
5/29/2007	N/A			40	5	123		1.58	1.75	1.83	1.25	OM	1	2.83	1.75	BM	1.25	BM	
5/30/2007	N/A			40	5	123		1.58	1.75	1.83	1.25	OM	1	2.83	1.75	BM	1.25	BM	
5/31/2007	N/A			40	5	123		1.58	1.75	1.83	1.25	OM	1	2.83	1.75	BM	1.25	BM	
6/4/2007	N/A			34	5	123		1.58	1.83	1.92	1.42	OM	1	2.83	1.75	BM	1.17	BM	
6/5/2007	N/A			44	5	123		1.58	1.83	1.92	1.42	OM	1	2.83	1.75	BM	1.17	BM	
6/6/2007	N/A			45	5	123		1.58	1.75	1.83	1.42	OM	1	2.83	1.83	BM	1.25	BM	
6/7/2007	N/A			45	6	193	**0.6**	1.58	1.75	1.83	1.42	OM	1	2.83	1.83	BM	1.25	BM	
6/11/2007	N/A			52	5	123		1.58	1.75	1.92	1.5	OM	0.92	2.67	1.83	BM	1.17	BM	
6/12/2007	N/A			51	4	70.2		1.58	1.75	1.92	1.5	OM	0.83	2.67	1.83	BM	1.17	BM	
6/13/2007	N/A			52	4	70.2		1.58	1.75	1.83	1.5	OM	1	2.75	1.83	BM	1.17	BM	
6/14/2007	N/A			51	5	123		1.58	1.75	1.83	1.58	OM	1	2.75	1.83	BM	1.08	BM	
6/18/2007	N/A			52	5	123		1.58	1.67	1.75	1.42	OM	1.33	3	2	BM	1.17	BM	
6/19/2007	N/A			53	5	123		1.58	1.67	1.75	1.42	OM	1.33	3	2	BM	1.17	BM	
6/20/2007	N/A			53	5	123		1.58	1.67	1.75	1.42	OM	1.33	3	2	BM	1.17	BM	
6/21/2007	N/A			54	5	123		1.58	1.58	1.67	1.42	OM	1.42	3	2.08	BM	1.17	BM	
6/25/2007	N/A			54	5	123		1.58	1.5	1.67	1.33	OM	1.83	3.33	2.25	BM	1.25	BM	
6/26/2007	N/A			54	5	123		1.58	1.5	1.67	1.33	OM	1.83	3.33	2.25	BM	1.25	BM	
6/27/2007	N/A			53	5	123		1.58	1.5	1.67	1.42	OM	1.83	3.33	2.25	BM	1.17	BM	
6/28/2007	N/A			54	6	193		1.58	1.5	1.75	1.5	OM	1.83	3.42	2.33	BM	1.17	BM	
7/9/2007	N/A			50	5	123		1.58	1.5	1.83	1.25	0.5	BM	4	3	BM	1.25	BM	
7/10/2007	N/A			49	5	123	**0.2**	1.58	1.5	1.83	1.25	0.5	BM	4	3	BM	1.25	BM	
7/11/2007	N/A			51	5	123		1.58	1.5	1.83	1.25	0.5	BM	4	3	BM	1.25	BM	
7/12/2007	N/A			52	5	123		1.58	1.5	1.83	1.25	0.5	BM	4	3	BM	1.25	BM	
7/16/2007	N/A			52	5	123		1.58	1.42	1.67	1.25	0.5	BM	4	2.92	BM	1.42	BM	
7/17/2007	N/A			51	5	123		1.58	1.42	1.67	1.25	0.5	BM	4	2.92	BM	1.42	BM	
7/18/2007	N/A			50	5	123		1.58	1.42	1.67	1.25	0.5	BM	4	2.92	BM	1.42	BM	
7/19/2007	N/A			52	5	123		1.58	1.42	1.67	1.25	0.5	BM	4	2.92	BM	1.42	BM	
7/23/2007	N/A			53	5	123	**1**	1.58	1.5	1.67	1	0.5	1.5	4	BM	BM	1.33	BM	
7/24/2007	N/A			50	5	123		1.58	1.5	1.67	1	0.5	1.5	4.33	BM	BM	1.33	BM	
7/25/2007	N/A			52	5	123	**1**	1.58	1.5	1.67	1	0.5	1.5	4	BM	BM	1.33	BM	
7/26/2007	N/A				5	123	**1**	1.58	1.5	1.67	1	0.5	1.5	4	BM	BM	1.33	BM	
7/30/2007	N/A			50	7	284	**1**	1.58	1.42	1.58	1.67	OM	1.83	4	4	BM	1.33	BM	
7/31/2007	N/A			50	6	193		1.58	1.42	1.58	1.67	OM	1.83	4	4	BM	1.33	BM	
8/1/2007	N/A			50	5	123		1.58	1.42	1.58	1.67	OM	1.83	4	4	BM	1.25	BM	
8/2/2007	N/A			52	5	123	**0.6**	1.58	1.42	1.58	1.67	OM	1.83	4	4	BM	1.25	BM	
8/6/2007	N/A			48	5	123	**0.2**	1.58	1.5	1.58	2	OM	BM	4.17	BM	BM	1.42	BM	
8/7/2008	N/A			48	6	193	**1.5**	1.58	1.5	1.58	2	OM	BM	4.17	BM	BM	1.42	BM	

DATE		60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM	GAUGE INCHES	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	Comme
8/8/2007	N/A			50	5	123		1.58	1.5	1.58	2	OM	BM	4.17	BM	BM	1.42	BM	
8/9/2008	N/A			52	5	123		1.58	1.5	1.58	2	OM	BM	4.17	BM	BM	1.42	BM	
8/13/2007	N/A			54	6	193		1.58	1.58	1.58	2.17	OM	BM	4.17	BM	2.5	1.25	BM	
8/14/2007	N/A			50	5	123	**0.3**	1.58	1.58	1.58	2.08	OM	BM	4.17	BM	2.5	1.25	BM	
8/15/2007	N/A			51	5	123		1.58	1.58	1.58	2.08	OM	BM	4.17	BM	2.5	1.25	BM	
8/16/2007	N/A			52	5	123		1.58	1.58	1.58	2	OM	BM	4.17	BM	2.5	1.25	BM	
8/20/2007	N/A			56	6	193		1.5	1.5	1.58	2	OM	BM	BM	3	BM	1.25	BM	
8/21/2007	N/A			58	6	193		1.5	1.5	1.58	2	OM	BM	BM	3	BM	1.25	BM	
8/22/2007	N/A			58	5	123		1.5	1.5	1.58	2	OM	BM	BM	3	BM	1.25	BM	
8/23/2007	N/A			56	5	123		1.5	1.5	1.58	2	OM	BM	BM	3	BM	1.25	BM	
8/22/2007	N/A			56	5	123	**0.3**	1.5	1.58	1.58	2.08	OM	BM	BM	3.08	BM	1.25	BM	
8/28/2007	N/A			54	5	123	**0.02**	1.5	1.58	1.58	2.08	OM	BM	BM	3.08	BM	1.25	BM	
8/29/2007	N/A			52	4	70.2		1.5	1.58	1.67	2.08	OM	BM	BM	3.08	BM	1.25	BM	
8/30/2007	N/A			52	5	123		1.5	1.58	1.67	2.08	OM	BM	BM	3.08	BM	1.25	BM	
9/5/2007	N/A			60	6	193	**0.03**	1.58	1.58	1.58	1.75	OM	BM	BM	3	BM	1.25	BM	
9/6/2007	N/A			57	6	193		1.58	1.67	1.67	1.75	OM	BM	BM	3	BM	1.25	BM	
9/7/2007	N/A			55	5	123	**0.5**	1.58	1.58	1.67	1.75	OM	BM	BM	3	BM	1.25	BM	
9/10/2007	N/A			54	4	70.2		1.58	1.75	1.75	1.75	OM	BM	BM	3.17	BM	1.25	BM	
9/11/2007	N/A			53	4	70.2		1.58	1.75	1.75	1.75	OM	BM	BM	3.17	BM	1.25	BM	
9/12/2007	N/A			54	4	70.2		1.58	BM	1.83	1.75	OM	BM	BM	3.25	BM	1.17	BM	
9/13/2007	N/A			54	5	123		1.58	BM	1.83	1.75	OM	BM	BM	3.25	BM	1.17	BM	
9/17/2007	N/A			56	4	70.2		1.58	BM	BM	2	OM	BM	BM	3.33	BM	1.25	BM	
9/18/2007	N/A			54	4	70.2	**0.2**	1.58	BM	BM	2	OM	BM	BM	3.33	BM	1.33	BM	
9/19/2007	N/A			54	5	123		1.58	BM	BM	2	OM	BM	BM	3.33	BM	1.33	BM	
9/20/2007	N/A			54	5	123		1.58	BM	BM	2	OM	BM	BM	3.33	BM	1.33	BM	
9/24/2007	N/A			54	6	193	**0.1**	1.58	1.33	1.5	1.83	OM	BM	BM	3	BM	1.17	BM	
9/25/2007	N/A			54	5	123		1.58	1.33	1.5	1.83	OM	BM	BM	3	BM	1.17	BM	
9/26/2007	N/A			52	5	123		1.58	1.33	1.5	1.83	OM	BM	BM	3.08	BM	1.17	BM	
9/27/2007	N/A							1.58	1.33	1.5	1.83	OM	BM	BM	3	BM	1.17	BM	
10/1/2007	N/A			52	5	123		1.58	1.5	1.58	1.75	OM	BM	BM	3	BM	1.17	BM	
10/2/2007	N/A			52	5	123	**0.3**	1.58	1.5	1.58	1.75	OM	BM	BM	3	BM	1.25	BM	
10/3/2007	N/A			50	5	123		1.58	1.5	1.58	1.75	OM	BM	BM	3	BM	1.17	BM	
10/4/2007	N/A			50	5	123		1.58	1.5	1.58	1.75	OM	BM	BM	3	BM	1.17	BM	
10/8/2007	N/A			48	5	123	**0.2**	1.58	1.67	1.67	1.75	OM	BM	BM	3	BM	1.33	BM	
10/9/2007	N/A			48	5	123		1.58	1.67	1.67	1.75	OM	BM	BM	3	BM	1.33	BM	
10/10/2007	N/A			48	5	123	**0.2**	1.58	1.67	1.67	1.75	OM	BM	BM	3	BM	1.33	BM	
10/11/2007	N/A			48	5	123		1.58	1.67	1.67	1.67	OM	BM	BM	3.08	BM	1.33	BM	
10/15/2007	N/A			46	5	123		1.58	1.5	1.58	1.58	OM	BM	BM	3.17	BM	1.33	BM	
10/16/2007	N/A			46	4	70.2		1.58	1.5	1.58	1.58	OM	BM	BM	3.17	BM	1.33	BM	

DATE		60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM	GAUGE INCHES	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	Comme
10/17/2007	N/A			46	5	123		1.58	1.5	1.58	1.58	OM	BM	BM	3.17	BM	1.33	BM	
10/22/2007	N/A			45	5	123		1.58	1.67	1.67	1.5	OM	BM	BM	3.25	BM	1.33	BM	
10/23/2007	N/A			45	5	123		1.58	1.67	1.67	1.5	OM	BM	BM	3.25	BM	1.33	BM	
10/24/2007	N/A			45	5	123		1.58	1.67	1.67	1.5	OM	BM	BM	3.25	BM	1.33	BM	
10/25/2007	N/A			44	5	123		1.58	1.5	1.58	1.5	OM	BM	BM	3.17	BM	1.33	BM	
10/29/2007	N/A			43	6	193		1.58	1.33	1.42	1.5	OM	BM	BM	3	BM	1.25	BM	
10/30/2007	N/A			44	6	193		1.58	1.33	1.42	1.5	OM	BM	BM	2.92	BM	1.25	BM	
10/31/2007	N/A			44	6	193		1.58	1.33	1.42	1.42	OM	BM	BM	2.83	BM	1.25	BM	
11/1/2007	N/A			44	6	193		1.58	1.33	1.42	1.42	OM	BM	BM	2.83	BM	1.25	BM	
11/5/2007	N/A			43	6	193		1.5	1.25	1.42	1.25	OM	BM	BM	2.83	BM	1.33	BM	
11/6/2007	N/A			45	6	193		1.5	1.25	1.42	1.25	OM	BM	BM	2.83	BM	1.33	BM	
11/7/2007	N/A			45	5	123		1.5	1.25	1.42	1.25	OM	BM	BM	2.83	BM	1.33	BM	
11/8/2007	N/A			42	5	123		1.5	1.42	1.5	1.25	OM	BM	BM	2.75	BM	1.25	BM	
11/12/2007	N/A			42	6	193		1.5	1.33	1.42	1.33	OM	BM	BM	2.67	BM	1.25	BM	
11/13/2007	N/A			42	5	123		1.5	1.33	1.42	1.33	OM	BM	BM	2.67	BM	1.25	BM	
11/14/2007	N/A			42	5	123		1.5	1.67	1.42	1.33	OM	BM	BM	2.67	BM	1.25	BM	
11/15/2007	N/A			42	5	123		1.5	1.42	1.5	1.5	OM	BM	BM	2.75	BM	1.25	BM	
11/19/2007	N/A			41	5	123		1.5	1.42	1.5	1.58	OM	BM	BM	2.75	BM	1.25	BM	
11/20/2007	N/A			41	5	123		1.5	1.42	1.5	1.58	OM	BM	BM	2.75	BM	1.25	BM	
11/26/2007	N/A			40	5	123		1.58	1.25	1.33	1.25	OM	BM	BM	2.25	BM	1.25	BM	
11/27/2007	N/A			40	5	123		1.58	1.25	1.33	1.25	OM	BM	BM	2.25	BM	1.25	BM	
11/28/2007	N/A			40	5	123		1.58	1.25	1.33	1.25	OM	BM	BM	2.25	BM	1.25	BM	
11/29/2007	N/A			39	5	123		1.58	1.25	1.33	1.17	OM	BM	BM	2.17	BM	1.25	BM	
12/3/2007	N/A			36	5	123	**1.5**	1.58	1.25	1.33	1	OM	BM	BM	2	BM	1.25	BM	
12/4/2007	N/A			37	5	123		1.58	1.25	1.33	1	OM	BM	BM	2	BM	1.25	BM	
12/5/2007	N/A			36	5	123		1.58	1.25	1.33	1	OM	BM	BM	2	BM	1.25	BM	
12/6/2007	N/A			35	5	123		1.58	1.25	1.33	1	OM	BM	BM	2	BM	1.25	BM	
12/10/2007	N/A			40	5	123	**1**	1.5	1.17	1.33	1	OM	BM	BM	2	BM	1.25	BM	
12/11/2007	N/A			39	5	123		1.5	1.17	1.33	1	OM	BM	BM	2	BM	1.25	BM	
12/12/2007	N/A			39	5	123		1.5	1.17	1.33	1	OM	BM	BM	2	BM	1.25	BM	
12/13/2007	N/A			38	5	123		1.5	1.17	1.33	1	OM	BM	BM	2	BM	1.25	2.42	
12/17/2007	N/A			38	6	193		1.58	1.25	1.33	1	OM	BM	BM	1.83	BM	1.25	2.25	
12/18/2007	N/A			38	5	123		1.58	1.25	1.33	1	OM	BM	BM	1.83	BM	1.25	2.25	
12/19/2007	N/A							1.58	1.25	1.33	1	OM	BM	BM	1.83	BM	1.25	2.25	

* **BM denotes Below Marker (Marker ~ 3 Feet)**

	AVG #####	**AVG #DIV/0!**	**AVG #DIV/0!**	**AVG 42.12**	**AVG 5.17**	**AVG 135.93**	**TOTAL 17.25**	**AVG 1.55**	**AVG 1.58**	**AVG 2.71**	**AVG 1.47**	**AVG 0.50**	**AVG 1.20**	**AVG 3.24**	**AVG 2.19**	**AVG BM**	**AVG 1.20**	**AVG 2.29**	

DATE		60 DEGREE V NOTCH "INCHES"	FLOW GPM	TEMP	90 DEGREE V NOTCH "INCHES"	FLOW GPM	GAUGE INCHES	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	feet	Comme

2007 TOTAL FLOW TO PONDS

135.93 GPM x 60 MIN/YR x 8760 HR/YR: 71,444,808 GAL/YR

Rainfall = 27154 gal/inch/acre: 14.95 inches/yr X 121.2 acres X 27154 gal/inch/acre = 56,770,868 gal/yr

Pond Evaporation = 150gal/min, then 150 gal/min X 60 min/hr X 24 hr/day X 365 day/year = 78,840,000 gal/year

56770868

WESTERN REFINING - GALLUP REFINERY

JAMESTOWN, NEW MEXICO

2007 WASTE WATER BALANCE / EVAPORATION POND RATES

PONDS	GALLONS/YR
Discharged to Ponds (measured at V notch)	71,444,808
RAINFALL TO PONDS	56,770,868
TOTAL TO PONDS	128,215,676
POND EVAPORATION (150 GPM)	78,840,000
SNOW MACHINES EVAPORATION(80GPM)	8,764,800
WATER SOLD	0
TOTAL BALANCE IN PONDS	40,610,876

UNDERGROUND PROCESS AND WASTEWATER LINES

CRUDE UNIT

Re-test on or before due date	ID Number (Sewer Box or Catch Basin	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/ Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results	Notes
	C-1	P-2 (From Plat Unit) to C-1	1957	EC-09-125 & EP-09-102	10/30/07	Pass	4	60	Rmartinez, Abecenti	Swr Bx needs to be vacuumed out & cleaned. Concrete box inside needs repair.	
	C-2	C-1 to C-2	1957	EC-09-125	10/30/07	Pass	4	60	Rmartinez, Abecenti		
		C-V2 to C-2	1957	EC-09-125	10/30/07	Pass	4	60	Rmartinez, Abecenti		
		C-P4 to C-P5B to C-2	1957	EC-09-125	10/30/07	Pass	4	60	Rmartinez, Abecenti		
		C-P10B to C-P5A to C-2	1957	EC-09-125	10/30/07	Pass	4	60	Rmartinez, Abecenti		
	C-3	C-2 to C-3	1957	EC-09-125	10/30/07	Pass	4	60	Rmartinez, Abecenti	Swr Bx needs to be vacuumed out & cleaned. Concrete box inside needs repair. Inlet branch line elbows needs to be replaced.	
		C-P10A to C-P9A to C-P9B to C-3	1957	EC-09-125	10/30/07	Pass	4	60	Rmartinez, Abecenti	Screens to be installed on branch lines to C3 & C4 boxes.	
		C-P8 to C-3	1957	EC-09-125	10/30/07	Pass	4	60	Rmartinez, Abecenti	Screens to be installed on branch lines to C3 & C4 boxes.	
	C-4	to C-4	1957	EC-09-125	10/30/07	Pass	4	60	Rmartinez, Abecenti	Swr Bx needs to be vacuumed out & cleaned.	
		C-E8 to C-4	1957	EC-09-125	10/30/07	Pass	4	60	Rmartinez, Abecenti	Screens to be installed on branch lines to C3 & C4 boxes	
		C-24A to C-24B to C-P7 to C-4	1957	EC-09-125	10/30/07	Pass	4	60	Rmartinez, Abecenti	Screens to be installed on branch lines to C3 & C4 boxes.	
	C-5	C-4 to C-5	1957	EC-09-125	10/31/07	Pass	5	60	Rmartinez, Abecenti	Swr Bx needs to be vacuumed out & cleaned. Concrete box inside needs repair. A Inlet branch line elbows needs to be replaced. Lid on C5 may need to be replaced.	
		C-P1B to C-P3 to C-5	1957	EC-09-125	10/31/07	Pass	5	60	Rmartinez, Abecenti		
		N.26+11'-6" W.6+56'-9" (C-PV109) to C-5	1957	EC-09-125	10/31/07	Pass	5	60	Rmartinez, Abecenti		
	C-6	C-P23A To C-P23B To C-6	1957	EC-09-125	10/31/07	Pass	5	60	Rmartinez, Abecenti		
		C-V10 To C-6	1957	EC-09-125	N/A	N/A	N/A	N/A	N/A	Capped	
		A To C-P21 To C-P16A To C-P15 To C-P14B To C-P14A To C-6	1957	EC-09-125	10/31/07	Pass	5	60	Rmartinez, Abecenti		
		C-V13 Drain to Pipe Between C-6 & C-7	1967	EC-09-125	10/31/07	Pass	5	60	Rmartinez, Abecenti		
		C-P13A To C-P13B To C-6	1957	EC-09-125	10/31/07	Pass	5	60	Rmartinez, Abecenti		
	C-7	C-6 to C-7	1957	EC-09-125	11/01/07	Pass	5	60	Rmartinez, Abecenti	Swr Bxs need to be vacuumed out & cleaned.	
		C-E11 To C-7	1957	EC-09-125	11/01/07	Pass	5	60	Rmartinez, Abecenti		

UNDERGROUND PROCESS AND WASTEWATER LINES

CRUDE UNIT

Re-test on or before due date	ID Number (Sewer Box or Catch Basin	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/ Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results	Notes
	C-8	FCC Sewer Box N2461.57' W546.5' To C-8	1969	EC-09-125 & EF-09-102 SH.2	11/01/07	Pass	5	60	Rmartinez, Abecenti	C8 swr bx needs concrete repair, vacuum out, cleaned. All branch lines to C8 need screens installed.	
		F-E10 To C-8	1957	EC-09-125	11/01/07	Pass	5	60	Rmartinez, Abecenti		
		F-11B To F-11A To C-8	1957	EC-09-125	11/01/07	Pass	5	60	Rmartinez, Abecenti		
		F-C1 N2515'11" W590' 0" To C-8	1957	EF-09-102 SH.1	11/01/07	Pass	5	60	Rmartinez, Abecenti		
		F-C1 N2496" 8" W594' 3" To C-8	1957	EF-09-102 SH.1	11/01/07	Pass	5	60	Rmartinez, Abecenti		
		F-P12B To FIELD MITER To C-8	1957	EC-09-125	07/13/02				B. Loos	Red Line ????	
		FE-9 To N24+93-0" W6+56' 11" To C-8	1957	EC-09-125	11/01/07	Pass	5	60	Rmartinez, Abecenti		
		' to C-8	1957	EC-09-125	11/01/07	Pass	5	60	Rmartinez, Abecenti		
	C-9	C-7 to C-9	1957	EC-09-125	11/01/07	Pass	5	60	Rmartinez, Abecenti	Swr Boxes need to be vacuumed out & cleaned.	
		C-8 to C-9	1957	EC-09-125	11/01/07	Pass	5	60	Rmartinez	Swr Boxes need to be vacuumed out & cleaned.	
		F-3 to C-9	1957	EF-09-102 SH.1	11/01/07	Pass	5	60	Rmartinez	Line needs to be water blasted going to C9	
		F-V14 To C-9	1957	EC-09-125	11/01/07	Pass	5	60	Rmartinez	Line needs to be water blasted going to C9	
		C-V6 To C-9	1957	EC-09-125	11/01/07	Pass	5	60	Rmartinez	Line needs to be water blasted going to C9	
		C-P11A To C-P11B To C-9 (C-P37A to C-P37B)	1957	EC-09-125	11/02/07	Pass	6	60	Rmartinez	Line needs to be water blasted going to C9	WO46749 Cup Repaired 10/23/02
	C-10	C-10	1957	EC-09-125	11/02/07	Pass	4	30	Rmartinez	Swr Box needs concrete repair, cleaned & vacuumed. Inlet piping needs to be replaced or repaired.	
		F4 W. to C-10	1957	EC-09-125 & EF-09-102	11/02/07	Pass	4 ft	30	Rmartinez	Line needs to be water blasted going to C10	
		C-9 N. to C-10	1957	EC-09-125	11/02/07	Pass	4	30	Rmartinez	Line needs to be water blasted going to C10	
		C-5 E. to C-10	1957	EC-09-125	11/02/07	Pass	4	30	Rmartinez	Line needs to be water blasted going to C10	
		C-P1A to C-P2 to C-10	1957	EC-09-125	12/19/06	Pass	4	30 ft	Rmartinez	WO481143 Cup Repaired 11/18/02	
	C-11	C-10 N. to C-11	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
		N.26+14'-2" W.6+45'-0" to C-11	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
		N.26+45'-8" W.6+44'-3.5" to C11	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
	From Neutralizing Pit Drains Toward NW To Catch Basin CBZ-25 by Treating Unit		1957	EZ-80-09-510EP	12/20/2006	Pass	4 ft	30	Rmartinez	End of Alky Unit from ASOPit to CBZ-25	

UNDERGROUND PROCESS AND WASTEWATER LINES

CRUDE UNIT

Re-test on or before due date	ID Number (Sewer Box or Catch Basin	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/ Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results	Notes
	C-11 flows N. to CBZ-24										
	AT DHT, CBZ-24 2687N 632W	C-11 N to CBZ-24	1957	EC-09-125 & EZ-80-09-510EP EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	(DHT) All branch lines going into CBZ-24 needs piping & elbows replaced. CBZ 24 box needs to be repaired	
	AT DHT, CBZ-23 2729.63N 632W	CBZ-25 W to CBZ-24	1957	EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	DHT Unit	
		CBZ-24 N to CBZ-23	1957	EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	DHT Unit	
		Q-1 (Treaters) W to CBZ-23	1957	EQ-09-101 SH.1 EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	Treaters to CBZ-23 at DHT Unit	
		Drain Hub (Treaters) 2785.42N 524.00W to CBZ-23	1957	EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	Treaters to CBZ-23 at DHT Unit	
	AT SRU CBZ-22 2900N 632W	CBZ-23 N to CBZ-22 (now CBZ-A)	1957	EZ-80-09-510EP	Re-routed to main sewer - unable to test 12/06					DHT to SRU	
		Drain 2872.50N 574.17W to CBZ-22 (now CBZ-A) Just S. of CWT	1957	EZ-80-09-510EP	Re-routed to main sewer - unable to test 12/06					DHT to SRU	
	CBZ--21 2980N 632W	CBZ-22 (now CBZ-A flows N to CBZ-21 (now CBZ-B)	1957	EZ-80-09-510EP EZ-80-09-509EP	Re-routed to main sewer - unable to test 12/06						
		Cooling Tower Drain 2900N 582.92W to EZ-80-09-509EP (runs to CBZ-A)	1957	EZ-80-09-510EP EZ-80-09-509EP	Re-routed to main sewer - unable to test 12/06						
	CBZ-20 3073N 632W	CBZ-21 flows N under road to start of tank farm to CBZ-20	1957	EZ-80-509-EP	CBZ-20 - out of service						
		CBZ-21 flows to main sewer box CBZ A			Re-routed to main sewer - unable to test 12/06						

UNDERGROUND PROCESS AND WASTEWATER LINES
FLUID CATLALYTIC CRACKING UNIT

Re-test on or before due date	ID Number (Sewer Box or Catch Basin	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/ Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
	F1	F-E1 To F1	1957	EF-09-102 SH.1	11/02/07	Pass	4	60	Rmartinez; Abecenti	Swr Bx needs to be vacuumed out & cleaned. Concrete repair required inside box.
		F-V7 To F1	1957	EF-09-102 SH.1	11/02/07	Pass	4	60	Rmartinez; Abecenti	
		F-V5 To F1	1957	EF-09-102 SH.1	11/02/07	Pass	4	60	Rmartinez; Abecenti	
	F2	F1 Flows W.To F2	1957	EF-09-102 SH.1	11/02/07	Pass	4	60	Rmartinez; Abecenti	Swr Bx needs to be vacuumed out
		F-P4 To F-P5B To F-P5A To F-P3A To F-P3B To F-P2A To F2	1957	EF-09-102 SH.1	11/01/07	Pass	3	60	Rmartinez; Abecenti	Screens need to be installed on sewer cups
		F-P10A To F-P10B To F-P1B To F-P1A To F-P2B To F2	1957	EF-09-102 SH.1	11/01/07	Pass	3	60	Rmartinez; Abecenti	Screens need to be installed on sewer cups
		F-V6 To F2	1957	EF-09-102 SH.1	11/01/07	Pass	3	60	Rmartinez; Abecenti	
	F3	F2 Flows W. To F3	1957	EF-09-102 SH.1	11/01/07	Pass	3	60	Rmartinez; Abecenti	lines need to be blasted. Swr Bx needs to be vacuumed out
		Drain Coordinate N.2557'-0". W.596'-0" To F3	1957	EF-09-102 SH.1	11/01/07	Pass	5	60	Rmartinez; Abecenti	
		Drain Coordinate N.2566'-0". W.603'-0" To F3	1957	EF-09-102 SH.1	11/01/07	Pass	5	60	Rmartinez; Abecenti	
	F4	G4 to F4	1957	EF-09-102 SH.1 & EG-09-102EP	11/05/07	Pass	5	60	Rmartinez; Abecenti	Swr Bxs needs to be vacuumed out. F4 Box concrete inside needs repair. Inlet 90 elbow needs to be replaced.
		G-P1B To G-P1A To F-P8 To F-P9B To F-P9A To F-P6 To F-P7B To F4	1957	EF-09-102 SH.1	11/05/07	Pass	5	60	Rmartinez; Abecenti	Screens need to be installed on sewer cups
		F-P7A To F4	1957	EF-09-102 SH.1	11/05/07	Pass	5	60	Rmartinez; Abecenti	
		F-V8 To F4	1957	EF-09-102 SH.1	11/05/07	Pass	5	60	Rmartinez; Abecenti	

UNDERGROUND PROCESS AND WASTEWATER LINES
FLUID CATLALYTIC CRACKING UNIT

Re-test on or before due date	ID Number (Sewer Box or Catch Basin	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail/ Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results
	FCC Box N2461.57' W546.5'	F-B1 & Drain N2447.07' W542.0' To F-V20 To Sewer Box N2461.57' W546.5'	1969	EF-09-102 SH.2	11/05/07	Pass	6	60	Rmartinez; Abecenti	Swr Bx needs to be vacuumed out & cleaned. Concrete repair required inside box.
		F-B1-F To Sewer Box N2461.57' W546.5'	1969	EF-09-102 SH.2	11/05/07	Pass	6	60	Rmartinez; Abecenti	Swr Bx needs to be vacuumed out & cleaned. Concrete repair required inside box.

UNDERGROUND PROCESS AND WASTEWATER LINES

PLATFORMER/NHT UNIT

Re-test on or before due date	ID Number (Sewer Box or Catch Basin	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results	Notes
	P-1	P-E8 to P-1	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti	Swr Box needs to be cleaned, vacuumed. Concrete repair inside box. Inlet 90 elbows need to be replaced.Lid needs to be repaired/replaced.	
		P-V8/P-E9 to P1	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		
		P-P6 to P-P5A to P-1	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		
		P-P5B to P-1	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		
	P-2	P-2 (From Plat Unit) flows to C-1(Crude Unit)	1957	EC-09-125 & EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti	Swr Box needs to be cleaned and vacuumed. Concrete needs repair inside sewer box.	
		P-V9 to P-2	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		
		P-V6 to P-2	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		
		P-C1B to P-2	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		
		P-C1A to P-2	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		
		P-3 to P-2	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		
	P-3	P-V18 to P-3	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti	P3 Box needs to be cleaned, vacuumed & inlet 90 elbows need to be replaced. Concrete repairs required.	
		P-P2 to P-3	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		
		P-4 to P-3	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		
	P-4	P-V23 to P-4	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti	P4 Box needs to be cleaned, vacuumed & inlet 90 elbows need to be replaced. Concrete repairs required. All branch lines to P-4 need screens installed.	NHT
		P-V24 to P-4	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		NHT
		DC-P15 to P-P10 to P-4	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		NHT
	P-7 N2509'-9" W1074'-0"	Z-89-V3 @ N2509'-9' to P-7	1957	EP-09-102	10/26/07	Pass	2.5	60	Rmartinez, Abecenti		NHT End Drain
	P-8 N2550'-3" W1048'-6"	P-7 to P-8	1957	EP-09-102	10/26/07	Pass	2.5	60	Rmartinez, Abecenti	P7, 8 Sewer boxes need to be vacuumed out & cleaned. Concrete repairs.	NHT

UNDERGROUND PROCESS AND WASTEWATER LINES

PLATFORMER/NHT UNIT

Re-test on or before due date	ID Number (Sewer Box or Catch Basin	Lateral Drains and/or Headers	Date Installed	Drawing Reference	Test Date	Pass/Fail Repair Information	Test Water Column (Feet)	Test Duration (Minutes)	Signature	Investigation Results	Notes
		Z89-V1 to P-8	1957	EP-09-102	10/26/07	Pass	2.5	60	Rmartinez, Abecenti		NHT
	P-6 N2550'-3" W990'-0"	P-8 to P-6	1957	EP-09-102	10/26/07	Pass	2.5	60	Rmartinez, Abecenti		NHT
		H-F1/H-F2 to Line HE-2 to P-6	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		NHT
		HE-2 to P-6	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		NHT
		H-P2 to P-6	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		NHT
		H-V2 to H-P2 to P-6	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		NHT
	P-5 N2598'-6" W980'-0"	P-6 To P-5	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti	P6, 8 Boxes needs to be cleaned, vacuumed & inlet 90 elbows need to be replaced. Concrete repairs required. Lids need to be replaced/repaired.	NHT
		H-P3B to H-P3A to P-5	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		NHT
		H-V4 to P-5	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		NHT
		H-V1 to P-5	1957	EP-09-102	10/29/07	Pass	3	60	Rmartinez, Abecenti		NHT
	P-5 Flows N. @ W980"-0" thru Manhole 31 232.33 (ISOM Manhole) to EZ80-09-509-EP Map		1957	EP-09-102 , EZ80-09-509-EP &EZ80-09-							NHT (Connects to ISOM Manhole)

Item 3 Refinery Spill Log

Summary of 2007 Spills and Releases

12/31/07 – Marketing Tank-6 Ethanol Pump – A pressure gauge on the ethanol pump vibrated loose resulting in a release of 32 BBLs of ethanol. Release was confined to the dike area and cleaned up.

12/04/07 – Tanker Loading Rack _ we estimate that approximately 300 gallons of gasoline was released to the soil. Valving on a tanker was being back flushing because driver thought the gasoline was "old". Driver thought there was only 20 gallons of gasoline product in the tanker but there was actually a much greater amount. The gasoline poured out onto the pad. Most of the gasoline was contained on the pad and some entered the process sewer that goes to the new API separator (NAPIS). The gasoline that made its way into the NAPIS is recovered for reuse. Some of the gasoline spilled over the pad onto adjacent soil.
We immediately shut down the loading dock and foamed the pad to prevent fire. A vac truck was immediately dispatched to recover spilled gasoline product. The area was flushed with water spray to reduce the likelihood of fie and to assist recovery of gasoline by the vac truck, a crew of 8 workers was put to work to dig up the impacted soil. The crew built a low dike of soil around the impacted area. The impacted soil will be placed on plastic sheeting in our soil staging area.

12/01/07 – API Flare Stack _ Slop Oil & Water, less than 5 bbls/inclement weather (rain showers) at approximately 1:00 AM, the API flare stack "puked" over with slop oil & water. Operations notified pumper and ERT members were called out to respond to fire, Amount of spill less than 5 BBLs, hard to tell from rain showers over refinery at time of incident.

11/21/07 – API Pit Area Slop Oil/Water: 20-30 gallons _When taking API Pit East Bay out of service for repair. The East Bay was being blinded of for isolation. The stuff coming out the weir box was being pump over to a Baker Tank using couple of trash pumps. After the Baker Tank got half full, it build a head pressure and the trash pumps couldn't keep up with the flow coming in. Which cause the weir box to run over. We didn't have the west in service due to a blind flange needed to install inside the Sump Pit to isolate East bay.

11/06/07 – Truck Sales Rack _LSD & Kerosene mix , @ 2.5 bbls _the kerosene sales system was being flushed out to remove all the LSD (low sulfur diesel) left in the line. At the end of the flush, the kerosene control valve failed to close. This resulted in the tanker running over for approximately 5 minutes. All the spilled LSD/Kero mix product was contained on the concrete pad and captured in the process sewer system.

10/22/07 – Tank Farm, LSD @ 2 BBLs _ LSD sales Pumper discovered kerosene coalescer filter pot had blown gasket while making his rounds in the tank, Pumper

bypassed leaking filter pot. Operations shifter was notified. Most of product was contained by concreted curb and ran off into process sewer.

9/29/07 – Tank Farm – API Flare: Hydrocarbon liquid, < 1 BBL_ Lab Tech saw a small fire coming from the flare tip as he came into work around 6:45 AM. I drove to the API flare area and confirmed that something was burning inside the "wind box" right under the flare. I called the control room and asked them to call in safety. The API KO-drum sight glass shows@ 18"-20"" of liquid in drum. Pumper and I opened up the west drain and we took a sample from drain. Sample from drain is 100% water, no oil sheen on water. We did a walk thru around the KO-drum and there is an oil spray pattern on the ground running in the NW direction. Some piping in the API area is coated with heavy oil; it may be diesel-kero-dist.

9/29/07 – Tank Farm _ Kerosne, @ 2-4 BBLs Pumper notified me that sewer cup ran over while he was draining water off the bottom of T-226. Appears to be about 5 bbls of water/oil on the ground. Sewer cup is still full of liquid and not draining. It may be plugged up with dirt. Pumper stated that he was working on his quarterly tank gauge checklist when spill happened.

9/20/07 – Tank farm _ Alkyl ate gasoline, liquid vol = 2-4 bbls _ : Found vapors coming out of T-108 wall vents, I Climbed on top of tank and discovered that we had gasoline on top of floating roof. Pumper and I also found the alky RD line all frosted up, Called control room and they said RD was still open on their side and that iso-butane may have entered RD line. No gasoline released to ground, all contained on top of floating roof.

9/16/07 –Tank 701 in the Hot Oil Tank Farm _FCC feed was mistakenly pumped to Tank 701 despite that is was gauged as full the previous night. Hence the cause can be Attributed to operator error As soon as it was noted that the tank was overflowing, the pump feed to the tank was shut off and the Giant vac Truck was dispatched to vacuum up the spilled feed, The drain valve in the containment dike surrounding Tank 701 was open but is was shut as soon as it become apparent that oil was escaping the dike. Some feed oil escaped outside the dike before the valve was closed. The amount estimated to have escaped the dike is 10 barrels (42 gasl/bbls) but contained in a depression near the dike so it did not get very far. The oil outside the dike was given immediate attention for cleanup. Volume of Release 200 barrels Volume recovered 190 barrels

9/11/07 – North /south _ pipe way west of cooling: 3 gallons of naphtha_ An Operator noticed a leak in the naptha rundown line and immediately notified the control room. The decision was made to divert the flow to the NHT unit and block in the sour naptha rundown this move stopped the leaking almost immediately. In less than 10 minutes the problem was taken care of and only about 3 gallons had leaked out

8/21/07 –Tank Farm, T-583_ Pumper discovered leaks around 2:00 AM in morning, Blend into T-583 was stopped when leaks were found. Estimate that 5-10 bbls of diesel spilled

8/20/07 – Tank Farm _ ULSD Product was being transferred to Tank 577 from Tanks 111,112 &116 to make another ULSD Blend to Sale. The Pumper tech miss Time his transfer. Due to that about 50 gallons spilled on the ground.

8/12/07 – Fuel Oil Unloading Spot _ A driver unloading oil left a sample point valve open causing product to flow into the sump while he was off-loading, This resulted in the sump running over spilling about 10 gallons of gas oil onto the ground.

7/24/07 – API Weir Box Slop Oil, Approximately 2 barrels _ Pumper Gauger had opened the bypass at the Weir Box because of heavy rain At the Time he opened the bypass, the Weir Box was not overflowing . When he returned about 30 minutes later, the weir Box had overflowed on the ground on the east side of the API Pit,

7/24/07 – Propane Sales Loading Rack, PRV was removed from propane sales filter pot on 7-23-07 for normal maintenance repairs, the propane filter pot PRV bypass was opened after the PRV was removed for repairs. On 7-24-07, a propane truck was loaded From cleared sales Tank-556 While the truck was being loaded with propane, approx 296 BBLS of propane was moved into the refinery flare system because of the open bypass at the propane sales filter pot.

7/23/07 – Rail road rack spot #8 wests Track. Employee was loading Residual Fuel To Railcars in the process of Loading. The employee step away from it just for a moment. There was about 50 gallon oil rand over. It was immediately shut down And clean up begin by the employee.

7/20/07 – Hot Oil Tank Farm, The Pumper Tech was making sure that the tank Didn't have water before it was charged to the riser in the units, He opened the bottom water draw and found the drain was plugged. So he looked around to see what he Could use to poke a hole. He found a stick to poke only a couple feet away. But the drain broke through and filled drain drums and ran over. About 1 to 2 barrel rand over. After the sun heated the material it spread more on the found setting on top of the water.

7/19/07 – The API weir box Ran over, Thunderstorm rolled into area about 5:15PM Lab received a high weir-box level alarm about 5 minutes before weir-box ran over. The Forman and Pumper arrived at API; the weir box was running over. Estimate 5-10 bbls of oil/water spilled to ground.

6/23/07 – The API weir box screen became partially plugged with debris and trash causing approximately 420 gallons of wastewater to overflow. The spilled material was cleaned up with the vacuum truck and shovel.

4/23/07 – The seal on the light cycle oil pump failed while pump was on and transferring oil to units. Fifty gallons of oil was contained on dirt and cleaned up.

4/4/07 – A discharge hose came loose from a tote that was being filled. Twenty gallons of cooling tower chemical was spilled onto ground and cleaned up with vacuum truck.

3/3/07 – The level device on the oil sump at the new API separator was left in the off position, allowing oil to pass through to the water pumps and out to the aeration lagoons and pond #1. The lagoons and ponds were cleaned up (oil removed) with a vacuum truck.

2/14/07 – The ultra low sulfur diesel transfer system was being flushed out and a bleeder off the component pump was cracked open. Sixty gallons ran over the concrete sump onto the ground surface. The sump and ground surface was cleaned up with vacuum truck.

2/13/07 – The six inch rundown valve bonnet gasket failed at T-112 failed which resulted in 4 barrels of diesel spilling into diked area. The area was vacuumed up and seal was replaced.

2/12/07 – T106 was put on circulation and the filters plugged up and the relief valve popped to the sewer drain which could not handle the flow. The drain ran over into the pipeway and the spill was cleaned up.

OCD Permit Condition 21:

f. Summary of Discovery of New Groundwater Contamination

In 2007, monitoring showed that in Potable Well- 3 the contaminant 2-Methylnapthalene was at a level of 0.032 mg/l. This level exceeds the current NM Water Quality Control Commission standard of 0.03 mg/l for 2-Methylnaphthalene. In 2006, this well had no detectable levels of Naphthalene or of 1- or 2-Methylnaphthalene. To be sure that the levels detected in PW-3 in 2007 are not a sampling artifact, we have taken two samples (one a blind duplicate) of PW-3 in 2008. Further, in 2008, we will be taking samples from all Potable Water well (PW-2 and PW-4) to ensure that possible contamination in the aquifer intersected by these wells is not spreading. In 2007, 1-Methylnapthalene was found in the sample taken from OW 14. The level of 1-Methylnapthalene was at 0.027 mg/l, which is below the NM WQCC standard of 0.03 mg/l. The sampling in 2006 did not test this well, OW-14, for all semi-volatile and volatile compounds as in 2007. Therefore, if this contaminant was present in OW-14, it would not have been analyzed for. Tests in 2006 did find and report Naphthalene and 1- and/or 2-Methylnaphthalene in the evaporation ponds inlets, and the API effluent.

OCD Permit Condition 21:

g. Summary and Copies of All EPA-NMED RCRA Activity

The following items are included in this section:

2006 Land Treatment Unit Inspection Summary
2006 Annual Hazardous Waste Fee Report
NMED-HWB Contained-In Determination for Banks Cleanup Soil
OCD Approval for Gandy-Marley

WESTERN REFINING - GALLUP REFINERY
JAMESTOWN, NEW MEXICO
2007 LAND TREATMENT UNIT INSPECTION CHECK LIST

DATE	INSPECTOR'S NAME	FINDINGS
12/13/2007	Kent McKinney	No problems noted
12/6/2007	Kent McKinney	No problems noted
11/29/2007	Kent McKinney	No problems noted
11/15/2007	Kent McKinney	No problems noted
11/8/2007	Kent McKinney	No problems noted
11/1/2007	Kent McKinney	No problems noted
10/25/2007	Kent McKinney	No problems noted
10/17/2007	Kent McKinney	No problems noted
10/11/2007	Kent McKinney	No problems noted
10/7/2007	Kent McKinney	No problems noted
9/27/2007	Kent McKinney	No problems noted
9/20/2007	Kent McKinney	No problems noted
9/13/2007	Kent McKinney	No problems noted
8/30/2007	Kent McKinney	No problems noted
8/23/2007	Kent McKinney	No problems noted
8/16/2007	Kent McKinney	No problems noted
7/26/2007	Kent McKinney	No problems noted
7/17/2007	Kent McKinney	No problems noted
7/12/2007	Kent McKinney	No problems noted
7/21/2007	Kent McKinney	No problems noted
6/28/2007	Kent McKinney	No problems noted
6/14/2007	Kent McKinney	No problems noted
6/7/2007	Kent McKinney	No problems noted
5/24/2007	Kent McKinney	No problems noted
5/17/2007	Kent McKinney	No problems noted
5/10/2007	Kent McKinney	No problems noted
5/3/2007	Kent McKinney	No problems noted
4/25/2007	Kent McKinney	No problems noted
4/19/2007	Kent McKinney	No problems noted
4/12/2007	Kent McKinney	No problems noted
4/5/2007	Kent McKinney	No problems noted
3/29/2007	Kent McKinney	No problems noted
3/22/2007	Kent McKinney	No problems noted
3/15/2007	Kent McKinney	No problems noted
3/8/2007	Kent McKinney	No problems noted
3/1/2007	Kent McKinney	No problems noted
2/22/2007	Kent McKinney	No problems noted
2/15/2007	Kent McKinney	No problems noted
2/1/2007	Kent McKinney	No problems noted
1/25/2007	Kent McKinney	No problems noted
1/18/2007	Kent McKinney	Ice on Ponds
1/11/2007	Kent McKinney	No problems noted
1/4/2007	Jim Lieb	No problems noted

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: ok

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: ok

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0739 ☑ AM ☐ PM Date: 12-13-07

Name of Inspector: Kurt McKay

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0745 ☑ AM ☐ PM Date: 12-06-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☐ No
Erosion?	☐ Yes ☐ No
Is vegetation growing?	☐ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: ok

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0715 ☑ AM ☐ PM Date: 11-29-07

Name of Inspector: Kent McKinney

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0800 ☑ AM ☐ PM Date: 11-15-07

Name of Inspector: Kent McKinney

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0730 ☑ AM ☐ PM Date: 11-08-07

Name of Inspector: Kent M Kenny

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0940 ☑ AM ☐ PM Date: 11-01-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☐ Yes	☑ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: ok

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☐ Yes	☑ No

Vehicle, Fence, and Locks

Condition: ok

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0720 ☑ AM ☐ PM Date: 10-25-07

Name of Inspector: Kent McKinney

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☐ Yes ☑ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0736 ☑ AM ☐ PM Date: 10-17-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0700 ☒ AM ☐ PM Date: 10-11-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: ok

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☑ Yes ☐ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: ok

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0745 ☑ AM ☐ PM Date: 10-04-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: yes

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0700 ☑ AM ☐ PM Date: 09-27-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☑ Yes ☐ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☑ Yes ☐ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0730 ☑ AM ☐ PM Date: 09-20-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0730 ☑ AM ☐ PM Date: 09-13-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0900 ☑ AM ☐ PM Date: 05-30-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☐ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: Yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0745 ☐ AM ☐ PM Date: 08-23-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☐ Yes ☐ No

Repairs Needed

Time of day: 0730 ☑ AM ☐ PM Date: 02-16-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☐ No
Erosion?	☐ Yes ☐ No
Is vegetation growing?	☐ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0800 ☑ AM ☐ PM Date: 07-26-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0730 ☑ AM ☐ PM Date: 071707

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☑ Yes ☐ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0725 ☑ AM ☐ PM Date: 07-12-07

Name of Inspector: Kent McKinney

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☐ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0730 ☑ AM ☐ PM Date: 07-21-07

Name of Inspector: Kent McKinley

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0800 ☑ AM ☐ PM Date: 06-22-07

Name of Inspector: [illegible] McKinney

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:		
	Water Standing?	☐ Yes ☑ No
	Wet or Dry?	☐ Yes ☐ No
	Odor?	☐ Yes ☑ No
	Erosion?	☐ Yes ☑ No
	Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: fair

Dikes/Berms

Condition:		
	Water Standing?	☐ Yes ☑ No
	Wet or Dry?	☐ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:		
	In place?	☑ Yes ☐ No
	Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 07[illegible] ☑ AM ☐ PM Date: 06-11-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☑ Yes	☐ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: Yes

Dikes/Berms

Condition:

Water Standing?	☑ Yes	☐ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☐ Yes	☐ No

Repairs Needed

Time of day: 0720 ☑ AM ☐ PM Date: 06-07-07

Name of Inspector: Kent McGhee

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☐ Yes	☑ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☐ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: OK

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☐ Yes	☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0710 ☑ AM ☐ PM Date: 05-24-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☑ Yes ☐ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☑ Yes ☐ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0900 ☒ AM ☐ PM Date: 05-17-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0900 ☑ AM ☐ PM Date: 05-10-07

Name of Inspector: _____

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☑ Yes	☐ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☑ Yes	☐ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0715 ☑ AM ☐ PM Date: 05-03-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☐ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☐ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: ok

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: ok

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0745 ☒ AM ☐ PM Date: 04-25-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:		
	Water Standing?	☐ Yes ☑ No
	Wet or Dry?	☑ Yes ☐ No
	Odor?	☐ Yes ☑ No
	Erosion?	☐ Yes ☑ No
	Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: ok

Caps and Locks: yes

Dikes/Berms

Condition:		
	Water Standing?	☐ Yes ☑ No
	Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: ok

Signs (8)

Condition:		
	In place?	☑ Yes ☐ No
	Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 745 ☑ AM ☐ PM Date: 2/1/907

Name of Inspector: Kent M. King

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 7:15 ☑ AM ☐ PM Date: 04-12-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:		
	Water Standing?	☐ Yes ☑ No
	Wet or Dry?	☑ Yes ☐ No
	Odor?	☐ Yes ☑ No
	Erosion?	☐ Yes ☑ No
	Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:		
	Water Standing?	☐ Yes ☑ No
	Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:		
	In place?	☑ Yes ☐ No
	Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0810 ☑ AM ☐ PM Date: 010507

Name of Inspector: Kent McGinnis

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0715 ☑ AM ☐ PM Date: 03-29-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 7:20 ☑ AM ☐ PM Date: 03-22-07

Name of Inspector: Kent McKinney

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: Yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0715 ☑ AM ☐ PM Date: 03-15-07

Name of Inspector: Kent McKinney

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0710 ☑ AM ☐ PM Date: 03-08-07

Name of Inspector: _____

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: ok

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: ok

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0745 ☑ AM ☐ PM Date: 030107

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes	☑ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 745 ☑ AM ☐ PM Date: 02-22-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No
Odor?	☐ Yes ☑ No
Erosion?	☐ Yes ☑ No
Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: ok

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing?	☐ Yes ☑ No
Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: ok

Signs (8)

Condition:

In place?	☑ Yes ☐ No
Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0715 ☑ AM ☐ PM Date: 02-15-07

Name of Inspector: Kent McKinney

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:		
	Water Standing?	☐ Yes ☑ No
	Wet or Dry?	☑ Yes ☐ No
	Odor?	☐ Yes ☑ No
	Erosion?	☐ Yes ☑ No
	Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:		
	Water Standing?	☑ Yes ☑ No
	Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:		
	In place?	☑ Yes ☐ No
	Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 0720 ☑ AM ☐ PM Date: 02-01-07

Name of Inspector: Kent McKinley

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:		
	Water Standing?	☐ Yes ☒ No
	Wet or Dry?	☒ Yes ☐ No
	Odor?	☐ Yes ☒ No
	Erosion?	☐ Yes ☒ No
	Is vegetation growing?	☒ Yes ☐ No

Monitoring Wells

Condition: ok

Caps and Locks: yes

Dikes/Berms

Condition:		
	Water Standing?	☐ Yes ☒ No
	Wet or Dry?	☒ Yes ☐ No

Vehicle, Fence, and Locks

Condition: ok

Signs (8)

Condition:		
	In place?	☒ Yes ☐ No
	Legible?	☒ Yes ☐ No

Repairs Needed

Time of day: 07:15 ☒ AM ☐ PM Date: 01-25-07

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing? ICE	☑ Yes	☐ No
Wet or Dry?	☑ Yes	☐ No
Odor?	☐ Yes	☑ No
Erosion?	☐ Yes	☑ No
Is vegetation growing?	☑ Yes	☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:

Water Standing? ICE	☑ Yes	☐ No
Wet or Dry?	☑ Yes	☐ No

Vehicle, Fence, and Locks

Condition: yes

Signs (8)

Condition:

In place?	☑ Yes	☐ No
Legible?	☑ Yes	☐ No

Repairs Needed

Time of day: 0800 ☑ AM ☐ PM Date: 01-18-07

Name of Inspector: Kent M Kenney

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:		
	Water Standing?	☐ Yes ☑ No
	Wet or Dry?	☑ Yes ☐ No
	Odor?	☐ Yes ☑ No
	Erosion?	☐ Yes ☑ No
	Is vegetation growing?	☑ Yes ☐ No

Monitoring Wells

Condition: OK

Caps and Locks: yes

Dikes/Berms

Condition:		
	Water Standing?	☐ Yes ☑ No
	Wet or Dry?	☑ Yes ☐ No

Vehicle, Fence, and Locks

Condition: OK

Signs (8)

Condition:		
	In place?	☑ Yes ☐ No
	Legible?	☑ Yes ☐ No

Repairs Needed

Time of day: 07 hrs ☑ AM ☐ PM Date: 01-11-07

Name of Inspector: Kent McKay

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing?		Yes	X	No
Wet or Dry? SOME SNOW	X	Yes		No
Odor?		Yes	X	No
Erosion?		Yes	X	No
Is vegetation growing?	X	Yes		No

Monitoring Wells

Condition: GOOD

Caps and Locks: O.K.

Dikes/Berms

Condition:

Water Standing?		Yes	X	No
Wet or Dry? MUDDY wet some SNOW	X	Yes		No

Vehicle, Fence, and Locks

Condition: O.K.

Signs (8)

Condition:

In Place?	X	Yes		No
Legible?	X	Yes		No

Repairs Needed NONE

Time of Day: 4:00PM ☐ AM ☒ PM Date: 1/4/07

Name of Inspector: JIM CIEB

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

OCD LANDFARM TILLING RECORDS SUMMARY 2007

File: OCD 17.C.

DATE	NAME	DESCRIPTION
1/31/07	Mack McKinney	unable to plow
2/28/2007	Mack McKinney	unable to plow
3/15/2007	Mack McKinney	Plowed Landfarm
4/5/2007	Mack McKinney	Disk
5/15/2007	Mack McKinney	Plowed Landfarm
6/18/2007	Mack McKinney	Disk
7/31/2007	Mack McKinney	Unable to plow - ground too wet
8/16/2007	Mack McKinney	Unable to plow - ground too wet
9/27/2007	Mack McKinney	Disk
10/25/2007	Mack McKinney	Plowed Landfarm
11/19/2007	Mack McKinney	Plowed Landfarm
12/6/2007	Mack McKinney	Plowed Landfarm

Date 01-31-07
Initials BM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. _____ CONCRETE BARRIER WEST OF CRUDE TANKS.
3. _____ API SEPARATOR AREA GENERAL APPEARANCE.
4. _____ BENZENE STRIPPER AREA CONDITION.
5. _____ AERATION LAGOONS AND AERATOR PUMPS. Temp.___V___
6. _____ POND ONE GENERAL APPEARANCE.
7. _____ POND 10 WATER FLOW IN AND OUT. Temp 29 V 5"
8. _____ DITCH OUT OF POND 10 TO RUNWAY
9. _____ DITCH FROM NORTH OF RUNWAY TO POND 9
10. _____ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. _____ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'6"	#6 OM	#12a 2'6"
#3 1'7"	#8 BM	#12b 1FT
#4 1'8"	#7 BM	#9 BM
#5 2FT	#11 1'6"	

Monthly tilling of OCD landfarm _____ **Date**_____ **Signed**

not done - muddy -

sm/c:/word/envforms/dailydrainage/revision 08/24/2004

Date 030107
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. _____ CONCRETE BARRIER WEST OF CRUDE TANKS.
3. _____ API SEPARATOR AREA GENERAL APPEARANCE.
4. _____ BENZENE STRIPPER AREA CONDITION.
5. _____ AERATION LAGOONS AND AERATOR PUMPS. Temp.___V___
6. _____ POND ONE GENERAL APPEARANCE.
7. _____ POND 10 WATER FLOW IN AND OUT. Temp 22 V 5"
8. _____ DITCH OUT OF POND 10 TO RUNWAY
9. _____ DITCH FROM NORTH OF RUNWAY TO POND 9
10. _____ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. _____ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'6"	#6 BM	#12a 2'6"
#3 1'11"	#8 2 FT	#12b 1'1"
#4 2 FT	#7 3"	#9 BM
#5 1 FT	#11 [illegible]	

Monthly tilling of OCD landfarm _____ **Date**_____ **Signed**

not done - muddy
for February

sm/c:/word/envforms/dailydrainage/revision 08/24/2004

Date 03-14-07
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. ✓ CONCRETE BARRIER WEST OF CRUDE TANKS.
3. ✓ API SEPARATOR AREA GENERAL APPEARANCE.
4. ✓ BENZENE STRIPPER AREA CONDITION.
5. ✓ AERATION LAGOONS AND AERATOR PUMPS. Temp. ~~V~~
6. ✓ POND ONE GENERAL APPEARANCE.
7. ✓ POND 10 WATER FLOW IN AND OUT. Temp 36 V 5"
8. ✓ DITCH OUT OF POND 10 TO RUNWAY
9. ✓ DITCH FROM NORTH OF RUNWAY TO POND 9
10. ✓ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. ✓ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'6"	#6 0M	#12a 2'6"
#3 3M	#8 1FT	#12b 1FT
#4 3M	#7 3FT	#9 3M
#5 1FT	#11 1'6"	

Monthly tilling of OCD landfarm Done **Date** 03-14-07 **Signed**

Date 04-05-07
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. CONCRETE BARRIER WEST OF CRUDE TANKS.
3. API SEPARATOR AREA GENERAL APPEARANCE.
4. BENZENE STRIPPER AREA CONDITION.
5. AERATION LAGOONS AND AERATOR PUMPS. Temp.___V___
6. POND ONE GENERAL APPEARANCE.
7. POND 10 WATER FLOW IN AND OUT. Temp 40 V 5"
8. DITCH OUT OF POND 10 TO RUNWAY
9. DITCH FROM NORTH OF RUNWAY TO POND 9
10. VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'6"	#6 OM	#12a 2'6"
#3 1'10"	#8 1FT	#12b 1FT
#4 1'11"	#7 2'11"	#9 BM
#5 1'5"	#11 1'7"	

Monthly tilling of OCD landfarm [signature] **Date** DH 05 07 **Signed**

Date 05-15-07
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. _____ CONCRETE BARRIER WEST OF CRUDE TANKS.
3. _____ API SEPARATOR AREA GENERAL APPEARANCE.
4. _____ BENZENE STRIPPER AREA CONDITION.
5. _____ AERATION LAGOONS AND AERATOR PUMPS. Temp.___V___
6. _____ POND ONE GENERAL APPEARANCE.
7. _____ POND 10 WATER FLOW IN AND OUT. Temp 38 V 4"
8. _____ DITCH OUT OF POND 10 TO RUNWAY
9. _____ DITCH FROM NORTH OF RUNWAY TO POND 9
10. _____ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. _____ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'6"	#6 DM	#12a BM
#3 1'8"	#8 1'1"	#12b 1'1"
#4 1'10"	#7 2'10"	#9 BM
#5 1'2"	#11 1'7"	

Monthly tilling of OCD landfarm _____ **Date** 05-15-07 **Signed**

sm/c:/word/envforms/dailydrainage/revision 08/24/2004

Date 04-18-07
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. _____ CONCRETE BARRIER WEST OF CRUDE TANKS.
3. _____ API SEPARATOR AREA GENERAL APPEARANCE.
4. _____ BENZENE STRIPPER AREA CONDITION.
5. _____ AERATION LAGOONS AND AERATOR PUMPS. Temp.___V___
6. _____ POND ONE GENERAL APPEARANCE.
7. _____ POND 10 WATER FLOW IN AND OUT. Temp 62 V 5'
8. _____ DITCH OUT OF POND 10 TO RUNWAY
9. _____ DITCH FROM NORTH OF RUNWAY TO POND 9
10. _____ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. _____ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'7"	#6 0M	#12a 13M
#3 1'8"	#8 1'4"	#12b 1'2"
#4 1'9"	#7 3 FT	#9 13M
#5 1'5	#11 2 FT	

Monthly tilling of OCD landfarm _____ **Date** 04-18-07 **Signed**

sm/c:/word/envforms/dailydrainage/revision 08/24/2004

Date 07-31-07
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. _____ CONCRETE BARRIER WEST OF CRUDE TANKS.
3. _____ API SEPARATOR AREA GENERAL APPEARANCE.
4. _____ BENZENE STRIPPER AREA CONDITION.
5. _____ AERATION LAGOONS AND AERATOR PUMPS. Temp. ___V___
6. _____ POND ONE GENERAL APPEARANCE.
7. _____ POND 10 WATER FLOW IN AND OUT. Temp 50 V 6"
8. _____ DITCH OUT OF POND 10 TO RUNWAY
9. _____ DITCH FROM NORTH OF RUNWAY TO POND 9
10. _____ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. ✓ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'7"	#6 OM	#12a BM
#3 1'5"	#8 1'10"	#12b 1'4"
#4 1'7"	#7 4FT	#9 BM
#5 1'8"	#11 4FT	

Towers Mark

Monthly tilling of OCD landfarm _____ **Date** _____ **Signed**

Date 08-16-07
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. _____ CONCRETE BARRIER WEST OF CRUDE TANKS.
3. _____ API SEPARATOR AREA GENERAL APPEARANCE.
4. _____ BENZENE STRIPPER AREA CONDITION.
5. _____ AERATION LAGOONS AND AERATOR PUMPS. Temp. ~~V~~
6. _____ POND ONE GENERAL APPEARANCE.
7. _____ POND 10 WATER FLOW IN AND OUT. Temp 52 V 5"
8. _____ DITCH OUT OF POND 10 TO RUNWAY
9. _____ DITCH FROM NORTH OF RUNWAY TO POND 9
10. _____ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. _____ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'7"	#6 OM	#12a 2'6"
#3 1'7"	#8 BM	#12b 1'3"
#4 1'7"	#7 4'2"	#9 BM
#5 2 FT	#11 BM	

Monthly tilling of OCD landfarm Wet **Date**_____ **Signed**

Date 09-27-07
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. _____ CONCRETE BARRIER WEST OF CRUDE TANKS.
3 _____ API SEPARATOR AREA GENERAL APPEARANCE.
4 _____ BENZENE STRIPPER AREA CONDITION.
5 _____ AERATION LAGOONS AND AERATOR PUMPS. Temp.___V___
6 _____ POND ONE GENERAL APPEARANCE.
7 _____ POND 10 WATER FLOW IN AND OUT. Temp___V___
8 _____ DITCH OUT OF POND 10 TO RUNWAY
9 _____ DITCH FROM NORTH OF RUNWAY TO POND 9
10 _____ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11 _____ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'7"	#6 DM	#12a BM
#3 1'4"	#8 BM	#12b 1'2"
#4 1'6"	#7 BM	#9 BM
#5 1'10"	#11 3 FT	

Monthly tilling of OCD landfarm Dicks **Date** 09-27-07 **Signed**

Date 10-25-07
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. _____ CONCRETE BARRIER WEST OF CRUDE TANKS.
3. _____ API SEPARATOR AREA GENERAL APPEARANCE.
4. _____ BENZENE STRIPPER AREA CONDITION.
5. _____ AERATION LAGOONS AND AERATOR PUMPS. Temp.___V___
6. _____ POND ONE GENERAL APPEARANCE.
7. _____ POND 10 WATER FLOW IN AND OUT. Temp 24 V 5"
8. _____ DITCH OUT OF POND 10 TO RUNWAY
9. _____ DITCH FROM NORTH OF RUNWAY TO POND 9
10. _____ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. _____ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'7"	#6 0 M	#12a BM
#3 1'6"	#8 BM	#12b 1'4"
#4 1'7"	#7 BM	#9 BM
#5 1'6"	#11 3'7"	

Monthly tilling of OCD landfarm Plow **Date** 10-25-07 **Signed**

Date 11-19-07
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. _____ CONCRETE BARRIER WEST OF CRUDE TANKS.
3. _____ API SEPARATOR AREA GENERAL APPEARANCE.
4. _____ BENZENE STRIPPER AREA CONDITION.
5. _____ AERATION LAGOONS AND AERATOR PUMPS. Temp.___V___
6. _____ POND ONE GENERAL APPEARANCE.
7. _____ POND 10 WATER FLOW IN AND OUT. Temp 41 V 51
8. _____ DITCH OUT OF POND 10 TO RUNWAY
9. _____ DITCH FROM NORTH OF RUNWAY TO POND 9
10. _____ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. _____ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'6"	#6 OM	#12a OM
#3 1'5"	#8 DM	#12b 1'3"
#4 1'6"	#7 DM	#9 DM
#5 1'7"	#11 2'9"	

Monthly tilling of OCD landfarm _____ **Date** 11-19-07 **Signed**

Date 12-06-07
Initials KM

DAILY DRAINAGE INSPECTION

1. OK CHECK WATER IN DIKE AT MARKETING TANK AREA.
2. _____ CONCRETE BARRIER WEST OF CRUDE TANKS.
3. _____ API SEPARATOR AREA GENERAL APPEARANCE.
4. _____ BENZENE STRIPPER AREA CONDITION.
5. _____ AERATION LAGOONS AND AERATOR PUMPS. Temp.___V___
6. _____ POND ONE GENERAL APPEARANCE.
7. _____ POND 10 WATER FLOW IN AND OUT. Temp 35 V 5"
8. _____ DITCH OUT OF POND 10 TO RUNWAY
9. _____ DITCH FROM NORTH OF RUNWAY TO POND 9
10. _____ VALVES AND POND LEVELS ON PONDS 12 THRU 7
11. _____ VALVES AND POND LEVELS ON PONDS 3 THRU 9

Rain Gauge_____

Freeboard on Ponds:

#2 1'7"	#6 OM	#12a BM
#3 1'3"	#8 BM	#12b 1'3"
#4 1'4"	#7 BM	#9 BM
#5 1 FT	#11 2 FT	

Monthly tilling of OCD landfarm 12/06/06 **Date** J Mach **Signed**

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS WASTE BUREAU

2007 ANNUAL HAZARDOUS WASTE FEE REPORT

Note: Complete and return this report with your invoice and payment

SECTION I: FACILITY INFORMATION AND IDENTIFICATION

Facility Name: WESTERN REFINING SW INC-GALLUP

EPA Identification Number: NMD000333211 **Phone:** (505) 722-0217

Facility Address: INTERSTATE 40, EXIT 39, 17 MILES EAST OF GALLUP, NM 87347

Mailing Address: RT 3 BOX7, GALLUP, NM. 87301

Facility Contact: ED RIEGE

Title: ENVIRONMENTAL MANAGER

Reporting Date: 7/15/08

The New Mexico Hazardous Waste Generation Fee is comprised of two parts: a Business Fee and a Generation Fee. The Business Fee is determined by your generator status and the Generation Fee is determined by the amount of non-recycled hazardous waste, which is generated by the facility. It is important to note that your generator status is determined by adding the recycled and non-recycled hazardous waste generated by your facility each month.

Detailed regulations covering the annual hazardous waste fees are defined at 20.4.3 NMAC.

SECTION II: ANNUAL GENERATION CALCULATIONS

To calculate the annual waste generation amounts, use the schedule below. Enter the total pounds of hazardous waste generated per month and then subtract the pounds of recycled hazardous waste per month. The difference is the amount of non-recycled hazardous waste generated.

Calendar Year: 2007

Month	Total Hazardous Waste (lb)		Recycled (lb)		Non-Recycled (lb)
January	56500	-	0	=	56500
February	37024	-	0	=	37024
March	21000	-	0	=	21000
April	2830	-	0	=	2830
May	1941	-	0	=	1941
June	12028	-	0	=	12028
July	0	-	0	=	0
August	15187	-	0	=	15187
September	27000	-	0	=	27000
October	80500	-	0	=	80500
November	189850	-	0	=	189850
December	139940	-	0	=	139940
Annual Totals	583800	-	0	=	583800

SECTION III: GENERATION STATUS DETERMINATION

Determine your generator status using the largest amount of total hazardous waste generated during any one calendar month (from first column in Section II).

GENERATOR STATUS:

* **If you generate 220 lbs (100 kg) or less of hazardous waste (recycled <u>and</u> non-recycled) in any one month, you are a Conditionally Exempt Small Quantity Generator (CESQG).**
* **If you generate more than 220 lbs (100 kg) but less than 2,205 lbs (1,000 kg) of hazardous waste (recycled <u>and</u> non-recycled) in any one month, you are a Small Quantity Generator (SQG).**
* **If you generate 2,205 lbs (1,000 kg) or more of hazardous waste (recycled <u>and</u> non-recycled) in any one month, you are a Large Quantity Generator (LQG).**

NOTE: IF YOU ARE A <u>CESQG</u>, YOU <u>DO NOT</u> OWE ANY FEES. PLEASE COMPLETE THE CERTIFICATION SECTION OF THIS FORM AND RETURN TO OUR OFFICE.

SECTION IV: BUSINESS FEES

Based on the generator status determined from Section III, check the appropriate category for this facility and pay the appropriate Business Fee.

Conditional Exempt Small Quantity Generator	.....	no fees due
Small Quantity Generator	.....	$ 200.00
Large Quantity Generator	.....	$2,500.00

SECTION V: ANNUAL GENERATION FEES

1. **Conditionally Exempt Small Quantity Generators** do not owe any annual generator fees.

2. **Small Quantity Generators** shall pay the following fees based on **the average monthly amount of non-recycled hazardous waste generated.**

   Annual total non-recycled hazardous waste from Section II divided by twelve equals monthly average

   _____ lb / 12 = _____ pounds per month

1 - 500 pounds/month	.....	$ 35.00
501 - 1,000 pounds/month	.....	$ 100.00
1,001 - 2,205 pounds/month	.....	$ 250.00

   If ≤ 2,205 pounds/month, enter appropriate fee: $ _____

3. **Large Quantity Generators** at a site shall pay the following fees **for non-recycled hazardous waste generated for the reporting year**, if both hazardous waste and hazardous wastewater were generated at the site, the generator must determine the amounts for each to calculate the fee. Use the following fee schedules for these calculations.

   a. $ 0.01 per pound of non-recycled hazardous waste generated at the site.

   583800 pounds for the reporting year X $ 0.01 = $ $5,838.00

   and

   b. $ 0.01 per ton of wastewater designated a hazardous waste solely because it exhibits a hazardous characteristic.

   _____ tons for reporting year X $ 0.01 = $ _____

Total LQG annual fee (a + b) = $ $5,838.00

SECTION VI: PAST DUE FEES

Fees owed for previous years are calculated the same as above and are then multiplied by 1%. The **sum** of the annual business fee (Section IV) and the generation fee (Section V) are **multiplied** by the number of months that the fee is past due:

Business Fee + Generation X 1% X Number of months past due = Late Fee

Example: ($200 + $35) X 0.01 X 10 Months = $23.50

Example: ($200 + $35) X 0.01 X 10 Months = $23.50

This late fee is added to the business fee, the generation fee, and the administration charge of $100 to determine the total past due fee owed for that year:

Business Fee + Generation + Late Fee + $100 = Total Past Due Fee

Example: $200.00 + $35.00 + $23.50 + $100.00 = $358.50

If you are paying past due fees for multiple years, you pay the administration charge one time only. The fees for each year are due on August 1st of the following year.

Example: Fees for 2006 were due on August 1, 2007. Please calculate past due fees and enter them below:

2004 Fees	$ _____
2005 Fees	$ _____
2006 Fees	$ _____
Administrative Fee	$ 100.00
Total Past Due Fees Owed	$ _____

SECTION VII: CAP FEES

CAP Fees: The aggregate amount of annual generation and business fees to be paid per person [as defined at 20.4.3.108 NMAC] for any year based on this Part (20.4.3 NMAC) shall be limited to:

One facility	$35,000.00
Two facilities	$50,000.00
Three or more facilities	$65,000.00

If your facility generates non-recycled hazardous waste in amounts which will result in a total fee greater than the amounts given in the above table, you only pay the CAP Fee indicated. These CAP Fees does not apply to late fees.

SECTION VIII: TOTAL FEES DUE

Total Fees (Business Fees, Generation Fees) Owed for Current Calendar Year	$8,338.00
Total Past Due Fees Owed (if applicable)	
TOTAL FEES	$8,338.00

SECTION IX: CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents. I hereby certify that either based on my personal knowledge or my inquiry of those individuals immediately responsible for obtaining the information, the submitted information is true, accurate and complete. I hereby acknowledge that any person who knowingly omits information from or makes any false statement or representation in a fee report may be subject to criminal penalties under the Act.

Mark B. Turri
Name (printed or typed)

Refinery Manager
Title

Signature

July 15, 2008
Date

This report must be completed and returned to the address listed below. Make your cashiers check or money order for the full amount due payable to the NMED Hazardous Waste Fund and mail it to:

NMED - Hazardous Waste Bureau
ATTN: Charlotte Duran
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe, New Mexico 87505

Western Refining
LUP REFINERY

WNR LISTED NYSE

July 15, 2008

COPY

CERTIFIED MAIL 7005 1820 0001 6456 2991

State of New Mexico
Environment Department
Hazardous Waste Bureau (HWB)
2905 Rodeo Park Drive East, Bldg 1
Santa Fe, NM. 87505

Attn: Ms Charlotte Duran

Reference: **2007 ANNUAL HAZARDOUS WASTE FEE REPORT**
Western Refining Southwest- Gallup Refinery
EPA ID# NMD000333211

Dear Ms Duran;

The Gallup Refinery (formerly Giant Industries, Inc. (Ciniza Refining0 has prepared and is submitting the 2007 Annual Hazardous Waste Fee Report for your use. Enclosed is a check (Check #: 339506) to cover the 2007 Annual Hazardous Waste fee as calculated. If you should require additional information, please contact me at (505) 722-0258.

Sincerely,

Beck Larsen, CHMM, REM
Environmental Engineer

Cc: w/attachments
File
Mark B. Turri, General Manager
Ed Riege, Environmental Manager

2007 hw fee rpt_covrltr.doc

I-40 Exit 39, Jamestown, New Mexico 87347 • 505 722-3833 • www.wnr.com
Mail: Route 3 Box 7, Gallup, New Mexico 87301

Western Refining

REQUEST FOR CHECK

DATE 7/14/08

☐ NEW SUPPLIER

PAYABLE TO: NMED Hazardous Waste Bureau

ADDRESS: 2905 Rodeo Park Drive East, Bldg 1

CITY,STATE,ZIP: Santa Fe, New Mexico 87505

NEW VENDOR ☐

OLD VENDOR ☑

ITEM	DISTRIBUTION	AMOUNT
2007 Annual Hazardous Waste Fee Report	2084060-5771	8,338.00
☐ MAIL TO VENDOR ☑ RETURN TO ORIGINATOR	DATE REQUIRED 7/18/08	PREPARED BY Ed Riege
COMMENTS		APPROVED BY