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GIANT
Giant Refining Company
Route 3, Box 7
Gallup, NM 87301

August 31, 2007

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

RE: 2006 Annual Groundwater Report (and OCD Addendum), Discharge Permit GW-032

Dear Carl, Hope, and Brandon:

Giant Refining is pleased to submit the 2006 Annual Groundwater Report for our Ciniza Refinery. This report is being submitted to comply with Discharge Permit-032 annual groundwater reporting requirements.

Due to the large number of environmental sampling data laboratory reports from 2006, we have split the report into two binders; the first being the groundwater report proper, and the second, an OCD Addendum containing OCD requested information.

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

Sincerely,

Jim Lieb, Environmental Engineer
Giant Refining, Gallup Refinery

cc: Ed Rios w/o report
Ed Riege w/o report

OIL CONSERVATION DIVISION 2006 ANNUAL GROUNDWATER REPORT (AND OCD ADDENDUM)

Binder 1: Annual Groundwater Report

Giant Refining Company – Gallup Refinery

McKinley County, New Mexico

August 31, 2007

EPA ID No. NMD000333211

Discharge Permit No. GW-032

Prepared By: Jim Lieb, Environmental Engineer, Giant Refining – Gallup Refinery

Signature: _____, Date: 8/30/07

Certified By: Ed Rios, General Manager, Giant Refining – Gallup Refinery

Signature: _____, Date: 8-30-07

Executive Summary

The purpose of groundwater sampling performed in 2006 at Gallup Refinery is to determine whether contamination resulting from refinery related activities has entered groundwater at the facility. Twenty monitoring wells are distributed within the boundaries of the refinery and 9 monitoring wells are located along the perimeter of the lagoons and ponds. The ground water 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 Giant Refining, Inc. with headquarters in El Paso, Texas. U.S. EPA permit ID No. NMD000333211 pertains to the facility.

The monitoring in 2006 has shown that although contamination has entered the shallow perched groundwater at one location (OW-14), the contamination is limited in extent and has not migrated to the wells that were placed nearby OW-14 (OW-12, OW-13, OW-29, and OW-30). The monitoring performed in 2006 has shown that, at the OW-14 location where contamination exists, the contamination has remained relatively constant in concentration in comparison to sampling conducted in past years and the concentrations have not appreciably increased.

Monitoring of well GWM-1 in 2005 has shown benzene in concentrations (June 2005 = 0.010 mg/l and September 2005 = 0.081 mg/l) exceeding the NM Water Quality Control Commission standard (0.01 mg/l) and the U.S. EPA MCL (0.005 mg/l). Giant conducted annual sampling of GWM-1 on August 4, 2006. The benzene concentration in this sample was 0.012 mg/l.

Elevated levels of fluoride and total dissolved solids (TDS) have shown up in some of the boundary wells in 2006, 2005 and 2004.

The Ciniza Refinery is now to be known as the *Gallup* Refinery.

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I. Annual Groundwater Report (Binder 1)

Section 1 Introduction

1.1 Facility Description

This annual groundwater report pertains to the Giant Refining Company 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 location of the Gallup Refinery.

The owner is:

	Giant Refining, Inc. 23733 North Scottsdale Road Scottsdale, AZ 85255	(parent corporation)
Operator:	Giant Refining Company Route 3, Box 7 Gallup, New Mexico 87301	(postal address)
	Giant Refining Company I-40, Exit 39 Jamestown, New Mexico 87347	(physical address)

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

The following permits pertain to 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 Giant New Mexico. The setting is a high desert plain on the Giant 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, 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 residual.
- The fluidized catalytic cracking unit (FCCU) breaks up (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 vac truck. The vac 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. A separate storm water collection system routes storm water to the old API separator (OAPIS). Water from the OAPIS is pumped to the NAPIS for processing and benzene stripping.

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 vac truck and disposed as hazardous waste at an approved landfill.

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 recently constructed several new berms in the "grassy area" 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 Giant 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 a density of less than six cattle or 30 sheep per section. Surface vegetation consists of native xerophytic vegetation including grasses, shrubs, small junipers, and some prickly pear cacti. Average rainfall is less than 7 inches per year.

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 cattle 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 very 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 throughout the central and Giant 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.

2. Scope of Activities

The annual monitoring of the ground water monitoring wells was conducted in August, October and December 2006. The following table shows the dates of sampling and the parameters of analysis:

Well	Date Sampled	Parameters of Analysis
OW-11	10-26-06	General Chem/VOCs/SVOCs/BTEX/MTBE and RCRA 8 Metals
OW-12	10-27-06	BTEX and MTBE
OW-13	10-27-06	BTEX and MTBE
OW-14	10-29-06 and 12-28-06	BTEX and MTBE
OW-29	10-27-06	BTEX and MTBE
OW-30	10-27-06	BTEX and MTBE
BW-1A	Dry	
BW-1B	Not enough to sample (<1 foot)	
BW-1C	10-28-06	General Chem/VOCs/SVOCs/BTEX/MTBE and RCRA 8 Metals
BW-2A	10-28-06	General Chem/VOCs/SVOCs/BTEX/MTBE and RCRA 8 Metals
BW-2B	10-28-06	General Chem/VOCs/SVOCs/BTEX/MTBE/RCRA 8 Metals (Selenium on 7-19-06)
BW-2C	10-28-06	General Chem/VOCs/SVOCs/BTEX/MTBE/RCRA 8 Metals
BW-3A	Dry	
BW-3B	10-29-06	General Chem/VOCs/SVOCs/BTEX/MTBE/RCRA 8 Metals
BW-3C	10-29-06	General Chem/VOCs/SVOCs/BTEX/MTBE/RCRA 8 Metals
GWM-1	8-2-06	General Chem/VOCs/SVOCs/BTEX/MTBE/RCRA 8 Metals
GWM-2	Dry	
GWM-3	Dry	
MW-1	10-26-06	DRO/GRO/General Chem/VOCs/SVOCs/RCRA 8 Metals
MW-4	Not required to be sampled in 2006	
MW-5	Not required to be sampled in	

	2006	
SMW-2	Not required to be sampled in 2006	
SMW-4	Not required to be sampled in 2006	
PW-3	10-27-06	General Chem/nitrates/ VOCs/SVOCs/ and RCRA 8 Metals*
RW-1	3-16, 6-6, 7-31, and 12-21-06	Measure product layer thickness
RW-2	No product present	Measure product layer thickness
RW-5	3-16, 6-1, 7-26, and 10-16-06	Measure product layer thickness
RW-6	3-17, 6-7, 7-26, and 10-16-06	Measure product layer thickness
*Cyanide was specified to be analyzed on the C-O-C but lab did not perform the analysis.		

The results of the annual sampling event are summarized in tables provided in Section 4 (Groundwater Monitoring Events).

Quarterly visual checks for artesian flow conditions at OW-1 and level measurements at OW-10 were conducted on 3-9-06, 6-27-06, 7-26-06, and 10-13-06. Checks for water in GWM-1, GWM-2, and GWM-3 were conducted on 1-18-06, 3-9-06, 5-26-06, 7-26-06, and 10-13-06. The visual checks are documented on the forms provided in Section 8 - Well Inspection Logs.

The following table summarizes all the currently active monitoring wells and sampling frequencies:

The observation, measurement, sampling frequency, and type of analysis are as follows.

Well ID	Frequency	Measurement[4] / Analysis
OW-1	Quarterly	Visual check for artesian flow conditions
OW-10	Quarterly	Level measurement of the Sonsela Aquifer water table
GWM-1	Quarterly Annual	Q: Check for indication of aeration basin leakage. A: General chemistry /VOC/SVOC/BTEX/MTBE/RCRA 8 metals
GWM-2	Quarterly	Check for indication of aeration basin leakage.
GWM-3	Quarterly	Check for indication of aeration basin leakage.
OW-11	Annual	General chemistry/VOC/SVOC /BTEX/MTBE/ RCRA 8 metals
OW-12	Annual	BTEX / MTBE
OW-13[2]	Annual	BTEX / MTBE
OW-14	SemiAnnual	BTEX / MTBE
OW-29	Annual	BTEX / MTBE

Well ID	Frequency	Measurement[4] / Analysis
OW-30	Annual	BTEX / MTBE
BW-1-A[3]	Annual	General chemistry / VOC / SVOC / BTEX / MTBE / RCRA 8 metals
BW-1-B[3]	Annual	General chemistry / VOC / SVOC / BTEX / MTBE /RCRA 8 metals
BW-1-C[3]	Annual	General chemistry / VOC / SVOC / BTEX / MTBE / RCRA 8 metals
BW-2-A[3]	Annual	General chemistry / VOC / SVOC / BTEX / MTBE / RCRA 8 metals
BW-2-B[3]	Annual	General chemistry / VOC / SVOC / BTEX / MTBE / RCRA 8 metals
BW-2-C[3]	Annual	General chemistry / VOC / SVOC / BTEX / MTBE / RCRA 8 metals
BW-3-A[3]	Annual	General chemistry / VOC / SVOC / BTEX / MTBE / RCRA 8 metals
BW-3-B[3]	Annual	General chemistry / VOC / SVOC / BTEX / MTBE / RCRA 8 metals
BW-3-C[3]	Annual	General chemistry / VOC / SVOC / BTEX / MTBE / RCRA 8 metals
MW-1	Annual	General chemistry / RCRA list constituents[5]
MW-4	Annual in 05,07,09	General chemistry / RCRA list constituents[5] Modified Skinner List and organics
MW-5	Annual in 05,07,09	General chemistry / RCRA list constituents[5] Modified Skinner List and organics
SMW-2	Annual in 05,07,09	General chemistry / RCRA list constituents[5] Modified Skinner List and organics
SMW-4	Annual in 05,07,09	General chemistry / RCRA list constituents[5] Modified Skinner List and organics
RW-1	Annual	Measurement of product layer thickness, if present
RW-2	Annual	Measurement of product layer thickness, if present
RW-5	Annual	Measurement of product layer thickness, if present
RW-6	Annual	Measurement of product layer thickness, if present
PW-2 (Process)	2008, then every 3 yrs thereafter	SVOCs, VOCs, Heavy Metals, Cyanide, Nitrates
PW-3 (Drinking/ Process)	Every 3 yrs starting with 2006	SVOCs, VOCs, Heavy Metals, Cyanide, Nitrates

Well ID	Frequency	Measurement[4] / Analysis
PW-4 (Process)	Every 3 yrs starting with 2004	SVOCs, VOCs, Heavy Metals, Cyanide, Nitrates
Pond 1 Inlet (EP1-IN)	Semi-Annual	BTEX, SVOCs, RCRA 8 metals
Pilot Wastewater	Quarterly	TCLP (EPA Method 1311 and BOD)

[1] This is the new well installed down gradient of the aeration basins.

[2] When OW-14 is cleaned up, then monitoring of OW-13 shall be discontinued.

[3] These are the new wells installed at the northwest corner boundary of the refinery. BW-1-A, BW-1-B, and BW-3-A were dry at the time of drilling.

[4] To the extent practicable, water table depth shall be measured at each well annually.

[5] Frequency of sampling shall be per RCRA post closure schedule.

In addition to groundwater monitoring, surface water monitoring shall also be conducted as follows.

- On an annual basis, a grab sample of the inlet water to Pond #2 shall be collected and analyzed for BOD, COD, TDS, BTEX, and MTBE.

On an annual basis, a grab sample of evaporation pond water shall be collected and analyzed for general chemistry parameters. The evaporation pond selected for sampling shall be the pond, considered by refinery personnel, to most likely contain the highest salinity or TDS. In addition, the selected pond shall be alternated from year-to-year in order to provide a broader indication of analysis.

Groundwater Monitoring Well Installations in 2006

No monitoring wells were installed in 2006.

Two new shallow ground water monitoring wells were installed in the early fall of 2005 near GWM-1 which is located at the south west corner of evaporation pond 1. GWM-2 was placed at the northwest corner of evaporation pond 2 and GWM-3 was placed at the northwest corner of evaporation pond 1. GWM-1, GWM–2, and GWM–3 were placed to determine whether any leakage from the lagoons and or evaporation ponds is occurring. GWM-2 is screened at 18.95 feet and GWM-3 is screened at 17.95 feet.

Ground water remediation activities are conducted at the Gallup refinery including the pumping of 24.4 gallons of product from recovery well No.1 (RW-1) in 2006.

Old API Oil Water Separator

The old API Separator (OAPIS) was removed from service on October 6, 2004 and the start up of the new API Separator (NAPIS) occurred on the same date. Work to remove the OAPIS from service as an oil water separator was described in the 2004 report. Once the OAPIS was removed from oil/water separator service, its use as a storm water catch basin commenced. Beginning in early 2005, Giant began pumping accumulated storm water from the OAPIS into the NAPIS so that the water would undergo treatment in the benzene stripping columns.

Perimeter Search

Giant 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. Giant 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.

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 TT[1] (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 present[5]	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/a[6]
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	TT[3]	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 TT1 (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)	TT3	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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C. The standards are not intended as maximum ranges and concentrations for use, and nothing herein contained shall be construed as limiting the use of waters containing higher ranges and concentrations.
[2-18-77; 20.6.2.3101 NMAC - Rn, 20 NMAC 6.2.III.3101, 1-15-01]

20.6.2.3102: [RESERVED]
[12-1-95; 20.6.2.3102 NMAC - Rn, 20 NMAC 6.2.III.3102, 1-15-01]

20.6.2.3103 STANDARDS FOR GROUND WATER OF 10,000 mg/l TDS CONCENTRATION OR LESS: The following standards are the allowable pH range and the maximum allowable concentration in ground water for the contaminants specified unless the existing condition exceeds the standard or unless otherwise provided in Subsection D of Section 20.6.2.3109 NMAC. Regardless of whether there is one contaminant or more than one contaminant present in ground water, when an existing pH or concentration of any water contaminant exceeds the standard specified in Subsection A, B, or C of this section, the existing pH or concentration shall be the allowable limit, provided that the discharge at such concentrations will not result in concentrations at any place of withdrawal for present or reasonably foreseeable future use in excess of the standards of this section. These standards shall apply to the dissolved portion of the contaminants specified with a definition of dissolved being that given in the publication "*methods for chemical analysis of water and waste of the U.S. environmental protection agency*," with the exception that standards for mercury, organic compounds and non-aqueous phase liquids shall apply to the total unfiltered concentrations of the contaminants.

A. **Human Health Standards**-Ground water shall meet the standards of Subsection A and B of this section unless otherwise provided. If more than one water contaminant affecting human health is present, the toxic pollutant criteria as set forth in the definition of toxic pollutant in Section 20.6.2.1101 NMAC for the combination of contaminants, or the Human Health Standard of Subsection A of Section 20.6.2.3103 NMAC for each contaminant shall apply, whichever is more stringent. Non-aqueous phase liquid shall not be present floating atop of or immersed within ground water, as can be reasonably measured.

(1) Arsenic (As).....0.1 mg/l
(2) Barium (Ba).....1.0 mg/l
(3) Cadmium (Cd).....0.01 mg/l
(4) Chromium (Cr).....0.05 mg/l
(5) Cyanide (CN).....0.2 mg/l
(6) Fluoride (F).....1.6 mg/l
(7) Lead (Pb).....0.05 mg/l
(8) Total Mercury (Hg).....0.002 mg/l
(9) Nitrate (NO_3 as N).....10.0 mg/l
(10) Selenium (Se).....0.05 mg/l
(11) Silver (Ag).....0.05 mg/l
(12) Uranium (U).....0.03 mg/l
(13) Radioactivity: Combined Radium-226 & Radium-228.....30 pCi/l
(14) Benzene.....0.01 mg/l
(15) Polychlorinated biphenyls (PCB's).....0.001 mg/l
(16) Toluene.....0.75 mg/l
(17) Carbon Tetrachloride.....0.01 mg/l
(18) 1,2-dichloroethane (EDC).....0.01 mg/l
(19) 1,1-dichloroethylene (1,1-DCE).....0.005 mg/l
(20) 1,1,2,2-tetrachloroethylene (PCE).....0.02 mg/l
(21) 1,1,2-trichloroethylene (TCE).....0.1 mg/l
(22) ethylbenzene.....0.75 mg/l
(23) total xylenes.....0.62 mg/l
(24) methylene chloride.....0.1 mg/l
(25) chloroform.....0.1 mg/l
(26) 1,1-dichloroethane.....0.025 mg/l
(27) ethylene dibromide (EDB).....0.0001 mg/l
(28) 1,1,1-trichloroethane.....0.06 mg/l
(29) 1,1,2-trichloroethane.....0.01 mg/l
(30) 1,1,2,2-tetrachloroethane.....0.01 mg/l
(31) vinyl chloride.....0.001 mg/l

(32) PAHs: total naphthalene plus monomethylnaphthalenes.....0.03 mg/l
(33) benzo-a-pyrene.....0.0007 mg/l

B. Other Standards for Domestic Water Supply

(1) Chloride (Cl) .....250.0 mg/l
(2) Copper (Cu) .....1.0 mg/l
(3) Iron (Fe) .....1.0 mg/l
(4) Manganese (Mn) .....0.2 mg/l
(6) Phenols.....0.005 mg/l
(7) Sulfate (SO_4) .....600.0 mg/l
(8) Total Dissolved Solids (TDS) .....1000.0 mg/l
(9) Zinc (Zn) .....10.0 mg/l
(10) pH.....between 6 and 9

C. Standards for Irrigation Use - Ground water shall meet the standards of Subsection A, B, and C of this section unless otherwise provided.

(1) Aluminum (Al).....5.0 mg/l
(2) Boron (B) .....0.75 mg/l
(3) Cobalt (Co) .....0.05 mg/l
(4) Molybdenum (Mo) .....1.0 mg/l
(5) Nickel (Ni) .....0.2 mg/l

[2-18-77, 1-29-82, 11-17-83, 3-3-86, 12-1-95; 20.6.2.3103 NMAC - Rn, 20 NMAC 6.2.III.3103, 1-15-01; A, 9-26-04]

[Note: For purposes of application of the amended numeric uranium standard to past and current water discharges (as of 9-26-04), the new standard will not become effective until June 1, 2007. For any new water discharges, the uranium standard is effective 9-26-04.]

20.6.2.3104 DISCHARGE PERMIT REQUIRED: Unless otherwise provided by this Part, no person shall cause or allow effluent or leachate to discharge so that it may move directly of indirectly into ground water unless he is discharging pursuant to a discharge permit issued by the secretary. When a permit has been issued, discharges must be consistent with the terms and conditions of the permit. In the event of a transfer of the ownership, control, or possession of a facility for which a discharge permit is in effect, the transferee shall have authority to discharge under such permit, provided that the transferee has complied with Section 20.6.2.3111 NMAC, regarding transfers. [2-18-77, 12-24-87, 12-1-95; Rn & A, 20.6.2.3104 NMAC - 20 NMAC 6.2.III.3104, 1-15-01; A, 12-1-01]

20.6.2.3105 EXEMPTIONS FROM DISCHARGE PERMIT REQUIREMENT: Sections 20.6.2.3104 and 20.6.2.3106 NMAC do not apply to the following:

A. Effluent or leachate which conforms to all the listed numerical standards of Section 20.6.2.3103 NMAC and has a total nitrogen concentration of 10 mg/l or less, and does not contain any toxic pollutant. To determine conformance, samples may be taken by the agency before the effluent or leachate is discharged so that it may move directly or indirectly into ground water; provided that if the discharge is by seepage through non-natural or altered natural materials, the agency may take samples of the solution before or after seepage. If for any reason the agency does not have access to obtain the appropriate samples, this exemption shall not apply;

B. Effluent which is discharged from a sewerage system used only for disposal of household and other domestic waste which is designed to receive and which receives 2,000 gallons or less of liquid waste per day;

C. Water used for irrigated agriculture, for watering of lawns, trees, gardens or shrubs, or for irrigation for a period not to exceed five years for the revegetation of any disturbed land area, unless that water is received directly from any sewerage system;

D. Discharges resulting from the transport or storage of water diverted, provided that the water diverted has not had added to it after the point of diversion any effluent received from a sewerage system, that the source of the water diverted was not mine workings, and that the secretary has not determined that a hazard to public health may result;

E. Effluent which is discharged to a watercourse which is naturally perennial; discharges to dry arroyos and ephemeral streams are not exempt from the discharge permit requirement, except as otherwise provided in this section;

F. Those constituents which are subject to effective and enforceable effluent limitations in a National Pollutant Discharge Elimination System (NPDES) permit, where discharge onto or below the surface of the ground so that water contaminants may move directly or indirectly into ground water occurs downstream from the outfall

NEW MEXICO ENVIRONMENT DEPARTMENT TPH SCREENING GUIDELINES
November 2005

In some instances, it may be practical to assess areas of soil contamination that are the result of releases of petroleum products such as jet fuel and diesel, using total petroleum hydrocarbon (TPH) analyses. TPH results may be used to delineate the extent of petroleum-related contamination at these sites and ascertain if the residual level of petroleum products in soil represents an unacceptable risk to future users of the site. Petroleum hydrocarbons represent complex mixtures of compounds, some of which are regulated constituents and some compounds that are not regulated. In addition, the amount and types of the constituent compounds in a petroleum hydrocarbon release differ widely depending on what type of product was spilled and how the spill has weathered. This variability makes it difficult to determine the toxicity of weathered petroleum products in soil solely from TPH results; however, these results can be used to approximate risk in some cases, depending upon the nature of the petroleum product, the release scenario, how well the site has been characterized, and anticipated potential future land uses. In some cases, site clean up cannot be based solely on results of TPH sampling. The New Mexico Environment Department (NMED) will make these determinations on a case by case basis. If NMED determines that additional data are necessary, these TPH guidelines must be used in conjunction with the screening guidelines for individual petroleum-related contaminants in Table 3 and other contaminants, as applicable.

The screening levels for each petroleum carbon range from the Massachusetts Department of Environmental Protection (MADEP) Volatile Petroleum Hydrocarbons/Extractable Petroleum Hydrocarbons (VPH/EPH) approach and the percent composition table below were used to generate screening levels corresponding to total TPH. Except for waste oil, the information in the compositional assumptions table was obtained from the Massachusetts Department of Environmental Protection guidance document *Implementation of the MADEP VPH/EPH Approach* (October 31, 2002). TPH toxicity was based only on the weighted sum of the toxicity of the hydrocarbon fractions listed in Table 1.

Table 1. TPH Compositional Assumptions in Soil

Petroleum Product	C11-C22 Aromatics	C9-C18 Aliphatics	C19-C36 Aliphatics
Diesel #2/ new crankcase oil	60%	40%	0%
#3 and #6 Fuel Oil	70%	30%	0%
Kerosene and jet fuel	30%	70%	0%
Mineral oil dielectric fluid	20%	40%	40%
Unknown oil[a]	100%	0%	0%
Waste Oil[b]	0%	0%	100%

[a] Sites with oil from unknown sources must be tested for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs) to determine if other potentially toxic constituents are present. The TPH guidelines in Table 2 are not designed to be protective of exposure to these constituents therefore they must be tested for, and compared to, their individual NMED soil screening guidelines.

[b] Compositional assumption for waste oil developed by NMED is based on review of chromatographs of several types of waste oil. Sites with waste oil must be tested for VOCs, SVOCs, metals, and PCBs to determine if other potentially toxic constituents are present. The TPH guidelines in Table 2 are not designed to be protective of exposure to these constituents therefore they must be tested for, and compared to, their individual NMED soil screening guidelines.

A TPH screening guideline was calculated for each of the types of petroleum product based on the assumed composition from Table 1 for petroleum products and the direct soil standards incorporating ceiling concentrations given in the MADEP VPH/EPH Excel spreadsheet for each of the carbon fractions. Groundwater concentrations are based on the weighted sum of the noncarcinogenic toxicity of the petroleum fractions.

Method 1 from the MADEP VPH/EPH document was applied, which represents generic cleanup standards for soil and groundwater. Method 1 applies if contamination exists in only soil and groundwater. The MADEP VPH/EPH further divides groundwater into standards. Standard GW-1 applies when groundwater may be used for drinking water purposes. GW-1 standards are based upon ingestion and use of groundwater as a potable water supply. The TPH screening guidelines for sites with potable groundwater are presented in Table 2a.

Table 2a. TPH Screening Guidelines for Potable Groundwater (GW-1)

TPH			Concentration in Groundwater (mg/L)
Petroleum Product	**Residential Direct Exposure (mg/kg)**	**Industrial Direct Exposure (mg/kg)**	
Diesel #2/crankcase oil	520	1120	1.72
#3 and #6 Fuel Oil	440	890	1.34
Kerosene and jet fuel	760	1810	2.86
Mineral oil dielectric fluid	1440	3040	3.64
Unknown oil [a]	200	200	0.2
Waste Oil [b]	2500	5000	Petroleum-Related Contaminants
Gasoline	Not applicable	Not applicable	Petroleum-Related Contaminants

[a] Sites with oil from unknown sources must be tested for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs) to determine if other potentially toxic constituents are present. The TPH guidelines in Table 2 are not designed to be protective of exposure to these constituents therefore they must be tested for, and compared to, their individual NMED soil screening guidelines.

[b] Compositional assumption for waste oil developed by NMED is based on review of chromatographs of several types of waste oil. Sites with waste oil must be tested for VOCs, SVOCs, metals, and PCBs to determine if other potentially toxic constituents are present. The TPH guidelines in Table 2 are not designed to be protective of exposure to these constituents therefore they must be tested for, and compared to, their individual NMED soil screening guidelines.

The second standard is GW-2, which is applicable for sites where the depth to groundwater is less than 15 feet from the ground surface and within 30 feet of an occupied structure. The structure may be either residential or industrial. GW-2 standards are based upon "inhalation exposures that could occur to occupants of the building impacted by volatile compounds, which partition from the groundwater" (MADEP 2001). The GW-2 screening guidelines ONLY apply for the evaluation of inhalation exposures. If potential ingestion or contact with contaminated soil and/or

groundwater could occur, then the screening guidelines provided in Table 2.a should be applied. Table 2.b lists the TPH screening guidelines for the inhalation scenario.

Table 2b. TPH Screening Guidelines – Vapor Migration and Inhalation of Groundwater (GW-2)

TPH			Concentration in Groundwater (mg/L)
Petroleum Product	**Residential Direct Exposure (mg/kg)**	**Industrial Direct Exposure (mg/kg)**	
Diesel #2/crankcase oil	880	2200	30.4
#3 and #6 Fuel Oil	860	2150	35.3
Kerosene and jet fuel	940	2350	15.7
Mineral oil dielectric fluid	1560	3400	10.4
Unknown oil [a]	800	2000	50.0
Waste Oil [b]	2500	5000	Petroleum-Related Contaminants
Gasoline	Not applicable	Not applicable	Petroleum-Related Contaminants

[a] Sites with oil from unknown sources must be tested for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs) to determine if other potentially toxic constituents are present. The TPH guidelines in Table 2 are not designed to be protective of exposure to these constituents therefore they must be tested for, and compared to, their individual NMED soil screening guidelines.

[b] Compositional assumption for waste oil developed by NMED is based on review of chromatographs of several types of waste oil. Sites with waste oil must be tested for VOCs, SVOCs, metals, and PCBs to determine if other potentially toxic constituents are present. The TPH guidelines in Table 2 are not designed to be protective of exposure to these constituents therefore they must be tested for, and compared to, their individual NMED soil screening guidelines.

Mineral oil based hydraulic fluids can be evaluated for petroleum fraction toxicity using the screening guidelines from Tables 2a and 2b specified for waste oil, because this type of hydraulic fluid is composed of approximately the same range of carbon fractions as waste oil. However, these hydraulic fluids often contain proprietary additives that may be significantly more toxic than the oil itself; these additives must be considered on a site- and product-specific basis (see ATSDR hydraulic fluids profile reference). **Use of alternate screening guideline values requires prior written approval from the New Mexico Environment Department.** TPH screening guidelines in Tables 2a and 2b must be used in conjunction with the screening levels for petroleum-related contaminants given in Table 3 because the TPH screening levels are NOT designed to be protective of exposure to these individual petroleum-related contaminants. Table 3 petroleum-related contaminants screening levels are based on the New Mexico Environment Department soil screening levels (SSLs) released in February 2004.

The list of petroleum-related contaminants does not include polyaromatic hydrocarbons (PAHs) with individual screening levels that would exceed the total TPH screening levels (acenaphthene, anthracene, flouranthene, flourene, and pyrene). In addition, these TPH screening guidelines are based solely on human health, not ecological risk considerations, protection of surface water, or

potential indoor air impacts from soil vapors. Potential soil vapor impacts to structures or utilities are not addressed by these guidelines. Site-specific investigations for potential soil vapor impacts to structures or utilities must be done to assure that screenings are consistently protective of human health, welfare or use of the property. NMED believes that use of these screening guidelines will allow more efficient screenings of petroleum release sites at sites while protecting human health and the environment. Copies of the references cited below are available on the MADEP website at http://www.state.ma.us/dep/bwsc/vph_eph.htm and the NMED website at http://www.nmenv.state.nm.us/HWB/guidance.html.

Table 3. Petroleum-Related Contaminants Screening Guidelines

Petroleum-Related Contaminants	Values for Direct Exposure to Soil		NMED DAF[a] 20 GW protection (mg/kg in soil)	NMED DAF[b] 1 GW protection (mg/kg in soil)
	NMED residential SSL (mg/kg)	NMED Industrial SSL (mg/kg)		
Benzene	2.70E+01	7.36E+01	2.83E-02	1.41E-03
Toluene	2.48E+02	2.48E+02	6.80E+00	3.40E-01
Ethyl benzene	1.06E+04	2.54E+04	1.05E+01	5.25E-01
Xylene[c]	1.32E+02	1.32E+02	1.01E+01	5.07E-01
Naphthalene	7.19E+01	9.83E+01	3.93E-01	1.97E-02
2-methyl naphthalene	1.00E+03[d]	2.50E+03[d]	---[d]	---[d]
Benzo(a)anthracene	6.21E+00	2.34E+01	1.10E+00	5.49E-02
Benzo(b)fluoranthene	6.21E+00	2.34E+01	3.40E+00	1.7E-01
Benzo(k)fluoranthene	6.21E+01	2.34E+02	3.40E+01	1.70E+00
Benzo(a)pyrene	6.21E-01	2.34E+00	6.12E+00	3.06E-01
Chrysene	6.21E+02	2.34E+03	1.10E+02	5.49E+00
Dibenz(a,h) anthracene	6.21E-01	2.34E+00	1.05E+00	5.24E-02
Indeno(1,2,3-c,d) pyrene	6.21E+00	2.34E+01	9.58E+00	4.79E-01

[a] DAF – Dilution Attenuation Factor
[b] For contaminated soil in contact with groundwater
[c] Based upon total xylenes
[d] No NMED value available, value taken from MADEP 2002

References

Agency for Toxic Substances and Disease Registry (ATSDR). 1997. Toxicological Profile for Hydraulic fluids.

Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup and Office of Research and Standards. 1994. "Background Documentation for the Development of the MCP Numerical Standards."

Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup and Office of Research and Standards. 2002. "Characterizing Risks Posed by Petroleum Contaminated Sites: Implementation of the MADEP VPH/EPH Approach," Policy, October 31, 2002.

Massachusetts Department of Environmental Protection, Bureau of Waste Site Cleanup and Office of Research and Standards. 2003. "Updated Petroleum Hydrocarbon Fraction Toxicity Values for the VPH/EPH/APH Methodology." November 2003.

New Mexico Environment Department, Hazardous Waste Bureau and Groundwater Quality Bureau Voluntary Remediation Program. 2004. "Technical Background Document for Development of Soil Screening Levels." February 2004. Revision 2.0.

4. Groundwater Monitoring Results

Results of the annual groundwater sampling are summarized in tables presented in this section.

Benzene in the two samples taken from Well OW-14 in 2006 were less than the NMWQS.

No semi-volatile compounds were detected in any of the ground water samples except there was a single hit of 2, 4-Dimethylphenol (85 ug/l) in GWM-1 in the sample taken on 8-2-06.

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

Arsenic showed up in the August 2006 analysis of water from GMW-1 at 0.077 mg/l which exceeds the NMWQS of 0.050 mg/l.

Selenium showed up in boundary well 2B in August 2004 at 0.069 mg/l which is greater than the WQCC standard of 0.05 mg/l however sampling results in 2006 showed less than 0.05 mg/l of selenium.

POTABLE WELLS #2, #3, AND #4								
	mg/L	DATE SAMPLED	PW Well #2	PW Well #4	PW Well #3	WQCC 20 NMAC 6.2.3103	MCL'S	EPA sug. for MTBE
	Benzene	27-Oct-06			<0.001			
		Not sampled in 2005*				0.01	0.005	
		04-Aug-04		<0.001				
		09-Dec-04	<0.001					
	Toluene	27-Oct-06			<0.001			
		Not sampled in 2005*				0.75	1	
		04-Aug-04		<0.001				
		09-Dec-04	<0.001					
	EthylBen	27-Oct-06			<0.001			
		Not sampled in 2005*				0.75	0.7	
		04-Aug-04		<0.001				
		09-Dec-04	<0.001					
	Xylene	27-Oct-06			<0.001			
		Not sampled in 2005*				0.62	10	
		04-Aug-04		<0.001				
		19-Nov-04	0.005					
		27-Oct-06			<0.001			
		Not sampled in 2005*						

*The potable water supply wells were not required to be sampled in 2005.

INFLUENT TO EVAPORATION POND 1						
	mg/L	DATE SAMPLED	EP1 INFLUENT	WQCC 20 NMAC 6.2.3103	MCL'S	EPA sug. for MTBE
EPA METHOD 8260B VOLATILES	Benzene	March 30, 2006	0.210	0.01	0.005	
		October 30, 2006	<0.010			
	Ethyl Benzene	March 30, 2006	0.060	0.75	0.7	
		October 30, 2006	<0.010			
	MTBE	March 30, 2006	<0.075			0.2
		October 30, 2006	<0.015			
	Toluene	March 30, 2006	0.440	0.75	1	
		October 30, 2006	<0.010			
	Xylenes	March 30, 2006	0.430	0.62	10	
		October 30, 2006	0.062			
	1-Methylnaphthalene	March 30, 2006	0.410			
		October 30, 2006	0.440			
	2-Methylnaphthalene	March 30, 2006	0.620	0.03		
		October 30, 2006	0.550			
	1,2,4-trimethylbenzene	March 30, 2006	0.170			
		October 30, 2006	0.110			
	2-butanone	March 30, 2006	0.820			
		October 30, 2006	0.110			
	Naphthalene	March 30, 2006	0.200			
		October 30, 2006	0.054			
EPA METHOD 6010B METALS	Hg	March 30, 2006	0.0017	0.002	0.002	
		October 30, 2006	0.0011			
	Ba	March 30, 2006	0.22		2	
		October 30, 2006	0.16			
	Cr	March 30, 2006	0.010		0.1	
		October 30, 2006	0.011			
	Pb	March 30, 2006	0.011		0.015	
		October 30, 2006	0.018			

	Se	March 30, 2006	<0.050	0.2**		
		October 30, 2006	<0.050			
	Ag	March 30, 2006	<0.0050	10.0*		
		October 30, 2006	<0.0050			

Groundwater standards from NMAC are human health based standards except as indicated below:
*Standard for domestic water supply.
**Standard for irrigation use.

VOLATILES 8021B

EPA METHOD 8021B VOLATILES

mg/L	DATE SAMPLED	OW #12	OW 13	OW 14	OW 29	OW 30	POND #2	GWM 1*	WQCC 20 NMAC 6.2.3103	EPA MCLs	EPA Sug. # MTBE
Benzene	28-Dec-06			0.0042					0.01	0.005	0.2
	27-Oct-06	<0.001	<0.001	0.0034	<0.001	<0.001	<0.010	0.012			
	27-Sep-05	<0.0005	<0.0005	0.017	<0.0005	<0.0005		0.081			
	28-Jun-05							0.010			
	15-Feb-05							0.005			
	08-Dec-04	<0.0005	<0.0005		<0.0005	<0.0005					
	09-Dec-04			0.23				0.0044			
Toluene	28-Dec-06			<0.001					0.75	1	
	27-Oct-06	<0.001	<0.001	<0.001	<0.001	<0.001	0.022	<0.010			
	27-Sep-05	<0.0005	<0.0005	0.0022	<0.0005	<0.0005		0.0046			
	28-Jun-05							<.0025			
	15-Feb-05							0.0024			
	08-Dec-04	<0.0005	<0.0005	0.0025	<0.0005	<0.0005		0.0032			
EthylBen	28-Dec-06			0.0025					0.75	0.7	
	27-Oct-06	<0.001	<0.001	<0.001	<0.001	<0.001	<0.010	<0.010			
	27-Sep-05	<0.0005	<0.0005	0.0023	<0.0005	<0.0005		0.0028			
	28-Jun-05							0.0035			
	15-Feb-05							0.0026			
	08-Dec-04	<0.0005	<0.0005	0.0029	<0.0005	<0.0005		0.0021			
Xylene	28-Dec-06			<0.003					0.62	10	
	27-Oct-06	<0.003	<0.003	<0.003	<0.003	<0.003	0.045	<0.030			
	27-Sep-05	<0.0005	<0.0005	0.0014	<0.0005	<0.0005		0.010			
	28-Jun-05							0.041			
	15-Feb-05							0.031			
	08-Dec-04	<0.0005	<0.0005	0.003	<0.0005	<0.0005		0.0024			
MTBE	28-Dec-06			0.180							
	27-Oct-06	<0.0025	<0.0025	0.016	<0.0025	0.018	<0.0025	0.160			
	27-Sep-05	<0.0025	<0.0025	0.077	<0.0025	<0.0025		0.170			
	08-Dec-04	<0.0025	<0.0025	0.065	<0.0025	<0.0025		0.048			

*GWM-1 was sampled on August 8, 2006.

VOLATILES 8260B

EPA METHOD 8260B VOLATILES	mg/L	DATE SAMPLED	OW 11**	BW 1A	BW 1B	BW 2A	BW 2B	BW 3B	BW 3B	BW 1C	BW 2C	BW 3C	WQCC 20 NMAC 6.2.3103	MCL'S	EPA sug.f MTB
	Benzene	28/29-Oct-06	<0.001	DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.001	<0.001	0.01	0.005	
		17/20-Oct-05	<0.001	DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.001	<0.001			
		08-Dec-04	<0.001	DRY	DRY			DRY							
		04-Aug-04		DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.01	0.0052			
	Toluene	28/29-Oct-06	<0.001	DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.001	<0.001	0.75	1	
		17/20-Oct-05	<0.001	DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.001	<0.001			
		08-Dec-04	<0.001	DRY	DRY			DRY							
		04-Aug-04		DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.01	0.001			
	EthylBen	28/29-Oct-06	<0.001	DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.001	<0.001	0.75	0.7	
		17/20-Oct-05	<0.001	DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.001	<0.001			
		08-Dec-04	<0.001	DRY	DRY			DRY							
		04-Aug-04		DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.01	<0.001			
	Xylene	28/29-Oct-06	<0.003	DRY	DRY	<0.003	<0.003	DRY	<0.003	<0.003	<0.003	<0.003	0.62	10	
		17/20-Oct-05	<0.001	DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.001	<0.001			
		08-Dec-04	<0.001	DRY	DRY			DRY							
		04-Aug-04		DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.01	0.0015			
	MTBE	28/29-Oct-06	<0.0015	DRY	DRY	<0.0015	<0.0015	DRY	<0.0015	<0.0015	<0.0015	<0.0015			
		17/20-Oct-05	<0.001	DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.001	<0.001			
		08-Dec-04	<0.001	DRY	DRY			DRY							
		04-Aug-04		DRY	DRY	<0.001	<0.001	DRY	<0.001	<0.001	<0.01	0.001			0.2

**OW-11 was sampled in 2006 on October 26, 2006.

VOLATILES 8260B										
	mg/L	DATE SAMPLED	MW-1	MW-4	MW-5	SMW-2	SMW-4	WQCC 20 NMAC 6.2.3103	MCLs	USEPA Suggested MTBE
EPA METHOD 8260B VOLATILES	Benzene	26-Oct-06	<0.001					0.01	0.005	
		12-Oct-05	<0.001	<0.001	<0.001	<0.001	<0.001			
	Toluene	26-Oct-06	<0.001					0.75	1	
		12-Oct-05	<0.001	<0.001	<0.001	<0.001	<0.001			
	EthylBen	26-Oct-06	<0.001					0.75	0.7	
		12-Oct-05	<0.001	<0.001	<0.001	<0.001	<0.001			
	Xylene	26-Oct-06	<0.003					0.62	10	
		29-Sep-05	<0.001	<0.001	<0.001	<0.001	<0.001			
	MTBE	26-Oct-06	<0.0015							0.20
		29-Sep-05	<0.001	<0.001	<0.001	0.0083	<0.001			

Note: Wells MW-4, MW-5, SMW-2, and SMW-4 were not required to be sampled in 2006.

TPH, METALS, AND GENERAL CHEMISTRY										
	mg/L	DATE SAMPLED	GW M-1	MW-1	MW-4*	MW-5*	SMW-2*	SMW-4*	WQCC 20 NMAC 6.2.3103	MCLs
EPA Method 8015B	DRO	October 26, 2006		<1.0						
	MRO	October 26, 2006		<5.0						
	GRO	October 26, 2006		<0.05						
EPA Method 300.0	Fluoride	October 26, 2006	2.0	0.84					1.6	4.0
	Chloride	October 26, 2006	3,700	46					250**	
	Phosphorus	October 26, 2006	<2.5	<0.5						
	Sulfate	October 26, 2006	120	150					600**	
	Nitrogen-Nitrate+Nitrite	October 26, 2006	<2.0	<0.5					10 nitrate	10 nitrate 1 nitrite
EPA 245.1	Hg	October 26, 2006	<0.0002	<0.0002					0.002	0.002
EPA Method 6010	Total Recoverable Metals									
	Ar	October 26, 2006	0.077	<0.020					0.1	0.010
	Ba	October 26, 2006	0.53	<0.020					1.0	2
	Ca	October 26, 2006	380	23						
	Cd	October 26, 2006	<0.002	<0.002					0.01	0.005
	Co	2006							0.05***	
	Cr	October 26, 2006	<0.006	<0.006					0.05	0.1
	K	October 26, 2006	4.2	<1.0						
	Pb	October 26, 2006	<0.005	<0.005					0.05	0.015
	Mg	October 26, 2006	93	<1.0						
	Na	October 26, 2006	1,400	280						
	Ni	2006							0.2***	
	Se	October 26, 2006	<0.05	<0.05					0.05	0.05
	Ag	October 26, 2006	<0.005	<0.005					0.05	
	Va	2006								
	Zn	2006								
EPA Method 15.1	pH	October 26, 2006	6.87	8.98					6<pH<9	

*Wells MW-4, MW-5, SMW-2, and SMW-4 were not required to be sampled in 2006.
Groundwater standards from NMAC are human health based standards except as indicated below:
**Standard for domestic water supply.
***Standard for irrigation use.
GWM-1 was sampled on August 2, 2006.

GENERAL CHEMISTRY																
EPA Method 300.0	mg/L	DATE SAMPLED	OW 11**	BW 1A	BW 1B	BW 2A	BW 2B	BW 3A	BW 3B	BW 1C	BW 2C	BW 3C	POND #7	WELL #3	WQCC 20 NMAC 6.2.3103	MCL'S
	Fluoride	Oct-06	2.5	DRY	DRY	1.3	1.9	DRY	1.7	2.7	2.4	1.9	31	0.19	1.6	4
		17/20-Oct-05	2.3	DRY	DRY	1.1	1.7	DRY	1.4	2.2	1.5	1.6				
		08-Dec-04	2.3	DRY	DRY											
		04-Aug-04		DRY	DRY	1.2	1.7	DRY	1.4	2	2.2	0.95		0.21		
	Chloride	Oct-06	86	DRY	DRY	39	31	DRY	33	36	42	38	42,000	14	250	250
		17/20-Oct-05	87	DRY	DRY	39	29	DRY	34	34	42	37				
		08-Dec-04	80	DRY	DRY											
		04-Aug-04		DRY	DRY	40	32	DRY	35	38	46	25				
	Nitrogen-Nitrite	Oct-06	<.50	DRY	DRY	<0.50	<0.50	DRY	<0.50	<0.50	<0.50	<0.50	<0.10	<0.50		1
		17/20-Oct-05	<0.1	DRY	DRY	<0.50	<0.50	DRY	<0.10	<0.50	<0.50	<0.10				
		08-Dec-04	<.50	DRY	DRY											
		04-Aug-04		DRY	DRY	<0.10	<0.10	DRY	<0.10	<0.10	<0.10	<0.10				
		09-Dec-04														
	Bromide	28-Oct-06		DRY	DRY											
		17/20-Oct-05		DRY	DRY											
		08-Dec-04	<0.10	DRY	DRY											
		04-Aug-04		DRY	DRY	0.4	1.3	DRY	0.49	0.32	0.78	1.2				
	Nitrogen-Nitrate	Oct-06	<.50	DRY	DRY	<0.50	<0.50	DRY	<0.50	<0.50	<0.50	<0.50	<0.10	<0.50	10	
		17/20-Oct-05	0.72	DRY	DRY	<0.50	<0.50	DRY	<0.10	<0.50	<0.50	<0.10				
		08-Dec-04	<0.50	DRY	DRY											
		04-Aug-04		DRY	DRY	<0.10	<0.10	DRY	<0.10	<0.10	<0.10	<0.10		0.12		
		09-Dec-04														
	P	Oct-06	<.50	DRY	DRY	0.64	<0.50	DRY	1.1	<0.50	<0.50	<0.50	<0.50	<0.50		
		17/20-Oct-05	<0.50	DRY	DRY	0.59	0.64	DRY	1.0	<0.50	<0.50	<0.50				
		08-Dec-04	<0.50	DRY	DRY											
		04-Aug-04		DRY	DRY	0.57	<0.50	DRY	1.2	<0.50	<0.50	<0.50				
		09-Dec-04														

	GENERAL CHEMISTRY															
	mg/L	DATE SAMPLED	OW 11**	BW 1A	BW 1B	BW 2A	BW 2B	BW 3A	BW 3B	BW 1C	BW 2C	BW 3C	POND #7	WELL #3	WQCC 20 NMAC 6.2.3103	MCL'S
	Sulfate	28-Oct-06	1100	DRY	DRY	7.5	140	DRY	53	250	270	280	7,000	490	600	
		17/20-Oct-05	990	DRY	DRY	6.9	130	DRY	56	240	270	350				
		08-Dec-04	1100	DRY	DRY											
		04-Aug-04		DRY	DRY	9.6	140	DRY	63	210	230	440				
		09-Dec-04														
EPA METHOD 160.1	TDS	31-Oct-06		DRY	DRY										1000	500
		17/20-Oct-05		DRY	DRY											
		08-Dec-04	1900	DRY	DRY											
		04-Aug-04		DRY	DRY	1100	1500	DRY	1000	970	970	940	3800			
	pH	Oct-06	8.40	DRY	DRY	8.27	8.10	DRY	8.12	8.39	8.52	8.39	7.46	7.89	6.5 – 8.5	Betwee 6 and 9
		29-Sep-05	8.44	DRY	DRY											
		08-Dec-04	8.48	DRY	DRY											
		04-Aug-04		DRY	DRY	8.4	8.35	DRY	8.5	**9.36**	8.84	8.87				
	SP COND	Oct-06	3100	DRY	DRY	1400	2400	DRY	1500	1400	1300	1400	150000	1200		
		17-Oct-05		DRY	DRY	1400	2500	DRY	1600	1400	1500	1400				
		04-Aug-04		DRY	DRY	1447	2280	DRY	1534	1280	1401	1380				
	Temp (°F)		56	DRY	DRY	56	56	56		57	56	56				
	Depth to water (ft)		21.10	DRY	DRY	31.98	27.78	32.75		7.55	20.26	8.40				

**OW-11 was sampled on September 29, 2005.

Wells 2 and 4 were not required to be sampled in 2006, hence they are not listed on the table.

DISSOLVED METALS

mg/L	DATE SAMPLED	OW 11	BW 1A	BW 1B	BW 2A	BW 2B	BW 3A	BW 3B	BW 1C	BW 2C	BW 3C	POND #7	WELL #3	WQCC 20 NMAC	MCL'S
Arsenic	28-Oct-06	<0.020	DRY	DRY	<0.020	<0.020	DRY	0.021	<0.020	<0.020	<0.020		<0.020	0.1	0.01
	29-Sep-05	<0.020													
	08-Dec-04	<0.020													
	04-Aug-04		DRY	DRY	<0.020	<0.020	DRY	<0.020	<0.020	<0.020	<0.020				
	19-Nov-04											<0.020			
Barium	28-Oct-06	<0.020	DRY	DRY	0.15	0.071	DRY	0.11	<0.020	0.031	0.029		<0.020	1.0	2
	29-Sep-05	<0.020													
	08-Dec-04	<0.020													
	04-Aug-04		DRY	DRY	0.12	<0.0020	DRY	0.13	<0.0020	0.047	0.051				
	19-Nov-04											0.14			
Cadmium	28-Oct-06	0.0020	DRY	DRY	<0.002	<0.002	DRY	<0.002	<0.002	<0.002	<0.002		<0.002	0.01	0.005
	29-Sep-05	0.0020													
	08-Dec-04	0.0020													
	04-Aug-04		DRY	DRY	<0.002	<0.0020	DRY	<0.0020	<0.0020	<0.0020	<0.0020				
	19-Nov-04											<0.0020			
Calcium	28-Oct-06	12	DRY	DRY	9.7	20	DRY	9.0	3.4	5.8	6.0		190		
	17-Oct-05	10			10	23	DRY	9.9	3.1	140	6.1				
	08-Dec-04	9.6													
	04-Aug-04		DRY	DRY	6.7	14	DRY	11	3.8	5.6	45				
Cr	28-Oct-06	<0.0060	DRY	DRY	<0.0060	<0.0060	DRY	<0.0060	0.011	<0.0060	<0.0060			0.05	0.1
	29-Sep-05	<0.0060													
	08-Dec-04	<0.0060													
	04-Aug-04		DRY	DRY	<0.0060	<0.0060	DRY	<0.0060	<0.0060	<0.0060	<0.0060				
	19-Nov-04											0.012			
Lead	28-Oct-06	<0.0050	DRY	DRY	<0.0050	<0.0050	DRY	<0.0050	<0.0050	0.0054	<0.0050		<0.006	0.05	0.015
	29-Sep-05	<0.0050													
	08-Dec-04	<0.0050													
	04-Aug-04		DRY	DRY	0.0059	0.0064	DRY	0.006	<0.0050	<0.0050	<0.0050				
	19-Nov-04											0.0075			
Mercury	28-Oct-06	<0.0002	DRY	DRY	<0.00020	<0.00020	DRY	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	0.002	0.002

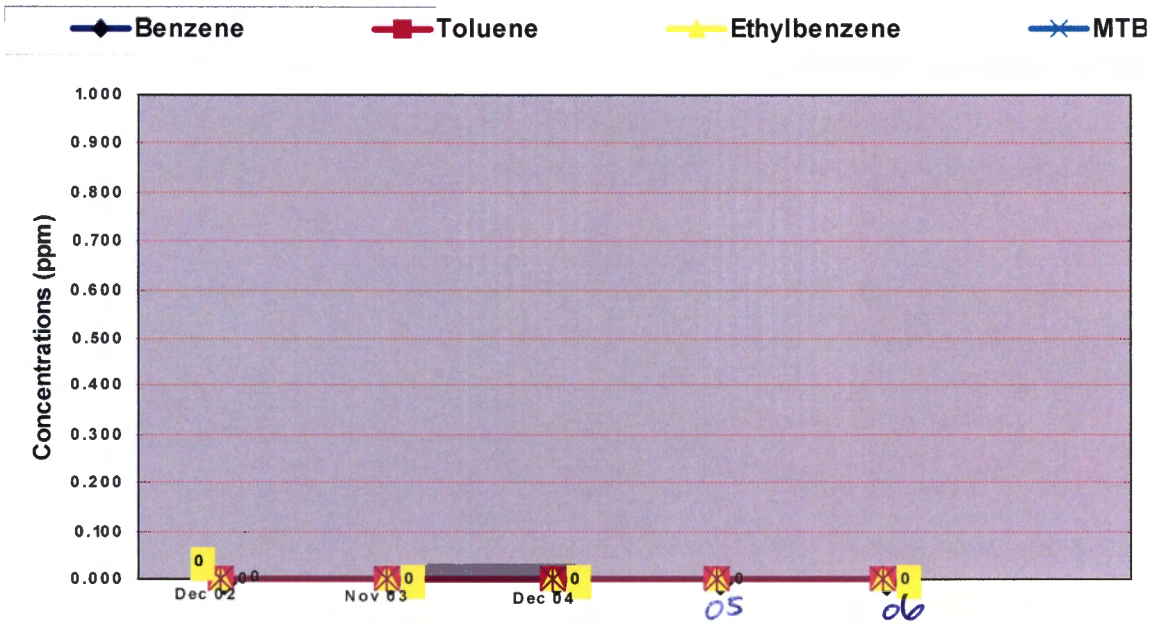
DISSOLVED METALS															
/L	DATE SAMPLED	OW 11	BW 1A	BW 1B	BW 2A	BW 2B	BW 3A	BW 3B	BW 1C	BW 2C	BW 3C	POND #7	WELL #3	WQCC 20 NMAC	MCL's
Mg	28-Oct-06	1.4			3.5	3.8	DRY	2.7	<1.0	<1.0			43		
	17-Oct-05	1.2			3.6	3.9	DRY	2.9	<1.0	7.7	1.1				
	08-Dec-04	1.1													
	04-Aug-04		DRY	DRY	2.5	3.2	DRY	3.1	<1.0	1.5	9.8				
	19-Nov-04														
K	28-Oct-06	1.6	DRY	DRY	<1.0	1.6	DRY	<1.0	<1.0	<1.0	<1.0		1.1		
	17-Oct-05	1.7			1.1	2.1	DRY	1.4	1.5	2.5	1.8				
	08-Dec-04	1.9													
	04-Aug-04		DRY	DRY	<1.0	4.7	DRY	1.3	2	2	5.3				
Se	28-Oct-06	<0.050	DRY	DRY	<0.050	<0.050	DRY	<0.050	<0.050	<0.050	<0.050		<0.05	0.05	0.05
	29-Sep-05	<0.050													
	08-Dec-04	0.005													
	04-Aug-04		DRY	DRY	<0.050	0.069	DRY	<0.050	<0.050	<0.050	<0.050				
	19-Nov-04											<0.050			
	09-Dec-04														
Silver	28-Oct-06	<0.0050	DRY	DRY	<0.0050	<0.005	DRY	<0.005	<0.005	<0.005	<0.005		<0.005	0.05	0.10
	29-Sep-05	<0.0050													
	08-Dec-04	<0.0050													
	04-Aug-04		DRY	DRY	<0.0050	<0.0050	DRY	<0.0050	DRY	DRY	<0.0050	<0.005	DRY		
	19-Nov-04											<0.0050			
	09-Dec-04														
Sodium	29-Sep-05	620											28		
	08-Dec-04	620													
	04-Aug-04		DRY	DRY	220	540	DRY	340	200	300	230				
	19-Nov-04														
	09-Dec-04														
Uranium	29-Sep-05													0.03	0.030
	08-Dec-04														
	04-Aug-04		DRY	DRY	<0.10	<0.10	DRY	<0.10	<0.10	<0.10	<0.10				
	09-Dec-04														

BOD - PILOT TRAVEL CENTER AND TRUCK STOP

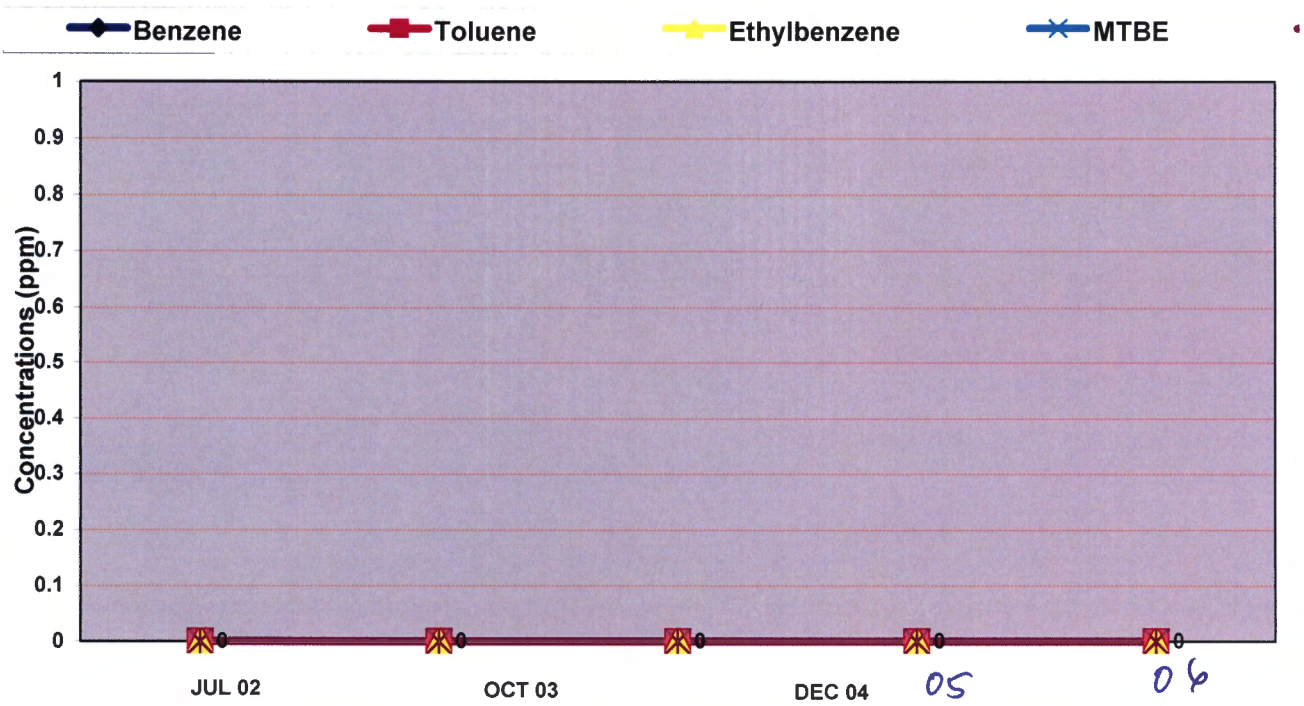
EPA 405.1

Date of Analysis	BOD Results (mg/l)	Detection Limit (mg/l)
3-30-06	886	2
6-9-06	472	2

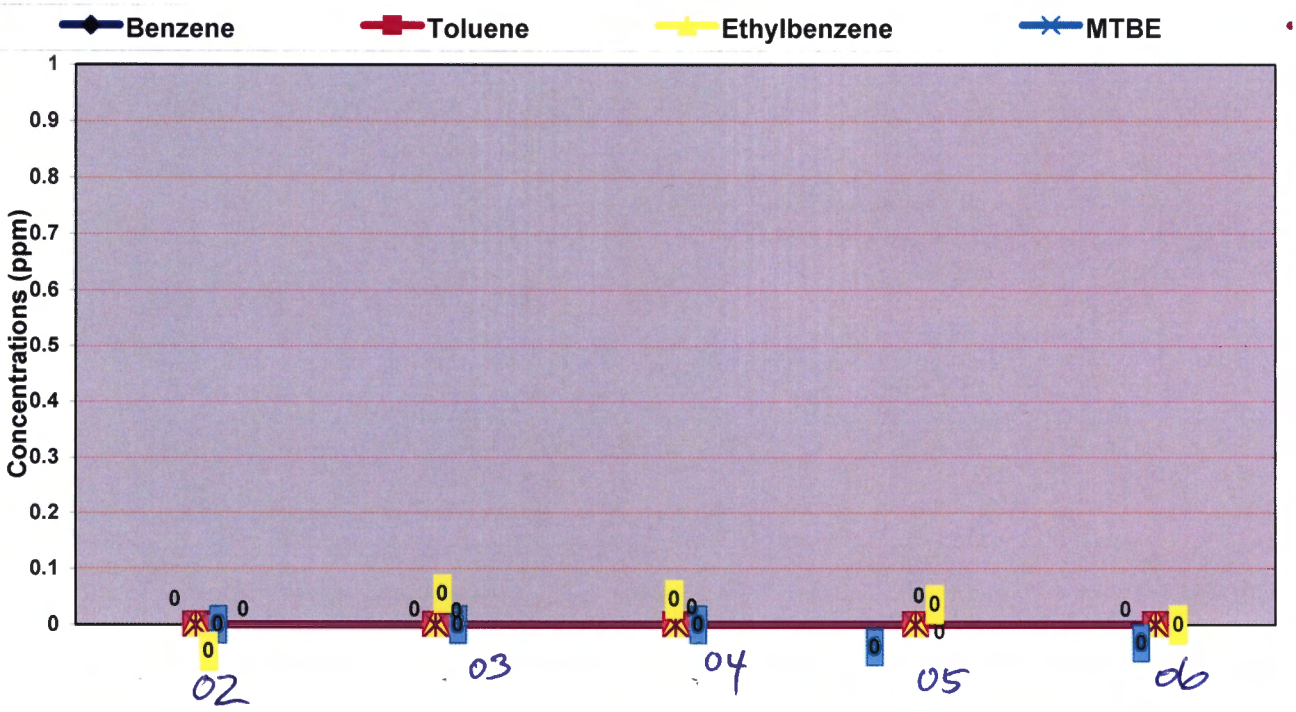
OW-11


Benzene
Toluene
Ethylbenzene
MTB
Concentrations (ppm)
1.000
0.900
0.800
0.700
0.600
0.500
0.400
0.300
0.200
0.100
0.000
Dec 02
Nov 03
Dec 04
05
06

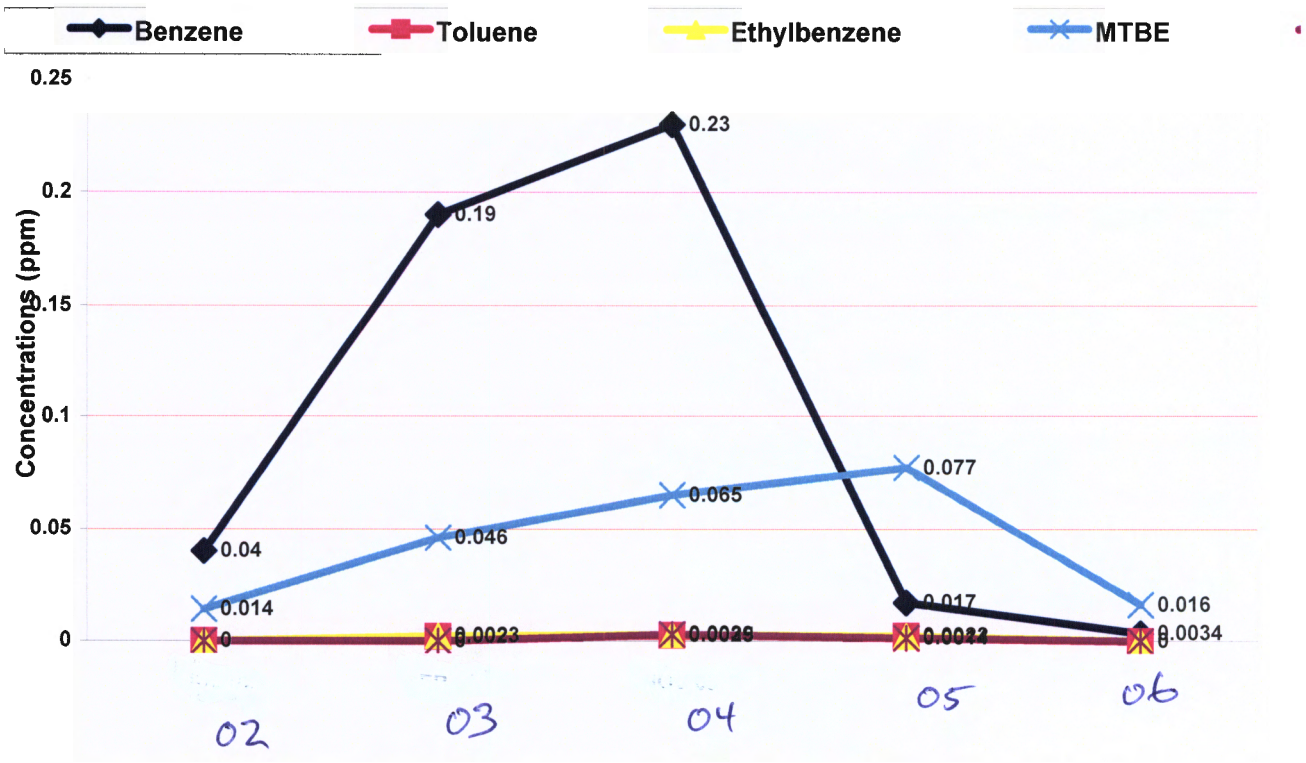
OW-12


Benzene
Toluene
Ethylbenzene
MTBE
Concentrations (ppm)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
JUL 02
OCT 03
DEC 04
05
06

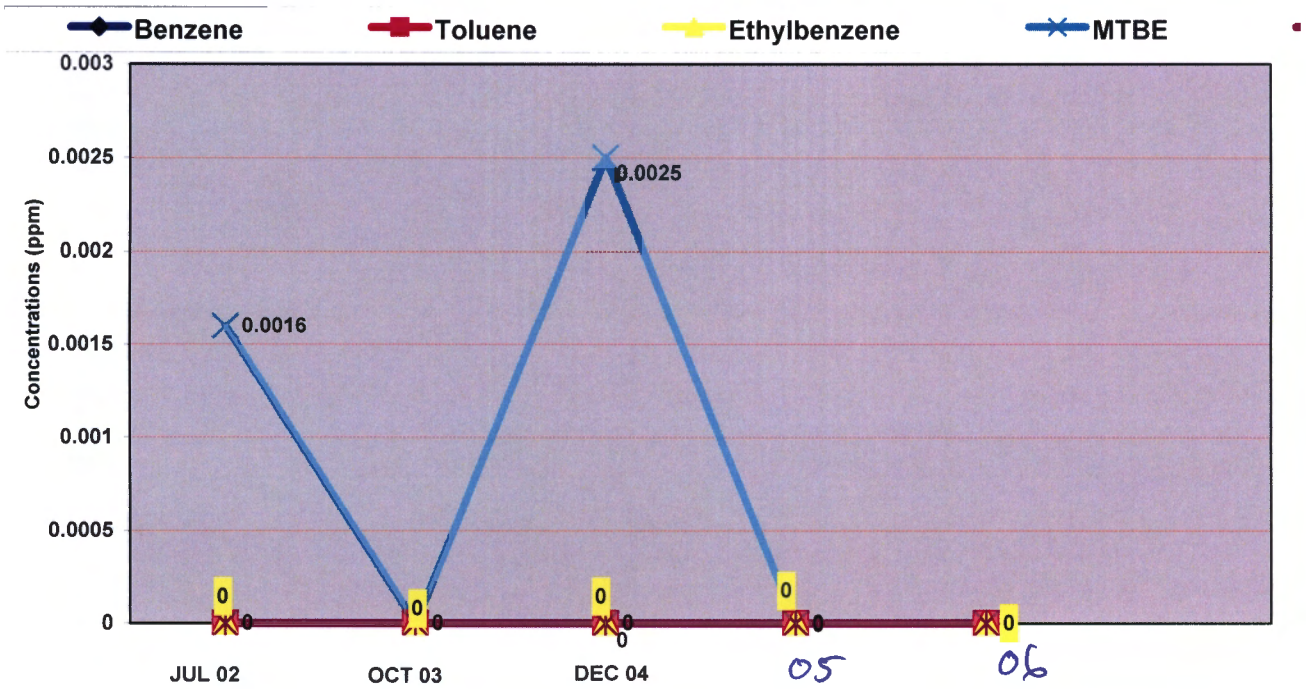
OW-13


Benzene
Toluene
Ethylbenzene
MTBE
Concentrations (ppm)
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
02
03
04
05
06

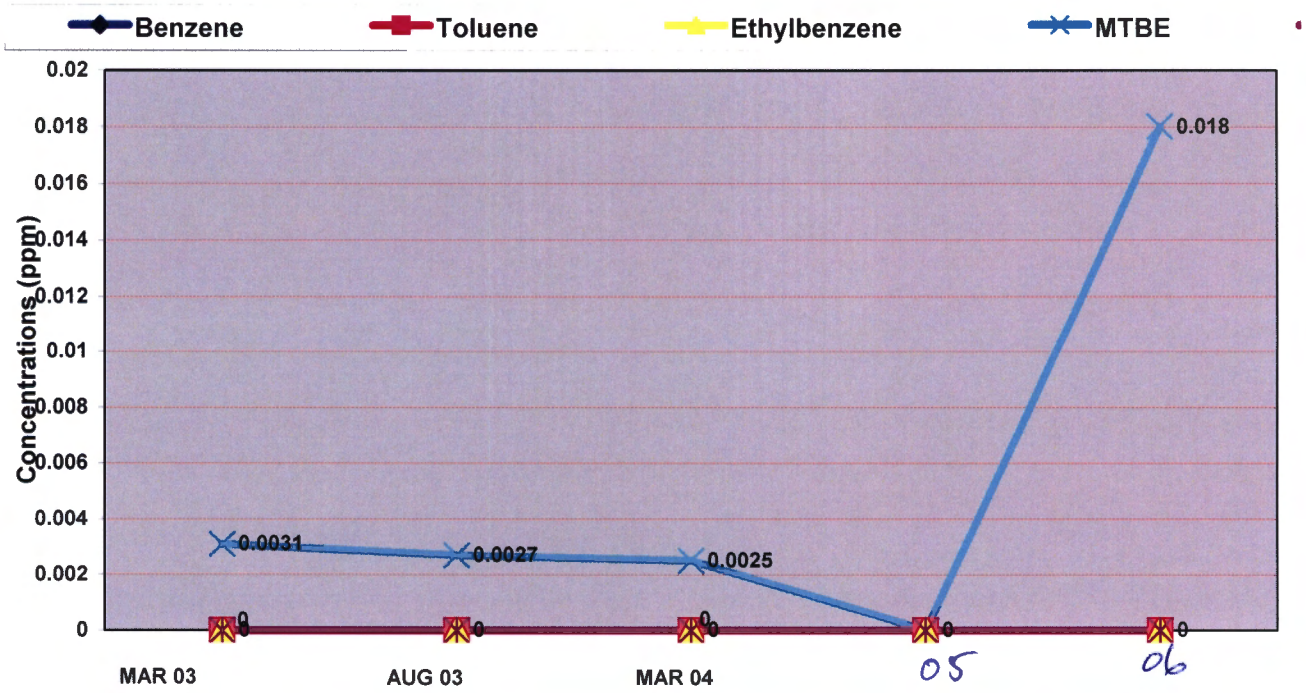
OW-14


Benzene
Toluene
Ethylbenzene
MTBE
Concentrations (ppm)
0.25
0.2
0.15
0.1
0.05
0
0.04
0.19
0.23
0.017
0.016
0.014
0.046
0.065
0.077
0
0.0023
0.0034
02
03
04
05
06

OW-29


Benzene
Toluene
Ethylbenzene
MTBE
Concentrations (ppm)
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
0.0016
0.0025
0
JUL 02
OCT 03
DEC 04
05
06

OW-30


Benzene
Toluene
Ethylbenzene
MTBE
Concentrations (ppm)
0.02
0.018
0.016
0.014
0.012
0.01
0.008
0.006
0.004
0.002
0
0.0031
0.0027
0.0025
0.018
MAR 03
AUG 03
MAR 04
05
06

5. Groundwater Chemical Analytical Data

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, November 17, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Annual Ground Water 2006-Ciniza

Order No.: 0611014

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 9 sample(s) on 11/1/2006 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-12
Lab Order:	0611014	**Collection Date:**	10/27/2006 9:15:00 AM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	11/3/2006 11:26:32 AM
Benzene	ND	1.0		µg/L	1	11/3/2006 11:26:32 AM
Toluene	ND	1.0		µg/L	1	11/3/2006 11:26:32 AM
Ethylbenzene	ND	1.0		µg/L	1	11/3/2006 11:26:32 AM
Xylenes, Total	ND	3.0		µg/L	1	11/3/2006 11:26:32 AM
Surr: 4-Bromofluorobenzene	82.7	72.2-125		%REC	1	11/3/2006 11:26:32 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-13
Lab Order:	0611014	**Collection Date:**	10/27/2006 10:30:00 AM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	11/3/2006 11:56:36 AM
Benzene	ND	1.0		µg/L	1	11/3/2006 11:56:36 AM
Toluene	ND	1.0		µg/L	1	11/3/2006 11:56:36 AM
Ethylbenzene	ND	1.0		µg/L	1	11/3/2006 11:56:36 AM
Xylenes, Total	ND	3.0		µg/L	1	11/3/2006 11:56:36 AM
Surr: 4-Bromofluorobenzene	83.8	72.2-125		%REC	1	11/3/2006 11:56:36 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-14
Lab Order:	0611014	**Collection Date:**	10/29/2006 1:30:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	16	2.5		µg/L	1	11/3/2006 12:29:21 PM
Benzene	3.4	1.0		µg/L	1	11/3/2006 12:29:21 PM
Toluene	ND	1.0		µg/L	1	11/3/2006 12:29:21 PM
Ethylbenzene	ND	1.0		µg/L	1	11/3/2006 12:29:21 PM
Xylenes, Total	ND	3.0		µg/L	1	11/3/2006 12:29:21 PM
Surr: 4-Bromofluorobenzene	84.9	72.2-125		%REC	1	11/3/2006 12:29:21 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-29
Lab Order:	0611014	**Collection Date:**	10/27/2006 12:30:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.5		µg/L	1	11/3/2006 1:29:18 PM
Benzene	ND	1.0		µg/L	1	11/3/2006 1:29:18 PM
Toluene	ND	1.0		µg/L	1	11/3/2006 1:29:18 PM
Ethylbenzene	ND	1.0		µg/L	1	11/3/2006 1:29:18 PM
Xylenes, Total	ND	3.0		µg/L	1	11/3/2006 1:29:18 PM
Surr: 4-Bromofluorobenzene	84.2	72.2-125		%REC	1	11/3/2006 1:29:18 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-30
Lab Order:	0611014	**Collection Date:**	10/27/2006 2:00:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	18	2.5		µg/L	1	11/3/2006 1:59:29 PM
Benzene	ND	1.0		µg/L	1	11/3/2006 1:59:29 PM
Toluene	ND	1.0		µg/L	1	11/3/2006 1:59:29 PM
Ethylbenzene	ND	1.0		µg/L	1	11/3/2006 1:59:29 PM
Xylenes, Total	ND	3.0		µg/L	1	11/3/2006 1:59:29 PM
Surr: 4-Bromofluorobenzene	86.2	72.2-125		%REC	1	11/3/2006 1:59:29 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-11
Lab Order:	0611014	**Collection Date:**	10/26/2006 2:00:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TES**
Fluoride	2.5	0.10		mg/L	1	11/3/2006 11:57:39 PM
Chloride	86	0.50		mg/L	5	11/6/2006 2:21:59 PM
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/4/2006 12:49:51 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/3/2006 11:57:39 PM
Sulfate	1100	10		mg/L	20	11/7/2006 10:40:32 AM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	ND	0.00020		mg/L	1	11/9/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/15/2006 8:13:48 PM
Barium	ND	0.020		mg/L	1	11/15/2006 8:13:48 PM
Cadmium	ND	0.0020		mg/L	1	11/15/2006 8:13:48 PM
Calcium	12	1.0		mg/L	1	11/15/2006 8:13:48 PM
Chromium	ND	0.0060		mg/L	1	11/15/2006 8:13:48 PM
Lead	ND	0.0050		mg/L	1	11/15/2006 8:13:48 PM
Magnesium	1.4	1.0		mg/L	1	11/15/2006 8:13:48 PM
Potassium	1.6	1.0		mg/L	1	11/15/2006 8:13:48 PM
Selenium	ND	0.050		mg/L	1	11/15/2006 8:13:48 PM
Silver	ND	0.0050		mg/L	1	11/15/2006 8:13:48 PM
Sodium	660	10		mg/L	10	11/16/2006 10:33:42 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	11/14/2006
Acenaphthylene	ND	10		µg/L	1	11/14/2006
Aniline	ND	20		µg/L	1	11/14/2006
Anthracene	ND	10		µg/L	1	11/14/2006
Azobenzene	ND	10		µg/L	1	11/14/2006
Benz(a)anthracene	ND	15		µg/L	1	11/14/2006
Benzo(a)pyrene	ND	15		µg/L	1	11/14/2006
Benzo(b)fluoranthene	ND	15		µg/L	1	11/14/2006
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/14/2006
Benzo(k)fluoranthene	ND	10		µg/L	1	11/14/2006
Benzoic acid	ND	50		µg/L	1	11/14/2006
Benzyl alcohol	ND	20		µg/L	1	11/14/2006
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/14/2006
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-11
Lab Order:	0611014	**Collection Date:**	10/26/2006 2:00:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/14/2006
Butyl benzyl phthalate	ND	15		µg/L	1	11/14/2006
Carbazole	ND	10		µg/L	1	11/14/2006
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/14/2006
4-Chloroaniline	ND	20		µg/L	1	11/14/2006
2-Chloronaphthalene	ND	10		µg/L	1	11/14/2006
2-Chlorophenol	ND	10		µg/L	1	11/14/2006
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/14/2006
Chrysene	ND	15		µg/L	1	11/14/2006
Di-n-butyl phthalate	ND	10		µg/L	1	11/14/2006
Di-n-octyl phthalate	ND	15		µg/L	1	11/14/2006
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/14/2006
Dibenzofuran	ND	10		µg/L	1	11/14/2006
1,2-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,3-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,4-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/14/2006
Diethyl phthalate	ND	10		µg/L	1	11/14/2006
Dimethyl phthalate	ND	10		µg/L	1	11/14/2006
2,4-Dichlorophenol	ND	10		µg/L	1	11/14/2006
2,4-Dimethylphenol	ND	10		µg/L	1	11/14/2006
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrophenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
2,6-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
Fluoranthene	ND	10		µg/L	1	11/14/2006
Fluorene	ND	10		µg/L	1	11/14/2006
Hexachlorobenzene	ND	10		µg/L	1	11/14/2006
Hexachlorobutadiene	ND	10		µg/L	1	11/14/2006
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/14/2006
Hexachloroethane	ND	10		µg/L	1	11/14/2006
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/14/2006
Isophorone	ND	10		µg/L	1	11/14/2006
2-Methylnaphthalene	ND	10		µg/L	1	11/14/2006
2-Methylphenol	ND	15		µg/L	1	11/14/2006
3+4-Methylphenol	ND	20		µg/L	1	11/14/2006
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodimethylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/14/2006
Naphthalene	ND	10		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-11
Lab Order:	0611014	**Collection Date:**	10/26/2006 2:00:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
2-Nitroaniline	ND	50		µg/L	1	11/14/2006
3-Nitroaniline	ND	50		µg/L	1	11/14/2006
4-Nitroaniline	ND	20		µg/L	1	11/14/2006
Nitrobenzene	ND	10		µg/L	1	11/14/2006
2-Nitrophenol	ND	15		µg/L	1	11/14/2006
4-Nitrophenol	ND	50		µg/L	1	11/14/2006
Pentachlorophenol	ND	50		µg/L	1	11/14/2006
Phenanthrene	ND	10		µg/L	1	11/14/2006
Phenol	ND	10		µg/L	1	11/14/2006
Pyrene	ND	15		µg/L	1	11/14/2006
Pyridine	ND	30		µg/L	1	11/14/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/14/2006
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/14/2006
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/14/2006
Surr: 2,4,6-Tribromophenol	63.0	16.6-150		%REC	1	11/14/2006
Surr: 2-Fluorobiphenyl	63.7	19.6-134		%REC	1	11/14/2006
Surr: 2-Fluorophenol	48.1	9.54-113		%REC	1	11/14/2006
Surr: 4-Terphenyl-d14	72.9	22.7-145		%REC	1	11/14/2006
Surr: Nitrobenzene-d5	63.4	14.6-134		%REC	1	11/14/2006
Surr: Phenol-d5	36.2	10.7-80.3		%REC	1	11/14/2006
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/7/2006
Toluene	ND	1.0		µg/L	1	11/7/2006
Ethylbenzene	ND	1.0		µg/L	1	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/7/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/7/2006
Naphthalene	ND	2.0		µg/L	1	11/7/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
Acetone	ND	10		µg/L	1	11/7/2006
Bromobenzene	ND	1.0		µg/L	1	11/7/2006
Bromochloromethane	ND	1.0		µg/L	1	11/7/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/7/2006
Bromoform	ND	1.0		µg/L	1	11/7/2006
Bromomethane	ND	2.0		µg/L	1	11/7/2006
2-Butanone	ND	10		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-11
Lab Order:	0611014	**Collection Date:**	10/26/2006 2:00:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Carbon disulfide	ND	10		µg/L	1	11/7/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/7/2006
Chlorobenzene	ND	1.0		µg/L	1	11/7/2006
Chloroethane	ND	2.0		µg/L	1	11/7/2006
Chloroform	ND	1.0		µg/L	1	11/7/2006
Chloromethane	ND	1.0		µg/L	1	11/7/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/7/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/7/2006
Dibromomethane	ND	2.0		µg/L	1	11/7/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/7/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/7/2006
2-Hexanone	ND	10		µg/L	1	11/7/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/7/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/7/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/7/2006
Methylene Chloride	ND	3.0		µg/L	1	11/7/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/7/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/7/2006
Styrene	ND	1.5		µg/L	1	11/7/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/7/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-11
Lab Order:	0611014	**Collection Date:**	10/26/2006 2:00:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/7/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/7/2006
Vinyl chloride	ND	1.0		µg/L	1	11/7/2006
Xylenes, Total	ND	3.0		µg/L	1	11/7/2006
Surr: 1,2-Dichloroethane-d4	85.9	69.9-130		%REC	1	11/7/2006
Surr: 4-Bromofluorobenzene	101	75-139		%REC	1	11/7/2006
Surr: Dibromofluoromethane	90.8	57.3-135		%REC	1	11/7/2006
Surr: Toluene-d8	98.2	81.9-122		%REC	1	11/7/2006
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMS**
Specific Conductance	3100	0.010		µmhos/cm	1	11/1/2006
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	8.40	0.010		pH units	1	11/1/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	MW-1
Lab Order:	0611014	**Collection Date:**	10/26/2006 11:00:00 AM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-07	**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	11/2/2006 12:35:58 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/2/2006 12:35:58 PM
Surr: DNOP	138	58-140		%REC	1	11/2/2006 12:35:58 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	11/3/2006 6:16:41 PM
Surr: BFB	106	84.5-129		%REC	1	11/3/2006 6:16:41 PM
EPA METHOD 300.0: ANIONS						Analyst: **TES**
Fluoride	0.84	0.10		mg/L	1	11/4/2006 1:07:15 AM
Chloride	46	0.50		mg/L	5	11/6/2006 2:56:48 PM
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/4/2006 1:24:39 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/4/2006 1:07:15 AM
Sulfate	150	2.5		mg/L	5	11/6/2006 2:56:48 PM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	ND	0.00020		mg/L	1	11/9/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/15/2006 8:17:58 PM
Barium	ND	0.020		mg/L	1	11/15/2006 8:17:58 PM
Cadmium	ND	0.0020		mg/L	1	11/15/2006 8:17:58 PM
Calcium	2.3	1.0		mg/L	1	11/15/2006 8:17:58 PM
Chromium	ND	0.0060		mg/L	1	11/15/2006 8:17:58 PM
Lead	ND	0.0050		mg/L	1	11/15/2006 8:17:58 PM
Magnesium	ND	1.0		mg/L	1	11/15/2006 8:17:58 PM
Potassium	ND	1.0		mg/L	1	11/15/2006 8:17:58 PM
Selenium	ND	0.050		mg/L	1	11/15/2006 8:17:58 PM
Silver	ND	0.0050		mg/L	1	11/15/2006 8:17:58 PM
Sodium	280	10		mg/L	10	11/16/2006 10:36:47 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	11/14/2006
Acenaphthylene	ND	10		µg/L	1	11/14/2006
Aniline	ND	20		µg/L	1	11/14/2006
Anthracene	ND	10		µg/L	1	11/14/2006
Azobenzene	ND	10		µg/L	1	11/14/2006
Benz(a)anthracene	ND	15		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	MW-1
Lab Order:	0611014	**Collection Date:**	10/26/2006 11:00:00 AM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Benzo(a)pyrene	ND	15		µg/L	1	11/14/2006
Benzo(b)fluoranthene	ND	15		µg/L	1	11/14/2006
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/14/2006
Benzo(k)fluoranthene	ND	10		µg/L	1	11/14/2006
Benzoic acid	ND	50		µg/L	1	11/14/2006
Benzyl alcohol	ND	20		µg/L	1	11/14/2006
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/14/2006
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/14/2006
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/14/2006
Butyl benzyl phthalate	ND	15		µg/L	1	11/14/2006
Carbazole	ND	10		µg/L	1	11/14/2006
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/14/2006
4-Chloroaniline	ND	20		µg/L	1	11/14/2006
2-Chloronaphthalene	ND	10		µg/L	1	11/14/2006
2-Chlorophenol	ND	10		µg/L	1	11/14/2006
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/14/2006
Chrysene	ND	15		µg/L	1	11/14/2006
Di-n-butyl phthalate	ND	10		µg/L	1	11/14/2006
Di-n-octyl phthalate	ND	15		µg/L	1	11/14/2006
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/14/2006
Dibenzofuran	ND	10		µg/L	1	11/14/2006
1,2-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,3-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,4-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/14/2006
Diethyl phthalate	ND	10		µg/L	1	11/14/2006
Dimethyl phthalate	ND	10		µg/L	1	11/14/2006
2,4-Dichlorophenol	ND	10		µg/L	1	11/14/2006
2,4-Dimethylphenol	ND	10		µg/L	1	11/14/2006
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrophenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
2,6-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
Fluoranthene	ND	10		µg/L	1	11/14/2006
Fluorene	ND	10		µg/L	1	11/14/2006
Hexachlorobenzene	ND	10		µg/L	1	11/14/2006
Hexachlorobutadiene	ND	10		µg/L	1	11/14/2006
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	MW-1
Lab Order:	0611014	**Collection Date:**	10/26/2006 11:00:00 AM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Hexachloroethane	ND	10		µg/L	1	11/14/2006
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/14/2006
Isophorone	ND	10		µg/L	1	11/14/2006
2-Methylnaphthalene	ND	10		µg/L	1	11/14/2006
2-Methylphenol	ND	15		µg/L	1	11/14/2006
3+4-Methylphenol	ND	20		µg/L	1	11/14/2006
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodimethylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/14/2006
Naphthalene	ND	10		µg/L	1	11/14/2006
2-Nitroaniline	ND	50		µg/L	1	11/14/2006
3-Nitroaniline	ND	50		µg/L	1	11/14/2006
4-Nitroaniline	ND	20		µg/L	1	11/14/2006
Nitrobenzene	ND	10		µg/L	1	11/14/2006
2-Nitrophenol	ND	15		µg/L	1	11/14/2006
4-Nitrophenol	ND	50		µg/L	1	11/14/2006
Pentachlorophenol	ND	50		µg/L	1	11/14/2006
Phenanthrene	ND	10		µg/L	1	11/14/2006
Phenol	ND	10		µg/L	1	11/14/2006
Pyrene	ND	15		µg/L	1	11/14/2006
Pyridine	ND	30		µg/L	1	11/14/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/14/2006
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/14/2006
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/14/2006
Surr: 2,4,6-Tribromophenol	63.8	16.6-150		%REC	1	11/14/2006
Surr: 2-Fluorobiphenyl	68.2	19.6-134		%REC	1	11/14/2006
Surr: 2-Fluorophenol	55.1	9.54-113		%REC	1	11/14/2006
Surr: 4-Terphenyl-d14	68.7	22.7-145		%REC	1	11/14/2006
Surr: Nitrobenzene-d5	72.7	14.6-134		%REC	1	11/14/2006
Surr: Phenol-d5	40.8	10.7-80.3		%REC	1	11/14/2006
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/7/2006
Toluene	ND	1.0		µg/L	1	11/7/2006
Ethylbenzene	ND	1.0		µg/L	1	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/7/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	MW-1
Lab Order:	0611014	**Collection Date:**	10/26/2006 11:00:00 AM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Naphthalene	ND	2.0		µg/L	1	11/7/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
Acetone	ND	10		µg/L	1	11/7/2006
Bromobenzene	ND	1.0		µg/L	1	11/7/2006
Bromochloromethane	ND	1.0		µg/L	1	11/7/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/7/2006
Bromoform	ND	1.0		µg/L	1	11/7/2006
Bromomethane	ND	2.0		µg/L	1	11/7/2006
2-Butanone	ND	10		µg/L	1	11/7/2006
Carbon disulfide	ND	10		µg/L	1	11/7/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/7/2006
Chlorobenzene	ND	1.0		µg/L	1	11/7/2006
Chloroethane	ND	2.0		µg/L	1	11/7/2006
Chloroform	ND	1.0		µg/L	1	11/7/2006
Chloromethane	ND	1.0		µg/L	1	11/7/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/7/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/7/2006
Dibromomethane	ND	2.0		µg/L	1	11/7/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/7/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/7/2006
2-Hexanone	ND	10		µg/L	1	11/7/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/7/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/7/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/7/2006
Methylene Chloride	ND	3.0		µg/L	1	11/7/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	MW-1
Lab Order:	0611014	**Collection Date:**	10/26/2006 11:00:00 AM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
n-Propylbenzene	ND	1.0		µg/L	1	11/7/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/7/2006
Styrene	ND	1.5		µg/L	1	11/7/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/7/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/7/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/7/2006
Vinyl chloride	ND	1.0		µg/L	1	11/7/2006
Xylenes, Total	ND	3.0		µg/L	1	11/7/2006
Surr: 1,2-Dichloroethane-d4	84.4	69.9-130		%REC	1	11/7/2006
Surr: 4-Bromofluorobenzene	112	75-139		%REC	1	11/7/2006
Surr: Dibromofluoromethane	88.0	57.3-135		%REC	1	11/7/2006
Surr: Toluene-d8	98.4	81.9-122		%REC	1	11/7/2006
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMS**
Specific Conductance	970	0.010		µmhos/cm	1	11/1/2006
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	8.98	0.010		pH units	1	11/1/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PW-3
Lab Order:	0611014	**Collection Date:**	10/27/2006 2:45:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TES**
Fluoride	0.19	0.10		mg/L	1	11/4/2006 1:42:03 AM
Chloride	14	0.10		mg/L	1	11/4/2006 1:42:03 AM
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/4/2006 1:59:28 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/4/2006 1:42:03 AM
Sulfate	490	5.0		mg/L	10	11/6/2006 3:14:12 PM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	ND	0.00020		mg/L	1	11/9/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/15/2006 8:22:09 PM
Barium	ND	0.020		mg/L	1	11/15/2006 8:22:09 PM
Cadmium	ND	0.0020		mg/L	1	11/15/2006 8:22:09 PM
Calcium	190	10		mg/L	10	11/16/2006 10:41:19 AM
Chromium	ND	0.0060		mg/L	1	11/15/2006 8:22:09 PM
Lead	ND	0.0050		mg/L	1	11/15/2006 8:22:09 PM
Magnesium	43	1.0		mg/L	1	11/15/2006 8:22:09 PM
Potassium	1.1	1.0		mg/L	1	11/15/2006 8:22:09 PM
Selenium	ND	0.050		mg/L	1	11/15/2006 8:22:09 PM
Silver	ND	0.0050		mg/L	1	11/15/2006 8:22:09 PM
Sodium	28	1.0		mg/L	1	11/15/2006 8:22:09 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	11/14/2006
Acenaphthylene	ND	10		µg/L	1	11/14/2006
Aniline	ND	20		µg/L	1	11/14/2006
Anthracene	ND	10		µg/L	1	11/14/2006
Azobenzene	ND	10		µg/L	1	11/14/2006
Benz(a)anthracene	ND	15		µg/L	1	11/14/2006
Benzo(a)pyrene	ND	15		µg/L	1	11/14/2006
Benzo(b)fluoranthene	ND	15		µg/L	1	11/14/2006
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/14/2006
Benzo(k)fluoranthene	ND	10		µg/L	1	11/14/2006
Benzoic acid	ND	50		µg/L	1	11/14/2006
Benzyl alcohol	ND	20		µg/L	1	11/14/2006
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/14/2006
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/14/2006

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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PW-3
Lab Order:	0611014	**Collection Date:**	10/27/2006 2:45:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/14/2006
Butyl benzyl phthalate	ND	15		µg/L	1	11/14/2006
Carbazole	ND	10		µg/L	1	11/14/2006
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/14/2006
4-Chloroaniline	ND	20		µg/L	1	11/14/2006
2-Chloronaphthalene	ND	10		µg/L	1	11/14/2006
2-Chlorophenol	ND	10		µg/L	1	11/14/2006
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/14/2006
Chrysene	ND	15		µg/L	1	11/14/2006
Di-n-butyl phthalate	ND	10		µg/L	1	11/14/2006
Di-n-octyl phthalate	ND	15		µg/L	1	11/14/2006
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/14/2006
Dibenzofuran	ND	10		µg/L	1	11/14/2006
1,2-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,3-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,4-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/14/2006
Diethyl phthalate	ND	10		µg/L	1	11/14/2006
Dimethyl phthalate	ND	10		µg/L	1	11/14/2006
2,4-Dichlorophenol	ND	10		µg/L	1	11/14/2006
2,4-Dimethylphenol	ND	10		µg/L	1	11/14/2006
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrophenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
2,6-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
Fluoranthene	ND	10		µg/L	1	11/14/2006
Fluorene	ND	10		µg/L	1	11/14/2006
Hexachlorobenzene	ND	10		µg/L	1	11/14/2006
Hexachlorobutadiene	ND	10		µg/L	1	11/14/2006
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/14/2006
Hexachloroethane	ND	10		µg/L	1	11/14/2006
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/14/2006
Isophorone	ND	10		µg/L	1	11/14/2006
2-Methylnaphthalene	ND	10		µg/L	1	11/14/2006
2-Methylphenol	ND	15		µg/L	1	11/14/2006
3+4-Methylphenol	ND	20		µg/L	1	11/14/2006
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodimethylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/14/2006
Naphthalene	ND	10		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PW-3
Lab Order:	0611014	**Collection Date:**	10/27/2006 2:45:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
2-Nitroaniline	ND	50		µg/L	1	11/14/2006
3-Nitroaniline	ND	50		µg/L	1	11/14/2006
4-Nitroaniline	ND	20		µg/L	1	11/14/2006
Nitrobenzene	ND	10		µg/L	1	11/14/2006
2-Nitrophenol	ND	15		µg/L	1	11/14/2006
4-Nitrophenol	ND	50		µg/L	1	11/14/2006
Pentachlorophenol	ND	50		µg/L	1	11/14/2006
Phenanthrene	ND	10		µg/L	1	11/14/2006
Phenol	ND	10		µg/L	1	11/14/2006
Pyrene	ND	15		µg/L	1	11/14/2006
Pyridine	ND	30		µg/L	1	11/14/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/14/2006
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/14/2006
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/14/2006
Surr: 2,4,6-Tribromophenol	50.4	16.6-150		%REC	1	11/14/2006
Surr: 2-Fluorobiphenyl	61.1	19.6-134		%REC	1	11/14/2006
Surr: 2-Fluorophenol	43.6	9.54-113		%REC	1	11/14/2006
Surr: 4-Terphenyl-d14	67.3	22.7-145		%REC	1	11/14/2006
Surr: Nitrobenzene-d5	61.4	14.6-134		%REC	1	11/14/2006
Surr: Phenol-d5	33.1	10.7-80.3		%REC	1	11/14/2006
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/7/2006
Toluene	ND	1.0		µg/L	1	11/7/2006
Ethylbenzene	ND	1.0		µg/L	1	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/7/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/7/2006
Naphthalene	ND	2.0		µg/L	1	11/7/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
Acetone	ND	10		µg/L	1	11/7/2006
Bromobenzene	ND	1.0		µg/L	1	11/7/2006
Bromochloromethane	ND	1.0		µg/L	1	11/7/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/7/2006
Bromoform	ND	1.0		µg/L	1	11/7/2006
Bromomethane	ND	2.0		µg/L	1	11/7/2006
2-Butanone	ND	10		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PW-3
Lab Order:	0611014	**Collection Date:**	10/27/2006 2:45:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Carbon disulfide	ND	10		µg/L	1	11/7/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/7/2006
Chlorobenzene	ND	1.0		µg/L	1	11/7/2006
Chloroethane	ND	2.0		µg/L	1	11/7/2006
Chloroform	ND	1.0		µg/L	1	11/7/2006
Chloromethane	ND	1.0		µg/L	1	11/7/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/7/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/7/2006
Dibromomethane	ND	2.0		µg/L	1	11/7/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/7/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/7/2006
2-Hexanone	ND	10		µg/L	1	11/7/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/7/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/7/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/7/2006
Methylene Chloride	ND	3.0		µg/L	1	11/7/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/7/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/7/2006
Styrene	ND	1.5		µg/L	1	11/7/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/7/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PW-3
Lab Order:	0611014	**Collection Date:**	10/27/2006 2:45:00 PM
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/7/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/7/2006
Vinyl chloride	ND	1.0		µg/L	1	11/7/2006
Xylenes, Total	ND	3.0		µg/L	1	11/7/2006
Surr: 1,2-Dichloroethane-d4	85.3	69.9-130		%REC	1	11/7/2006
Surr: 4-Bromofluorobenzene	101	75-139		%REC	1	11/7/2006
Surr: Dibromofluoromethane	89.4	57.3-135		%REC	1	11/7/2006
Surr: Toluene-d8	89.0	81.9-122		%REC	1	11/7/2006
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMS**
Specific Conductance	1200	0.010		µmhos/cm	1	11/1/2006
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	7.89	0.010		pH units	1	11/1/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Trip Blank
Lab Order:	0611014	**Collection Date:**	
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-09	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/7/2006
Toluene	ND	1.0		µg/L	1	11/7/2006
Ethylbenzene	ND	1.0		µg/L	1	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/7/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/7/2006
Naphthalene	ND	2.0		µg/L	1	11/7/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
Acetone	ND	10		µg/L	1	11/7/2006
Bromobenzene	ND	1.0		µg/L	1	11/7/2006
Bromochloromethane	ND	1.0		µg/L	1	11/7/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/7/2006
Bromoform	ND	1.0		µg/L	1	11/7/2006
Bromomethane	ND	2.0		µg/L	1	11/7/2006
2-Butanone	ND	10		µg/L	1	11/7/2006
Carbon disulfide	ND	10		µg/L	1	11/7/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/7/2006
Chlorobenzene	ND	1.0		µg/L	1	11/7/2006
Chloroethane	ND	2.0		µg/L	1	11/7/2006
Chloroform	ND	1.0		µg/L	1	11/7/2006
Chloromethane	ND	1.0		µg/L	1	11/7/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/7/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/7/2006
Dibromomethane	ND	2.0		µg/L	1	11/7/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/7/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Trip Blank
Lab Order:	0611014	**Collection Date:**	
Project:	Annual Ground Water 2006-Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611014-09	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,1-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/7/2006
2-Hexanone	ND	10		µg/L	1	11/7/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/7/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/7/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/7/2006
Methylene Chloride	ND	3.0		µg/L	1	11/7/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/7/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/7/2006
Styrene	ND	1.5		µg/L	1	11/7/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/7/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/7/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/7/2006
Vinyl chloride	ND	1.0		µg/L	1	11/7/2006
Xylenes, Total	ND	3.0		µg/L	1	11/7/2006
Surr: 1,2-Dichloroethane-d4	85.9	69.9-130		%REC	1	11/7/2006
Surr: 4-Bromofluorobenzene	108	75-139		%REC	1	11/7/2006
Surr: Dibromofluoromethane	87.8	57.3-135		%REC	1	11/7/2006
Surr: Toluene-d8	96.4	81.9-122		%REC	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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		

ENERGY LABORATORIES, INC. • P.O. Box 30916 • 1120 South 27th Street • Billings, MT 59107-0916
800-735-4489 • 406-252-6325 • 406-252-6069 fax • eli@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque
Project: Proj. 0611014
Lab ID: B06110241-001
Client Sample ID 0611014-07E, MW-1

Report Date: 11/14/06
Collection Date: 10/26/06 11:00
DateReceived: 11/03/06
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Cyanide, Total Manual Distillation	ND	mg/L		0.005		E335.4	11/03/06 12:42 / kjp

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque
Project: Proj. 0611014
Lab ID: B06110241-002
Client Sample ID 0611014-08E, PW-3

Report Date: 11/14/06
Collection Date: 10/27/06 14:45
DateReceived: 11/03/06
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Cyanide, Total Manual Distillation	ND	mg/L		0.005		E335.4	11/03/06 12:44 / kjp

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

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QA/QC Summary Report

Client: Hall Environmental-Albuquerque
Project: Proj. 0611014

Report Date: 11/08/06
Work Order: B06110241

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E335.4								Batch: A2006-11-03_4_CN__01	
Sample ID: B06110241-002AMS	Sample Matrix Spike				Run: AUTOAN201-B_061103A			11/03/06 12:46	
Cyanide, Total Manual Distillation	0.113	mg/L	0.0050	113	90	110			S
Sample ID: B06110241-002AMSD	Sample Matrix Spike Duplicate				Run: AUTOAN201-B_061103A			11/03/06 12:47	
Cyanide, Total Manual Distillation	0.112	mg/L	0.0050	112	90	110	1.3	10	S
Sample ID: LFB	Laboratory Fortified Blank				Run: AUTOAN201-B_061103A			11/03/06 11:52	
Cyanide, Total Manual Distillation	0.0986	mg/L	0.0050	99	90	110			
Sample ID: MBLK	Method Blank				Run: AUTOAN201-B_061103A			11/03/06 11:54	
Cyanide, Total Manual Distillation	ND	mg/L	0.001						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

S - Spike recovery outside of advisory limits.

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Annual Ground Water 2006-Ciniza **Work Order:** 0611014

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E300									
Sample ID: MBLK		*MBLK*			Batch ID:	**R21288**	Analysis Date:	11/3/2006 11:11:41 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R21305**	Analysis Date:	11/6/2006 10:00:52 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS ST300-06019		*LCS*			Batch ID:	**R21288**	Analysis Date:	11/3/2006 11:29:05 AM	
Fluoride	0.5273	mg/L	0.10	105	90	110			
Chloride	4.899	mg/L	0.10	98.0	90	110			
Nitrate (As N)+Nitrite (As N)	3.461	mg/L	0.10	98.9	90	110			
Phosphorus, Orthophosphate (As P)	4.997	mg/L	0.50	99.9	90	110			
Sulfate	9.674	mg/L	0.50	96.7	90	110			
Sample ID: LCS ST300-06019		*LCS*			Batch ID:	**R21305**	Analysis Date:	11/6/2006 10:18:16 AM	
Fluoride	0.5066	mg/L	0.10	101	90	110			
Chloride	4.862	mg/L	0.10	97.2	90	110			
Nitrate (As N)+Nitrite (As N)	3.426	mg/L	0.10	97.9	90	110			
Phosphorus, Orthophosphate (As P)	4.905	mg/L	0.50	98.1	90	110			
Sulfate	9.652	mg/L	0.50	96.5	90	110			
Method: SW8015									
Sample ID: MB-11640		*MBLK*			Batch ID:	**11640**	Analysis Date:	11/2/2006 1:11:03 PM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-11640		*LCS*			Batch ID:	**11640**	Analysis Date:	11/2/2006 11:26:05 AM	
Diesel Range Organics (DRO)	5.830	mg/L	1.0	117	74	157			
Sample ID: LCSD-11640		*LCSD*			Batch ID:	**11640**	Analysis Date:	11/2/2006 12:00:55 PM	
Diesel Range Organics (DRO)	6.008	mg/L	1.0	120	74	157	3.01	23	
Method: SW8015									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R21285**	Analysis Date:	11/3/2006 8:46:30 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R21285**	Analysis Date:	11/3/2006 7:17:11 PM	
Gasoline Range Organics (GRO)	0.4740	mg/L	0.050	94.8	73.3	119			

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: Annual Ground Water 2006-Ciniza **Work Order:** 0611014

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 0611014-01A MSD		*MSD*			Batch ID:	**R21286**	Analysis Date:	11/3/2006 8:10:59 PM	
Methyl tert-butyl ether (MTBE)	38.73	µg/L	2.5	96.8	51.2	138	1.19	28	
Benzene	19.96	µg/L	1.0	99.8	85	115	2.15	27	
Toluene	20.31	µg/L	1.0	102	85	118	3.09	19	
Ethylbenzene	20.26	µg/L	1.0	101	85	116	2.06	10	
Xylenes, Total	61.04	µg/L	3.0	102	85	119	2.62	13	
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	**R21286**	Analysis Date:	11/3/2006 8:55:37 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	3.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R21286**	Analysis Date:	11/3/2006 7:10:49 PM	
Methyl tert-butyl ether (MTBE)	40.12	µg/L	2.5	100	51.2	138			
Benzene	19.89	µg/L	1.0	99.4	85	115			
Toluene	20.41	µg/L	1.0	102	85	118			
Ethylbenzene	20.50	µg/L	1.0	103	85	116			
Xylenes, Total	61.61	µg/L	3.0	103	85	119			
Sample ID: 0611014-01A MS		*MS*			Batch ID:	**R21286**	Analysis Date:	11/3/2006 7:40:53 PM	
lethyl tert-butyl ether (MTBE)	39.20	µg/L	2.5	98.0	51.2	138			
Benzene	20.39	µg/L	1.0	102	85	115			
Toluene	20.95	µg/L	1.0	105	85	118			
Ethylbenzene	20.68	µg/L	1.0	103	85	116			
Xylenes, Total	62.66	µg/L	3.0	104	85	119			

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: Annual Ground Water 2006-Ciniza **Work Order:** 0611014

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-11641		*MBLK*			Batch ID:	**11641**	Analysis Date:		11/14/2006
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	15						
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: Annual Ground Water 2006-Ciniza **Work Order:** 0611014

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-11641		*MBLK*			Batch ID:	**11641**	Analysis Date:		11/14/2006
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	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-11641		*LCS*			Batch ID:	**11641**	Analysis Date:		11/14/2006
Acenaphthene	75.56	µg/L	10	75.6	11	123			
4-Chloro-3-methylphenol	128.8	µg/L	20	64.4	15.4	119			
2-Chlorophenol	109.7	µg/L	10	54.9	12.2	122			
1,4-Dichlorobenzene	44.08	µg/L	10	44.1	16.9	100			
2,4-Dinitrotoluene	70.12	µg/L	10	70.1	13	138			
N-Nitrosodi-n-propylamine	59.72	µg/L	10	59.7	9.93	122			
4-Nitrophenol	61.04	µg/L	50	30.5	12.5	87.4			
Pentachlorophenol	89.54	µg/L	50	44.8	3.55	114			
Phenol	60.02	µg/L	10	30.0	7.53	73.1			
Pyrene	74.84	µg/L	15	74.8	12.6	140			
1,2,4-Trichlorobenzene	49.74	µg/L	10	49.7	17.4	98.7			
Sample ID: LCSD-11641		*LCSD*			Batch ID:	**11641**	Analysis Date:		11/14/2006
Acenaphthene	72.80	µg/L	10	72.8	11	123	3.72	30.5	
4-Chloro-3-methylphenol	129.7	µg/L	20	64.8	15.4	119	0.697	28.6	
2-Chlorophenol	129.1	µg/L	10	64.5	12.2	122	16.2	107	
1,4-Dichlorobenzene	48.32	µg/L	10	48.3	16.9	100	9.18	62.1	
2,4-Dinitrotoluene	64.96	µg/L	10	65.0	13	138	7.64	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: Annual Ground Water 2006-Ciniza **Work Order:** 0611014

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: LCSD-11641		*LCSD*			Batch ID:	**11641**	Analysis Date:		11/14/2006
N-Nitrosodi-n-propylamine	60.62	µg/L	10	60.6	9.93	122	1.50	30.3	
4-Nitrophenol	75.92	µg/L	50	38.0	12.5	87.4	21.7	36.3	
Pentachlorophenol	127.0	µg/L	50	63.5	3.55	114	34.6	49	
Phenol	72.86	µg/L	10	36.4	7.53	73.1	19.3	52.4	
Pyrene	71.16	µg/L	15	71.2	12.6	140	5.04	16.3	
1,2,4-Trichlorobenzene	52.72	µg/L	10	52.7	17.4	98.7	5.82	36.4	
Method: SW7470									
Sample ID: 0611014-08C MSD		*MSD*			Batch ID:	**11711**	Analysis Date:		11/9/2006
Mercury	0.004725	mg/L	0.00020	94.5	75	125	2.25	20	
Sample ID: MB-11711		*MBLK*			Batch ID:	**11711**	Analysis Date:		11/9/2006
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-11711		*LCS*			Batch ID:	**11711**	Analysis Date:		11/9/2006
Mercury	0.004815	mg/L	0.00020	96.3	80	120			
Sample ID: 0611014-08C MS		*MS*			Batch ID:	**11711**	Analysis Date:		11/9/2006
Mercury	0.004620	mg/L	0.00020	92.4	75	125			

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: Annual Ground Water 2006-Ciniza **Work Order:** 0611014

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW6010A									
Sample ID: MB-11746		*MBLK*			Batch ID:	**11746**	Analysis Date:	11/16/2006 8:58:41 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: MB-11746		*MBLK*			Batch ID:	**11746**	Analysis Date:	11/15/2006 7:10:00 PM	
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Sample ID: MB-11746		*MBLK*			Batch ID:	**11746**	Analysis Date:	11/16/2006 8:58:41 AM	
Calcium	ND	mg/L	1.0						
Sodium	ND	mg/L	1.0						
Sample ID: LCS-11746		*LCS*			Batch ID:	**11746**	Analysis Date:	11/16/2006 8:53:16 AM	
Arsenic	0.5143	mg/L	0.020	103	80	120			
Barium	0.4951	mg/L	0.020	99.0	80	120			
Cadmium	0.5012	mg/L	0.0020	100	80	120			
Calcium	53.42	mg/L	1.0	107	80	120			
Chromium	0.5086	mg/L	0.0060	102	80	120			
Lead	0.4945	mg/L	0.0050	98.9	80	120			
Magnesium	53.81	mg/L	1.0	108	80	120			
Potassium	57.58	mg/L	1.0	115	80	120			
Selenium	0.4749	mg/L	0.050	95.0	80	120			
Silver	0.5011	mg/L	0.0050	100	80	120			
Sodium	57.46	mg/L	1.0	115	80	120			
Sample ID: LCS-11746		*LCS*			Batch ID:	**11746**	Analysis Date:	11/15/2006 7:13:04 PM	
Cadmium	0.4806	mg/L	0.0020	96.1	80	120			
Chromium	0.4878	mg/L	0.0060	97.6	80	120			
Magnesium	54.21	mg/L	1.0	108	80	120			
Potassium	56.75	mg/L	1.0	114	80	120			
Sample ID: LCS-11746		*LCS*			Batch ID:	**11746**	Analysis Date:	11/16/2006 8:53:16 AM	
Calcium	53.42	mg/L	1.0	107	80	120			
Sodium	57.46	mg/L	1.0	115	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: Annual Ground Water 2006-Ciniza **Work Order:** 0611014

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID: **R21321**		Analysis Date:		11/7/2006
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: Annual Ground Water 2006-Ciniza
Work Order: 0611014

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R21321**	Analysis Date:		11/7/2006
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-b		*LCS*			Batch ID:	**R21321**	Analysis Date:		11/7/2006
Benzene	18.27	µg/L	1.0	91.4	74.9	113			
Toluene	17.05	µg/L	1.0	85.3	80.4	111			
Chlorobenzene	20.26	µg/L	1.0	101	83.2	120			
1,1-Dichloroethene	18.32	µg/L	1.0	91.6	72	127			
Trichloroethene (TCE)	17.25	µg/L	1.0	86.2	58.2	131			

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: 11/1/2006

Work Order Number 0611014

Received by AT

Checklist completed by _____ Signature _____ Date 11/1/06

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? **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: Annual Ground Water 2006 - Ciniza
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	HEAL No. 0611014	BTEX + MTBE + [redacted]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)	Gen. Chem.	Cyanide	Nitrate	RCRA Metals Total	Air Bubbles or Headspace (Y or N)
10.27.06	0915	H_2O	OW-12				-1	X																
10.27.06	10.30	"	OW-13				-2	X																
10.29.06	1330	"	OW-14				-3	X																
10.27.06	1230	"	OW-29				-4	X																
10.27.06	1400	"	OW-30				-5	X																
10.26.06	1400	"	OW-11				-6								X			X	X	X				
10.26.06	1100	"	MW-1				-7			X					X			X	X	X	X			
10/27/06	1445	"	PW-3				-8											X	X	X	+	X	X	
			Tr. Blank				-9																	

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-1-06	1100	Steve Morris	11/1/06 1100
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Gen. Chem. = Cations, Anions, pH, + Conductivity

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, November 27, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Annual Groundwater Samples 2006 Ponds 1

Order No.: 0611018

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 11/1/2006 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: *27-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 1 Inlet
Lab Order:	0611018	**Collection Date:**	10/30/2006 2:00:00 PM
Project:	Annual Groundwater Samples 2006 Ponds 1&2	**Date Received:**	11/1/2006
Lab ID:	0611018-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	25		µg/L	10	11/3/2006 3:37:33 PM
Benzene	ND	10		µg/L	10	11/3/2006 3:37:33 PM
Toluene	ND	10		µg/L	10	11/3/2006 3:37:33 PM
Ethylbenzene	13	10		µg/L	10	11/3/2006 3:37:33 PM
Xylenes, Total	79	30		µg/L	10	11/3/2006 3:37:33 PM
Surr: 4-Bromofluorobenzene	88.0	72.2-125		%REC	10	11/3/2006 3:37:33 PM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	0.00057	0.00020		mg/L	1	11/16/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/15/2006 9:35:51 PM
Barium	0.15	0.020		mg/L	1	11/15/2006 9:35:51 PM
Cadmium	ND	0.0020		mg/L	1	11/15/2006 9:35:51 PM
Chromium	0.012	0.0060		mg/L	1	11/15/2006 9:35:51 PM
Lead	0.015	0.0050		mg/L	1	11/15/2006 9:35:51 PM
Selenium	ND	0.050		mg/L	1	11/15/2006 9:35:51 PM
Silver	ND	0.0050		mg/L	1	11/15/2006 9:35:51 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	25		µg/L	1	11/14/2006
Acenaphthylene	ND	25		µg/L	1	11/14/2006
Aniline	ND	50		µg/L	1	11/14/2006
Anthracene	ND	25		µg/L	1	11/14/2006
Azobenzene	ND	25		µg/L	1	11/14/2006
Benz(a)anthracene	ND	38		µg/L	1	11/14/2006
Benzo(a)pyrene	ND	38		µg/L	1	11/14/2006
Benzo(b)fluoranthene	ND	38		µg/L	1	11/14/2006
Benzo(g,h,i)perylene	ND	25		µg/L	1	11/14/2006
Benzo(k)fluoranthene	ND	25		µg/L	1	11/14/2006
Benzoic acid	ND	120		µg/L	1	11/14/2006
Benzyl alcohol	ND	50		µg/L	1	11/14/2006
Bis(2-chloroethoxy)methane	ND	25		µg/L	1	11/14/2006
Bis(2-chloroethyl)ether	ND	38		µg/L	1	11/14/2006
Bis(2-chloroisopropyl)ether	ND	38		µg/L	1	11/14/2006
Bis(2-ethylhexyl)phthalate	ND	38		µg/L	1	11/14/2006
4-Bromophenyl phenyl ether	ND	25		µg/L	1	11/14/2006
Butyl benzyl phthalate	ND	38		µg/L	1	11/14/2006
Carbazole	ND	25		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 1 Inlet
Lab Order:	0611018	**Collection Date:**	10/30/2006 2:00:00 PM
Project:	Annual Groundwater Samples 2006 Ponds 1&2	**Date Received:**	11/1/2006
Lab ID:	0611018-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
4-Chloro-3-methylphenol	ND	50		µg/L	1	11/14/2006
4-Chloroaniline	ND	50		µg/L	1	11/14/2006
2-Chloronaphthalene	ND	25		µg/L	1	11/14/2006
2-Chlorophenol	ND	25		µg/L	1	11/14/2006
4-Chlorophenyl phenyl ether	ND	38		µg/L	1	11/14/2006
Chrysene	ND	38		µg/L	1	11/14/2006
Di-n-butyl phthalate	ND	25		µg/L	1	11/14/2006
Di-n-octyl phthalate	ND	38		µg/L	1	11/14/2006
Dibenz(a,h)anthracene	ND	25		µg/L	1	11/14/2006
Dibenzofuran	ND	25		µg/L	1	11/14/2006
1,2-Dichlorobenzene	ND	25		µg/L	1	11/14/2006
1,3-Dichlorobenzene	ND	25		µg/L	1	11/14/2006
1,4-Dichlorobenzene	ND	25		µg/L	1	11/14/2006
3,3'-Dichlorobenzidine	ND	38		µg/L	1	11/14/2006
Diethyl phthalate	ND	25		µg/L	1	11/14/2006
Dimethyl phthalate	ND	25		µg/L	1	11/14/2006
2,4-Dichlorophenol	ND	25		µg/L	1	11/14/2006
2,4-Dimethylphenol	110	25		µg/L	1	11/14/2006
4,6-Dinitro-2-methylphenol	ND	120		µg/L	1	11/14/2006
2,4-Dinitrophenol	ND	120		µg/L	1	11/14/2006
2,4-Dinitrotoluene	ND	25		µg/L	1	11/14/2006
2,6-Dinitrotoluene	ND	25		µg/L	1	11/14/2006
Fluoranthene	ND	25		µg/L	1	11/14/2006
Fluorene	ND	25		µg/L	1	11/14/2006
Hexachlorobenzene	ND	25		µg/L	1	11/14/2006
Hexachlorobutadiene	ND	25		µg/L	1	11/14/2006
Hexachlorocyclopentadiene	ND	25		µg/L	1	11/14/2006
Hexachloroethane	ND	25		µg/L	1	11/14/2006
Indeno(1,2,3-cd)pyrene	ND	25		µg/L	1	11/14/2006
Isophorone	ND	25		µg/L	1	11/14/2006
2-Methylnaphthalene	320	25		µg/L	1	11/14/2006
2-Methylphenol	220	38		µg/L	1	11/14/2006
3+4-Methylphenol	88	50		µg/L	1	11/14/2006
N-Nitrosodi-n-propylamine	ND	25		µg/L	1	11/14/2006
N-Nitrosodimethylamine	27	25		µg/L	1	11/14/2006
N-Nitrosodiphenylamine	ND	25		µg/L	1	11/14/2006
Naphthalene	48	25		µg/L	1	11/14/2006
2-Nitroaniline	ND	120		µg/L	1	11/14/2006
3-Nitroaniline	ND	120		µg/L	1	11/14/2006
4-Nitroaniline	ND	50		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 1 Inlet
Lab Order:	0611018	**Collection Date:**	10/30/2006 2:00:00 PM
Project:	Annual Groundwater Samples 2006 Ponds 1&2	**Date Received:**	11/1/2006
Lab ID:	0611018-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Nitrobenzene	ND	25		µg/L	1	11/14/2006
2-Nitrophenol	ND	38		µg/L	1	11/14/2006
4-Nitrophenol	ND	120		µg/L	1	11/14/2006
Pentachlorophenol	ND	120		µg/L	1	11/14/2006
Phenanthrene	460	25		µg/L	1	11/14/2006
Phenol	130	25		µg/L	1	11/14/2006
Pyrene	96	38		µg/L	1	11/14/2006
Pyridine	ND	75		µg/L	1	11/14/2006
1,2,4-Trichlorobenzene	ND	25		µg/L	1	11/14/2006
2,4,5-Trichlorophenol	ND	25		µg/L	1	11/14/2006
2,4,6-Trichlorophenol	ND	38		µg/L	1	11/14/2006
Surr: 2,4,6-Tribromophenol	87.9	16.6-150		%REC	1	11/14/2006
Surr: 2-Fluorobiphenyl	68.8	19.6-134		%REC	1	11/14/2006
Surr: 2-Fluorophenol	44.2	9.54-113		%REC	1	11/14/2006
Surr: 4-Terphenyl-d14	69.8	22.7-145		%REC	1	11/14/2006
Surr: Nitrobenzene-d5	67.3	14.6-134		%REC	1	11/14/2006
Surr: Phenol-d5	37.7	10.7-80.3		%REC	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 2 Inlet
Lab Order:	0611018	**Collection Date:**	10/31/2006 11:00:00 AM
Project:	Annual Groundwater Samples 2006 Ponds 1&2	**Date Received:**	11/1/2006
Lab ID:	0611018-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	25		µg/L	10	11/3/2006 4:10:13 PM
Benzene	ND	10		µg/L	10	11/3/2006 4:10:13 PM
Toluene	22	10		µg/L	10	11/3/2006 4:10:13 PM
Ethylbenzene	ND	10		µg/L	10	11/3/2006 4:10:13 PM
Xylenes, Total	45	30		µg/L	10	11/3/2006 4:10:13 PM
Surr: 4-Bromofluorobenzene	85.0	72.2-125		%REC	10	11/3/2006 4:10:13 PM
EPA METHOD 160.1: TDS						Analyst: **KS**
Total Dissolved Solids	1800	40		mg/L	1	11/7/2006

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 7 Gen Chem
Lab Order:	0611018	**Collection Date:**	10/31/2006 2:30:00 PM
Project:	Annual Groundwater Samples 2006 Ponds 1&2	**Date Received:**	11/1/2006
Lab ID:	0611018-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TES**
Fluoride	31	10		mg/L	100	11/6/2006 1:12:21 PM
Chloride	42000	200		mg/L	2000	11/6/2006 2:04:34 PM
Nitrate (As N)+Nitrite (As N)	ND	10		mg/L	100	11/7/2006 10:23:07 AM
Phosphorus, Orthophosphate (As P)	ND	50	H	mg/L	100	11/6/2006 1:12:21 PM
Sulfate	7000	250		mg/L	500	11/6/2006 1:29:45 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **IC**
Calcium	810	20		mg/L	20	11/27/2006 11:38:49 AM
Magnesium	970	20		mg/L	20	11/27/2006 11:38:49 AM
Potassium	1400	20		mg/L	20	11/27/2006 11:38:49 AM
Sodium	29000	500		mg/L	500	11/27/2006 2:53:48 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMS**
Specific Conductance	150000	0.10		µmhos/cm	10	11/1/2006
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	7.46	0.010		pH units	1	11/1/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: **0611018**
Order: **0611031** **HAL03** Receipt: **11-02-06**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0611018-02C POND 2 INLET*** Collected: *10-31-06 11:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0611031-0001A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD06131	WC.2006.2807.13	10-26-4	Biochemical Oxygen Demand	586	mg/L	1	2		11-02-06	11-07-06

Sample: ***0611018-02D POND 2 INLET*** Collected: *10-31-06 11:00:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0611031-0002A		**EPA 410.1 Chemical Oxygen Demand**					By:	NJL		
WCOD06070	WC.2006.2849.5	C-004	Chemical Oxygen Demand	1240	mg/L	1	10		11-15-06	11-15-06

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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THIS REPORT MAY NOT BE USED IN ANY MANNER IENT OR ANY OTHER THIRD PARTY TO CLAIM
PRODUCT ENDORSEMENT BY THE NATIONAL V LABORATORY ACCREDITATION PROGRAM.

Report Date: 11/16/2006 12:47:33 PM

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Annual Groundwater Samples 2006 Ponds 1&2
Work Order: 0611018

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E300									
Sample ID: MBLK		*MBLK*			Batch ID:	**R21288**	Analysis Date:	11/3/2006 11:11:41 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R21305**	Analysis Date:	11/6/2006 10:00:52 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS ST300-06019		*LCS*			Batch ID:	**R21288**	Analysis Date:	11/3/2006 11:29:05 AM	
Fluoride	0.5273	mg/L	0.10	105	90	110			
Chloride	4.899	mg/L	0.10	98.0	90	110			
Nitrate (As N)+Nitrite (As N)	3.461	mg/L	0.10	98.9	90	110			
Phosphorus, Orthophosphate (As P)	4.997	mg/L	0.50	99.9	90	110			
Sulfate	9.674	mg/L	0.50	96.7	90	110			
Sample ID: LCS ST300-06019		*LCS*			Batch ID:	**R21305**	Analysis Date:	11/6/2006 10:18:16 AM	
Fluoride	0.5066	mg/L	0.10	101	90	110			
Chloride	4.862	mg/L	0.10	97.2	90	110			
Nitrate (As N)+Nitrite (As N)	3.426	mg/L	0.10	97.9	90	110			
Phosphorus, Orthophosphate (As P)	4.905	mg/L	0.50	98.1	90	110			
Sulfate	9.652	mg/L	0.50	96.5	90	110			
Method: SW8021									
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	**R21286**	Analysis Date:	11/3/2006 8:55:37 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	3.0						
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R21286**	Analysis Date:	11/3/2006 7:10:49 PM	
Methyl tert-butyl ether (MTBE)	40.12	µg/L	2.5	100	51.2	138			
Benzene	19.89	µg/L	1.0	99.4	85	115			
Toluene	20.41	µg/L	1.0	102	85	118			
Ethylbenzene	20.50	µg/L	1.0	103	85	116			
Xylenes, Total	61.61	µg/L	3.0	103	85	119			

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: Annual Groundwater Samples 2006 Ponds 1&2 **Work Order:** 0611018

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-11641		*MBLK*			Batch ID:	**11641**	Analysis Date:		11/14/2006
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	15						
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: Annual Groundwater Samples 2006 Ponds 1&2 **Work Order:** 0611018

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-11641		*MBLK*			Batch ID:	**11641**	Analysis Date:		11/14/2006
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	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-11641		*LCS*			Batch ID:	**11641**	Analysis Date:		11/14/2006
Acenaphthene	75.56	µg/L	10	75.6	11	123			
4-Chloro-3-methylphenol	128.8	µg/L	20	64.4	15.4	119			
2-Chlorophenol	109.7	µg/L	10	54.9	12.2	122			
1,4-Dichlorobenzene	44.08	µg/L	10	44.1	16.9	100			
2,4-Dinitrotoluene	70.12	µg/L	10	70.1	13	138			
N-Nitrosodi-n-propylamine	59.72	µg/L	10	59.7	9.93	122			
4-Nitrophenol	61.04	µg/L	50	30.5	12.5	87.4			
Pentachlorophenol	89.54	µg/L	50	44.8	3.55	114			
Phenol	60.02	µg/L	10	30.0	7.53	73.1			
Pyrene	74.84	µg/L	15	74.8	12.6	140			
1,2,4-Trichlorobenzene	49.74	µg/L	10	49.7	17.4	98.7			
Sample ID: LCSD-11641		*LCSD*			Batch ID:	**11641**	Analysis Date:		11/14/2006
Acenaphthene	72.80	µg/L	10	72.8	11	123	3.72	30.5	
4-Chloro-3-methylphenol	129.7	µg/L	20	64.8	15.4	119	0.697	28.6	
2-Chlorophenol	129.1	µg/L	10	64.5	12.2	122	16.2	107	
1,4-Dichlorobenzene	48.32	µg/L	10	48.3	16.9	100	9.18	62.1	
2,4-Dinitrotoluene	64.96	µg/L	10	65.0	13	138	7.64	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: Annual Groundwater Samples 2006 Ponds 1&2

Work Order: 0611018

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: LCSD-11641		*LCSD*			Batch ID:	**11641**	Analysis Date:		11/14/2006
N-Nitrosodi-n-propylamine	60.62	µg/L	10	60.6	9.93	122	1.50	30.3	
4-Nitrophenol	75.92	µg/L	50	38.0	12.5	87.4	21.7	36.3	
Pentachlorophenol	127.0	µg/L	50	63.5	3.55	114	34.6	49	
Phenol	72.86	µg/L	10	36.4	7.53	73.1	19.3	52.4	
Pyrene	71.16	µg/L	15	71.2	12.6	140	5.04	16.3	
1,2,4-Trichlorobenzene	52.72	µg/L	10	52.7	17.4	98.7	5.82	36.4	
Method: SW7470									
Sample ID: MB-11774		*MBLK*			Batch ID:	**11774**	Analysis Date:		11/16/2006
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-11774		*LCS*			Batch ID:	**11774**	Analysis Date:		11/16/2006
Mercury	0.005025	mg/L	0.00020	100	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: Annual Groundwater Samples 2006 Ponds 1&2 **Work Order:** 0611018

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW6010A									
Sample ID: MB-11746		*MBLK*			Batch ID:	**11746**	Analysis Date:	11/16/2006 8:58:41 AM	
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: MB-11746		*MBLK*			Batch ID:	**11746**	Analysis Date:	11/15/2006 7:10:00 PM	
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Sample ID: MB-11761		*MBLK*			Batch ID:	**11761**	Analysis Date:	11/22/2006 1:16:09 PM	
Calcium	ND	mg/L	1.0						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Sodium	ND	mg/L	1.0						
Sample ID: LCS-11746		*LCS*			Batch ID:	**11746**	Analysis Date:	11/16/2006 8:53:16 AM	
Arsenic	0.5143	mg/L	0.020	103	80	120			
Barium	0.4951	mg/L	0.020	99.0	80	120			
Cadmium	0.5012	mg/L	0.0020	100	80	120			
Chromium	0.5086	mg/L	0.0060	102	80	120			
Lead	0.4945	mg/L	0.0050	98.9	80	120			
Selenium	0.4749	mg/L	0.050	95.0	80	120			
Silver	0.5011	mg/L	0.0050	100	80	120			
Sample ID: LCS-11746		*LCS*			Batch ID:	**11746**	Analysis Date:	11/15/2006 7:13:04 PM	
Cadmium	0.4806	mg/L	0.0020	96.1	80	120			
Chromium	0.4878	mg/L	0.0060	97.6	80	120			
Sample ID: LCS-11761		*LCS*			Batch ID:	**11761**	Analysis Date:	11/22/2006 11:04:34 AM	
Calcium	51.40	mg/L	1.0	103	80	120			
Magnesium	53.28	mg/L	1.0	106	80	120			
Potassium	55.78	mg/L	1.0	111	80	120			
Sodium	57.07	mg/L	1.0	113	80	120			
Method: E160.1									
Sample ID: MB-11691		*MBLK*			Batch ID:	**11691**	Analysis Date:	11/7/2006	
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-11691		*LCS*			Batch ID:	**11691**	Analysis Date:	11/7/2006	
Total Dissolved Solids	1010	mg/L	20	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: 11/1/2006

Work Order Number 0611018

Received by AT

Checklist completed by _____ Signature _____ Date 11/1/06

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? 3° *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: per SM Pond 7 collection time 1430 AT 11/1/06

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: Annual Ground water Samples 2006 Ponds 1 and 2 inlets.
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		HEAL No. 0611018	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)	BOD, COD + TDS	Gen Chem			Air Bubbles or Headspace (Y or N)
10/30/06	1400	H_2O	Pond 1 inlet	5				-1	X							X			X	X					
10/31/06	1100	"	Pond 2 inlet	6				-2	X												X				
10/31/06	1430	"	Pond 7 Gen Chem	3				-3														X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-1-06	1100	Steve Morris	11/1/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1100

Remarks: Gen. Chem. = Cations, Anions, pH, + Conductivity

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, November 15, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED Quarterly Samples 4th Qtr. 2006

Order No.: 0611012

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 11/1/2006 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: *15-Nov-06*

CLIENT:	Giant Refining Co	
Project:	NMED Quarterly Samples 4th Qtr. 2006	**CASE NARRATIVE**
Lab Order:	0611012	

Analytical Comments for METHOD 8015GRO_W, SAMPLE 0611012-01A: Elevated surrogate due to matrix interference.See Corrective Action: [400] Low recovery for Se in 0611012-2 MS/MSD.

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0611012	**Collection Date:**	10/30/2006 3:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	28	0.50		mg/L	10	11/6/2006 12:19:30 PM
Surr: BFB	142	84.5-129	S	%REC	10	11/6/2006 12:19:30 PM
EPA METHOD 7470: MERCURY						Analyst: CMS
Mercury	0.0011	0.00020		mg/L	1	11/8/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	11/9/2006 2:35:03 PM
Barium	0.16	0.020		mg/L	1	11/9/2006 2:35:03 PM
Cadmium	ND	0.0020		mg/L	1	11/9/2006 2:35:03 PM
Chromium	0.011	0.0060		mg/L	1	11/9/2006 2:35:03 PM
Lead	0.018	0.0050		mg/L	1	11/9/2006 2:35:03 PM
Selenium	ND	0.050		mg/L	1	11/9/2006 2:35:03 PM
Silver	ND	0.0050		mg/L	1	11/9/2006 2:35:03 PM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	ND	10		µg/L	10	11/8/2006
Toluene	ND	10		µg/L	10	11/8/2006
Ethylbenzene	ND	10		µg/L	10	11/8/2006
Methyl tert-butyl ether (MTBE)	ND	15		µg/L	10	11/8/2006
1,2,4-Trimethylbenzene	110	10		µg/L	10	11/8/2006
1,3,5-Trimethylbenzene	30	10		µg/L	10	11/8/2006
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/8/2006
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/8/2006
Naphthalene	54	20		µg/L	10	11/8/2006
1-Methylnaphthalene	440	40		µg/L	10	11/8/2006
2-Methylnaphthalene	550	40		µg/L	10	11/8/2006
Acetone	1100	100		µg/L	10	11/8/2006
Bromobenzene	ND	10		µg/L	10	11/8/2006
Bromochloromethane	ND	10		µg/L	10	11/8/2006
Bromodichloromethane	ND	10		µg/L	10	11/8/2006
Bromoform	ND	10		µg/L	10	11/8/2006
Bromomethane	ND	20		µg/L	10	11/8/2006
2-Butanone	110	100		µg/L	10	11/8/2006
Carbon disulfide	ND	100		µg/L	10	11/8/2006
Carbon Tetrachloride	ND	20		µg/L	10	11/8/2006
Chlorobenzene	ND	10		µg/L	10	11/8/2006
Chloroethane	ND	20		µg/L	10	11/8/2006
Chloroform	ND	10		µg/L	10	11/8/2006

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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0611012	**Collection Date:**	10/30/2006 3:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Chloromethane	ND	10		µg/L	10	11/8/2006
2-Chlorotoluene	ND	10		µg/L	10	11/8/2006
4-Chlorotoluene	ND	10		µg/L	10	11/8/2006
cis-1,2-DCE	ND	10		µg/L	10	11/8/2006
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/8/2006
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/8/2006
Dibromochloromethane	ND	10		µg/L	10	11/8/2006
Dibromomethane	ND	20		µg/L	10	11/8/2006
1,2-Dichlorobenzene	ND	10		µg/L	10	11/8/2006
1,3-Dichlorobenzene	ND	10		µg/L	10	11/8/2006
1,4-Dichlorobenzene	ND	10		µg/L	10	11/8/2006
Dichlorodifluoromethane	ND	10		µg/L	10	11/8/2006
1,1-Dichloroethane	ND	20		µg/L	10	11/8/2006
1,1-Dichloroethene	ND	10		µg/L	10	11/8/2006
1,2-Dichloropropane	ND	10		µg/L	10	11/8/2006
1,3-Dichloropropane	ND	10		µg/L	10	11/8/2006
2,2-Dichloropropane	ND	20		µg/L	10	11/8/2006
1,1-Dichloropropene	ND	10		µg/L	10	11/8/2006
Hexachlorobutadiene	ND	20		µg/L	10	11/8/2006
2-Hexanone	ND	100		µg/L	10	11/8/2006
Isopropylbenzene	ND	10		µg/L	10	11/8/2006
4-Isopropyltoluene	ND	10		µg/L	10	11/8/2006
4-Methyl-2-pentanone	ND	100		µg/L	10	11/8/2006
Methylene Chloride	ND	30		µg/L	10	11/8/2006
n-Butylbenzene	47	10		µg/L	10	11/8/2006
n-Propylbenzene	ND	10		µg/L	10	11/8/2006
sec-Butylbenzene	ND	20		µg/L	10	11/8/2006
Styrene	ND	15		µg/L	10	11/8/2006
tert-Butylbenzene	ND	10		µg/L	10	11/8/2006
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/8/2006
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	11/8/2006
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/8/2006
trans-1,2-DCE	ND	10		µg/L	10	11/8/2006
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/8/2006
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/8/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/8/2006
1,1,1-Trichloroethane	ND	10		µg/L	10	11/8/2006
1,1,2-Trichloroethane	ND	10		µg/L	10	11/8/2006
Trichloroethene (TCE)	ND	10		µg/L	10	11/8/2006
Trichlorofluoromethane	ND	10		µg/L	10	11/8/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0611012	**Collection Date:**	10/30/2006 3:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
1,2,3-Trichloropropane	ND	20		µg/L	10	11/8/2006
Vinyl chloride	ND	10		µg/L	10	11/8/2006
Xylenes, Total	62	30		µg/L	10	11/8/2006
Surr: 1,2-Dichloroethane-d4	84.2	69.9-130		%REC	10	11/8/2006
Surr: 4-Bromofluorobenzene	109	75-139		%REC	10	11/8/2006
Surr: Dibromofluoromethane	89.1	57.3-135		%REC	10	11/8/2006
Surr: Toluene-d8	86.0	81.9-122		%REC	10	11/8/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot TC Eff
Lab Order:	0611012	**Collection Date:**	10/30/2006 2:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	0.17	0.10		mg/L	2	11/6/2006 2:30:16 PM
Surr: BFB	103	84.5-129		%REC	2	11/6/2006 2:30:16 PM
EPA METHOD 7470: MERCURY						Analyst: CMS
Mercury	ND	0.00020		mg/L	1	11/8/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	11/9/2006 2:37:44 PM
Barium	ND	0.020		mg/L	1	11/9/2006 2:37:44 PM
Cadmium	ND	0.0020		mg/L	1	11/9/2006 2:37:44 PM
Chromium	ND	0.0060		mg/L	1	11/9/2006 2:37:44 PM
Lead	ND	0.0050		mg/L	1	11/9/2006 2:37:44 PM
Selenium	ND	0.050		mg/L	1	11/9/2006 2:37:44 PM
Silver	ND	0.0050		mg/L	1	11/9/2006 2:37:44 PM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	ND	1.0		µg/L	1	11/13/2006
Toluene	5.1	1.0		µg/L	1	11/13/2006
Ethylbenzene	ND	1.0		µg/L	1	11/13/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/13/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/13/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/13/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/13/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/13/2006
Naphthalene	ND	2.0		µg/L	1	11/13/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/13/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/13/2006
Acetone	150	10		µg/L	1	11/13/2006
Bromobenzene	ND	1.0		µg/L	1	11/13/2006
Bromochloromethane	ND	1.0		µg/L	1	11/13/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/13/2006
Bromoform	ND	1.0		µg/L	1	11/13/2006
Bromomethane	ND	2.0		µg/L	1	11/13/2006
2-Butanone	ND	10		µg/L	1	11/13/2006
Carbon disulfide	ND	10		µg/L	1	11/13/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/13/2006
Chlorobenzene	ND	1.0		µg/L	1	11/13/2006
Chloroethane	ND	2.0		µg/L	1	11/13/2006
Chloroform	1.8	1.0		µg/L	1	11/13/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot TC Eff
Lab Order:	0611012	**Collection Date:**	10/30/2006 2:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Chloromethane	ND	1.0		µg/L	1	11/13/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/13/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/13/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/13/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/13/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/13/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/13/2006
Dibromomethane	ND	2.0		µg/L	1	11/13/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/13/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/13/2006
1,4-Dichlorobenzene	2.8	1.0		µg/L	1	11/13/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/13/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/13/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/13/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/13/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/13/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/13/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/13/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/13/2006
2-Hexanone	ND	10		µg/L	1	11/13/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/13/2006
4-Isopropyltoluene	1.6	1.0		µg/L	1	11/13/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/13/2006
Methylene Chloride	ND	3.0		µg/L	1	11/13/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/13/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/13/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/13/2006
Styrene	ND	1.5		µg/L	1	11/13/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/13/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/13/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/13/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/13/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/13/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/13/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/13/2006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/13/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/13/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/13/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/13/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/13/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot TC Eff
Lab Order:	0611012	**Collection Date:**	10/30/2006 2:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/13/2006
Vinyl chloride	ND	1.0		µg/L	1	11/13/2006
Xylenes, Total	ND	3.0		µg/L	1	11/13/2006
Surr: 1,2-Dichloroethane-d4	86.3	69.9-130		%REC	1	11/13/2006
Surr: 4-Bromofluorobenzene	120	75-139		%REC	1	11/13/2006
Surr: Dibromofluoromethane	93.2	57.3-135		%REC	1	11/13/2006
Surr: Toluene-d8	91.0	81.9-122		%REC	1	11/13/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Eff
Lab Order:	0611012	**Collection Date:**	10/30/2006 3:15:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	39	1.0		mg/L	20	11/6/2006 1:24:52 PM
Surr: BFB	103	84.5-129		%REC	20	11/6/2006 1:24:52 PM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	6600	100		µg/L	100	11/8/2006
Toluene	9800	100		µg/L	100	11/8/2006
Ethylbenzene	760	100		µg/L	100	11/8/2006
Methyl tert-butyl ether (MTBE)	300	150		µg/L	100	11/8/2006
1,2,4-Trimethylbenzene	570	100		µg/L	100	11/8/2006
1,3,5-Trimethylbenzene	170	100		µg/L	100	11/8/2006
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	11/8/2006
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	11/8/2006
Naphthalene	330	200		µg/L	100	11/8/2006
1-Methylnaphthalene	ND	400		µg/L	100	11/8/2006
2-Methylnaphthalene	ND	400		µg/L	100	11/8/2006
Acetone	1800	1000		µg/L	100	11/8/2006
Bromobenzene	ND	100		µg/L	100	11/8/2006
Bromochloromethane	ND	100		µg/L	100	11/8/2006
Bromodichloromethane	ND	100		µg/L	100	11/8/2006
Bromoform	ND	100		µg/L	100	11/8/2006
Bromomethane	ND	200		µg/L	100	11/8/2006
2-Butanone	ND	1000		µg/L	100	11/8/2006
Carbon disulfide	ND	1000		µg/L	100	11/8/2006
Carbon Tetrachloride	ND	200		µg/L	100	11/8/2006
Chlorobenzene	ND	100		µg/L	100	11/8/2006
Chloroethane	ND	200		µg/L	100	11/8/2006
Chloroform	ND	100		µg/L	100	11/8/2006
Chloromethane	ND	100		µg/L	100	11/8/2006
2-Chlorotoluene	ND	100		µg/L	100	11/8/2006
4-Chlorotoluene	ND	100		µg/L	100	11/8/2006
cis-1,2-DCE	ND	100		µg/L	100	11/8/2006
cis-1,3-Dichloropropene	ND	100		µg/L	100	11/8/2006
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	11/8/2006
Dibromochloromethane	ND	100		µg/L	100	11/8/2006
Dibromomethane	ND	200		µg/L	100	11/8/2006
1,2-Dichlorobenzene	ND	100		µg/L	100	11/8/2006
1,3-Dichlorobenzene	ND	100		µg/L	100	11/8/2006
1,4-Dichlorobenzene	ND	100		µg/L	100	11/8/2006
Dichlorodifluoromethane	ND	100		µg/L	100	11/8/2006
1,1-Dichloroethane	ND	200		µg/L	100	11/8/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Eff
Lab Order:	0611012	**Collection Date:**	10/30/2006 3:15:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
1,1-Dichloroethene	ND	100		µg/L	100	11/8/2006
1,2-Dichloropropane	ND	100		µg/L	100	11/8/2006
1,3-Dichloropropane	ND	100		µg/L	100	11/8/2006
2,2-Dichloropropane	ND	200		µg/L	100	11/8/2006
1,1-Dichloropropene	ND	100		µg/L	100	11/8/2006
Hexachlorobutadiene	ND	200		µg/L	100	11/8/2006
2-Hexanone	ND	1000		µg/L	100	11/8/2006
Isopropylbenzene	ND	100		µg/L	100	11/8/2006
4-Isopropyltoluene	ND	100		µg/L	100	11/8/2006
4-Methyl-2-pentanone	ND	1000		µg/L	100	11/8/2006
Methylene Chloride	ND	300		µg/L	100	11/8/2006
n-Butylbenzene	ND	100		µg/L	100	11/8/2006
n-Propylbenzene	ND	100		µg/L	100	11/8/2006
sec-Butylbenzene	ND	200		µg/L	100	11/8/2006
Styrene	ND	150		µg/L	100	11/8/2006
tert-Butylbenzene	ND	100		µg/L	100	11/8/2006
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	11/8/2006
1,1,2,2-Tetrachloroethane	ND	100		µg/L	100	11/8/2006
Tetrachloroethene (PCE)	ND	100		µg/L	100	11/8/2006
trans-1,2-DCE	ND	100		µg/L	100	11/8/2006
trans-1,3-Dichloropropene	ND	100		µg/L	100	11/8/2006
1,2,3-Trichlorobenzene	ND	100		µg/L	100	11/8/2006
1,2,4-Trichlorobenzene	ND	100		µg/L	100	11/8/2006
1,1,1-Trichloroethane	ND	100		µg/L	100	11/8/2006
1,1,2-Trichloroethane	ND	100		µg/L	100	11/8/2006
Trichloroethene (TCE)	ND	100		µg/L	100	11/8/2006
Trichlorofluoromethane	ND	100		µg/L	100	11/8/2006
1,2,3-Trichloropropane	ND	200		µg/L	100	11/8/2006
Vinyl chloride	ND	100		µg/L	100	11/8/2006
Xylenes, Total	3500	300		µg/L	100	11/8/2006
Surr: 1,2-Dichloroethane-d4	89.3	69.9-130		%REC	100	11/8/2006
Surr: 4-Bromofluorobenzene	89.1	75-139		%REC	100	11/8/2006
Surr: Dibromofluoromethane	97.8	57.3-135		%REC	100	11/8/2006
Surr: Toluene-d8	87.0	81.9-122		%REC	100	11/8/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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

COVER LETTER

Thursday, January 04, 2007

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Groundwater 2006-0W-14

Order No.: 0612343

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 12/28/2006 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: *04-Jan-07*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OW-14
Lab Order:	0612343	**Collection Date:**	12/28/2006 10:30:00 PM
Project:	Groundwater 2006-0W-14	**Date Received:**	12/28/2006
Lab ID:	0612343-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **SMP**
Benzene	4.2	1.0		µg/L	1	1/3/2007
Toluene	ND	1.0		µg/L	1	1/3/2007
Ethylbenzene	2.5	1.0		µg/L	1	1/3/2007
Methyl tert-butyl ether (MTBE)	180	1.5		µg/L	1	1/3/2007
Xylenes, Total	ND	3.0		µg/L	1	1/3/2007
Surr: 4-Bromofluorobenzene	105	71.2-123		%REC	1	1/3/2007

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: Groundwater 2006-0W-14

Work Order: 0612343

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R21999**	Analysis Date:		1/3/2007
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						
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R21999**	Analysis Date:		1/3/2007
Benzene	19.37	µg/L	1.0	96.8	75.6	111			
Toluene	19.64	µg/L	1.0	98.2	69.6	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: 12/28/2006

Work Order Number 0612343

Received by AT

Checklist completed by _____ 12/28/06
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 - 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: Groundwater 2006 - OW-14
Project #:
Project Manager: Steve Moore
Sampler: Steve Moore
Sample Temperature: 1°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0612343	BTEX + MTBE + ~~THB~~'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)
12-28-06	~~1030~~ 1030 AM	Water	OW-14					-1	X																

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
12-28-06	1525	Steve Moore	Steve Moore 12/28/06 1525
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, April 12, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED Mntly & OCD Qtly Samp 3/30/06

Order No.: 0603345

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/31/2006 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

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

Date: *12-Apr-06*

CLIENT: Giant Refining Co
Project: NMED Mntly & OCD Qtly Samp 3/30/06
Lab Order: 0603345

CASE NARRATIVE

Analytical Comments for METHOD 8260_W, SAMPLE 0603345-01a: Dilution necessary due to sulfur dioxide

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 9:45:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	22	3.0		mg/L	1	4/4/2006 9:22:58 AM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	4/4/2006 9:22:58 AM
Surr: DNOP	96.4	58-140		%REC	1	4/4/2006 9:22:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	0.078	0.050		mg/L	1	4/10/2006 2:01:51 PM
Surr: BFB	114	79.7-119		%REC	1	4/10/2006 2:01:51 PM
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	ND	0.00020		mg/L	1	4/5/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	4/11/2006 2:50:18 PM
Barium	0.15	0.020		mg/L	1	4/11/2006 2:50:18 PM
Cadmium	0.0027	0.0020		mg/L	1	4/11/2006 2:50:18 PM
Chromium	0.023	0.0060		mg/L	1	4/11/2006 2:50:18 PM
Lead	0.0081	0.0050		mg/L	1	4/11/2006 2:50:18 PM
Selenium	ND	0.050		mg/L	1	4/11/2006 2:50:18 PM
Silver	0.0061	0.0050		mg/L	1	4/11/2006 6:03:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	100		µg/L	2	4/11/2006
Acenaphthylene	ND	100		µg/L	2	4/11/2006
Aniline	ND	200		µg/L	2	4/11/2006
Anthracene	ND	100		µg/L	2	4/11/2006
Azobenzene	ND	100		µg/L	2	4/11/2006
Benz(a)anthracene	ND	150		µg/L	2	4/11/2006
Benzo(a)pyrene	ND	150		µg/L	2	4/11/2006
Benzo(b)fluoranthene	ND	150		µg/L	2	4/11/2006
Benzo(g,h,i)perylene	ND	100		µg/L	2	4/11/2006
Benzo(k)fluoranthene	ND	100		µg/L	2	4/11/2006
Benzoic acid	1300	500		µg/L	2	4/11/2006
Benzyl alcohol	ND	200		µg/L	2	4/11/2006
Bis(2-chloroethoxy)methane	ND	100		µg/L	2	4/11/2006
Bis(2-chloroethyl)ether	ND	150		µg/L	2	4/11/2006
Bis(2-chloroisopropyl)ether	ND	150		µg/L	2	4/11/2006
Bis(2-ethylhexyl)phthalate	ND	150		µg/L	2	4/11/2006
4-Bromophenyl phenyl ether	ND	100		µg/L	2	4/11/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 9:45:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Butyl benzyl phthalate	ND	150		µg/L	2	4/11/2006
Carbazole	ND	100		µg/L	2	4/11/2006
4-Chloro-3-methylphenol	ND	200		µg/L	2	4/11/2006
4-Chloroaniline	ND	200		µg/L	2	4/11/2006
2-Chloronaphthalene	ND	100		µg/L	2	4/11/2006
2-Chlorophenol	ND	100		µg/L	2	4/11/2006
4-Chlorophenyl phenyl ether	ND	150		µg/L	2	4/11/2006
Chrysene	ND	150		µg/L	2	4/11/2006
Di-n-butyl phthalate	ND	100		µg/L	2	4/11/2006
Di-n-octyl phthalate	ND	150		µg/L	2	4/11/2006
Dibenz(a,h)anthracene	ND	100		µg/L	2	4/11/2006
Dibenzofuran	ND	100		µg/L	2	4/11/2006
1,2-Dichlorobenzene	ND	100		µg/L	2	4/11/2006
1,3-Dichlorobenzene	ND	100		µg/L	2	4/11/2006
1,4-Dichlorobenzene	ND	100		µg/L	2	4/11/2006
3,3'-Dichlorobenzidine	ND	150		µg/L	2	4/11/2006
Diethyl phthalate	ND	100		µg/L	2	4/11/2006
Dimethyl phthalate	ND	100		µg/L	2	4/11/2006
2,4-Dichlorophenol	ND	100		µg/L	2	4/11/2006
2,4-Dimethylphenol	ND	100		µg/L	2	4/11/2006
4,6-Dinitro-2-methylphenol	ND	500		µg/L	2	4/11/2006
2,4-Dinitrophenol	ND	500		µg/L	2	4/11/2006
2,4-Dinitrotoluene	ND	100		µg/L	2	4/11/2006
2,6-Dinitrotoluene	ND	100		µg/L	2	4/11/2006
Fluoranthene	ND	100		µg/L	2	4/11/2006
Fluorene	ND	100		µg/L	2	4/11/2006
Hexachlorobenzene	ND	100		µg/L	2	4/11/2006
Hexachlorobutadiene	ND	100		µg/L	2	4/11/2006
Hexachlorocyclopentadiene	ND	100		µg/L	2	4/11/2006
Hexachloroethane	ND	100		µg/L	2	4/11/2006
Indeno(1,2,3-cd)pyrene	ND	100		µg/L	2	4/11/2006
Isophorone	ND	100		µg/L	2	4/11/2006
2-Methylnaphthalene	ND	100		µg/L	2	4/11/2006
2-Methylphenol	ND	150		µg/L	2	4/11/2006
3+4-Methylphenol	370	200		µg/L	2	4/11/2006
N-Nitrosodi-n-propylamine	ND	100		µg/L	2	4/11/2006
N-Nitrosodimethylamine	ND	100		µg/L	2	4/11/2006
N-Nitrosodiphenylamine	ND	100		µg/L	2	4/11/2006
Naphthalene	ND	100		µg/L	2	4/11/2006
2-Nitroaniline	ND	500		µg/L	2	4/11/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 9:45:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
3-Nitroaniline	ND	500		µg/L	2	4/11/2006
4-Nitroaniline	ND	200		µg/L	2	4/11/2006
Nitrobenzene	ND	100		µg/L	2	4/11/2006
2-Nitrophenol	ND	150		µg/L	2	4/11/2006
4-Nitrophenol	ND	500		µg/L	2	4/11/2006
Pentachlorophenol	ND	500		µg/L	2	4/11/2006
Phenanthrene	ND	100		µg/L	2	4/11/2006
Phenol	ND	100		µg/L	2	4/11/2006
Pyrene	ND	150		µg/L	2	4/11/2006
Pyridine	ND	300		µg/L	2	4/11/2006
1,2,4-Trichlorobenzene	ND	100		µg/L	2	4/11/2006
2,4,5-Trichlorophenol	ND	100		µg/L	2	4/11/2006
2,4,6-Trichlorophenol	ND	150		µg/L	2	4/11/2006
Surr: 2,4,6-Tribromophenol	96.5	16.6-150		%REC	2	4/11/2006
Surr: 2-Fluorobiphenyl	67.8	19.6-134		%REC	2	4/11/2006
Surr: 2-Fluorophenol	59.3	9.54-113		%REC	2	4/11/2006
Surr: 4-Terphenyl-d14	61.8	22.7-145		%REC	2	4/11/2006
Surr: Nitrobenzene-d5	65.3	14.6-134		%REC	2	4/11/2006
Surr: Phenol-d5	47.0	10.7-80.3		%REC	2	4/11/2006
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Benzene	ND	10		µg/L	10	4/4/2006
Toluene	10	10		µg/L	10	4/4/2006
Ethylbenzene	ND	10		µg/L	10	4/4/2006
Methyl tert-butyl ether (MTBE)	ND	15		µg/L	10	4/4/2006
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/4/2006
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/4/2006
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/4/2006
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/4/2006
Naphthalene	ND	20		µg/L	10	4/4/2006
1-Methylnaphthalene	ND	40		µg/L	10	4/4/2006
2-Methylnaphthalene	ND	40		µg/L	10	4/4/2006
Acetone	ND	100		µg/L	10	4/4/2006
Bromobenzene	ND	10		µg/L	10	4/4/2006
Bromochloromethane	ND	10		µg/L	10	4/4/2006
Bromodichloromethane	ND	10		µg/L	10	4/4/2006
Bromoform	ND	10		µg/L	10	4/4/2006
Bromomethane	ND	20		µg/L	10	4/4/2006
2-Butanone	ND	100		µg/L	10	4/4/2006
Carbon disulfide	ND	100		µg/L	10	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 9:45:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Carbon Tetrachloride	ND	20		µg/L	10	4/4/2006
Chlorobenzene	ND	10		µg/L	10	4/4/2006
Chloroethane	ND	20		µg/L	10	4/4/2006
Chloroform	20	10		µg/L	10	4/4/2006
Chloromethane	ND	10		µg/L	10	4/4/2006
2-Chlorotoluene	ND	10		µg/L	10	4/4/2006
4-Chlorotoluene	ND	10		µg/L	10	4/4/2006
cis-1,2-DCE	ND	10		µg/L	10	4/4/2006
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/4/2006
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/4/2006
Dibromochloromethane	ND	10		µg/L	10	4/4/2006
Dibromomethane	ND	20		µg/L	10	4/4/2006
1,2-Dichlorobenzene	ND	10		µg/L	10	4/4/2006
1,3-Dichlorobenzene	ND	10		µg/L	10	4/4/2006
1,4-Dichlorobenzene	ND	10		µg/L	10	4/4/2006
Dichlorodifluoromethane	ND	10		µg/L	10	4/4/2006
1,1-Dichloroethane	ND	20		µg/L	10	4/4/2006
1,1-Dichloroethene	ND	10		µg/L	10	4/4/2006
1,2-Dichloropropane	ND	10		µg/L	10	4/4/2006
1,3-Dichloropropane	ND	10		µg/L	10	4/4/2006
2,2-Dichloropropane	ND	20		µg/L	10	4/4/2006
1,1-Dichloropropene	ND	10		µg/L	10	4/4/2006
Hexachlorobutadiene	ND	20		µg/L	10	4/4/2006
2-Hexanone	ND	100		µg/L	10	4/4/2006
Isopropylbenzene	ND	10		µg/L	10	4/4/2006
4-Isopropyltoluene	ND	10		µg/L	10	4/4/2006
4-Methyl-2-pentanone	ND	100		µg/L	10	4/4/2006
Methylene Chloride	ND	30		µg/L	10	4/4/2006
n-Butylbenzene	ND	10		µg/L	10	4/4/2006
n-Propylbenzene	ND	10		µg/L	10	4/4/2006
sec-Butylbenzene	ND	20		µg/L	10	4/4/2006
Styrene	ND	15		µg/L	10	4/4/2006
tert-Butylbenzene	ND	10		µg/L	10	4/4/2006
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/4/2006
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	4/4/2006
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/4/2006
trans-1,2-DCE	ND	10		µg/L	10	4/4/2006
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/4/2006
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/4/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 9:45:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HLM
1,1,1-Trichloroethane	ND	10		µg/L	10	4/4/2006
1,1,2-Trichloroethane	ND	10		µg/L	10	4/4/2006
Trichloroethene (TCE)	ND	10		µg/L	10	4/4/2006
Trichlorofluoromethane	ND	10		µg/L	10	4/4/2006
1,2,3-Trichloropropane	ND	20		µg/L	10	4/4/2006
Vinyl chloride	ND	10		µg/L	10	4/4/2006
Xylenes, Total	ND	30		µg/L	10	4/4/2006
Surr: 1,2-Dichloroethane-d4	101	69.9-130		%REC	10	4/4/2006
Surr: 4-Bromofluorobenzene	90.4	71.2-123		%REC	10	4/4/2006
Surr: Dibromofluoromethane	108	57.3-135		%REC	10	4/4/2006
Surr: Toluene-d8	98.6	81.9-122		%REC	10	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 10:10:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	520	30		mg/L	10	4/4/2006 11:45:13 AM
Motor Oil Range Organics (MRO)	ND	150		mg/L	10	4/4/2006 11:45:13 AM
Surr: DNOP	118	58-140		%REC	10	4/4/2006 11:45:13 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	64	12		mg/L	250	4/7/2006 1:41:57 PM
Surr: BFB	103	79.7-118		%REC	250	4/7/2006 1:41:57 PM
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Benzene	8600	250		µg/L	250	4/4/2006
Toluene	12000	250		µg/L	250	4/4/2006
Ethylbenzene	790	250		µg/L	250	4/4/2006
Methyl tert-butyl ether (MTBE)	1500	380		µg/L	250	4/4/2006
1,2,4-Trimethylbenzene	1000	250		µg/L	250	4/4/2006
1,3,5-Trimethylbenzene	ND	250		µg/L	250	4/4/2006
1,2-Dichloroethane (EDC)	ND	250		µg/L	250	4/4/2006
1,2-Dibromoethane (EDB)	ND	250		µg/L	250	4/4/2006
Naphthalene	1100	500		µg/L	250	4/4/2006
1-Methylnaphthalene	ND	1000		µg/L	250	4/4/2006
2-Methylnaphthalene	1200	1000		µg/L	250	4/4/2006
Acetone	42000	2500		µg/L	250	4/4/2006
Bromobenzene	ND	250		µg/L	250	4/4/2006
Bromochloromethane	ND	250		µg/L	250	4/4/2006
Bromodichloromethane	ND	250		µg/L	250	4/4/2006
Bromoform	ND	250		µg/L	250	4/4/2006
Bromomethane	ND	500		µg/L	250	4/4/2006
2-Butanone	15000	2500		µg/L	250	4/4/2006
Carbon disulfide	ND	2500		µg/L	250	4/4/2006
Carbon Tetrachloride	ND	500		µg/L	250	4/4/2006
Chlorobenzene	ND	250		µg/L	250	4/4/2006
Chloroethane	ND	500		µg/L	250	4/4/2006
Chloroform	ND	250		µg/L	250	4/4/2006
Chloromethane	ND	250		µg/L	250	4/4/2006
2-Chlorotoluene	ND	250		µg/L	250	4/4/2006
4-Chlorotoluene	ND	250		µg/L	250	4/4/2006
cis-1,2-DCE	ND	250		µg/L	250	4/4/2006
cis-1,3-Dichloropropene	ND	250		µg/L	250	4/4/2006
1,2-Dibromo-3-chloropropane	ND	500		µg/L	250	4/4/2006
Dibromochloromethane	ND	250		µg/L	250	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 10:10:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Dibromomethane	ND	500		µg/L	250	4/4/2006
1,2-Dichlorobenzene	ND	250		µg/L	250	4/4/2006
1,3-Dichlorobenzene	ND	250		µg/L	250	4/4/2006
1,4-Dichlorobenzene	ND	250		µg/L	250	4/4/2006
Dichlorodifluoromethane	ND	250		µg/L	250	4/4/2006
1,1-Dichloroethane	ND	500		µg/L	250	4/4/2006
1,1-Dichloroethene	ND	250		µg/L	250	4/4/2006
1,2-Dichloropropane	ND	250		µg/L	250	4/4/2006
1,3-Dichloropropane	ND	250		µg/L	250	4/4/2006
2,2-Dichloropropane	ND	500		µg/L	250	4/4/2006
1,1-Dichloropropene	ND	250		µg/L	250	4/4/2006
Hexachlorobutadiene	ND	500		µg/L	250	4/4/2006
2-Hexanone	ND	2500		µg/L	250	4/4/2006
Isopropylbenzene	ND	250		µg/L	250	4/4/2006
4-Isopropyltoluene	ND	250		µg/L	250	4/4/2006
4-Methyl-2-pentanone	ND	2500		µg/L	250	4/4/2006
Methylene Chloride	ND	750		µg/L	250	4/4/2006
n-Butylbenzene	ND	250		µg/L	250	4/4/2006
n-Propylbenzene	ND	250		µg/L	250	4/4/2006
sec-Butylbenzene	ND	500		µg/L	250	4/4/2006
Styrene	ND	380		µg/L	250	4/4/2006
tert-Butylbenzene	ND	250		µg/L	250	4/4/2006
1,1,1,2-Tetrachloroethane	ND	250		µg/L	250	4/4/2006
1,1,2,2-Tetrachloroethane	ND	250		µg/L	250	4/4/2006
Tetrachloroethene (PCE)	ND	250		µg/L	250	4/4/2006
trans-1,2-DCE	ND	250		µg/L	250	4/4/2006
trans-1,3-Dichloropropene	ND	250		µg/L	250	4/4/2006
1,2,3-Trichlorobenzene	ND	250		µg/L	250	4/4/2006
1,2,4-Trichlorobenzene	ND	250		µg/L	250	4/4/2006
1,1,1-Trichloroethane	ND	250		µg/L	250	4/4/2006
1,1,2-Trichloroethane	ND	250		µg/L	250	4/4/2006
Trichloroethene (TCE)	ND	250		µg/L	250	4/4/2006
Trichlorofluoromethane	ND	250		µg/L	250	4/4/2006
1,2,3-Trichloropropane	ND	500		µg/L	250	4/4/2006
Vinyl chloride	ND	250		µg/L	250	4/4/2006
Xylenes, Total	4700	750		µg/L	250	4/4/2006
Surr: 1,2-Dichloroethane-d4	107	69.9-130		%REC	250	4/4/2006
Surr: 4-Bromofluorobenzene	90.6	71.2-123		%REC	250	4/4/2006
Surr: Dibromofluoromethane	92.4	57.3-135		%REC	250	4/4/2006
Surr: Toluene-d8	102	81.9-122		%REC	250	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0603345	**Collection Date:**	3/30/2006 10:30:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: SCC
Diesel Range Organics (DRO)	64	3.0		mg/L	1	4/4/2006 10:08:17 AM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	4/4/2006 10:08:17 AM
Surr: DNOP	90.2	58-140		%REC	1	4/4/2006 10:08:17 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	3.5	2.5		mg/L	50	4/7/2006 2:40:33 PM
Surr: BFB	109	79.7-118		%REC	50	4/7/2006 2:40:33 PM
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	0.0017	0.00020		mg/L	1	4/5/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	4/11/2006 2:53:13 PM
Barium	0.22	0.020		mg/L	1	4/11/2006 2:53:13 PM
Cadmium	ND	0.0020		mg/L	1	4/11/2006 2:53:13 PM
Chromium	0.010	0.0060		mg/L	1	4/11/2006 2:53:13 PM
Lead	0.011	0.0050		mg/L	1	4/11/2006 2:53:13 PM
Selenium	ND	0.050		mg/L	1	4/11/2006 2:53:13 PM
Silver	ND	0.0050		mg/L	1	4/11/2006 6:06:18 PM
EPA METHOD 8260B: VOLATILES						Analyst: HLM
Benzene	210	50		µg/L	50	4/4/2006
Toluene	440	50		µg/L	50	4/4/2006
Ethylbenzene	60	50		µg/L	50	4/4/2006
Methyl tert-butyl ether (MTBE)	ND	75		µg/L	50	4/4/2006
1,2,4-Trimethylbenzene	170	50		µg/L	50	4/4/2006
1,3,5-Trimethylbenzene	ND	50		µg/L	50	4/4/2006
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	4/4/2006
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	4/4/2006
Naphthalene	200	100		µg/L	50	4/4/2006
1-Methylnaphthalene	410	200		µg/L	50	4/4/2006
2-Methylnaphthalene	620	200		µg/L	50	4/4/2006
Acetone	2500	500		µg/L	50	4/4/2006
Bromobenzene	ND	50		µg/L	50	4/4/2006
Bromochloromethane	ND	50		µg/L	50	4/4/2006
Bromodichloromethane	ND	50		µg/L	50	4/4/2006
Bromoform	ND	50		µg/L	50	4/4/2006
Bromomethane	ND	100		µg/L	50	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0603345	**Collection Date:**	3/30/2006 10:30:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HLM
2-Butanone	820	500		µg/L	50	4/4/2006
Carbon disulfide	ND	500		µg/L	50	4/4/2006
Carbon Tetrachloride	ND	100		µg/L	50	4/4/2006
Chlorobenzene	ND	50		µg/L	50	4/4/2006
Chloroethane	ND	100		µg/L	50	4/4/2006
Chloroform	ND	50		µg/L	50	4/4/2006
Chloromethane	ND	50		µg/L	50	4/4/2006
2-Chlorotoluene	ND	50		µg/L	50	4/4/2006
4-Chlorotoluene	ND	50		µg/L	50	4/4/2006
cis-1,2-DCE	ND	50		µg/L	50	4/4/2006
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/4/2006
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/4/2006
Dibromochloromethane	ND	50		µg/L	50	4/4/2006
Dibromomethane	ND	100		µg/L	50	4/4/2006
1,2-Dichlorobenzene	ND	50		µg/L	50	4/4/2006
1,3-Dichlorobenzene	ND	50		µg/L	50	4/4/2006
1,4-Dichlorobenzene	ND	50		µg/L	50	4/4/2006
Dichlorodifluoromethane	ND	50		µg/L	50	4/4/2006
1,1-Dichloroethane	ND	100		µg/L	50	4/4/2006
1,1-Dichloroethene	ND	50		µg/L	50	4/4/2006
1,2-Dichloropropane	ND	50		µg/L	50	4/4/2006
1,3-Dichloropropane	ND	50		µg/L	50	4/4/2006
2,2-Dichloropropane	ND	100		µg/L	50	4/4/2006
1,1-Dichloropropene	ND	50		µg/L	50	4/4/2006
Hexachlorobutadiene	ND	100		µg/L	50	4/4/2006
2-Hexanone	ND	500		µg/L	50	4/4/2006
Isopropylbenzene	ND	50		µg/L	50	4/4/2006
4-Isopropyltoluene	ND	50		µg/L	50	4/4/2006
4-Methyl-2-pentanone	ND	500		µg/L	50	4/4/2006
Methylene Chloride	ND	150		µg/L	50	4/4/2006
n-Butylbenzene	ND	50		µg/L	50	4/4/2006
n-Propylbenzene	ND	50		µg/L	50	4/4/2006
sec-Butylbenzene	ND	100		µg/L	50	4/4/2006
Styrene	ND	75		µg/L	50	4/4/2006
tert-Butylbenzene	ND	50		µg/L	50	4/4/2006
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/4/2006
1,1,2,2-Tetrachloroethane	ND	50		µg/L	50	4/4/2006
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/4/2006
trans-1,2-DCE	ND	50		µg/L	50	4/4/2006
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0603345	**Collection Date:**	3/30/2006 10:30:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HLM
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/4/2006
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/4/2006
1,1,1-Trichloroethane	ND	50		µg/L	50	4/4/2006
1,1,2-Trichloroethane	ND	50		µg/L	50	4/4/2006
Trichloroethene (TCE)	ND	50		µg/L	50	4/4/2006
Trichlorofluoromethane	ND	50		µg/L	50	4/4/2006
1,2,3-Trichloropropane	ND	100		µg/L	50	4/4/2006
Vinyl chloride	ND	50		µg/L	50	4/4/2006
Xylenes, Total	430	150		µg/L	50	4/4/2006
Surr: 1,2-Dichloroethane-d4	94.5	69.9-130		%REC	50	4/4/2006
Surr: 4-Bromofluorobenzene	84.4	71.2-123		%REC	50	4/4/2006
Surr: Dibromofluoromethane	105	57.3-135		%REC	50	4/4/2006
Surr: Toluene-d8	96.4	81.9-122		%REC	50	4/4/2006

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the 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

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: 0603345
Order: 0603760 HAL03 Receipt: 03-31-06

William P. Blava: President of Assalgai Analytical Laboratories, Inc.

Sample: *0603345-01D/PILOT EFF* Collected: *03-30-06 9:45:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0603760-0001A		EPA 405.1 Biochemical Oxygen Demand					By:	NJL		
BOD06041	WC.2006.856.15	10-26-4	Biochemical Oxygen Demand	886	mg/L	1	2		03-31-06	04-05-06

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

COVER LETTER

Friday, November 17, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Annual GW Samples 2006 Ciniza

Order No.: 0611016

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 7 sample(s) on 11/1/2006 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-1C
Lab Order:	0611016	**Collection Date:**	10/28/2006 10:15:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TES**
Fluoride	2.7	0.10		mg/L	1	11/4/2006 2:16:52 AM
Chloride	36	0.10		mg/L	1	11/4/2006 2:16:52 AM
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/4/2006 2:34:16 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/4/2006 2:16:52 AM
Sulfate	250	2.5		mg/L	5	11/6/2006 3:31:36 PM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	ND	0.00020		mg/L	1	11/14/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/15/2006 8:26:20 PM
Barium	ND	0.020		mg/L	1	11/15/2006 8:26:20 PM
Cadmium	ND	0.0020		mg/L	1	11/15/2006 8:26:20 PM
Calcium	3.4	1.0		mg/L	1	11/15/2006 8:26:20 PM
Chromium	0.011	0.0060		mg/L	1	11/15/2006 8:26:20 PM
Lead	ND	0.0050		mg/L	1	11/15/2006 8:26:20 PM
Magnesium	ND	1.0		mg/L	1	11/15/2006 8:26:20 PM
Potassium	ND	1.0		mg/L	1	11/15/2006 8:26:20 PM
Selenium	ND	0.050		mg/L	1	11/15/2006 8:26:20 PM
Silver	ND	0.0050		mg/L	1	11/15/2006 8:26:20 PM
Sodium	320	10		mg/L	10	11/16/2006 10:44:19 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	11/14/2006
Acenaphthylene	ND	10		µg/L	1	11/14/2006
Aniline	ND	20		µg/L	1	11/14/2006
Anthracene	ND	10		µg/L	1	11/14/2006
Azobenzene	ND	10		µg/L	1	11/14/2006
Benz(a)anthracene	ND	15		µg/L	1	11/14/2006
Benzo(a)pyrene	ND	15		µg/L	1	11/14/2006
Benzo(b)fluoranthene	ND	15		µg/L	1	11/14/2006
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/14/2006
Benzo(k)fluoranthene	ND	10		µg/L	1	11/14/2006
Benzoic acid	ND	50		µg/L	1	11/14/2006
Benzyl alcohol	ND	20		µg/L	1	11/14/2006
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/14/2006
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-1C
Lab Order:	0611016	**Collection Date:**	10/28/2006 10:15:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/14/2006
Butyl benzyl phthalate	ND	15		µg/L	1	11/14/2006
Carbazole	ND	10		µg/L	1	11/14/2006
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/14/2006
4-Chloroaniline	ND	20		µg/L	1	11/14/2006
2-Chloronaphthalene	ND	10		µg/L	1	11/14/2006
2-Chlorophenol	ND	10		µg/L	1	11/14/2006
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/14/2006
Chrysene	ND	15		µg/L	1	11/14/2006
Di-n-butyl phthalate	ND	10		µg/L	1	11/14/2006
Di-n-octyl phthalate	ND	15		µg/L	1	11/14/2006
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/14/2006
Dibenzofuran	ND	10		µg/L	1	11/14/2006
1,2-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,3-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,4-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/14/2006
Diethyl phthalate	ND	10		µg/L	1	11/14/2006
Dimethyl phthalate	ND	10		µg/L	1	11/14/2006
2,4-Dichlorophenol	ND	10		µg/L	1	11/14/2006
2,4-Dimethylphenol	ND	10		µg/L	1	11/14/2006
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrophenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
2,6-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
Fluoranthene	ND	10		µg/L	1	11/14/2006
Fluorene	ND	10		µg/L	1	11/14/2006
Hexachlorobenzene	ND	10		µg/L	1	11/14/2006
Hexachlorobutadiene	ND	10		µg/L	1	11/14/2006
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/14/2006
Hexachloroethane	ND	10		µg/L	1	11/14/2006
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/14/2006
Isophorone	ND	10		µg/L	1	11/14/2006
2-Methylnaphthalene	ND	10		µg/L	1	11/14/2006
2-Methylphenol	ND	15		µg/L	1	11/14/2006
3+4-Methylphenol	ND	20		µg/L	1	11/14/2006
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodimethylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/14/2006
Naphthalene	ND	10		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-1C
Lab Order:	0611016	**Collection Date:**	10/28/2006 10:15:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
2-Nitroaniline	ND	50		µg/L	1	11/14/2006
3-Nitroaniline	ND	50		µg/L	1	11/14/2006
4-Nitroaniline	ND	20		µg/L	1	11/14/2006
Nitrobenzene	ND	10		µg/L	1	11/14/2006
2-Nitrophenol	ND	15		µg/L	1	11/14/2006
4-Nitrophenol	ND	50		µg/L	1	11/14/2006
Pentachlorophenol	ND	50		µg/L	1	11/14/2006
Phenanthrene	ND	10		µg/L	1	11/14/2006
Phenol	ND	10		µg/L	1	11/14/2006
Pyrene	ND	15		µg/L	1	11/14/2006
Pyridine	ND	30		µg/L	1	11/14/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/14/2006
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/14/2006
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/14/2006
Surr: 2,4,6-Tribromophenol	53.3	16.6-150		%REC	1	11/14/2006
Surr: 2-Fluorobiphenyl	63.4	19.6-134		%REC	1	11/14/2006
Surr: 2-Fluorophenol	40.2	9.54-113		%REC	1	11/14/2006
Surr: 4-Terphenyl-d14	66.1	22.7-145		%REC	1	11/14/2006
Surr: Nitrobenzene-d5	61.4	14.6-134		%REC	1	11/14/2006
Surr: Phenol-d5	29.4	10.7-80.3		%REC	1	11/14/2006
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/7/2006
Toluene	ND	1.0		µg/L	1	11/7/2006
Ethylbenzene	ND	1.0		µg/L	1	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/7/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/7/2006
Naphthalene	ND	2.0		µg/L	1	11/7/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
Acetone	ND	10		µg/L	1	11/7/2006
Bromobenzene	ND	1.0		µg/L	1	11/7/2006
Bromochloromethane	ND	1.0		µg/L	1	11/7/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/7/2006
Bromoform	ND	1.0		µg/L	1	11/7/2006
Bromomethane	ND	2.0		µg/L	1	11/7/2006
2-Butanone	ND	10		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-1C
Lab Order:	0611016	**Collection Date:**	10/28/2006 10:15:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Carbon disulfide	ND	10		µg/L	1	11/7/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/7/2006
Chlorobenzene	ND	1.0		µg/L	1	11/7/2006
Chloroethane	ND	2.0		µg/L	1	11/7/2006
Chloroform	ND	1.0		µg/L	1	11/7/2006
Chloromethane	ND	1.0		µg/L	1	11/7/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/7/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/7/2006
Dibromomethane	ND	2.0		µg/L	1	11/7/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/7/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/7/2006
2-Hexanone	ND	10		µg/L	1	11/7/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/7/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/7/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/7/2006
Methylene Chloride	ND	3.0		µg/L	1	11/7/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/7/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/7/2006
Styrene	ND	1.5		µg/L	1	11/7/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/7/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-1C
Lab Order:	0611016	**Collection Date:**	10/28/2006 10:15:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/7/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/7/2006
Vinyl chloride	ND	1.0		µg/L	1	11/7/2006
Xylenes, Total	ND	3.0		µg/L	1	11/7/2006
Surr: 1,2-Dichloroethane-d4	97.3	69.9-130		%REC	1	11/7/2006
Surr: 4-Bromofluorobenzene	97.8	75-139		%REC	1	11/7/2006
Surr: Dibromofluoromethane	105	57.3-135		%REC	1	11/7/2006
Surr: Toluene-d8	90.9	81.9-122		%REC	1	11/7/2006
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMS**
Specific Conductance	1400	0.010		µmhos/cm	1	11/1/2006
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	8.72	0.010		pH units	1	11/1/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2A
Lab Order:	0611016	**Collection Date:**	10/28/2006 11:30:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TES**
Fluoride	1.3	0.10		mg/L	1	11/4/2006 2:51:41 AM
Chloride	39	0.50		mg/L	5	11/6/2006 3:49:00 PM
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/4/2006 3:09:05 AM
Phosphorus, Orthophosphate (As P)	0.64	0.50	H	mg/L	1	11/4/2006 2:51:41 AM
Sulfate	7.5	0.50		mg/L	1	11/4/2006 2:51:41 AM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	ND	0.00020		mg/L	1	11/14/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/15/2006 8:32:14 PM
Barium	0.15	0.020		mg/L	1	11/15/2006 8:32:14 PM
Cadmium	ND	0.0020		mg/L	1	11/15/2006 8:32:14 PM
Calcium	9.7	1.0		mg/L	1	11/15/2006 8:32:14 PM
Chromium	ND	0.0060		mg/L	1	11/15/2006 8:32:14 PM
Lead	ND	0.0050		mg/L	1	11/15/2006 8:32:14 PM
Magnesium	3.5	1.0		mg/L	1	11/15/2006 8:32:14 PM
Potassium	ND	1.0		mg/L	1	11/15/2006 8:32:14 PM
Selenium	ND	0.050		mg/L	1	11/15/2006 8:32:14 PM
Silver	ND	0.0050		mg/L	1	11/15/2006 8:32:14 PM
Sodium	340	10		mg/L	10	11/16/2006 10:47:22 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	11/14/2006
Acenaphthylene	ND	10		µg/L	1	11/14/2006
Aniline	ND	20		µg/L	1	11/14/2006
Anthracene	ND	10		µg/L	1	11/14/2006
Azobenzene	ND	10		µg/L	1	11/14/2006
Benz(a)anthracene	ND	15		µg/L	1	11/14/2006
Benzo(a)pyrene	ND	15		µg/L	1	11/14/2006
Benzo(b)fluoranthene	ND	15		µg/L	1	11/14/2006
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/14/2006
Benzo(k)fluoranthene	ND	10		µg/L	1	11/14/2006
Benzoic acid	ND	50		µg/L	1	11/14/2006
Benzyl alcohol	ND	20		µg/L	1	11/14/2006
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/14/2006
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2A
Lab Order:	0611016	**Collection Date:**	10/28/2006 11:30:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/14/2006
Butyl benzyl phthalate	ND	15		µg/L	1	11/14/2006
Carbazole	ND	10		µg/L	1	11/14/2006
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/14/2006
4-Chloroaniline	ND	20		µg/L	1	11/14/2006
2-Chloronaphthalene	ND	10		µg/L	1	11/14/2006
2-Chlorophenol	ND	10		µg/L	1	11/14/2006
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/14/2006
Chrysene	ND	15		µg/L	1	11/14/2006
Di-n-butyl phthalate	ND	10		µg/L	1	11/14/2006
Di-n-octyl phthalate	ND	15		µg/L	1	11/14/2006
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/14/2006
Dibenzofuran	ND	10		µg/L	1	11/14/2006
1,2-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,3-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,4-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/14/2006
Diethyl phthalate	ND	10		µg/L	1	11/14/2006
Dimethyl phthalate	ND	10		µg/L	1	11/14/2006
2,4-Dichlorophenol	ND	10		µg/L	1	11/14/2006
2,4-Dimethylphenol	ND	10		µg/L	1	11/14/2006
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrophenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
2,6-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
Fluoranthene	ND	10		µg/L	1	11/14/2006
Fluorene	ND	10		µg/L	1	11/14/2006
Hexachlorobenzene	ND	10		µg/L	1	11/14/2006
Hexachlorobutadiene	ND	10		µg/L	1	11/14/2006
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/14/2006
Hexachloroethane	ND	10		µg/L	1	11/14/2006
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/14/2006
Isophorone	ND	10		µg/L	1	11/14/2006
2-Methylnaphthalene	ND	10		µg/L	1	11/14/2006
2-Methylphenol	ND	15		µg/L	1	11/14/2006
3+4-Methylphenol	ND	20		µg/L	1	11/14/2006
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodimethylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/14/2006
Naphthalene	ND	10		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2A
Lab Order:	0611016	**Collection Date:**	10/28/2006 11:30:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
2-Nitroaniline	ND	50		µg/L	1	11/14/2006
3-Nitroaniline	ND	50		µg/L	1	11/14/2006
4-Nitroaniline	ND	20		µg/L	1	11/14/2006
Nitrobenzene	ND	10		µg/L	1	11/14/2006
2-Nitrophenol	ND	15		µg/L	1	11/14/2006
4-Nitrophenol	ND	50		µg/L	1	11/14/2006
Pentachlorophenol	ND	50		µg/L	1	11/14/2006
Phenanthrene	ND	10		µg/L	1	11/14/2006
Phenol	ND	10		µg/L	1	11/14/2006
Pyrene	ND	15		µg/L	1	11/14/2006
Pyridine	ND	30		µg/L	1	11/14/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/14/2006
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/14/2006
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/14/2006
Surr: 2,4,6-Tribromophenol	51.3	16.6-150		%REC	1	11/14/2006
Surr: 2-Fluorobiphenyl	62.8	19.6-134		%REC	1	11/14/2006
Surr: 2-Fluorophenol	49.7	9.54-113		%REC	1	11/14/2006
Surr: 4-Terphenyl-d14	69.4	22.7-145		%REC	1	11/14/2006
Surr: Nitrobenzene-d5	64.3	14.6-134		%REC	1	11/14/2006
Surr: Phenol-d5	36.4	10.7-80.3		%REC	1	11/14/2006
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/7/2006
Toluene	ND	1.0		µg/L	1	11/7/2006
Ethylbenzene	ND	1.0		µg/L	1	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/7/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/7/2006
Naphthalene	ND	2.0		µg/L	1	11/7/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
Acetone	ND	10		µg/L	1	11/7/2006
Bromobenzene	ND	1.0		µg/L	1	11/7/2006
Bromochloromethane	ND	1.0		µg/L	1	11/7/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/7/2006
Bromoform	ND	1.0		µg/L	1	11/7/2006
Bromomethane	ND	2.0		µg/L	1	11/7/2006
2-Butanone	ND	10		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2A
Lab Order:	0611016	**Collection Date:**	10/28/2006 11:30:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Carbon disulfide	ND	10		µg/L	1	11/7/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/7/2006
Chlorobenzene	ND	1.0		µg/L	1	11/7/2006
Chloroethane	ND	2.0		µg/L	1	11/7/2006
Chloroform	ND	1.0		µg/L	1	11/7/2006
Chloromethane	ND	1.0		µg/L	1	11/7/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/7/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/7/2006
Dibromomethane	ND	2.0		µg/L	1	11/7/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/7/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/7/2006
2-Hexanone	ND	10		µg/L	1	11/7/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/7/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/7/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/7/2006
Methylene Chloride	ND	3.0		µg/L	1	11/7/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/7/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/7/2006
Styrene	ND	1.5		µg/L	1	11/7/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/7/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2A
Lab Order:	0611016	**Collection Date:**	10/28/2006 11:30:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/7/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/7/2006
Vinyl chloride	ND	1.0		µg/L	1	11/7/2006
Xylenes, Total	ND	3.0		µg/L	1	11/7/2006
Surr: 1,2-Dichloroethane-d4	83.7	69.9-130		%REC	1	11/7/2006
Surr: 4-Bromofluorobenzene	109	75-139		%REC	1	11/7/2006
Surr: Dibromofluoromethane	90.7	57.3-135		%REC	1	11/7/2006
Surr: Toluene-d8	94.4	81.9-122		%REC	1	11/7/2006
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMS**
Specific Conductance	1400	0.010		µmhos/cm	1	11/1/2006
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	8.27	0.010		pH units	1	11/1/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2B
Lab Order:	0611016	**Collection Date:**	10/28/2006 1:30:00 PM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TES**
Fluoride	1.9	0.10		mg/L	1	11/4/2006 3:26:30 AM
Chloride	31	0.10		mg/L	1	11/4/2006 3:26:30 AM
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/4/2006 4:18:43 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/4/2006 3:26:30 AM
Sulfate	140	2.5		mg/L	5	11/6/2006 4:41:13 PM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	ND	0.00020		mg/L	1	11/14/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/15/2006 8:36:34 PM
Barium	0.071	0.020		mg/L	1	11/15/2006 8:36:34 PM
Cadmium	ND	0.0020		mg/L	1	11/15/2006 8:36:34 PM
Calcium	20	1.0		mg/L	1	11/15/2006 8:36:34 PM
Chromium	ND	0.0060		mg/L	1	11/15/2006 8:36:34 PM
Lead	ND	0.0050		mg/L	1	11/15/2006 8:36:34 PM
Magnesium	3.8	1.0		mg/L	1	11/15/2006 8:36:34 PM
Potassium	1.6	1.0		mg/L	1	11/15/2006 8:36:34 PM
Selenium	ND	0.050		mg/L	1	11/15/2006 8:36:34 PM
Silver	ND	0.0050		mg/L	1	11/15/2006 8:36:34 PM
Sodium	580	10		mg/L	10	11/16/2006 10:50:27 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	11/14/2006
Acenaphthylene	ND	10		µg/L	1	11/14/2006
Aniline	ND	20		µg/L	1	11/14/2006
Anthracene	ND	10		µg/L	1	11/14/2006
Azobenzene	ND	10		µg/L	1	11/14/2006
Benz(a)anthracene	ND	15		µg/L	1	11/14/2006
Benzo(a)pyrene	ND	15		µg/L	1	11/14/2006
Benzo(b)fluoranthene	ND	15		µg/L	1	11/14/2006
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/14/2006
Benzo(k)fluoranthene	ND	10		µg/L	1	11/14/2006
Benzoic acid	ND	50		µg/L	1	11/14/2006
Benzyl alcohol	ND	20		µg/L	1	11/14/2006
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/14/2006
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2B
Lab Order:	0611016	**Collection Date:**	10/28/2006 1:30:00 PM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/14/2006
Butyl benzyl phthalate	ND	15		µg/L	1	11/14/2006
Carbazole	ND	10		µg/L	1	11/14/2006
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/14/2006
4-Chloroaniline	ND	20		µg/L	1	11/14/2006
2-Chloronaphthalene	ND	10		µg/L	1	11/14/2006
2-Chlorophenol	ND	10		µg/L	1	11/14/2006
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/14/2006
Chrysene	ND	15		µg/L	1	11/14/2006
Di-n-butyl phthalate	ND	10		µg/L	1	11/14/2006
Di-n-octyl phthalate	ND	15		µg/L	1	11/14/2006
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/14/2006
Dibenzofuran	ND	10		µg/L	1	11/14/2006
1,2-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,3-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,4-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/14/2006
Diethyl phthalate	ND	10		µg/L	1	11/14/2006
Dimethyl phthalate	ND	10		µg/L	1	11/14/2006
2,4-Dichlorophenol	ND	10		µg/L	1	11/14/2006
2,4-Dimethylphenol	ND	10		µg/L	1	11/14/2006
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrophenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
2,6-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
Fluoranthene	ND	10		µg/L	1	11/14/2006
Fluorene	ND	10		µg/L	1	11/14/2006
Hexachlorobenzene	ND	10		µg/L	1	11/14/2006
Hexachlorobutadiene	ND	10		µg/L	1	11/14/2006
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/14/2006
Hexachloroethane	ND	10		µg/L	1	11/14/2006
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/14/2006
Isophorone	ND	10		µg/L	1	11/14/2006
2-Methylnaphthalene	ND	10		µg/L	1	11/14/2006
2-Methylphenol	ND	15		µg/L	1	11/14/2006
3+4-Methylphenol	ND	20		µg/L	1	11/14/2006
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodimethylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/14/2006
Naphthalene	ND	10		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2B
Lab Order:	0611016	**Collection Date:**	10/28/2006 1:30:00 PM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
2-Nitroaniline	ND	50		µg/L	1	11/14/2006
3-Nitroaniline	ND	50		µg/L	1	11/14/2006
4-Nitroaniline	ND	20		µg/L	1	11/14/2006
Nitrobenzene	ND	10		µg/L	1	11/14/2006
2-Nitrophenol	ND	15		µg/L	1	11/14/2006
4-Nitrophenol	ND	50		µg/L	1	11/14/2006
Pentachlorophenol	ND	50		µg/L	1	11/14/2006
Phenanthrene	ND	10		µg/L	1	11/14/2006
Phenol	ND	10		µg/L	1	11/14/2006
Pyrene	ND	15		µg/L	1	11/14/2006
Pyridine	ND	30		µg/L	1	11/14/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/14/2006
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/14/2006
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/14/2006
Surr: 2,4,6-Tribromophenol	55.5	16.6-150		%REC	1	11/14/2006
Surr: 2-Fluorobiphenyl	57.0	19.6-134		%REC	1	11/14/2006
Surr: 2-Fluorophenol	43.6	9.54-113		%REC	1	11/14/2006
Surr: 4-Terphenyl-d14	64.4	22.7-145		%REC	1	11/14/2006
Surr: Nitrobenzene-d5	53.6	14.6-134		%REC	1	11/14/2006
Surr: Phenol-d5	32.7	10.7-80.3		%REC	1	11/14/2006
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/7/2006
Toluene	ND	1.0		µg/L	1	11/7/2006
Ethylbenzene	ND	1.0		µg/L	1	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/7/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/7/2006
Naphthalene	ND	2.0		µg/L	1	11/7/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
Acetone	ND	10		µg/L	1	11/7/2006
Bromobenzene	ND	1.0		µg/L	1	11/7/2006
Bromochloromethane	ND	1.0		µg/L	1	11/7/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/7/2006
Bromoform	ND	1.0		µg/L	1	11/7/2006
Bromomethane	ND	2.0		µg/L	1	11/7/2006
2-Butanone	ND	10		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2B
Lab Order:	0611016	**Collection Date:**	10/28/2006 1:30:00 PM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Carbon disulfide	ND	10		µg/L	1	11/7/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/7/2006
Chlorobenzene	ND	1.0		µg/L	1	11/7/2006
Chloroethane	ND	2.0		µg/L	1	11/7/2006
Chloroform	ND	1.0		µg/L	1	11/7/2006
Chloromethane	ND	1.0		µg/L	1	11/7/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/7/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/7/2006
Dibromomethane	ND	2.0		µg/L	1	11/7/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/7/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/7/2006
2-Hexanone	ND	10		µg/L	1	11/7/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/7/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/7/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/7/2006
Methylene Chloride	ND	3.0		µg/L	1	11/7/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/7/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/7/2006
Styrene	ND	1.5		µg/L	1	11/7/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/7/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2B
Lab Order:	0611016	**Collection Date:**	10/28/2006 1:30:00 PM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/7/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/7/2006
Vinyl chloride	ND	1.0		µg/L	1	11/7/2006
Xylenes, Total	ND	3.0		µg/L	1	11/7/2006
Surr: 1,2-Dichloroethane-d4	87.6	69.9-130		%REC	1	11/7/2006
Surr: 4-Bromofluorobenzene	104	75-139		%REC	1	11/7/2006
Surr: Dibromofluoromethane	90.9	57.3-135		%REC	1	11/7/2006
Surr: Toluene-d8	92.4	81.9-122		%REC	1	11/7/2006
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMS**
Specific Conductance	2400	0.010		µmhos/cm	1	11/1/2006
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	8.10	0.010		pH units	1	11/1/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2C
Lab Order:	0611016	**Collection Date:**	10/28/2006 3:00:00 PM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TES**
Fluoride	2.4	0.10		mg/L	1	11/4/2006 4:36:07 AM
Chloride	42	0.50		mg/L	5	11/6/2006 4:58:38 PM
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/4/2006 4:53:31 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/4/2006 4:36:07 AM
Sulfate	270	2.5		mg/L	5	11/6/2006 4:58:38 PM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	ND	0.00020		mg/L	1	11/14/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/15/2006 8:40:46 PM
Barium	0.031	0.020		mg/L	1	11/15/2006 8:40:46 PM
Cadmium	ND	0.0020		mg/L	1	11/15/2006 8:40:46 PM
Calcium	5.8	1.0		mg/L	1	11/15/2006 8:40:46 PM
Chromium	ND	0.0060		mg/L	1	11/15/2006 8:40:46 PM
Lead	0.0054	0.0050		mg/L	1	11/15/2006 8:40:46 PM
Magnesium	ND	1.0		mg/L	1	11/15/2006 8:40:46 PM
Potassium	ND	1.0		mg/L	1	11/15/2006 8:40:46 PM
Selenium	ND	0.050		mg/L	1	11/15/2006 8:40:46 PM
Silver	ND	0.0050		mg/L	1	11/15/2006 8:40:46 PM
Sodium	310	10		mg/L	10	11/16/2006 10:53:31 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	11/14/2006
Acenaphthylene	ND	10		µg/L	1	11/14/2006
Aniline	ND	20		µg/L	1	11/14/2006
Anthracene	ND	10		µg/L	1	11/14/2006
Azobenzene	ND	10		µg/L	1	11/14/2006
Benz(a)anthracene	ND	15		µg/L	1	11/14/2006
Benzo(a)pyrene	ND	15		µg/L	1	11/14/2006
Benzo(b)fluoranthene	ND	15		µg/L	1	11/14/2006
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/14/2006
Benzo(k)fluoranthene	ND	10		µg/L	1	11/14/2006
Benzoic acid	ND	50		µg/L	1	11/14/2006
Benzyl alcohol	ND	20		µg/L	1	11/14/2006
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/14/2006
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2C
Lab Order:	0611016	**Collection Date:**	10/28/2006 3:00:00 PM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/14/2006
Butyl benzyl phthalate	ND	15		µg/L	1	11/14/2006
Carbazole	ND	10		µg/L	1	11/14/2006
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/14/2006
4-Chloroaniline	ND	20		µg/L	1	11/14/2006
2-Chloronaphthalene	ND	10		µg/L	1	11/14/2006
2-Chlorophenol	ND	10		µg/L	1	11/14/2006
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/14/2006
Chrysene	ND	15		µg/L	1	11/14/2006
Di-n-butyl phthalate	ND	10		µg/L	1	11/14/2006
Di-n-octyl phthalate	ND	15		µg/L	1	11/14/2006
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/14/2006
Dibenzofuran	ND	10		µg/L	1	11/14/2006
1,2-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,3-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,4-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/14/2006
Diethyl phthalate	ND	10		µg/L	1	11/14/2006
Dimethyl phthalate	ND	10		µg/L	1	11/14/2006
2,4-Dichlorophenol	ND	10		µg/L	1	11/14/2006
2,4-Dimethylphenol	ND	10		µg/L	1	11/14/2006
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrophenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
2,6-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
Fluoranthene	ND	10		µg/L	1	11/14/2006
Fluorene	ND	10		µg/L	1	11/14/2006
Hexachlorobenzene	ND	10		µg/L	1	11/14/2006
Hexachlorobutadiene	ND	10		µg/L	1	11/14/2006
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/14/2006
Hexachloroethane	ND	10		µg/L	1	11/14/2006
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/14/2006
Isophorone	ND	10		µg/L	1	11/14/2006
2-Methylnaphthalene	ND	10		µg/L	1	11/14/2006
2-Methylphenol	ND	15		µg/L	1	11/14/2006
3+4-Methylphenol	ND	20		µg/L	1	11/14/2006
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodimethylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/14/2006
Naphthalene	ND	10		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2C
Lab Order:	0611016	**Collection Date:**	10/28/2006 3:00:00 PM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
2-Nitroaniline	ND	50		µg/L	1	11/14/2006
3-Nitroaniline	ND	50		µg/L	1	11/14/2006
4-Nitroaniline	ND	20		µg/L	1	11/14/2006
Nitrobenzene	ND	10		µg/L	1	11/14/2006
2-Nitrophenol	ND	15		µg/L	1	11/14/2006
4-Nitrophenol	ND	50		µg/L	1	11/14/2006
Pentachlorophenol	ND	50		µg/L	1	11/14/2006
Phenanthrene	ND	10		µg/L	1	11/14/2006
Phenol	ND	10		µg/L	1	11/14/2006
Pyrene	ND	15		µg/L	1	11/14/2006
Pyridine	ND	30		µg/L	1	11/14/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/14/2006
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/14/2006
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/14/2006
Surr: 2,4,6-Tribromophenol	64.4	16.6-150		%REC	1	11/14/2006
Surr: 2-Fluorobiphenyl	66.5	19.6-134		%REC	1	11/14/2006
Surr: 2-Fluorophenol	48.6	9.54-113		%REC	1	11/14/2006
Surr: 4-Terphenyl-d14	70.2	22.7-145		%REC	1	11/14/2006
Surr: Nitrobenzene-d5	62.7	14.6-134		%REC	1	11/14/2006
Surr: Phenol-d5	35.8	10.7-80.3		%REC	1	11/14/2006
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/7/2006
Toluene	ND	1.0		µg/L	1	11/7/2006
Ethylbenzene	ND	1.0		µg/L	1	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/7/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/7/2006
Naphthalene	ND	2.0		µg/L	1	11/7/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
Acetone	ND	10		µg/L	1	11/7/2006
Bromobenzene	ND	1.0		µg/L	1	11/7/2006
Bromochloromethane	ND	1.0		µg/L	1	11/7/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/7/2006
Bromoform	ND	1.0		µg/L	1	11/7/2006
Bromomethane	ND	2.0		µg/L	1	11/7/2006
2-Butanone	ND	10		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2C
Lab Order:	0611016	**Collection Date:**	10/28/2006 3:00:00 PM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Carbon disulfide	ND	10		µg/L	1	11/7/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/7/2006
Chlorobenzene	ND	1.0		µg/L	1	11/7/2006
Chloroethane	ND	2.0		µg/L	1	11/7/2006
Chloroform	ND	1.0		µg/L	1	11/7/2006
Chloromethane	ND	1.0		µg/L	1	11/7/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/7/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/7/2006
Dibromomethane	ND	2.0		µg/L	1	11/7/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/7/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/7/2006
2-Hexanone	ND	10		µg/L	1	11/7/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/7/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/7/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/7/2006
Methylene Chloride	ND	3.0		µg/L	1	11/7/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/7/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/7/2006
Styrene	ND	1.5		µg/L	1	11/7/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/7/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2C
Lab Order:	0611016	**Collection Date:**	10/28/2006 3:00:00 PM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/7/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/7/2006
Vinyl chloride	ND	1.0		µg/L	1	11/7/2006
Xylenes, Total	ND	3.0		µg/L	1	11/7/2006
Surr: 1,2-Dichloroethane-d4	84.9	69.9-130		%REC	1	11/7/2006
Surr: 4-Bromofluorobenzene	107	75-139		%REC	1	11/7/2006
Surr: Dibromofluoromethane	95.0	57.3-135		%REC	1	11/7/2006
Surr: Toluene-d8	89.9	81.9-122		%REC	1	11/7/2006
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMS**
Specific Conductance	1300	0.010		µmhos/cm	1	11/1/2006
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	8.76	0.010		pH units	1	11/1/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-3B
Lab Order:	0611016	**Collection Date:**	10/29/2006 10:00:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TES**
Fluoride	1.7	0.10		mg/L	1	11/4/2006 5:10:56 AM
Chloride	33	0.50		mg/L	5	11/6/2006 5:16:03 PM
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/4/2006 5:28:21 AM
Phosphorus, Orthophosphate (As P)	1.1	0.50	H	mg/L	1	11/4/2006 5:10:56 AM
Sulfate	53	0.50		mg/L	1	11/4/2006 5:10:56 AM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	ND	0.00020		mg/L	1	11/14/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	0.021	0.020		mg/L	1	11/15/2006 9:26:01 PM
Barium	0.11	0.020		mg/L	1	11/15/2006 9:26:01 PM
Cadmium	ND	0.0020		mg/L	1	11/15/2006 9:26:01 PM
Calcium	9.0	1.0		mg/L	1	11/15/2006 9:26:01 PM
Chromium	ND	0.0060		mg/L	1	11/15/2006 9:26:01 PM
Lead	ND	0.0050		mg/L	1	11/15/2006 9:26:01 PM
Magnesium	2.7	1.0		mg/L	1	11/15/2006 9:26:01 PM
Potassium	ND	1.0		mg/L	1	11/15/2006 9:26:01 PM
Selenium	ND	0.050		mg/L	1	11/15/2006 9:26:01 PM
Silver	ND	0.0050		mg/L	1	11/15/2006 9:26:01 PM
Sodium	380	10		mg/L	10	11/16/2006 11:10:42 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	11/14/2006
Acenaphthylene	ND	10		µg/L	1	11/14/2006
Aniline	ND	20		µg/L	1	11/14/2006
Anthracene	ND	10		µg/L	1	11/14/2006
Azobenzene	ND	10		µg/L	1	11/14/2006
Benz(a)anthracene	ND	15		µg/L	1	11/14/2006
Benzo(a)pyrene	ND	15		µg/L	1	11/14/2006
Benzo(b)fluoranthene	ND	15		µg/L	1	11/14/2006
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/14/2006
Benzo(k)fluoranthene	ND	10		µg/L	1	11/14/2006
Benzoic acid	ND	50		µg/L	1	11/14/2006
Benzyl alcohol	ND	20		µg/L	1	11/14/2006
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/14/2006
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-3B
Lab Order:	0611016	**Collection Date:**	10/29/2006 10:00:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/14/2006
Butyl benzyl phthalate	ND	15		µg/L	1	11/14/2006
Carbazole	ND	10		µg/L	1	11/14/2006
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/14/2006
4-Chloroaniline	ND	20		µg/L	1	11/14/2006
2-Chloronaphthalene	ND	10		µg/L	1	11/14/2006
2-Chlorophenol	ND	10		µg/L	1	11/14/2006
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/14/2006
Chrysene	ND	15		µg/L	1	11/14/2006
Di-n-butyl phthalate	ND	10		µg/L	1	11/14/2006
Di-n-octyl phthalate	ND	15		µg/L	1	11/14/2006
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/14/2006
Dibenzofuran	ND	10		µg/L	1	11/14/2006
1,2-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,3-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,4-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/14/2006
Diethyl phthalate	ND	10		µg/L	1	11/14/2006
Dimethyl phthalate	ND	10		µg/L	1	11/14/2006
2,4-Dichlorophenol	ND	10		µg/L	1	11/14/2006
2,4-Dimethylphenol	ND	10		µg/L	1	11/14/2006
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrophenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
2,6-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
Fluoranthene	ND	10		µg/L	1	11/14/2006
Fluorene	ND	10		µg/L	1	11/14/2006
Hexachlorobenzene	ND	10		µg/L	1	11/14/2006
Hexachlorobutadiene	ND	10		µg/L	1	11/14/2006
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/14/2006
Hexachloroethane	ND	10		µg/L	1	11/14/2006
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/14/2006
Isophorone	ND	10		µg/L	1	11/14/2006
2-Methylnaphthalene	ND	10		µg/L	1	11/14/2006
2-Methylphenol	ND	15		µg/L	1	11/14/2006
3+4-Methylphenol	ND	20		µg/L	1	11/14/2006
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodimethylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/14/2006
Naphthalene	ND	10		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-3B
Lab Order:	0611016	**Collection Date:**	10/29/2006 10:00:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
2-Nitroaniline	ND	50		µg/L	1	11/14/2006
3-Nitroaniline	ND	50		µg/L	1	11/14/2006
4-Nitroaniline	ND	20		µg/L	1	11/14/2006
Nitrobenzene	ND	10		µg/L	1	11/14/2006
2-Nitrophenol	ND	15		µg/L	1	11/14/2006
4-Nitrophenol	ND	50		µg/L	1	11/14/2006
Pentachlorophenol	ND	50		µg/L	1	11/14/2006
Phenanthrene	ND	10		µg/L	1	11/14/2006
Phenol	ND	10		µg/L	1	11/14/2006
Pyrene	ND	15		µg/L	1	11/14/2006
Pyridine	ND	30		µg/L	1	11/14/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/14/2006
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/14/2006
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/14/2006
Surr: 2,4,6-Tribromophenol	61.7	16.6-150		%REC	1	11/14/2006
Surr: 2-Fluorobiphenyl	60.1	19.6-134		%REC	1	11/14/2006
Surr: 2-Fluorophenol	47.8	9.54-113		%REC	1	11/14/2006
Surr: 4-Terphenyl-d14	65.4	22.7-145		%REC	1	11/14/2006
Surr: Nitrobenzene-d5	56.4	14.6-134		%REC	1	11/14/2006
Surr: Phenol-d5	35.4	10.7-80.3		%REC	1	11/14/2006
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/7/2006
Toluene	ND	1.0		µg/L	1	11/7/2006
Ethylbenzene	ND	1.0		µg/L	1	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/7/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/7/2006
Naphthalene	ND	2.0		µg/L	1	11/7/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
Acetone	ND	10		µg/L	1	11/7/2006
Bromobenzene	ND	1.0		µg/L	1	11/7/2006
Bromochloromethane	ND	1.0		µg/L	1	11/7/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/7/2006
Bromoform	ND	1.0		µg/L	1	11/7/2006
Bromomethane	ND	2.0		µg/L	1	11/7/2006
2-Butanone	ND	10		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-3B
Lab Order:	0611016	**Collection Date:**	10/29/2006 10:00:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Carbon disulfide	ND	10		µg/L	1	11/7/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/7/2006
Chlorobenzene	ND	1.0		µg/L	1	11/7/2006
Chloroethane	ND	2.0		µg/L	1	11/7/2006
Chloroform	ND	1.0		µg/L	1	11/7/2006
Chloromethane	ND	1.0		µg/L	1	11/7/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/7/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/7/2006
Dibromomethane	ND	2.0		µg/L	1	11/7/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/7/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/7/2006
2-Hexanone	ND	10		µg/L	1	11/7/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/7/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/7/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/7/2006
Methylene Chloride	ND	3.0		µg/L	1	11/7/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/7/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/7/2006
Styrene	ND	1.5		µg/L	1	11/7/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/7/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-3B
Lab Order:	0611016	**Collection Date:**	10/29/2006 10:00:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/7/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/7/2006
Vinyl chloride	ND	1.0		µg/L	1	11/7/2006
Xylenes, Total	ND	3.0		µg/L	1	11/7/2006
Surr: 1,2-Dichloroethane-d4	86.8	69.9-130		%REC	1	11/7/2006
Surr: 4-Bromofluorobenzene	114	75-139		%REC	1	11/7/2006
Surr: Dibromofluoromethane	93.0	57.3-135		%REC	1	11/7/2006
Surr: Toluene-d8	96.4	81.9-122		%REC	1	11/7/2006
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMS**
Specific Conductance	1500	0.010		µmhos/cm	1	11/1/2006
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	8.12	0.010		pH units	1	11/1/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-3C
Lab Order:	0611016	**Collection Date:**	10/29/2006 10:45:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TES**
Fluoride	1.9	0.10		mg/L	1	11/4/2006 5:45:46 AM
Chloride	38	0.50		mg/L	5	11/6/2006 5:33:27 PM
Nitrate (As N)+Nitrite (As N)	ND	0.50		mg/L	5	11/4/2006 6:03:10 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	11/4/2006 5:45:46 AM
Sulfate	280	2.5		mg/L	5	11/6/2006 5:33:27 PM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	ND	0.00020		mg/L	1	11/14/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/15/2006 9:29:53 PM
Barium	0.029	0.020		mg/L	1	11/15/2006 9:29:53 PM
Cadmium	ND	0.0020		mg/L	1	11/15/2006 9:29:53 PM
Calcium	6.0	1.0		mg/L	1	11/15/2006 9:29:53 PM
Chromium	ND	0.0060		mg/L	1	11/15/2006 9:29:53 PM
Lead	ND	0.0050		mg/L	1	11/15/2006 9:29:53 PM
Magnesium	ND	1.0		mg/L	1	11/15/2006 9:29:53 PM
Potassium	ND	1.0		mg/L	1	11/15/2006 9:29:53 PM
Selenium	ND	0.050		mg/L	1	11/15/2006 9:29:53 PM
Silver	ND	0.0050		mg/L	1	11/15/2006 9:29:53 PM
Sodium	320	10		mg/L	10	11/16/2006 11:16:50 AM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	10		µg/L	1	11/14/2006
Acenaphthylene	ND	10		µg/L	1	11/14/2006
Aniline	ND	20		µg/L	1	11/14/2006
Anthracene	ND	10		µg/L	1	11/14/2006
Azobenzene	ND	10		µg/L	1	11/14/2006
Benz(a)anthracene	ND	15		µg/L	1	11/14/2006
Benzo(a)pyrene	ND	15		µg/L	1	11/14/2006
Benzo(b)fluoranthene	ND	15		µg/L	1	11/14/2006
Benzo(g,h,i)perylene	ND	10		µg/L	1	11/14/2006
Benzo(k)fluoranthene	ND	10		µg/L	1	11/14/2006
Benzoic acid	ND	50		µg/L	1	11/14/2006
Benzyl alcohol	ND	20		µg/L	1	11/14/2006
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	11/14/2006
Bis(2-chloroethyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	11/14/2006
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-3C
Lab Order:	0611016	**Collection Date:**	10/29/2006 10:45:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
4-Bromophenyl phenyl ether	ND	10		µg/L	1	11/14/2006
Butyl benzyl phthalate	ND	15		µg/L	1	11/14/2006
Carbazole	ND	10		µg/L	1	11/14/2006
4-Chloro-3-methylphenol	ND	20		µg/L	1	11/14/2006
4-Chloroaniline	ND	20		µg/L	1	11/14/2006
2-Chloronaphthalene	ND	10		µg/L	1	11/14/2006
2-Chlorophenol	ND	10		µg/L	1	11/14/2006
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	11/14/2006
Chrysene	ND	15		µg/L	1	11/14/2006
Di-n-butyl phthalate	ND	10		µg/L	1	11/14/2006
Di-n-octyl phthalate	ND	15		µg/L	1	11/14/2006
Dibenz(a,h)anthracene	ND	10		µg/L	1	11/14/2006
Dibenzofuran	ND	10		µg/L	1	11/14/2006
1,2-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,3-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
1,4-Dichlorobenzene	ND	10		µg/L	1	11/14/2006
3,3'-Dichlorobenzidine	ND	15		µg/L	1	11/14/2006
Diethyl phthalate	ND	10		µg/L	1	11/14/2006
Dimethyl phthalate	ND	10		µg/L	1	11/14/2006
2,4-Dichlorophenol	ND	10		µg/L	1	11/14/2006
2,4-Dimethylphenol	ND	10		µg/L	1	11/14/2006
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrophenol	ND	50		µg/L	1	11/14/2006
2,4-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
2,6-Dinitrotoluene	ND	10		µg/L	1	11/14/2006
Fluoranthene	ND	10		µg/L	1	11/14/2006
Fluorene	ND	10		µg/L	1	11/14/2006
Hexachlorobenzene	ND	10		µg/L	1	11/14/2006
Hexachlorobutadiene	ND	10		µg/L	1	11/14/2006
Hexachlorocyclopentadiene	ND	10		µg/L	1	11/14/2006
Hexachloroethane	ND	10		µg/L	1	11/14/2006
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	11/14/2006
Isophorone	ND	10		µg/L	1	11/14/2006
2-Methylnaphthalene	ND	10		µg/L	1	11/14/2006
2-Methylphenol	ND	15		µg/L	1	11/14/2006
3+4-Methylphenol	ND	20		µg/L	1	11/14/2006
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodimethylamine	ND	10		µg/L	1	11/14/2006
N-Nitrosodiphenylamine	ND	10		µg/L	1	11/14/2006
Naphthalene	ND	10		µg/L	1	11/14/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-3C
Lab Order:	0611016	**Collection Date:**	10/29/2006 10:45:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
2-Nitroaniline	ND	50		µg/L	1	11/14/2006
3-Nitroaniline	ND	50		µg/L	1	11/14/2006
4-Nitroaniline	ND	20		µg/L	1	11/14/2006
Nitrobenzene	ND	10		µg/L	1	11/14/2006
2-Nitrophenol	ND	15		µg/L	1	11/14/2006
4-Nitrophenol	ND	50		µg/L	1	11/14/2006
Pentachlorophenol	ND	50		µg/L	1	11/14/2006
Phenanthrene	ND	10		µg/L	1	11/14/2006
Phenol	ND	10		µg/L	1	11/14/2006
Pyrene	ND	15		µg/L	1	11/14/2006
Pyridine	ND	30		µg/L	1	11/14/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	1	11/14/2006
2,4,5-Trichlorophenol	ND	10		µg/L	1	11/14/2006
2,4,6-Trichlorophenol	ND	15		µg/L	1	11/14/2006
Surr: 2,4,6-Tribromophenol	66.1	16.6-150		%REC	1	11/14/2006
Surr: 2-Fluorobiphenyl	54.6	19.6-134		%REC	1	11/14/2006
Surr: 2-Fluorophenol	44.3	9.54-113		%REC	1	11/14/2006
Surr: 4-Terphenyl-d14	66.5	22.7-145		%REC	1	11/14/2006
Surr: Nitrobenzene-d5	50.6	14.6-134		%REC	1	11/14/2006
Surr: Phenol-d5	32.0	10.7-80.3		%REC	1	11/14/2006
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/8/2006
Toluene	ND	1.0		µg/L	1	11/8/2006
Ethylbenzene	ND	1.0		µg/L	1	11/8/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/8/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2006
Naphthalene	ND	2.0		µg/L	1	11/8/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2006
Acetone	ND	10		µg/L	1	11/8/2006
Bromobenzene	ND	1.0		µg/L	1	11/8/2006
Bromochloromethane	ND	1.0		µg/L	1	11/8/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2006
Bromoform	ND	1.0		µg/L	1	11/8/2006
Bromomethane	ND	2.0		µg/L	1	11/8/2006
2-Butanone	ND	10		µg/L	1	11/8/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-3C
Lab Order:	0611016	**Collection Date:**	10/29/2006 10:45:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Carbon disulfide	ND	10		µg/L	1	11/8/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/8/2006
Chlorobenzene	ND	1.0		µg/L	1	11/8/2006
Chloroethane	ND	2.0		µg/L	1	11/8/2006
Chloroform	ND	1.0		µg/L	1	11/8/2006
Chloromethane	ND	1.0		µg/L	1	11/8/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2006
Dibromomethane	ND	2.0		µg/L	1	11/8/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/8/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/8/2006
2-Hexanone	ND	10		µg/L	1	11/8/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2006
Methylene Chloride	ND	3.0		µg/L	1	11/8/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/8/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/8/2006
Styrene	ND	1.5		µg/L	1	11/8/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-3C
Lab Order:	0611016	**Collection Date:**	10/29/2006 10:45:00 AM
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2006
Vinyl chloride	ND	1.0		µg/L	1	11/8/2006
Xylenes, Total	ND	3.0		µg/L	1	11/8/2006
Surr: 1,2-Dichloroethane-d4	89.8	69.9-130		%REC	1	11/8/2006
Surr: 4-Bromofluorobenzene	97.9	75-139		%REC	1	11/8/2006
Surr: Dibromofluoromethane	99.9	57.3-135		%REC	1	11/8/2006
Surr: Toluene-d8	94.5	81.9-122		%REC	1	11/8/2006
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **CMS**
Specific Conductance	1400	0.010		µmhos/cm	1	11/1/2006
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	8.72	0.010		pH units	1	11/1/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Trip Blank
Lab Order:	0611016	**Collection Date:**	
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-07	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/7/2006
Toluene	ND	1.0		µg/L	1	11/7/2006
Ethylbenzene	ND	1.0		µg/L	1	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/7/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/7/2006
Naphthalene	ND	2.0		µg/L	1	11/7/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/7/2006
Acetone	ND	10		µg/L	1	11/7/2006
Bromobenzene	ND	1.0		µg/L	1	11/7/2006
Bromochloromethane	ND	1.0		µg/L	1	11/7/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/7/2006
Bromoform	ND	1.0		µg/L	1	11/7/2006
Bromomethane	ND	2.0		µg/L	1	11/7/2006
2-Butanone	ND	10		µg/L	1	11/7/2006
Carbon disulfide	ND	10		µg/L	1	11/7/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/7/2006
Chlorobenzene	ND	1.0		µg/L	1	11/7/2006
Chloroethane	ND	2.0		µg/L	1	11/7/2006
Chloroform	ND	1.0		µg/L	1	11/7/2006
Chloromethane	ND	1.0		µg/L	1	11/7/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/7/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/7/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/7/2006
Dibromomethane	ND	2.0		µg/L	1	11/7/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/7/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/7/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/7/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/7/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/7/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *17-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Trip Blank
Lab Order:	0611016	**Collection Date:**	
Project:	Annual GW Samples 2006 Ciniza	**Date Received:**	11/1/2006
Lab ID:	0611016-07	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,1-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/7/2006
2-Hexanone	ND	10		µg/L	1	11/7/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/7/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/7/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/7/2006
Methylene Chloride	ND	3.0		µg/L	1	11/7/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/7/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/7/2006
Styrene	ND	1.5		µg/L	1	11/7/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/7/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/7/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/7/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/7/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/7/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/7/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/7/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/7/2006
Vinyl chloride	ND	1.0		µg/L	1	11/7/2006
Xylenes, Total	ND	3.0		µg/L	1	11/7/2006
Surr: 1,2-Dichloroethane-d4	88.6	69.9-130		%REC	1	11/7/2006
Surr: 4-Bromofluorobenzene	104	75-139		%REC	1	11/7/2006
Surr: Dibromofluoromethane	95.4	57.3-135		%REC	1	11/7/2006
Surr: Toluene-d8	95.1	81.9-122		%REC	1	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: Annual GW Samples 2006 Ciniza **Work Order:** 0611016

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E300									
Sample ID: MBLK		*MBLK*			Batch ID:	**R21288**	Analysis Date:	11/3/2006 11:11:41 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	**R21305**	Analysis Date:	11/6/2006 10:00:52 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS ST300-06019		*LCS*			Batch ID:	**R21288**	Analysis Date:	11/3/2006 11:29:05 AM	
Fluoride	0.5273	mg/L	0.10	105	90	110			
Chloride	4.899	mg/L	0.10	98.0	90	110			
Nitrate (As N)+Nitrite (As N)	3.461	mg/L	0.10	98.9	90	110			
Phosphorus, Orthophosphate (As P)	4.997	mg/L	0.50	99.9	90	110			
Sulfate	9.674	mg/L	0.50	96.7	90	110			
Sample ID: LCS ST300-06019		*LCS*			Batch ID:	**R21305**	Analysis Date:	11/6/2006 10:18:16 AM	
Fluoride	0.5066	mg/L	0.10	101	90	110			
Chloride	4.862	mg/L	0.10	97.2	90	110			
Nitrate (As N)+Nitrite (As N)	3.426	mg/L	0.10	97.9	90	110			
Phosphorus, Orthophosphate (As P)	4.905	mg/L	0.50	98.1	90	110			
Sulfate	9.652	mg/L	0.50	96.5	90	110			

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: Annual GW Samples 2006 Ciniza **Work Order:** 0611016

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-11641		*MBLK*			Batch ID:	**11641**	Analysis Date:		11/14/2006
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	15						
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 Not Detected at the Reporting Limit
S Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

lient: Giant Refining Co
Project: Annual GW Samples 2006 Ciniza **Work Order:** 0611016

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-11641		*MBLK*			Batch ID:	**11641**	Analysis Date:		11/14/2006
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	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-11641		*LCS*			Batch ID:	**11641**	Analysis Date:		11/14/2006
Acenaphthene	75.56	µg/L	10	75.6	11	123			
4-Chloro-3-methylphenol	128.8	µg/L	20	64.4	15.4	119			
2-Chlorophenol	109.7	µg/L	10	54.9	12.2	122			
1,4-Dichlorobenzene	44.08	µg/L	10	44.1	16.9	100			
2,4-Dinitrotoluene	70.12	µg/L	10	70.1	13	138			
N-Nitrosodi-n-propylamine	59.72	µg/L	10	59.7	9.93	122			
4-Nitrophenol	61.04	µg/L	50	30.5	12.5	87.4			
Pentachlorophenol	89.54	µg/L	50	44.8	3.55	114			
Phenol	60.02	µg/L	10	30.0	7.53	73.1			
Pyrene	74.84	µg/L	15	74.8	12.6	140			
1,2,4-Trichlorobenzene	49.74	µg/L	10	49.7	17.4	98.7			
Sample ID: LCSD-11641		*LCSD*			Batch ID:	**11641**	Analysis Date:		11/14/2006
Acenaphthene	72.80	µg/L	10	72.8	11	123	3.72	30.5	
4-Chloro-3-methylphenol	129.7	µg/L	20	64.8	15.4	119	0.697	28.6	
2-Chlorophenol	129.1	µg/L	10	64.5	12.2	122	16.2	107	
1,4-Dichlorobenzene	48.32	µg/L	10	48.3	16.9	100	9.18	62.1	
2,4-Dinitrotoluene	64.96	µg/L	10	65.0	13	138	7.64	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: Annual GW Samples 2006 Ciniza **Work Order:** 0611016

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: LCSD-11641		*LCSD*			Batch ID:	**11641**	Analysis Date:		11/14/2006
N-Nitrosodi-n-propylamine	60.62	µg/L	10	60.6	9.93	122	1.50	30.3	
4-Nitrophenol	75.92	µg/L	50	38.0	12.5	87.4	21.7	36.3	
Pentachlorophenol	127.0	µg/L	50	63.5	3.55	114	34.6	49	
Phenol	72.86	µg/L	10	36.4	7.53	73.1	19.3	52.4	
Pyrene	71.16	µg/L	15	71.2	12.6	140	5.04	16.3	
1,2,4-Trichlorobenzene	52.72	µg/L	10	52.7	17.4	98.7	5.82	36.4	
Method: SW7470									
Sample ID: 0611016-06D msd		*MSD*			Batch ID:	**11747**	Analysis Date:		11/14/2006
Mercury	0.005025	mg/L	0.00020	100	75	125	2.07	20	
Sample ID: MB-11747		*MBLK*			Batch ID:	**11747**	Analysis Date:		11/14/2006
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-11747		*LCS*			Batch ID:	**11747**	Analysis Date:		11/14/2006
Mercury	0.005385	mg/L	0.00020	108	80	120			
Sample ID: 0611016-06D ms		*MS*			Batch ID:	**11747**	Analysis Date:		11/14/2006
Mercury	0.005130	mg/L	0.00020	103	75	125			

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: Annual GW Samples 2006 Ciniza **Work Order:** 0611016

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW6010A									
Sample ID: MB-11746		*MBLK*			Batch ID:	**11746**	Analysis Date:	11/16/2006 8:58:41 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: MB-11746		*MBLK*			Batch ID:	**11746**	Analysis Date:	11/15/2006 7:10:00 PM	
Cadmium	ND	mg/L	0.0020						
Chromium	ND	mg/L	0.0060						
Magnesium	ND	mg/L	1.0						
Potassium	ND	mg/L	1.0						
Sample ID: MB-11746		*MBLK*			Batch ID:	**11746**	Analysis Date:	11/16/2006 8:58:41 AM	
Calcium	ND	mg/L	1.0						
Sodium	ND	mg/L	1.0						
Sample ID: LCS-11746		*LCS*			Batch ID:	**11746**	Analysis Date:	11/16/2006 8:53:16 AM	
Arsenic	0.5143	mg/L	0.020	103	80	120			
Barium	0.4951	mg/L	0.020	99.0	80	120			
Cadmium	0.5012	mg/L	0.0020	100	80	120			
Calcium	53.42	mg/L	1.0	107	80	120			
Chromium	0.5086	mg/L	0.0060	102	80	120			
Lead	0.4945	mg/L	0.0050	98.9	80	120			
Magnesium	53.81	mg/L	1.0	108	80	120			
Potassium	57.58	mg/L	1.0	115	80	120			
Selenium	0.4749	mg/L	0.050	95.0	80	120			
Silver	0.5011	mg/L	0.0050	100	80	120			
Sodium	57.46	mg/L	1.0	115	80	120			
Sample ID: LCS-11746		*LCS*			Batch ID:	**11746**	Analysis Date:	11/15/2006 7:13:04 PM	
Cadmium	0.4806	mg/L	0.0020	96.1	80	120			
Chromium	0.4878	mg/L	0.0060	97.6	80	120			
Magnesium	54.21	mg/L	1.0	108	80	120			
Potassium	56.75	mg/L	1.0	114	80	120			
Sample ID: LCS-11746		*LCS*			Batch ID:	**11746**	Analysis Date:	11/16/2006 8:53:16 AM	
Calcium	53.42	mg/L	1.0	107	80	120			
Sodium	57.46	mg/L	1.0	115	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

lient: Giant Refining Co
Project: Annual GW Samples 2006 Ciniza **Work Order:** 0611016

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 0611016-04a msd		*MSD*			Batch ID:	**R21321**	Analysis Date:		11/7/2006
Benzene	18.60	µg/L	1.0	93.0	74.9	113	3.52	15	
Toluene	17.00	µg/L	1.0	85.0	80.4	111	1.44	15	
Chlorobenzene	19.68	µg/L	1.0	98.4	83.2	120	3.82	15	
1,1-Dichloroethene	18.95	µg/L	1.0	94.8	72	127	2.72	17.8	
Trichloroethene (TCE)	16.61	µg/L	1.0	83.1	58.2	131	3.36	19.8	
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R21321**	Analysis Date:		11/7/2006
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						

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: Annual GW Samples 2006 Ciniza

Work Order: 0611016

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R21321**	Analysis Date:		11/7/2006
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						
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						
rans-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: 5mL rb		*MBLK*			Batch ID:	**R21342**	Analysis Date:		11/8/2006
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						

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: Annual GW Samples 2006 Ciniza

Work Order: 0611016

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R21342**	Analysis Date:		11/8/2006
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						
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						

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: Annual GW Samples 2006 Ciniza **Work Order:** 0611016

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R21342**	Analysis Date:		11/8/2006
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-b		*LCS*			Batch ID:	**R21321**	Analysis Date:		11/7/2006
Benzene	18.27	µg/L	1.0	91.4	74.9	113			
Toluene	17.05	µg/L	1.0	85.3	80.4	111			
Chlorobenzene	20.26	µg/L	1.0	101	83.2	120			
1,1-Dichloroethene	18.32	µg/L	1.0	91.6	72	127			
Trichloroethene (TCE)	17.25	µg/L	1.0	86.2	58.2	131			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R21342**	Analysis Date:		11/8/2006
Benzene	18.16	µg/L	1.0	90.8	74.9	113			
Toluene	16.22	µg/L	1.0	81.1	80.4	111			
Chlorobenzene	18.37	µg/L	1.0	91.9	83.2	120			
1,1-Dichloroethene	19.73	µg/L	1.0	98.6	72	127			
Trichloroethene (TCE)	17.89	µg/L	1.0	89.5	58.2	131			
Sample ID: 0611016-04a ms		*MS*			Batch ID:	**R21321**	Analysis Date:		11/7/2006
Benzene	17.96	µg/L	1.0	89.8	74.9	113			
Toluene	17.24	µg/L	1.0	86.2	80.4	111			
Chlorobenzene	18.94	µg/L	1.0	94.7	83.2	120			
1,1-Dichloroethene	18.44	µg/L	1.0	92.2	72	127			
Trichloroethene (TCE)	17.18	µg/L	1.0	85.9	58.2	131			

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: 11/1/2006

Work Order Number 0611016

Received by AT

Checklist completed by _____ Signature _____ Date 11/1/06

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? **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: Annual Ground water samples 2006-Ciniza

Project #:

Project Manager: Steve Morris

Sampler: Steve Morris

Sample Temperature: Steve Morris 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative:	HEAL No. 0611016	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)	Gen. Chem				Air Bubbles or Headspace (Y or N)
10.28.06	1015	H_2O	BW-1C					-1								X			X	X	X				
10.28.06	1130	"	BW-2A					-2								X			X	X	X				
10.28.06	1330	"	BW-2B					-3								X			X	X	X				
10.28.06	1500	"	BW-2C					-4								X			X	X	X				
10.29.06	1000	"	BW-3B					-5								X			X	X	X				
10.29.06	1045		BW-3C					-6								X			X	X	X				
			Trip Blank					-7																	

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-1-06	1100	Steve Morris	11/1/06 1100
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Gen. Chem. = Cations anions, pH, + Conductivity

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, July 25, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Boundary Well 2B for Selenium

Order No.: 0607244

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 7/21/2006 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

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-Jul-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	BW-2B
Lab Order:	0607244	**Collection Date:**	7/19/2006 3:30:00 PM
Project:	Boundary Well 2B for Selenium	**Date Received:**	7/21/2006
Lab ID:	0607244-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010: DISSOLVED METALS						Analyst: **NMO**
Selenium	ND	0.050		mg/L	1	7/25/2006 11:36:17 AM
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Selenium	ND	0.050		mg/L	1	7/25/2006 9:13:00 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Boundary Well 2B for Selenium
Work Order: 0607244

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW6010A									
Sample ID: MB		*MBLK*			Batch ID:	**R20019**	Analysis Date:	7/25/2006 11:27:24 AM	
Selenium	ND	mg/L	0.050						
Sample ID: LCS		*LCS*			Batch ID:	**R20019**	Analysis Date:	7/25/2006 11:30:25 AM	
Selenium	0.4790	mg/L	0.050	95.8	80	120			
Method: SW6010A									
Sample ID: 0607244-01AMSD		*MSD*			Batch ID:	**10853**	Analysis Date:	7/25/2006 9:19:23 AM	
Selenium	0.4837	mg/L	0.050	96.7	75	125	0.983	20	
Sample ID: MB-10853		*MBLK*			Batch ID:	**10853**	Analysis Date:	7/25/2006 9:00:52 AM	
Selenium	ND	mg/L	0.050						
Sample ID: LCS-10853		*LCS*			Batch ID:	**10853**	Analysis Date:	7/25/2006 9:03:56 AM	
Selenium	0.4717	mg/L	0.050	94.3	80	120			
Sample ID: 0607244-01AMS		*MS*			Batch ID:	**10853**	Analysis Date:	7/25/2006 9:17:04 AM	
Selenium	0.4790	mg/L	0.050	95.8	75	125			

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: 7/21/2006

Work Order Number 0607244

Received by AT

Checklist completed by _____ Signature | 7/21/06 Date

Matrix

Carrier name FedEx

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? **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: Boundary Well 2B for Selenium
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~~ Selenium	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)
7/19/06	1530	H_2O	BW-2B	2		X		0607244-1								X									

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
7/20/06	1400	Steve Morris	7/21/06 1030
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH RCRA Metals Total and Dissolved for Selenium

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, August 22, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: GWM-1 Annual 2006

Order No.: 0608046

Dear Ed Riege:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 8/4/2006 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

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: *22-Aug-06*

CLIENT:	Giant Refining Co	Client Sample ID:	GWM-1
Lab Order:	0608046	Collection Date:	8/2/2006 2:00:00 PM
Project:	GWM-1 Annual 2006	Date Received:	8/4/2006
Lab ID:	0608046-01	Matrix:	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: TES
Fluoride	2.0	0.50		mg/L	5	8/4/2006 12:28:00 PM
Chloride	3700	10		mg/L	100	8/7/2006 1:51:51 PM
Nitrate (As N)+Nitrite (As N)	ND	2.0		mg/L	20	8/14/2006 7:17:23 PM
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	8/4/2006 12:28:00 PM
Sulfate	120	2.5		mg/L	5	8/4/2006 12:28:00 PM
EPA METHOD 7470: MERCURY						Analyst: MAP
Mercury	ND	0.00020		mg/L	1	8/15/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: CMC
Arsenic	0.077	0.020		mg/L	1	8/9/2006 2:35:20 PM
Barium	0.53	0.020		mg/L	1	8/10/2006 6:44:01 PM
Cadmium	ND	0.0020		mg/L	1	8/9/2006 2:35:20 PM
Calcium	380	20		mg/L	20	8/10/2006 7:52:38 PM
Chromium	ND	0.0060		mg/L	1	8/9/2006 2:35:20 PM
Lead	ND	0.0050		mg/L	1	8/9/2006 2:35:20 PM
Magnesium	93	1.0		mg/L	1	8/9/2006 2:35:20 PM
Potassium	4.2	1.0		mg/L	1	8/9/2006 2:35:20 PM
Selenium	ND	0.050		mg/L	1	8/9/2006 2:35:20 PM
Silver	ND	0.0050		mg/L	1	8/10/2006 6:44:01 PM
Sodium	1400	20		mg/L	20	8/10/2006 7:52:38 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: SCC
Acenaphthene	ND	10		µg/L	1	8/15/2006
Acenaphthylene	ND	10		µg/L	1	8/15/2006
Aniline	ND	20		µg/L	1	8/15/2006
Anthracene	ND	10		µg/L	1	8/15/2006
Azobenzene	ND	10		µg/L	1	8/15/2006
Benz(a)anthracene	ND	15		µg/L	1	8/15/2006
Benzo(a)pyrene	ND	15		µg/L	1	8/15/2006
Benzo(b)fluoranthene	ND	15		µg/L	1	8/15/2006
Benzo(g,h,i)perylene	ND	10		µg/L	1	8/15/2006
Benzo(k)fluoranthene	ND	10		µg/L	1	8/15/2006
Benzoic acid	ND	50		µg/L	1	8/15/2006
Benzyl alcohol	ND	20		µg/L	1	8/15/2006
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	8/15/2006
Bis(2-chloroethyl)ether	ND	15		µg/L	1	8/15/2006
Bis(2-chloroisopropyl)ether	ND	15		µg/L	1	8/15/2006
Bis(2-ethylhexyl)phthalate	ND	15		µg/L	1	8/15/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *22-Aug-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0608046	**Collection Date:**	8/2/2006 2:00:00 PM
Project:	GWM-1 Annual 2006	**Date Received:**	8/4/2006
Lab ID:	0608046-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: SCC
4-Bromophenyl phenyl ether	ND	10		µg/L	1	8/15/2006
Butyl benzyl phthalate	ND	15		µg/L	1	8/15/2006
Carbazole	ND	10		µg/L	1	8/15/2006
4-Chloro-3-methylphenol	ND	20		µg/L	1	8/15/2006
4-Chloroaniline	ND	20		µg/L	1	8/15/2006
2-Chloronaphthalene	ND	10		µg/L	1	8/15/2006
2-Chlorophenol	ND	10		µg/L	1	8/15/2006
4-Chlorophenyl phenyl ether	ND	15		µg/L	1	8/15/2006
Chrysene	ND	15		µg/L	1	8/15/2006
Di-n-butyl phthalate	ND	10		µg/L	1	8/15/2006
Di-n-octyl phthalate	ND	15		µg/L	1	8/15/2006
Dibenz(a,h)anthracene	ND	10		µg/L	1	8/15/2006
Dibenzofuran	ND	10		µg/L	1	8/15/2006
1,2-Dichlorobenzene	ND	10		µg/L	1	8/15/2006
1,3-Dichlorobenzene	ND	10		µg/L	1	8/15/2006
1,4-Dichlorobenzene	ND	10		µg/L	1	8/15/2006
3,3'-Dichlorobenzidine	ND	15		µg/L	1	8/15/2006
Diethyl phthalate	ND	10		µg/L	1	8/15/2006
Dimethyl phthalate	ND	10		µg/L	1	8/15/2006
2,4-Dichlorophenol	ND	10		µg/L	1	8/15/2006
2,4-Dimethylphenol	85	10		µg/L	1	8/15/2006
4,6-Dinitro-2-methylphenol	ND	50		µg/L	1	8/15/2006
2,4-Dinitrophenol	ND	50		µg/L	1	8/15/2006
2,4-Dinitrotoluene	ND	10		µg/L	1	8/15/2006
2,6-Dinitrotoluene	ND	10		µg/L	1	8/15/2006
Fluoranthene	ND	10		µg/L	1	8/15/2006
Fluorene	ND	10		µg/L	1	8/15/2006
Hexachlorobenzene	ND	10		µg/L	1	8/15/2006
Hexachlorobutadiene	ND	10		µg/L	1	8/15/2006
Hexachlorocyclopentadiene	ND	10		µg/L	1	8/15/2006
Hexachloroethane	ND	10		µg/L	1	8/15/2006
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	8/15/2006
Isophorone	ND	10		µg/L	1	8/15/2006
2-Methylnaphthalene	ND	10		µg/L	1	8/15/2006
2-Methylphenol	ND	15		µg/L	1	8/15/2006
3+4-Methylphenol	ND	20		µg/L	1	8/15/2006
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	8/15/2006
N-Nitrosodimethylamine	ND	10		µg/L	1	8/15/2006
N-Nitrosodiphenylamine	ND	10		µg/L	1	8/15/2006
Naphthalene	ND	10		µg/L	1	8/15/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *22-Aug-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0608046	**Collection Date:**	8/2/2006 2:00:00 PM
Project:	GWM-1 Annual 2006	**Date Received:**	8/4/2006
Lab ID:	0608046-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: SCC
2-Nitroaniline	ND	50		µg/L	1	8/15/2006
3-Nitroaniline	ND	50		µg/L	1	8/15/2006
4-Nitroaniline	ND	20		µg/L	1	8/15/2006
Nitrobenzene	ND	10		µg/L	1	8/15/2006
2-Nitrophenol	ND	15		µg/L	1	8/15/2006
4-Nitrophenol	ND	50		µg/L	1	8/15/2006
Pentachlorophenol	ND	50		µg/L	1	8/15/2006
Phenanthrene	ND	10		µg/L	1	8/15/2006
Phenol	ND	10		µg/L	1	8/15/2006
Pyrene	ND	15		µg/L	1	8/15/2006
Pyridine	ND	30		µg/L	1	8/15/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	1	8/15/2006
2,4,5-Trichlorophenol	ND	10		µg/L	1	8/15/2006
2,4,6-Trichlorophenol	ND	15		µg/L	1	8/15/2006
Surr: 2,4,6-Tribromophenol	86.6	16.6-150		%REC	1	8/15/2006
Surr: 2-Fluorobiphenyl	63.7	19.6-134		%REC	1	8/15/2006
Surr: 2-Fluorophenol	52.4	9.54-113		%REC	1	8/15/2006
Surr: 4-Terphenyl-d14	67.5	22.7-145		%REC	1	8/15/2006
Surr: Nitrobenzene-d5	65.4	14.6-134		%REC	1	8/15/2006
Surr: Phenol-d5	48.6	10.7-80.3		%REC	1	8/15/2006
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	12	10		µg/L	10	8/4/2006
Toluene	ND	10		µg/L	10	8/4/2006
Ethylbenzene	ND	10		µg/L	10	8/4/2006
Methyl tert-butyl ether (MTBE)	160	15		µg/L	10	8/4/2006
1,2,4-Trimethylbenzene	ND	10		µg/L	10	8/4/2006
1,3,5-Trimethylbenzene	ND	10		µg/L	10	8/4/2006
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	8/4/2006
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	8/4/2006
Naphthalene	ND	20		µg/L	10	8/4/2006
1-Methylnaphthalene	ND	40		µg/L	10	8/4/2006
2-Methylnaphthalene	ND	40		µg/L	10	8/4/2006
Acetone	ND	100		µg/L	10	8/4/2006
Bromobenzene	ND	10		µg/L	10	8/4/2006
Bromochloromethane	ND	10		µg/L	10	8/4/2006
Bromodichloromethane	ND	10		µg/L	10	8/4/2006
Bromoform	ND	10		µg/L	10	8/4/2006
Bromomethane	ND	20		µg/L	10	8/4/2006
2-Butanone	ND	100		µg/L	10	8/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *22-Aug-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0608046	**Collection Date:**	8/2/2006 2:00:00 PM
Project:	GWM-1 Annual 2006	**Date Received:**	8/4/2006
Lab ID:	0608046-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMN
Carbon disulfide	ND	100		µg/L	10	8/4/2006
Carbon Tetrachloride	ND	20		µg/L	10	8/4/2006
Chlorobenzene	ND	10		µg/L	10	8/4/2006
Chloroethane	ND	20		µg/L	10	8/4/2006
Chloroform	ND	10		µg/L	10	8/4/2006
Chloromethane	ND	10		µg/L	10	8/4/2006
2-Chlorotoluene	ND	10		µg/L	10	8/4/2006
4-Chlorotoluene	ND	10		µg/L	10	8/4/2006
cis-1,2-DCE	ND	10		µg/L	10	8/4/2006
cis-1,3-Dichloropropene	ND	10		µg/L	10	8/4/2006
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	8/4/2006
Dibromochloromethane	ND	10		µg/L	10	8/4/2006
Dibromomethane	ND	20		µg/L	10	8/4/2006
1,2-Dichlorobenzene	ND	10		µg/L	10	8/4/2006
1,3-Dichlorobenzene	ND	10		µg/L	10	8/4/2006
1,4-Dichlorobenzene	ND	10		µg/L	10	8/4/2006
Dichlorodifluoromethane	ND	10		µg/L	10	8/4/2006
1,1-Dichloroethane	ND	20		µg/L	10	8/4/2006
1,1-Dichloroethene	ND	10		µg/L	10	8/4/2006
1,2-Dichloropropane	ND	10		µg/L	10	8/4/2006
1,3-Dichloropropane	ND	10		µg/L	10	8/4/2006
2,2-Dichloropropane	ND	20		µg/L	10	8/4/2006
1,1-Dichloropropene	ND	10		µg/L	10	8/4/2006
Hexachlorobutadiene	ND	20		µg/L	10	8/4/2006
2-Hexanone	ND	100		µg/L	10	8/4/2006
Isopropylbenzene	ND	10		µg/L	10	8/4/2006
4-Isopropyltoluene	ND	10		µg/L	10	8/4/2006
4-Methyl-2-pentanone	ND	100		µg/L	10	8/4/2006
Methylene Chloride	ND	30		µg/L	10	8/4/2006
n-Butylbenzene	ND	10		µg/L	10	8/4/2006
n-Propylbenzene	ND	10		µg/L	10	8/4/2006
sec-Butylbenzene	ND	20		µg/L	10	8/4/2006
Styrene	ND	15		µg/L	10	8/4/2006
tert-Butylbenzene	ND	10		µg/L	10	8/4/2006
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	8/4/2006
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	8/4/2006
Tetrachloroethene (PCE)	ND	10		µg/L	10	8/4/2006
trans-1,2-DCE	ND	10		µg/L	10	8/4/2006
trans-1,3-Dichloropropene	ND	10		µg/L	10	8/4/2006
1,2,3-Trichlorobenzene	ND	10		µg/L	10	8/4/2006

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

Hall Environmental Analysis Laboratory, Inc.

Date: *22-Aug-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	GWM-1
Lab Order:	0608046	**Collection Date:**	8/2/2006 2:00:00 PM
Project:	GWM-1 Annual 2006	**Date Received:**	8/4/2006
Lab ID:	0608046-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
1,2,4-Trichlorobenzene	ND	10		µg/L	10	8/4/2006
1,1,1-Trichloroethane	ND	10		µg/L	10	8/4/2006
1,1,2-Trichloroethane	ND	10		µg/L	10	8/4/2006
Trichloroethene (TCE)	ND	10		µg/L	10	8/4/2006
Trichlorofluoromethane	ND	10		µg/L	10	8/4/2006
1,2,3-Trichloropropane	ND	20		µg/L	10	8/4/2006
Vinyl chloride	ND	10		µg/L	10	8/4/2006
Xylenes, Total	ND	30		µg/L	10	8/4/2006
Surr: 1,2-Dichloroethane-d4	98.4	69.9-130		%REC	10	8/4/2006
Surr: 4-Bromofluorobenzene	104	75-139		%REC	10	8/4/2006
Surr: Dibromofluoromethane	96.9	57.3-135		%REC	10	8/4/2006
Surr: Toluene-d8	107	81.9-122		%REC	10	8/4/2006
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: CMC
Specific Conductance	8500	0.010		µmhos/cm	1	8/15/2006
EPA METHOD 150.1: PH						Analyst: CMC
pH	6.87	0.010		pH units	1	8/4/2006

Qualifiers:

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E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: GWM-1 Annual 2006

Work Order: 0608046

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E300									
Sample ID: MBLK		*MBLK*			Batch ID:	R20174	Analysis Date:	8/3/2006 4:09:29 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	R20183	Analysis Date:	8/6/2006 1:57:31 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	R20196	Analysis Date:	8/7/2006 11:39:12 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MBLK		*MBLK*			Batch ID:	R20300	Analysis Date:	8/14/2006 12:25:45 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS ST300-06008		*LCS*			Batch ID:	R20174	Analysis Date:	8/3/2006 4:26:53 PM	
Fluoride	0.4796	mg/L	0.10	95.9	90	110			
Chloride	4.897	mg/L	0.10	97.9	90	110			
Nitrate (As N)+Nitrite (As N)	3.440	mg/L	0.10	98.3	90	110			
Phosphorus, Orthophosphate (As P)	4.934	mg/L	0.50	98.7	90	110			
Sulfate	10.09	mg/L	0.50	101	90	110			
Sample ID: LCS ST300-06008		*LCS*			Batch ID:	R20183	Analysis Date:	8/6/2006 2:14:55 PM	
Fluoride	0.4843	mg/L	0.10	96.9	90	110			
Chloride	5.025	mg/L	0.10	101	90	110			
Nitrate (As N)+Nitrite (As N)	3.578	mg/L	0.10	102	90	110			
Phosphorus, Orthophosphate (As P)	5.041	mg/L	0.50	101	90	110			
Sulfate	10.18	mg/L	0.50	102	90	110			
Sample ID: LCS ST300-06008		*LCS*			Batch ID:	R20196	Analysis Date:	8/7/2006 11:56:36 AM	
Fluoride	0.4523	mg/L	0.10	90.5	90	110			
Chloride	4.859	mg/L	0.10	97.2	90	110			
Nitrate (As N)+Nitrite (As N)	3.444	mg/L	0.10	98.4	90	110			
Phosphorus, Orthophosphate (As P)	4.812	mg/L	0.50	96.2	90	110			
Sulfate	9.830	mg/L	0.50	98.3	90	110			
Sample ID: LCS ST300-06008		*LCS*			Batch ID:	R20300	Analysis Date:	8/14/2006 12:43:09 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: Giant Refining Co
Project: GWM-1 Annual 2006

Work Order: 0608046

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: E300									
Sample ID: LCS ST300-06008		*LCS*			Batch ID:	R20300	Analysis Date:	8/14/2006 12:43:09 PM	
Fluoride	0.4765	mg/L	0.10	95.3	90	110			
Chloride	4.953	mg/L	0.10	99.1	90	110			
Nitrate (As N)+Nitrite (As N)	3.470	mg/L	0.10	99.2	90	110			
Phosphorus, Orthophosphate (As P)	4.978	mg/L	0.50	99.6	90	110			
Sulfate	10.46	mg/L	0.50	101	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 2006
Work Order: 0608046

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: mb-10987		*MBLK*			Batch ID:	10987	Analysis Date:		8/15/2006
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	15						
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: GWM-1 Annual 2006 **Work Order:** 0608046

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: mb-10987		*MBLK*			Batch ID:	10987	Analysis Date:		8/15/2006
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	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-10987		*LCS*			Batch ID:	10987	Analysis Date:		8/15/2006
Acenaphthene	65.72	µg/L	10	65.7	11	123			
4-Chloro-3-methylphenol	140.0	µg/L	20	70.0	15.4	119			
2-Chlorophenol	124.1	µg/L	10	62.0	12.2	122			
1,4-Dichlorobenzene	53.10	µg/L	10	53.1	16.9	100			
2,4-Dinitrotoluene	69.86	µg/L	10	69.9	13	138			
N-Nitrosodi-n-propylamine	67.28	µg/L	10	67.3	9.93	122			
4-Nitrophenol	82.46	µg/L	50	41.2	12.5	87.4			
Pentachlorophenol	155.2	µg/L	50	77.6	3.55	114			
Phenol	77.46	µg/L	10	38.7	7.53	73.1			
Pyrene	74.88	µg/L	15	74.9	12.6	140			
1,2,4-Trichlorobenzene	58.80	µg/L	10	58.8	17.4	98.7			
Sample ID: lcsd-10987		*LCSD*			Batch ID:	10987	Analysis Date:		8/15/2006
Acenaphthene	64.90	µg/L	10	64.9	11	123	1.26	30.5	
4-Chloro-3-methylphenol	136.0	µg/L	20	68.0	15.4	119	2.86	28.6	
2-Chlorophenol	125.8	µg/L	10	62.9	12.2	122	1.38	107	
1,4-Dichlorobenzene	55.42	µg/L	10	55.4	16.9	100	4.28	62.1	
2,4-Dinitrotoluene	65.64	µg/L	10	65.6	13	138	6.23	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 2006 **Work Order:** 0608046

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: lcsd-10987		*LCSD*			Batch ID:	10987	Analysis Date:		8/15/2006
N-Nitrosodi-n-propylamine	60.74	µg/L	10	60.7	9.93	122	10.2	30.3	
4-Nitrophenol	79.10	µg/L	50	39.6	12.5	87.4	4.16	36.3	
Pentachlorophenol	154.0	µg/L	50	77.0	3.55	114	0.776	49	
Phenol	76.22	µg/L	10	38.1	7.53	73.1	1.61	52.4	
Pyrene	72.70	µg/L	15	72.7	12.6	140	2.95	16.3	
1,2,4-Trichlorobenzene	59.64	µg/L	10	59.6	17.4	98.7	1.42	36.4	
Method: SW7470									
Sample ID: MB-11039		*MBLK*			Batch ID:	11039	Analysis Date:		8/15/2006
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-11039		*LCS*			Batch ID:	11039	Analysis Date:		8/15/2006
Mercury	0.005235	mg/L	0.00020	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 Co
Project: GWM-1 Annual 2006 **Work Order:** 0608046

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW6010A									
Sample ID: MB-10972		*MBLK*			Batch ID:	10972	Analysis Date:	8/9/2006 1:17:52 PM	
Arsenic	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						
Sodium	ND	mg/L	1.0						
Sample ID: MB-10972		*MBLK*			Batch ID:	10972	Analysis Date:	8/10/2006 6:15:43 PM	
Barium	ND	mg/L	0.020						
Calcium	ND	mg/L	1.0						
Silver	ND	mg/L	0.0050						
Sodium	ND	mg/L	1.0						
Sample ID: LCS-10972		*LCS*			Batch ID:	10972	Analysis Date:	8/9/2006 1:20:55 PM	
Arsenic	0.5138	mg/L	0.020	102	80	120			
Cadmium	0.4918	mg/L	0.0020	98.4	80	120			
Calcium	49.14	mg/L	1.0	98.3	80	120			
Chromium	0.4929	mg/L	0.0060	98.6	80	120			
Lead	0.4863	mg/L	0.0050	97.3	80	120			
Magnesium	49.39	mg/L	1.0	98.8	80	120			
Potassium	51.57	mg/L	1.0	103	80	120			
Selenium	0.4925	mg/L	0.050	98.5	80	120			
Sodium	52.08	mg/L	1.0	104	80	120			
Sample ID: LCS-10972		*LCS*			Batch ID:	10972	Analysis Date:	8/10/2006 6:18:45 PM	
Barium	0.4765	mg/L	0.020	95.3	80	120			
Calcium	49.50	mg/L	1.0	99.0	80	120			
Silver	0.4855	mg/L	0.0050	97.1	80	120			
Sodium	53.12	mg/L	1.0	106	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: GWM-1 Annual 2006

Work Order: 0608046

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	R20161	Analysis Date:		8/4/2006
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: GWM-1 Annual 2006

Work Order: 0608046

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	R20181	Analysis Date:		8/4/2006
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:	R20181	Analysis Date:		8/4/2006
Benzene	19.09	µg/L	1.0	95.5	71	124			
Toluene	18.01	µg/L	1.0	90.1	81.5	118			
Chlorobenzene	17.63	µg/L	1.0	88.2	81.2	132			
1,1-Dichloroethene	18.03	µg/L	1.0	90.2	65.5	134			
Trichloroethene (TCE)	17.87	µg/L	1.0	89.4	69.5	119			

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: 8/4/2006

Work Order Number 0608046

Received by GLS

Checklist completed by _____ Signature | Date 8/4/06

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? 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

Client: Giant Refining Co Ciniza

Address: Route 3 Box 7 Gallup, NM 87301

Phone #: 505-722-3833

Fax #: 505-722-0216

QA / QC Package: Std ☐ Level 4 ☐ Other:

Project Name: GWM-1 ANNUAL 2006

Project #:

Project Manager: ED RIEGE

Sampler: JJ + CJ

Sample Temperature: 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: H_2SO_4	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	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)
8/2/06	1400 Hrs	H_2O	GWM-1	1 500mL		X			D606046-1								X									
↓	↓	↓	↓	1 500mL			X		—													X				
				1 500mL		X			—													X				
				1L PLASTIC UNPRESERVED					—													X				
				1L GLASS AMBER UNPRESERVED					—												X					
				3 VOAS				X	—											X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
8/4/06	0930	[signature]	[signature] 8-4-06 930
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: GEN. CHEM = CATIONS, ANIONS, PH + CONDUCTIVITY

6. Summary of Groundwater Testing

OW-11

A grab sample from OW-11 was taken on October 26, 2006 . The sample was analyzed for RCRA Metals, VOC, SVOC, BTEX, MTBE and general chemistry. Lab results showed results less than the New Mexico Water Quality Standards (NMWQS) for anions, VOCs, SVOCs, and metals. All the tested parameters were less than the applicable MCLs, NM ground water, and NM TPH screening levels. However, 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).

RECOMMENDATION: *Giant Gallup will continue to test OW-11 on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry*

OW-12

OW-12 was sampled on October 27, 2006 and analyzed for BTEX and MTBE. Lab analysis showed all parameters at concentrations less than (all non-detect) the NMWQS for BTEX and MTBE.

RECOMMENDATION: *Giant Gallup will continue to monitor OW-12 on an annual basis for BTEX and MTBE*

OW-13

OW-13 was sampled on October 27, 2006 and analyzed for BTEX and MTBE. Lab analysis showed all parameters at concentrations less than (all non-detect) the NMWQS for BTEX compounds and MTBE.

RECOMMENDATION: *Giant Gallup will continue to monitor OW-13 on an annual basis for BTEX and MTBE*

OW-14

OW-14 was sampled on October 29, 2006 and on December 28, 2006 and analyzed for BTEX and MTBE. **Lab analysis on the two sample events in 2006 showed all parameters at concentrations less than the NMWQS for BTEX compounds and MTBE. Benzene had shown up at levels exceeding the NMWQS in the 2004 and 2005 samplings.**

RECOMMENDATION: Well *OW-14 is to be sampled on a semi-annual basis. This well has been known to contain contaminants. Wells OW-12, OW-13, OW- 29, and OW-30 were installed to monitor if contaminants from OW-14 were migrating.* ***Data from the additional wells have not shown any signs of contaminants.***

OW-29

OW-29 was sampled on October 27, 2006 and analyzed for BTEX and MTBE. Lab analysis showed concentrations less than (all non-detect) the NMWQS for Benzene, Toluene, Ethylbenzene, Xylene, and MTBE.

RECOMMENDATION: *Giant Gallup will continue to monitor OW-29 on an annual basis for BTEX and MTBE*

OW-30

OW-30 was sampled on October 27, 2006 and analyzed for BTEX and MTBE. Lab analysis showed concentrations less than the NMWQS for Benzene, Toluene, Ethylbenzene, Xylene, and MTBE.

RECOMMENDATION: *Giant Gallup will continue to monitor OW-30 on an annual basis for BTEX and MTBE*

BW-1-A

BW-1-A is a dry well and therefore was not sampled in 2006.

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 2006.

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 October 28, 2006 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 (2.7 mg/l) was greater than the NMWQS (1.6 mg/l).

RECOMMENDATION: *Giant Gallup 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 October 28, 2006 and analyzed for VOC, SVOC, BTEX, MTBE, recoverable metals, and General Chemistry. Lab results showed all parameters less than NMWQS.

RECOMMENDATION: *Giant Gallup 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 October 28, 2006 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 (1.9 mg/l) than the NMWQS (1.6 mg/l).

RECOMMENDATION: *Giant Gallup will continue to monitor BW-2-B on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry. All future lab reports will be compared to past data to determine if levels of Selenium are increasing or remaining static. Selenium in 2006 was less than the detection level (<0.050 mg/l) .*

BW-2-C

BW-2-C was sampled on October 28, 2006 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 (2.4 mg/l) than the NMWQS (1.6 mg/l).

RECOMMENDATION: Giant Gallup 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: *Giant Gallup 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 October 29, 2006 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 (1.7 mg/l) than the NMWQS (1.6 mg/l).

RECOMMENDATION: *Giant Gallup 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 October 29, 2006 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

GWM-1 was inspected for presence of water in 2006 on March 9, May 26, July 26, and October 13. Ground water was sampled on August 2, 2006; the sample was analyzed for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry. The sample showed benzene present at 0.012 mg/l which is greater than the 0.005 mg/l MCL standard for benzene. All other results from the August 2 sampling were less than the NMWQS except fluoride (2.0 mg/l), chloride (3,700 mg/l), and arsenic (0.077 mg/l) which were greater than the NMWQS for fluoride (1.6 mg/l), chloride (250 mg/l), and arsenic (0.05 mg/l).

RECOMMENDATION: *Giant Gallup will monitor GWM-1 on an annual basis for VOC, SVOC, BTEX, MTBE, Metals, and General Chemistry. Gallup also checks GWM-1 on a quarterly basis for the presence of water. Based on 2006 lab data, discussions with NMED and NMOCD are ongoing and sampling maybe changed*

GWM-2

GWM-2 was installed in the Fall of 2005 and was dry. It was inspected for presence of groundwater in 2006 on January 18, May 26, July 26, and October 13. It was dry at all the inspections.

RECOMMENDATION: *Giant Gallup will monitor GWM-2 on a quarterly basis for the presence of water. If water is found, Giant will contact OCD/HWB immediately.*

GWM-3

GWM-3 was installed in the Fall of 2005 and was dry. It was inspected for presence of groundwater in 2006 on October 13. It was dry at the inspection.

RECOMMENDATION: *Giant Gallup will monitor GWM-3 on a quarterly basis for the presence of water. If water is found, Giant will contact OCD/HWB immediately.*

Pond #1 Inlet

Pond #1 inlet was sampled on March 30, 2006 and October 30, 2006 for BTEX, VOCs, and RCRA 8 metals (VOCs were inadvertently tested rather than SVOCs). Benzene, 2-methylnaphthalene, and lead exceeded the NMWQS; all other parameters were less than the NMWQS.

RECOMMENDATION: *Giant Gallup will continue to monitor Pond 1inlet on a semi-annual basis for BTEX, SVOCs and RCRA 8 metals.*

POND #2 Inlet

Pond #2 inlet was sampled on October 31, 2006 for BTEX, MTBE, and TDS. TDS exceeds the NMWQS; BTEX and MTBE were less than the NMWQS. It was sampled many times in 2006 for BOD and COD (a summary of the test results is included in Section 21. 3. b. in the OCD Addendum, Binder 2). This evaluation is not to be confused with the general chemistry evaluation, as for Pond 7, described in the next section.

RECOMMENDATION: *Giant Gallup will continue to monitor Pond 2on an annual basis for BTEX, MTBE, BOD, COD, and TDS. Moreover, in 2006 Giant will monitor above this point (pond 1) for any contaminants.*

Pond 7

Giant is required to sample on an annual basis one of the evaporation ponds for general chemistry parameters. Pond 7 was sampled on October 31, 2006 for general chemistry. As to be expected in water from evaporation ponds, the water sample was high in chloride, sodium and sulfate.

RECOMMENDATION: *Giant Gallup will continue to perform a general chemistry evaluation of one of the evaporation ponds on an annual basis for general chemistry. The pond selection will be at Giant's discretion.*

PW-2

PW-2 was not required to be sampled in 2005.

RECOMMENDATION: *Giant Gallup 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 2006. All parameters are less than the applicable NMWQS and MCLs.

RECOMMENDATION: *Giant Gallup will monitor PW-3 according to the discharge plan. Sampling will be conducted every 3 years beginning in 2006*

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

GROUND WATER DEPTH TO WATER 2006

WELL #	DTW:	BTM:	DATE:
BW-1A	Dry	37.8	10-24-06
BW-1B	67.55	1 ft H_2O	"
BW-1C	7.55		"
BW-2A	23.03		"
BW-2B	27.78		"
BW-2C	20.25		"
BW-3A	Dry	52.60	"
BW-3B	32.78		"
BW-3C	8.40		"
OW-11	21.95		"
OW-12	49.17		"
OW-13	24.36		"
OW-14	27.38		"
OW-29	21.95		"
OW-30	26.43		"
MW-1	7.58		"

BW-1B not enough water to sample.

OW-1 10/26/06 DPW - 7.58 ft.
Cold / Windy / Pt Cloudy
Attendees / Steve Morris, Cheryl Morris
Start Purge 9:45
Sample 11:00 AM
3 W Vols. = 429.18 gals
Purged 175 gal. Lost Suction, waited 10 min.
& Sampled.
Water Clear / No odor
0945 Calibrated pH & Cond. Meter 10.26.06

OW-11 10/26/06 DPW - 21.10 ft.
Cold Windy
Attendees Steve Morris & Cheryl Morris
Start Purge 13:15 pm 105 gals. Purged
Sample 14:00 pm
Portable pump Lowered to 55 ft.
3 W. Vols = 101.05 gals
Water Clear / No odor

OW-12 10/26/06
Cold Windy / Pt. Cloudy
DTW 49.14
Attendees Steve Morris, Cheryl Morris
Start Purge time 14:30
Sample time
3 W Vols = 212.8 gals

Con. Pg 2

Pumped gals, Lost Suction time
Pump depth 120 ft.
Tried to lower pump to 130 feet but hit either bottom of well or obstruction at about 126 feet.
Water Clear / No Odor

OW-12 10/27/06 DTW 61.34 ft. 8:30 AM
Clear skies, Cold, wind still.
43 gals. Available in well
10.27.06 Purge 20 gal.
Calibrated pH & Con. Meter
345 Purge time - 8:45 Lowered Pump to 120 ft.
Sample time - 9:15
Water Clear / No odor

OW-13 10.27.06 (DTW) 24.38
Clear skies, Cold, wind still
Purge Gals 170 gals.
Purge - time 0935 Purge Liquid Depth 24.38
Sample time - 01030
Pump depth - 90 ft
3 Well Depts = 167.88 gals.
Water Clear / No odor

OW-29 10.27.06
Clear skies, Cold, wind still
Pump Dept. 45 3 Well Vols. = 66.64 gals
Well Dept. 52 Dept. to Water 21.98
Purge time - 1100 Purged 44 gals + Lost Suction.
Sample time - 12:30

Page 2 of 1

CW-29 water slightly cloudy / No odor

OW-30 10.27.06

Clear, Cold, Slight Breeze

DTW - 26.45

Purge gals 48.84 gals purge time 1330

Well Depth 48 ft.

Pump Depth 42 ft

3 Well Vols = 47.84 ft.

Water Clear / No odor

Sample time 1400

PW-3 10.27.06

Clear, Cold, Slight Breeze

Sample time 01445

Grab sample	8260	x 3	Preservative HCL
	8270	x 1	None
	Cyanide	x 1	NaOH
	Nitrates	x 2	None / H_2SO_4
	RCRA metals total	x 1	

Gathered Water in 2 gal. filtered Water jugs filled Sample bottles @ Shed, Vapors in the Air @ PW-3 Well.

BW-1-C 10.28.06

Cold, Sunny, slight Breeze

Purge time - 0930 Purged 5 gals, Lost Suction & Sampled 01015

Dtw - 7.55 ft.

DED Pump

Well Dpth. 157 3 Well Vols. = 73.08

Sample time - 01015

Dtw - 7.55 ft.

8260 VOA x 3 HCL

157
- 7.55
x .163
x 3

RCRA metals + totals → HNO3 x 1
Gen Chem
8270 → glass amber x 1 None
Gen Chem | NONE x 1
Gen Chem. H_2SO_4 x 1
(7 - Bottles)

BW-2-A 10.28.06

Cold, Sunny, slight Breeze

Purge time - 1115 Purged 17 gal.s.

Dtw - 31.98 ft.

Well Dept. 65 ft.

3 Well Vols = 16.15 gals

DED Pump

Sample time. 1130

Con. Pg. 5

1-2-B 10.28.06

Cold, Sunny, No Wind

Purge time 1300 Purged 16 gals Lost Suction! Waited 15 min. Sampled.

Dtw 27.78

Well Depth. 90.5

3 Well Vols. = 30.67

Sample time - 1330

Cloudy sample Water

BW-2-C 10.28.06

Moderate, Sunny, No Wind

Purge time - 1400 Purged 28 gals, Lost suction. waited 30 mins & sampled.

Dtw - 20.26

Well Depth. 170 ft.

3 Well Vols = 73.22

Sample time - 1500

Well Depth 170 ft

Con. page 6

BW-3-B 10.29.06

Cold, Partically Cloudy, Slight Breeze

Purge time 0900 Purged Amount 12 gals. Cloudy Water
Lost Suction.

DtW- 32.75

Well Depth 72 ft

3 Well Vols. = 19.19 gals

Voa x 3 HLC

sample time 1000

BW-3-C 10.29.06

Cold, Partically Cloudy, Slight Breeze,

Purge time 1015 Purged amount 19.41 gal Lost Suction

DtW 8.40

(History Notes) Lowered pump to 80' well ran over. 10-12 gals lost Suction 5 min. Lowered again to 120'

Well Depth 155 ft

3 Well Vols = 71.69 gals.

~~Lowered Pump to~~

sample time 1045

Slightly Cloudy Water

Con. pg. 7

MW-14 10.29.06

Cold, Overcast, slight Breeze

Purge time - 1300 purged amount - 40 gals

Dtw - 27.25

Well Depth 45 ft.

3 Well Vols = 39.40 VOA x 3

Sample time. 1330

WELL #	OW-12	OW-13	OW-14	OW29	OW-30	OW-11	MW-1					
PURGE DATE	10-26-06	10-27-06	10-29-06	10-27-06	10-27-06	10/26/06	10/26/06					
PURGE TIME	14:30	0935	1300	1100	1330	13:15	0945					
OVA READING												
LIQUID DEPTH	49.14	24.38	27.25	21.98	26.45	21.10	7.58					
PUMP DEPTH	120ft	90ft.		45ft	42ft.	55ft.	Ded.					
IMMISC. LAYER												
FLOW RATE												
PUMP TIME												

OW-12 61.34 ft

SAMPLE DAY	10-27-06	10-27-06	10-29-06	10-27-06	10-27-06	10/26/06	10/26/06					
SAMPLE TIME	0915	1030	1330	12:30	1400	14:00	11:60					
OVA READING												
LIQUID DEPTH	61.34	24.38	27.25	21.98	26.45	21.10	7.58'					
1) TEMP. F	56	56	57	55	56	56	56					
pH	9.61	8.26	6.88	7.66	7.30	8.58	9.1					
SP. COND.	1190	1295	2540	1702	1675	2980	1192					
2) TEMP. F	56	56	57	55	56	56	56					
pH	9.65	8.31	6.83	7.53	7.25	8.52	9.22					
SP. COND.	1177	1295	2540	1696	1671	3000	1192					
3) TEMP. F	56	56	57	55	56	56	56					
pH	9.64	8.28	6.81	7.48	7.24	8.55	9.16					
SP. COND.	1165	1293	2520	1702	1670	2960	1190					
4) TEMP. F	56	56	57	55	56	56	56					
pH	9.64	8.28	6.80	7.42	7.23	8.51	9.14					
SP. COND.	1169	1287	2530	1698	1672	2990	1185					

Nitrates
H_2SO_4

WELL #	BW-1-C	BW-2-A	BW-2B	BW-2-C	BW-3-B	BW-3-C						
PURGE DATE	10.28.06	10.28.06	10.28.06	10.28.06	10.29.06	10.29.06						
PURGE TIME	0930	1115	1300	1400	0900	1015						
OVA READING												
LIQUID DEPTH	7.55	31.98	27.78	20.26	32.75	8.40						
PUMP DEPTH	DED	DED	DED	140	DED	155						
IMMISC. LAYER												
FLOW RATE												
PUMP TIME												

SAMPLE DAY	10.28.06	10.28.06	10.28.06	10.28.06	10.29.06	10.29.06						
SAMPLE TIME	01015	1120	1330	1500	1000	1045						
OVA READING												
LIQUID DEPTH	7.55	31.98	27.78	20.26	32.75	8.40						
1) TEMP. F	57	56	56	56	56	56						
pH	8.39	7.44	7.58	8.52	7.88	8.39						
SP. COND.	1352	1352	2290	1375	1547	1442						
2) TEMP. F	57	56	56	56	56	56						
pH	8.41	7.44	7.49	8.48	7.85	8.38						
SP. COND.	1352	1350	2290	1368	1558	1448						
3) TEMP. F	57	56	56	56	56	56						
pH	8.35	7.45	7.52	8.47	7.83	8.38						
SP. COND.	1359	1357	2310	1360	1558	1439						
4) TEMP. F	57	56	56	56	56	56						
pH	8.36	7.44	7.51	8.50	7.82	8.38						
SP. COND.	1346	1356	2310	1378	1550	1432						

32.75

Volume of Product Recovered

RW-1 HYDROCARBON RECOVERY LOG
2/22/05 TO 6/14/07

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
					Total Gallons		457.275	2411

WELL VOLUME SHEET

WELL	TOTAL DEPTH	DEPTH TO WATER	CAPACITY GALLON 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			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		

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)
3/16/2006	1300 Hrs.	1st	**RW-1**	32'-2 3/4"	34'-5 3/4"	2'-3"	* 7
3/16/2006	1430 Hrs.	1st	**RW-2**	No Product	27'-10 3/4"	0	0
3/16/2006	1450 Hrs.	1st	**RW-5**	32'-7"	33'-0"	0'-5"	1
3/17/2006	1245Hrs	1st	**RW-6**	32'-8"	33'-9"	1'-1"	2 1/2
Name and Title of person who performed measurement: Johnny Sanchez (Environmental Specialist)							

* Started pumping 3-16-06 at 1430 Hrs. Shut Off pump 3/23/06 at 1430 Hrs. Start Pumping 3/27/06 at 1530 Hrs. 3/31/06 at 1130 Hrs. Pumped 174 Gallons of water and 7 Gallons of Product.

Signature: Johnny Sanchez

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)
6/6/2006	1330 Hrs.	2nd.	**RW-1**	32'-4 3/4"	34'-6 1/2"	2'-1 3/4"	***
6/1/2006	1500 Hrs.	2nd.	**RW-2**	No Product	27'-11 3/4"	0	0
6/1/2006	1540 Hrs.	2nd.	**RW-5**	32'-9 1/2"	33'-2"	0'-4 1/2"	1
6/7/2006	1505 Hrs.	2nd.	**RW-6**	32'-11"	34'-0 1/2"	1'-1 1/2"	2 1/2

Name and Title of person who performed measurement: Johnny Sanchez (Environmental Specialist)

*** Pumped RW-1 from 6-8-06 to 6-29-06 intermittingly, 365 gallons of water and 8 gallons of product.

Signature: Johnny Sanchez

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)
7/31/2006	1050 hrs	3rd	**RW-1**	33'-0 3/4"	33'-5 3/4"	0'-5"	*4.9
7/26/2006	1145 hrs	3rd	**RW-2**	No Product	28'-2 3/4"	0	0
7/26/2006	1435 Hrs.	3rd	**RW-5**	32'-10 3/4"	33'-3 3/4"	0'-7"	3/8
7/26/2006	1500 Hrs.	3rd	**RW-6**	33'-0"	34'-1 1/2"	1'-1 1/2"	1 1/2

Name and Title of person who performed measurement: Johnny Sanchez & Cheryl Johnson (Environmental Specialist)

Measured to top of steel casings on all wells. * started pumping at 11:45AM 7/31/06. Completed pumping to all 8 drums on 8/22/06. Total gallons pumped 373 gallons; 4.9 gals of product.

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)
12/21/2006	1055 hrs	4th	**RW-1**	32' 5-1/2"	32' 4-3/4"	0' 0-3/4"	1.5
10/13/2006	1540 hrs	4TH	**RW-2**	No Product	28' 2-3/4"	0	0
10/16/2006	0915 hrs	4th	**RW-5**	32' 8 3/4"	33' 5"	0' 6-1/4"	1/4
10/16/2006	0955 hrs	4th	**RW-6**	33' 8 1/2"	34' 7 5/8"	1' 1/8"	3/4

Name and Title of person who performed measurement:
Cheryl Johnson (Environmental Specialist)

Signature: _____

CC: Ed Riege

Well Data Summary Table

Well Data Summary Table - REVISED
2006 Annual Groundwater Discharge Report
Giant Refining - Ciniza Refinery
August 2007 by Jim Lieb

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	24-Oct-06	6,876.73	6,836.73	40.00	na	na	dry	dry	na
BW-1B	24-Oct-06	6,876.91	6,811.71	67.55	na	na	67.55	6,809.36	na
BW-1C	24-Oct-06	6,876.75	6,719.75	157.00	na	na	7.55	6,869.20	na
BW-2A	24-Oct-06	6,874.72	6,809.22	65.50	na	na	23.03	6,851.69	na
BW-2B	24-Oct-06	6,874.58	6,784.08	90.50	na	na	27.78	6,846.80	na
BW-2C	24-Oct-06	6,875.40	6,724.40	151.00	na	na	20.25	6,855.15	na
BW-3A	24-Oct-06	6,878.22	6,828.22	52.60	na	na	dry	dry	na
BW-3B	24-Oct-06	6,878.79	6,803.79	75.00	na	na	32.78	6,846.01	na
BW-3C	24-Oct-06	6,878.08	6,723.08	155.00	na	na	8.40	6,869.68	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	24-Oct-06	6,923.89	6,857.27	66.62	na	na	21.05	6,902.84	na
OW-12	24-Oct-06	6,940.43	6,795.43	145.00	na	na	49.17	6,891.26	na
OW-13	24-Oct-06	6,920.12	6,820.12	100.00	na	na	24.36	6,895.76	na
OW-14	24-Oct-06	6,926.64	6,881.64	45.00	na	na	27.38	6,899.26	na
OW-29	24-Oct-06	6,913.50	6,864.50	49.00	na	na	21.95	6891.55	na
OW-30	24-Oct-06	6,921.60	6,873.20	48.4	na	na	26.43	6,895.17	na
MW-1	24-Oct-06	6,878.52	6,746.50	132.02	na	na	7.58	6,870.94	na
MW-4	not sampled	6,882.54	6,760.40	122.14	na	na	not sampled	not sampled	na
MW-5	not sampled	6,883.32	6,750.30	133.02	na	na	not sampled	not sampled	na
RW-1 (OW-27)	16-Mar-06	6,943.50			32.23	4.04	34.48	6,909.02	6912.252
	6-Jun-06				32.40	4.02	34.54	6,908.96	6912.176
	31-Jul-06				31.92	4.44	33.48	6,910.02	6913.572
	21-Dec-06				32.46	5.58	32.40	6,911.10	6915.564
RW-2 (OW-28)	16-Mar-06	6,927.20			na	0	27.90	6,899.30	6899.3
	June 1,2006				na	0	27.98	6,899.22	6899.22
	26-Jul-06				na	0	28.23	6,898.97	6898.97
	13-Oct-06				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	1.17	33.00	6,909.50	6910.436
	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	not sampled	6,884.44	6,827.10	57.34	na	na	not sampled	not sampled	na
SMW-4	not sampled	6,882.54	6,760.40	122.14	na	na	not sampled	not sampled	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 Inspection Logs

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
3/9/2006	1:10PM	1st	20.25'	To top of plastic casing
Name & Title of person who performed measurement: Johnny Sanchez (Environmental Specialist)				

Signature: Johnny Sanchez

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
5/26/2006	1350 Hrs.	2nd	20.16'	To top of plastic casing

Name & Title of person who performed measurement: Johnny Sanchez (Environmental Specialist)

Signature: Johnny Sanchez

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
7/26/2006	1110 hrs	3rd	20.72'	To top of plastic casing
				Collected annual water samples
Name & Title of person who performed measurement: Johnny Sanchez & Cheryl Johnson (Environmental Specialist)				

Signature: Johnny Sanchez

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
10/13/2006	1505 hrs	4th	20'61"	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: Monthly Through 2005 QTR. START 2006

Date	Time	Month	Depth to Bottom (feet)	Comments (Dry?)
1-18-06	0955A	JAN	18.97	DRY

Name & Title of person who performed measurement: Johnny Sanchez (ENV Specialist)

Signature: Johnny Sanchez

GIANT CINIZA REFINERY
GROUNDWATER DISCHARGE PERMIT
GWM-2 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2006

Date	Time	Qtr.	Depth to Bottom (feet)	Comments (Dry?)
5/26/2006	1400Hrs.	2nd	18.97'	To top of plastic. Dry.
Name & Title of person who performed measurement: Johnny Sanchez (Environmental Specialist)				

Signature: Johnny Sanchez

GIANT CINIZA REFINERY
GROUNDWATER DISCHARGE PERMIT
GWM-2 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2006

Date	Time	Qtr.	Depth to Bottom (feet)	Comments (Dry?)
7/26/2006	1105Hrs.	3rd	18.97'	To top of plastic. Dry.

Name & Title of person who performed measurement:
Johnny Sanchez & Cheryl Johnson (Environmental Specialist)

Signature: J. Sanchez

GIANT CINIZA REFINERY
GROUNDWATER DISCHARGE PERMIT
GWM-2 WELL INSPECTION

Permit Requirement: OCD, Section 9, Item 3

Monitoring Requirement: Quarterly Start 2006

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
10/13/2006	1510 hrs	4th	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 2006

Date	Time	Quarter	Depth to bottom (feet)	Comments (Dry?)
10/13/2006	1500 hrs	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
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
3/9/2006	1:45PM	1st	0	
Name & Title of person who performed measurement: Johnny Sanchez (Environmental Specialist)				

Signature: Johnny Sanchez

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
6/27/2006	1420 Hrs.	2nd	0' - 4 3/4"	To top of plastic casing.
Name & Title of person who performed measurement: Johnny Sanchez (Environmental Specialist)				

Signature: Johnny Sanchez

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
7/26/2006	1125	3rd	0' - 10"	To top of plastic casing.
Name & Title of person who performed measurement: Johnny Sanchez & Cheryl Johnson (Environmental Specialist)				

Signature: Johnny Sanchez

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
10/13/2006	1455 hrs	4th	0' 3"	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
3/9/2006	1:40PM	1st	2.7'	To Top of Plastic Casing
Name & Title of person who performed measurement: Johnny Sanchez (Environmental Specilist)				

Signature: Johnny Sanchez

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
6/27/2006	1405 Hrs.	2nd	3.43'	To Top of Plastic Casing
Name & Title of person who performed measurement: Johnny Sanchez (Environmental Specilist)				

Signature: Johnny Sanchez

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
7/26/2006	1120	3rd	3.95'	To Top of Plastic Casing

Name & Title of person who performed measurement: Johnny Sanchez & 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
10/13/2006	1440 hrs	4th	2'.9"	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

8. List of Figures

Figure 1
Regional Map

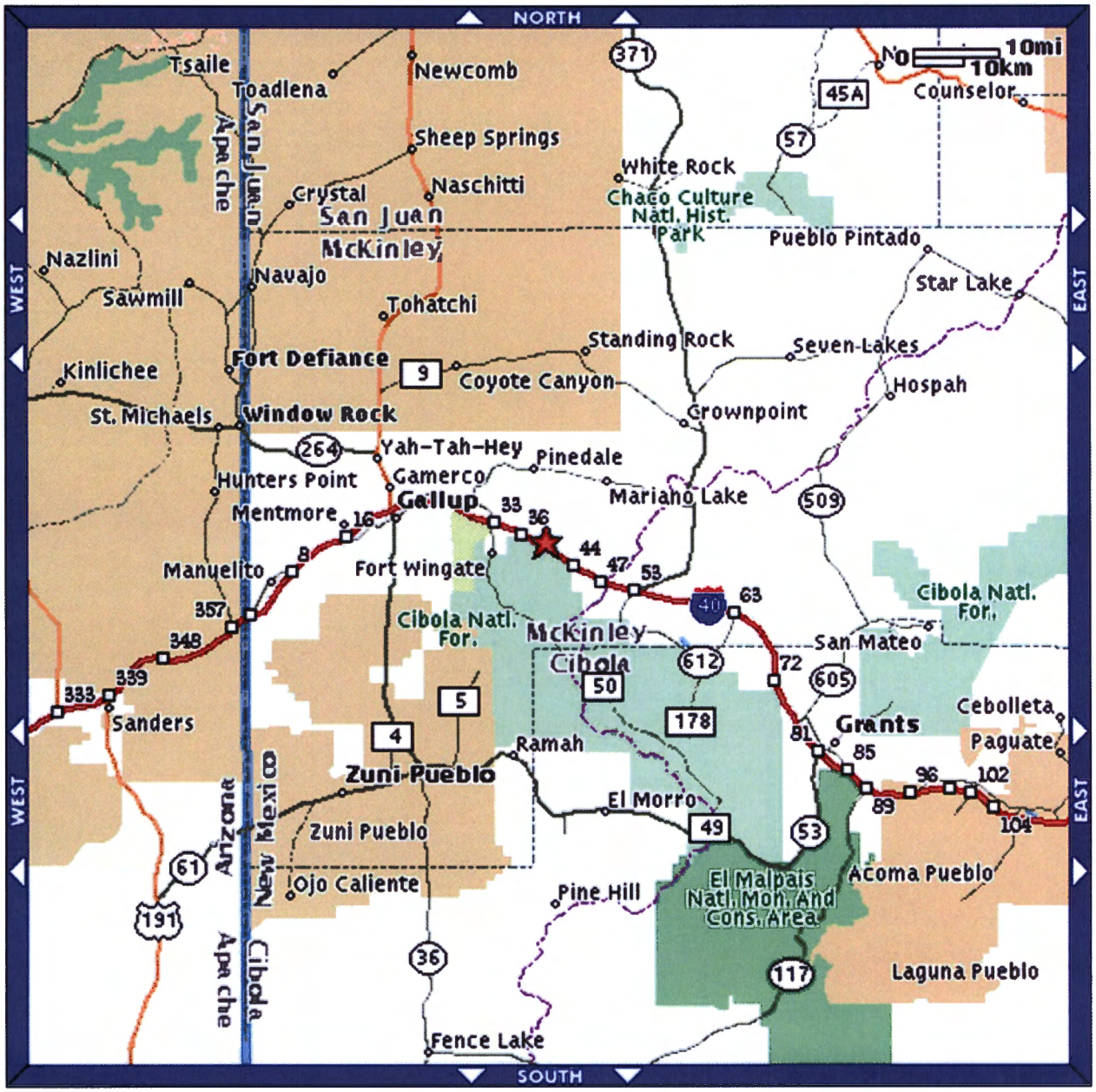
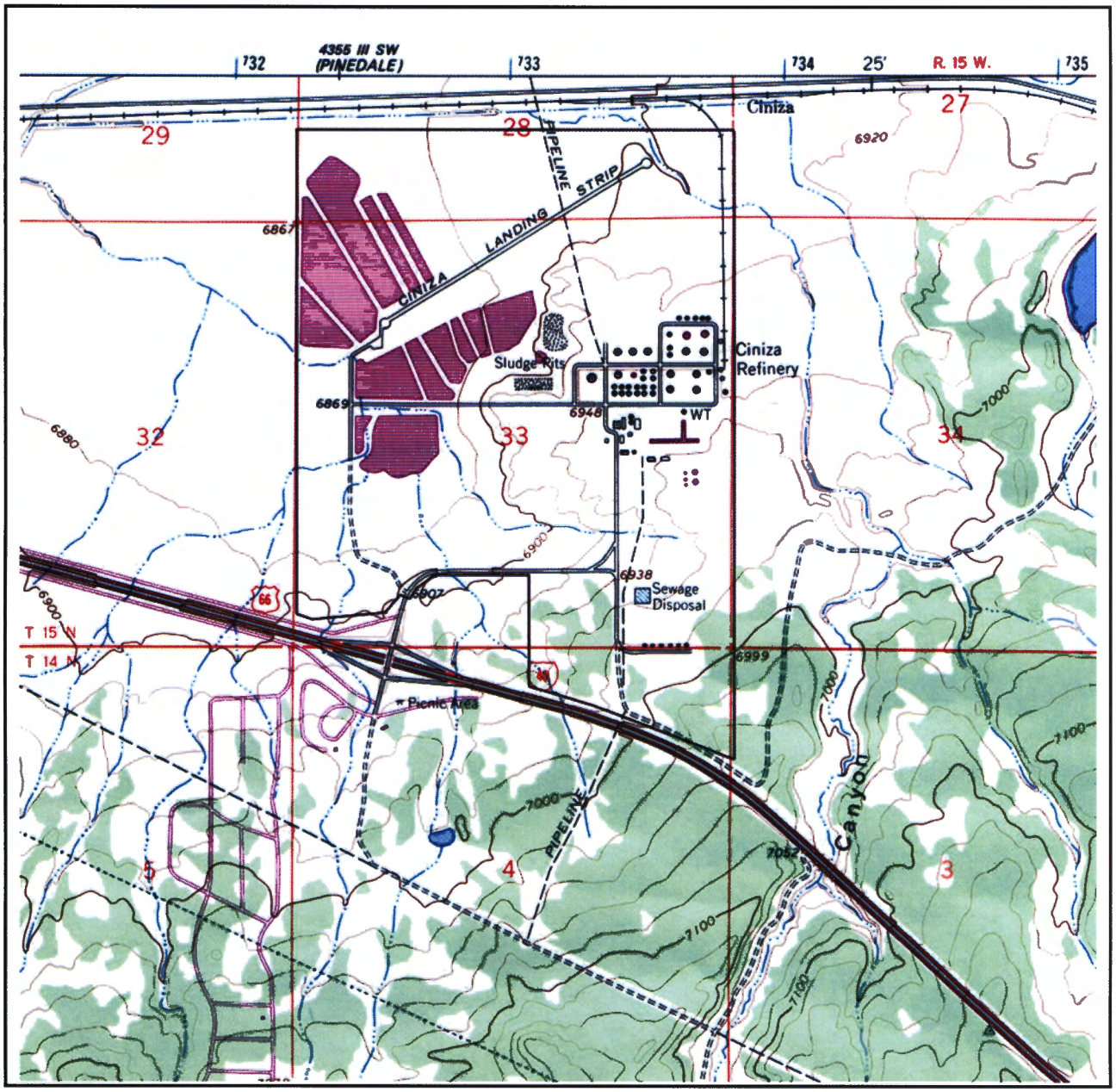


Figure 2 - Topographic Map of the Refinery Site

Locality Map
USGS Topographical Map - Gallup Quadrangle (Revised 1980)



Well and Boring Locations Map

Potentiometric Elevation Map
(Alluvium - Chinle Group Interface Water Levels)

Annual Product Thickness Map
(Separate Phase Hydrocarbon Thickness)

Sonsela Water Piezometric Surface

Groundwater Elevation Map

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, October, and December of 2005. 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 conductance 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 conductance (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 conductance, 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 conductance. 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 conductance 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:

$$\text{Flow rate (gpm)} = \frac{\text{volume collected (gallons)} \times 60 \text{ seconds per minute}}{\text{Time to fill container (seconds)}}$$

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 2006 ANNUAL GROUNDWATER REPORT

Binder 2: OCD Addendum to Annual Groundwater Report

Giant Refining Company – Gallup Refinery
McKinley County, New Mexico

August 31, 2007

EPA ID No. NMD000333211

Discharge Permit No. GW-032

Prepared By : Jim Lieb, Environmental Engineer, Giant Refining – Gallup Refinery

Signature: _____, Date: 8/30/07

Certified By: Ed Rios, General Manager, Giant Refining – Gallup Refinery

Signature: _____, Date: 8-31-07

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

II. OCD Addendum (Binder 2)

Permit Condition 17B (Temporary Land Farm Analysis)

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, April 07, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Northeast OCD Landfarm 1st Qtr 2006

Order No.: 0603348

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/31/2006 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

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

Date: *07-Apr-06*

CLIENT:	Giant Refining Co	Client Sample ID:	NE Landfarm #54-1st Qtr
Lab Order:	0603348	Collection Date:	3/29/2006 9:30:00 AM
Project:	Northeast OCD Landfarm 1st Qtr 2006	Date Received:	3/31/2006
Lab ID:	0603348-01	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	180	10		mg/Kg	1	4/6/2006 11:38:43 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/6/2006 11:38:43 PM
Surr: DNOP	98.9	60-124		%REC	1	4/6/2006 11:38:43 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	4/5/2006 9:26:55 PM
Surr: BFB	107	79-128		%REC	10	4/5/2006 9:26:55 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	10	4/5/2006 9:26:55 PM
Benzene	ND	0.50		mg/Kg	10	4/5/2006 9:26:55 PM
Toluene	ND	0.50		mg/Kg	10	4/5/2006 9:26:55 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/5/2006 9:26:55 PM
Xylenes, Total	ND	0.50		mg/Kg	10	4/5/2006 9:26:55 PM
Surr: 4-Bromofluorobenzene	100	84.4-117		%REC	10	4/5/2006 9:26:55 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *07-Apr-06*

CLIENT:	Giant Refining Co	Client Sample ID:	NE Landfarm #137-1st Qtr
Lab Order:	0603348	Collection Date:	3/29/2006 9:45:00 AM
Project:	Northeast OCD Landfarm 1st Qtr 2006	Date Received:	3/31/2006
Lab ID:	0603348-02	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	3700	100		mg/Kg	10	4/7/2006 12:11:44 AM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	4/7/2006 12:11:44 AM
Surr: DNOP	94.4	60-124		%REC	10	4/7/2006 12:11:44 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	4/5/2006 9:54:53 PM
Surr: BFB	115	79-128		%REC	10	4/5/2006 9:54:53 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	10	4/5/2006 9:54:53 PM
Benzene	ND	0.50		mg/Kg	10	4/5/2006 9:54:53 PM
Toluene	ND	0.50		mg/Kg	10	4/5/2006 9:54:53 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/5/2006 9:54:53 PM
Xylenes, Total	ND	0.50		mg/Kg	10	4/5/2006 9:54:53 PM
Surr: 4-Bromofluorobenzene	103	84.4-117		%REC	10	4/5/2006 9:54:53 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *07-Apr-06*

CLIENT: Giant Refining Co
Work Order: 0603348
Project: Northeast OCD Landfarm 1st Qtr 2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_S

Sample ID: MB-10113 | SampType: MBLK | TestCode: 8015DRO_S | Units: mg/Kg | Prep Date: 4/4/2006 | RunNo: 18818
Client ID: ZZZZZ | Batch ID: 10113 | TestNo: SW8015 | Analysis Date: 4/5/2006 | SeqNo: 467263

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									

Sample ID: LCS-10113 | SampType: LCS | TestCode: 8015DRO_S | Units: mg/Kg | Prep Date: 4/4/2006 | RunNo: 18818
Client ID: ZZZZZ | Batch ID: 10113 | TestNo: SW8015 | Analysis Date: 4/5/2006 | SeqNo: 467264

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41.47	10	50	0	82.9	67.4	117				

Sample ID: LCSD-10113 | SampType: LCSD | TestCode: 8015DRO_S | Units: mg/Kg | Prep Date: 4/4/2006 | RunNo: 18818
Client ID: ZZZZZ | Batch ID: 10113 | TestNo: SW8015 | Analysis Date: 4/5/2006 | SeqNo: 467265

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38.68	10	50	0	77.4	67.4	117	41.47	6.97	17.4	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0603348
Project: Northeast OCD Landfarm 1st Qtr 2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_S

Sample ID: MB-10098 SampType: MBLK TestCode: 8015GRO_S Units: mg/Kg Prep Date: 3/31/2006 RunNo: 18842
Client ID: ZZZZZ Batch ID: 10098 TestNo: SW8015 (SW5035) Analysis Date: 4/5/2006 SeqNo: 467547

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0									

4/6

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0603348
Project: Northeast OCD Landfarm 1st Qtr 2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_S

Sample ID: MB-10098 | SampType: MBLK | TestCode: 8021BTEX_S | Units: mg/Kg | Prep Date: 3/31/2006 | RunNo: 18842
Client ID: ZZZZZ | Batch ID: 10098 | TestNo: SW8021 | (SW5035) | Analysis Date: 4/5/2006 | SeqNo: 467531

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10									
Benzene	ND	0.050									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.050									

Sample ID: LCS-10098 | SampType: LCS | TestCode: 8021BTEX_S | Units: mg/Kg | Prep Date: 3/31/2006 | RunNo: 18842
Client ID: ZZZZZ | Batch ID: 10098 | TestNo: SW8021 | (SW5035) | Analysis Date: 4/5/2006 | SeqNo: 467532

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.4064	0.10	0.4	0	102	65	132				
Benzene	0.4721	0.050	0.452	0	104	85.6	116				
Toluene	1.859	0.050	1.62	0	115	82.4	120				
Ethylbenzene	0.4260	0.050	0.456	0	93.4	86.4	111				
Xylenes, Total	2.002	0.050	1.8	0	111	78.4	125				

5 / 6

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/31/2006

Work Order Number 0603348

Received by AT

Checklist completed by Signature Date 3/31/06

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 #: 505 722 3833
Fax #: 505 722 0210

Project Name: North east OCD Landfarm 1st Qtr. 2006
Project #:
Project Manager:
Sampler:
Sample Temperature: 2

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)					Air Bubbles or Headspace (Y or N)
3-29-06	0930	Soil	NE Landfarm #54 - 1st Qtr.	2				0603348-1	X		X														
3-29-06	0945	Soil	NE Landfarm #137 - 1st Qtr.	2				-2	X		X														

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
3/31/06	0910		3/31/06 0910
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, June 28, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NE OCD Landfarm 2nd Qtr. 2006

Order No.: 0606174

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 6/16/2006 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

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: *28-Jun-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NEOCDLF#17
Lab Order:	0606174	**Collection Date:**	6/15/2006 8:00:00 AM
Project:	NE OCD Landfarm 2nd Qtr. 2006	**Date Received:**	6/16/2006
Lab ID:	0606174-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/20/2006 3:13:26 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/20/2006 3:13:26 PM
Surr: DNOP	79.3	61.7-135		%REC	1	6/20/2006 3:13:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/19/2006 10:38:39 PM
Surr: BFB	91.8	81.7-127		%REC	1	6/19/2006 10:38:39 PM
EPA METHOD 8021B: VOLATILES						Analyst: HLM
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	6/19/2006 10:38:39 PM
Benzene	ND	0.050		mg/Kg	1	6/19/2006 10:38:39 PM
Toluene	ND	0.050		mg/Kg	1	6/19/2006 10:38:39 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/19/2006 10:38:39 PM
Xylenes, Total	ND	0.15		mg/Kg	1	6/19/2006 10:38:39 PM
Surr: 4-Bromofluorobenzene	85.9	76.8-115		%REC	1	6/19/2006 10:38:39 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory, Inc.

Date: *28-Jun-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NEOCDLF#72
Lab Order:	0606174	**Collection Date:**	6/15/2006 8:30:00 AM
Project:	NE OCD Landfarm 2nd Qtr. 2006	**Date Received:**	6/16/2006
Lab ID:	0606174-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	60	10		mg/Kg	1	6/21/2006 12:31:15 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/21/2006 12:31:15 PM
Surr: DNOP	152	61.7-135	S	%REC	1	6/21/2006 12:31:15 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **HLM**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/19/2006 11:07:47 PM
Surr: BFB	94.9	81.7-127		%REC	1	6/19/2006 11:07:47 PM
EPA METHOD 8021B: VOLATILES						Analyst: **HLM**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	6/19/2006 11:07:47 PM
Benzene	ND	0.050		mg/Kg	1	6/19/2006 11:07:47 PM
Toluene	ND	0.050		mg/Kg	1	6/19/2006 11:07:47 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/19/2006 11:07:47 PM
Xylenes, Total	ND	0.15		mg/Kg	1	6/19/2006 11:07:47 PM
Surr: 4-Bromofluorobenzene	92.0	76.8-115		%REC	1	6/19/2006 11:07:47 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NE OCD Landfarm 2nd Qtr. 2006 **Work Order:** 0606174

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									Batch ID: 10632
Sample ID: MB-10632		*MBLK*							Analysis Date: 6/20/2006
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-10632		*LCS*							Analysis Date: 6/20/2006
Diesel Range Organics (DRO)	39.33	mg/Kg	10	78.7	64.6	116			
Sample ID: LCSD-10632		*LCSD*							Analysis Date: 6/20/2006
Diesel Range Organics (DRO)	41.81	mg/Kg	10	83.6	64.6	116	6.11	17.4	
Method: SW8015									Batch ID: 10631
Sample ID: MB-10631		*MBLK*							Analysis Date: 6/19/2006
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-10631		*LCS*							Analysis Date: 6/19/2006
Gasoline Range Organics (GRO)	19.90	mg/Kg	5.0	79.6	73.4	115			
Method: SW8021									Batch ID: 10631
Sample ID: MB-10631		*MBLK*							Analysis Date: 6/19/2006
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.10						
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.15						
Sample ID: LCS-10631		*LCS*							Analysis Date: 6/19/2006
Methyl tert-butyl ether (MTBE)	0.3825	mg/Kg	0.10	109	67.9	135			
Benzene	0.2930	mg/Kg	0.050	91.6	77.5	123			
Toluene	1.783	mg/Kg	0.050	89.2	85.3	129			
Ethylbenzene	0.3907	mg/Kg	0.050	100	79.6	121			
Xylenes, Total	2.170	mg/Kg	0.15	103	80	130			

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: 6/16/2006

Work Order Number 0606174 | Received by GLS

Checklist completed by _____ Signature _____ Date 6-16-06

Matrix | Carrier name FedEx

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? 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: Rt 3 Box 7 Gallup NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: NE-OCD Land Farm 2nd QTR. 2006
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 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)				Air Bubbles or Headspace (Y or N)
6/15/06	0800	Soil	NEOCDLF#17	2				0606174 1	X		X													
"	0830	"	" #72	2				2	X		X													

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
6/15/06	1050	Steve Morris	6-16-06 1120
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, October 16, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: N.E. OCD Landfarm 9-28-2006

Order No.: 0609378

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 9/29/2006 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: *16-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NE-OCD-25
Lab Order:	0609378	**Collection Date:**	9/28/2006 8:00:00 AM
Project:	N.E. OCD Landfarm 9-28-2006	**Date Received:**	9/29/2006
Lab ID:	0609378-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	2900	100		mg/Kg	10	10/12/2006 2:19:07 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	10/12/2006 2:19:07 PM
Surr: DNOP	0	61.7-135	S	%REC	10	10/12/2006 2:19:07 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	10/9/2006 11:04:19 PM
Surr: BFB	85.4	81.7-129		%REC	10	10/9/2006 11:04:19 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	10	10/9/2006 11:04:19 PM
Benzene	ND	0.50		mg/Kg	10	10/9/2006 11:04:19 PM
Toluene	ND	0.50		mg/Kg	10	10/9/2006 11:04:19 PM
Ethylbenzene	ND	0.50		mg/Kg	10	10/9/2006 11:04:19 PM
Xylenes, Total	ND	1.5		mg/Kg	10	10/9/2006 11:04:19 PM
Surr: 4-Bromofluorobenzene	85.0	76.8-115		%REC	10	10/9/2006 11:04:19 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-Oct-06*

CLIENT:	Giant Refining Co	Client Sample ID:	NE-OCD-126
Lab Order:	0609378	Collection Date:	9/28/2006 8:15:00 AM
Project:	N.E. OCD Landfarm 9-28-2006	Date Received:	9/29/2006
Lab ID:	0609378-02	Matrix:	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: JMP
Diesel Range Organics (DRO)	380	10		mg/Kg	1	10/8/2006 12:36:04 AM
Motor Oil Range Organics (MRO)	78	50		mg/Kg	1	10/8/2006 12:36:04 AM
Surr: DNOP	75.6	61.7-135		%REC	1	10/8/2006 12:36:04 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	10/9/2006 11:34:53 PM
Surr: BFB	85.0	81.7-129		%REC	5	10/9/2006 11:34:53 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	5	10/9/2006 11:34:53 PM
Benzene	ND	0.25		mg/Kg	5	10/9/2006 11:34:53 PM
Toluene	ND	0.25		mg/Kg	5	10/9/2006 11:34:53 PM
Ethylbenzene	ND	0.25		mg/Kg	5	10/9/2006 11:34:53 PM
Xylenes, Total	ND	0.75		mg/Kg	5	10/9/2006 11:34:53 PM
Surr: 4-Bromofluorobenzene	84.6	76.8-115		%REC	5	10/9/2006 11:34:53 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		

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: N.E. OCD Landfarm 9-28-2006 **Work Order:** 0609378

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: MB-11405		*MBLK*			Batch ID:	11405	Analysis Date:	10/3/2006 12:32:54 AM	
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-11405		*LCS*			Batch ID:	11405	Analysis Date:	10/3/2006 1:07:44 AM	
Diesel Range Organics (DRO)	42.70	mg/Kg	10	85.4	64.6	116			
Sample ID: LCSD-11405		*LCSD*			Batch ID:	11405	Analysis Date:	10/3/2006 1:42:28 AM	
Diesel Range Organics (DRO)	45.94	mg/Kg	10	91.9	64.6	116	7.31	17.4	
Method: SW8015									
Sample ID: MB-11411		*MBLK*			Batch ID:	11411	Analysis Date:	10/9/2006 7:31:18 PM	
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-11411		*LCS*			Batch ID:	11411	Analysis Date:	10/9/2006 8:01:46 PM	
Gasoline Range Organics (GRO)	20.10	mg/Kg	5.0	80.4	73.4	115			
Method: SW8021									
Sample ID: MB-11411		*MBLK*			Batch ID:	11411	Analysis Date:	10/9/2006 7:31:18 PM	
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.10						
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.15						
Sample ID: LCS-11411		*LCS*			Batch ID:	11411	Analysis Date:	10/9/2006 8:01:46 PM	
Methyl tert-butyl ether (MTBE)	0.6819	mg/Kg	0.10	195	67.9	135			S
Benzene	0.2878	mg/Kg	0.050	79.3	77.5	123			
Toluene	1.778	mg/Kg	0.050	87.2	85.3	129			
Ethylbenzene	0.3534	mg/Kg	0.050	81.9	79.6	121			
Xylenes, Total	2.023	mg/Kg	0.15	92.9	80	130			

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: 9/29/2006

Work Order Number 0609378

Received by AT

Checklist completed by [signature] 9-29-06
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 - 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

Project Name: N.E. OCD Landfarm 9-28-2006
~~Project #:~~ Remediation Check.

Project Manager: Steve Morris

Phone #: 505 722 3833
Sampler: Steve Morris
Fax #: 505 722 9210
Sample Temperature: 5°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0609378	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)
9-28-06	0800	Soil	NE-OCD-25	2				-1	X		X														
"	0815	"	NE-OCD-126	2				-2	X		X														

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
9/29/06	1035	Steve Morris	9/29/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1035

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, November 15, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NE-OCD Landfarm 4th Qtr. 2006 & Annual

Order No.: 0611011

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/1/2006 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: *15-Nov-06*

CLIENT: Giant Refining Co
Project: NE-OCD Landfarm 4th Qtr. 2006 & Annual'Par

Lab Order: 0611011

Lab ID: 0611011-01
Collection Date: 10/30/2006 11:30:00 AM
Client Sample ID: NE-OCD-LF
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	11/2/2006 5:51:58 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	11/2/2006 5:51:58 PM
Surr: DNOP	83.2	61.7-135		%REC	1	11/2/2006 5:51:58 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	11/6/2006 11:55:09 AM
Surr: BFB	113	84.5-129		%REC	1	11/6/2006 11:55:09 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	11/6/2006 11:55:09 AM
Toluene	ND	0.050		mg/Kg	1	11/6/2006 11:55:09 AM
Ethylbenzene	ND	0.050		mg/Kg	1	11/6/2006 11:55:09 AM
Xylenes, Total	ND	0.15		mg/Kg	1	11/6/2006 11:55:09 AM
Surr: 4-Bromofluorobenzene	82.3	76.8-115		%REC	1	11/6/2006 11:55:09 AM
EPA METHOD 9056A: ANIONS						Analyst: TES
Fluoride	2.1	1.5		mg/Kg	5	11/9/2006 2:59:29 AM
Chloride	100	1.5		mg/Kg	5	11/9/2006 2:59:29 AM
Nitrogen, Nitrite (As N)	ND	1.5		mg/Kg	5	11/9/2006 2:59:29 AM
Nitrogen, Nitrate (As N)	15	1.5		mg/Kg	5	11/9/2006 2:59:29 AM
Phosphorus, Orthophosphate (As P)	ND	7.5		mg/Kg	5	11/9/2006 2:59:29 AM
Sulfate	110	7.5		mg/Kg	5	11/9/2006 2:59:29 AM
EPA METHOD 7471: MERCURY						Analyst: MAP
Mercury	ND	0.033		mg/Kg	1	11/13/2006
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	ND	12		mg/Kg	5	11/9/2006 11:29:16 AM
Barium	360	1.0		mg/Kg	10	11/9/2006 12:01:11 PM
Cadmium	ND	0.50		mg/Kg	5	11/9/2006 11:29:16 AM
Calcium	20000	120		mg/Kg	5	11/9/2006 11:29:16 AM
Chromium	8.4	1.5		mg/Kg	5	11/9/2006 11:29:16 AM
Lead	9.2	1.2		mg/Kg	5	11/9/2006 11:29:16 AM
Magnesium	4500	120		mg/Kg	5	11/9/2006 1:25:13 PM
Potassium	1000	250		mg/Kg	5	11/9/2006 11:29:16 AM
Selenium	ND	12		mg/Kg	5	11/9/2006 11:29:16 AM
Silver	ND	1.2		mg/Kg	5	11/9/2006 11:29:16 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Lab Order:**	0611011
Project:	NE-OCD Landfarm 4th Qtr. 2006 & Annual Par		

EPA METHOD 6010B: SOIL METALS					Analyst: NMO
Sodium	620	120	mg/Kg	5	11/9/2006 11:29:16 AM
EPA METHOD 150.1: PH					Analyst: CMS
pH	8.50	0.010	pH Units	1	11/7/2006

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: NE-OCD Landfarm 4th Qtr. 2006 & Annual Par
Work Order: 0611011

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11684		*MBLK*			Batch ID:	11684	Analysis Date:	11/8/2006 8:01:40 PM	
Fluoride	ND	mg/Kg	0.30						
Chloride	ND	mg/Kg	0.30						
Nitrogen, Nitrite (As N)	ND	mg/Kg	0.30						
Nitrogen, Nitrate (As N)	ND	mg/Kg	0.30						
Phosphorus, Orthophosphate (As P)	ND	mg/Kg	1.5						
Sulfate	ND	mg/Kg	1.5						
Sample ID: LCS-11684		*LCS*			Batch ID:	11684	Analysis Date:	11/8/2006 8:19:05 PM	
Fluoride	1.533	mg/Kg	0.30	102	90	110			
Chloride	14.80	mg/Kg	0.30	98.6	90	110			
Nitrogen, Nitrite (As N)	3.207	mg/Kg	0.30	107	90	110			
Nitrogen, Nitrate (As N)	7.224	mg/Kg	0.30	96.3	90	110			
Phosphorus, Orthophosphate (As P)	15.73	mg/Kg	1.5	105	90	110			
Sulfate	29.48	mg/Kg	1.5	98.3	90	110			
Method: SW8015									
Sample ID: MB-11639		*MBLK*			Batch ID:	11639	Analysis Date:	11/2/2006 1:46:11 PM	
Diesel Range Organics (DRO)	ND	mg/Kg	10						
Motor Oil Range Organics (MRO)	ND	mg/Kg	50						
Sample ID: LCS-11639		*LCS*			Batch ID:	11639	Analysis Date:	11/2/2006 2:21:15 PM	
Diesel Range Organics (DRO)	40.92	mg/Kg	10	81.8	64.6	116			
Sample ID: LCSD-11639		*LCSD*			Batch ID:	11639	Analysis Date:	11/2/2006 2:56:19 PM	
Diesel Range Organics (DRO)	48.54	mg/Kg	10	97.1	64.6	116	17.0	17.4	
Method: SW8015									
Sample ID: 0611011-01A MSD		*MSD*			Batch ID:	11649	Analysis Date:	11/6/2006 12:56:06 PM	
Gasoline Range Organics (GRO)	26.30	mg/Kg	5.0	105	73.4	115	0.380	11.6	
Sample ID: MB-11649		*MBLK*			Batch ID:	11649	Analysis Date:	11/6/2006 10:53:29 AM	
Gasoline Range Organics (GRO)	ND	mg/Kg	5.0						
Sample ID: LCS-11649		*LCS*			Batch ID:	11649	Analysis Date:	11/6/2006 11:24:10 AM	
Gasoline Range Organics (GRO)	25.40	mg/Kg	5.0	102	73.4	115			
Sample ID: 0611011-01A MS		*MS*			Batch ID:	11649	Analysis Date:	11/6/2006 12:25:57 PM	
Gasoline Range Organics (GRO)	26.40	mg/Kg	5.0	106	73.4	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: NE-OCD Landfarm 4th Qtr. 2006 & Annual Par **Work Order:** 0611011

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 0611011-01A MSD		*MSD*			Batch ID:	11649	Analysis Date:	11/6/2006 12:56:06 PM	
Benzene	0.2705	mg/Kg	0.050	84.5	77.5	123	0.966	27	
Toluene	1.752	mg/Kg	0.050	86.3	82.3	129	2.26	19	
Ethylbenzene	0.3496	mg/Kg	0.050	89.6	79.6	121	1.50	10	
Xylenes, Total	1.963	mg/Kg	0.15	90.6	80	130	1.70	13	
Sample ID: MB-11649		*MBLK*			Batch ID:	11649	Analysis Date:	11/7/2006 11:22:35 AM	
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.15						
Sample ID: LCS-11649		*LCS*			Batch ID:	11649	Analysis Date:	11/6/2006 11:24:10 AM	
Benzene	0.2570	mg/Kg	0.050	80.3	77.5	123			
Toluene	1.660	mg/Kg	0.050	83.0	82.3	129			
Ethylbenzene	0.3248	mg/Kg	0.050	83.3	79.6	121			
Xylenes, Total	1.848	mg/Kg	0.15	88.0	80	130			
Sample ID: 0611011-01A MS		*MS*			Batch ID:	11649	Analysis Date:	11/6/2006 12:25:57 PM	
Benzene	0.2679	mg/Kg	0.050	83.7	77.5	123			
Toluene	1.713	mg/Kg	0.050	84.4	82.3	129			
Ethylbenzene	0.3444	mg/Kg	0.050	88.3	79.6	121			
Xylenes, Total	1.930	mg/Kg	0.15	89.0	80	130			
Method: SW7471									
Sample ID: MB-11739		*MBLK*			Batch ID:	11739	Analysis Date:	11/13/2006	
Mercury	ND	mg/Kg	0.033						
Sample ID: LCS-11739		*LCS*			Batch ID:	11739	Analysis Date:	11/13/2006	
Mercury	0.1680	mg/Kg	0.033	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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NE-OCD Landfarm 4th Qtr. 2006 & Annual Par **Work Order:** 0611011

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW6010A									
Sample ID: MB-11677		*MBLK*			Batch ID:	11677	Analysis Date:	11/9/2006 10:31:33 AM	
Arsenic	ND	mg/Kg	2.5						
Barium	ND	mg/Kg	0.10						
Cadmium	ND	mg/Kg	0.10						
Calcium	ND	mg/Kg	25						
Chromium	ND	mg/Kg	0.30						
Lead	ND	mg/Kg	0.25						
Potassium	ND	mg/Kg	50						
Selenium	ND	mg/Kg	2.5						
Silver	ND	mg/Kg	0.25						
Sodium	ND	mg/Kg	25						
Sample ID: MB-11677		*MBLK*			Batch ID:	11677	Analysis Date:	11/9/2006 1:12:49 PM	
Magnesium	ND	mg/Kg	25						
Sample ID: LCS-11677		*LCS*			Batch ID:	11677	Analysis Date:	11/9/2006 10:22:40 AM	
Arsenic	26.17	mg/Kg	2.5	105	80	120			
Barium	24.59	mg/Kg	0.10	98.3	80	120			
Cadmium	24.59	mg/Kg	0.10	98.3	80	120			
Calcium	2398	mg/Kg	25	95.9	80	120			
Chromium	24.24	mg/Kg	0.30	96.9	80	120			
Lead	24.46	mg/Kg	0.25	97.8	80	120			
Potassium	2644	mg/Kg	50	106	80	120			
Selenium	19.76	mg/Kg	2.5	79.0	80	120			S
Silver	23.78	mg/Kg	0.25	95.1	80	120			
Sodium	2641	mg/Kg	25	106	80	120			
Sample ID: LCS-11677		*LCS*			Batch ID:	11677	Analysis Date:	11/9/2006 1:14:40 PM	
Magnesium	2372	mg/Kg	25	94.5	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: 11/1/2006

Work Order Number 0611011 — Received by AT

Checklist completed by _____ Signature — 11/1/06 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? 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: NE-OCD Landfarm 4th Qtr. 2006 and Annual Parameters.
~~Project #:~~
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl2	Preservative HNO3	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)	Gen Chem				Air Bubbles or Headspace (Y or N)
10/30/06	11:30	Soil	NE-OCD-LF	3				0611011-1	X		X					X					X				

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-1-06	1100	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
			11/1/06 1100

Remarks: Gen. Chem. = pH, Cations, and Anions

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, April 07, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NE OCD Landfarm Lift

Order No.: 0603346

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/31/2006 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

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

Date: *07-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NE Landfarm #34 Lift
Lab Order:	0603346	**Collection Date:**	3/29/2006 10:10:00 AM
Project:	NE OCD Landfarm Lift	**Date Received:**	3/31/2006
Lab ID:	0603346-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	1700	100		mg/Kg	10	4/6/2006 9:59:32 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	4/6/2006 9:59:32 PM
Surr: DNOP	77.5	60-124		%REC	10	4/6/2006 9:59:32 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	4/5/2006 7:35:05 PM
Surr: BFB	108	79-128		%REC	10	4/5/2006 7:35:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	10	4/5/2006 7:35:05 PM
Benzene	ND	0.50		mg/Kg	10	4/5/2006 7:35:05 PM
Toluene	ND	0.50		mg/Kg	10	4/5/2006 7:35:05 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/5/2006 7:35:05 PM
Xylenes, Total	ND	0.50		mg/Kg	10	4/5/2006 7:35:05 PM
Surr: 4-Bromofluorobenzene	99.8	84.4-117		%REC	10	4/5/2006 7:35:05 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *07-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NE Landfarm #117-Lift
Lab Order:	0603346	**Collection Date:**	3/29/2006 10:30:00 AM
Project:	NE OCD Landfarm Lift	**Date Received:**	3/31/2006
Lab ID:	0603346-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	990	100		mg/Kg	10	4/6/2006 10:32:35 PM
Motor Oil Range Organics (MRO)	ND	500		mg/Kg	10	4/6/2006 10:32:35 PM
Surr: DNOP	73.4	60-124		%REC	10	4/6/2006 10:32:35 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	4/5/2006 8:59:01 PM
Surr: BFB	108	79-128		%REC	10	4/5/2006 8:59:01 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	10	4/5/2006 8:59:01 PM
Benzene	ND	0.50		mg/Kg	10	4/5/2006 8:59:01 PM
Toluene	ND	0.50		mg/Kg	10	4/5/2006 8:59:01 PM
Ethylbenzene	ND	0.50		mg/Kg	10	4/5/2006 8:59:01 PM
Xylenes, Total	ND	0.50		mg/Kg	10	4/5/2006 8:59:01 PM
Surr: 4-Bromofluorobenzene	98.8	84.4-117		%REC	10	4/5/2006 8:59:01 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *07-Apr-06*

CLIENT: Giant Refining Co
Work Order: 0603346
Project: NE OCD Landfarm Lift

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_S

Sample ID: MB-10113 | SampType: MBLK | TestCode: 8015DRO_S | Units: mg/Kg | Prep Date: 4/4/2006 | RunNo: 18818
Client ID: ZZZZZ | Batch ID: 10113 | TestNo: SW8015 | Analysis Date: 4/5/2006 | SeqNo: 467263

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									

Sample ID: LCS-10113 | SampType: LCS | TestCode: 8015DRO_S | Units: mg/Kg | Prep Date: 4/4/2006 | RunNo: 18818
Client ID: ZZZZZ | Batch ID: 10113 | TestNo: SW8015 | Analysis Date: 4/5/2006 | SeqNo: 467264

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41.47	10	50	0	82.9	67.4	117				

Sample ID: LCSD-10113 | SampType: LCSD | TestCode: 8015DRO_S | Units: mg/Kg | Prep Date: 4/4/2006 | RunNo: 18818
Client ID: ZZZZZ | Batch ID: 10113 | TestNo: SW8015 | Analysis Date: 4/5/2006 | SeqNo: 467265

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38.68	10	50	0	77.4	67.4	117	41.47	6.97	17.4	

3 / 6

Qualifiers:
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0603346
Project: NE OCD Landfarm Lift

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_S

Sample ID: MB-10098	SampType: MBLK	TestCode: 8015GRO_S	Units: mg/Kg	Prep Date: 3/31/2006	RunNo: 18842							
Client ID: ZZZZZ	Batch ID: 10098	TestNo: SW8015	(SW5035)	Analysis Date: 4/5/2006	SeqNo: 467547							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Gasoline Range Organics (GRO)	ND	5.0										

4 / 6

Qualifiers:
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0603346
Project: NE OCD Landfarm Lift

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_S

Sample ID: MB-10098	SampType: MBLK	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 3/31/2006	RunNo: 18842
Client ID: ZZZZZ	Batch ID: 10098	TestNo: SW8021	(SW5035)	Analysis Date: 4/5/2006	SeqNo: 467531

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10									
Benzene	ND	0.050									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.050									

Sample ID: LCS-10098	SampType: LCS	TestCode: 8021BTEX_S	Units: mg/Kg	Prep Date: 3/31/2006	RunNo: 18842
Client ID: ZZZZZ	Batch ID: 10098	TestNo: SW8021	(SW5035)	Analysis Date: 4/5/2006	SeqNo: 467532

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.4064	0.10	0.4	0	102	65	132				
Benzene	0.4721	0.050	0.452	0	104	85.6	116				
Toluene	1.859	0.050	1.62	0	115	82.4	120				
Ethylbenzene	0.4260	0.050	0.456	0	93.4	86.4	111				
Xylenes, Total	2.002	0.050	1.8	0	111	78.4	125				

5 / 6

Qualifiers:
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/31/2006

Work Order Number 0603346

Received by AT

Checklist completed by _____ Signature

3/31/06 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 #: 505 722 3833
Fax #: 505 722 0210

Project Name: NE OCD Landfarm Lift
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.	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)
3-29-06	1010	Soil	NE Landfarm #34 Lift					0603316-1	X		X														
3-29-06	1030	Soil	NE Landfarm #117-Lift					-2	X		X														

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
3/31/06	0907	Steve Morris	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 3/31/06 0907

Remarks:

Permit Condition 19A (Examples of Weekly Pond Inspections)

CINIZA REFINERY
OCD DISCHARGE PLAN GW-032
WEEKLY POND INSPECTION

DATE: 1-4-06

INSPECTED BY: Johnny Sanchez

POND #	FREEBOARD	DIKE CONDITION	IMMEDIATE ACTION NEEDED?
1	OK	OK	None
2			
3			
4			
5			
6a			
6b			
7			
8			
9a			
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.

CINIZA REFINERY
OCD DISCHARGE PLAN GW-032
WEEKLY POND INSPECTION

DATE: 3/1/04

INSPECTED BY: JIM LIEB / JOHNNY SANCHEZ

POND #	FREEBOARD	DIKE CONDITION	IMMEDIATE ACTION NEEDED?
1	OK	OK	NONE
2	↓	↓	↓
3	↓	↓	↓
4	↓	↓	↓
5	↓	↓	↓
6a	↓	↓	↓
6b	↓	↓	↓
7	↓	↓	↓
8	↓	↓	↓
9a	↓	↓	↓
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.

CINIZA REFINERY
OCD DISCHARGE PLAN GW-032
WEEKLY POND INSPECTION

DATE: 7-3-06

INSPECTED BY: Johnny Sanchez

POND #	FREEBOARD	DIKE CONDITION	IMMEDIATE ACTION NEEDED?
1	OK	OK	None
2			
3			
4			
5			
6a			
6b			
7			
8			
9a			
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.

CINIZA REFINERY
OCD DISCHARGE PLAN GW-032
WEEKLY POND INSPECTION

DATE: 7-10-06

INSPECTED BY: Johnny Sanchez

POND #	FREEBOARD	DIKE CONDITION	IMMEDIATE ACTION NEEDED?
1	OK	OK	NONE
2			
3			
4			
5			
6a			
6b			
7			
8			
9a			
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.

CINIZA REFINERY
OCD DISCHARGE PLAN GW-032
WEEKLY POND INSPECTION

DATE: 12/20/02

INSPECTED BY: Chad Johnson

POND #	FREEBOARD	DIKE CONDITION	IMMEDIATE ACTION NEEDED?
1	ok	ok	None
2			
3			
4			
5			
6a			
6b			
7			
8			
9a			
9b			
9c			
9d			
11			
12a			
12b			

COMMENTS: Ref Chem working on API pond

Check all ponds weekly for dike condition and freeboards. Check also for unusual flow from or into the ponds.

CINIZA REFINERY
OCD DISCHARGE PLAN GW-032
WEEKLY POND INSPECTION

DATE: 12/13/06

INSPECTED BY: [illegible]

POND #	FREEBOARD	DIKE CONDITION	IMMEDIATE ACTION NEEDED?
1	ok	ok	no
2			
3			
4			
5			
6a			
6b			
7			
8			
9a			
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 2006
(All months in 2006)

January: Nothing of note.

February: The Remedy Completion Report for the Railroad Rack Lagoon (SWMU 8) was delivered to NMED HWB in Santa Fe.

March: On March 28th, a meeting was held at Ciniza with OCD and NMED HWB. An Inspection of the refinery followed the meeting.

April: Trihydro dye tracing of storm sewers performed.

May: Cleanup of the Lagoons and Ponds banks conducted.

June: Trihydro's dye trace study report submitted to OCD and NMED HWB.

July: Nothing of note

August: Flow meter and flumes design submitted to OCD and NMED HWB. Ciniza's Annual Ground Water Report was delivered to NMED HWB and OCD. The soil sampling workplan for investigation of the Trench and Fan-out portions of the RR Rack lagoon was submitted to OCD and NMED HWB.

September: Installation of flumes began.

October: There was a fire in the Alkylation Unit on October 5. There was an OCD inspection on October 11 in response to the fire. A sub-surface investigation of the trench and fan-out area was conducted by Trihydro. Ciniza environmental participated in a spill boom deployment training exercise at Giant's Bloomfield refinery.

November: Nothing of note.

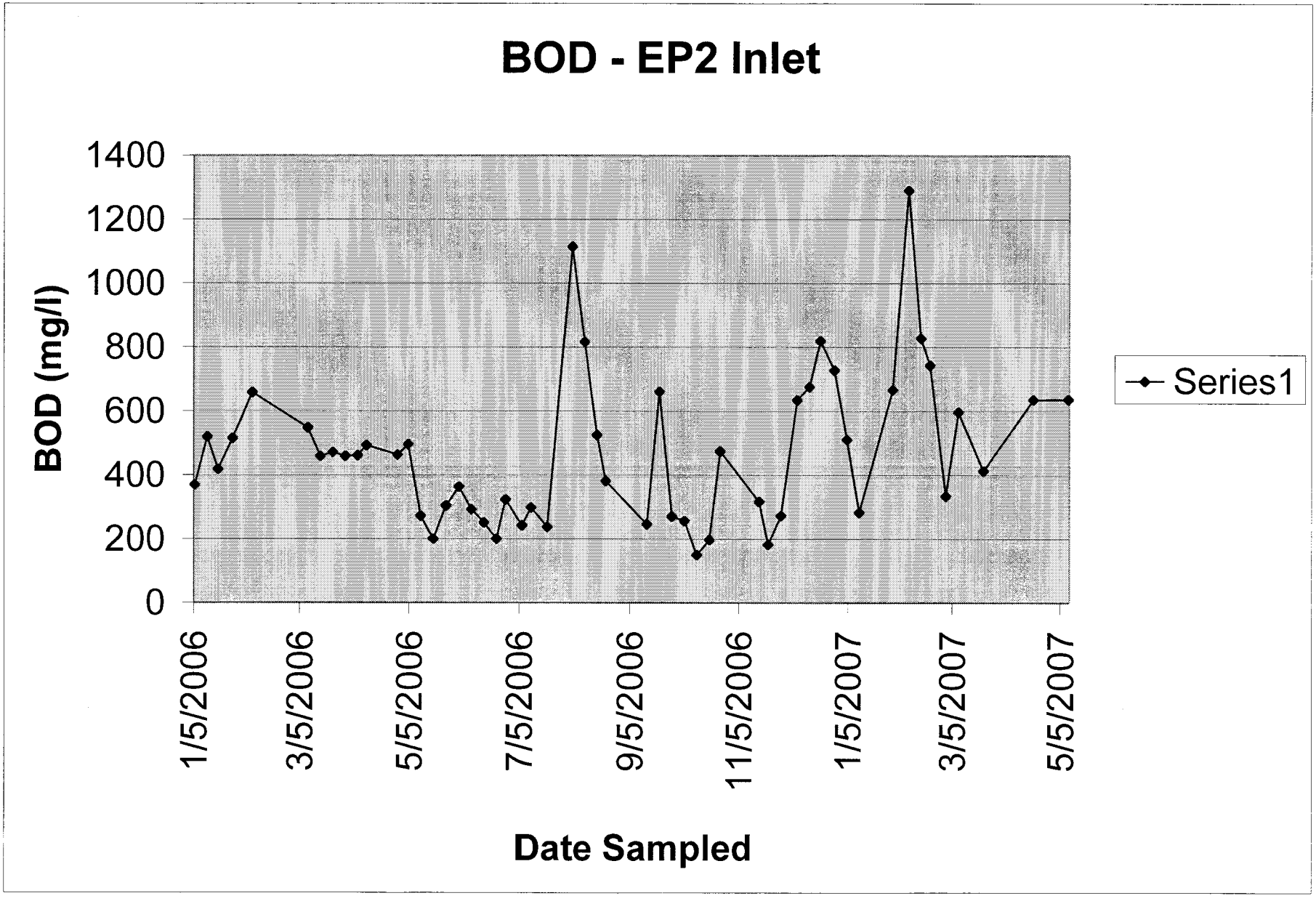
December: Annual Hazwoper training at NMU Gallup campus. RCRA/Storm Water/SPCC training conducted. There was a fire at the DH2 heater in the ULSD Hydrotreating Unit on December 27th. Potable Well No. 1 was plugged and sealed. There was a large spill of crude at Tank 102 on December 31.

OCD Permit Condition 21:

b. Results of All Sampling and Monitoring Events

BOD and COD Concentrations
Effluent to Evaporation Pond 2

Date Sampled	BOD (mg/l)	COD (mg/l)	No. Aerators Running
5/9/2007	636	1690	5
4/19/2007	635	1710	5
3/22/2007	412	1180	5
3/8/2007	596	1980	5
3/1/2007	334	2440	5
2/20/2007	743	1800	5
2/15/2007	827	2050	5
2/8/2007	1290	3490	5
1/30/2007	666	1860	5
1/11/2007	282	2200	5
1/4/2007	510	1980	5
12/28/2006	727	2220	5
12/20/2006	819	2500	5
12/14/2006	675	2410	5
12/7/2006	634	1360	5
11/28/2006	272	975	5
11/21/2006	182	600	5
11/16/2006	316	532	5
10/25/2006	474	1040	5
10/19/2006	197	578	5
10/12/2006	150	707	5
10/5/2006	256	732	5
9/28/2006	270	1110	5
9/21/2006	660	1120	5
9/14/2006	246	884	5
8/22/2006	381	1050	5
8/17/2006	525	976	5
[illegible]/2006	816	1470	5
[illegible]/2006	1114	1930	5
7/20/2006	237	783	5
7/11/2006	298	773	5
7/6/2006	242	795	5
6/27/2006	323	800	4
6/22/2006	200	867	5
6/15/2006	251	829	5
6/8/2006	292	963	5
6/1/2006	363	1080	5
5/25/2006	304	1120	5
5/18/2006	200	988	5
5/11/2006	272	1010	5
5/4/2006	496	1180	5
4/28/2006	463	1210	5
4/11/2006	493	1480	5
4/6/2006	461	1330	5
3/30/2006	459	1470	5
3/23/2006	471	1460	5
3/16/2006	459	1480	5
3/9/2006	547	1430	5
2/6/2006	658	2860	5
1/26/2006	515	1950	5
1/18/2006	418	1100	5
1/12/2006	519	1300	5
1/5/2006	369	1390	5


BOD - EP2 Inlet
BOD (mg/l)
1400
1200
1000
800
600
400
200
0
1/5/2006
3/5/2006
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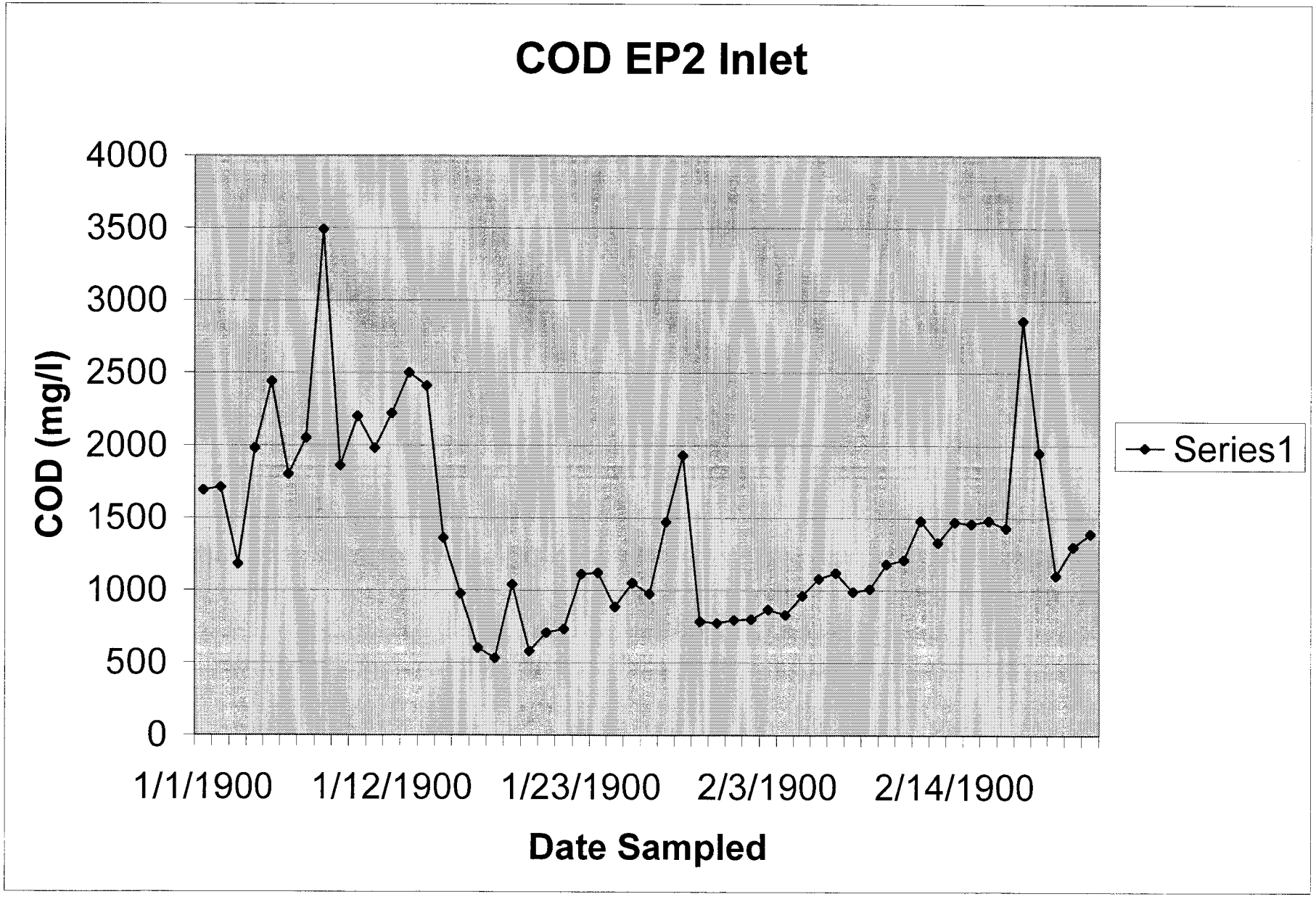
7/5/2006
9/5/2006
11/5/2006
1/5/2007
3/5/2007
5/5/2007
Date Sampled
Series1


COD EP2 Inlet
COD (mg/l)
4000
3500
3000
2500
2000
1500
1000
500
0
1/1/1900
1/12/1900
1/23/1900
2/3/1900
2/14/1900
Date Sampled
Series1

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, January 25, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-0258
FAX (505) 722-0210

RE: OAPIS Week of 1/6/2006

Order No.: 0601055

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/6/2006 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

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

Date: *25-Jan-06*

CLIENT: Giant Refining Co
Lab Order: 0601055
Project: OAPIS Week of 1/6/2006
Lab ID: 0601055-01

Client Sample ID: OAPIS
Collection Date: 1/4/2006 2:30:00 PM
Date Received: 1/6/2006
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	1/9/2006 6:56:04 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	1/9/2006 6:56:04 PM
Surr: DNOP	119	58-140		%REC	1	1/9/2006 6:56:04 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	2.1	0.50		mg/L	10	1/13/2006 11:39:59 AM
Surr: BFB	106	79.7-118		%REC	10	1/13/2006 11:39:59 AM
EPA METHOD 8310: PAHS						Analyst: **JMP**
Naphthalene	200	12		µg/L	5	1/23/2006 4:19:23 PM
1-Methylnaphthalene	27	2.5		µg/L	1	1/16/2006 11:10:35 PM
2-Methylnaphthalene	5.8	2.5		µg/L	1	1/16/2006 11:10:35 PM
Acenaphthylene	ND	2.5		µg/L	1	1/16/2006 11:10:35 PM
Acenaphthene	6.0	2.5		µg/L	1	1/16/2006 11:10:35 PM
Fluorene	7.0	0.80		µg/L	1	1/16/2006 11:10:35 PM
Phenanthrene	ND	0.60		µg/L	1	1/16/2006 11:10:35 PM
Anthracene	ND	0.60		µg/L	1	1/16/2006 11:10:35 PM
Fluoranthene	ND	0.30		µg/L	1	1/16/2006 11:10:35 PM
Pyrene	0.51	0.30		µg/L	1	1/16/2006 11:10:35 PM
Benz(a)anthracene	0.050	0.020		µg/L	1	1/16/2006 11:10:35 PM
Chrysene	ND	0.20		µg/L	1	1/16/2006 11:10:35 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	1/16/2006 11:10:35 PM
Benzo(k)fluoranthene	0.040	0.020		µg/L	1	1/16/2006 11:10:35 PM
Benzo(a)pyrene	ND	0.020		µg/L	1	1/16/2006 11:10:35 PM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	1/16/2006 11:10:35 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	1/16/2006 11:10:35 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	1/16/2006 11:10:35 PM
Surr: Benzo(e)pyrene	90.0	54-102		%REC	1	1/16/2006 11:10:35 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	1/9/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **CMC**
Arsenic	ND	0.020		mg/L	1	1/16/2006 2:22:17 PM
Barium	0.23	0.020		mg/L	1	1/16/2006 2:22:17 PM
Cadmium	ND	0.0020		mg/L	1	1/16/2006 2:22:17 PM
Chromium	0.0093	0.0060		mg/L	1	1/16/2006 2:22:17 PM
Lead	ND	0.0050		mg/L	1	1/16/2006 2:22:17 PM

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: *25-Jan-06*

CLIENT: Giant Refining Co
Lab Order: 0601055
Project: OAPIS Week of 1/6/2006
Lab ID: 0601055-01

Client Sample ID: OAPIS
Collection Date: 1/4/2006 2:30:00 PM
Date Received: 1/6/2006
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **CMC**
Selenium	ND	0.050		mg/L	1	1/16/2006 2:22:17 PM
Silver	ND	0.0050		mg/L	1	1/16/2006 2:22:17 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
Benzene	190	10		µg/L	10	1/16/2006
Toluene	50	10		µg/L	10	1/16/2006
Ethylbenzene	ND	10		µg/L	10	1/16/2006
Methyl tert-butyl ether (MTBE)	11	10		µg/L	10	1/16/2006
1,2,4-Trimethylbenzene	47	10		µg/L	10	1/16/2006
1,3,5-Trimethylbenzene	44	10		µg/L	10	1/16/2006
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	1/16/2006
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	1/16/2006
Naphthalene	25	20		µg/L	10	1/16/2006
1-Methylnaphthalene	51	40		µg/L	10	1/16/2006
2-Methylnaphthalene	53	40		µg/L	10	1/16/2006
Acetone	210	100		µg/L	10	1/16/2006
Bromobenzene	ND	10		µg/L	10	1/16/2006
Bromochloromethane	ND	10		µg/L	10	1/16/2006
Bromodichloromethane	ND	10		µg/L	10	1/16/2006
Bromoform	ND	10		µg/L	10	1/16/2006
Bromomethane	ND	20		µg/L	10	1/16/2006
2-Butanone	ND	100		µg/L	10	1/16/2006
Carbon disulfide	ND	100		µg/L	10	1/16/2006
Carbon Tetrachloride	ND	20		µg/L	10	1/16/2006
Chlorobenzene	ND	10		µg/L	10	1/16/2006
Chloroethane	ND	20		µg/L	10	1/16/2006
Chloroform	ND	10		µg/L	10	1/16/2006
Chloromethane	ND	10		µg/L	10	1/16/2006
2-Chlorotoluene	ND	10		µg/L	10	1/16/2006
4-Chlorotoluene	ND	10		µg/L	10	1/16/2006
cis-1,2-DCE	ND	10		µg/L	10	1/16/2006
cis-1,3-Dichloropropene	ND	10		µg/L	10	1/16/2006
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	1/16/2006
Dibromochloromethane	ND	10		µg/L	10	1/16/2006
Dibromomethane	ND	20		µg/L	10	1/16/2006
1,2-Dichlorobenzene	ND	10		µg/L	10	1/16/2006
1,3-Dichlorobenzene	ND	10		µg/L	10	1/16/2006
1,4-Dichlorobenzene	ND	10		µg/L	10	1/16/2006
Dichlorodifluoromethane	ND	10		µg/L	10	1/16/2006
1,1-Dichloroethane	ND	20		µg/L	10	1/16/2006

Qualifiers:
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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: *25-Jan-06*

CLIENT: Giant Refining Co
Lab Order: 0601055
Project: OAPIS Week of 1/6/2006
Lab ID: 0601055-01

Client Sample ID: OAPIS
Collection Date: 1/4/2006 2:30:00 PM
Date Received: 1/6/2006
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
1,1-Dichloroethene	ND	10		µg/L	10	1/16/2006
1,2-Dichloropropane	ND	10		µg/L	10	1/16/2006
1,3-Dichloropropane	ND	10		µg/L	10	1/16/2006
2,2-Dichloropropane	ND	20		µg/L	10	1/16/2006
1,1-Dichloropropene	ND	10		µg/L	10	1/16/2006
Hexachlorobutadiene	ND	20		µg/L	10	1/16/2006
2-Hexanone	ND	100		µg/L	10	1/16/2006
Isopropylbenzene	ND	10		µg/L	10	1/16/2006
4-Isopropyltoluene	ND	10		µg/L	10	1/16/2006
4-Methyl-2-pentanone	ND	100		µg/L	10	1/16/2006
Methylene Chloride	ND	30		µg/L	10	1/16/2006
n-Butylbenzene	ND	10		µg/L	10	1/16/2006
n-Propylbenzene	ND	10		µg/L	10	1/16/2006
sec-Butylbenzene	ND	10		µg/L	10	1/16/2006
Styrene	ND	10		µg/L	10	1/16/2006
tert-Butylbenzene	ND	10		µg/L	10	1/16/2006
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	1/16/2006
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	1/16/2006
Tetrachloroethene (PCE)	ND	10		µg/L	10	1/16/2006
trans-1,2-DCE	ND	10		µg/L	10	1/16/2006
trans-1,3-Dichloropropene	ND	10		µg/L	10	1/16/2006
1,2,3-Trichlorobenzene	ND	10		µg/L	10	1/16/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	10	1/16/2006
1,1,1-Trichloroethane	ND	10		µg/L	10	1/16/2006
1,1,2-Trichloroethane	ND	10		µg/L	10	1/16/2006
Trichloroethene (TCE)	ND	10		µg/L	10	1/16/2006
Trichlorofluoromethane	ND	10		µg/L	10	1/16/2006
1,2,3-Trichloropropane	ND	20		µg/L	10	1/16/2006
Vinyl chloride	ND	10		µg/L	10	1/16/2006
Xylenes, Total	530	10		µg/L	10	1/16/2006
Surr: 1,2-Dichloroethane-d4	114	69.9-130		%REC	10	1/16/2006
Surr: 4-Bromofluorobenzene	103	71.2-123		%REC	10	1/16/2006
Surr: Dibromofluoromethane	116	73.9-134		%REC	10	1/16/2006
Surr: Toluene-d8	96.2	81.9-122		%REC	10	1/16/2006

Qualifiers:
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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: *25-Jan-06*

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **MB-9535** SampType: **MBLK** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17852**
Client ID: **ZZZZZ** Batch ID: **9535** TestNo: **SW8015** Analysis Date: **1/9/2006** SeqNo: **438884**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCS-9535** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17852**
Client ID: **ZZZZZ** Batch ID: **9535** TestNo: **SW8015** Analysis Date: **1/9/2006** SeqNo: **438885**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.740	1.0	5	0	115	81.2	149				

Sample ID: **LCSD-9535** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17852**
Client ID: **ZZZZZ** Batch ID: **9535** TestNo: **SW8015** Analysis Date: **1/9/2006** SeqNo: **438886**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.962	1.0	5	0	119	81.2	149	5.74	3.80	23	

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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

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **Reagent Blank 5ml** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **17890**
Client ID: **ZZZZZ** Batch ID: **R17890** TestNo: **SW8015** Analysis Date: **1/12/2006** SeqNo: **439931**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **Reagent Blank 5ml** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **17915**
Client ID: **ZZZZZ** Batch ID: **R17915** TestNo: **SW8015** Analysis Date: **1/13/2006** SeqNo: **440339**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **GRO lcs 2.5ug** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **17890**
Client ID: **ZZZZZ** Batch ID: **R17890** TestNo: **SW8015** Analysis Date: **1/13/2006** SeqNo: **439932**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4586	0.050	0.5	0	91.7	82.6	114				

Sample ID: **GRO lcs 2.5ug** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **17915**
Client ID: **ZZZZZ** Batch ID: **R17915** TestNo: **SW8015** Analysis Date: **1/13/2006** SeqNo: **440340**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4762	0.050	0.5	0	95.2	82.6	114				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **MB-9551** SampType: **MBLK** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/10/2006** RunNo: **17974**
Client ID: **ZZZZZ** Batch ID: **9551** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/16/2006** SeqNo: **441634**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									
Anthracene	ND	0.60									
Fluoranthene	ND	0.30									
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	ND	0.020									
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									

Sample ID: **LCS-9551** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/10/2006** RunNo: **17974**
Client ID: **ZZZZZ** Batch ID: **9551** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/16/2006** SeqNo: **441637**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	14.94	2.5	20	0	74.7	34.8	97.4				
1-Methylnaphthalene	14.85	2.5	20.05	0	74.1	34.7	100				
2-Methylnaphthalene	14.55	2.5	20	0	72.8	35	98.1				
Acenaphthylene	14.63	2.5	20.05	0	73.0	48.3	95.1				
Acenaphthene	15.05	2.5	20	0	75.2	45	95				
Fluorene	1.480	0.80	2.005	0	73.8	46.8	93.4				
Phenanthrene	0.8300	0.60	1.005	0	82.6	48.7	104				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **LCS-9551** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/10/2006** RunNo: **17974**
Client ID: **ZZZZZ** Batch ID: **9551** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/16/2006** SeqNo: **441637**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	0.7900	0.60	1.005	0	78.6	47.5	102				
Fluoranthene	1.720	0.30	2.005	0	85.8	46.3	108				
Pyrene	1.820	0.30	2.005	0	90.8	43.8	109				
Benz(a)anthracene	0.1800	0.020	0.2005	0	89.8	40.3	115				
Chrysene	0.9600	0.20	1.005	0	95.5	42.6	107				
Benzo(b)fluoranthene	0.2200	0.050	0.2505	0	87.8	48.6	107				
Benzo(k)fluoranthene	0.1100	0.020	0.125	0	88.0	23.3	136				
Benzo(a)pyrene	0.1100	0.020	0.125	0	88.0	33.4	117				
Dibenz(a,h)anthracene	0.2200	0.040	0.25	0	88.0	27.3	139				
Benzo(g,h,i)perylene	0.2500	0.030	0.25	0	100	38.2	117				
Indeno(1,2,3-cd)pyrene	0.4770	0.080	0.501	0	95.2	39.9	125				

Sample ID: **LCSD-9551** SampType: **LCSD** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/10/2006** RunNo: **17974**
Client ID: **ZZZZZ** Batch ID: **9551** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/16/2006** SeqNo: **441638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	14.42	2.5	20	0	72.1	34.8	97.4	14.94	3.54	32.1	
1-Methylnaphthalene	14.35	2.5	20.05	0	71.6	34.7	100	14.85	3.42	32.7	
2-Methylnaphthalene	14.20	2.5	20	0	71.0	35	98.1	14.55	2.43	34	
Acenaphthylene	14.36	2.5	20.05	0	71.6	48.3	95.1	14.63	1.83	38.8	
Acenaphthene	14.61	2.5	20	0	73.0	45	95	15.05	2.97	38.6	
Fluorene	1.440	0.80	2.005	0	71.8	46.8	93.4	1.48	2.74	39.3	
Phenanthrene	0.7600	0.60	1.005	0	75.6	48.7	104	0.83	8.81	25	
Anthracene	0.7700	0.60	1.005	0	76.6	47.5	102	0.79	2.56	23.9	
Fluoranthene	1.610	0.30	2.005	0	80.3	46.3	108	1.72	6.61	15.7	
Pyrene	1.730	0.30	2.005	0	86.3	43.8	109	1.82	5.07	15.3	
Benz(a)anthracene	0.1600	0.020	0.2005	0	79.8	40.3	115	0.18	11.8	119	
Chrysene	0.8700	0.20	1.005	0	86.6	42.6	107	0.96	9.84	16.6	
Benzo(b)fluoranthene	0.2100	0.050	0.2505	0	83.8	48.6	107	0.22	4.65	21.7	
Benzo(k)fluoranthene	0.1000	0.020	0.125	0	80.0	23.3	136	0.11	9.52	19.4	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **LCSD-9551** SampType: **LCSD** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/10/2006** RunNo: **17974**
Client ID: **ZZZZZ** Batch ID: **9551** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/16/2006** SeqNo: **441638**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	0.1300	0.020	0.125	0	104	33.4	117	0.11	16.7	16.7	
Dibenz(a,h)anthracene	0.2100	0.040	0.25	0	84.0	27.3	139	0.22	4.65	17.3	
Benzo(g,h,i)perylene	0.2300	0.030	0.25	0	92.0	38.2	117	0.25	8.33	118	
Indeno(1,2,3-cd)pyrene	0.4540	0.080	0.501	0	90.6	39.9	125	0.477	4.94	17.7	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

TestCode: HG_CTW

Sample ID: **MB-9544** SampType: **MBLK** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17848**
Client ID: **ZZZZZ** Batch ID: **9544** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/9/2006** SeqNo: **438823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: **LCS-9544** SampType: **LCS** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17848**
Client ID: **ZZZZZ** Batch ID: **9544** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/9/2006** SeqNo: **438824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004253	0.00020	0.005	0	85.1	80	120				

Sample ID: **LCSD-9544** SampType: **LCSD** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17848**
Client ID: **ZZZZZ** Batch ID: **9544** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/9/2006** SeqNo: **438848**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004311	0.00020	0.005	0	86.2	80	120	0.004253	1.35	0	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **MB-9536** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17885**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/12/2006** SeqNo: **439739**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **MB-9536** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17932**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/16/2006** SeqNo: **440773**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **LCS-9536** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17885**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/12/2006** SeqNo: **439740**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.4894	0.0050	0.5	0	97.9	80	120				

Sample ID: **LCS-9536** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17932**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/16/2006** SeqNo: **440774**

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

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

TestCode: METALS_TOTAL

Sample ID: **LCS-9536** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17932**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/16/2006** SeqNo: **440774**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4853	0.020	0.5	0	97.1	80	120				
Barium	0.4613	0.020	0.5	0	92.3	80	120				
Cadmium	0.4680	0.0020	0.5	0	93.6	80	120				
Chromium	0.4714	0.0060	0.5	0	94.3	80	120				
Lead	0.4601	0.0050	0.5	0	92.0	80	120				
Selenium	0.4684	0.050	0.5	0	93.7	80	120				
Silver	0.4791	0.0050	0.5	0.001109	95.6	80	120				

Sample ID: **LCSD-9536** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17885**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/12/2006** SeqNo: **439741**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.4769	0.0050	0.5	0	95.4	80	120	0.4894	2.60	20	

Sample ID: **LCSD-9536** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17932**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/16/2006** SeqNo: **440775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4891	0.020	0.5	0	97.8	80	120	0.4853	0.775	20	
Barium	0.4627	0.020	0.5	0	92.5	80	120	0.4613	0.308	20	
Cadmium	0.4676	0.0020	0.5	0	93.5	80	120	0.468	0.0760	20	
Chromium	0.4741	0.0060	0.5	0	94.8	80	120	0.4714	0.582	20	
Lead	0.4560	0.0050	0.5	0	91.2	80	120	0.4601	0.907	20	
Selenium	0.4633	0.050	0.5	0	92.7	80	120	0.4684	1.11	20	
Silver	0.4795	0.0050	0.5	0.001109	95.7	80	120	0.4791	0.0776	20	

11/18

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Date: *25-Jan-06*

Hall Environmental Analysis Laboratory

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

TestCode: 8260_W

Sample ID: **5ml rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **17916**
Client ID: **ZZZZZ** Batch ID: **R17916** TestNo: **SW8260B** Analysis Date: **1/13/2006** SeqNo: **440423**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,2-Dichloroethane (EDC)	ND	1.0									
1,2-Dibromoethane (EDB)	ND	1.0									
Naphthalene	ND	2.0									
1-Methylnaphthalene	ND	4.0									
2-Methylnaphthalene	ND	4.0									
Acetone	ND	10									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	2.0									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	2.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	2.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
cis-1,2-DCE	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									

12/18

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **5ml rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **17916**
Client ID: **ZZZZZ** Batch ID: **R17916** TestNo: **SW8260B** Analysis Date: **1/13/2006** SeqNo: **440423**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	2.0									
1,2-Dichlorobenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
1,1-Dichloroethane	ND	2.0									
1,1-Dichloroethene	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3-Dichloropropane	ND	1.0									
2,2-Dichloropropane	ND	2.0									
1,1-Dichloropropene	ND	1.0									
Hexachlorobutadiene	ND	2.0									
2-Hexanone	ND	10									
Isopropylbenzene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Methylene Chloride	ND	3.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
Tetrachloroethene (PCE)	ND	1.0									
trans-1,2-DCE	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

13/18

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

TestCode: 8260_W

Sample ID: **5ml rb** | SampType: **MBLK** | TestCode: **8260_W** | Units: **µg/L** | Prep Date: | RunNo: **17916**
Client ID: **ZZZZZ** | Batch ID: **R17916** | TestNo: **SW8260B** | Analysis Date: **1/13/2006** | SeqNo: **440423**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	1.0									
Trichloroethene (TCE)	ND	1.0									
Trichlorofluoromethane	ND	1.0									
1,2,3-Trichloropropane	ND	2.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	1.0									

Sample ID: **5ml rb** | SampType: **MBLK** | TestCode: **8260_W** | Units: **µg/L** | Prep Date: | RunNo: **17921**
Client ID: **ZZZZZ** | Batch ID: **R17921** | TestNo: **SW8260B** | Analysis Date: **1/16/2006** | SeqNo: **440538**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,2-Dichloroethane (EDC)	ND	1.0									
1,2-Dibromoethane (EDB)	ND	1.0									
Naphthalene	ND	2.0									
1-Methylnaphthalene	ND	4.0									
2-Methylnaphthalene	ND	4.0									
Acetone	ND	10									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	2.0									
2-Butanone	ND	10									
Carbon disulfide	ND	10									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

Sample ID: **5ml rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **17921**
Client ID: **ZZZZZ** Batch ID: **R17921** TestNo: **SW8260B** Analysis Date: **1/16/2006** SeqNo: **440538**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon Tetrachloride	ND	2.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	2.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
cis-1,2-DCE	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	2.0									
1,2-Dichlorobenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
1,1-Dichloroethane	ND	2.0									
1,1-Dichloroethene	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3-Dichloropropane	ND	1.0									
2,2-Dichloropropane	ND	2.0									
1,1-Dichloropropene	ND	1.0									
Hexachlorobutadiene	ND	2.0									
2-Hexanone	ND	10									
Isopropylbenzene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Methylene Chloride	ND	3.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
sec-Butylbenzene	ND	1.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

Sample ID: **5ml rb** | SampType: **MBLK** | TestCode: **8260_W** | Units: **µg/L** | Prep Date: | RunNo: **17921**
Client ID: **ZZZZZ** | Batch ID: **R17921** | TestNo: **SW8260B** | Analysis Date: **1/16/2006** | SeqNo: **440538**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
Tetrachloroethene (PCE)	ND	1.0									
trans-1,2-DCE	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									
1,1,2-Trichloroethane	ND	1.0									
Trichloroethene (TCE)	ND	1.0									
Trichlorofluoromethane	ND	1.0									
1,2,3-Trichloropropane	ND	2.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	1.0									

Sample ID: **100ng lcs** | SampType: **LCS** | TestCode: **8260_W** | Units: **µg/L** | Prep Date: | RunNo: **17916**
Client ID: **ZZZZZ** | Batch ID: **R17916** | TestNo: **SW8260B** | Analysis Date: **1/13/2006** | SeqNo: **440424**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.47	1.0	20	0	102	79.3	136				
Toluene	20.09	1.0	20	0	100	65.5	123				
Chlorobenzene	20.51	1.0	20	0	103	80.3	134				
1,1-Dichloroethene	20.10	1.0	20	0	101	72.7	135				
Trichloroethene (TCE)	19.96	1.0	20	0	99.8	85.6	119				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601055
Project: OAPIS Week of 1/6/2006

TestCode: 8260_W

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **17921**
Client ID: **ZZZZZ** Batch ID: **R17921** TestNo: **SW8260B** Analysis Date: **1/16/2006** SeqNo: **440539**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.04	1.0	20	0	100	79.3	136				
Toluene	19.43	1.0	20	0	97.1	65.5	123				
Chlorobenzene	20.33	1.0	20	0	102	80.3	134				
1,1-Dichloroethene	19.92	1.0	20	0	99.6	72.7	135				
Trichloroethene (TCE)	18.98	1.0	20	0	94.9	85.6	119				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 1/6/2006

Work Order Number 0601055

Received by AT

Checklist completed by _____ Signature Date 1/6/06

Matrix

Carrier name UPS

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?	7°	*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 87321
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: OAPIS Week of 1-6-2006
Project #:
Project Manager: Steve Morris
Sampler:
Sample Temperature: 7°

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 (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)
-4-06	1430	H_2O	OAPIS				0601055-1			X				X	X			X						

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	
-5-06	0900	[signature]	[signature]	1/6/06 @ 1340
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, January 25, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: OAPIS Week of 1/13/06

Order No.: 0601119

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/13/2006 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

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

Date: *25-Jan-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OAPIS
Lab Order:	0601119	**Collection Date:**	1/11/2006 1:30:00 PM
Project:	OAPIS Week of 1/13/06	**Date Received:**	1/13/2006
Lab ID:	0601119-01	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	4.6	3.0		mg/L	1	1/17/2006 9:40:35 AM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	1/17/2006 9:40:35 AM
Surr: DNOP	128	58-140		%REC	1	1/17/2006 9:40:35 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	6.0	2.0		mg/L	40	1/23/2006 1:50:24 PM
Surr: BFB	105	79.7-118		%REC	40	1/23/2006 1:50:24 PM
EPA METHOD 8310: PAHS						Analyst: **JMP**
Naphthalene	190	12		µg/L	5	1/23/2006 3:31:23 PM
1-Methylnaphthalene	68	2.5		µg/L	1	1/18/2006 11:04:38 PM
2-Methylnaphthalene	37	2.5		µg/L	1	1/18/2006 11:04:38 PM
Acenaphthylene	ND	2.5		µg/L	1	1/18/2006 11:04:38 PM
Acenaphthene	ND	2.5		µg/L	1	1/18/2006 11:04:38 PM
Fluorene	7.7	0.80		µg/L	1	1/18/2006 11:04:38 PM
Phenanthrene	5.9	0.60		µg/L	1	1/18/2006 11:04:38 PM
Anthracene	ND	0.60		µg/L	1	1/18/2006 11:04:38 PM
Fluoranthene	0.30	0.30		µg/L	1	1/18/2006 11:04:38 PM
Pyrene	0.52	0.30		µg/L	1	1/18/2006 11:04:38 PM
Benz(a)anthracene	0.060	0.020		µg/L	1	1/18/2006 11:04:38 PM
Chrysene	ND	0.20		µg/L	1	1/18/2006 11:04:38 PM
Benzo(b)fluoranthene	0.080	0.050		µg/L	1	1/18/2006 11:04:38 PM
Benzo(k)fluoranthene	0.050	0.020		µg/L	1	1/18/2006 11:04:38 PM
Benzo(a)pyrene	0.050	0.020		µg/L	1	1/18/2006 11:04:38 PM
Dibenz(a,h)anthracene	0.040	0.040		µg/L	1	1/18/2006 11:04:38 PM
Benzo(g,h,i)perylene	0.10	0.030		µg/L	1	1/18/2006 11:04:38 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	1/18/2006 11:04:38 PM
Surr: Benzo(e)pyrene	77.9	54-102		%REC	1	1/18/2006 11:04:38 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	1/20/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/20/2006 10:39:37 AM
Barium	0.26	0.020		mg/L	1	1/20/2006 10:39:37 AM
Cadmium	ND	0.0020		mg/L	1	1/20/2006 10:39:37 AM
Chromium	0.0092	0.0060		mg/L	1	1/20/2006 10:39:37 AM
Lead	ND	0.0050		mg/L	1	1/20/2006 10:39:37 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *25-Jan-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OAPIS
Lab Order:	0601119	**Collection Date:**	1/11/2006 1:30:00 PM
Project:	OAPIS Week of 1/13/06	**Date Received:**	1/13/2006
Lab ID:	0601119-01	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Selenium	ND	0.050		mg/L	1	1/20/2006 10:39:37 AM
Silver	ND	0.0050		mg/L	1	1/20/2006 10:39:37 AM
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
Benzene	1000	50		µg/L	50	1/19/2006
Toluene	990	50		µg/L	50	1/19/2006
Ethylbenzene	ND	50		µg/L	50	1/19/2006
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	1/19/2006
1,2,4-Trimethylbenzene	180	50		µg/L	50	1/19/2006
1,3,5-Trimethylbenzene	82	50		µg/L	50	1/19/2006
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	1/19/2006
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	1/19/2006
Naphthalene	110	100		µg/L	50	1/19/2006
1-Methylnaphthalene	ND	200		µg/L	50	1/19/2006
2-Methylnaphthalene	ND	200		µg/L	50	1/19/2006
Acetone	ND	500		µg/L	50	1/19/2006
Bromobenzene	ND	50		µg/L	50	1/19/2006
Bromochloromethane	ND	50		µg/L	50	1/19/2006
Bromodichloromethane	ND	50		µg/L	50	1/19/2006
Bromoform	ND	50		µg/L	50	1/19/2006
Bromomethane	ND	100		µg/L	50	1/19/2006
2-Butanone	ND	500		µg/L	50	1/19/2006
Carbon disulfide	ND	500		µg/L	50	1/19/2006
Carbon Tetrachloride	ND	100		µg/L	50	1/19/2006
Chlorobenzene	ND	50		µg/L	50	1/19/2006
Chloroethane	ND	100		µg/L	50	1/19/2006
Chloroform	ND	50		µg/L	50	1/19/2006
Chloromethane	ND	50		µg/L	50	1/19/2006
2-Chlorotoluene	ND	50		µg/L	50	1/19/2006
4-Chlorotoluene	ND	50		µg/L	50	1/19/2006
cis-1,2-DCE	ND	50		µg/L	50	1/19/2006
cis-1,3-Dichloropropene	ND	50		µg/L	50	1/19/2006
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	1/19/2006
Dibromochloromethane	ND	50		µg/L	50	1/19/2006
Dibromomethane	ND	100		µg/L	50	1/19/2006
1,2-Dichlorobenzene	ND	50		µg/L	50	1/19/2006
1,3-Dichlorobenzene	ND	50		µg/L	50	1/19/2006
1,4-Dichlorobenzene	ND	50		µg/L	50	1/19/2006
Dichlorodifluoromethane	ND	50		µg/L	50	1/19/2006
1,1-Dichloroethane	ND	100		µg/L	50	1/19/2006

Qualifiers:

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- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: *25-Jan-06*

CLIENT: Giant Refining Co
Lab Order: 0601119
Project: OAPIS Week of 1/13/06
Lab ID: 0601119-01

Client Sample ID: OAPIS
Collection Date: 1/11/2006 1:30:00 PM
Date Received: 1/13/2006
Matrix: AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
1,1-Dichloroethene	ND	50		µg/L	50	1/19/2006
1,2-Dichloropropane	ND	50		µg/L	50	1/19/2006
1,3-Dichloropropane	ND	50		µg/L	50	1/19/2006
2,2-Dichloropropane	ND	100		µg/L	50	1/19/2006
1,1-Dichloropropene	ND	50		µg/L	50	1/19/2006
Hexachlorobutadiene	ND	100		µg/L	50	1/19/2006
2-Hexanone	ND	500		µg/L	50	1/19/2006
Isopropylbenzene	ND	50		µg/L	50	1/19/2006
4-Isopropyltoluene	ND	50		µg/L	50	1/19/2006
4-Methyl-2-pentanone	ND	500		µg/L	50	1/19/2006
Methylene Chloride	ND	150		µg/L	50	1/19/2006
n-Butylbenzene	ND	50		µg/L	50	1/19/2006
n-Propylbenzene	ND	50		µg/L	50	1/19/2006
sec-Butylbenzene	ND	50		µg/L	50	1/19/2006
Styrene	ND	50		µg/L	50	1/19/2006
tert-Butylbenzene	ND	50		µg/L	50	1/19/2006
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	1/19/2006
1,1,2,2-Tetrachloroethane	ND	50		µg/L	50	1/19/2006
Tetrachloroethene (PCE)	ND	50		µg/L	50	1/19/2006
trans-1,2-DCE	ND	50		µg/L	50	1/19/2006
trans-1,3-Dichloropropene	ND	50		µg/L	50	1/19/2006
1,2,3-Trichlorobenzene	ND	50		µg/L	50	1/19/2006
1,2,4-Trichlorobenzene	ND	50		µg/L	50	1/19/2006
1,1,1-Trichloroethane	ND	50		µg/L	50	1/19/2006
1,1,2-Trichloroethane	ND	50		µg/L	50	1/19/2006
Trichloroethene (TCE)	ND	50		µg/L	50	1/19/2006
Trichlorofluoromethane	ND	50		µg/L	50	1/19/2006
1,2,3-Trichloropropane	ND	100		µg/L	50	1/19/2006
Vinyl chloride	ND	50		µg/L	50	1/19/2006
Xylenes, Total	970	50		µg/L	50	1/19/2006
Surr: 1,2-Dichloroethane-d4	104	69.9-130		%REC	50	1/19/2006
Surr: 4-Bromofluorobenzene	110	71.2-123		%REC	50	1/19/2006
Surr: Dibromofluoromethane	93.2	73.9-134		%REC	50	1/19/2006
Surr: Toluene-d8	99.9	81.9-122		%REC	50	1/19/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *25-Jan-06*

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **LCS-9583** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/16/2006** RunNo: **17928**
Client ID: **ZZZZZ** Batch ID: **9583** TestNo: **SW8015** Analysis Date: **1/16/2006** SeqNo: **440598**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.618	1.0	5	0	112	81.2	149				
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCSD-9583** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/16/2006** RunNo: **17928**
Client ID: **ZZZZZ** Batch ID: **9583** TestNo: **SW8015** Analysis Date: **1/16/2006** SeqNo: **440599**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.779	1.0	5	0	116	81.2	149	5.618	2.82	23	
Motor Oil Range Organics (MRO)	ND	5.0						0	0	0	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18017**
Client ID: **ZZZZZ** Batch ID: **R18017** TestNo: **SW8015** Analysis Date: **1/23/2006** SeqNo: **443323**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18017**
Client ID: **ZZZZZ** Batch ID: **R18017** TestNo: **SW8015** Analysis Date: **1/23/2006** SeqNo: **443324**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4740	0.050	0.5	0	94.8	82.6	114				

Sample ID: **2.5UG GRO LCSD** SampType: **LCSD** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18017**
Client ID: **ZZZZZ** Batch ID: **R18017** TestNo: **SW8015** Analysis Date: **1/23/2006** SeqNo: **443349**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4840	0.050	0.5	0	96.8	82.6	114	0.474	2.09	8.39	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **MB-9599** SampType: **MBLK** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/17/2006** RunNo: **17999**
Client ID: **ZZZZZ** Batch ID: **9599** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/18/2006** SeqNo: **442601**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									
Anthracene	ND	0.60									
Fluoranthene	ND	0.30									
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	ND	0.020									
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									

Sample ID: **LCS-9599** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/17/2006** RunNo: **17999**
Client ID: **ZZZZZ** Batch ID: **9599** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/18/2006** SeqNo: **442603**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	24.23	2.5	40	0	60.6	34.8	97.4				
1-Methylnaphthalene	23.35	2.5	40.1	0	58.2	34.7	100				
2-Methylnaphthalene	23.08	2.5	40	0	57.7	35	98.1				
Acenaphthylene	25.00	2.5	40.1	0	62.4	48.3	95.1				
Acenaphthene	24.46	2.5	40	0	61.2	45	95				
Fluorene	2.490	0.80	4.01	0	62.1	46.8	93.4				
Phenanthrene	1.380	0.60	2.01	0	68.7	48.7	104				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **LCS-9599** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/17/2006** RunNo: **17999**
Client ID: **ZZZZZ** Batch ID: **9599** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/18/2006** SeqNo: **442603**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1.340	0.60	2.01	0	66.7	47.5	102				
Fluoranthene	2.700	0.30	4.01	0	67.3	46.3	108				
Pyrene	2.720	0.30	4.01	0	67.8	43.8	109				
Benz(a)anthracene	0.2800	0.020	0.401	0	69.8	40.3	115				
Chrysene	1.370	0.20	2.01	0	68.2	42.6	107				
Benzo(b)fluoranthene	0.3400	0.050	0.501	0	67.9	48.6	107				
Benzo(k)fluoranthene	0.1700	0.020	0.25	0	68.0	23.3	136				
Benzo(a)pyrene	0.1700	0.020	0.251	0	67.7	33.4	117				
Dibenz(a,h)anthracene	0.3400	0.040	0.501	0	67.9	27.3	139				
Benzo(g,h,i)perylene	0.3600	0.030	0.5	0	72.0	38.2	117				
Indeno(1,2,3-cd)pyrene	0.7370	0.080	1.002	0	73.6	39.9	125				

Sample ID: **LCSD-9599** SampType: **LCSD** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/17/2006** RunNo: **17999**
Client ID: **ZZZZZ** Batch ID: **9599** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/18/2006** SeqNo: **442604**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	24.98	2.5	40	0	62.4	34.8	97.4	24.23	3.05	32.1	
1-Methylnaphthalene	24.30	2.5	40.1	0	60.6	34.7	100	23.35	3.99	32.7	
2-Methylnaphthalene	24.05	2.5	40	0	60.1	35	98.1	23.08	4.12	34	
Acenaphthylene	25.66	2.5	40.1	0	64.0	48.3	95.1	25	2.58	38.8	
Acenaphthene	25.29	2.5	40	0	63.2	45	95	24.46	3.34	38.6	
Fluorene	2.570	0.80	4.01	0	64.1	46.8	93.4	2.49	3.16	39.3	
Phenanthrene	1.370	0.60	2.01	0	68.2	48.7	104	1.38	0.727	25	
Anthracene	1.400	0.60	2.01	0	69.7	47.5	102	1.34	4.38	23.9	
Fluoranthene	2.910	0.30	4.01	0	72.6	46.3	108	2.7	7.49	15.7	
Pyrene	2.830	0.30	4.01	0	70.6	43.8	109	2.72	3.96	15.3	
Benz(a)anthracene	0.2900	0.020	0.401	0	72.3	40.3	115	0.28	3.51	119	
Chrysene	1.520	0.20	2.01	0	75.6	42.6	107	1.37	10.4	16.6	
Benzo(b)fluoranthene	0.3700	0.050	0.501	0	73.9	48.6	107	0.34	8.45	21.7	
Benzo(k)fluoranthene	0.1800	0.020	0.25	0	72.0	23.3	136	0.17	5.71	19.4	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **LCSD-9599** SampType: **LCSD** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/17/2006** RunNo: **17999**
Client ID: **ZZZZZ** Batch ID: **9599** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/18/2006** SeqNo: **442604**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	0.1800	0.020	0.251	0	71.7	33.4	117	0.17	5.71	16.7	
Dibenz(a,h)anthracene	0.3500	0.040	0.501	0	69.9	27.3	139	0.34	2.90	17.3	
Benzo(g,h,i)perylene	0.3900	0.030	0.5	0	78.0	38.2	117	0.36	8.00	118	
Indeno(1,2,3-cd)pyrene	0.7620	0.080	1.002	0	76.0	39.9	125	0.737	3.34	17.7	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

ANALYTICAL QC SUMMARY REPORT

TestCode: Hg_CTW

Sample ID: **MB-9625** SampType: **MBLK** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **1/20/2006** RunNo: **17989**
Client ID: **ZZZZZ** Batch ID: **9625** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/20/2006** SeqNo: **442366**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: **LCS-9625** SampType: **LCS** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **1/20/2006** RunNo: **17989**
Client ID: **ZZZZZ** Batch ID: **9625** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/20/2006** SeqNo: **442367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004124	0.00020	0.005	0	82.5	80	120				

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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

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **MB-9615** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/19/2006** RunNo: **17983**
Client ID: **ZZZZZ** Batch ID: **9615** TestNo: **SW6010A** Analysis Date: **1/20/2006** SeqNo: **442110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **LCS-9615** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/19/2006** RunNo: **17983**
Client ID: **ZZZZZ** Batch ID: **9615** TestNo: **SW6010A** Analysis Date: **1/20/2006** SeqNo: **442101**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4712	0.020	0.5	0	94.2	80	120				
Barium	0.4652	0.020	0.5	0	93.0	80	120				
Cadmium	0.4572	0.0020	0.5	0	91.4	80	120				
Chromium	0.4752	0.0060	0.5	0	95.0	80	120				
Lead	0.4433	0.0050	0.5	0	88.7	80	120				
Selenium	0.4317	0.050	0.5	0	86.3	80	120				
Silver	0.4764	0.0050	0.5	0	95.3	80	120				

Sample ID: **LCSD-9615** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/19/2006** RunNo: **17983**
Client ID: **ZZZZZ** Batch ID: **9615** TestNo: **SW6010A** Analysis Date: **1/20/2006** SeqNo: **442102**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4736	0.020	0.5	0	94.7	80	120	0.4712	0.500	20	
Barium	0.4662	0.020	0.5	0	93.2	80	120	0.4652	0.211	20	
Cadmium	0.4649	0.0020	0.5	0	93.0	80	120	0.4572	1.65	20	
Chromium	0.4763	0.0060	0.5	0	95.3	80	120	0.4752	0.235	20	
Lead	0.4476	0.0050	0.5	0	89.5	80	120	0.4433	0.956	20	
Selenium	0.4415	0.050	0.5	0	88.3	80	120	0.4317	2.24	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

TestCode: METALS_TOTAL

Sample ID: **LCSD-9615** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/19/2006** RunNo: **17983**
Client ID: **ZZZZZ** Batch ID: **9615** TestNo: **SW6010A** Analysis Date: **1/20/2006** SeqNo: **442102**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.4772	0.0050	0.5	0	95.4	80	120	0.4764	0.179	20	

11/15

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Date: *25-Jan-06*

Hall Environmental Analysis Laboratory

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

TestCode: 8260_W

Sample ID: **5ml rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **17978**
Client ID: **ZZZZZ** Batch ID: **R17978** TestNo: **SW8260B** Analysis Date: **1/19/2006** SeqNo: **441974**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,2-Dichloroethane (EDC)	ND	1.0									
1,2-Dibromoethane (EDB)	ND	1.0									
Naphthalene	ND	2.0									
1-Methylnaphthalene	ND	4.0									
2-Methylnaphthalene	ND	4.0									
Acetone	ND	10									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	2.0									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	2.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	2.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
cis-1,2-DCE	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

TestCode: 8260_W

Sample ID: **5ml rb** | SampType: **MBLK** | TestCode: **8260_W** | Units: **µg/L** | Prep Date: | RunNo: **17978**
Client ID: **ZZZZZ** | Batch ID: **R17978** | TestNo: **SW8260B** | Analysis Date: **1/19/2006** | SeqNo: **441974**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	2.0									
1,2-Dichlorobenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
1,1-Dichloroethane	ND	2.0									
1,1-Dichloroethene	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3-Dichloropropane	ND	1.0									
2,2-Dichloropropane	ND	2.0									
1,1-Dichloropropene	ND	1.0									
Hexachlorobutadiene	ND	2.0									
2-Hexanone	ND	10									
Isopropylbenzene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Methylene Chloride	ND	3.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
Tetrachloroethene (PCE)	ND	1.0									
trans-1,2-DCE	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

13/15

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601119
Project: OAPIS Week of 1/13/06

TestCode: 8260_W

Sample ID: **5ml rb** | SampType: **MBLK** | TestCode: **8260_W** | Units: **µg/L** | Prep Date: | RunNo: **17978**
Client ID: **ZZZZZ** | Batch ID: **R17978** | TestNo: **SW8260B** | Analysis Date: **1/19/2006** | SeqNo: **441974**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	1.0									
Trichloroethene (TCE)	ND	1.0									
Trichlorofluoromethane	ND	1.0									
1,2,3-Trichloropropane	ND	2.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	1.0									

Sample ID: **100ng lcs** | SampType: **LCS** | TestCode: **8260_W** | Units: **µg/L** | Prep Date: | RunNo: **17978**
Client ID: **ZZZZZ** | Batch ID: **R17978** | TestNo: **SW8260B** | Analysis Date: **1/19/2006** | SeqNo: **441975**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.34	1.0	20	0	96.7	79.3	136				
Toluene	20.12	1.0	20	0	101	65.5	123				
Chlorobenzene	20.20	1.0	20	0	101	80.3	134				
1,1-Dichloroethene	19.93	1.0	20	0	99.7	72.7	135				
Trichloroethene (TCE)	19.14	1.0	20	0	95.7	85.6	119				

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Qualifiers:
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 1/13/2006

Work Order Number 0601119

Received by LMM

Checklist completed by Lisa Helentka (Signature) 1/13/06 (Date)

Matrix

Carrier name UPS

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?	7°	*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 Co. Ciniza
Address: Route 3, Box 7 Gallup, NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: OAPIS Week of 1-13-06
Project #:
Project Manager: ED RIEGE
Sampler: Johnny Sanchez
Sample Temperature: -0

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 (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)
1-11-06	1:30P	H_2O	OAPIS					0601119-1			X				X	X			X						

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-12-06	0900	J Sanchez	Lisa Hall 1140 1/13/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Wednesday, February 01, 2006

Johnny Sanchez
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: OAPIS Week of 1/20/2006

Order No.: 0601206

Dear Johnny Sanchez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/20/2006 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

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

Date: *01-Feb-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OAPIS
Lab Order:	0601206	**Collection Date:**	1/18/2006 2:00:00 PM
Project:	OAPIS Week of 1/20/2006	**Date Received:**	1/20/2006
Lab ID:	0601206-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	1.2	1.0		mg/L	1	1/24/2006 7:14:34 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	1/24/2006 7:14:34 PM
Surr: DNOP	116	58-140		%REC	1	1/24/2006 7:14:34 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	12	2.5		mg/L	50	1/30/2006 11:42:10 AM
Surr: BFB	113	79.7-118		%REC	50	1/30/2006 11:42:10 AM
EPA METHOD 8310: PAHS						Analyst: **JMP**
Naphthalene	230	12		µg/L	5	1/27/2006 1:13:42 PM
1-Methylnaphthalene	95	2.5		µg/L	1	1/26/2006 3:39:33 PM
2-Methylnaphthalene	62	2.5		µg/L	1	1/26/2006 3:39:33 PM
Acenaphthylene	ND	2.5		µg/L	1	1/26/2006 3:39:33 PM
Acenaphthene	3.4	2.5		µg/L	1	1/26/2006 3:39:33 PM
Fluorene	6.9	0.80		µg/L	1	1/26/2006 3:39:33 PM
Phenanthrene	0.63	0.60		µg/L	1	1/26/2006 3:39:33 PM
Anthracene	ND	0.60		µg/L	1	1/26/2006 3:39:33 PM
Fluoranthene	ND	0.30		µg/L	1	1/26/2006 3:39:33 PM
Pyrene	0.50	0.30		µg/L	1	1/26/2006 3:39:33 PM
Benz(a)anthracene	ND	0.020		µg/L	1	1/26/2006 3:39:33 PM
Chrysene	ND	0.20		µg/L	1	1/26/2006 3:39:33 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	1/26/2006 3:39:33 PM
Benzo(k)fluoranthene	0.045	0.020		µg/L	1	1/26/2006 3:39:33 PM
Benzo(a)pyrene	0.020	0.020		µg/L	1	1/26/2006 3:39:33 PM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	1/26/2006 3:39:33 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	1/26/2006 3:39:33 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	1/26/2006 3:39:33 PM
Surr: Benzo(e)pyrene	68.5	54-102		%REC	1	1/26/2006 3:39:33 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	1/24/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/25/2006 9:47:24 AM
Barium	0.19	0.020		mg/L	1	1/25/2006 9:47:24 AM
Cadmium	ND	0.0020		mg/L	1	1/25/2006 9:47:24 AM
Chromium	0.012	0.0060		mg/L	1	1/25/2006 9:47:24 AM
Lead	ND	0.0050		mg/L	1	1/25/2006 9:47:24 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *01-Feb-06*

CLIENT: Giant Refining Co
Lab Order: 0601206
Project: OAPIS Week of 1/20/2006
Lab ID: 0601206-01

Client Sample ID: OAPIS
Collection Date: 1/18/2006 2:00:00 PM
Date Received: 1/20/2006
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Selenium	ND	0.050		mg/L	1	1/25/2006 9:47:24 AM
Silver	ND	0.0050		mg/L	1	1/25/2006 9:47:24 AM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	2900	50		µg/L	50	1/25/2006
Toluene	3900	50		µg/L	50	1/25/2006
Ethylbenzene	490	50		µg/L	50	1/25/2006
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	1/25/2006
1,2,4-Trimethylbenzene	420	50		µg/L	50	1/25/2006
1,3,5-Trimethylbenzene	150	50		µg/L	50	1/25/2006
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	1/25/2006
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	1/25/2006
Naphthalene	220	100		µg/L	50	1/25/2006
1-Methylnaphthalene	260	200		µg/L	50	1/25/2006
2-Methylnaphthalene	310	200		µg/L	50	1/25/2006
Acetone	ND	500		µg/L	50	1/25/2006
Bromobenzene	ND	50		µg/L	50	1/25/2006
Bromochloromethane	ND	50		µg/L	50	1/25/2006
Bromodichloromethane	ND	50		µg/L	50	1/25/2006
Bromoform	ND	50		µg/L	50	1/25/2006
Bromomethane	ND	100		µg/L	50	1/25/2006
2-Butanone	ND	500		µg/L	50	1/25/2006
Carbon disulfide	ND	500		µg/L	50	1/25/2006
Carbon Tetrachloride	ND	100		µg/L	50	1/25/2006
Chlorobenzene	ND	50		µg/L	50	1/25/2006
Chloroethane	ND	100		µg/L	50	1/25/2006
Chloroform	ND	50		µg/L	50	1/25/2006
Chloromethane	ND	50		µg/L	50	1/25/2006
2-Chlorotoluene	ND	50		µg/L	50	1/25/2006
4-Chlorotoluene	ND	50		µg/L	50	1/25/2006
cis-1,2-DCE	ND	50		µg/L	50	1/25/2006
cis-1,3-Dichloropropene	ND	50		µg/L	50	1/25/2006
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	1/25/2006
Dibromochloromethane	ND	50		µg/L	50	1/25/2006
Dibromomethane	ND	100		µg/L	50	1/25/2006
1,2-Dichlorobenzene	ND	50		µg/L	50	1/25/2006
1,3-Dichlorobenzene	ND	50		µg/L	50	1/25/2006
1,4-Dichlorobenzene	ND	50		µg/L	50	1/25/2006
Dichlorodifluoromethane	ND	50		µg/L	50	1/25/2006
1,1-Dichloroethane	ND	100		µg/L	50	1/25/2006

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

Hall Environmental Analysis Laboratory

Date: *01-Feb-06*

CLIENT: Giant Refining Co
Lab Order: 0601206
Project: OAPIS Week of 1/20/2006
Lab ID: 0601206-01

Client Sample ID: OAPIS
Collection Date: 1/18/2006 2:00:00 PM
Date Received: 1/20/2006
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **BDH**
EPA METHOD 8260B: VOLATILES						
1,1-Dichloroethene	ND	50		µg/L	50	1/25/2006
1,2-Dichloropropane	ND	50		µg/L	50	1/25/2006
1,3-Dichloropropane	ND	50		µg/L	50	1/25/2006
2,2-Dichloropropane	ND	100		µg/L	50	1/25/2006
1,1-Dichloropropene	ND	50		µg/L	50	1/25/2006
Hexachlorobutadiene	ND	100		µg/L	50	1/25/2006
2-Hexanone	ND	500		µg/L	50	1/25/2006
Isopropylbenzene	ND	50		µg/L	50	1/25/2006
4-Isopropyltoluene	ND	50		µg/L	50	1/25/2006
4-Methyl-2-pentanone	ND	500		µg/L	50	1/25/2006
Methylene Chloride	ND	150		µg/L	50	1/25/2006
n-Butylbenzene	ND	50		µg/L	50	1/25/2006
n-Propylbenzene	66	50		µg/L	50	1/25/2006
sec-Butylbenzene	ND	50		µg/L	50	1/25/2006
Styrene	ND	50		µg/L	50	1/25/2006
tert-Butylbenzene	ND	50		µg/L	50	1/25/2006
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	1/25/2006
1,1,2,2-Tetrachloroethane	ND	50		µg/L	50	1/25/2006
Tetrachloroethene (PCE)	ND	50		µg/L	50	1/25/2006
trans-1,2-DCE	ND	50		µg/L	50	1/25/2006
trans-1,3-Dichloropropene	ND	50		µg/L	50	1/25/2006
1,2,3-Trichlorobenzene	ND	50		µg/L	50	1/25/2006
1,2,4-Trichlorobenzene	ND	50		µg/L	50	1/25/2006
1,1,1-Trichloroethane	ND	50		µg/L	50	1/25/2006
1,1,2-Trichloroethane	ND	50		µg/L	50	1/25/2006
Trichloroethene (TCE)	ND	50		µg/L	50	1/25/2006
Trichlorofluoromethane	ND	50		µg/L	50	1/25/2006
1,2,3-Trichloropropane	ND	100		µg/L	50	1/25/2006
Vinyl chloride	ND	50		µg/L	50	1/25/2006
Xylenes, Total	2900	50		µg/L	50	1/25/2006
Surr: 1,2-Dichloroethane-d4	114	69.9-130		%REC	50	1/25/2006
Surr: 4-Bromofluorobenzene	115	71.2-123		%REC	50	1/25/2006
Surr: Dibromofluoromethane	98.6	57.3-135		%REC	50	1/25/2006
Surr: Toluene-d8	109	81.9-122		%REC	50	1/25/2006

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

Date: *01-Feb-06*

Hall Environmental Analysis Laboratory

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

TestCode: 8015DRO_W

Sample ID: **MB-9636** SampType: **MBLK** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **17998**
Client ID: **ZZZZZ** Batch ID: **9636** TestNo: **SW8015** Analysis Date: **1/24/2006** SeqNo: **444110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCS-9636** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **17998**
Client ID: **ZZZZZ** Batch ID: **9636** TestNo: **SW8015** Analysis Date: **1/24/2006** SeqNo: **444111**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.020	1.0	5	0	100	81.2	149				

Sample ID: **LCSD-9636** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **17998**
Client ID: **ZZZZZ** Batch ID: **9636** TestNo: **SW8015** Analysis Date: **1/24/2006** SeqNo: **444112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.355	1.0	5	0	87.1	81.2	149	5.02	14.2	23	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18092**
Client ID: **ZZZZZ** Batch ID: **R18092** TestNo: **SW8015** Analysis Date: **1/30/2006** SeqNo: **445964**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18092**
Client ID: **ZZZZZ** Batch ID: **R18092** TestNo: **SW8015** Analysis Date: **1/30/2006** SeqNo: **445965**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.5340	0.050	0.5	0	107	82.6	114				

Sample ID: **2.5UG GRO LCSD** SampType: **LCSD** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18092**
Client ID: **ZZZZZ** Batch ID: **R18092** TestNo: **SW8015** Analysis Date: **1/30/2006** SeqNo: **445966**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.5280	0.050	0.5	0	106	82.6	114	0.534	1.13	8.39	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **MB-9639** SampType: **MBLK** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/24/2006** RunNo: **18069**
Client ID: **ZZZZZ** Batch ID: **9639** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/26/2006** SeqNo: **445300**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									
Anthracene	ND	0.60									
Fluoranthene	ND	0.30									
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	ND	0.020									
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									

Sample ID: **LCS-9639** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/24/2006** RunNo: **18069**
Client ID: **ZZZZZ** Batch ID: **9639** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/26/2006** SeqNo: **445301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	25.22	2.5	40	0	63.0	34.8	97.4				
1-Methylnaphthalene	25.46	2.5	40.1	0	63.5	34.7	100				
2-Methylnaphthalene	24.88	2.5	40	0	62.2	35	98.1				
Acenaphthylene	26.87	2.5	40.1	0	67.0	48.3	95.1				
Acenaphthene	26.93	2.5	40	0	67.3	45	95				
Fluorene	2.750	0.80	4.01	0	68.6	46.8	93.4				
Phenanthrene	1.460	0.60	2.01	0	72.6	48.7	104				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **LCS-9639** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/24/2006** RunNo: **18069**
Client ID: **ZZZZZ** Batch ID: **9639** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/26/2006** SeqNo: **445301**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1.470	0.60	2.01	0	73.1	47.5	102				
Fluoranthene	3.040	0.30	4.01	0	75.8	46.3	108				
Pyrene	3.170	0.30	4.01	0	79.1	43.8	109				
Benz(a)anthracene	0.3200	0.020	0.401	0	79.8	40.3	115				
Chrysene	1.530	0.20	2.01	0	76.1	42.6	107				
Benzo(b)fluoranthene	0.3940	0.050	0.501	0	78.6	48.6	107				
Benzo(k)fluoranthene	0.1960	0.020	0.25	0	78.4	23.3	136				
Benzo(a)pyrene	0.2000	0.020	0.251	0	79.7	33.4	117				
Dibenz(a,h)anthracene	0.3700	0.040	0.501	0	73.9	27.3	139				
Benzo(g,h,i)perylene	0.3900	0.030	0.5	0	78.0	38.2	117				
Indeno(1,2,3-cd)pyrene	0.7270	0.080	1.002	0	72.6	39.9	125				

Sample ID: **LCSD-9639** SampType: **LCSD** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/24/2006** RunNo: **18069**
Client ID: **ZZZZZ** Batch ID: **9639** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/26/2006** SeqNo: **445302**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	24.68	2.5	40	0	61.7	34.8	97.4	25.22	2.16	32.1	
1-Methylnaphthalene	24.37	2.5	40.1	0	60.8	34.7	100	25.46	4.37	32.7	
2-Methylnaphthalene	23.83	2.5	40	0	59.6	35	98.1	24.88	4.31	34	
Acenaphthylene	26.02	2.5	40.1	0	64.9	48.3	95.1	26.87	3.21	38.8	
Acenaphthene	26.12	2.5	40	0	65.3	45	95	26.93	3.05	38.6	
Fluorene	2.650	0.80	4.01	0	66.1	46.8	93.4	2.75	3.70	39.3	
Phenanthrene	1.410	0.60	2.01	0	70.1	48.7	104	1.46	3.48	25	
Anthracene	1.430	0.60	2.01	0	71.1	47.5	102	1.47	2.76	23.9	
Fluoranthene	2.930	0.30	4.01	0	73.1	46.3	108	3.04	3.69	15.7	
Pyrene	3.160	0.30	4.01	0	78.8	43.8	109	3.17	0.316	15.3	
Benz(a)anthracene	0.3200	0.020	0.401	0	79.8	40.3	115	0.32	0	119	
Chrysene	1.550	0.20	2.01	0	77.1	42.6	107	1.53	1.30	16.6	
Benzo(b)fluoranthene	0.3980	0.050	0.501	0	79.4	48.6	107	0.394	1.01	21.7	
Benzo(k)fluoranthene	0.2020	0.020	0.25	0	80.8	23.3	136	0.196	3.02	19.4	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

TestCode: 8310_W

Sample ID: **LCSD-9639** SampType: **LCSD** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/24/2006** RunNo: **18069**
Client ID: **ZZZZZ** Batch ID: **9639** TestNo: **SW8310** **(SW3510C)** Analysis Date: **1/26/2006** SeqNo: **445302**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	0.1900	0.020	0.251	0	75.7	33.4	117	0.2	5.13	16.7	
Dibenz(a,h)anthracene	0.3700	0.040	0.501	0	73.9	27.3	139	0.37	0	17.3	
Benzo(g,h,i)perylene	0.4300	0.030	0.5	0	86.0	38.2	117	0.39	9.76	118	
Indeno(1,2,3-cd)pyrene	0.8760	0.080	1.002	0	87.4	39.9	125	0.727	18.6	17.7	R

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: Hg_CTW

Sample ID: **MB-9640** SampType: **MBLK** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **18026**
Client ID: **ZZZZZ** Batch ID: **9640** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/24/2006** SeqNo: **444078**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: **LCS-9640** SampType: **LCS** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **18026**
Client ID: **ZZZZZ** Batch ID: **9640** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/24/2006** SeqNo: **444079**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004155	0.00020	0.005	0	83.1	80	120				

Sample ID: **LCSD-9640** SampType: **LCSD** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **18026**
Client ID: **ZZZZZ** Batch ID: **9640** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/24/2006** SeqNo: **444089**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004467	0.00020	0.005	0	89.3	80	120	0.004155	7.23	0	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

TestCode: METALS_TOTAL

Sample ID: **MB-9629** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444662**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **MB-9629** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									

Sample ID: **LCS-9629** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444663**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.4498	0.020	0.5	0	90.0	80	120				
Cadmium	0.4478	0.0020	0.5	0.000571	89.5	80	120				
Chromium	0.4627	0.0060	0.5	0.0006937	92.4	80	120				
Lead	0.4351	0.0050	0.5	0	87.0	80	120				
Selenium	0.4084	0.050	0.5	0	81.7	80	120				
Silver	0.4570	0.0050	0.5	0.002855	90.8	80	120				

Sample ID: **LCS-9629** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444680**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4862	0.020	0.5	0	97.2	80	120				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

TestCode: METALS_TOTAL

Sample ID: **LCSD-9629** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.4638	0.020	0.5	0	92.8	80	120	0.4498	3.05	20	
Cadmium	0.4579	0.0020	0.5	0.000571	91.5	80	120	0.4478	2.21	20	
Chromium	0.4720	0.0060	0.5	0.0006937	94.3	80	120	0.4627	2.00	20	
Lead	0.4458	0.0050	0.5	0	89.2	80	120	0.4351	2.44	20	
Selenium	0.4230	0.050	0.5	0	84.6	80	120	0.4084	3.53	20	
Silver	0.4701	0.0050	0.5	0.002855	93.4	80	120	0.457	2.82	20	

Sample ID: **LCSD-9629** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
.rsenic	0.4915	0.020	0.5	0	98.3	80	120	0.4862	1.10	20	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Date: *01-Feb-06*

Hall Environmental Analysis Laboratory

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

TestCode: 8260_W

Sample ID: **5ml rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18046**
Client ID: **ZZZZZ** Batch ID: **R18046** TestNo: **SW8260B** Analysis Date: **1/25/2006** SeqNo: **444823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,2-Dichloroethane (EDC)	ND	1.0									
1,2-Dibromoethane (EDB)	ND	1.0									
Naphthalene	ND	2.0									
1-Methylnaphthalene	ND	4.0									
-Methylnaphthalene	ND	4.0									
cetone	ND	10									
romobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	2.0									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	2.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	2.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
cis-1,2-DCE	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

TestCode: 8260_W

Sample ID: **5ml rb** | SampType: **MBLK** | TestCode: **8260_W** | Units: **µg/L** | Prep Date: | RunNo: **18046**
Client ID: **ZZZZZ** | Batch ID: **R18046** | TestNo: **SW8260B** | Analysis Date: **1/25/2006** | SeqNo: **444823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	2.0									
1,2-Dichlorobenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
1,1-Dichloroethane	ND	2.0									
1,1-Dichloroethene	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3-Dichloropropane	ND	1.0									
2,2-Dichloropropane	ND	2.0									
',1-Dichloropropene	ND	1.0									
lexachlorobutadiene	ND	2.0									
-Hexanone	ND	10									
3opropylbenzene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Methylene Chloride	ND	3.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
Tetrachloroethene (PCE)	ND	1.0									
trans-1,2-DCE	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

CLIENT: Giant Refining Co
Work Order: 0601206
Project: OAPIS Week of 1/20/2006

Sample ID: **5ml rb** | SampType: **MBLK** | TestCode: **8260_W** | Units: **µg/L** | Prep Date: | RunNo: **18046**
Client ID: **ZZZZZ** | Batch ID: **R18046** | TestNo: **SW8260B** | Analysis Date: **1/25/2006** | SeqNo: **444823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	1.0									
Trichloroethene (TCE)	ND	1.0									
Trichlorofluoromethane	ND	1.0									
1,2,3-Trichloropropane	ND	2.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	1.0									

Sample ID: **100ng lcs** | SampType: **LCS** | TestCode: **8260_W** | Units: **µg/L** | Prep Date: | RunNo: **18046**
Client ID: **ZZZZZ** | Batch ID: **R18046** | TestNo: **SW8260B** | Analysis Date: **1/25/2006** | SeqNo: **444824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.75	1.0	20	0	98.7	79.3	136				
Toluene	20.31	1.0	20	0	102	65.5	123				
Chlorobenzene	21.15	1.0	20	0	106	80.3	134				
1,1-Dichloroethene	15.30	1.0	20	0	76.5	72.7	135				
Trichloroethene (TCE)	17.79	1.0	20	0	89.0	85.6	119				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

'all Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Work Order Numbe 0601206

Checklist completed by _____ Signature 1/20/06 Date

Date and Time Receive 1/20/2006

Received by AT

Reviewed by UM Initials 1/20/06 Date

Matrix

Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
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 ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☐	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

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: OAPIS for Week of 1-20-2006
Project #:
Project Manager: Johnny Sanchez
Sampler: Johnny Sanchez
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 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)
18-06	1400	H_2O	OAPIS	7				0601260	✓		X				X	X			X						

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
-19-06	0900	[signature]	[signature] 1/20/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, February 10, 2006

Johnny Sanchez
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: OAPIS Week of 1/27/06

Order No.: 0601270

Dear Johnny Sanchez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/27/2006 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

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

Date: *10-Feb-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OAPIS
Lab Order:	0601270	**Collection Date:**	1/26/2006 8:00:00 AM
Project:	OAPIS Week of 1/27/06	**Date Received:**	1/27/2006
Lab ID:	0601270-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	1.3	1.0		mg/L	1	2/6/2006 7:18:12 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/6/2006 7:18:12 PM
Surr: DNOP	122	58-140		%REC	1	2/6/2006 7:18:12 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	22	2.0		mg/L	40	1/31/2006 5:37:23 PM
Surr: BFB	109	79.7-118		%REC	40	1/31/2006 5:37:23 PM
EPA METHOD 8310: PAHS						Analyst: **JMP**
Naphthalene	220	12		µg/L	5	2/3/2006 5:10:01 PM
1-Methylnaphthalene	60	12		µg/L	5	2/3/2006 5:10:01 PM
2-Methylnaphthalene	63	12		µg/L	5	2/3/2006 5:10:01 PM
Acenaphthylene	ND	2.5		µg/L	1	2/2/2006 2:56:15 PM
Acenaphthene	3.0	2.5		µg/L	1	2/2/2006 2:56:15 PM
Fluorene	7.6	0.80		µg/L	1	2/2/2006 2:56:15 PM
Phenanthrene	10	3.0		µg/L	5	2/3/2006 5:10:01 PM
Anthracene	ND	0.60		µg/L	1	2/2/2006 2:56:15 PM
Fluoranthene	ND	0.30		µg/L	1	2/2/2006 2:56:15 PM
Pyrene	0.64	0.30		µg/L	1	2/2/2006 2:56:15 PM
Benz(a)anthracene	ND	0.020		µg/L	1	2/2/2006 2:56:15 PM
Chrysene	ND	0.20		µg/L	1	2/2/2006 2:56:15 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	2/2/2006 2:56:15 PM
Benzo(k)fluoranthene	ND	0.020		µg/L	1	2/2/2006 2:56:15 PM
Benzo(a)pyrene	ND	0.020		µg/L	1	2/2/2006 2:56:15 PM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	2/2/2006 2:56:15 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	2/2/2006 2:56:15 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	2/2/2006 2:56:15 PM
Surr: Benzo(e)pyrene	89.8	54-102		%REC	1	2/2/2006 2:56:15 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.00043	0.00020		mg/L	1	2/2/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/30/2006 10:00:34 AM
Barium	0.20	0.020		mg/L	1	1/30/2006 10:00:34 AM
Cadmium	ND	0.0020		mg/L	1	1/30/2006 10:00:34 AM
Chromium	0.016	0.0060		mg/L	1	1/30/2006 10:00:34 AM
Lead	0.011	0.0050		mg/L	1	1/30/2006 10:00:34 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *10-Feb-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OAPIS
Lab Order:	0601270	**Collection Date:**	1/26/2006 8:00:00 AM
Project:	OAPIS Week of 1/27/06	**Date Received:**	1/27/2006
Lab ID:	0601270-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Selenium	ND	0.050		mg/L	1	1/30/2006 10:00:34 AM
Silver	ND	0.0050		mg/L	1	1/30/2006 10:00:34 AM
EPA METHOD 8260B: VOLATILES						Analyst: **KTM**
Benzene	2800	50		µg/L	50	2/2/2006
Toluene	8200	100		µg/L	100	2/3/2006
Ethylbenzene	540	50		µg/L	50	2/2/2006
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	2/2/2006
1,2,4-Trimethylbenzene	420	50		µg/L	50	2/2/2006
1,3,5-Trimethylbenzene	160	50		µg/L	50	2/2/2006
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	2/2/2006
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	2/2/2006
Naphthalene	110	100		µg/L	50	2/2/2006
1-Methylnaphthalene	ND	200		µg/L	50	2/2/2006
2-Methylnaphthalene	ND	200		µg/L	50	2/2/2006
Acetone	570	500		µg/L	50	2/2/2006
Bromobenzene	ND	50		µg/L	50	2/2/2006
Bromochloromethane	ND	50		µg/L	50	2/2/2006
Bromodichloromethane	ND	50		µg/L	50	2/2/2006
Bromoform	ND	50		µg/L	50	2/2/2006
Bromomethane	ND	100		µg/L	50	2/2/2006
2-Butanone	ND	500		µg/L	50	2/2/2006
Carbon disulfide	ND	500		µg/L	50	2/2/2006
Carbon Tetrachloride	ND	100		µg/L	50	2/2/2006
Chlorobenzene	ND	50		µg/L	50	2/2/2006
Chloroethane	ND	100		µg/L	50	2/2/2006
Chloroform	ND	50		µg/L	50	2/2/2006
Chloromethane	ND	50		µg/L	50	2/2/2006
2-Chlorotoluene	ND	50		µg/L	50	2/2/2006
4-Chlorotoluene	ND	50		µg/L	50	2/2/2006
cis-1,2-DCE	ND	50		µg/L	50	2/2/2006
cis-1,3-Dichloropropene	ND	50		µg/L	50	2/2/2006
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	2/2/2006
Dibromochloromethane	ND	50		µg/L	50	2/2/2006
Dibromomethane	ND	100		µg/L	50	2/2/2006
1,2-Dichlorobenzene	ND	50		µg/L	50	2/2/2006
1,3-Dichlorobenzene	ND	50		µg/L	50	2/2/2006
1,4-Dichlorobenzene	ND	50		µg/L	50	2/2/2006
Dichlorodifluoromethane	ND	50		µg/L	50	2/2/2006
1,1-Dichloroethane	ND	100		µg/L	50	2/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *10-Feb-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OAPIS
Lab Order:	0601270	**Collection Date:**	1/26/2006 8:00:00 AM
Project:	OAPIS Week of 1/27/06	**Date Received:**	1/27/2006
Lab ID:	0601270-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **KTM**
1,1-Dichloroethene	ND	50		µg/L	50	2/2/2006
1,2-Dichloropropane	ND	50		µg/L	50	2/2/2006
1,3-Dichloropropane	ND	50		µg/L	50	2/2/2006
2,2-Dichloropropane	ND	100		µg/L	50	2/2/2006
1,1-Dichloropropene	ND	50		µg/L	50	2/2/2006
Hexachlorobutadiene	ND	100		µg/L	50	2/2/2006
2-Hexanone	ND	500		µg/L	50	2/2/2006
Isopropylbenzene	ND	50		µg/L	50	2/2/2006
4-Isopropyltoluene	ND	50		µg/L	50	2/2/2006
4-Methyl-2-pentanone	ND	500		µg/L	50	2/2/2006
Methylene Chloride	ND	150		µg/L	50	2/2/2006
n-Butylbenzene	ND	50		µg/L	50	2/2/2006
n-Propylbenzene	61	50		µg/L	50	2/2/2006
sec-Butylbenzene	ND	50		µg/L	50	2/2/2006
Styrene	ND	50		µg/L	50	2/2/2006
tert-Butylbenzene	ND	50		µg/L	50	2/2/2006
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	2/2/2006
1,1,2,2-Tetrachloroethane	ND	50		µg/L	50	2/2/2006
Tetrachloroethene (PCE)	ND	50		µg/L	50	2/2/2006
trans-1,2-DCE	ND	50		µg/L	50	2/2/2006
trans-1,3-Dichloropropene	ND	50		µg/L	50	2/2/2006
1,2,3-Trichlorobenzene	ND	50		µg/L	50	2/2/2006
1,2,4-Trichlorobenzene	ND	50		µg/L	50	2/2/2006
1,1,1-Trichloroethane	ND	50		µg/L	50	2/2/2006
1,1,2-Trichloroethane	ND	50		µg/L	50	2/2/2006
Trichloroethene (TCE)	ND	50		µg/L	50	2/2/2006
Trichlorofluoromethane	ND	50		µg/L	50	2/2/2006
1,2,3-Trichloropropane	ND	100		µg/L	50	2/2/2006
Vinyl chloride	ND	50		µg/L	50	2/2/2006
Xylenes, Total	4200	50		µg/L	50	2/2/2006
Surr: 1,2-Dichloroethane-d4	103	69.9-130		%REC	50	2/2/2006
Surr: 4-Bromofluorobenzene	96.3	71.2-123		%REC	50	2/2/2006
Surr: Dibromofluoromethane	102	57.3-135		%REC	50	2/2/2006
Surr: Toluene-d8	90.7	81.9-122		%REC	50	2/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *10-Feb-06*

CLIENT: Giant Refining Co
Work Order: 0601270
Project: OAPIS Week of 1/27/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **MB-9682** SampType: **MBLK** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/31/2006** RunNo: **18151**
Client ID: **ZZZZZ** Batch ID: **9682** TestNo: **SW8015** Analysis Date: **2/6/2006** SeqNo: **447798**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCS-9682** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/31/2006** RunNo: **18151**
Client ID: **ZZZZZ** Batch ID: **9682** TestNo: **SW8015** Analysis Date: **2/6/2006** SeqNo: **447799**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.643	1.0	5	0	113	81.2	149				

Sample ID: **LCSD-9682** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/31/2006** RunNo: **18151**
Client ID: **ZZZZZ** Batch ID: **9682** TestNo: **SW8015** Analysis Date: **2/6/2006** SeqNo: **447800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.624	1.0	5	0	112	81.2	149	5.643	0.337	23	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601270
Project: OAPIS Week of 1/27/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18110**
Client ID: **ZZZZZ** Batch ID: **R18110** TestNo: **SW8015** Analysis Date: **1/31/2006** SeqNo: **446513**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18110**
Client ID: **ZZZZZ** Batch ID: **R18110** TestNo: **SW8015** Analysis Date: **1/31/2006** SeqNo: **446514**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4620	0.050	0.5	0	92.4	82.6	114				

Sample ID: **2.5UG GRO LCSD** SampType: **LCSD** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18110**
Client ID: **ZZZZZ** Batch ID: **R18110** TestNo: **SW8015** Analysis Date: **2/1/2006** SeqNo: **446515**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4680	0.050	0.5	0	93.6	82.6	114	0.462	1.29	8.39	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601270
Project: OAPIS Week of 1/27/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **MB-9668** SampType: **MBLK** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/27/2006** RunNo: **18162**
Client ID: **ZZZZZ** Batch ID: **9668** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/2/2006** SeqNo: **447718**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									
Anthracene	ND	0.60									
Fluoranthene	ND	0.30									
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	ND	0.020									
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									

Sample ID: **LCS-9668** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/27/2006** RunNo: **18162**
Client ID: **ZZZZZ** Batch ID: **9668** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/2/2006** SeqNo: **447719**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	21.83	2.5	40	0	54.6	34.8	97.4				
1-Methylnaphthalene	22.11	2.5	40.1	0	55.1	34.7	100				
2-Methylnaphthalene	21.94	2.5	40	0	54.8	35	98.1				
Acenaphthylene	22.69	2.5	40.1	0	56.6	48.3	95.1				
Acenaphthene	22.36	2.5	40	0	55.9	45	95				
Fluorene	2.260	0.80	4.01	0	56.4	46.8	93.4				
Phenanthrene	1.190	0.60	2.01	0	59.2	48.7	104				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601270
Project: OAPIS Week of 1/27/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **LCS-9668** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **1/27/2006** RunNo: **18162**
Client ID: **ZZZZZ** Batch ID: **9668** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/2/2006** SeqNo: **447719**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1.210	0.60	2.01	0	60.2	47.5	102				
Fluoranthene	2.450	0.30	4.01	0	61.1	46.3	108				
Pyrene	2.590	0.30	4.01	0	64.6	43.8	109				
Benz(a)anthracene	0.2500	0.020	0.401	0	62.3	40.3	115				
Chrysene	1.250	0.20	2.01	0	62.2	42.6	107				
Benzo(b)fluoranthene	0.3200	0.050	0.501	0	63.9	48.6	107				
Benzo(k)fluoranthene	0.1500	0.020	0.25	0	60.0	23.3	136				
Benzo(a)pyrene	0.1500	0.020	0.251	0	59.8	33.4	117				
Dibenz(a,h)anthracene	0.2500	0.040	0.501	0	49.9	27.3	139				
Benzo(g,h,i)perylene	0.3200	0.030	0.5	0	64.0	38.2	117				
Indeno(1,2,3-cd)pyrene	0.6870	0.080	1.002	0	68.6	39.9	125				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601270
Project: OAPIS Week of 1/27/06

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: **MB-9703** SampType: **MBLK** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **2/2/2006** RunNo: **18136**
Client ID: **ZZZZZ** Batch ID: **9703** TestNo: **SW7470** **(SW7470)** Analysis Date: **2/2/2006** SeqNo: **447052**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: **LCS-9703** SampType: **LCS** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **2/2/2006** RunNo: **18136**
Client ID: **ZZZZZ** Batch ID: **9703** TestNo: **SW7470** **(SW7470)** Analysis Date: **2/2/2006** SeqNo: **447053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004489	0.00020	0.005	0	89.8	80	120				

Sample ID: **LCSD-9703** SampType: **LCSD** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **2/2/2006** RunNo: **18136**
Client ID: **ZZZZZ** Batch ID: **9703** TestNo: **SW7470** **(SW7470)** Analysis Date: **2/2/2006** SeqNo: **447071**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004458	0.00020	0.005	0	89.2	80	120	0.004489	0.697	0	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601270
Project: OAPIS Week of 1/27/06

TestCode: METALS_TOTAL

Sample ID: **MB-9665** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/27/2006** RunNo: **18082**
Client ID: **ZZZZZ** Batch ID: **9665** TestNo: **SW6010A** Analysis Date: **1/30/2006** SeqNo: **445679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **LCS-9665** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/27/2006** RunNo: **18082**
Client ID: **ZZZZZ** Batch ID: **9665** TestNo: **SW6010A** Analysis Date: **1/30/2006** SeqNo: **445680**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5067	0.020	0.5	0.01183	99.0	80	120				
Barium	0.4787	0.020	0.5	0	95.7	80	120				
Cadmium	0.4827	0.0020	0.5	0	96.5	80	120				
Chromium	0.4856	0.0060	0.5	0	97.1	80	120				
Lead	0.4888	0.0050	0.5	0	97.8	80	120				
Selenium	0.4637	0.050	0.5	0	92.7	80	120				

Sample ID: **LCSD-9665** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/27/2006** RunNo: **18082**
Client ID: **ZZZZZ** Batch ID: **9665** TestNo: **SW6010A** Analysis Date: **1/30/2006** SeqNo: **445681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5096	0.020	0.5	0.01183	99.5	80	120	0.5067	0.558	20	
Barium	0.4787	0.020	0.5	0	95.7	80	120	0.4787	0.00151	20	
Cadmium	0.4865	0.0020	0.5	0	97.3	80	120	0.4827	0.786	20	
Chromium	0.4868	0.0060	0.5	0	97.4	80	120	0.4856	0.231	20	
Lead	0.4925	0.0050	0.5	0	98.5	80	120	0.4888	0.758	20	
Selenium	0.4670	0.050	0.5	0	93.4	80	120	0.4637	0.693	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Date: *10-Feb-06*

Hall Environmental Analysis Laboratory

CLIENT: Giant Refining Co
Work Order: 0601270
Project: OAPIS Week of 1/27/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **100ng lcs-full** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18125**
Client ID: **ZZZZZ** Batch ID: **R18125** TestNo: **SW8260B** Analysis Date: **2/1/2006** SeqNo: **446814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	18.59	1.0	20	0	93.0	79.3	136				
Toluene	19.14	1.0	20	0	95.7	65.5	123				
Ethylbenzene	19.44	1.0	20	0	97.2	70	130				
Methyl tert-butyl ether (MTBE)	21.86	1.0	20	0	109	70	130				
1,2,4-Trimethylbenzene	19.08	1.0	20	0	95.4	70	130				
1,3,5-Trimethylbenzene	18.72	1.0	20	0	93.6	70	130				
1,2-Dichloroethane (EDC)	19.21	1.0	20	0	96.0	70	130				
1,2-Dibromoethane (EDB)	17.72	1.0	20	0	88.6	70	130				
Naphthalene	19.54	2.0	20	0	97.7	70	130				
1-Methylnaphthalene	22.43	4.0	20	0	112	70	130				
2-Methylnaphthalene	22.77	4.0	20	0	114	70	130				
Acetone	69.32	10	80	0	86.7	70	130				
Bromobenzene	18.42	1.0	20	0	92.1	70	130				
Bromochloromethane	17.89	1.0	20	0	89.5	70	130				
Bromodichloromethane	16.78	1.0	20	0	83.9	70	130				
Bromoform	17.93	1.0	20	0	89.6	70	130				
Bromomethane	16.48	2.0	20	0	82.4	70	130				
2-Butanone	74.22	10	80	0	92.8	70	130				
Carbon disulfide	82.15	10	80	0	103	70	130				
Carbon Tetrachloride	21.16	2.0	20	0	106	70	130				
Chlorobenzene	20.84	1.0	20	0	104	80.3	134				
Chloroethane	17.35	2.0	20	0	86.8	70	130				
Chloroform	19.64	1.0	20	0	98.2	70	130				
Chloromethane	15.70	1.0	20	0	78.5	70	130				
2-Chlorotoluene	17.44	1.0	20	0	87.2	70	130				
4-Chlorotoluene	17.50	1.0	20	0	87.5	70	130				
cis-1,2-DCE	19.00	1.0	20	0	95.0	70	130				
cis-1,3-Dichloropropene	17.44	1.0	20	0	87.2	70	130				
1,2-Dibromo-3-chloropropane	19.88	2.0	20	0	99.4	70	130				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

10/13

CLIENT: Giant Refining Co
Work Order: 0601270
Project: OAPIS Week of 1/27/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **100ng lcs-full** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18125**
Client ID: **ZZZZZ** Batch ID: **R18125** TestNo: **SW8260B** Analysis Date: **2/1/2006** SeqNo: **446814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	17.63	1.0	20	0	88.2	70	130				
Dibromomethane	16.41	2.0	20	0	82.1	70	130				
1,2-Dichlorobenzene	19.61	1.0	20	0	98.0	70	130				
1,3-Dichlorobenzene	20.22	1.0	20	0	101	70	130				
1,4-Dichlorobenzene	20.22	1.0	20	0	101	70	130				
Dichlorodifluoromethane	13.13	1.0	20	0	65.7	70	130				S
1,1-Dichloroethane	18.66	2.0	20	0	93.3	70	130				
1,1-Dichloroethene	14.97	1.0	20	0	74.8	65.5	134				
1,2-Dichloropropane	19.91	1.0	20	0	99.5	70	130				
1,3-Dichloropropane	18.14	1.0	20	0	90.7	70	130				
2,2-Dichloropropane	19.57	2.0	20	0	97.9	70	130				
1,1-Dichloropropene	16.74	1.0	20	0	83.7	70	130				
Hexachlorobutadiene	18.71	2.0	20	0	93.5	70	130				
2-Hexanone	77.10	10	80	0	96.4	70	130				
Isopropylbenzene	18.90	1.0	20	0	94.5	70	130				
4-Isopropyltoluene	19.32	1.0	20	0	96.6	70	130				
4-Methyl-2-pentanone	83.80	10	80	0	105	70	130				
Methylene Chloride	20.01	3.0	20	0	100	70	130				
n-Butylbenzene	20.05	1.0	20	0	100	70	130				
n-Propylbenzene	18.84	1.0	20	0	94.2	70	130				
sec-Butylbenzene	18.03	1.0	20	0	90.2	70	130				
Styrene	18.31	1.0	20	0	91.6	70	130				
tert-Butylbenzene	19.43	1.0	20	0	97.1	70	130				
1,1,1,2-Tetrachloroethane	19.82	1.0	20	0	99.1	70	130				
1,1,2,2-Tetrachloroethane	19.12	1.0	20	0	95.6	70	130				
Tetrachloroethene (PCE)	18.18	1.0	20	0	90.9	70	130				
trans-1,2-DCE	18.07	1.0	20	0	90.4	70	130				
trans-1,3-Dichloropropene	17.90	1.0	20	0	89.5	70	130				
1,2,3-Trichlorobenzene	19.09	1.0	20	0	95.4	70	130				
1,2,4-Trichlorobenzene	19.78	1.0	20	0	98.9	70	130				
1,1,1-Trichloroethane	20.58	1.0	20	0	103	70	130				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0601270
Project: OAPIS Week of 1/27/06

TestCode: 8260_W

Sample ID: **100ng lcs-full** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18125**
Client ID: **ZZZZZ** Batch ID: **R18125** TestNo: **SW8260B** Analysis Date: **2/1/2006** SeqNo: **446814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	17.75	1.0	20	0	88.8	70	130				
Trichloroethene (TCE)	18.97	1.0	20	0	94.8	85.6	119				
Trichlorofluoromethane	16.96	1.0	20	0	84.8	70	130				
1,2,3-Trichloropropane	18.41	2.0	20	0	92.0	70	130				
Vinyl chloride	17.01	1.0	20	0	85.0	70	130				
Xylenes, Total	58.74	1.0	60	0	97.9	70	130				

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18154**
Client ID: **ZZZZZ** Batch ID: **R18154** TestNo: **SW8260B** Analysis Date: **2/3/2006** SeqNo: **447447**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.40	1.0	20	0	112	79.3	136				
Toluene	21.41	1.0	20	0	107	65.5	123				
Chlorobenzene	21.88	1.0	20	0	109	80.3	134				
1,1-Dichloroethene	20.73	1.0	20	0	104	65.5	134				
Trichloroethene (TCE)	23.20	1.0	20	0	116	85.6	119				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

all Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 1/27/2006

Work Order Number 0601270

Received by LMM

Checklist completed by Lisa Helickis 1/27/06
Signature Date

Matrix

Carrier name UPS

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?	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

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

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: OAPIS for week of 1-27-2006
Project #:
Project Manager: Johnny Sanchez
Sampler: Johnny Sanchez
Sample Temperature: 3°

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 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)
-26-06	0800	H_2O	OAPIS				0601270-1			X				X	X			X						

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
-26-06	0900	[signature]	[signature] 9:57 1/27/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, March 01, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: OAPIS Effluent Week of 2-10-2006

Order No.: 0602104

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/10/2006 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

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

Date: *01-Mar-06*

CLIENT: Giant Refining Co
Project: OAPIS Effluent Week of 2-10-2006
Lab Order: 0602104

CASE NARRATIVE

EPA Method 8310: The LCSD has RPD data that is slightly outside of the standard limits. All percent recoveries were within acceptable limits.

Hall Environmental Analysis Laboratory

Date: *01-Mar-06*

CLIENT: Giant Refining Co
Lab Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006
Lab ID: 0602104-01

Client Sample ID: OAPIS
Collection Date: 2/9/2006 8:00:00 AM
Date Received: 2/10/2006
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	5.5	1.0		mg/L	1	2/16/2006 12:01:10 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/16/2006 12:01:10 AM
Surr: DNOP	124	58-140		%REC	1	2/16/2006 12:01:10 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	4.1	1.0		mg/L	20	2/11/2006 3:54:35 AM
Surr: BFB	105	79.7-118		%REC	20	2/11/2006 3:54:35 AM
EPA METHOD 8310: PAHS						Analyst: **JMP**
Naphthalene	230	25		µg/L	10	2/24/2006 12:53:42 PM
1-Methylnaphthalene	ND	2.5		µg/L	1	2/23/2006 11:18:00 PM
2-Methylnaphthalene	4.2	2.5		µg/L	1	2/23/2006 11:18:00 PM
Acenaphthylene	ND	2.5		µg/L	1	2/23/2006 11:18:00 PM
Acenaphthene	ND	2.5		µg/L	1	2/23/2006 11:18:00 PM
Fluorene	ND	0.80		µg/L	1	2/23/2006 11:18:00 PM
Phenanthrene	2.2	0.60		µg/L	1	2/23/2006 11:18:00 PM
Anthracene	ND	0.60		µg/L	1	2/23/2006 11:18:00 PM
Fluoranthene	0.35	0.30		µg/L	1	2/23/2006 11:18:00 PM
Pyrene	0.75	0.30		µg/L	1	2/23/2006 11:18:00 PM
Benz(a)anthracene	0.060	0.020		µg/L	1	2/23/2006 11:18:00 PM
Chrysene	0.23	0.20		µg/L	1	2/23/2006 11:18:00 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	2/23/2006 11:18:00 PM
Benzo(k)fluoranthene	0.020	0.020		µg/L	1	2/23/2006 11:18:00 PM
Benzo(a)pyrene	ND	0.020		µg/L	1	2/23/2006 11:18:00 PM
Dibenz(a,h)anthracene	0.040	0.040		µg/L	1	2/23/2006 11:18:00 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	2/23/2006 11:18:00 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	2/23/2006 11:18:00 PM
Surr: Benzo(e)pyrene	69.4	54-102		%REC	1	2/23/2006 11:18:00 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	2/15/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	2/17/2006 10:19:42 AM
Barium	0.22	0.020		mg/L	1	2/17/2006 10:19:42 AM
Cadmium	ND	0.0020		mg/L	1	2/17/2006 10:19:42 AM
Chromium	0.0090	0.0060		mg/L	1	2/17/2006 10:19:42 AM
Lead	ND	0.0050		mg/L	1	2/17/2006 10:19:42 AM

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

Hall Environmental Analysis Laboratory

Date: *01-Mar-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	OAPIS
Lab Order:	0602104	**Collection Date:**	2/9/2006 8:00:00 AM
Project:	OAPIS Effluent Week of 2-10-2006	**Date Received:**	2/10/2006
Lab ID:	0602104-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Selenium	ND	0.050		mg/L	1	2/17/2006 10:19:42 AM
Silver	ND	0.0050		mg/L	1	2/17/2006 10:19:42 AM
EPA METHOD 8260B: VOLATILES						Analyst: **KTM**
Benzene	340	50		µg/L	50	2/19/2006
Toluene	610	50		µg/L	50	2/19/2006
Ethylbenzene	ND	50		µg/L	50	2/19/2006
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	50	2/19/2006
1,2,4-Trimethylbenzene	95	50		µg/L	50	2/19/2006
1,3,5-Trimethylbenzene	60	50		µg/L	50	2/19/2006
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	2/19/2006
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	2/19/2006
Naphthalene	ND	100		µg/L	50	2/19/2006
1-Methylnaphthalene	ND	200		µg/L	50	2/19/2006
2-Methylnaphthalene	ND	200		µg/L	50	2/19/2006
Acetone	ND	500		µg/L	50	2/19/2006
Bromobenzene	ND	50		µg/L	50	2/19/2006
Bromochloromethane	ND	50		µg/L	50	2/19/2006
Bromodichloromethane	ND	50		µg/L	50	2/19/2006
Bromoform	ND	50		µg/L	50	2/19/2006
Bromomethane	ND	100		µg/L	50	2/19/2006
2-Butanone	ND	500		µg/L	50	2/19/2006
Carbon disulfide	ND	500		µg/L	50	2/19/2006
Carbon Tetrachloride	ND	100		µg/L	50	2/19/2006
Chlorobenzene	ND	50		µg/L	50	2/19/2006
Chloroethane	ND	100		µg/L	50	2/19/2006
Chloroform	ND	50		µg/L	50	2/19/2006
Chloromethane	ND	50		µg/L	50	2/19/2006
2-Chlorotoluene	ND	50		µg/L	50	2/19/2006
4-Chlorotoluene	ND	50		µg/L	50	2/19/2006
cis-1,2-DCE	ND	50		µg/L	50	2/19/2006
cis-1,3-Dichloropropene	ND	50		µg/L	50	2/19/2006
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	2/19/2006
Dibromochloromethane	ND	50		µg/L	50	2/19/2006
Dibromomethane	ND	100		µg/L	50	2/19/2006
1,2-Dichlorobenzene	ND	50		µg/L	50	2/19/2006
1,3-Dichlorobenzene	ND	50		µg/L	50	2/19/2006
1,4-Dichlorobenzene	ND	50		µg/L	50	2/19/2006
Dichlorodifluoromethane	ND	50		µg/L	50	2/19/2006
1,1-Dichloroethane	ND	100		µg/L	50	2/19/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *01-Mar-06*

CLIENT: Giant Refining Co
Lab Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006
Lab ID: 0602104-01

Client Sample ID: OAPIS
Collection Date: 2/9/2006 8:00:00 AM
Date Received: 2/10/2006
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **KTM**
1,1-Dichloroethene	ND	50		µg/L	50	2/19/2006
1,2-Dichloropropane	ND	50		µg/L	50	2/19/2006
1,3-Dichloropropane	ND	50		µg/L	50	2/19/2006
2,2-Dichloropropane	ND	100		µg/L	50	2/19/2006
1,1-Dichloropropene	ND	50		µg/L	50	2/19/2006
Hexachlorobutadiene	ND	100		µg/L	50	2/19/2006
2-Hexanone	ND	500		µg/L	50	2/19/2006
Isopropylbenzene	ND	50		µg/L	50	2/19/2006
4-Isopropyltoluene	ND	50		µg/L	50	2/19/2006
4-Methyl-2-pentanone	ND	500		µg/L	50	2/19/2006
Methylene Chloride	ND	150		µg/L	50	2/19/2006
n-Butylbenzene	ND	50		µg/L	50	2/19/2006
n-Propylbenzene	ND	50		µg/L	50	2/19/2006
sec-Butylbenzene	ND	50		µg/L	50	2/19/2006
Styrene	ND	50		µg/L	50	2/19/2006
tert-Butylbenzene	ND	50		µg/L	50	2/19/2006
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	2/19/2006
1,1,2,2-Tetrachloroethane	ND	50		µg/L	50	2/19/2006
Tetrachloroethene (PCE)	ND	50		µg/L	50	2/19/2006
trans-1,2-DCE	ND	50		µg/L	50	2/19/2006
trans-1,3-Dichloropropene	ND	50		µg/L	50	2/19/2006
1,2,3-Trichlorobenzene	ND	50		µg/L	50	2/19/2006
1,2,4-Trichlorobenzene	ND	50		µg/L	50	2/19/2006
1,1,1-Trichloroethane	ND	50		µg/L	50	2/19/2006
1,1,2-Trichloroethane	ND	50		µg/L	50	2/19/2006
Trichloroethene (TCE)	ND	50		µg/L	50	2/19/2006
Trichlorofluoromethane	ND	50		µg/L	50	2/19/2006
1,2,3-Trichloropropane	ND	100		µg/L	50	2/19/2006
Vinyl chloride	ND	50		µg/L	50	2/19/2006
Xylenes, Total	810	50		µg/L	50	2/19/2006
Surr: 1,2-Dichloroethane-d4	96.6	69.9-130		%REC	50	2/19/2006
Surr: 4-Bromofluorobenzene	104	71.2-123		%REC	50	2/19/2006
Surr: Dibromofluoromethane	96.1	57.3-135		%REC	50	2/19/2006
Surr: Toluene-d8	103	81.9-122		%REC	50	2/19/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *01-Mar-06*

CLIENT: Giant Refining Co
Work Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **MB-9756** SampType: **MBLK** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **2/13/2006** RunNo: **18235**
Client ID: **ZZZZZ** Batch ID: **9756** TestNo: **SW8015** Analysis Date: **2/15/2006** SeqNo: **450713**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCS-9756** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **2/13/2006** RunNo: **18235**
Client ID: **ZZZZZ** Batch ID: **9756** TestNo: **SW8015** Analysis Date: **2/15/2006** SeqNo: **450714**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.134	1.0	5	0	103	81.2	149				

Sample ID: **LCSD-9756** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **2/13/2006** RunNo: **18235**
Client ID: **ZZZZZ** Batch ID: **9756** TestNo: **SW8015** Analysis Date: **2/15/2006** SeqNo: **450715**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.902	1.0	5	0	98.0	81.2	149	5.134	4.63	23	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006

TestCode: 8015GRO_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18225**
Client ID: **ZZZZZ** Batch ID: **R18225** TestNo: **SW8015** Analysis Date: **2/10/2006** SeqNo: **449272**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18225**
Client ID: **ZZZZZ** Batch ID: **R18225** TestNo: **SW8015** Analysis Date: **2/10/2006** SeqNo: **449273**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.5140	0.050	0.5	0	103	82.6	114				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006

TestCode: 8310_W

Sample ID: **MB-9801** | SampType: **MBLK** | TestCode: **8310_W** | Units: **µg/L** | Prep Date: **2/17/2006** | RunNo: **18380**
Client ID: **ZZZZZ** | Batch ID: **9801** | TestNo: **SW8310** | **(SW3510C)** | Analysis Date: **2/23/2006** | SeqNo: **453446**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									
Anthracene	ND	0.60									
Fluoranthene	ND	0.30									
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	ND	0.020									
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									

Sample ID: **MB-9785** | SampType: **MBLK** | TestCode: **8310_W** | Units: **µg/L** | Prep Date: **2/15/2006** | RunNo: **18380**
Client ID: **ZZZZZ** | Batch ID: **9785** | TestNo: **SW8310** | **(SW3510C)** | Analysis Date: **2/23/2006** | SeqNo: **453453**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006

TestCode: 8310_W

Sample ID: **MB-9785** SampType: **MBLK** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/15/2006** RunNo: **18380**
Client ID: **ZZZZZ** Batch ID: **9785** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/23/2006** SeqNo: **453453**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	ND	0.60									
Fluoranthene	ND	0.30									
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	ND	0.020									
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									

Sample ID: **LCS-9801** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/17/2006** RunNo: **18380**
Client ID: **ZZZZZ** Batch ID: **9801** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/23/2006** SeqNo: **453447**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	22.76	2.5	40	0	56.9	34.8	97.4				
1-Methylnaphthalene	22.85	2.5	40.1	0	57.0	34.7	100				
2-Methylnaphthalene	22.32	2.5	40	0	55.8	35	98.1				
Acenaphthylene	24.16	2.5	40.1	0	60.2	48.3	95.1				
Acenaphthene	23.38	2.5	40	0	58.4	45	95				
Fluorene	2.320	0.80	4.01	0	57.9	46.8	93.4				
Phenanthrene	1.310	0.60	2.01	0	65.2	48.7	104				
Anthracene	1.230	0.60	2.01	0	61.2	47.5	102				
Fluoranthene	2.570	0.30	4.01	0	64.1	46.3	108				
Pyrene	2.690	0.30	4.01	0	67.1	43.8	109				
Benz(a)anthracene	0.2600	0.020	0.401	0	64.8	40.3	115				
Chrysene	1.370	0.20	2.01	0	68.2	42.6	107				
Benzo(b)fluoranthene	0.3100	0.050	0.501	0	61.9	48.6	107				
Benzo(k)fluoranthene	0.1600	0.020	0.25	0	64.0	23.3	136				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006

TestCode: 8310_W

Sample ID: **LCS-9801** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/17/2006** RunNo: **18380**
Client ID: **ZZZZZ** Batch ID: **9801** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/23/2006** SeqNo: **453447**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	0.1700	0.020	0.251	0	67.7	33.4	117				
Dibenz(a,h)anthracene	0.3400	0.040	0.501	0	67.9	27.3	139				
Benzo(g,h,i)perylene	0.3600	0.030	0.5	0	72.0	38.2	117				
Indeno(1,2,3-cd)pyrene	0.6520	0.080	1.002	0	65.1	39.9	125				

Sample ID: **LCS-9785** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/15/2006** RunNo: **18380**
Client ID: **ZZZZZ** Batch ID: **9785** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/23/2006** SeqNo: **453454**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	24.25	2.5	40	0	60.6	34.8	97.4				
1-Methylnaphthalene	24.06	2.5	40.1	0	60.0	34.7	100				
2-Methylnaphthalene	23.56	2.5	40	0	58.9	35	98.1				
Acenaphthylene	26.32	2.5	40.1	0	65.6	48.3	95.1				
Acenaphthene	25.79	2.5	40	0	64.5	45	95				
Fluorene	2.670	0.80	4.01	0	66.6	46.8	93.4				
Phenanthrene	1.430	0.60	2.01	0	71.1	48.7	104				
Anthracene	1.480	0.60	2.01	0	73.6	47.5	102				
Fluoranthene	3.100	0.30	4.01	0	77.3	46.3	108				
Pyrene	3.150	0.30	4.01	0	78.6	43.8	109				
Benz(a)anthracene	0.3000	0.020	0.401	0	74.8	40.3	115				
Chrysene	1.540	0.20	2.01	0	76.6	42.6	107				
Benzo(b)fluoranthene	0.3900	0.050	0.501	0	77.8	48.6	107				
Benzo(k)fluoranthene	0.1900	0.020	0.25	0	76.0	23.3	136				
Benzo(a)pyrene	0.2000	0.020	0.251	0	79.7	33.4	117				
Dibenz(a,h)anthracene	0.4000	0.040	0.501	0	79.8	27.3	139				
Benzo(g,h,i)perylene	0.4200	0.030	0.5	0	84.0	38.2	117				
Indeno(1,2,3-cd)pyrene	0.7800	0.080	1.002	0	77.8	39.9	125				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006

TestCode: 8310_W

Sample ID: **LCSD-9801** SampType: **LCSD** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/17/2006** RunNo: **18380**
Client ID: **ZZZZZ** Batch ID: **9801** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/23/2006** SeqNo: **453448**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	24.66	2.5	40	0	61.6	34.8	97.4	22.76	8.01	32.1	
1-Methylnaphthalene	23.80	2.5	40.1	0	59.4	34.7	100	22.85	4.07	32.7	
2-Methylnaphthalene	23.36	2.5	40	0	58.4	35	98.1	22.32	4.55	34	
Acenaphthylene	24.98	2.5	40.1	0	62.3	48.3	95.1	24.16	3.35	38.8	
Acenaphthene	24.39	2.5	40	0	61.0	45	95	23.38	4.23	38.6	
Fluorene	2.420	0.80	4.01	0	60.3	46.8	93.4	2.32	4.22	39.3	
Phenanthrene	1.270	0.60	2.01	0	63.2	48.7	104	1.31	3.10	25	
Anthracene	1.300	0.60	2.01	0	64.7	47.5	102	1.23	5.53	23.9	
Fluoranthene	2.720	0.30	4.01	0	67.8	46.3	108	2.57	5.67	15.7	
Pyrene	2.860	0.30	4.01	0	71.3	43.8	109	2.69	6.13	15.3	
Benz(a)anthracene	0.2800	0.020	0.401	0	69.8	40.3	115	0.26	7.41	119	
Chrysene	1.400	0.20	2.01	0	69.7	42.6	107	1.37	2.17	16.6	
Benzo(b)fluoranthene	0.3200	0.050	0.501	0	63.9	48.6	107	0.31	3.17	21.7	
Benzo(k)fluoranthene	0.1700	0.020	0.25	0	68.0	23.3	136	0.16	6.06	19.4	
Benzo(a)pyrene	0.1900	0.020	0.251	0	75.7	33.4	117	0.17	11.1	16.7	
Dibenz(a,h)anthracene	0.3500	0.040	0.501	0	69.9	27.3	139	0.34	2.90	17.3	
Benzo(g,h,i)perylene	0.3800	0.030	0.5	0	76.0	38.2	117	0.36	5.41	118	
Indeno(1,2,3-cd)pyrene	0.6920	0.080	1.002	0	69.1	39.9	125	0.652	5.95	17.7	

Sample ID: **LCSD-9785** SampType: **LCSD** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/15/2006** RunNo: **18380**
Client ID: **ZZZZZ** Batch ID: **9785** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/23/2006** SeqNo: **453455**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	16.55	2.5	40	0	41.4	34.8	97.4	24.25	37.7	32.1	R
1-Methylnaphthalene	17.15	2.5	40.1	0	42.8	34.7	100	24.06	33.5	32.7	R
2-Methylnaphthalene	16.72	2.5	40	0	41.8	35	98.1	23.56	34.0	34	
Acenaphthylene	20.10	2.5	40.1	0	50.1	48.3	95.1	26.32	26.8	38.8	
Acenaphthene	19.67	2.5	40	0	49.2	45	95	25.79	26.9	38.6	
Fluorene	2.100	0.80	4.01	0	52.4	46.8	93.4	2.67	23.9	39.3	
Phenanthrene	1.150	0.60	2.01	0	57.2	48.7	104	1.43	21.7	25	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

CLIENT: Giant Refining Co
Work Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006

Sample ID: **LCSD-9785** SampType: **LCSD** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/15/2006** RunNo: **18380**
Client ID: **ZZZZZ** Batch ID: **9785** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/23/2006** SeqNo: **453455**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1.180	0.60	2.01	0	58.7	47.5	102	1.48	22.6	23.9	
Fluoranthene	2.620	0.30	4.01	0	65.3	46.3	108	3.1	16.8	15.7	R
Pyrene	2.590	0.30	4.01	0	64.6	43.8	109	3.15	19.5	15.3	R
Benz(a)anthracene	0.2400	0.020	0.401	0	59.9	40.3	115	0.3	22.2	119	
Chrysene	1.260	0.20	2.01	0	62.7	42.6	107	1.54	20.0	16.6	R
Benzo(b)fluoranthene	0.3100	0.050	0.501	0	61.9	48.6	107	0.39	22.9	21.7	R
Benzo(k)fluoranthene	0.1600	0.020	0.25	0	64.0	23.3	136	0.19	17.1	19.4	
Benzo(a)pyrene	0.1700	0.020	0.251	0	67.7	33.4	117	0.2	16.2	16.7	
Dibenz(a,h)anthracene	0.3300	0.040	0.501	0	65.9	27.3	139	0.4	19.2	17.3	R
Benzo(g,h,i)perylene	0.3500	0.030	0.5	0	70.0	38.2	117	0.42	18.2	118	
Indeno(1,2,3-cd)pyrene	0.6300	0.080	1.002	0	62.9	39.9	125	0.78	21.3	17.7	R

11 / 15

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006

TestCode: HG_CTW

Sample ID: **MB-9774** SampType: **MBLK** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **2/15/2006** RunNo: **18273**
Client ID: **ZZZZZ** Batch ID: **9774** TestNo: **SW7470** **(SW7470)** Analysis Date: **2/15/2006** SeqNo: **450494**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: **LCS-9774** SampType: **LCS** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **2/15/2006** RunNo: **18273**
Client ID: **ZZZZZ** Batch ID: **9774** TestNo: **SW7470** **(SW7470)** Analysis Date: **2/15/2006** SeqNo: **450495**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004592	0.00020	0.005	0	91.8	80	120				

12/15

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006

TestCode: METALS_TOTAL

Sample ID: **MB-9790** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **2/16/2006** RunNo: **18305**
Client ID: **ZZZZZ** Batch ID: **9790** TestNo: **SW6010A** Analysis Date: **2/17/2006** SeqNo: **451487**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **LCS-9790** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **2/16/2006** RunNo: **18305**
Client ID: **ZZZZZ** Batch ID: **9790** TestNo: **SW6010A** Analysis Date: **2/17/2006** SeqNo: **451488**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5078	0.020	0.5	0	102	80	120				
Barium	0.4677	0.020	0.5	0	93.5	80	120				
Cadmium	0.4914	0.0020	0.5	0	98.3	80	120				
Chromium	0.4802	0.0060	0.5	0	96.0	80	120				
Lead	0.4686	0.0050	0.5	0	93.7	80	120				
Selenium	0.4994	0.050	0.5	0	99.9	80	120				
Silver	0.4998	0.0050	0.5	0.001836	99.6	80	120				

Sample ID: **LCSD-9790** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **2/16/2006** RunNo: **18305**
Client ID: **ZZZZZ** Batch ID: **9790** TestNo: **SW6010A** Analysis Date: **2/17/2006** SeqNo: **451489**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5035	0.020	0.5	0	101	80	120	0.5078	0.848	20	
Barium	0.4740	0.020	0.5	0	94.8	80	120	0.4677	1.34	20	
Cadmium	0.4902	0.0020	0.5	0	98.0	80	120	0.4914	0.239	20	
Chromium	0.4776	0.0060	0.5	0	95.5	80	120	0.4802	0.533	20	
Lead	0.4659	0.0050	0.5	0	93.2	80	120	0.4686	0.589	20	
Selenium	0.5076	0.050	0.5	0	102	80	120	0.4994	1.63	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602104
Project: OAPIS Effluent Week of 2-10-2006

TestCode: METALS_TOTAL

Sample ID: **LCSD-9790** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **2/16/2006** RunNo: **18305**
Client ID: **ZZZZZ** Batch ID: **9790** TestNo: **SW6010A** Analysis Date: **2/17/2006** SeqNo: **451489**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.5082	0.0050	0.5	0.001836	101	80	120	0.4998	1.66	20	

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

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 2/10/2006

Work Order Number 0602104

Received by LMM

Checklist completed by Lisa Hedlund 2/10/06
Signature Date

Matrix

Carrier name UPS

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 ☐		
.ll 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? **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 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: OAPIS Effluent Week of 2-10-2006
Project #:
Project Manager: [signature]
Sampler: [signature]
Sample Temperature: 30

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0602104	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)
2/9/06	0800	H_2O	OAPIS					-1			X				X	X			X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
2/9/06	0900	[signature]	[signature] 1147 2/10/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Rush

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Monday, December 11, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Secondary Containment Oil Water Sep. (4t

Order No.: 0611288

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/21/2006 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-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Oil Water Sep. H2O
Lab Order:	0611288	**Collection Date:**	11/21/2006 10:15:00 AM
Project:	Secondary Containment Oil Water Sep. (4th QT	**Date Received:**	11/21/2006
Lab ID:	0611288-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **ADM**
Diesel Range Organics (DRO)	7.4	1.0		mg/L	1	11/30/2006 1:41:16 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	11/30/2006 1:41:16 AM
Surr: DNOP	86.1	58-140		%REC	1	11/30/2006 1:41:16 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	1.4	0.25		mg/L	5	12/4/2006 1:37:34 PM
Surr: BFB	109	79.2-121		%REC	5	12/4/2006 1:37:34 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	39	12		µg/L	5	12/4/2006 1:37:34 PM
Benzene	140	5.0		µg/L	5	12/4/2006 1:37:34 PM
Toluene	340	5.0		µg/L	5	12/4/2006 1:37:34 PM
Ethylbenzene	13	5.0		µg/L	5	12/4/2006 1:37:34 PM
Xylenes, Total	110	15		µg/L	5	12/4/2006 1:37:34 PM
1,2,4-Trimethylbenzene	ND	5.0		µg/L	5	12/4/2006 1:37:34 PM
1,3,5-Trimethylbenzene	ND	5.0		µg/L	5	12/4/2006 1:37:34 PM
Surr: 4-Bromofluorobenzene	84.3	70.2-105		%REC	5	12/4/2006 1:37:34 PM
EPA METHOD 7470: MERCURY						Analyst: **MAP**
Mercury	ND	0.00020		mg/L	1	12/7/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	0.051	0.020		mg/L	1	11/29/2006 10:03:14 AM
Barium	0.030	0.020		mg/L	1	11/29/2006 10:03:14 AM
Cadmium	ND	0.0020		mg/L	1	11/29/2006 10:03:14 AM
Chromium	ND	0.0060		mg/L	1	11/29/2006 10:03:14 AM
Lead	ND	0.0050		mg/L	1	11/29/2006 10:03:14 AM
Selenium	ND	0.050		mg/L	1	11/29/2006 10:03:14 AM
Silver	ND	0.0050		mg/L	1	11/29/2006 10:03:14 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: Secondary Containment Oil Water Sep. (4th QT

Work Order: 0611288

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: MB-11850		*MBLK*			Batch ID:	**11850**	Analysis Date:	11/29/2006 11:22:39 PM	
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						
Sample ID: LCS-11850		*LCS*			Batch ID:	**11850**	Analysis Date:	11/30/2006 12:31:59 AM	
Diesel Range Organics (DRO)	5.254	mg/L	1.0	105	74	157			
Sample ID: LCSD-11850		*LCSD*			Batch ID:	**11850**	Analysis Date:	11/30/2006 1:06:39 AM	
Diesel Range Organics (DRO)	5.562	mg/L	1.0	111	74	157	5.70	23	
Method: SW8015									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R21633**	Analysis Date:	11/30/2006 8:50:27 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: B		*MBLK*			Batch ID:	**R21651**	Analysis Date:	12/4/2006 10:18:30 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R21633**	Analysis Date:	12/2/2006 1:28:38 AM	
Gasoline Range Organics (GRO)	0.4474	mg/L	0.050	89.5	80	115			
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R21651**	Analysis Date:	12/5/2006 1:25:09 AM	
Gasoline Range Organics (GRO)	0.4532	mg/L	0.050	90.6	80	115			
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID:	**R21633**	Analysis Date:	12/2/2006 1:58:37 AM	
Gasoline Range Organics (GRO)	0.4486	mg/L	0.050	89.7	80	115	0.268	8.39	
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID:	**R21651**	Analysis Date:	12/5/2006 1:55:16 AM	
Gasoline Range Organics (GRO)	0.4570	mg/L	0.050	91.4	80	115	0.835	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: Secondary Containment Oil Water Sep. (4th QT **Work Order:** 0611288

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: 5ML RB		*MBLK*			Batch ID:	**R21633**	Analysis Date:	11/30/2006 8:50:27 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	3.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
Sample ID: B		*MBLK*			Batch ID:	**R21651**	Analysis Date:	12/4/2006 10:18:30 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	3.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
Sample ID: 125NG BTEX CCV-B		*LCS*			Batch ID:	**R21633**	Analysis Date:	12/1/2006 8:28:43 AM	
Methyl tert-butyl ether (MTBE)	50.13	µg/L	2.5	100	51.2	138			
Benzene	24.67	µg/L	1.0	98.7	85.9	113			
Toluene	24.24	µg/L	1.0	97.0	86.4	113			
Ethylbenzene	23.65	µg/L	1.0	94.6	83.5	118			
Xylenes, Total	71.15	µg/L	3.0	94.9	83.4	122			
1,2,4-Trimethylbenzene	23.62	µg/L	1.0	94.5	83.5	115			
1,3,5-Trimethylbenzene	23.75	µg/L	1.0	95.0	85.2	113			
Sample ID: 100NG BTEX LCS		*LCS*			Batch ID:	**R21651**	Analysis Date:	12/4/2006 10:24:45 PM	
Methyl tert-butyl ether (MTBE)	37.85	µg/L	2.5	94.6	51.2	138			
Benzene	18.14	µg/L	1.0	90.7	85.9	113			
Toluene	17.86	µg/L	1.0	89.3	86.4	113			
Ethylbenzene	17.30	µg/L	1.0	86.5	83.5	118			
Xylenes, Total	52.11	µg/L	3.0	86.8	83.4	122			
1,2,4-Trimethylbenzene	17.90	µg/L	1.0	89.5	83.5	115			
1,3,5-Trimethylbenzene	17.93	µg/L	1.0	89.7	85.2	113			
Sample ID: 100NG BTEX LCSD		*LCSD*			Batch ID:	**R21651**	Analysis Date:	12/4/2006 10:54:40 PM	
Methyl tert-butyl ether (MTBE)	36.81	µg/L	2.5	92.0	51.2	138	2.79	28	
Benzene	18.02	µg/L	1.0	90.1	85.9	113	0.686	27	
Toluene	17.73	µg/L	1.0	88.7	86.4	113	0.719	19	
Ethylbenzene	17.17	µg/L	1.0	85.9	83.5	118	0.766	10	
Xylenes, Total	51.71	µg/L	3.0	86.2	83.4	122	0.774	13	
1,2,4-Trimethylbenzene	17.63	µg/L	1.0	88.2	83.5	115	1.53	21	
1,3,5-Trimethylbenzene	17.60	µg/L	1.0	88.0	85.2	113	1.87	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: Secondary Containment Oil Water Sep. (4th QT **Work Order:** 0611288

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW7470									
Sample ID: MB-11934		*MBLK*			Batch ID:	**11934**	Analysis Date:	12/7/2006	
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-11934		*LCS*			Batch ID:	**11934**	Analysis Date:	12/7/2006	
Mercury	0.004878	mg/L	0.00020	96.4	80	120			
Method: SW6010A									
Sample ID: MB-11852		*MBLK*			Batch ID:	**11852**	Analysis Date:	11/29/2006 9:06:59 AM	
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-11852		*LCS*			Batch ID:	**11852**	Analysis Date:	11/29/2006 9:10:03 AM	
Arsenic	0.5132	mg/L	0.020	103	80	120			
Barium	0.4694	mg/L	0.020	93.9	80	120			
Cadmium	0.4746	mg/L	0.0020	94.8	80	120			
Chromium	0.4779	mg/L	0.0060	95.6	80	120			
Lead	0.4836	mg/L	0.0050	96.7	80	120			
Selenium	0.4631	mg/L	0.050	92.6	80	120			
Silver	0.4764	mg/L	0.0050	95.0	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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 11/21/2006

Work Order Number 0611288

Received by GLS

Checklist completed by _____ Signature | 11-21-06 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? 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 Refinery Cuniza
Address: Rt 3 Box 7 Gallup, NM 87301
Phone #: 505-722-0231
Fax #: 505-722-0268

Project Name: 2nd day Containment Oil Water Sep. (4th Qtr)
Project #:
Project Manager:
Sampler: Cheryl Johnson
Sample Temperature: 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative: $HgCl_2$	Preservative: HNO_3	Preservative: HCl	HEAL No. 0611288	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)
1.21.06	10:15	H_2O	Oil Water Sep. H_2O	3/VOA			HCl	-1	X																
21.06	10:15	"	"	3/3DA			HCl	-1			X														
21.06	10:15	"	"	1/500ml		X		-1								X									

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
1/21/06	1640	[signature]	[signature]	11-21-06 @ 1640
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, July 18, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Pilot Travel Center 2nd Quarter 2006

Order No.: 0606101

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 6/9/2006 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

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: *18-Jul-06*

CLIENT: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006
Lab Order: 0606101

Lab ID: 0606101-01
Collection Date: 6/8/2006 8:45:00 AM
Client Sample ID: Pilot TC-2 QTR.
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: CMC
Mercury	ND	0.00020		mg/L	1	6/20/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: NMO
Arsenic	ND	0.020		mg/L	1	6/21/2006 2:42:32 PM
Barium	ND	0.020		mg/L	1	6/21/2006 2:42:32 PM
Cadmium	ND	0.0020		mg/L	1	6/21/2006 2:42:32 PM
Chromium	ND	0.0060		mg/L	1	6/21/2006 2:42:32 PM
Lead	ND	0.0050		mg/L	1	6/21/2006 2:42:32 PM
Selenium	ND	0.050		mg/L	1	6/21/2006 2:42:32 PM
Silver	ND	0.0050		mg/L	1	6/21/2006 2:42:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	100		µg/L	5	7/14/2006
Acenaphthylene	ND	100		µg/L	5	7/14/2006
Aniline	ND	200		µg/L	5	7/14/2006
Anthracene	ND	100		µg/L	5	7/14/2006
Azobenzene	ND	100		µg/L	5	7/14/2006
Benz(a)anthracene	ND	150		µg/L	5	7/14/2006
Benzo(a)pyrene	ND	150		µg/L	5	7/14/2006
Benzo(b)fluoranthene	ND	150		µg/L	5	7/14/2006
Benzo(g,h,i)perylene	ND	100		µg/L	5	7/14/2006
Benzo(k)fluoranthene	ND	100		µg/L	5	7/14/2006
Benzoic acid	770	500		µg/L	5	7/14/2006
Benzyl alcohol	ND	200		µg/L	5	7/14/2006
Bis(2-chloroethoxy)methane	ND	100		µg/L	5	7/14/2006
Bis(2-chloroethyl)ether	ND	150		µg/L	5	7/14/2006
Bis(2-chloroisopropyl)ether	ND	150		µg/L	5	7/14/2006
Bis(2-ethylhexyl)phthalate	ND	150		µg/L	5	7/14/2006
4-Bromophenyl phenyl ether	ND	100		µg/L	5	7/14/2006
Butyl benzyl phthalate	ND	150		µg/L	5	7/14/2006
Carbazole	ND	100		µg/L	5	7/14/2006
4-Chloro-3-methylphenol	ND	200		µg/L	5	7/14/2006
4-Chloroaniline	ND	200		µg/L	5	7/14/2006
2-Chloronaphthalene	ND	100		µg/L	5	7/14/2006
2-Chlorophenol	ND	100		µg/L	5	7/14/2006
4-Chlorophenyl phenyl ether	ND	150		µg/L	5	7/14/2006
Chrysene	ND	150		µg/L	5	7/14/2006
Di-n-butyl phthalate	ND	100		µg/L	5	7/14/2006

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

Hall Environmental Analysis Laboratory, Inc.

Date: *18-Jul-06*

CLIENT: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006

Lab Order: 0606101

EPA METHOD 8270C: SEMIVOLATILES

Analyst: BL

Di-n-octyl phthalate	ND	150	µg/L	5	7/14/2006
Dibenz(a,h)anthracene	ND	100	µg/L	5	7/14/2006
Dibenzofuran	ND	100	µg/L	5	7/14/2006
1,2-Dichlorobenzene	ND	100	µg/L	5	7/14/2006
1,3-Dichlorobenzene	ND	100	µg/L	5	7/14/2006
1,4-Dichlorobenzene	ND	100	µg/L	5	7/14/2006
3,3'-Dichlorobenzidine	ND	150	µg/L	5	7/14/2006
Diethyl phthalate	ND	100	µg/L	5	7/14/2006
Dimethyl phthalate	ND	100	µg/L	5	7/14/2006
2,4-Dichlorophenol	ND	100	µg/L	5	7/14/2006
2,4-Dimethylphenol	ND	100	µg/L	5	7/14/2006
4,6-Dinitro-2-methylphenol	ND	500	µg/L	5	7/14/2006
2,4-Dinitrophenol	ND	500	µg/L	5	7/14/2006
2,4-Dinitrotoluene	ND	100	µg/L	5	7/14/2006
2,6-Dinitrotoluene	ND	100	µg/L	5	7/14/2006
Fluoranthene	ND	100	µg/L	5	7/14/2006
Fluorene	ND	100	µg/L	5	7/14/2006
Hexachlorobenzene	ND	100	µg/L	5	7/14/2006
Hexachlorobutadiene	ND	100	µg/L	5	7/14/2006
Hexachlorocyclopentadiene	ND	100	µg/L	5	7/14/2006
Hexachloroethane	ND	100	µg/L	5	7/14/2006
Indeno(1,2,3-cd)pyrene	ND	100	µg/L	5	7/14/2006
Isophorone	ND	100	µg/L	5	7/14/2006
2-Methylnaphthalene	ND	100	µg/L	5	7/14/2006
2-Methylphenol	ND	150	µg/L	5	7/14/2006
3+4-Methylphenol	330	200	µg/L	5	7/14/2006
N-Nitrosodi-n-propylamine	ND	100	µg/L	5	7/14/2006
N-Nitrosodimethylamine	ND	100	µg/L	5	7/14/2006
N-Nitrosodiphenylamine	ND	100	µg/L	5	7/14/2006
Naphthalene	ND	100	µg/L	5	7/14/2006
2-Nitroaniline	ND	500	µg/L	5	7/14/2006
3-Nitroaniline	ND	500	µg/L	5	7/14/2006
4-Nitroaniline	ND	200	µg/L	5	7/14/2006
Nitrobenzene	ND	100	µg/L	5	7/14/2006
2-Nitrophenol	ND	150	µg/L	5	7/14/2006
4-Nitrophenol	ND	500	µg/L	5	7/14/2006
Pentachlorophenol	ND	500	µg/L	5	7/14/2006
Phenanthrene	ND	100	µg/L	5	7/14/2006
Phenol	ND	100	µg/L	5	7/14/2006
Pyrene	ND	150	µg/L	5	7/14/2006
Pyridine	ND	300	µg/L	5	7/14/2006
1,2,4-Trichlorobenzene	ND	100	µg/L	5	7/14/2006
2,4,5-Trichlorophenol	ND	100	µg/L	5	7/14/2006
2,4,6-Trichlorophenol	ND	150	µg/L	5	7/14/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *18-Jul-06*

CLIENT: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006
Lab Order: 0606101

EPA METHOD 8270C: SEMIVOLATILES

Analyst: BL

Surr: 2,4,6-Tribromophenol	83.6	16.6-150	%REC	5	7/14/2006
Surr: 2-Fluorobiphenyl	68.7	19.6-134	%REC	5	7/14/2006
Surr: 2-Fluorophenol	47.6	9.54-113	%REC	5	7/14/2006
Surr: 4-Terphenyl-d14	84.8	22.7-145	%REC	5	7/14/2006
Surr: Nitrobenzene-d5	64.1	14.6-134	%REC	5	7/14/2006
Surr: Phenol-d5	38.4	10.7-80.3	%REC	5	7/14/2006

EPA METHOD 8260B: VOLATILES

Analyst: KTM

Benzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Toluene	9.8	1.0	µg/L	1	6/12/2006 6:10:59 PM
Ethylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Methyl tert-butyl ether (MTBE)	ND	1.5	µg/L	1	6/12/2006 6:10:59 PM
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Naphthalene	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
1-Methylnaphthalene	ND	4.0	µg/L	1	6/12/2006 6:10:59 PM
2-Methylnaphthalene	ND	4.0	µg/L	1	6/12/2006 6:10:59 PM
Acetone	900	100	µg/L	10	6/10/2006 6:17:34 AM
Bromobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Bromochloromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Bromodichloromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Bromoform	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Bromomethane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
2-Butanone	ND	10	µg/L	1	6/12/2006 6:10:59 PM
Carbon disulfide	ND	10	µg/L	1	6/12/2006 6:10:59 PM
Carbon Tetrachloride	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
Chlorobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Chloroethane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
Chloroform	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Chloromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
2-Chlorotoluene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
4-Chlorotoluene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
cis-1,2-DCE	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
Dibromochloromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Dibromomethane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
1,2-Dichlorobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,3-Dichlorobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,4-Dichlorobenzene	5.1	1.0	µg/L	1	6/12/2006 6:10:59 PM
Dichlorodifluoromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,1-Dichloroethane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *18-Jul-06*

CLIENT: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006

Lab Order: 0606101

EPA METHOD 8260B: VOLATILES

Analyst: KTM

1,1-Dichloroethene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2-Dichloropropane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,3-Dichloropropane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
2,2-Dichloropropane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
1,1-Dichloropropene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Hexachlorobutadiene	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
2-Hexanone	ND	10	µg/L	1	6/12/2006 6:10:59 PM
Isopropylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
4-Isopropyltoluene	6.6	1.0	µg/L	1	6/12/2006 6:10:59 PM
4-Methyl-2-pentanone	ND	10	µg/L	1	6/12/2006 6:10:59 PM
Methylene Chloride	ND	3.0	µg/L	1	6/12/2006 6:10:59 PM
n-Butylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
n-Propylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
sec-Butylbenzene	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
Styrene	ND	1.5	µg/L	1	6/12/2006 6:10:59 PM
tert-Butylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Tetrachloroethene (PCE)	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
trans-1,2-DCE	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,1,1-Trichloroethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,1,2-Trichloroethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Trichloroethene (TCE)	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Trichlorofluoromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2,3-Trichloropropane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
Vinyl chloride	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Xylenes, Total	ND	3.0	µg/L	1	6/12/2006 6:10:59 PM
Surr: 1,2-Dichloroethane-d4	87.9	69.9-130	%REC	1	6/12/2006 6:10:59 PM
Surr: 4-Bromofluorobenzene	103	75-139	%REC	1	6/12/2006 6:10:59 PM
Surr: Dibromofluoromethane	92.3	57.3-135	%REC	1	6/12/2006 6:10:59 PM
Surr: Toluene-d8	97.3	81.9-122	%REC	1	6/12/2006 6:10:59 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	ND	Not Detected at the 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: 0606101
Order: 0606215 HAL03 Receipt: 06-09-06

William P. Blava: President of Assaigai Analytical Laboratories, Inc.

Sample: *0606101-01D/ PILOT TC-2 QTR.* Collected: *06-08-06 8:45:00* By:
Matrix: *AQUEOUS*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0606215-0001A		EPA 405.1 Biochemical Oxygen Demand						By: NJL		
BOD06071	WC.2006.1470.5	10-26-4	Biochemical Oxygen Demand	472	mg/L	1	2		06-09-06	06-14-06

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.

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006
Work Order: 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-10617		*MBLK*			Batch ID:	10617	Analysis Date:		7/14/2006
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	15						
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: Pilot Travel Center 2nd Quarter 2006
Work Order: 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-10617		*MBLK*			Batch ID:	10617	Analysis Date:		7/14/2006
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	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-10617		*LCS*			Batch ID:	10617	Analysis Date:		7/14/2006
Acenaphthene	72.64	µg/L	10	72.6	11	123			
4-Chloro-3-methylphenol	132.4	µg/L	20	66.2	15.4	119			
2-Chlorophenol	105.1	µg/L	10	52.6	12.2	122			
1,4-Dichlorobenzene	43.10	µg/L	10	43.1	16.9	100			
2,4-Dinitrotoluene	62.40	µg/L	10	62.4	13	138			
N-Nitrosodi-n-propylamine	60.56	µg/L	10	60.6	9.93	122			
4-Nitrophenol	89.46	µg/L	50	44.7	12.5	87.4			
Pentachlorophenol	140.9	µg/L	50	70.4	3.55	114			
Phenol	59.16	µg/L	10	29.6	7.53	73.1			
Pyrene	68.16	µg/L	15	68.2	12.6	140			
1,2,4-Trichlorobenzene	52.22	µg/L	10	52.2	17.4	98.7			
Sample ID: LCSD-10617		*LCSD*			Batch ID:	10617	Analysis Date:		7/17/2006
Acenaphthene	66.58	µg/L	10	66.6	11	123	8.71	30.5	
4-Chloro-3-methylphenol	130.9	µg/L	20	65.4	15.4	119	1.14	28.6	
2-Chlorophenol	101.7	µg/L	10	50.9	12.2	122	3.29	107	
1,4-Dichlorobenzene	45.50	µg/L	10	45.5	16.9	100	5.42	62.1	
2,4-Dinitrotoluene	59.42	µg/L	10	59.4	13	138	4.89	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: Pilot Travel Center 2nd Quarter 2006
Work Order: 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: LCSD-10617		*LCSD*			Batch ID:	10617	Analysis Date:		7/17/2006
N-Nitrosodi-n-propylamine	64.20	µg/L	10	64.2	9.93	122	5.84	30.3	
4-Nitrophenol	81.02	µg/L	50	40.5	12.5	87.4	9.90	36.3	
Pentachlorophenol	143.6	µg/L	50	71.8	3.55	114	1.90	49	
Phenol	59.46	µg/L	10	29.7	7.53	73.1	0.506	52.4	
Pyrene	66.34	µg/L	15	66.3	12.6	140	2.71	16.3	
1,2,4-Trichlorobenzene	54.60	µg/L	10	54.6	17.4	98.7	4.46	36.4	
Method: SW7470									
Sample ID: MB-10646		*MBLK*			Batch ID:	10646	Analysis Date:		6/20/2006
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-10646		*LCS*			Batch ID:	10646	Analysis Date:		6/20/2006
Mercury	0.004830	mg/L	0.00020	96.6	80	120			
Method: SW6010A									
Sample ID: MB-10640		*MBLK*			Batch ID:	10640	Analysis Date:		6/21/2006 2:25:56 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-10640		*LCS*			Batch ID:	10640	Analysis Date:		6/21/2006 2:28:59 PM
Barium	0.4993	mg/L	0.020	99.9	80	120			
Cadmium	0.5070	mg/L	0.0020	101	80	120			
Chromium	0.5076	mg/L	0.0060	101	80	120			
Lead	0.4989	mg/L	0.0050	99.8	80	120			
Selenium	0.4945	mg/L	0.050	98.9	80	120			
Silver	0.5125	mg/L	0.0050	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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006

Work Order: 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb2		*MBLK*			Batch ID: R19563		Analysis Date: 6/9/2006 1:12:59 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	1.5						
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: Pilot Travel Center 2nd Quarter 2006 **Work Order:** 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb2		*MBLK*			Batch ID:	**R19563**	Analysis Date:	6/9/2006 1:12:59 PM	
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: 5mL rb-f		*MBLK*			Batch ID:	**R19579**	Analysis Date:	6/12/2006 11:31:16 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	1.5						
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						

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: Pilot Travel Center 2nd Quarter 2006 **Work Order:** 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb-f		*MBLK*			Batch ID:	**R19579**	Analysis Date:	6/12/2006 11:31:16 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	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						
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						

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: Pilot Travel Center 2nd Quarter 2006 **Work Order:** 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb-f		*MBLK*			Batch ID:	**R19579**	Analysis Date:	6/12/2006 11:31:16 AM	
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R19563**	Analysis Date:	6/9/2006 2:57:32 PM	
Benzene	18.70	µg/L	1.0	93.5	71	124			
Toluene	18.04	µg/L	1.0	90.2	81.5	118			
Chlorobenzene	18.06	µg/L	1.0	90.3	81.2	132			
1,1-Dichloroethene	16.38	µg/L	1.0	81.9	65.5	134			
Trichloroethene (TCE)	16.64	µg/L	1.0	83.2	69.5	119			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R19579**	Analysis Date:	6/12/2006 12:55:56 PM	
Benzene	19.76	µg/L	1.0	98.8	71	124			
Toluene	18.70	µg/L	1.0	93.5	81.5	118			
Chlorobenzene	18.11	µg/L	1.0	90.5	81.2	132			
1,1-Dichloroethene	16.06	µg/L	1.0	80.3	65.5	134			
Trichloroethene (TCE)	17.96	µg/L	1.0	89.8	69.5	119			

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

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 6/9/2006

Work Order Number 0606101

Received by GLS

Checklist completed by D Schlappe 6-9-06
Signature Date

Matrix

Carrier name FedEx

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:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup NM 87301

Project Name: Pilot Travel Center 2nd Quarter 2006
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 2°

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. 0606101	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)
6/8/06	0845	H_2O	Pilot TC-2QTR.					-1								X			X	X	X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	
6/8/06	0900	Steve Morris	[signature]	6-9-06 9:10
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, November 15, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED Quarterly Samples 4th Qtr. 2006

Order No.: 0611012

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 11/1/2006 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:** *15-Nov-06*

CLIENT: Giant Refining Co
Project: NMED Quarterly Samples 4th Qtr. 2006
Lab Order: 0611012

CASE NARRATIVE

Analytical Comments for METHOD 8015GRO_W, SAMPLE 0611012-01A: Elevated surrogate due to matrix interference.See Corrective Action: [400] Low recovery for Se in 0611012-2 MS/MSD.

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0611012	**Collection Date:**	10/30/2006 3:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	28	0.50		mg/L	10	11/6/2006 12:19:30 PM
Surr: BFB	142	84.5-129	S	%REC	10	11/6/2006 12:19:30 PM
EPA METHOD 7470: MERCURY						Analyst: **CMS**
Mercury	0.0011	0.00020		mg/L	1	11/8/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/9/2006 2:35:03 PM
Barium	0.16	0.020		mg/L	1	11/9/2006 2:35:03 PM
Cadmium	ND	0.0020		mg/L	1	11/9/2006 2:35:03 PM
Chromium	0.011	0.0060		mg/L	1	11/9/2006 2:35:03 PM
Lead	0.018	0.0050		mg/L	1	11/9/2006 2:35:03 PM
Selenium	ND	0.050		mg/L	1	11/9/2006 2:35:03 PM
Silver	ND	0.0050		mg/L	1	11/9/2006 2:35:03 PM
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	10		µg/L	10	11/8/2006
Toluene	ND	10		µg/L	10	11/8/2006
Ethylbenzene	ND	10		µg/L	10	11/8/2006
Methyl tert-butyl ether (MTBE)	ND	15		µg/L	10	11/8/2006
1,2,4-Trimethylbenzene	110	10		µg/L	10	11/8/2006
1,3,5-Trimethylbenzene	30	10		µg/L	10	11/8/2006
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	11/8/2006
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	11/8/2006
Naphthalene	54	20		µg/L	10	11/8/2006
1-Methylnaphthalene	440	40		µg/L	10	11/8/2006
2-Methylnaphthalene	550	40		µg/L	10	11/8/2006
Acetone	1100	100		µg/L	10	11/8/2006
Bromobenzene	ND	10		µg/L	10	11/8/2006
Bromochloromethane	ND	10		µg/L	10	11/8/2006
Bromodichloromethane	ND	10		µg/L	10	11/8/2006
Bromoform	ND	10		µg/L	10	11/8/2006
Bromomethane	ND	20		µg/L	10	11/8/2006
2-Butanone	110	100		µg/L	10	11/8/2006
Carbon disulfide	ND	100		µg/L	10	11/8/2006
Carbon Tetrachloride	ND	20		µg/L	10	11/8/2006
Chlorobenzene	ND	10		µg/L	10	11/8/2006
Chloroethane	ND	20		µg/L	10	11/8/2006
Chloroform	ND	10		µg/L	10	11/8/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0611012	**Collection Date:**	10/30/2006 3:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Chloromethane	ND	10		µg/L	10	11/8/2006
2-Chlorotoluene	ND	10		µg/L	10	11/8/2006
4-Chlorotoluene	ND	10		µg/L	10	11/8/2006
cis-1,2-DCE	ND	10		µg/L	10	11/8/2006
cis-1,3-Dichloropropene	ND	10		µg/L	10	11/8/2006
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	11/8/2006
Dibromochloromethane	ND	10		µg/L	10	11/8/2006
Dibromomethane	ND	20		µg/L	10	11/8/2006
1,2-Dichlorobenzene	ND	10		µg/L	10	11/8/2006
1,3-Dichlorobenzene	ND	10		µg/L	10	11/8/2006
1,4-Dichlorobenzene	ND	10		µg/L	10	11/8/2006
Dichlorodifluoromethane	ND	10		µg/L	10	11/8/2006
1,1-Dichloroethane	ND	20		µg/L	10	11/8/2006
1,1-Dichloroethene	ND	10		µg/L	10	11/8/2006
1,2-Dichloropropane	ND	10		µg/L	10	11/8/2006
1,3-Dichloropropane	ND	10		µg/L	10	11/8/2006
2,2-Dichloropropane	ND	20		µg/L	10	11/8/2006
1,1-Dichloropropene	ND	10		µg/L	10	11/8/2006
Hexachlorobutadiene	ND	20		µg/L	10	11/8/2006
2-Hexanone	ND	100		µg/L	10	11/8/2006
Isopropylbenzene	ND	10		µg/L	10	11/8/2006
4-Isopropyltoluene	ND	10		µg/L	10	11/8/2006
4-Methyl-2-pentanone	ND	100		µg/L	10	11/8/2006
Methylene Chloride	ND	30		µg/L	10	11/8/2006
n-Butylbenzene	47	10		µg/L	10	11/8/2006
n-Propylbenzene	ND	10		µg/L	10	11/8/2006
sec-Butylbenzene	ND	20		µg/L	10	11/8/2006
Styrene	ND	15		µg/L	10	11/8/2006
tert-Butylbenzene	ND	10		µg/L	10	11/8/2006
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	11/8/2006
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	11/8/2006
Tetrachloroethene (PCE)	ND	10		µg/L	10	11/8/2006
trans-1,2-DCE	ND	10		µg/L	10	11/8/2006
trans-1,3-Dichloropropene	ND	10		µg/L	10	11/8/2006
1,2,3-Trichlorobenzene	ND	10		µg/L	10	11/8/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	10	11/8/2006
1,1,1-Trichloroethane	ND	10		µg/L	10	11/8/2006
1,1,2-Trichloroethane	ND	10		µg/L	10	11/8/2006
Trichloroethene (TCE)	ND	10		µg/L	10	11/8/2006
Trichlorofluoromethane	ND	10		µg/L	10	11/8/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0611012	**Collection Date:**	10/30/2006 3:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,3-Trichloropropane	ND	20		µg/L	10	11/8/2006
Vinyl chloride	ND	10		µg/L	10	11/8/2006
Xylenes, Total	62	30		µg/L	10	11/8/2006
Surr: 1,2-Dichloroethane-d4	84.2	69.9-130		%REC	10	11/8/2006
Surr: 4-Bromofluorobenzene	109	75-139		%REC	10	11/8/2006
Surr: Dibromofluoromethane	89.1	57.3-135		%REC	10	11/8/2006
Surr: Toluene-d8	86.0	81.9-122		%REC	10	11/8/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot TC Eff
Lab Order:	0611012	**Collection Date:**	10/30/2006 2:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.17	0.10		mg/L	2	11/6/2006 2:30:16 PM
Surr: BFB	103	84.5-129		%REC	2	11/6/2006 2:30:16 PM
EPA METHOD 7470: MERCURY						Analyst: **CMS**
Mercury	ND	0.00020		mg/L	1	11/8/2006
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	11/9/2006 2:37:44 PM
Barium	ND	0.020		mg/L	1	11/9/2006 2:37:44 PM
Cadmium	ND	0.0020		mg/L	1	11/9/2006 2:37:44 PM
Chromium	ND	0.0060		mg/L	1	11/9/2006 2:37:44 PM
Lead	ND	0.0050		mg/L	1	11/9/2006 2:37:44 PM
Selenium	ND	0.050		mg/L	1	11/9/2006 2:37:44 PM
Silver	ND	0.0050		mg/L	1	11/9/2006 2:37:44 PM
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/13/2006
Toluene	5.1	1.0		µg/L	1	11/13/2006
Ethylbenzene	ND	1.0		µg/L	1	11/13/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/13/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/13/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/13/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/13/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/13/2006
Naphthalene	ND	2.0		µg/L	1	11/13/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/13/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/13/2006
Acetone	150	10		µg/L	1	11/13/2006
Bromobenzene	ND	1.0		µg/L	1	11/13/2006
Bromochloromethane	ND	1.0		µg/L	1	11/13/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/13/2006
Bromoform	ND	1.0		µg/L	1	11/13/2006
Bromomethane	ND	2.0		µg/L	1	11/13/2006
2-Butanone	ND	10		µg/L	1	11/13/2006
Carbon disulfide	ND	10		µg/L	1	11/13/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/13/2006
Chlorobenzene	ND	1.0		µg/L	1	11/13/2006
Chloroethane	ND	2.0		µg/L	1	11/13/2006
Chloroform	1.8	1.0		µg/L	1	11/13/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot TC Eff
Lab Order:	0611012	**Collection Date:**	10/30/2006 2:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Chloromethane	ND	1.0		µg/L	1	11/13/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/13/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/13/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/13/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/13/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/13/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/13/2006
Dibromomethane	ND	2.0		µg/L	1	11/13/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/13/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/13/2006
1,4-Dichlorobenzene	2.8	1.0		µg/L	1	11/13/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/13/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/13/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/13/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/13/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/13/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/13/2006
1,1-Dichloropropene	ND	1.0		µg/L	1	11/13/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/13/2006
2-Hexanone	ND	10		µg/L	1	11/13/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/13/2006
4-Isopropyltoluene	1.6	1.0		µg/L	1	11/13/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/13/2006
Methylene Chloride	ND	3.0		µg/L	1	11/13/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/13/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/13/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/13/2006
Styrene	ND	1.5		µg/L	1	11/13/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/13/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/13/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/13/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/13/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/13/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/13/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/13/2006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/13/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/13/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/13/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/13/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/13/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot TC Eff
Lab Order:	0611012	**Collection Date:**	10/30/2006 2:45:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/13/2006
Vinyl chloride	ND	1.0		µg/L	1	11/13/2006
Xylenes, Total	ND	3.0		µg/L	1	11/13/2006
Surr: 1,2-Dichloroethane-d4	86.3	69.9-130		%REC	1	11/13/2006
Surr: 4-Bromofluorobenzene	120	75-139		%REC	1	11/13/2006
Surr: Dibromofluoromethane	93.2	57.3-135		%REC	1	11/13/2006
Surr: Toluene-d8	91.0	81.9-122		%REC	1	11/13/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Eff
Lab Order:	0611012	**Collection Date:**	10/30/2006 3:15:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	39	1.0		mg/L	20	11/6/2006 1:24:52 PM
Surr: BFB	103	84.5-129		%REC	20	11/6/2006 1:24:52 PM
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	6600	100		µg/L	100	11/8/2006
Toluene	9800	100		µg/L	100	11/8/2006
Ethylbenzene	760	100		µg/L	100	11/8/2006
Methyl tert-butyl ether (MTBE)	300	150		µg/L	100	11/8/2006
1,2,4-Trimethylbenzene	570	100		µg/L	100	11/8/2006
1,3,5-Trimethylbenzene	170	100		µg/L	100	11/8/2006
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	11/8/2006
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	11/8/2006
Naphthalene	330	200		µg/L	100	11/8/2006
1-Methylnaphthalene	ND	400		µg/L	100	11/8/2006
2-Methylnaphthalene	ND	400		µg/L	100	11/8/2006
Acetone	1800	1000		µg/L	100	11/8/2006
Bromobenzene	ND	100		µg/L	100	11/8/2006
Bromochloromethane	ND	100		µg/L	100	11/8/2006
Bromodichloromethane	ND	100		µg/L	100	11/8/2006
Bromoform	ND	100		µg/L	100	11/8/2006
Bromomethane	ND	200		µg/L	100	11/8/2006
2-Butanone	ND	1000		µg/L	100	11/8/2006
Carbon disulfide	ND	1000		µg/L	100	11/8/2006
Carbon Tetrachloride	ND	200		µg/L	100	11/8/2006
Chlorobenzene	ND	100		µg/L	100	11/8/2006
Chloroethane	ND	200		µg/L	100	11/8/2006
Chloroform	ND	100		µg/L	100	11/8/2006
Chloromethane	ND	100		µg/L	100	11/8/2006
2-Chlorotoluene	ND	100		µg/L	100	11/8/2006
4-Chlorotoluene	ND	100		µg/L	100	11/8/2006
cis-1,2-DCE	ND	100		µg/L	100	11/8/2006
cis-1,3-Dichloropropene	ND	100		µg/L	100	11/8/2006
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	11/8/2006
Dibromochloromethane	ND	100		µg/L	100	11/8/2006
Dibromomethane	ND	200		µg/L	100	11/8/2006
1,2-Dichlorobenzene	ND	100		µg/L	100	11/8/2006
1,3-Dichlorobenzene	ND	100		µg/L	100	11/8/2006
1,4-Dichlorobenzene	ND	100		µg/L	100	11/8/2006
Dichlorodifluoromethane	ND	100		µg/L	100	11/8/2006
1,1-Dichloroethane	ND	200		µg/L	100	11/8/2006

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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Eff
Lab Order:	0611012	**Collection Date:**	10/30/2006 3:15:00 PM
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,1-Dichloroethene	ND	100		µg/L	100	11/8/2006
1,2-Dichloropropane	ND	100		µg/L	100	11/8/2006
1,3-Dichloropropane	ND	100		µg/L	100	11/8/2006
2,2-Dichloropropane	ND	200		µg/L	100	11/8/2006
1,1-Dichloropropene	ND	100		µg/L	100	11/8/2006
Hexachlorobutadiene	ND	200		µg/L	100	11/8/2006
2-Hexanone	ND	1000		µg/L	100	11/8/2006
Isopropylbenzene	ND	100		µg/L	100	11/8/2006
4-Isopropyltoluene	ND	100		µg/L	100	11/8/2006
4-Methyl-2-pentanone	ND	1000		µg/L	100	11/8/2006
Methylene Chloride	ND	300		µg/L	100	11/8/2006
n-Butylbenzene	ND	100		µg/L	100	11/8/2006
n-Propylbenzene	ND	100		µg/L	100	11/8/2006
sec-Butylbenzene	ND	200		µg/L	100	11/8/2006
Styrene	ND	150		µg/L	100	11/8/2006
tert-Butylbenzene	ND	100		µg/L	100	11/8/2006
1,1,1,2-Tetrachloroethane	ND	100		µg/L	100	11/8/2006
1,1,2,2-Tetrachloroethane	ND	100		µg/L	100	11/8/2006
Tetrachloroethene (PCE)	ND	100		µg/L	100	11/8/2006
trans-1,2-DCE	ND	100		µg/L	100	11/8/2006
trans-1,3-Dichloropropene	ND	100		µg/L	100	11/8/2006
1,2,3-Trichlorobenzene	ND	100		µg/L	100	11/8/2006
1,2,4-Trichlorobenzene	ND	100		µg/L	100	11/8/2006
1,1,1-Trichloroethane	ND	100		µg/L	100	11/8/2006
1,1,2-Trichloroethane	ND	100		µg/L	100	11/8/2006
Trichloroethene (TCE)	ND	100		µg/L	100	11/8/2006
Trichlorofluoromethane	ND	100		µg/L	100	11/8/2006
1,2,3-Trichloropropane	ND	200		µg/L	100	11/8/2006
Vinyl chloride	ND	100		µg/L	100	11/8/2006
Xylenes, Total	3500	300		µg/L	100	11/8/2006
Surr: 1,2-Dichloroethane-d4	89.3	69.9-130		%REC	100	11/8/2006
Surr: 4-Bromofluorobenzene	89.1	75-139		%REC	100	11/8/2006
Surr: Dibromofluoromethane	97.8	57.3-135		%REC	100	11/8/2006
Surr: Toluene-d8	87.0	81.9-122		%REC	100	11/8/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Trip Blank
Lab Order:	0611012	**Collection Date:**	
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-04	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	1.0		µg/L	1	11/8/2006
Toluene	ND	1.0		µg/L	1	11/8/2006
Ethylbenzene	ND	1.0		µg/L	1	11/8/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	11/8/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/8/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/8/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/8/2006
Naphthalene	ND	2.0		µg/L	1	11/8/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	11/8/2006
Acetone	ND	10		µg/L	1	11/8/2006
Bromobenzene	ND	1.0		µg/L	1	11/8/2006
Bromochloromethane	ND	1.0		µg/L	1	11/8/2006
Bromodichloromethane	ND	1.0		µg/L	1	11/8/2006
Bromoform	ND	1.0		µg/L	1	11/8/2006
Bromomethane	ND	2.0		µg/L	1	11/8/2006
2-Butanone	ND	10		µg/L	1	11/8/2006
Carbon disulfide	ND	10		µg/L	1	11/8/2006
Carbon Tetrachloride	ND	2.0		µg/L	1	11/8/2006
Chlorobenzene	ND	1.0		µg/L	1	11/8/2006
Chloroethane	ND	2.0		µg/L	1	11/8/2006
Chloroform	ND	1.0		µg/L	1	11/8/2006
Chloromethane	ND	1.0		µg/L	1	11/8/2006
2-Chlorotoluene	ND	1.0		µg/L	1	11/8/2006
4-Chlorotoluene	ND	1.0		µg/L	1	11/8/2006
cis-1,2-DCE	ND	1.0		µg/L	1	11/8/2006
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2006
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/8/2006
Dibromochloromethane	ND	1.0		µg/L	1	11/8/2006
Dibromomethane	ND	2.0		µg/L	1	11/8/2006
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2006
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2006
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/8/2006
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/8/2006
1,1-Dichloroethane	ND	2.0		µg/L	1	11/8/2006
1,1-Dichloroethene	ND	1.0		µg/L	1	11/8/2006
1,2-Dichloropropane	ND	1.0		µg/L	1	11/8/2006
1,3-Dichloropropane	ND	1.0		µg/L	1	11/8/2006
2,2-Dichloropropane	ND	2.0		µg/L	1	11/8/2006

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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Trip Blank
Lab Order:	0611012	**Collection Date:**	
Project:	NMED Quarterly Samples 4th Qtr. 2006	**Date Received:**	11/1/2006
Lab ID:	0611012-04	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,1-Dichloropropene	ND	1.0		µg/L	1	11/8/2006
Hexachlorobutadiene	ND	2.0		µg/L	1	11/8/2006
2-Hexanone	ND	10		µg/L	1	11/8/2006
Isopropylbenzene	ND	1.0		µg/L	1	11/8/2006
4-Isopropyltoluene	ND	1.0		µg/L	1	11/8/2006
4-Methyl-2-pentanone	ND	10		µg/L	1	11/8/2006
Methylene Chloride	ND	3.0		µg/L	1	11/8/2006
n-Butylbenzene	ND	1.0		µg/L	1	11/8/2006
n-Propylbenzene	ND	1.0		µg/L	1	11/8/2006
sec-Butylbenzene	ND	2.0		µg/L	1	11/8/2006
Styrene	ND	1.5		µg/L	1	11/8/2006
tert-Butylbenzene	ND	1.0		µg/L	1	11/8/2006
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2006
1,1,2,2-Tetrachloroethane	ND	1.0		µg/L	1	11/8/2006
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/8/2006
trans-1,2-DCE	ND	1.0		µg/L	1	11/8/2006
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/8/2006
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2006
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/8/2006
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/8/2006
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/8/2006
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/8/2006
Trichlorofluoromethane	ND	1.0		µg/L	1	11/8/2006
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/8/2006
Vinyl chloride	ND	1.0		µg/L	1	11/8/2006
Xylenes, Total	ND	3.0		µg/L	1	11/8/2006
Surr: 1,2-Dichloroethane-d4	91.2	69.9-130		%REC	1	11/8/2006
Surr: 4-Bromofluorobenzene	92.7	75-139		%REC	1	11/8/2006
Surr: Dibromofluoromethane	94.6	57.3-135		%REC	1	11/8/2006
Surr: Toluene-d8	87.8	81.9-122		%REC	1	11/8/2006

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED Quarterly Samples 4th Qtr. 2006 **Work Order:** 0611012

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8015									
Sample ID: 5ML REAGENT BLA		*MBLK*			Batch ID:	**R21301**	Analysis Date:	11/6/2006 8:43:27 AM	
Gasoline Range Organics (GRO)	ND	mg/L	0.050						
Sample ID: 2.5UG GRO LCS		*LCS*			Batch ID:	**R21301**	Analysis Date:	11/6/2006 11:04:03 PM	
Gasoline Range Organics (GRO)	0.4578	mg/L	0.050	91.6	73.3	119			
Sample ID: 2.5UG GRO LCSD		*LCSD*			Batch ID:	**R21301**	Analysis Date:	11/6/2006 11:34:09 PM	
Gasoline Range Organics (GRO)	0.4564	mg/L	0.050	91.3	73.3	119	0.306	8.39	
Method: SW7470									
Sample ID: MB-11705		*MBLK*			Batch ID:	**11705**	Analysis Date:	11/8/2006	
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-11705		*LCS*			Batch ID:	**11705**	Analysis Date:	11/8/2006	
Mercury	0.004995	mg/L	0.00020	99.9	80	120			
Method: SW6010A									
Sample ID: 0611012-02B MSD		*MSD*			Batch ID:	**11672**	Analysis Date:	11/9/2006 2:42:22 PM	
Arsenic	0.5203	mg/L	0.020	104	75	125	0.0224	20	
Barium	0.5108	mg/L	0.020	99.6	75	125	6.39	20	
Cadmium	0.5056	mg/L	0.0020	101	75	125	3.91	20	
Chromium	0.5020	mg/L	0.0060	100	75	125	4.89	20	
Lead	0.4873	mg/L	0.0050	97.5	75	125	1.87	20	
Selenium	0.1100	mg/L	0.050	22.0	75	125	61.1	20	SR
Sample ID: MB-11672		*MBLK*			Batch ID:	**11672**	Analysis Date:	11/9/2006 2:12:50 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-11672		*LCS*			Batch ID:	**11672**	Analysis Date:	11/9/2006 2:14:44 PM	
Arsenic	0.5281	mg/L	0.020	106	80	120			
Barium	0.4898	mg/L	0.020	97.8	80	120			
Cadmium	0.5102	mg/L	0.0020	102	80	120			
Chromium	0.5026	mg/L	0.0060	101	80	120			
Lead	0.4912	mg/L	0.0050	98.2	80	120			
Selenium	0.4423	mg/L	0.050	88.5	80	120			
Silver	0.4926	mg/L	0.0050	98.3	80	120			
Sample ID: 0611012-02B MS		*MS*			Batch ID:	**11672**	Analysis Date:	11/9/2006 2:40:23 PM	
Arsenic	0.5204	mg/L	0.020	104	75	125			
Barium	0.4791	mg/L	0.020	93.3	75	125			
Cadmium	0.4862	mg/L	0.0020	97.2	75	125			
Chromium	0.4780	mg/L	0.0060	95.6	75	125			
Lead	0.4783	mg/L	0.0050	95.7	75	125			
Selenium	0.05851	mg/L	0.050	11.7	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 Samples 4th Qtr. 2006 **Work Order:** 0611012

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID: **R21342**		Analysis Date:		11/8/2006
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
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: NMED Quarterly Samples 4th Qtr. 2006 **Work Order:** 0611012

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R21342**	Analysis Date:		11/8/2006
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: 5mL rb		*MBLK*			Batch ID:	**R21378**	Analysis Date:		11/10/2006
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						

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 Samples 4th Qtr. 2006 **Work Order:** 0611012

Method: **SW8260B**
Sample ID: **5mL rb** *MBLK* Batch ID: **R21378** Analysis Date: 11/10/2006

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	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						
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						

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: NMED Quarterly Samples 4th Qtr. 2006 **Work Order:** 0611012

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R21378**	Analysis Date:		11/10/2006
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R21387**	Analysis Date:		11/13/2006
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						

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 Samples 4th Qtr. 2006 **Work Order:** 0611012

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb		*MBLK*			Batch ID:	**R21387**	Analysis Date:		11/13/2006
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	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:	**R21342**	Analysis Date:		11/8/2006
Benzene	18.16	µg/L	1.0	90.8	74.9	113			
Toluene	16.22	µg/L	1.0	81.1	80.4	111			
Chlorobenzene	18.37	µg/L	1.0	91.9	83.2	120			
1,1-Dichloroethene	19.73	µg/L	1.0	98.6	72	127			
Trichloroethene (TCE)	17.89	µg/L	1.0	89.5	58.2	131			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R21378**	Analysis Date:		11/10/2006
Benzene	19.07	µg/L	1.0	95.4	74.9	113			
Toluene	17.81	µg/L	1.0	89.0	80.4	111			
Chlorobenzene	18.54	µg/L	1.0	92.7	83.2	120			
1,1-Dichloroethene	18.36	µg/L	1.0	91.8	72	127			
Trichloroethene (TCE)	17.39	µg/L	1.0	87.0	58.2	131			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R21387**	Analysis Date:		11/13/2006
Benzene	18.29	µg/L	1.0	91.4	74.9	113			
Toluene	17.64	µg/L	1.0	88.2	80.4	111			
Chlorobenzene	18.67	µg/L	1.0	93.4	83.2	120			
1,1-Dichloroethene	19.07	µg/L	1.0	95.4	72	127			
Trichloroethene (TCE)	20.48	µg/L	1.0	102	58.2	131			

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.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 11/1/2006

Work Order Number 0611012

Received by AT

Checklist completed by _____ Signature 11/1/06 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? **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 Samples 4th Qtr. 2006
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. 0611012	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)
1/30/06	1545	H_2O	AL-2 to EP-1					-1			X					X			X						
1/30/06	1445	"	Pilot TC Eff.					-2			X					X			X						
1/30/06	1515	"	NAPIS Eff					-3			X								X						
			Trip Blank					-4																	

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-1-06	1100	Steve Morris	1/1/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, March 08, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED Monthly Water Samples

Order No.: 0602238

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 4 sample(s) on 2/24/2006 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

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

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples
Lab Order: 0602238

Lab ID: 0602238-01
Client Sample ID: AL-2 to EP-1
Collection Date: 2/23/2006 8:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	52	3.0		mg/L	1	2/28/2006 10:08:02 AM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	2/28/2006 10:08:02 AM
Surr: DNOP	137	58-140		%REC	1	2/28/2006 10:08:02 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	2.4	1.0		mg/L	20	3/6/2006 11:39:39 AM
Surr: BFB	110	79.7-118		%REC	20	3/6/2006 11:39:39 AM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.0017	0.00020		mg/L	1	3/2/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **CMC**
Arsenic	0.028	0.020		mg/L	1	3/6/2006 12:16:52 PM
Barium	0.16	0.020		mg/L	1	3/6/2006 12:16:52 PM
Cadmium	ND	0.0020		mg/L	1	3/6/2006 12:16:52 PM
Chromium	0.0094	0.0060		mg/L	1	3/6/2006 12:16:52 PM
Lead	ND	0.0050		mg/L	1	3/6/2006 12:16:52 PM
Selenium	ND	0.050		mg/L	1	3/6/2006 12:16:52 PM
Silver	ND	0.0050		mg/L	1	3/6/2006 12:16:52 PM
EPA METHOD 8260B: VOLATILES						Analyst: **KTM**
Benzene	120	50		µg/L	50	3/2/2006
Toluene	160	50		µg/L	50	3/2/2006
Ethylbenzene	ND	50		µg/L	50	3/2/2006
Methyl tert-butyl ether (MTBE)	1100	50		µg/L	50	3/2/2006
1,2,4-Trimethylbenzene	ND	50		µg/L	50	3/2/2006
1,3,5-Trimethylbenzene	ND	50		µg/L	50	3/2/2006
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	3/2/2006
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	3/2/2006
Naphthalene	ND	100		µg/L	50	3/2/2006
1-Methylnaphthalene	ND	200		µg/L	50	3/2/2006
2-Methylnaphthalene	ND	200		µg/L	50	3/2/2006
Acetone	4600	500		µg/L	50	3/2/2006
Bromobenzene	ND	50		µg/L	50	3/2/2006
Bromochloromethane	ND	50		µg/L	50	3/2/2006
Bromodichloromethane	ND	50		µg/L	50	3/2/2006
Bromoform	ND	50		µg/L	50	3/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples

Lab Order: 0602238

EPA METHOD 8260B: VOLATILES Analyst: **KTM**

Bromomethane	ND	100	µg/L	50	3/2/2006
2-Butanone	680	500	µg/L	50	3/2/2006
Carbon disulfide	ND	500	µg/L	50	3/2/2006
Carbon Tetrachloride	ND	100	µg/L	50	3/2/2006
Chlorobenzene	ND	50	µg/L	50	3/2/2006
Chloroethane	ND	100	µg/L	50	3/2/2006
Chloroform	ND	50	µg/L	50	3/2/2006
Chloromethane	ND	50	µg/L	50	3/2/2006
2-Chlorotoluene	ND	50	µg/L	50	3/2/2006
4-Chlorotoluene	ND	50	µg/L	50	3/2/2006
cis-1,2-DCE	ND	50	µg/L	50	3/2/2006
cis-1,3-Dichloropropene	ND	50	µg/L	50	3/2/2006
1,2-Dibromo-3-chloropropane	ND	100	µg/L	50	3/2/2006
Dibromochloromethane	ND	50	µg/L	50	3/2/2006
Dibromomethane	ND	100	µg/L	50	3/2/2006
1,2-Dichlorobenzene	ND	50	µg/L	50	3/2/2006
1,3-Dichlorobenzene	ND	50	µg/L	50	3/2/2006
1,4-Dichlorobenzene	ND	50	µg/L	50	3/2/2006
Dichlorodifluoromethane	ND	50	µg/L	50	3/2/2006
1,1-Dichloroethane	ND	100	µg/L	50	3/2/2006
1,1-Dichloroethene	ND	50	µg/L	50	3/2/2006
1,2-Dichloropropane	ND	50	µg/L	50	3/2/2006
1,3-Dichloropropane	ND	50	µg/L	50	3/2/2006
2,2-Dichloropropane	ND	100	µg/L	50	3/2/2006
1,1-Dichloropropene	ND	50	µg/L	50	3/2/2006
Hexachlorobutadiene	ND	100	µg/L	50	3/2/2006
2-Hexanone	ND	500	µg/L	50	3/2/2006
Isopropylbenzene	ND	50	µg/L	50	3/2/2006
4-Isopropyltoluene	ND	50	µg/L	50	3/2/2006
4-Methyl-2-pentanone	ND	500	µg/L	50	3/2/2006
Methylene Chloride	ND	150	µg/L	50	3/2/2006
n-Butylbenzene	ND	50	µg/L	50	3/2/2006
n-Propylbenzene	ND	50	µg/L	50	3/2/2006
sec-Butylbenzene	ND	100	µg/L	50	3/2/2006
Styrene	ND	50	µg/L	50	3/2/2006
tert-Butylbenzene	ND	50	µg/L	50	3/2/2006
1,1,1,2-Tetrachloroethane	ND	50	µg/L	50	3/2/2006
1,1,2,2-Tetrachloroethane	ND	50	µg/L	50	3/2/2006
Tetrachloroethene (PCE)	ND	50	µg/L	50	3/2/2006
trans-1,2-DCE	ND	50	µg/L	50	3/2/2006
trans-1,3-Dichloropropene	ND	50	µg/L	50	3/2/2006
1,2,3-Trichlorobenzene	ND	50	µg/L	50	3/2/2006
1,2,4-Trichlorobenzene	ND	50	µg/L	50	3/2/2006
1,1,1-Trichloroethane	ND	50	µg/L	50	3/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples

Lab Order: 0602238

EPA METHOD 8260B: VOLATILES Analyst: **KTM**

1,1,2-Trichloroethane	ND	50	µg/L	50	3/2/2006
Trichloroethene (TCE)	ND	50	µg/L	50	3/2/2006
Trichlorofluoromethane	ND	50	µg/L	50	3/2/2006
1,2,3-Trichloropropane	ND	100	µg/L	50	3/2/2006
Vinyl chloride	ND	50	µg/L	50	3/2/2006
Xylenes, Total	98	50	µg/L	50	3/2/2006
Surr: 1,2-Dichloroethane-d4	103	69.9-130	%REC	50	3/2/2006
Surr: 4-Bromofluorobenzene	90.5	71.2-123	%REC	50	3/2/2006
Surr: Dibromofluoromethane	102	57.3-135	%REC	50	3/2/2006
Surr: Toluene-d8	92.8	81.9-122	%REC	50	3/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples
Lab Order: 0602238

Lab ID: 0602238-02
Collection Date: 2/23/2006 7:30:00 AM
Client Sample ID: OAPIS
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	2.8	1.0		mg/L	1	2/28/2006 10:40:46 AM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/28/2006 10:40:46 AM
Surr: DNOP	114	58-140		%REC	1	2/28/2006 10:40:46 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.80	0.25		mg/L	5	3/3/2006 12:24:11 PM
Surr: BFB	101	79.7-118		%REC	5	3/3/2006 12:24:11 PM
EPA METHOD 8310: PAHS						Analyst: **JMP**
Naphthalene	290	25		µg/L	10	3/7/2006 2:21:22 PM
1-Methylnaphthalene	ND	2.5		µg/L	1	3/7/2006 3:09:22 PM
2-Methylnaphthalene	ND	2.5		µg/L	1	3/7/2006 3:09:22 PM
Acenaphthylene	ND	2.5		µg/L	1	3/7/2006 3:09:22 PM
Acenaphthene	ND	2.5		µg/L	1	3/7/2006 3:09:22 PM
Fluorene	ND	0.80		µg/L	1	3/7/2006 3:09:22 PM
Phenanthrene	ND	0.60		µg/L	1	3/7/2006 3:09:22 PM
Anthracene	ND	0.60		µg/L	1	3/7/2006 3:09:22 PM
Fluoranthene	ND	0.30		µg/L	1	3/7/2006 3:09:22 PM
Pyrene	0.32	0.30		µg/L	1	3/7/2006 3:09:22 PM
Benz(a)anthracene	ND	0.020		µg/L	1	3/7/2006 3:09:22 PM
Chrysene	ND	0.20		µg/L	1	3/7/2006 3:09:22 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	3/7/2006 3:09:22 PM
Benzo(k)fluoranthene	ND	0.020		µg/L	1	3/7/2006 3:09:22 PM
Benzo(a)pyrene	ND	0.020		µg/L	1	3/7/2006 3:09:22 PM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	3/7/2006 3:09:22 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	3/7/2006 3:09:22 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	3/7/2006 3:09:22 PM
Surr: Benzo(e)pyrene	89.2	54-102		%REC	1	3/7/2006 3:09:22 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	3/2/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **CMC**
Arsenic	0.033	0.020		mg/L	1	3/6/2006 12:20:49 PM
Barium	0.29	0.020		mg/L	1	3/6/2006 12:20:49 PM
Cadmium	ND	0.0020		mg/L	1	3/6/2006 12:20:49 PM
Chromium	0.0081	0.0060		mg/L	1	3/6/2006 12:20:49 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples

Lab Order: 0602238

EPA 6010: TOTAL RECOVERABLE METALS

Analyst: **CMC**

Lead	ND	0.0050	mg/L	1	3/6/2006 12:20:49 PM
Selenium	ND	0.050	mg/L	1	3/6/2006 12:20:49 PM
Silver	ND	0.0050	mg/L	1	3/6/2006 12:20:49 PM

EPA METHOD 8260B: VOLATILES

Analyst: **KTM**

Benzene	ND	5.0	µg/L	5	3/7/2006
Toluene	ND	5.0	µg/L	5	3/7/2006
Ethylbenzene	ND	5.0	µg/L	5	3/7/2006
Methyl tert-butyl ether (MTBE)	8.4	5.0	µg/L	5	3/7/2006
1,2,4-Trimethylbenzene	12	5.0	µg/L	5	3/7/2006
1,3,5-Trimethylbenzene	31	5.0	µg/L	5	3/7/2006
1,2-Dichloroethane (EDC)	ND	5.0	µg/L	5	3/7/2006
1,2-Dibromoethane (EDB)	ND	5.0	µg/L	5	3/7/2006
Naphthalene	12	10	µg/L	5	3/7/2006
1-Methylnaphthalene	98	20	µg/L	5	3/7/2006
2-Methylnaphthalene	60	20	µg/L	5	3/7/2006
Acetone	99	50	µg/L	5	3/7/2006
Bromobenzene	ND	5.0	µg/L	5	3/7/2006
Bromochloromethane	ND	5.0	µg/L	5	3/7/2006
Bromodichloromethane	ND	5.0	µg/L	5	3/7/2006
Bromoform	ND	5.0	µg/L	5	3/7/2006
Bromomethane	ND	10	µg/L	5	3/7/2006
2-Butanone	ND	50	µg/L	5	3/7/2006
Carbon disulfide	ND	50	µg/L	5	3/7/2006
Carbon Tetrachloride	ND	10	µg/L	5	3/7/2006
Chlorobenzene	ND	5.0	µg/L	5	3/7/2006
Chloroethane	ND	10	µg/L	5	3/7/2006
Chloroform	ND	5.0	µg/L	5	3/7/2006
Chloromethane	ND	5.0	µg/L	5	3/7/2006
2-Chlorotoluene	ND	5.0	µg/L	5	3/7/2006
4-Chlorotoluene	ND	5.0	µg/L	5	3/7/2006
cis-1,2-DCE	ND	5.0	µg/L	5	3/7/2006
cis-1,3-Dichloropropene	ND	5.0	µg/L	5	3/7/2006
1,2-Dibromo-3-chloropropane	ND	10	µg/L	5	3/7/2006
Dibromochloromethane	ND	5.0	µg/L	5	3/7/2006
Dibromomethane	ND	10	µg/L	5	3/7/2006
1,2-Dichlorobenzene	ND	5.0	µg/L	5	3/7/2006
1,3-Dichlorobenzene	ND	5.0	µg/L	5	3/7/2006
1,4-Dichlorobenzene	ND	5.0	µg/L	5	3/7/2006
Dichlorodifluoromethane	ND	5.0	µg/L	5	3/7/2006
1,1-Dichloroethane	ND	10	µg/L	5	3/7/2006
1,1-Dichloroethene	ND	5.0	µg/L	5	3/7/2006
1,2-Dichloropropane	ND	5.0	µg/L	5	3/7/2006
1,3-Dichloropropane	ND	5.0	µg/L	5	3/7/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples

Lab Order: 0602238

EPA METHOD 8260B: VOLATILES Analyst: **KTM**

2,2-Dichloropropane	ND	10	µg/L	5	3/7/2006
1,1-Dichloropropene	ND	5.0	µg/L	5	3/7/2006
Hexachlorobutadiene	ND	10	µg/L	5	3/7/2006
2-Hexanone	ND	50	µg/L	5	3/7/2006
Isopropylbenzene	ND	5.0	µg/L	5	3/7/2006
4-Isopropyltoluene	ND	5.0	µg/L	5	3/7/2006
4-Methyl-2-pentanone	ND	50	µg/L	5	3/7/2006
Methylene Chloride	ND	15	µg/L	5	3/7/2006
n-Butylbenzene	7.5	5.0	µg/L	5	3/7/2006
n-Propylbenzene	ND	5.0	µg/L	5	3/7/2006
sec-Butylbenzene	ND	10	µg/L	5	3/7/2006
Styrene	ND	5.0	µg/L	5	3/7/2006
tert-Butylbenzene	ND	5.0	µg/L	5	3/7/2006
1,1,1,2-Tetrachloroethane	ND	5.0	µg/L	5	3/7/2006
1,1,2,2-Tetrachloroethane	ND	5.0	µg/L	5	3/7/2006
Tetrachloroethene (PCE)	ND	5.0	µg/L	5	3/7/2006
trans-1,2-DCE	ND	5.0	µg/L	5	3/7/2006
trans-1,3-Dichloropropene	ND	5.0	µg/L	5	3/7/2006
1,2,3-Trichlorobenzene	ND	5.0	µg/L	5	3/7/2006
1,2,4-Trichlorobenzene	ND	5.0	µg/L	5	3/7/2006
1,1,1-Trichloroethane	ND	5.0	µg/L	5	3/7/2006
1,1,2-Trichloroethane	ND	5.0	µg/L	5	3/7/2006
Trichloroethene (TCE)	ND	5.0	µg/L	5	3/7/2006
Trichlorofluoromethane	ND	5.0	µg/L	5	3/7/2006
1,2,3-Trichloropropane	ND	10	µg/L	5	3/7/2006
Vinyl chloride	ND	5.0	µg/L	5	3/7/2006
Xylenes, Total	25	5.0	µg/L	5	3/7/2006
Surr: 1,2-Dichloroethane-d4	95.6	69.9-130	%REC	5	3/7/2006
Surr: 4-Bromofluorobenzene	98.6	71.2-123	%REC	5	3/7/2006
Surr: Dibromofluoromethane	96.3	57.3-135	%REC	5	3/7/2006
Surr: Toluene-d8	90.8	81.9-122	%REC	5	3/7/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples

Lab Order: 0602238

Lab ID: 0602238-03
Client Sample ID: NAPIS

Collection Date: 2/23/2006 8:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	140	3.0		mg/L	1	2/28/2006 11:13:30 AM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	2/28/2006 11:13:30 AM
Surr: DNOP	123	58-140		%REC	1	2/28/2006 11:13:30 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	50	2.5		mg/L	50	3/3/2006 12:55:09 PM
Surr: BFB	100	79.7-118		%REC	50	3/3/2006 12:55:09 PM
EPA METHOD 8260B: VOLATILES						Analyst: **KTM**
Benzene	15000	1000		µg/L	1000	3/7/2006
Toluene	9800	1000		µg/L	1000	3/7/2006
Ethylbenzene	610	100		µg/L	100	3/2/2006
Methyl tert-butyl ether (MTBE)	19000	1000		µg/L	1000	3/7/2006
1,2,4-Trimethylbenzene	690	100		µg/L	100	3/2/2006
1,3,5-Trimethylbenzene	250	100		µg/L	100	3/2/2006
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	3/2/2006
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	3/2/2006
Naphthalene	410	200		µg/L	100	3/2/2006
1-Methylnaphthalene	ND	400		µg/L	100	3/2/2006
2-Methylnaphthalene	ND	400		µg/L	100	3/2/2006
Acetone	19000	10000		µg/L	1000	3/7/2006
Bromobenzene	ND	100		µg/L	100	3/2/2006
Bromochloromethane	ND	100		µg/L	100	3/2/2006
Bromodichloromethane	ND	100		µg/L	100	3/2/2006
Bromoform	ND	100		µg/L	100	3/2/2006
Bromomethane	ND	200		µg/L	100	3/2/2006
2-Butanone	4400	1000		µg/L	100	3/2/2006
Carbon disulfide	ND	1000		µg/L	100	3/2/2006
Carbon Tetrachloride	ND	200		µg/L	100	3/2/2006
Chlorobenzene	ND	100		µg/L	100	3/2/2006
Chloroethane	ND	200		µg/L	100	3/2/2006
Chloroform	ND	100		µg/L	100	3/2/2006
Chloromethane	ND	100		µg/L	100	3/2/2006
2-Chlorotoluene	ND	100		µg/L	100	3/2/2006
4-Chlorotoluene	ND	100		µg/L	100	3/2/2006
cis-1,2-DCE	ND	100		µg/L	100	3/2/2006
cis-1,3-Dichloropropene	ND	100		µg/L	100	3/2/2006
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	3/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples

Lab Order: 0602238

EPA METHOD 8260B: VOLATILES Analyst: **KTM**

Dibromochloromethane	ND	100	µg/L	100	3/2/2006
Dibromomethane	ND	200	µg/L	100	3/2/2006
1,2-Dichlorobenzene	ND	100	µg/L	100	3/2/2006
1,3-Dichlorobenzene	ND	100	µg/L	100	3/2/2006
1,4-Dichlorobenzene	ND	100	µg/L	100	3/2/2006
Dichlorodifluoromethane	ND	100	µg/L	100	3/2/2006
1,1-Dichloroethane	ND	200	µg/L	100	3/2/2006
1,1-Dichloroethene	ND	100	µg/L	100	3/2/2006
1,2-Dichloropropane	ND	100	µg/L	100	3/2/2006
1,3-Dichloropropane	ND	100	µg/L	100	3/2/2006
2,2-Dichloropropane	ND	200	µg/L	100	3/2/2006
1,1-Dichloropropene	ND	100	µg/L	100	3/2/2006
Hexachlorobutadiene	ND	200	µg/L	100	3/2/2006
2-Hexanone	ND	1000	µg/L	100	3/2/2006
Isopropylbenzene	ND	100	µg/L	100	3/2/2006
4-Isopropyltoluene	ND	100	µg/L	100	3/2/2006
4-Methyl-2-pentanone	ND	1000	µg/L	100	3/2/2006
Methylene Chloride	ND	300	µg/L	100	3/2/2006
n-Butylbenzene	120	100	µg/L	100	3/2/2006
n-Propylbenzene	100	100	µg/L	100	3/2/2006
sec-Butylbenzene	ND	200	µg/L	100	3/2/2006
Styrene	ND	100	µg/L	100	3/2/2006
tert-Butylbenzene	ND	100	µg/L	100	3/2/2006
1,1,1,2-Tetrachloroethane	ND	100	µg/L	100	3/2/2006
1,1,2,2-Tetrachloroethane	ND	100	µg/L	100	3/2/2006
Tetrachloroethene (PCE)	ND	100	µg/L	100	3/2/2006
trans-1,2-DCE	ND	100	µg/L	100	3/2/2006
trans-1,3-Dichloropropene	ND	100	µg/L	100	3/2/2006
1,2,3-Trichlorobenzene	ND	100	µg/L	100	3/2/2006
1,2,4-Trichlorobenzene	ND	100	µg/L	100	3/2/2006
1,1,1-Trichloroethane	ND	100	µg/L	100	3/2/2006
1,1,2-Trichloroethane	ND	100	µg/L	100	3/2/2006
Trichloroethene (TCE)	ND	100	µg/L	100	3/2/2006
Trichlorofluoromethane	ND	100	µg/L	100	3/2/2006
1,2,3-Trichloropropane	ND	200	µg/L	100	3/2/2006
Vinyl chloride	ND	100	µg/L	100	3/2/2006
Xylenes, Total	3900	100	µg/L	100	3/2/2006
Surr: 1,2-Dichloroethane-d4	103	69.9-130	%REC	100	3/2/2006
Surr: 4-Bromofluorobenzene	89.7	71.2-123	%REC	100	3/2/2006
Surr: Dibromofluoromethane	103	57.3-135	%REC	100	3/2/2006
Surr: Toluene-d8	89.5	81.9-122	%REC	100	3/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples

Lab Order: 0602238

Lab ID: 0602238-04
Client Sample ID: Pilot TC

Collection Date: 2/23/2006 8:45:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	7.0	3.0		mg/L	1	2/28/2006 11:46:00 AM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	2/28/2006 11:46:00 AM
Surr: DNOP	135	58-140		%REC	1	2/28/2006 11:46:00 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.067	0.050		mg/L	1	3/3/2006 1:23:18 PM
Surr: BFB	99.8	79.7-118		%REC	1	3/3/2006 1:23:18 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	3/2/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **CMC**
Arsenic	ND	0.020		mg/L	1	3/6/2006 12:24:46 PM
Barium	0.039	0.020		mg/L	1	3/6/2006 12:24:46 PM
Cadmium	ND	0.0020		mg/L	1	3/6/2006 12:24:46 PM
Chromium	ND	0.0060		mg/L	1	3/6/2006 12:24:46 PM
Lead	ND	0.0050		mg/L	1	3/6/2006 12:24:46 PM
Selenium	ND	0.050		mg/L	1	3/6/2006 12:24:46 PM
Silver	ND	0.0050		mg/L	1	3/6/2006 12:24:46 PM
EPA METHOD 8260B: VOLATILES						Analyst: **KTM**
Benzene	ND	1.0		µg/L	1	3/2/2006
Toluene	3.1	1.0		µg/L	1	3/2/2006
Ethylbenzene	ND	1.0		µg/L	1	3/2/2006
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	3/2/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	3/2/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	3/2/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	3/2/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	3/2/2006
Naphthalene	ND	2.0		µg/L	1	3/2/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	3/2/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	3/2/2006
Acetone	200	10		µg/L	1	3/2/2006
Bromobenzene	ND	1.0		µg/L	1	3/2/2006
Bromochloromethane	ND	1.0		µg/L	1	3/2/2006
Bromodichloromethane	ND	1.0		µg/L	1	3/2/2006
Bromoform	ND	1.0		µg/L	1	3/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples

Lab Order: 0602238

EPA METHOD 8260B: VOLATILES

Analyst: **KTM**

Bromomethane	ND	2.0	µg/L	1	3/2/2006
2-Butanone	ND	10	µg/L	1	3/2/2006
Carbon disulfide	ND	10	µg/L	1	3/2/2006
Carbon Tetrachloride	ND	2.0	µg/L	1	3/2/2006
Chlorobenzene	ND	1.0	µg/L	1	3/2/2006
Chloroethane	ND	2.0	µg/L	1	3/2/2006
Chloroform	4.0	1.0	µg/L	1	3/2/2006
Chloromethane	ND	1.0	µg/L	1	3/2/2006
2-Chlorotoluene	ND	1.0	µg/L	1	3/2/2006
4-Chlorotoluene	ND	1.0	µg/L	1	3/2/2006
cis-1,2-DCE	ND	1.0	µg/L	1	3/2/2006
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	3/2/2006
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	3/2/2006
Dibromochloromethane	ND	1.0	µg/L	1	3/2/2006
Dibromomethane	ND	2.0	µg/L	1	3/2/2006
1,2-Dichlorobenzene	ND	1.0	µg/L	1	3/2/2006
1,3-Dichlorobenzene	ND	1.0	µg/L	1	3/2/2006
1,4-Dichlorobenzene	ND	1.0	µg/L	1	3/2/2006
Dichlorodifluoromethane	ND	1.0	µg/L	1	3/2/2006
1,1-Dichloroethane	ND	2.0	µg/L	1	3/2/2006
1,1-Dichloroethene	ND	1.0	µg/L	1	3/2/2006
1,2-Dichloropropane	ND	1.0	µg/L	1	3/2/2006
1,3-Dichloropropane	ND	1.0	µg/L	1	3/2/2006
2,2-Dichloropropane	ND	2.0	µg/L	1	3/2/2006
1,1-Dichloropropene	ND	1.0	µg/L	1	3/2/2006
Hexachlorobutadiene	ND	2.0	µg/L	1	3/2/2006
2-Hexanone	ND	10	µg/L	1	3/2/2006
Isopropylbenzene	ND	1.0	µg/L	1	3/2/2006
4-Isopropyltoluene	1.7	1.0	µg/L	1	3/2/2006
4-Methyl-2-pentanone	ND	10	µg/L	1	3/2/2006
Methylene Chloride	ND	3.0	µg/L	1	3/2/2006
n-Butylbenzene	ND	1.0	µg/L	1	3/2/2006
n-Propylbenzene	ND	1.0	µg/L	1	3/2/2006
sec-Butylbenzene	ND	2.0	µg/L	1	3/2/2006
Styrene	ND	1.0	µg/L	1	3/2/2006
tert-Butylbenzene	ND	1.0	µg/L	1	3/2/2006
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	3/2/2006
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1	3/2/2006
Tetrachloroethene (PCE)	ND	1.0	µg/L	1	3/2/2006
trans-1,2-DCE	ND	1.0	µg/L	1	3/2/2006
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	3/2/2006
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1	3/2/2006
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	3/2/2006
1,1,1-Trichloroethane	ND	1.0	µg/L	1	3/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples

Lab Order: 0602238

EPA METHOD 8260B: VOLATILES Analyst: **KTM**

1,1,2-Trichloroethane	ND	1.0	µg/L	1	3/2/2006
Trichloroethene (TCE)	ND	1.0	µg/L	1	3/2/2006
Trichlorofluoromethane	ND	1.0	µg/L	1	3/2/2006
1,2,3-Trichloropropane	ND	2.0	µg/L	1	3/2/2006
Vinyl chloride	ND	1.0	µg/L	1	3/2/2006
Xylenes, Total	ND	1.0	µg/L	1	3/2/2006
Surr: 1,2-Dichloroethane-d4	103	69.9-130	%REC	1	3/2/2006
Surr: 4-Bromofluorobenzene	90.6	71.2-123	%REC	1	3/2/2006
Surr: Dibromofluoromethane	103	57.3-135	%REC	1	3/2/2006
Surr: Toluene-d8	91.0	81.9-122	%REC	1	3/2/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the 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: **0602238**
Order: **0602539** **HAL03** Receipt: **02-24-06**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0602238-01C/AL-2 TO EP-1*** Collected: *02-23-06 8:00:00* By:
ix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0602539-0001A		**EPA 405.1 Biochemical Oxygen Demand**					By:	MKM		
BOD06026	WC.2006.531.15	10-26-4	Biochemical Oxygen Demand	550	mg/L	1	2	1	02-24-06	03-01-06

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 percent recoveries of the LCS and LCSD are outside of QA/QC criteria (low). This should be taken into account when reviewing the data.

Hall Environmental Analysis Laboratory

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **MB-9869** SampType: **MBLK** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **2/27/2006** RunNo: **18412**
Client ID: **ZZZZZ** Batch ID: **9869** TestNo: **SW8015** Analysis Date: **2/28/2006** SeqNo: **454270**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCS-9869** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **2/27/2006** RunNo: **18412**
Client ID: **ZZZZZ** Batch ID: **9869** TestNo: **SW8015** Analysis Date: **2/28/2006** SeqNo: **454271**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.746	1.0	5	0	135	81.2	149				

Sample ID: **LCSD-9869** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **2/27/2006** RunNo: **18412**
Client ID: **ZZZZZ** Batch ID: **9869** TestNo: **SW8015** Analysis Date: **2/28/2006** SeqNo: **454272**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.353	1.0	5	0	127	81.2	149	6.746	6.00	23	

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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

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **5ML RB-2** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18480**
Client ID: **ZZZZZ** Batch ID: **R18480** TestNo: **SW8015** Analysis Date: **3/4/2006** SeqNo: **456357**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18489**
Client ID: **ZZZZZ** Batch ID: **R18489** TestNo: **SW8015** Analysis Date: **3/6/2006** SeqNo: **456575**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **2.5UG GRO LCS-2** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18480**
Client ID: **ZZZZZ** Batch ID: **R18480** TestNo: **SW8015** Analysis Date: **3/4/2006** SeqNo: **456358**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4520	0.050	0.5	0	90.4	82.6	114				

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18489**
Client ID: **ZZZZZ** Batch ID: **R18489** TestNo: **SW8015** Analysis Date: **3/6/2006** SeqNo: **456577**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4980	0.050	0.5	0	99.6	82.6	114				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **MB-9882** SampType: **MBLK** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/28/2006** RunNo: **18497**
Client ID: **ZZZZZ** Batch ID: **9882** TestNo: **SW8310** **(SW3510C)** Analysis Date: **3/7/2006** SeqNo: **456803**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									
Anthracene	ND	0.60									
Fluoranthene	ND	0.30									
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	ND	0.020									
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									

Sample ID: **LCS-9882** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/28/2006** RunNo: **18497**
Client ID: **ZZZZZ** Batch ID: **9882** TestNo: **SW8310** **(SW3510C)** Analysis Date: **3/7/2006** SeqNo: **456814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	26.50	2.5	40	0	66.2	34.8	97.4				
1-Methylnaphthalene	27.27	2.5	40.1	0	68.0	34.7	100				
2-Methylnaphthalene	25.31	2.5	40	0	63.3	35	98.1				
Acenaphthylene	26.17	2.5	40.1	0	65.3	48.3	95.1				
Acenaphthene	27.51	2.5	40	0	68.8	45	95				
Fluorene	2.870	0.80	4.01	0	71.6	46.8	93.4				
Phenanthrene	1.590	0.60	2.01	0	79.1	48.7	104				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **LCS-9882** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/28/2006** RunNo: **18497**
Client ID: **ZZZZZ** Batch ID: **9882** TestNo: **SW8310** **(SW3510C)** Analysis Date: **3/7/2006** SeqNo: **456814**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1.490	0.60	2.01	0	74.1	47.5	102				
Fluoranthene	3.520	0.30	4.01	0	87.8	46.3	108				
Pyrene	3.770	0.30	4.01	0	94.0	43.8	109				
Benz(a)anthracene	0.3600	0.020	0.401	0	89.8	40.3	115				
Chrysene	1.860	0.20	2.01	0	92.5	42.6	107				
Benzo(b)fluoranthene	0.4400	0.050	0.501	0	87.8	48.6	107				
Benzo(k)fluoranthene	0.2200	0.020	0.25	0	88.0	23.3	136				
Benzo(a)pyrene	0.2000	0.020	0.251	0	79.7	33.4	117				
Dibenz(a,h)anthracene	0.4300	0.040	0.501	0	85.8	27.3	139				
Benzo(g,h,i)perylene	0.4400	0.030	0.5	0	88.0	38.2	117				
Indeno(1,2,3-cd)pyrene	0.8530	0.080	1.002	0	85.1	39.9	125				

Sample ID: **LCSD-9882** SampType: **LCSD** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/28/2006** RunNo: **18497**
Client ID: **ZZZZZ** Batch ID: **9882** TestNo: **SW8310** **(SW3510C)** Analysis Date: **3/7/2006** SeqNo: **456839**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	27.23	2.5	40	0	68.1	34.8	97.4				
1-Methylnaphthalene	25.84	2.5	40.1	0	64.4	34.7	100				
2-Methylnaphthalene	25.32	2.5	40	0	63.3	35	98.1				
Acenaphthylene	28.29	2.5	40.1	0	70.5	48.3	95.1				
Acenaphthene	27.25	2.5	40	0	68.1	45	95				
Fluorene	2.840	0.80	4.01	0	70.8	46.8	93.4				
Phenanthrene	1.560	0.60	2.01	0	77.6	48.7	104				
Anthracene	1.520	0.60	2.01	0	75.6	47.5	102				
Fluoranthene	3.160	0.30	4.01	0	78.8	46.3	108				
Pyrene	3.210	0.30	4.01	0	80.0	43.8	109				
Benz(a)anthracene	0.3100	0.020	0.401	0	77.3	40.3	115				
Chrysene	1.630	0.20	2.01	0	81.1	42.6	107				
Benzo(b)fluoranthene	0.3900	0.050	0.501	0	77.8	48.6	107				
Benzo(k)fluoranthene	0.1900	0.020	0.25	0	76.0	23.3	136				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **LCSD-9882**	SampType: **LCSD**	TestCode: **8310_W**	Units: **µg/L**	Prep Date: **2/28/2006**	RunNo: **18497**
Client ID: **ZZZZZ**	Batch ID: **9882**	TestNo: **SW8310**	**(SW3510C)**	Analysis Date: **3/7/2006**	SeqNo: **456839**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzo(a)pyrene	0.1700	0.020	0.251	0	67.7	33.4	117				
Dibenz(a,h)anthracene	0.3900	0.040	0.501	0	77.8	27.3	139				
Benzo(g,h,i)perylene	0.3700	0.030	0.5	0	74.0	38.2	117				
Indeno(1,2,3-cd)pyrene	0.7800	0.080	1.002	0	77.8	39.9	125				

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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

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: **MB-9905** SampType: **MBLK** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **3/2/2006** RunNo: **18454**
Client ID: **ZZZZZ** Batch ID: **9905** TestNo: **SW7470** **(SW7470)** Analysis Date: **3/2/2006** SeqNo: **455693**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: **LCS-9905** SampType: **LCS** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **3/2/2006** RunNo: **18454**
Client ID: **ZZZZZ** Batch ID: **9905** TestNo: **SW7470** **(SW7470)** Analysis Date: **3/2/2006** SeqNo: **455694**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004476	0.00020	0.005	0	89.5	80	120				

Sample ID: **LCSD-9905** SampType: **LCSD** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **3/2/2006** RunNo: **18454**
Client ID: **ZZZZZ** Batch ID: **9905** TestNo: **SW7470** **(SW7470)** Analysis Date: **3/2/2006** SeqNo: **455707**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004543	0.00020	0.005	0	90.9	80	120	0.004476	1.48	0	

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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

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **MB-9915** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **3/3/2006** RunNo: **18483**
Client ID: **ZZZZZ** Batch ID: **9915** TestNo: **SW6010A** Analysis Date: **3/6/2006** SeqNo: **456420**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **LCS-9915** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **3/3/2006** RunNo: **18483**
Client ID: **ZZZZZ** Batch ID: **9915** TestNo: **SW6010A** Analysis Date: **3/6/2006** SeqNo: **456421**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5621	0.020	0.5	0	112	80	120				
Barium	0.4882	0.020	0.5	0	97.6	80	120				
Cadmium	0.5037	0.0020	0.5	0	101	80	120				
Chromium	0.4889	0.0060	0.5	0	97.8	80	120				
Lead	0.4994	0.0050	0.5	0	99.9	80	120				
Selenium	0.5433	0.050	0.5	0	109	80	120				
Silver	0.4980	0.0050	0.5	0	99.6	80	120				

Sample ID: **LCSD-9915** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **3/3/2006** RunNo: **18483**
Client ID: **ZZZZZ** Batch ID: **9915** TestNo: **SW6010A** Analysis Date: **3/6/2006** SeqNo: **456422**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5479	0.020	0.5	0	110	80	120	0.5621	2.56	20	
Barium	0.4847	0.020	0.5	0	96.9	80	120	0.4882	0.706	20	
Cadmium	0.5021	0.0020	0.5	0	100	80	120	0.5037	0.313	20	
Chromium	0.4881	0.0060	0.5	0	97.6	80	120	0.4889	0.166	20	
Lead	0.4988	0.0050	0.5	0	99.8	80	120	0.4994	0.111	20	
Selenium	0.5338	0.050	0.5	0	107	80	120	0.5433	1.77	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **LCSD-9915** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **3/3/2006** RunNo: **18483**
Client ID: **ZZZZZ** Batch ID: **9915** TestNo: **SW6010A** Analysis Date: **3/6/2006** SeqNo: **456422**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.4954	0.0050	0.5	0	99.1	80	120	0.498	0.530	20	

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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

Date: *08-Mar-06*

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **5mL rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18457**
Client ID: **ZZZZZ** Batch ID: **R18457** TestNo: **SW8260B** Analysis Date: **3/2/2006** SeqNo: **455862**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,2-Dichloroethane (EDC)	ND	1.0									
1,2-Dibromoethane (EDB)	ND	1.0									
Naphthalene	ND	2.0									
1-Methylnaphthalene	ND	4.0									
2-Methylnaphthalene	ND	4.0									
Acetone	ND	10									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	2.0									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	2.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	2.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
cis-1,2-DCE	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **5mL rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18457**
Client ID: **ZZZZZ** Batch ID: **R18457** TestNo: **SW8260B** Analysis Date: **3/2/2006** SeqNo: **455862**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	2.0									
1,2-Dichlorobenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
1,1-Dichloroethane	ND	2.0									
1,1-Dichloroethene	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3-Dichloropropane	ND	1.0									
2,2-Dichloropropane	ND	2.0									
1,1-Dichloropropene	ND	1.0									
Hexachlorobutadiene	ND	2.0									
2-Hexanone	ND	10									
Isopropylbenzene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Methylene Chloride	ND	3.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
sec-Butylbenzene	ND	2.0									
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
Tetrachloroethene (PCE)	ND	1.0									
trans-1,2-DCE	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **5mL rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18457**
Client ID: **ZZZZZ** Batch ID: **R18457** TestNo: **SW8260B** Analysis Date: **3/2/2006** SeqNo: **455862**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	1.0									
Trichloroethene (TCE)	ND	1.0									
Trichlorofluoromethane	ND	1.0									
1,2,3-Trichloropropane	ND	2.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	1.0									

Sample ID: **5mL rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18474**
Client ID: **ZZZZZ** Batch ID: **R18474** TestNo: **SW8260B** Analysis Date: **3/3/2006** SeqNo: **456180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,2-Dichloroethane (EDC)	ND	1.0									
1,2-Dibromoethane (EDB)	ND	1.0									
Naphthalene	ND	2.0									
1-Methylnaphthalene	ND	4.0									
2-Methylnaphthalene	ND	4.0									
Acetone	ND	10									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	2.0									
2-Butanone	ND	10									
Carbon disulfide	ND	10									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **5mL rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18474**
Client ID: **ZZZZZ** Batch ID: **R18474** TestNo: **SW8260B** Analysis Date: **3/3/2006** SeqNo: **456180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Carbon Tetrachloride	ND	2.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	2.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
cis-1,2-DCE	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	2.0									
1,2-Dichlorobenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
1,1-Dichloroethane	ND	2.0									
1,1-Dichloroethene	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3-Dichloropropane	ND	1.0									
2,2-Dichloropropane	ND	2.0									
1,1-Dichloropropene	ND	1.0									
Hexachlorobutadiene	ND	2.0									
2-Hexanone	ND	10									
Isopropylbenzene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Methylene Chloride	ND	3.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
sec-Butylbenzene	ND	2.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **5mL rb** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18474**
Client ID: **ZZZZZ** Batch ID: **R18474** TestNo: **SW8260B** Analysis Date: **3/3/2006** SeqNo: **456180**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
Tetrachloroethene (PCE)	ND	1.0									
trans-1,2-DCE	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									
1,1,2-Trichloroethane	ND	1.0									
Trichloroethene (TCE)	ND	1.0									
Trichlorofluoromethane	ND	1.0									
1,2,3-Trichloropropane	ND	2.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	1.0									

Sample ID: **5mL rb-b** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18502**
Client ID: **ZZZZZ** Batch ID: **R18502** TestNo: **SW8260B** Analysis Date: **3/7/2006** SeqNo: **456977**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,2-Dichloroethane (EDC)	ND	1.0									
1,2-Dibromoethane (EDB)	ND	1.0									
Naphthalene	ND	2.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **5mL rb-b** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18502**
Client ID: **ZZZZZ** Batch ID: **R18502** TestNo: **SW8260B** Analysis Date: **3/7/2006** SeqNo: **456977**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1-Methylnaphthalene	ND	4.0									
2-Methylnaphthalene	ND	4.0									
Acetone	ND	10									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	2.0									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	2.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	2.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
cis-1,2-DCE	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	2.0									
1,2-Dichlorobenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
1,1-Dichloroethane	ND	2.0									
1,1-Dichloroethene	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3-Dichloropropane	ND	1.0									
2,2-Dichloropropane	ND	2.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **5mL rb-b** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18502**
Client ID: **ZZZZZ** Batch ID: **R18502** TestNo: **SW8260B** Analysis Date: **3/7/2006** SeqNo: **456977**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0									
Hexachlorobutadiene	ND	2.0									
2-Hexanone	ND	10									
Isopropylbenzene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Methylene Chloride	ND	3.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
sec-Butylbenzene	ND	2.0									
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
Tetrachloroethene (PCE)	ND	1.0									
trans-1,2-DCE	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									
1,1,2-Trichloroethane	ND	1.0									
Trichloroethene (TCE)	ND	1.0									
Trichlorofluoromethane	ND	1.0									
1,2,3-Trichloropropane	ND	2.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	1.0									

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602238
Project: NMED Monthly Water Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18457**
Client ID: **ZZZZZ** Batch ID: **R18457** TestNo: **SW8260B** Analysis Date: **3/2/2006** SeqNo: **455863**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.75	1.0	20	0	98.7	79.2	130				
Toluene	18.63	1.0	20	0	93.2	81.5	118				
Chlorobenzene	19.31	1.0	20	0	96.6	81.2	132				
1,1-Dichloroethene	19.44	1.0	20	0	97.2	65.5	134				
Trichloroethene (TCE)	18.19	1.0	20	0	91.0	67	131				

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18474**
Client ID: **ZZZZZ** Batch ID: **R18474** TestNo: **SW8260B** Analysis Date: **3/3/2006** SeqNo: **456181**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.74	1.0	20	0	98.7	79.2	130				
Toluene	17.72	1.0	20	0	88.6	81.5	118				
Chlorobenzene	18.95	1.0	20	0	94.8	81.2	132				
1,1-Dichloroethene	18.87	1.0	20	0	94.3	65.5	134				
Trichloroethene (TCE)	18.60	1.0	20	0	93.0	67	131				

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18502**
Client ID: **ZZZZZ** Batch ID: **R18502** TestNo: **SW8260B** Analysis Date: **3/7/2006** SeqNo: **456978**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	19.19	1.0	20	0	95.9	79.2	130				
Toluene	18.39	1.0	20	0	91.9	81.5	118				
Chlorobenzene	19.84	1.0	20	0	99.2	81.2	132				
1,1-Dichloroethene	19.77	1.0	20	0	98.8	65.5	134				
Trichloroethene (TCE)	18.19	1.0	20	0	90.9	67	131				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 2/24/2006

Work Order Number 0602238 | Received by AT

Checklist completed by Lisa Hedrick 2/24/06
Signature Date

Matrix | Carrier name UPS

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 ☐		
ll 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? **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

Client: Giant Refining Company - Ciniza
Address: Route 3, Box 7 Gallup, NM 87301
Phone #: 505-722-3833
Fax #: 505-722-0210

QA / QC Package: Std ☐ Level 4 ☐
Other:

Project Name: NMED Monthly Water Samples
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 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 (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)	BOD				Air Bubbles or Headspace (Y or N)
-23-06	0800	H_2O	AL-2 to EP-1					0602238-1			X					X			X		X				
"	0730	"	OAPIS					-2			X				X	X			X						
"	0830	"	NAPIS					-3			X								X						
"	0845	"	Pilot TC					-4			X					X			X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
2/23/06	0915	[signature]	[signature] 1143 2/23/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, February 17, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED Monthly Water Samples 1/31/2006

Order No.: 0602041

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 4 sample(s) on 2/3/2006 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

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

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006
Lab Order: 0602041

CASE NARRATIVE

Analytical Comments for METHOD 8015GRO_W, SAMPLE 0602041-01A: Elevated surrogate due to matrix interference. Analytical Comments for METHOD 8015DRO_W, SAMPLE 0602041-01A: DNOP not recovered due to dilution

Hall Environmental Analysis Laboratory

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

Lab ID: 0602041-01
Client Sample ID: AL-2 to EP-1

Collection Date: 1/31/2006 11:30:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	1300	150		mg/L	50	2/7/2006 7:19:43 PM
Motor Oil Range Organics (MRO)	ND	750		mg/L	50	2/7/2006 7:19:43 PM
Surr: DNOP	0	58-140	S	%REC	50	2/7/2006 7:19:43 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	9.7	1.0		mg/L	20	2/6/2006 11:08:34 PM
Surr: BFB	218	79.7-118	S	%REC	20	2/6/2006 11:08:34 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.012	0.0010		mg/L	5	2/15/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	2/9/2006 2:12:38 PM
Barium	0.53	0.020		mg/L	1	2/9/2006 2:12:38 PM
Cadmium	ND	0.0020		mg/L	1	2/9/2006 2:12:38 PM
Chromium	0.014	0.0060		mg/L	1	2/9/2006 2:12:38 PM
Lead	0.017	0.0050		mg/L	1	2/9/2006 2:12:38 PM
Selenium	ND	0.050		mg/L	1	2/9/2006 2:12:38 PM
Silver	ND	0.0050		mg/L	1	2/9/2006 2:12:38 PM
EPA METHOD 8260B: VOLATILES						Analyst: **KTM**
Benzene	410	100		µg/L	100	2/9/2006
Toluene	1000	100		µg/L	100	2/9/2006
Ethylbenzene	ND	100		µg/L	100	2/9/2006
Methyl tert-butyl ether (MTBE)	ND	100		µg/L	100	2/9/2006
1,2,4-Trimethylbenzene	290	100		µg/L	100	2/9/2006
1,3,5-Trimethylbenzene	ND	100		µg/L	100	2/9/2006
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	2/9/2006
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	2/9/2006
Naphthalene	320	200		µg/L	100	2/9/2006
1-Methylnaphthalene	ND	400		µg/L	100	2/9/2006
2-Methylnaphthalene	540	400		µg/L	100	2/9/2006
Acetone	4600	1000		µg/L	100	2/9/2006
Bromobenzene	ND	100		µg/L	100	2/9/2006
Bromochloromethane	ND	100		µg/L	100	2/9/2006
Bromodichloromethane	ND	100		µg/L	100	2/9/2006
Bromoform	ND	100		µg/L	100	2/9/2006

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

Hall Environmental Analysis Laboratory

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

Analyst: **KTM**

EPA METHOD 8260B: VOLATILES

Bromomethane	ND	200	µg/L	100	2/9/2006
2-Butanone	ND	1000	µg/L	100	2/9/2006
Carbon disulfide	ND	1000	µg/L	100	2/9/2006
Carbon Tetrachloride	ND	200	µg/L	100	2/9/2006
Chlorobenzene	ND	100	µg/L	100	2/9/2006
Chloroethane	ND	200	µg/L	100	2/9/2006
Chloroform	ND	100	µg/L	100	2/9/2006
Chloromethane	ND	100	µg/L	100	2/9/2006
2-Chlorotoluene	ND	100	µg/L	100	2/9/2006
4-Chlorotoluene	ND	100	µg/L	100	2/9/2006
cis-1,2-DCE	ND	100	µg/L	100	2/9/2006
cis-1,3-Dichloropropene	ND	100	µg/L	100	2/9/2006
1,2-Dibromo-3-chloropropane	ND	200	µg/L	100	2/9/2006
Dibromochloromethane	ND	100	µg/L	100	2/9/2006
Dibromomethane	ND	200	µg/L	100	2/9/2006
1,2-Dichlorobenzene	ND	100	µg/L	100	2/9/2006
1,3-Dichlorobenzene	ND	100	µg/L	100	2/9/2006
1,4-Dichlorobenzene	ND	100	µg/L	100	2/9/2006
Dichlorodifluoromethane	ND	100	µg/L	100	2/9/2006
1,1-Dichloroethane	ND	200	µg/L	100	2/9/2006
1,1-Dichloroethene	ND	100	µg/L	100	2/9/2006
1,2-Dichloropropane	ND	100	µg/L	100	2/9/2006
1,3-Dichloropropane	ND	100	µg/L	100	2/9/2006
2,2-Dichloropropane	ND	200	µg/L	100	2/9/2006
1,1-Dichloropropene	ND	100	µg/L	100	2/9/2006
Hexachlorobutadiene	ND	200	µg/L	100	2/9/2006
2-Hexanone	ND	1000	µg/L	100	2/9/2006
Isopropylbenzene	ND	100	µg/L	100	2/9/2006
4-Isopropyltoluene	ND	100	µg/L	100	2/9/2006
4-Methyl-2-pentanone	ND	1000	µg/L	100	2/9/2006
Methylene Chloride	ND	300	µg/L	100	2/9/2006
n-Butylbenzene	ND	100	µg/L	100	2/9/2006
n-Propylbenzene	ND	100	µg/L	100	2/9/2006
sec-Butylbenzene	ND	100	µg/L	100	2/9/2006
Styrene	ND	100	µg/L	100	2/9/2006
tert-Butylbenzene	ND	100	µg/L	100	2/9/2006
1,1,1,2-Tetrachloroethane	ND	100	µg/L	100	2/9/2006
1,1,2,2-Tetrachloroethane	ND	100	µg/L	100	2/9/2006
Tetrachloroethene (PCE)	ND	100	µg/L	100	2/9/2006
trans-1,2-DCE	ND	100	µg/L	100	2/9/2006
trans-1,3-Dichloropropene	ND	100	µg/L	100	2/9/2006
1,2,3-Trichlorobenzene	ND	100	µg/L	100	2/9/2006
1,2,4-Trichlorobenzene	ND	100	µg/L	100	2/9/2006
1,1,1-Trichloroethane	ND	100	µg/L	100	2/9/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

Analyst: **KTM**

EPA METHOD 8260B: VOLATILES

1,1,2-Trichloroethane	ND	100	µg/L	100	2/9/2006
Trichloroethene (TCE)	ND	100	µg/L	100	2/9/2006
Trichlorofluoromethane	ND	100	µg/L	100	2/9/2006
1,2,3-Trichloropropane	ND	200	µg/L	100	2/9/2006
Vinyl chloride	ND	100	µg/L	100	2/9/2006
Xylenes, Total	610	100	µg/L	100	2/9/2006
Surr: 1,2-Dichloroethane-d4	101	69.9-130	%REC	100	2/9/2006
Surr: 4-Bromofluorobenzene	117	71.2-123	%REC	100	2/9/2006
Surr: Dibromofluoromethane	104	57.3-135	%REC	100	2/9/2006
Surr: Toluene-d8	100	81.9-122	%REC	100	2/9/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

Lab ID: 0602041-02
Client Sample ID: OAPIS

Collection Date: 1/31/2006 11:00:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	2.1	1.0		mg/L	1	2/7/2006 7:52:31 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/7/2006 7:52:31 PM
Surr: DNOP	119	58-140		%REC	1	2/7/2006 7:52:31 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	7.2	2.0		mg/L	40	2/7/2006 12:08:45 AM
Surr: BFB	108	79.7-118		%REC	40	2/7/2006 12:08:45 AM
EPA METHOD 8310: PAHS						Analyst: **JMP**
Naphthalene	170	12		µg/L	5	2/16/2006 4:59:04 PM
1-Methylnaphthalene	38	2.5		µg/L	1	2/13/2006 2:47:46 PM
2-Methylnaphthalene	7.1	2.5		µg/L	1	2/13/2006 2:47:46 PM
Acenaphthylene	ND	2.5		µg/L	1	2/13/2006 2:47:46 PM
Acenaphthene	6.0	2.5		µg/L	1	2/13/2006 2:47:46 PM
Fluorene	3.2	0.80		µg/L	1	2/13/2006 2:47:46 PM
Phenanthrene	2.0	0.60		µg/L	1	2/13/2006 2:47:46 PM
Anthracene	ND	0.60		µg/L	1	2/13/2006 2:47:46 PM
Fluoranthene	0.31	0.30		µg/L	1	2/13/2006 2:47:46 PM
Pyrene	0.57	0.30		µg/L	1	2/13/2006 2:47:46 PM
Benz(a)anthracene	0.070	0.020		µg/L	1	2/13/2006 2:47:46 PM
Chrysene	0.22	0.20		µg/L	1	2/13/2006 2:47:46 PM
Benzo(b)fluoranthene	ND	0.050		µg/L	1	2/13/2006 2:47:46 PM
Benzo(k)fluoranthene	0.020	0.020		µg/L	1	2/13/2006 2:47:46 PM
Benzo(a)pyrene	0.030	0.020		µg/L	1	2/13/2006 2:47:46 PM
Dibenz(a,h)anthracene	ND	0.040		µg/L	1	2/13/2006 2:47:46 PM
Benzo(g,h,i)perylene	ND	0.030		µg/L	1	2/13/2006 2:47:46 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	2/13/2006 2:47:46 PM
Surr: Benzo(e)pyrene	72.2	54-102		%REC	1	2/13/2006 2:47:46 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	2/15/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	0.022	0.020		mg/L	1	2/9/2006 2:17:08 PM
Barium	0.12	0.020		mg/L	1	2/9/2006 2:17:08 PM
Cadmium	ND	0.0020		mg/L	1	2/9/2006 2:17:08 PM
Chromium	0.011	0.0060		mg/L	1	2/9/2006 2:17:08 PM

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

Hall Environmental Analysis Laboratory

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

EPA 6010: TOTAL RECOVERABLE METALS

Analyst: **NMO**

Lead	ND	0.0050	mg/L	1	2/9/2006 2:17:08 PM
Selenium	ND	0.050	mg/L	1	2/9/2006 2:17:08 PM
Silver	ND	0.0050	mg/L	1	2/9/2006 2:17:08 PM

EPA METHOD 8260B: VOLATILES

Analyst: **KTM**

Benzene	880	20	µg/L	20	2/9/2006
Toluene	1500	20	µg/L	20	2/9/2006
Ethylbenzene	ND	20	µg/L	20	2/9/2006
Methyl tert-butyl ether (MTBE)	ND	20	µg/L	20	2/9/2006
1,2,4-Trimethylbenzene	120	20	µg/L	20	2/9/2006
1,3,5-Trimethylbenzene	66	20	µg/L	20	2/9/2006
1,2-Dichloroethane (EDC)	ND	20	µg/L	20	2/9/2006
1,2-Dibromoethane (EDB)	ND	20	µg/L	20	2/9/2006
Naphthalene	46	40	µg/L	20	2/9/2006
1-Methylnaphthalene	81	80	µg/L	20	2/9/2006
2-Methylnaphthalene	84	80	µg/L	20	2/9/2006
Acetone	ND	200	µg/L	20	2/9/2006
Bromobenzene	ND	20	µg/L	20	2/9/2006
Bromochloromethane	ND	20	µg/L	20	2/9/2006
Bromodichloromethane	ND	20	µg/L	20	2/9/2006
Bromoform	ND	20	µg/L	20	2/9/2006
Bromomethane	ND	40	µg/L	20	2/9/2006
2-Butanone	ND	200	µg/L	20	2/9/2006
Carbon disulfide	ND	200	µg/L	20	2/9/2006
Carbon Tetrachloride	ND	40	µg/L	20	2/9/2006
Chlorobenzene	ND	20	µg/L	20	2/9/2006
Chloroethane	ND	40	µg/L	20	2/9/2006
Chloroform	ND	20	µg/L	20	2/9/2006
Chloromethane	ND	20	µg/L	20	2/9/2006
2-Chlorotoluene	ND	20	µg/L	20	2/9/2006
4-Chlorotoluene	ND	20	µg/L	20	2/9/2006
cis-1,2-DCE	ND	20	µg/L	20	2/9/2006
cis-1,3-Dichloropropene	ND	20	µg/L	20	2/9/2006
1,2-Dibromo-3-chloropropane	ND	40	µg/L	20	2/9/2006
Dibromochloromethane	ND	20	µg/L	20	2/9/2006
Dibromomethane	ND	40	µg/L	20	2/9/2006
1,2-Dichlorobenzene	ND	20	µg/L	20	2/9/2006
1,3-Dichlorobenzene	ND	20	µg/L	20	2/9/2006
1,4-Dichlorobenzene	ND	20	µg/L	20	2/9/2006
Dichlorodifluoromethane	ND	20	µg/L	20	2/9/2006
1,1-Dichloroethane	ND	40	µg/L	20	2/9/2006
1,1-Dichloroethene	ND	20	µg/L	20	2/9/2006
1,2-Dichloropropane	ND	20	µg/L	20	2/9/2006
1,3-Dichloropropane	ND	20	µg/L	20	2/9/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: 17-Feb-06

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

EPA METHOD 8260B: VOLATILES

Analyst: **KTM**

2,2-Dichloropropane	ND	40	µg/L	20	2/9/2006
1,1-Dichloropropene	ND	20	µg/L	20	2/9/2006
Hexachlorobutadiene	ND	40	µg/L	20	2/9/2006
2-Hexanone	ND	200	µg/L	20	2/9/2006
Isopropylbenzene	ND	20	µg/L	20	2/9/2006
4-Isopropyltoluene	ND	20	µg/L	20	2/9/2006
4-Methyl-2-pentanone	ND	200	µg/L	20	2/9/2006
Methylene Chloride	ND	60	µg/L	20	2/9/2006
n-Butylbenzene	ND	20	µg/L	20	2/9/2006
n-Propylbenzene	ND	20	µg/L	20	2/9/2006
sec-Butylbenzene	ND	20	µg/L	20	2/9/2006
Styrene	ND	20	µg/L	20	2/9/2006
tert-Butylbenzene	ND	20	µg/L	20	2/9/2006
1,1,1,2-Tetrachloroethane	ND	20	µg/L	20	2/9/2006
1,1,2,2-Tetrachloroethane	ND	20	µg/L	20	2/9/2006
Tetrachloroethene (PCE)	ND	20	µg/L	20	2/9/2006
trans-1,2-DCE	ND	20	µg/L	20	2/9/2006
trans-1,3-Dichloropropene	ND	20	µg/L	20	2/9/2006
1,2,3-Trichlorobenzene	ND	20	µg/L	20	2/9/2006
1,2,4-Trichlorobenzene	ND	20	µg/L	20	2/9/2006
1,1,1-Trichloroethane	ND	20	µg/L	20	2/9/2006
1,1,2-Trichloroethane	ND	20	µg/L	20	2/9/2006
Trichloroethene (TCE)	ND	20	µg/L	20	2/9/2006
Trichlorofluoromethane	ND	20	µg/L	20	2/9/2006
1,2,3-Trichloropropane	ND	40	µg/L	20	2/9/2006
Vinyl chloride	ND	20	µg/L	20	2/9/2006
Xylenes, Total	1500	20	µg/L	20	2/9/2006
Surr: 1,2-Dichloroethane-d4	102	69.9-130	%REC	20	2/9/2006
Surr: 4-Bromofluorobenzene	98.4	71.2-123	%REC	20	2/9/2006
Surr: Dibromofluoromethane	104	57.3-135	%REC	20	2/9/2006
Surr: Toluene-d8	95.9	81.9-122	%REC	20	2/9/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

Lab ID: 0602041-03
Client Sample ID: NAPIS

Collection Date: 1/31/2006 1:00:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **SCC**
EPA METHOD 8015B: DIESEL RANGE						
Diesel Range Organics (DRO)	120	3.0		mg/L	1	2/7/2006 8:25:34 PM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	2/7/2006 8:25:34 PM
Surr: DNOP	112	58-140		%REC	1	2/7/2006 8:25:34 PM
						Analyst: **NSB**
EPA METHOD 8015B: GASOLINE RANGE						
Gasoline Range Organics (GRO)	12	5.0		mg/L	100	2/7/2006 12:38:45 AM
Surr: BFB	113	79.7-118		%REC	100	2/7/2006 12:38:45 AM
						Analyst: **KTM**
EPA METHOD 8260B: VOLATILES						
Benzene	3200	50		µg/L	50	2/9/2006
Toluene	2900	50		µg/L	50	2/9/2006
Ethylbenzene	150	50		µg/L	50	2/9/2006
Methyl tert-butyl ether (MTBE)	5100	50		µg/L	50	2/9/2006
1,2,4-Trimethylbenzene	260	50		µg/L	50	2/9/2006
1,3,5-Trimethylbenzene	58	50		µg/L	50	2/9/2006
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	2/9/2006
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	2/9/2006
Naphthalene	240	100		µg/L	50	2/9/2006
1-Methylnaphthalene	240	200		µg/L	50	2/9/2006
2-Methylnaphthalene	350	200		µg/L	50	2/9/2006
Acetone	11000	2000		µg/L	200	2/9/2006
Bromobenzene	ND	50		µg/L	50	2/9/2006
Bromochloromethane	ND	50		µg/L	50	2/9/2006
Bromodichloromethane	ND	50		µg/L	50	2/9/2006
Bromoform	ND	50		µg/L	50	2/9/2006
Bromomethane	ND	100		µg/L	50	2/9/2006
2-Butanone	2500	500		µg/L	50	2/9/2006
Carbon disulfide	ND	500		µg/L	50	2/9/2006
Carbon Tetrachloride	ND	100		µg/L	50	2/9/2006
Chlorobenzene	ND	50		µg/L	50	2/9/2006
Chloroethane	ND	100		µg/L	50	2/9/2006
Chloroform	ND	50		µg/L	50	2/9/2006
Chloromethane	ND	50		µg/L	50	2/9/2006
2-Chlorotoluene	ND	50		µg/L	50	2/9/2006
4-Chlorotoluene	ND	50		µg/L	50	2/9/2006
cis-1,2-DCE	ND	50		µg/L	50	2/9/2006
cis-1,3-Dichloropropene	ND	50		µg/L	50	2/9/2006
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	2/9/2006

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

Hall Environmental Analysis Laboratory

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

Analyst: **KTM**

EPA METHOD 8260B: VOLATILES

Dibromochloromethane	ND	50	µg/L	50	2/9/2006
Dibromomethane	ND	100	µg/L	50	2/9/2006
1,2-Dichlorobenzene	ND	50	µg/L	50	2/9/2006
1,3-Dichlorobenzene	ND	50	µg/L	50	2/9/2006
1,4-Dichlorobenzene	ND	50	µg/L	50	2/9/2006
Dichlorodifluoromethane	ND	50	µg/L	50	2/9/2006
1,1-Dichloroethane	ND	100	µg/L	50	2/9/2006
1,1-Dichloroethene	ND	50	µg/L	50	2/9/2006
1,2-Dichloropropane	ND	50	µg/L	50	2/9/2006
1,3-Dichloropropane	ND	50	µg/L	50	2/9/2006
2,2-Dichloropropane	ND	100	µg/L	50	2/9/2006
1,1-Dichloropropene	ND	50	µg/L	50	2/9/2006
Hexachlorobutadiene	ND	100	µg/L	50	2/9/2006
2-Hexanone	ND	500	µg/L	50	2/9/2006
Isopropylbenzene	ND	50	µg/L	50	2/9/2006
4-Isopropyltoluene	ND	50	µg/L	50	2/9/2006
4-Methyl-2-pentanone	ND	500	µg/L	50	2/9/2006
Methylene Chloride	ND	150	µg/L	50	2/9/2006
n-Butylbenzene	ND	50	µg/L	50	2/9/2006
n-Propylbenzene	ND	50	µg/L	50	2/9/2006
sec-Butylbenzene	ND	50	µg/L	50	2/9/2006
Styrene	ND	50	µg/L	50	2/9/2006
tert-Butylbenzene	ND	50	µg/L	50	2/9/2006
1,1,1,2-Tetrachloroethane	ND	50	µg/L	50	2/9/2006
1,1,2,2-Tetrachloroethane	ND	50	µg/L	50	2/9/2006
Tetrachloroethene (PCE)	ND	50	µg/L	50	2/9/2006
trans-1,2-DCE	ND	50	µg/L	50	2/9/2006
trans-1,3-Dichloropropene	ND	50	µg/L	50	2/9/2006
1,2,3-Trichlorobenzene	ND	50	µg/L	50	2/9/2006
1,2,4-Trichlorobenzene	ND	50	µg/L	50	2/9/2006
1,1,1-Trichloroethane	ND	50	µg/L	50	2/9/2006
1,1,2-Trichloroethane	ND	50	µg/L	50	2/9/2006
Trichloroethene (TCE)	ND	50	µg/L	50	2/9/2006
Trichlorofluoromethane	ND	50	µg/L	50	2/9/2006
1,2,3-Trichloropropane	ND	100	µg/L	50	2/9/2006
Vinyl chloride	ND	50	µg/L	50	2/9/2006
Xylenes, Total	1000	50	µg/L	50	2/9/2006
Surr: 1,2-Dichloroethane-d4	106	69.9-130	%REC	50	2/9/2006
Surr: 4-Bromofluorobenzene	114	71.2-123	%REC	50	2/9/2006
Surr: Dibromofluoromethane	110	57.3-135	%REC	50	2/9/2006
Surr: Toluene-d8	98.3	81.9-122	%REC	50	2/9/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

Lab ID: 0602041-04
Client Sample ID: Pilot TC

Collection Date: 1/31/2006 2:00:00 PM
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	2/7/2006 9:31:39 PM
Motor Oil Range Organics (MRO)	ND	5.0		mg/L	1	2/7/2006 9:31:39 PM
Surr: DNOP	139	58-140		%REC	1	2/7/2006 9:31:39 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	0.050		mg/L	1	2/7/2006 1:08:51 AM
Surr: BFB	109	79.7-118		%REC	1	2/7/2006 1:08:51 AM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	2/15/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	2/9/2006 2:21:04 PM
Barium	0.024	0.020		mg/L	1	2/9/2006 2:21:04 PM
Cadmium	ND	0.0020		mg/L	1	2/9/2006 2:21:04 PM
Chromium	ND	0.0060		mg/L	1	2/9/2006 2:21:04 PM
Lead	ND	0.0050		mg/L	1	2/9/2006 2:21:04 PM
Selenium	ND	0.050		mg/L	1	2/9/2006 2:21:04 PM
Silver	ND	0.0050		mg/L	1	2/9/2006 2:21:04 PM
EPA METHOD 8260B: VOLATILES						Analyst: **KTM**
Benzene	ND	1.0		µg/L	1	2/9/2006
Toluene	1.5	1.0		µg/L	1	2/9/2006
Ethylbenzene	ND	1.0		µg/L	1	2/9/2006
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/9/2006
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/9/2006
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/9/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/9/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/9/2006
Naphthalene	ND	2.0		µg/L	1	2/9/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	2/9/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	2/9/2006
Acetone	180	10		µg/L	1	2/9/2006
Bromobenzene	ND	1.0		µg/L	1	2/9/2006
Bromochloromethane	ND	1.0		µg/L	1	2/9/2006
Bromodichloromethane	ND	1.0		µg/L	1	2/9/2006
Bromoform	ND	1.0		µg/L	1	2/9/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

Analyst: **KTM**

EPA METHOD 8260B: VOLATILES

Bromomethane	ND	2.0	µg/L	1	2/9/2006
2-Butanone	ND	10	µg/L	1	2/9/2006
Carbon disulfide	ND	10	µg/L	1	2/9/2006
Carbon Tetrachloride	ND	2.0	µg/L	1	2/9/2006
Chlorobenzene	ND	1.0	µg/L	1	2/9/2006
Chloroethane	ND	2.0	µg/L	1	2/9/2006
Chloroform	2.5	1.0	µg/L	1	2/9/2006
Chloromethane	ND	1.0	µg/L	1	2/9/2006
2-Chlorotoluene	ND	1.0	µg/L	1	2/9/2006
4-Chlorotoluene	ND	1.0	µg/L	1	2/9/2006
cis-1,2-DCE	ND	1.0	µg/L	1	2/9/2006
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	2/9/2006
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	2/9/2006
Dibromochloromethane	ND	1.0	µg/L	1	2/9/2006
Dibromomethane	ND	2.0	µg/L	1	2/9/2006
1,2-Dichlorobenzene	ND	1.0	µg/L	1	2/9/2006
1,3-Dichlorobenzene	ND	1.0	µg/L	1	2/9/2006
1,4-Dichlorobenzene	ND	1.0	µg/L	1	2/9/2006
Dichlorodifluoromethane	ND	1.0	µg/L	1	2/9/2006
1,1-Dichloroethane	ND	2.0	µg/L	1	2/9/2006
1,1-Dichloroethene	ND	1.0	µg/L	1	2/9/2006
1,2-Dichloropropane	ND	1.0	µg/L	1	2/9/2006
1,3-Dichloropropane	ND	1.0	µg/L	1	2/9/2006
2,2-Dichloropropane	ND	2.0	µg/L	1	2/9/2006
1,1-Dichloropropene	ND	1.0	µg/L	1	2/9/2006
Hexachlorobutadiene	ND	2.0	µg/L	1	2/9/2006
2-Hexanone	ND	10	µg/L	1	2/9/2006
Isopropylbenzene	ND	1.0	µg/L	1	2/9/2006
4-Isopropyltoluene	1.1	1.0	µg/L	1	2/9/2006
4-Methyl-2-pentanone	ND	10	µg/L	1	2/9/2006
Methylene Chloride	ND	3.0	µg/L	1	2/9/2006
n-Butylbenzene	ND	1.0	µg/L	1	2/9/2006
n-Propylbenzene	ND	1.0	µg/L	1	2/9/2006
sec-Butylbenzene	ND	1.0	µg/L	1	2/9/2006
Styrene	ND	1.0	µg/L	1	2/9/2006
tert-Butylbenzene	ND	1.0	µg/L	1	2/9/2006
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	2/9/2006
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1	2/9/2006
Tetrachloroethene (PCE)	ND	1.0	µg/L	1	2/9/2006
trans-1,2-DCE	ND	1.0	µg/L	1	2/9/2006
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	2/9/2006
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1	2/9/2006
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	2/9/2006
1,1,1-Trichloroethane	ND	1.0	µg/L	1	2/9/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *17-Feb-06*

CLIENT: Giant Refining Co
Project: NMED Monthly Water Samples 1/31/2006

Lab Order: 0602041

Analyst: **KTM**

EPA METHOD 8260B: VOLATILES

1,1,2-Trichloroethane	ND	1.0	µg/L	1	2/9/2006
Trichloroethene (TCE)	ND	1.0	µg/L	1	2/9/2006
Trichlorofluoromethane	ND	1.0	µg/L	1	2/9/2006
1,2,3-Trichloropropane	ND	2.0	µg/L	1	2/9/2006
Vinyl chloride	ND	1.0	µg/L	1	2/9/2006
Xylenes, Total	ND	1.0	µg/L	1	2/9/2006
Surr: 1,2-Dichloroethane-d4	95.0	69.9-130	%REC	1	2/9/2006
Surr: 4-Bromofluorobenzene	107	71.2-123	%REC	1	2/9/2006
Surr: Dibromofluoromethane	99.6	57.3-135	%REC	1	2/9/2006
Surr: Toluene-d8	97.3	81.9-122	%REC	1	2/9/2006

Qualifiers:

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

Date: 17-Feb-06

Hall Environmental Analysis Laboratory

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602041
Project: NMED Monthly Water Samples 1/31/2006

TestCode: 8015DRO_W

Sample ID: **MB-9709** SampType: **MBLK** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **2/6/2006** RunNo: **18170**
Client ID: **ZZZZZ** Batch ID: **9709** TestNo: **SW8015** Analysis Date: **2/7/2006** SeqNo: **447883**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCS-9709** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **2/6/2006** RunNo: **18170**
Client ID: **ZZZZZ** Batch ID: **9709** TestNo: **SW8015** Analysis Date: **2/7/2006** SeqNo: **447884**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.945	1.0	5	0	119	81.2	149				

Sample ID: **LCSD-9709** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **2/6/2006** RunNo: **18170**
Client ID: **ZZZZZ** Batch ID: **9709** TestNo: **SW8015** Analysis Date: **2/7/2006** SeqNo: **447885**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.781	1.0	5	0	116	81.2	149	5.945	2.80	23	

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Qualifiers:
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602041
Project: NMED Monthly Water Samples 1/31/2006

TestCode: 8015GRO_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18169**
Client ID: **ZZZZZ** Batch ID: **R18169** TestNo: **SW8015** Analysis Date: **2/6/2006** SeqNo: **447863**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18169**
Client ID: **ZZZZZ** Batch ID: **R18169** TestNo: **SW8015** Analysis Date: **2/6/2006** SeqNo: **447864**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4920	0.050	0.5	0	98.4	82.6	114				

Sample ID: **2.5UG GRO LCSD** SampType: **LCSD** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18169**
Client ID: **ZZZZZ** Batch ID: **R18169** TestNo: **SW8015** Analysis Date: **2/7/2006** SeqNo: **447865**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4860	0.050	0.5	0	97.2	82.6	114	0.492	1.23	8.39	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

CLIENT: Giant Refining Co
Work Order: 0602041
Project: NMED Monthly Water Samples 1/31/2006

Sample ID: **MB-9712** SampType: **MBLK** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/6/2006** RunNo: **18291**
Client ID: **ZZZZZ** Batch ID: **9712** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/13/2006** SeqNo: **450970**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	2.5									
1-Methylnaphthalene	ND	2.5									
2-Methylnaphthalene	ND	2.5									
Acenaphthylene	ND	2.5									
Acenaphthene	ND	2.5									
Fluorene	ND	0.80									
Phenanthrene	ND	0.60									
Anthracene	ND	0.60									
Fluoranthene	ND	0.30									
Pyrene	ND	0.30									
Benz(a)anthracene	ND	0.020									
Chrysene	ND	0.20									
Benzo(b)fluoranthene	ND	0.050									
Benzo(k)fluoranthene	ND	0.020									
Benzo(a)pyrene	ND	0.020									
Dibenz(a,h)anthracene	ND	0.040									
Benzo(g,h,i)perylene	ND	0.030									
Indeno(1,2,3-cd)pyrene	ND	0.080									

Sample ID: **LCS-9712** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/6/2006** RunNo: **18291**
Client ID: **ZZZZZ** Batch ID: **9712** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/13/2006** SeqNo: **450973**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	23.55	2.5	40	0	58.9	34.8	97.4				
1-Methylnaphthalene	23.19	2.5	40.1	0	57.8	34.7	100				
2-Methylnaphthalene	22.54	2.5	40	0	56.4	35	98.1				
Acenaphthylene	25.07	2.5	40.1	0	62.5	48.3	95.1				
Acenaphthene	24.30	2.5	40	0	60.8	45	95				
Fluorene	2.460	0.80	4.01	0	61.3	46.8	93.4				
Phenanthrene	1.290	0.60	2.01	0	64.2	48.7	104				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602041
Project: NMED Monthly Water Samples 1/31/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8310_W

Sample ID: **LCS-9712** SampType: **LCS** TestCode: **8310_W** Units: **µg/L** Prep Date: **2/6/2006** RunNo: **18291**
Client ID: **ZZZZZ** Batch ID: **9712** TestNo: **SW8310** **(SW3510C)** Analysis Date: **2/13/2006** SeqNo: **450973**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Anthracene	1.330	0.60	2.01	0	66.2	47.5	102				
Fluoranthene	2.730	0.30	4.01	0	68.1	46.3	108				
Pyrene	2.700	0.30	4.01	0	67.3	43.8	109				
Benz(a)anthracene	0.2800	0.020	0.401	0	69.8	40.3	115				
Chrysene	1.350	0.20	2.01	0	67.2	42.6	107				
Benzo(b)fluoranthene	0.3300	0.050	0.501	0	65.9	48.6	107				
Benzo(k)fluoranthene	0.1700	0.020	0.25	0	68.0	23.3	136				
Benzo(a)pyrene	0.1800	0.020	0.251	0	71.7	33.4	117				
Dibenz(a,h)anthracene	0.3300	0.040	0.501	0	65.9	27.3	139				
Benzo(g,h,i)perylene	0.3600	0.030	0.5	0	72.0	38.2	117				
Indeno(1,2,3-cd)pyrene	0.7650	0.080	1.002	0	76.3	39.9	125				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602041
Project: NMED Monthly Water Samples 1/31/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: **MB-9774** SampType: **MBLK** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **2/15/2006** RunNo: **18273**
Client ID: **ZZZZZ** Batch ID: **9774** TestNo: **SW7470** **(SW7470)** Analysis Date: **2/15/2006** SeqNo: **450494**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: **LCS-9774** SampType: **LCS** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **2/15/2006** RunNo: **18273**
Client ID: **ZZZZZ** Batch ID: **9774** TestNo: **SW7470** **(SW7470)** Analysis Date: **2/15/2006** SeqNo: **450495**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004592	0.00020	0.005	0	91.8	80	120				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602041
Project: NMED Monthly Water Samples 1/31/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **MB-9729** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **2/8/2006** RunNo: **18204**
Client ID: **ZZZZZ** Batch ID: **9729** TestNo: **SW6010A** Analysis Date: **2/9/2006** SeqNo: **448810**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **LCS-9729** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **2/8/2006** RunNo: **18204**
Client ID: **ZZZZZ** Batch ID: **9729** TestNo: **SW6010A** Analysis Date: **2/9/2006** SeqNo: **448811**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5173	0.020	0.5	0	103	80	120				
Barium	0.4809	0.020	0.5	0.0004845	96.1	80	120				
Cadmium	0.4939	0.0020	0.5	0	98.8	80	120				
Chromium	0.4842	0.0060	0.5	0	96.8	80	120				
Lead	0.4799	0.0050	0.5	0	96.0	80	120				
Selenium	0.4987	0.050	0.5	0	99.7	80	120				
Silver	0.5003	0.0050	0.5	0	100	80	120				

Sample ID: **LCSD-9729** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **2/8/2006** RunNo: **18204**
Client ID: **ZZZZZ** Batch ID: **9729** TestNo: **SW6010A** Analysis Date: **2/9/2006** SeqNo: **448812**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5084	0.020	0.5	0	102	80	120	0.5173	1.73	20	
Barium	0.4860	0.020	0.5	0.0004845	97.1	80	120	0.4809	1.06	20	
Cadmium	0.4907	0.0020	0.5	0	98.1	80	120	0.4939	0.644	20	
Chromium	0.4889	0.0060	0.5	0	97.8	80	120	0.4842	0.986	20	
Lead	0.4790	0.0050	0.5	0	95.8	80	120	0.4799	0.178	20	
Selenium	0.4941	0.050	0.5	0	98.8	80	120	0.4987	0.928	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602041
Project: NMED Monthly Water Samples 1/31/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **LCSD-9729** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **2/8/2006** RunNo: **18204**
Client ID: **ZZZZZ** Batch ID: **9729** TestNo: **SW6010A** Analysis Date: **2/9/2006** SeqNo: **448812**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.5066	0.0050	0.5	0	101	80	120	0.5003	1.26	20	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Date: *17-Feb-06*

Hall Environmental Analysis Laboratory

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602041
Project: NMED Monthly Water Samples 1/31/2006

TestCode: 8260_W

Sample ID: **5mL rb-b** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18209**
Client ID: **ZZZZZ** Batch ID: **R18209** TestNo: **SW8260B** Analysis Date: **2/9/2006** SeqNo: **448981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Methyl tert-butyl ether (MTBE)	ND	1.0									
1,2,4-Trimethylbenzene	ND	1.0									
1,3,5-Trimethylbenzene	ND	1.0									
1,2-Dichloroethane (EDC)	ND	1.0									
1,2-Dibromoethane (EDB)	ND	1.0									
Naphthalene	ND	2.0									
1-Methylnaphthalene	ND	4.0									
2-Methylnaphthalene	ND	4.0									
Acetone	ND	10									
Bromobenzene	ND	1.0									
Bromochloromethane	ND	1.0									
Bromodichloromethane	ND	1.0									
Bromoform	ND	1.0									
Bromomethane	ND	2.0									
2-Butanone	ND	10									
Carbon disulfide	ND	10									
Carbon Tetrachloride	ND	2.0									
Chlorobenzene	ND	1.0									
Chloroethane	ND	2.0									
Chloroform	ND	1.0									
Chloromethane	ND	1.0									
2-Chlorotoluene	ND	1.0									
4-Chlorotoluene	ND	1.0									
cis-1,2-DCE	ND	1.0									
cis-1,3-Dichloropropene	ND	1.0									
1,2-Dibromo-3-chloropropane	ND	2.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0602041
Project: NMED Monthly Water Samples 1/31/2006

TestCode: 8260_W

Sample ID: **5mL rb-b** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18209**
Client ID: **ZZZZZ** Batch ID: **R18209** TestNo: **SW8260B** Analysis Date: **2/9/2006** SeqNo: **448981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dibromochloromethane	ND	1.0									
Dibromomethane	ND	2.0									
1,2-Dichlorobenzene	ND	1.0									
1,3-Dichlorobenzene	ND	1.0									
1,4-Dichlorobenzene	ND	1.0									
Dichlorodifluoromethane	ND	1.0									
1,1-Dichloroethane	ND	2.0									
1,1-Dichloroethene	ND	1.0									
1,2-Dichloropropane	ND	1.0									
1,3-Dichloropropane	ND	1.0									
2,2-Dichloropropane	ND	2.0									
1,1-Dichloropropene	ND	1.0									
Hexachlorobutadiene	ND	2.0									
2-Hexanone	ND	10									
Isopropylbenzene	ND	1.0									
4-Isopropyltoluene	ND	1.0									
4-Methyl-2-pentanone	ND	10									
Methylene Chloride	ND	3.0									
n-Butylbenzene	ND	1.0									
n-Propylbenzene	ND	1.0									
sec-Butylbenzene	ND	1.0									
Styrene	ND	1.0									
tert-Butylbenzene	ND	1.0									
1,1,1,2-Tetrachloroethane	ND	1.0									
1,1,2,2-Tetrachloroethane	ND	1.0									
Tetrachloroethene (PCE)	ND	1.0									
trans-1,2-DCE	ND	1.0									
trans-1,3-Dichloropropene	ND	1.0									
1,2,3-Trichlorobenzene	ND	1.0									
1,2,4-Trichlorobenzene	ND	1.0									
1,1,1-Trichloroethane	ND	1.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0602041
Project: NMED Monthly Water Samples 1/31/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **5mL rb-b** SampType: **MBLK** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18209**
Client ID: **ZZZZZ** Batch ID: **R18209** TestNo: **SW8260B** Analysis Date: **2/9/2006** SeqNo: **448981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,2-Trichloroethane	ND	1.0									
Trichloroethene (TCE)	ND	1.0									
Trichlorofluoromethane	ND	1.0									
1,2,3-Trichloropropane	ND	2.0									
Vinyl chloride	ND	1.0									
Xylenes, Total	ND	1.0									

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18209**
Client ID: **ZZZZZ** Batch ID: **R18209** TestNo: **SW8260B** Analysis Date: **2/9/2006** SeqNo: **448982**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	22.54	1.0	20	0	113	79.3	136				
Toluene	20.83	1.0	20	0	104	65.5	123				
Chlorobenzene	21.50	1.0	20	0	108	80.3	134				
1,1-Dichloroethene	22.89	1.0	20	0	114	65.5	134				
Trichloroethene (TCE)	21.51	1.0	20	0	108	85.6	119				

Sample ID: **100ng lcsd** SampType: **LCSD** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18209**
Client ID: **ZZZZZ** Batch ID: **R18209** TestNo: **SW8260B** Analysis Date: **2/9/2006** SeqNo: **448983**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	21.29	1.0	20	0	106	81.4	130	22.54	5.68	11	
Toluene	21.23	1.0	20	0	106	65.5	123	20.83	1.89	12.2	
Chlorobenzene	21.02	1.0	20	0	105	80.3	134	21.5	2.26	12	
1,1-Dichloroethene	21.18	1.0	20	0	106	65.5	134	22.89	7.76	19.3	
Trichloroethene (TCE)	20.76	1.0	20	0	104	75.8	110	21.51	3.57	15.5	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

·ll Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 2/3/2006

Work Order Number 0602041

Received by LMM

Checklist completed by Lisa Hallukus (Signature) 2/3/06 (Date)

Matrix

Carrier name UPS

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 ☐		
·ll 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?	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 Monthly Water Samples 1-31-2006
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. 0602041	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)
31-06	1130	H_2O	AL-2 to EP-1					-1			X					X			X						
"	1100	"	OAPIS					-2			X				X	X			X						
"	1300	"	NAPIS					-3			X								X						
"	1400	"	Pilot TC					-4			X					X			X						

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
-2-06	0900	Steve Morris	Lisa Hedlund 1201 2/3/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Rush

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, May 09, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED-OCD Monthly Water Samples 4/28

Order No.: 0605009

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 3 sample(s) on 5/2/2006 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

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

Date: *09-May-06*

CLIENT: Giant Refining Co
Project: NMED-OCD Monthly Water Samples 4/28/06

Lab Order: 0605009

Lab ID: 0605009-01
Client Sample ID: Pilot TC Eff.

Collection Date: 4/28/2006 1:30:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	18	3.0		mg/L	1	5/4/2006 4:07:47 PM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	5/4/2006 4:07:47 PM
Surr: DNOP	140	58-140		%REC	1	5/4/2006 4:07:47 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **HLM**
Gasoline Range Organics (GRO)	0.084	0.050		mg/L	1	5/2/2006 11:55:21 AM
Surr: BFB	97.6	80-123		%REC	1	5/2/2006 11:55:21 AM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	5/5/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	5/4/2006 12:10:37 PM
Barium	ND	0.020		mg/L	1	5/4/2006 12:10:37 PM
Cadmium	ND	0.0020		mg/L	1	5/4/2006 12:10:37 PM
Chromium	ND	0.0060		mg/L	1	5/4/2006 12:10:37 PM
Lead	ND	0.0050		mg/L	1	5/4/2006 12:10:37 PM
Selenium	ND	0.050		mg/L	1	5/4/2006 12:10:37 PM
Silver	ND	0.0050		mg/L	1	5/4/2006 12:10:37 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	ND	1.0		µg/L	1	5/2/2006
Toluene	4.1	1.0		µg/L	1	5/2/2006
Ethylbenzene	ND	1.0		µg/L	1	5/2/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	5/2/2006
1,2,4-Trimethylbenzene	4.0	1.0		µg/L	1	5/2/2006
1,3,5-Trimethylbenzene	1.2	1.0		µg/L	1	5/2/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/2/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/2/2006
Naphthalene	ND	2.0		µg/L	1	5/2/2006
1-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2006
2-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2006
Acetone	ND	10		µg/L	1	5/2/2006
Bromobenzene	ND	1.0		µg/L	1	5/2/2006
Bromochloromethane	ND	1.0		µg/L	1	5/2/2006
Bromodichloromethane	ND	1.0		µg/L	1	5/2/2006
Bromoform	ND	1.0		µg/L	1	5/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *09-May-06*

CLIENT: Giant Refining Co
Project: NMED-OCD Monthly Water Samples 4/28/06

Lab Order: 0605009

Analyst: **BDH**

EPA METHOD 8260B: VOLATILES

Bromomethane	ND	2.0	µg/L	1	5/2/2006
2-Butanone	ND	10	µg/L	1	5/2/2006
Carbon disulfide	ND	10	µg/L	1	5/2/2006
Carbon Tetrachloride	ND	2.0	µg/L	1	5/2/2006
Chlorobenzene	ND	1.0	µg/L	1	5/2/2006
Chloroethane	ND	2.0	µg/L	1	5/2/2006
Chloroform	ND	1.0	µg/L	1	5/2/2006
Chloromethane	ND	1.0	µg/L	1	5/2/2006
2-Chlorotoluene	ND	1.0	µg/L	1	5/2/2006
4-Chlorotoluene	ND	1.0	µg/L	1	5/2/2006
cis-1,2-DCE	ND	1.0	µg/L	1	5/2/2006
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	5/2/2006
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	5/2/2006
Dibromochloromethane	ND	1.0	µg/L	1	5/2/2006
Dibromomethane	ND	2.0	µg/L	1	5/2/2006
1,2-Dichlorobenzene	ND	1.0	µg/L	1	5/2/2006
1,3-Dichlorobenzene	ND	1.0	µg/L	1	5/2/2006
1,4-Dichlorobenzene	1.7	1.0	µg/L	1	5/2/2006
Dichlorodifluoromethane	ND	1.0	µg/L	1	5/2/2006
1,1-Dichloroethane	ND	2.0	µg/L	1	5/2/2006
1,1-Dichloroethene	ND	1.0	µg/L	1	5/2/2006
1,2-Dichloropropane	ND	1.0	µg/L	1	5/2/2006
1,3-Dichloropropane	ND	1.0	µg/L	1	5/2/2006
2,2-Dichloropropane	ND	2.0	µg/L	1	5/2/2006
1,1-Dichloropropene	ND	1.0	µg/L	1	5/2/2006
Hexachlorobutadiene	ND	2.0	µg/L	1	5/2/2006
2-Hexanone	ND	10	µg/L	1	5/2/2006
Isopropylbenzene	ND	1.0	µg/L	1	5/2/2006
4-Isopropyltoluene	3.1	1.0	µg/L	1	5/2/2006
4-Methyl-2-pentanone	ND	10	µg/L	1	5/2/2006
Methylene Chloride	ND	3.0	µg/L	1	5/2/2006
n-Butylbenzene	ND	1.0	µg/L	1	5/2/2006
n-Propylbenzene	ND	1.0	µg/L	1	5/2/2006
sec-Butylbenzene	ND	2.0	µg/L	1	5/2/2006
Styrene	ND	1.5	µg/L	1	5/2/2006
tert-Butylbenzene	ND	1.0	µg/L	1	5/2/2006
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	5/2/2006
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1	5/2/2006
Tetrachloroethene (PCE)	ND	1.0	µg/L	1	5/2/2006
trans-1,2-DCE	ND	1.0	µg/L	1	5/2/2006
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	5/2/2006
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1	5/2/2006
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	5/2/2006
1,1,1-Trichloroethane	ND	1.0	µg/L	1	5/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *09-May-06*

CLIENT: Giant Refining Co
Project: NMED-OCD Monthly Water Samples 4/28/06

Lab Order: 0605009

Analyst: **BDH**

EPA METHOD 8260B: VOLATILES

1,1,2-Trichloroethane	ND	1.0	µg/L	1	5/2/2006
Trichloroethene (TCE)	ND	1.0	µg/L	1	5/2/2006
Trichlorofluoromethane	ND	1.0	µg/L	1	5/2/2006
1,2,3-Trichloropropane	ND	2.0	µg/L	1	5/2/2006
Vinyl chloride	ND	1.0	µg/L	1	5/2/2006
Xylenes, Total	ND	3.0	µg/L	1	5/2/2006
Surr: 1,2-Dichloroethane-d4	99.4	69.9-130	%REC	1	5/2/2006
Surr: 4-Bromofluorobenzene	99.2	75-139	%REC	1	5/2/2006
Surr: Dibromofluoromethane	91.7	57.3-135	%REC	1	5/2/2006
Surr: Toluene-d8	90.3	81.9-122	%REC	1	5/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *09-May-06*

CLIENT: Giant Refining Co
Project: NMED-OCD Monthly Water Samples 4/28/06

Lab Order: 0605009

Lab ID: 0605009-02
Client Sample ID: NAPIS Eff.

Collection Date: 4/28/2006 1:15:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	83	3.0		mg/L	1	5/4/2006 4:41:08 PM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	5/4/2006 4:41:08 PM
Surr: DNOP	135	58-140		%REC	1	5/4/2006 4:41:08 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **HLM**
Gasoline Range Organics (GRO)	22	2.5		mg/L	50	5/2/2006 12:27:04 PM
Surr: BFB	89.6	80-123		%REC	50	5/2/2006 12:27:04 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	6100	100		µg/L	100	5/2/2006
Toluene	8800	250		µg/L	250	5/2/2006
Ethylbenzene	910	100		µg/L	100	5/2/2006
Methyl tert-butyl ether (MTBE)	ND	150		µg/L	100	5/2/2006
1,2,4-Trimethylbenzene	900	100		µg/L	100	5/2/2006
1,3,5-Trimethylbenzene	230	100		µg/L	100	5/2/2006
1,2-Dichloroethane (EDC)	ND	100		µg/L	100	5/2/2006
1,2-Dibromoethane (EDB)	ND	100		µg/L	100	5/2/2006
Naphthalene	580	200		µg/L	100	5/2/2006
1-Methylnaphthalene	ND	400		µg/L	100	5/2/2006
2-Methylnaphthalene	ND	400		µg/L	100	5/2/2006
Acetone	18000	1000		µg/L	100	5/2/2006
Bromobenzene	ND	100		µg/L	100	5/2/2006
Bromochloromethane	ND	100		µg/L	100	5/2/2006
Bromodichloromethane	ND	100		µg/L	100	5/2/2006
Bromoform	ND	100		µg/L	100	5/2/2006
Bromomethane	ND	200		µg/L	100	5/2/2006
2-Butanone	4000	1000		µg/L	100	5/2/2006
Carbon disulfide	ND	1000		µg/L	100	5/2/2006
Carbon Tetrachloride	ND	200		µg/L	100	5/2/2006
Chlorobenzene	ND	100		µg/L	100	5/2/2006
Chloroethane	ND	200		µg/L	100	5/2/2006
Chloroform	ND	100		µg/L	100	5/2/2006
Chloromethane	ND	100		µg/L	100	5/2/2006
2-Chlorotoluene	ND	100		µg/L	100	5/2/2006
4-Chlorotoluene	ND	100		µg/L	100	5/2/2006
cis-1,2-DCE	ND	100		µg/L	100	5/2/2006
cis-1,3-Dichloropropene	ND	100		µg/L	100	5/2/2006
1,2-Dibromo-3-chloropropane	ND	200		µg/L	100	5/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *09-May-06*

CLIENT: Giant Refining Co
Project: NMED-OCD Monthly Water Samples 4/28/06

Lab Order: 0605009

EPA METHOD 8260B: VOLATILES

Analyst: **BDH**

Dibromochloromethane	ND	100	µg/L	100	5/2/2006
Dibromomethane	ND	200	µg/L	100	5/2/2006
1,2-Dichlorobenzene	ND	100	µg/L	100	5/2/2006
1,3-Dichlorobenzene	ND	100	µg/L	100	5/2/2006
1,4-Dichlorobenzene	ND	100	µg/L	100	5/2/2006
Dichlorodifluoromethane	ND	100	µg/L	100	5/2/2006
1,1-Dichloroethane	ND	200	µg/L	100	5/2/2006
1,1-Dichloroethene	ND	100	µg/L	100	5/2/2006
1,2-Dichloropropane	ND	100	µg/L	100	5/2/2006
1,3-Dichloropropane	ND	100	µg/L	100	5/2/2006
2,2-Dichloropropane	ND	200	µg/L	100	5/2/2006
1,1-Dichloropropene	ND	100	µg/L	100	5/2/2006
Hexachlorobutadiene	ND	200	µg/L	100	5/2/2006
2-Hexanone	ND	1000	µg/L	100	5/2/2006
Isopropylbenzene	ND	100	µg/L	100	5/2/2006
4-Isopropyltoluene	ND	100	µg/L	100	5/2/2006
4-Methyl-2-pentanone	ND	1000	µg/L	100	5/2/2006
Methylene Chloride	ND	300	µg/L	100	5/2/2006
n-Butylbenzene	ND	100	µg/L	100	5/2/2006
n-Propylbenzene	130	100	µg/L	100	5/2/2006
sec-Butylbenzene	ND	200	µg/L	100	5/2/2006
Styrene	ND	150	µg/L	100	5/2/2006
tert-Butylbenzene	ND	100	µg/L	100	5/2/2006
1,1,1,2-Tetrachloroethane	ND	100	µg/L	100	5/2/2006
1,1,2,2-Tetrachloroethane	ND	100	µg/L	100	5/2/2006
Tetrachloroethene (PCE)	ND	100	µg/L	100	5/2/2006
trans-1,2-DCE	ND	100	µg/L	100	5/2/2006
trans-1,3-Dichloropropene	ND	100	µg/L	100	5/2/2006
1,2,3-Trichlorobenzene	ND	100	µg/L	100	5/2/2006
1,2,4-Trichlorobenzene	ND	100	µg/L	100	5/2/2006
1,1,1-Trichloroethane	ND	100	µg/L	100	5/2/2006
1,1,2-Trichloroethane	ND	100	µg/L	100	5/2/2006
Trichloroethene (TCE)	ND	100	µg/L	100	5/2/2006
Trichlorofluoromethane	ND	100	µg/L	100	5/2/2006
1,2,3-Trichloropropane	ND	200	µg/L	100	5/2/2006
Vinyl chloride	ND	100	µg/L	100	5/2/2006
Xylenes, Total	6100	300	µg/L	100	5/2/2006
Surr: 1,2-Dichloroethane-d4	94.4	69.9-130	%REC	100	5/2/2006
Surr: 4-Bromofluorobenzene	102	75-139	%REC	100	5/2/2006
Surr: Dibromofluoromethane	93.7	57.3-135	%REC	100	5/2/2006
Surr: Toluene-d8	89.3	81.9-122	%REC	100	5/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *09-May-06*

CLIENT: Giant Refining Co
Project: NMED-OCD Monthly Water Samples 4/28/06

Lab Order: 0605009

Lab ID: 0605009-03
Client Sample ID: AL-2 to EP-1

Collection Date: 4/28/2006 1:05:00 PM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	42	3.0		mg/L	1	5/4/2006 5:14:10 PM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	5/4/2006 5:14:10 PM
Surr: DNOP	132	58-140		%REC	1	5/4/2006 5:14:10 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **HLM**
Gasoline Range Organics (GRO)	1.1	0.25		mg/L	5	5/2/2006 12:58:47 PM
Surr: BFB	110	80-123		%REC	5	5/2/2006 12:58:47 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.0071	0.00020		mg/L	1	5/5/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	5/4/2006 12:21:48 PM
Barium	0.11	0.020		mg/L	1	5/4/2006 12:21:48 PM
Cadmium	ND	0.0020		mg/L	1	5/4/2006 12:21:48 PM
Chromium	0.0068	0.0060		mg/L	1	5/4/2006 12:21:48 PM
Lead	0.0080	0.0050		mg/L	1	5/4/2006 12:21:48 PM
Selenium	ND	0.050		mg/L	1	5/4/2006 12:21:48 PM
Silver	ND	0.0050		mg/L	1	5/4/2006 12:21:48 PM
EPA METHOD 8260B: VOLATILES						Analyst: **BDH**
Benzene	9.3	1.0		µg/L	1	5/2/2006
Toluene	24	1.0		µg/L	1	5/2/2006
Ethylbenzene	4.7	1.0		µg/L	1	5/2/2006
Methyl tert-butyl ether (MTBE)	ND	1.5		µg/L	1	5/2/2006
1,2,4-Trimethylbenzene	24	1.0		µg/L	1	5/2/2006
1,3,5-Trimethylbenzene	6.7	1.0		µg/L	1	5/2/2006
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/2/2006
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/2/2006
Naphthalene	7.8	2.0		µg/L	1	5/2/2006
1-Methylnaphthalene	390	40		µg/L	10	5/4/2006
2-Methylnaphthalene	180	40		µg/L	10	5/4/2006
Acetone	ND	10		µg/L	1	5/2/2006
Bromobenzene	ND	1.0		µg/L	1	5/2/2006
Bromochloromethane	ND	1.0		µg/L	1	5/2/2006
Bromodichloromethane	ND	1.0		µg/L	1	5/2/2006
Bromoform	ND	1.0		µg/L	1	5/2/2006

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

Hall Environmental Analysis Laboratory

Date: *09-May-06*

CLIENT: Giant Refining Co
Project: NMED-OCD Monthly Water Samples 4/28/06

Lab Order: 0605009

Analyst: **BDH**

EPA METHOD 8260B: VOLATILES

Bromomethane	ND	2.0	µg/L	1	5/2/2006
2-Butanone	ND	10	µg/L	1	5/2/2006
Carbon disulfide	ND	10	µg/L	1	5/2/2006
Carbon Tetrachloride	ND	2.0	µg/L	1	5/2/2006
Chlorobenzene	ND	1.0	µg/L	1	5/2/2006
Chloroethane	ND	2.0	µg/L	1	5/2/2006
Chloroform	ND	1.0	µg/L	1	5/2/2006
Chloromethane	ND	1.0	µg/L	1	5/2/2006
2-Chlorotoluene	ND	1.0	µg/L	1	5/2/2006
4-Chlorotoluene	ND	1.0	µg/L	1	5/2/2006
cis-1,2-DCE	ND	1.0	µg/L	1	5/2/2006
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	5/2/2006
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	5/2/2006
Dibromochloromethane	ND	1.0	µg/L	1	5/2/2006
Dibromomethane	ND	2.0	µg/L	1	5/2/2006
1,2-Dichlorobenzene	ND	1.0	µg/L	1	5/2/2006
1,3-Dichlorobenzene	ND	1.0	µg/L	1	5/2/2006
1,4-Dichlorobenzene	ND	1.0	µg/L	1	5/2/2006
Dichlorodifluoromethane	ND	1.0	µg/L	1	5/2/2006
1,1-Dichloroethane	ND	2.0	µg/L	1	5/2/2006
1,1-Dichloroethene	ND	1.0	µg/L	1	5/2/2006
1,2-Dichloropropane	ND	1.0	µg/L	1	5/2/2006
1,3-Dichloropropane	ND	1.0	µg/L	1	5/2/2006
2,2-Dichloropropane	ND	2.0	µg/L	1	5/2/2006
1,1-Dichloropropene	ND	1.0	µg/L	1	5/2/2006
Hexachlorobutadiene	ND	2.0	µg/L	1	5/2/2006
2-Hexanone	ND	10	µg/L	1	5/2/2006
Isopropylbenzene	ND	1.0	µg/L	1	5/2/2006
4-Isopropyltoluene	1.5	1.0	µg/L	1	5/2/2006
4-Methyl-2-pentanone	ND	10	µg/L	1	5/2/2006
Methylene Chloride	ND	3.0	µg/L	1	5/2/2006
n-Butylbenzene	ND	1.0	µg/L	1	5/2/2006
n-Propylbenzene	ND	1.0	µg/L	1	5/2/2006
sec-Butylbenzene	ND	2.0	µg/L	1	5/2/2006
Styrene	ND	1.5	µg/L	1	5/2/2006
tert-Butylbenzene	ND	1.0	µg/L	1	5/2/2006
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	5/2/2006
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1	5/2/2006
Tetrachloroethene (PCE)	ND	1.0	µg/L	1	5/2/2006
trans-1,2-DCE	ND	1.0	µg/L	1	5/2/2006
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	5/2/2006
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1	5/2/2006
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	5/2/2006
1,1,1-Trichloroethane	ND	1.0	µg/L	1	5/2/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *09-May-06*

CLIENT: Giant Refining Co
Project: NMED-OCD Monthly Water Samples 4/28/06

Lab Order: 0605009

Analyst: **BDH**

EPA METHOD 8260B: VOLATILES

1,1,2-Trichloroethane	ND	1.0	µg/L	1	5/2/2006
Trichloroethene (TCE)	ND	1.0	µg/L	1	5/2/2006
Trichlorofluoromethane	ND	1.0	µg/L	1	5/2/2006
1,2,3-Trichloropropane	ND	2.0	µg/L	1	5/2/2006
Vinyl chloride	ND	1.0	µg/L	1	5/2/2006
Xylenes, Total	40	3.0	µg/L	1	5/2/2006
Surr: 1,2-Dichloroethane-d4	94.5	69.9-130	%REC	1	5/2/2006
Surr: 4-Bromofluorobenzene	96.1	75-139	%REC	1	5/2/2006
Surr: Dibromofluoromethane	95.6	57.3-135	%REC	1	5/2/2006
Surr: Toluene-d8	84.7	81.9-122	%REC	1	5/2/2006

Qualifiers:

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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: NMED-OCD Monthly Water Samples 4/28/06

Work Order: 0605009

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
									Batch ID: 10314
Method: SW8015									Analysis Date: 5/4/2006
Sample ID: MB-10314		MBLK							
Diesel Range Organics (DRO)	ND	mg/L	1.0						
Motor Oil Range Organics (MRO)	ND	mg/L	5.0						Analysis Date: 5/4/2006
Sample ID: LCS-10314		LCS							
Diesel Range Organics (DRO)	6.106	mg/L	1.0	122	74	157			Analysis Date: 5/4/2006
Sample ID: LCSD-10314		LCSD							
Diesel Range Organics (DRO)	5.398	mg/L	1.0	108	74	157	12.3	23	
									Batch ID: R19125
Method: SW8015									Analysis Date: 5/2/2006
Sample ID: 5ML REAGENT BLA		MBLK							
Gasoline Range Organics (GRO)	ND	mg/L	0.050						Analysis Date: 5/2/2006
Sample ID: 2.5UG GRO LCS		LCS							
Gasoline Range Organics (GRO)	0.5340	mg/L	0.050	107	73.3	119			Analysis Date: 5/2/2006
Sample ID: 2.5ug gro lcsd 13		LCSD							
Gasoline Range Organics (GRO)	0.5000	mg/L	0.050	100	73.3	119	6.58	8.39	
									Batch ID: 10362
Method: SW7470									Analysis Date: 5/5/2006
Sample ID: MB-10362		MBLK							
Mercury	ND	mg/L	0.00020						Analysis Date: 5/5/2006
Sample ID: LCS-10362		LCS							
Mercury	0.005040	mg/L	0.00020	101	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

:: Giant Refining Co
roject: NMED-OCD Monthly Water Samples 4/28/06 **Work Order:** 0605009

nalyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
								Batch ID:	10315
ethod: SW6010A								Analysis Date:	5/4/2006
ample ID: MB-10315		*MBLK*							
'senic	ND	mg/L	0.020						
arium	ND	mg/L	0.020						
admium	ND	mg/L	0.0020						
hromium	ND	mg/L	0.0060						
ead	ND	mg/L	0.0050						
elenium	ND	mg/L	0.050						
ilver	ND	mg/L	0.0050						
								Analysis Date:	5/4/2006
ample ID: LCS-10315		*LCS*							
rsenic	0.4965	mg/L	0.020	99.3	80	120			
arium	0.4816	mg/L	0.020	96.3	80	120			
:admium	0.4976	mg/L	0.0020	99.5	80	120			
:hromium	0.4887	mg/L	0.0060	97.6	80	120			
.ead	0.4692	mg/L	0.0050	93.8	80	120			
;elenium	0.4775	mg/L	0.050	95.5	80	120			
;ilver	0.4972	mg/L	0.0050	99.4	80	120			
								Analysis Date:	5/4/2006
;ample ID: 0605009-03BMS		*MS*							
›- ›nic	0.5254	mg/L	0.020	101	75	125			
n	0.6030	mg/L	0.020	98.0	75	125			
Cadmium	0.4987	mg/L	0.0020	99.7	75	125			
Chromium	0.4872	mg/L	0.0060	96.1	75	125			
_ead	0.4552	mg/L	0.0050	89.4	75	125			
Selenium	0.4588	mg/L	0.050	91.8	75	125			
Silver	0.5204	mg/L	0.0050	104	75	125			
								Analysis Date:	5/4/2006
Sample ID: 0605009-03BMSD		*MSD*							
Arsenic	0.5194	mg/L	0.020	100	75	125	1.16	20	
Barium	0.6045	mg/L	0.020	98.3	75	125	0.245	20	
Cadmium	0.4914	mg/L	0.0020	98.3	75	125	1.49	20	
Chromium	0.4807	mg/L	0.0060	94.8	75	125	1.33	20	
Lead	0.4449	mg/L	0.0050	87.4	75	125	2.28	20	
Selenium	0.4430	mg/L	0.050	88.6	75	125	3.50	20	
Silver	0.5037	mg/L	0.0050	101	75	125	3.26	20	

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: NMED-OCD Monthly Water Samples 4/28/06

Work Order: 0605009

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
									Batch ID: **R19124**
Method: SW8260B									Analysis Date: 5/1/2006
Sample ID: 100ng lcs		*LCS*							
Benzene	18.22	µg/L	1.0	91.1	71	124			
Toluene	19.59	µg/L	1.0	98.0	81.5	118			
Chlorobenzene	19.42	µg/L	1.0	94.2	81.2	132			
1,1-Dichloroethene	20.79	µg/L	1.0	104	65.5	134			
Trichloroethene (TCE)	18.12	µg/L	1.0	90.6	69.5	119			
									Analysis Date: 5/4/2006
Sample ID: 100ng lcs		*LCS*							
Benzene	18.02	µg/L	1.0	90.1	71	124			
Toluene	17.66	µg/L	1.0	88.3	81.5	118			
Chlorobenzene	19.77	µg/L	1.0	98.9	81.2	132			
1,1-Dichloroethene	17.33	µg/L	1.0	86.7	65.5	134			
Trichloroethene (TCE)	17.29	µg/L	1.0	86.5	69.5	119			

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

ıll Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 5/2/2006

Work Order Number 0605009

Received by GLS

Checklist completed by Signature [signature] Date 5-2-06

Matrix

Carrier name UPS

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 - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	

Container/Temp Blank temperature? **10°** *4° C ± 2 Acceptable* If given sufficient time to cool.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: Sample 0605009-3 One of the five VOAS in the set was broken in transit. GS 5-2-06
-added 3mL HNO_3 to HEAL-1 & -3 to pH (m)

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: NMED - OCD Monthly Water Samples 4/28/06
Project #:
Project Manager: STEVE MORRIS
Sampler: [illegible]
Sample Temperature: 10°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0605009	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)
4/28/06	13:30	H_2O	Pilot TC Eff.					1			X					X			X						
"	13:15	"	NAPIS Eff.					2			X								X						
"	13:05	"	AL-2 to EP-1					3			X					X			X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
5-1-06	0800	[illegible]	[illegible] 5-2-06 @ 825
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Rush. PLEASE SEND 500mL PLASTIC HNO3 [illegible]

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, April 12, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: NMED Mntly & OCD Qtly Samp 3/30/06

Order No.: 0603345

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/31/2006 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

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

Date: *12-Apr-06*

CLIENT: Giant Refining Co
Project: NMED Mntly & OCD Qtly Samp 3/30/06
Lab Order: 0603345

CASE NARRATIVE

Analytical Comments for METHOD 8260_W, SAMPLE 0603345-01a: Dilution necessary due to sulfur dioxide

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 9:45:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	22	3.0		mg/L	1	4/4/2006 9:22:58 AM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	4/4/2006 9:22:58 AM
Surr: DNOP	96.4	58-140		%REC	1	4/4/2006 9:22:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.078	0.050		mg/L	1	4/10/2006 2:01:51 PM
Surr: BFB	114	79.7-119		%REC	1	4/10/2006 2:01:51 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	4/5/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	4/11/2006 2:50:18 PM
Barium	0.15	0.020		mg/L	1	4/11/2006 2:50:18 PM
Cadmium	0.0027	0.0020		mg/L	1	4/11/2006 2:50:18 PM
Chromium	0.023	0.0060		mg/L	1	4/11/2006 2:50:18 PM
Lead	0.0081	0.0050		mg/L	1	4/11/2006 2:50:18 PM
Selenium	ND	0.050		mg/L	1	4/11/2006 2:50:18 PM
Silver	0.0061	0.0050		mg/L	1	4/11/2006 6:03:48 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	100		µg/L	2	4/11/2006
Acenaphthylene	ND	100		µg/L	2	4/11/2006
Aniline	ND	200		µg/L	2	4/11/2006
Anthracene	ND	100		µg/L	2	4/11/2006
Azobenzene	ND	100		µg/L	2	4/11/2006
Benz(a)anthracene	ND	150		µg/L	2	4/11/2006
Benzo(a)pyrene	ND	150		µg/L	2	4/11/2006
Benzo(b)fluoranthene	ND	150		µg/L	2	4/11/2006
Benzo(g,h,i)perylene	ND	100		µg/L	2	4/11/2006
Benzo(k)fluoranthene	ND	100		µg/L	2	4/11/2006
Benzoic acid	1300	500		µg/L	2	4/11/2006
Benzyl alcohol	ND	200		µg/L	2	4/11/2006
Bis(2-chloroethoxy)methane	ND	100		µg/L	2	4/11/2006
Bis(2-chloroethyl)ether	ND	150		µg/L	2	4/11/2006
Bis(2-chloroisopropyl)ether	ND	150		µg/L	2	4/11/2006
Bis(2-ethylhexyl)phthalate	ND	150		µg/L	2	4/11/2006
4-Bromophenyl phenyl ether	ND	100		µg/L	2	4/11/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 9:45:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Butyl benzyl phthalate	ND	150		µg/L	2	4/11/2006
Carbazole	ND	100		µg/L	2	4/11/2006
4-Chloro-3-methylphenol	ND	200		µg/L	2	4/11/2006
4-Chloroaniline	ND	200		µg/L	2	4/11/2006
2-Chloronaphthalene	ND	100		µg/L	2	4/11/2006
2-Chlorophenol	ND	100		µg/L	2	4/11/2006
4-Chlorophenyl phenyl ether	ND	150		µg/L	2	4/11/2006
Chrysene	ND	150		µg/L	2	4/11/2006
Di-n-butyl phthalate	ND	100		µg/L	2	4/11/2006
Di-n-octyl phthalate	ND	150		µg/L	2	4/11/2006
Dibenz(a,h)anthracene	ND	100		µg/L	2	4/11/2006
Dibenzofuran	ND	100		µg/L	2	4/11/2006
1,2-Dichlorobenzene	ND	100		µg/L	2	4/11/2006
1,3-Dichlorobenzene	ND	100		µg/L	2	4/11/2006
1,4-Dichlorobenzene	ND	100		µg/L	2	4/11/2006
3,3'-Dichlorobenzidine	ND	150		µg/L	2	4/11/2006
Diethyl phthalate	ND	100		µg/L	2	4/11/2006
Dimethyl phthalate	ND	100		µg/L	2	4/11/2006
2,4-Dichlorophenol	ND	100		µg/L	2	4/11/2006
2,4-Dimethylphenol	ND	100		µg/L	2	4/11/2006
4,6-Dinitro-2-methylphenol	ND	500		µg/L	2	4/11/2006
2,4-Dinitrophenol	ND	500		µg/L	2	4/11/2006
2,4-Dinitrotoluene	ND	100		µg/L	2	4/11/2006
2,6-Dinitrotoluene	ND	100		µg/L	2	4/11/2006
Fluoranthene	ND	100		µg/L	2	4/11/2006
Fluorene	ND	100		µg/L	2	4/11/2006
Hexachlorobenzene	ND	100		µg/L	2	4/11/2006
Hexachlorobutadiene	ND	100		µg/L	2	4/11/2006
Hexachlorocyclopentadiene	ND	100		µg/L	2	4/11/2006
Hexachloroethane	ND	100		µg/L	2	4/11/2006
Indeno(1,2,3-cd)pyrene	ND	100		µg/L	2	4/11/2006
Isophorone	ND	100		µg/L	2	4/11/2006
2-Methylnaphthalene	ND	100		µg/L	2	4/11/2006
2-Methylphenol	ND	150		µg/L	2	4/11/2006
3+4-Methylphenol	370	200		µg/L	2	4/11/2006
N-Nitrosodi-n-propylamine	ND	100		µg/L	2	4/11/2006
N-Nitrosodimethylamine	ND	100		µg/L	2	4/11/2006
N-Nitrosodiphenylamine	ND	100		µg/L	2	4/11/2006
Naphthalene	ND	100		µg/L	2	4/11/2006
2-Nitroaniline	ND	500		µg/L	2	4/11/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 9:45:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
3-Nitroaniline	ND	500		µg/L	2	4/11/2006
4-Nitroaniline	ND	200		µg/L	2	4/11/2006
Nitrobenzene	ND	100		µg/L	2	4/11/2006
2-Nitrophenol	ND	150		µg/L	2	4/11/2006
4-Nitrophenol	ND	500		µg/L	2	4/11/2006
Pentachlorophenol	ND	500		µg/L	2	4/11/2006
Phenanthrene	ND	100		µg/L	2	4/11/2006
Phenol	ND	100		µg/L	2	4/11/2006
Pyrene	ND	150		µg/L	2	4/11/2006
Pyridine	ND	300		µg/L	2	4/11/2006
1,2,4-Trichlorobenzene	ND	100		µg/L	2	4/11/2006
2,4,5-Trichlorophenol	ND	100		µg/L	2	4/11/2006
2,4,6-Trichlorophenol	ND	150		µg/L	2	4/11/2006
Surr: 2,4,6-Tribromophenol	96.5	16.6-150		%REC	2	4/11/2006
Surr: 2-Fluorobiphenyl	67.8	19.6-134		%REC	2	4/11/2006
Surr: 2-Fluorophenol	59.3	9.54-113		%REC	2	4/11/2006
Surr: 4-Terphenyl-d14	61.8	22.7-145		%REC	2	4/11/2006
Surr: Nitrobenzene-d5	65.3	14.6-134		%REC	2	4/11/2006
Surr: Phenol-d5	47.0	10.7-80.3		%REC	2	4/11/2006
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
Benzene	ND	10		µg/L	10	4/4/2006
Toluene	10	10		µg/L	10	4/4/2006
Ethylbenzene	ND	10		µg/L	10	4/4/2006
Methyl tert-butyl ether (MTBE)	ND	15		µg/L	10	4/4/2006
1,2,4-Trimethylbenzene	ND	10		µg/L	10	4/4/2006
1,3,5-Trimethylbenzene	ND	10		µg/L	10	4/4/2006
1,2-Dichloroethane (EDC)	ND	10		µg/L	10	4/4/2006
1,2-Dibromoethane (EDB)	ND	10		µg/L	10	4/4/2006
Naphthalene	ND	20		µg/L	10	4/4/2006
1-Methylnaphthalene	ND	40		µg/L	10	4/4/2006
2-Methylnaphthalene	ND	40		µg/L	10	4/4/2006
Acetone	ND	100		µg/L	10	4/4/2006
Bromobenzene	ND	10		µg/L	10	4/4/2006
Bromochloromethane	ND	10		µg/L	10	4/4/2006
Bromodichloromethane	ND	10		µg/L	10	4/4/2006
Bromoform	ND	10		µg/L	10	4/4/2006
Bromomethane	ND	20		µg/L	10	4/4/2006
2-Butanone	ND	100		µg/L	10	4/4/2006
Carbon disulfide	ND	100		µg/L	10	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 9:45:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
Carbon Tetrachloride	ND	20		µg/L	10	4/4/2006
Chlorobenzene	ND	10		µg/L	10	4/4/2006
Chloroethane	ND	20		µg/L	10	4/4/2006
Chloroform	20	10		µg/L	10	4/4/2006
Chloromethane	ND	10		µg/L	10	4/4/2006
2-Chlorotoluene	ND	10		µg/L	10	4/4/2006
4-Chlorotoluene	ND	10		µg/L	10	4/4/2006
cis-1,2-DCE	ND	10		µg/L	10	4/4/2006
cis-1,3-Dichloropropene	ND	10		µg/L	10	4/4/2006
1,2-Dibromo-3-chloropropane	ND	20		µg/L	10	4/4/2006
Dibromochloromethane	ND	10		µg/L	10	4/4/2006
Dibromomethane	ND	20		µg/L	10	4/4/2006
1,2-Dichlorobenzene	ND	10		µg/L	10	4/4/2006
1,3-Dichlorobenzene	ND	10		µg/L	10	4/4/2006
1,4-Dichlorobenzene	ND	10		µg/L	10	4/4/2006
Dichlorodifluoromethane	ND	10		µg/L	10	4/4/2006
1,1-Dichloroethane	ND	20		µg/L	10	4/4/2006
1,1-Dichloroethene	ND	10		µg/L	10	4/4/2006
1,2-Dichloropropane	ND	10		µg/L	10	4/4/2006
1,3-Dichloropropane	ND	10		µg/L	10	4/4/2006
2,2-Dichloropropane	ND	20		µg/L	10	4/4/2006
1,1-Dichloropropene	ND	10		µg/L	10	4/4/2006
Hexachlorobutadiene	ND	20		µg/L	10	4/4/2006
2-Hexanone	ND	100		µg/L	10	4/4/2006
Isopropylbenzene	ND	10		µg/L	10	4/4/2006
4-Isopropyltoluene	ND	10		µg/L	10	4/4/2006
4-Methyl-2-pentanone	ND	100		µg/L	10	4/4/2006
Methylene Chloride	ND	30		µg/L	10	4/4/2006
n-Butylbenzene	ND	10		µg/L	10	4/4/2006
n-Propylbenzene	ND	10		µg/L	10	4/4/2006
sec-Butylbenzene	ND	20		µg/L	10	4/4/2006
Styrene	ND	15		µg/L	10	4/4/2006
tert-Butylbenzene	ND	10		µg/L	10	4/4/2006
1,1,1,2-Tetrachloroethane	ND	10		µg/L	10	4/4/2006
1,1,2,2-Tetrachloroethane	ND	10		µg/L	10	4/4/2006
Tetrachloroethene (PCE)	ND	10		µg/L	10	4/4/2006
trans-1,2-DCE	ND	10		µg/L	10	4/4/2006
trans-1,3-Dichloropropene	ND	10		µg/L	10	4/4/2006
1,2,3-Trichlorobenzene	ND	10		µg/L	10	4/4/2006
1,2,4-Trichlorobenzene	ND	10		µg/L	10	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pilot Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 9:45:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
1,1,1-Trichloroethane	ND	10		µg/L	10	4/4/2006
1,1,2-Trichloroethane	ND	10		µg/L	10	4/4/2006
Trichloroethene (TCE)	ND	10		µg/L	10	4/4/2006
Trichlorofluoromethane	ND	10		µg/L	10	4/4/2006
1,2,3-Trichloropropane	ND	20		µg/L	10	4/4/2006
Vinyl chloride	ND	10		µg/L	10	4/4/2006
Xylenes, Total	ND	30		µg/L	10	4/4/2006
Surr: 1,2-Dichloroethane-d4	101	69.9-130		%REC	10	4/4/2006
Surr: 4-Bromofluorobenzene	90.4	71.2-123		%REC	10	4/4/2006
Surr: Dibromofluoromethane	108	57.3-135		%REC	10	4/4/2006
Surr: Toluene-d8	98.6	81.9-122		%REC	10	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 10:10:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	520	30		mg/L	10	4/4/2006 11:45:13 AM
Motor Oil Range Organics (MRO)	ND	150		mg/L	10	4/4/2006 11:45:13 AM
Surr: DNOP	118	58-140		%REC	10	4/4/2006 11:45:13 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	64	12		mg/L	250	4/7/2006 1:41:57 PM
Surr: BFB	103	79.7-118		%REC	250	4/7/2006 1:41:57 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
Benzene	8600	250		µg/L	250	4/4/2006
Toluene	12000	250		µg/L	250	4/4/2006
Ethylbenzene	790	250		µg/L	250	4/4/2006
Methyl tert-butyl ether (MTBE)	1500	380		µg/L	250	4/4/2006
1,2,4-Trimethylbenzene	1000	250		µg/L	250	4/4/2006
1,3,5-Trimethylbenzene	ND	250		µg/L	250	4/4/2006
1,2-Dichloroethane (EDC)	ND	250		µg/L	250	4/4/2006
1,2-Dibromoethane (EDB)	ND	250		µg/L	250	4/4/2006
Naphthalene	1100	500		µg/L	250	4/4/2006
1-Methylnaphthalene	ND	1000		µg/L	250	4/4/2006
2-Methylnaphthalene	1200	1000		µg/L	250	4/4/2006
Acetone	42000	2500		µg/L	250	4/4/2006
Bromobenzene	ND	250		µg/L	250	4/4/2006
Bromochloromethane	ND	250		µg/L	250	4/4/2006
Bromodichloromethane	ND	250		µg/L	250	4/4/2006
Bromoform	ND	250		µg/L	250	4/4/2006
Bromomethane	ND	500		µg/L	250	4/4/2006
2-Butanone	15000	2500		µg/L	250	4/4/2006
Carbon disulfide	ND	2500		µg/L	250	4/4/2006
Carbon Tetrachloride	ND	500		µg/L	250	4/4/2006
Chlorobenzene	ND	250		µg/L	250	4/4/2006
Chloroethane	ND	500		µg/L	250	4/4/2006
Chloroform	ND	250		µg/L	250	4/4/2006
Chloromethane	ND	250		µg/L	250	4/4/2006
2-Chlorotoluene	ND	250		µg/L	250	4/4/2006
4-Chlorotoluene	ND	250		µg/L	250	4/4/2006
cis-1,2-DCE	ND	250		µg/L	250	4/4/2006
cis-1,3-Dichloropropene	ND	250		µg/L	250	4/4/2006
1,2-Dibromo-3-chloropropane	ND	500		µg/L	250	4/4/2006
Dibromochloromethane	ND	250		µg/L	250	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NAPIS Eff
Lab Order:	0603345	**Collection Date:**	3/30/2006 10:10:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
Dibromomethane	ND	500		µg/L	250	4/4/2006
1,2-Dichlorobenzene	ND	250		µg/L	250	4/4/2006
1,3-Dichlorobenzene	ND	250		µg/L	250	4/4/2006
1,4-Dichlorobenzene	ND	250		µg/L	250	4/4/2006
Dichlorodifluoromethane	ND	250		µg/L	250	4/4/2006
1,1-Dichloroethane	ND	500		µg/L	250	4/4/2006
1,1-Dichloroethene	ND	250		µg/L	250	4/4/2006
1,2-Dichloropropane	ND	250		µg/L	250	4/4/2006
1,3-Dichloropropane	ND	250		µg/L	250	4/4/2006
2,2-Dichloropropane	ND	500		µg/L	250	4/4/2006
1,1-Dichloropropene	ND	250		µg/L	250	4/4/2006
Hexachlorobutadiene	ND	500		µg/L	250	4/4/2006
2-Hexanone	ND	2500		µg/L	250	4/4/2006
Isopropylbenzene	ND	250		µg/L	250	4/4/2006
4-Isopropyltoluene	ND	250		µg/L	250	4/4/2006
4-Methyl-2-pentanone	ND	2500		µg/L	250	4/4/2006
Methylene Chloride	ND	750		µg/L	250	4/4/2006
n-Butylbenzene	ND	250		µg/L	250	4/4/2006
n-Propylbenzene	ND	250		µg/L	250	4/4/2006
sec-Butylbenzene	ND	500		µg/L	250	4/4/2006
Styrene	ND	380		µg/L	250	4/4/2006
tert-Butylbenzene	ND	250		µg/L	250	4/4/2006
1,1,1,2-Tetrachloroethane	ND	250		µg/L	250	4/4/2006
1,1,2,2-Tetrachloroethane	ND	250		µg/L	250	4/4/2006
Tetrachloroethene (PCE)	ND	250		µg/L	250	4/4/2006
trans-1,2-DCE	ND	250		µg/L	250	4/4/2006
trans-1,3-Dichloropropene	ND	250		µg/L	250	4/4/2006
1,2,3-Trichlorobenzene	ND	250		µg/L	250	4/4/2006
1,2,4-Trichlorobenzene	ND	250		µg/L	250	4/4/2006
1,1,1-Trichloroethane	ND	250		µg/L	250	4/4/2006
1,1,2-Trichloroethane	ND	250		µg/L	250	4/4/2006
Trichloroethene (TCE)	ND	250		µg/L	250	4/4/2006
Trichlorofluoromethane	ND	250		µg/L	250	4/4/2006
1,2,3-Trichloropropane	ND	500		µg/L	250	4/4/2006
Vinyl chloride	ND	250		µg/L	250	4/4/2006
Xylenes, Total	4700	750		µg/L	250	4/4/2006
Surr: 1,2-Dichloroethane-d4	107	69.9-130		%REC	250	4/4/2006
Surr: 4-Bromofluorobenzene	90.6	71.2-123		%REC	250	4/4/2006
Surr: Dibromofluoromethane	92.4	57.3-135		%REC	250	4/4/2006
Surr: Toluene-d8	102	81.9-122		%REC	250	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0603345	**Collection Date:**	3/30/2006 10:30:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	64	3.0		mg/L	1	4/4/2006 10:08:17 AM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	4/4/2006 10:08:17 AM
Surr: DNOP	90.2	58-140		%REC	1	4/4/2006 10:08:17 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	3.5	2.5		mg/L	50	4/7/2006 2:40:33 PM
Surr: BFB	109	79.7-118		%REC	50	4/7/2006 2:40:33 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.0017	0.00020		mg/L	1	4/5/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	4/11/2006 2:53:13 PM
Barium	0.22	0.020		mg/L	1	4/11/2006 2:53:13 PM
Cadmium	ND	0.0020		mg/L	1	4/11/2006 2:53:13 PM
Chromium	0.010	0.0060		mg/L	1	4/11/2006 2:53:13 PM
Lead	0.011	0.0050		mg/L	1	4/11/2006 2:53:13 PM
Selenium	ND	0.050		mg/L	1	4/11/2006 2:53:13 PM
Silver	ND	0.0050		mg/L	1	4/11/2006 6:06:18 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
Benzene	210	50		µg/L	50	4/4/2006
Toluene	440	50		µg/L	50	4/4/2006
Ethylbenzene	60	50		µg/L	50	4/4/2006
Methyl tert-butyl ether (MTBE)	ND	75		µg/L	50	4/4/2006
1,2,4-Trimethylbenzene	170	50		µg/L	50	4/4/2006
1,3,5-Trimethylbenzene	ND	50		µg/L	50	4/4/2006
1,2-Dichloroethane (EDC)	ND	50		µg/L	50	4/4/2006
1,2-Dibromoethane (EDB)	ND	50		µg/L	50	4/4/2006
Naphthalene	200	100		µg/L	50	4/4/2006
1-Methylnaphthalene	410	200		µg/L	50	4/4/2006
2-Methylnaphthalene	620	200		µg/L	50	4/4/2006
Acetone	2500	500		µg/L	50	4/4/2006
Bromobenzene	ND	50		µg/L	50	4/4/2006
Bromochloromethane	ND	50		µg/L	50	4/4/2006
Bromodichloromethane	ND	50		µg/L	50	4/4/2006
Bromoform	ND	50		µg/L	50	4/4/2006
Bromomethane	ND	100		µg/L	50	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0603345	**Collection Date:**	3/30/2006 10:30:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
2-Butanone	820	500		µg/L	50	4/4/2006
Carbon disulfide	ND	500		µg/L	50	4/4/2006
Carbon Tetrachloride	ND	100		µg/L	50	4/4/2006
Chlorobenzene	ND	50		µg/L	50	4/4/2006
Chloroethane	ND	100		µg/L	50	4/4/2006
Chloroform	ND	50		µg/L	50	4/4/2006
Chloromethane	ND	50		µg/L	50	4/4/2006
2-Chlorotoluene	ND	50		µg/L	50	4/4/2006
4-Chlorotoluene	ND	50		µg/L	50	4/4/2006
cis-1,2-DCE	ND	50		µg/L	50	4/4/2006
cis-1,3-Dichloropropene	ND	50		µg/L	50	4/4/2006
1,2-Dibromo-3-chloropropane	ND	100		µg/L	50	4/4/2006
Dibromochloromethane	ND	50		µg/L	50	4/4/2006
Dibromomethane	ND	100		µg/L	50	4/4/2006
1,2-Dichlorobenzene	ND	50		µg/L	50	4/4/2006
1,3-Dichlorobenzene	ND	50		µg/L	50	4/4/2006
1,4-Dichlorobenzene	ND	50		µg/L	50	4/4/2006
Dichlorodifluoromethane	ND	50		µg/L	50	4/4/2006
1,1-Dichloroethane	ND	100		µg/L	50	4/4/2006
1,1-Dichloroethene	ND	50		µg/L	50	4/4/2006
1,2-Dichloropropane	ND	50		µg/L	50	4/4/2006
1,3-Dichloropropane	ND	50		µg/L	50	4/4/2006
2,2-Dichloropropane	ND	100		µg/L	50	4/4/2006
1,1-Dichloropropene	ND	50		µg/L	50	4/4/2006
Hexachlorobutadiene	ND	100		µg/L	50	4/4/2006
2-Hexanone	ND	500		µg/L	50	4/4/2006
Isopropylbenzene	ND	50		µg/L	50	4/4/2006
4-Isopropyltoluene	ND	50		µg/L	50	4/4/2006
4-Methyl-2-pentanone	ND	500		µg/L	50	4/4/2006
Methylene Chloride	ND	150		µg/L	50	4/4/2006
n-Butylbenzene	ND	50		µg/L	50	4/4/2006
n-Propylbenzene	ND	50		µg/L	50	4/4/2006
sec-Butylbenzene	ND	100		µg/L	50	4/4/2006
Styrene	ND	75		µg/L	50	4/4/2006
tert-Butylbenzene	ND	50		µg/L	50	4/4/2006
1,1,1,2-Tetrachloroethane	ND	50		µg/L	50	4/4/2006
1,1,2,2-Tetrachloroethane	ND	50		µg/L	50	4/4/2006
Tetrachloroethene (PCE)	ND	50		µg/L	50	4/4/2006
trans-1,2-DCE	ND	50		µg/L	50	4/4/2006
trans-1,3-Dichloropropene	ND	50		µg/L	50	4/4/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0603345	**Collection Date:**	3/30/2006 10:30:00 AM
Project:	NMED Mntly & OCD Qtly Samp 3/30/06	**Date Received:**	3/31/2006
Lab ID:	0603345-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HLM**
1,2,3-Trichlorobenzene	ND	50		µg/L	50	4/4/2006
1,2,4-Trichlorobenzene	ND	50		µg/L	50	4/4/2006
1,1,1-Trichloroethane	ND	50		µg/L	50	4/4/2006
1,1,2-Trichloroethane	ND	50		µg/L	50	4/4/2006
Trichloroethene (TCE)	ND	50		µg/L	50	4/4/2006
Trichlorofluoromethane	ND	50		µg/L	50	4/4/2006
1,2,3-Trichloropropane	ND	100		µg/L	50	4/4/2006
Vinyl chloride	ND	50		µg/L	50	4/4/2006
Xylenes, Total	430	150		µg/L	50	4/4/2006
Surr: 1,2-Dichloroethane-d4	94.5	69.9-130		%REC	50	4/4/2006
Surr: 4-Bromofluorobenzene	84.4	71.2-123		%REC	50	4/4/2006
Surr: Dibromofluoromethane	105	57.3-135		%REC	50	4/4/2006
Surr: Toluene-d8	96.4	81.9-122		%REC	50	4/4/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the 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: **0603345**
Order: **0603760** **HAL03** Receipt: **03-31-06**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0603345-01D/PILOT EFF*** Collected: *03-30-06 9:45:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0603760-0001A		**EPA 405.1 Biochemical Oxygen Demand**						By: NJL		
BOD06041	WC.2006.856.15	10-26-4	Biochemical Oxygen Demand	886	mg/L	1	2		03-31-06	04-05-06

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

Date: *12-Apr-06*

CLIENT: Giant Refining Co
Work Order: 0603345
Project: NMED Mntly & OCD Qtly Samp 3/30/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **MB-10106** SampType: **MBLK** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **4/3/2006** RunNo: **18797**
Client ID: **ZZZZZ** Batch ID: **10106** TestNo: **SW8015** Analysis Date: **4/3/2006** SeqNo: **466527**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCS-10106** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **4/3/2006** RunNo: **18797**
Client ID: **ZZZZZ** Batch ID: **10106** TestNo: **SW8015** Analysis Date: **4/3/2006** SeqNo: **466528**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	6.125	1.0	5	0	123	81.2	149				

Sample ID: **LCSD-10106** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **4/3/2006** RunNo: **18797**
Client ID: **ZZZZZ** Batch ID: **10106** TestNo: **SW8015** Analysis Date: **4/3/2006** SeqNo: **466578**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.983	1.0	5	0	120	81.2	149	6.125	2.36	23	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0603345
Project: NMED Mntly & OCD Qtly Samp 3/30/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **5ML REAGENT BLA** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18874**
Client ID: **ZZZZZ** Batch ID: **R18874** TestNo: **SW8015** Analysis Date: **4/7/2006** SeqNo: **468349**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **5ML REAGENT BLA** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18885**
Client ID: **ZZZZZ** Batch ID: **R18885** TestNo: **SW8015** Analysis Date: **4/10/2006** SeqNo: **468621**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18874**
Client ID: **ZZZZZ** Batch ID: **R18874** TestNo: **SW8015** Analysis Date: **4/7/2006** SeqNo: **468350**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.5440	0.050	0.5	0	109	82.6	114				

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18885**
Client ID: **ZZZZZ** Batch ID: **R18885** TestNo: **SW8015** Analysis Date: **4/10/2006** SeqNo: **468622**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.5300	0.050	0.5	0	106	82.6	114				

Sample ID: **2.5UG GRO LCSD** SampType: **LCSD** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18885**
Client ID: **ZZZZZ** Batch ID: **R18885** TestNo: **SW8015** Analysis Date: **4/10/2006** SeqNo: **468623**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.5200	0.050	0.5	0	104	82.6	114	0.53	1.90	8.39	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0603345
Project: NMED Mntly & OCD Qtly Samp 3/30/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_W

Sample ID: **MB-10111** SampType: **MBLK** TestCode: **8270_W** Units: **µg/L** Prep Date: **4/3/2006** RunNo: **18907**
Client ID: **ZZZZZ** Batch ID: **10111** TestNo: **SW8270C** **(SW3510)** Analysis Date: **4/12/2006** SeqNo: **469635**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	ND	10									
Acenaphthylene	ND	10									
Aniline	ND	20									
Anthracene	ND	10									
Azobenzene	ND	10									
Benz(a)anthracene	ND	15									
Benzo(a)pyrene	ND	15									
Benzo(b)fluoranthene	ND	15									
Benzo(g,h,i)perylene	ND	10									
Benzo(k)fluoranthene	ND	10									
Benzoic acid	ND	50									
Benzyl alcohol	ND	20									
Bis(2-chloroethoxy)methane	ND	10									
Bis(2-chloroethyl)ether	ND	15									
Bis(2-chloroisopropyl)ether	ND	15									
Bis(2-ethylhexyl)phthalate	ND	15									
4-Bromophenyl phenyl ether	ND	10									
Butyl benzyl phthalate	ND	15									
Carbazole	ND	10									
4-Chloro-3-methylphenol	ND	20									
4-Chloroaniline	ND	20									
2-Chloronaphthalene	ND	10									
2-Chlorophenol	ND	10									
4-Chlorophenyl phenyl ether	ND	15									
Chrysene	ND	15									
Di-n-butyl phthalate	ND	10									
Di-n-octyl phthalate	ND	15									
Dibenz(a,h)anthracene	ND	10									
Dibenzofuran	ND	10									
1,2-Dichlorobenzene	ND	10									
1,3-Dichlorobenzene	ND	10									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0603345
Project: NMED Mntly & OCD Qtly Samp 3/30/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_W

Sample ID: **MB-10111**	SampType: **MBLK**	TestCode: **8270_W**	Units: **µg/L**	Prep Date: **4/3/2006**	RunNo: **18907**
Client ID: **ZZZZZ**	Batch ID: **10111**	TestNo: **SW8270C**	**(SW3510)**	Analysis Date: **4/12/2006**	SeqNo: **469635**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,4-Dichlorobenzene	ND	10									
3,3'-Dichlorobenzidine	ND	15									
Diethyl phthalate	ND	10									
Dimethyl phthalate	ND	10									
2,4-Dichlorophenol	ND	10									
2,4-Dimethylphenol	ND	10									
4,6-Dinitro-2-methylphenol	ND	50									
2,4-Dinitrophenol	ND	50									
2,4-Dinitrotoluene	ND	10									
2,6-Dinitrotoluene	ND	10									
Fluoranthene	ND	10									
Fluorene	ND	10									
Hexachlorobenzene	ND	10									
Hexachlorobutadiene	ND	10									
Hexachlorocyclopentadiene	ND	10									
Hexachloroethane	ND	10									
Indeno(1,2,3-cd)pyrene	ND	10									
Isophorone	ND	10									
2-Methylnaphthalene	ND	10									
2-Methylphenol	ND	15									
3+4-Methylphenol	ND	20									
N-Nitrosodi-n-propylamine	ND	10									
N-Nitrosodimethylamine	ND	10									
N-Nitrosodiphenylamine	ND	10									
Naphthalene	ND	10									
2-Nitroaniline	ND	50									
3-Nitroaniline	ND	50									
4-Nitroaniline	ND	20									
Nitrobenzene	ND	10									
2-Nitrophenol	ND	15									
4-Nitrophenol	ND	50									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0603345
Project: NMED Mntly & OCD Qtly Samp 3/30/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8270_W

Sample ID: **MB-10111** SampType: **MBLK** TestCode: **8270_W** Units: **µg/L** Prep Date: **4/3/2006** RunNo: **18907**
Client ID: **ZZZZZ** Batch ID: **10111** TestNo: **SW8270C** **(SW3510)** Analysis Date: **4/12/2006** SeqNo: **469635**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Pentachlorophenol	ND	50									
Phenanthrene	ND	10									
Phenol	ND	10									
Pyrene	ND	15									
Pyridine	ND	30									
1,2,4-Trichlorobenzene	ND	10									
2,4,5-Trichlorophenol	ND	10									
2,4,6-Trichlorophenol	ND	15									

Sample ID: **LCS-10111** SampType: **LCS** TestCode: **8270_W** Units: **µg/L** Prep Date: **4/3/2006** RunNo: **18903**
Client ID: **ZZZZZ** Batch ID: **10111** TestNo: **SW8270C** **(SW3510)** Analysis Date: **4/11/2006** SeqNo: **469567**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	64.06	10	100	0	64.1	11	123				
4-Chloro-3-methylphenol	120.3	20	200	0	60.2	15.4	119				
2-Chlorophenol	104.8	10	200	0	52.4	12.2	122				
1,4-Dichlorobenzene	46.16	10	100	0	46.2	16.9	100				
2,4-Dinitrotoluene	71.60	10	100	0	71.6	13	138				
N-Nitrosodi-n-propylamine	58.62	10	100	0	58.6	9.93	122				
4-Nitrophenol	89.78	50	200	0	44.9	-20.5	87.4				
Pentachlorophenol	147.3	50	200	0	73.6	-0.355	114				
Phenol	61.38	10	200	0	30.7	7.53	73.1				
Pyrene	65.36	15	100	0	65.4	12.6	140				
1,2,4-Trichlorobenzene	52.00	10	100	0	52.0	17.4	98.7				

Sample ID: **LCSD-10111** SampType: **LCSD** TestCode: **8270_W** Units: **µg/L** Prep Date: **4/3/2006** RunNo: **18903**
Client ID: **ZZZZZ** Batch ID: **10111** TestNo: **SW8270C** **(SW3510)** Analysis Date: **4/11/2006** SeqNo: **469570**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	65.06	10	100	0	65.1	11	123	64.06	1.55	30.5	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0603345
Project: NMED Mntly & OCD Qtly Samp 3/30/06

TestCode: 8270_W

Sample ID: **LCSD-10111** SampType: **LCSD** TestCode: **8270_W** Units: **µg/L** Prep Date: **4/3/2006** RunNo: **18903**
Client ID: **ZZZZZ** Batch ID: **10111** TestNo: **SW8270C** **(SW3510)** Analysis Date: **4/11/2006** SeqNo: **469570**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chloro-3-methylphenol	123.3	20	200	0	61.6	15.4	119	120.3	2.45	28.6	
2-Chlorophenol	116.4	10	200	0	58.2	12.2	122	104.8	10.5	107	
1,4-Dichlorobenzene	54.84	10	100	0	54.8	16.9	100	46.16	17.2	62.1	
2,4-Dinitrotoluene	70.20	10	100	0	70.2	13	138	71.6	1.97	14.7	
N-Nitrosodi-n-propylamine	64.04	10	100	0	64.0	9.93	122	58.62	8.84	30.3	
4-Nitrophenol	92.74	50	200	0	46.4	12.5	87.4	89.78	3.24	36.3	
Pentachlorophenol	143.8	50	200	0	71.9	3.55	114	147.3	2.35	49	
Phenol	66.90	10	200	0	33.4	7.53	73.1	61.38	8.61	52.4	
Pyrene	64.96	15	100	0	65.0	12.6	140	65.36	0.614	16.3	
1,2,4-Trichlorobenzene	51.70	10	100	0	51.7	17.4	98.7	52	0.579	36.4	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

CLIENT: Giant Refining Co
Work Order: 0603345
Project: NMED Mntly & OCD Qtly Samp 3/30/06

TestCode: HG_CTW

Sample ID: MB-10119	SampType: MBLK	TestCode: HG_CTW	Units: mg/L	Prep Date: 4/4/2006	RunNo: 18829
Client ID: ZZZZZ	Batch ID: 10119	TestNo: SW7470	(SW7470)	Analysis Date: 4/5/2006	SeqNo: 467172

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: LCS-10119	SampType: LCS	TestCode: HG_CTW	Units: mg/L	Prep Date: 4/4/2006	RunNo: 18829
Client ID: ZZZZZ	Batch ID: 10119	TestNo: SW7470	(SW7470)	Analysis Date: 4/5/2006	SeqNo: 467173

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004770	0.00020	0.005	0	95.4	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

CLIENT: Giant Refining Co
Work Order: 0603345
Project: NMED Mntly & OCD Qtly Samp 3/30/06

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **MB-10143** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **4/8/2006** RunNo: **18898**
Client ID: **ZZZZZ** Batch ID: **10143** TestNo: **SW6010A** Analysis Date: **4/11/2006** SeqNo: **468949**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	ND	0.0050									

Sample ID: **LCS-10143** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **4/8/2006** RunNo: **18898**
Client ID: **ZZZZZ** Batch ID: **10143** TestNo: **SW6010A** Analysis Date: **4/11/2006** SeqNo: **468950**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.4908	0.0050	0.5	0	98.2	80	120				

Sample ID: **LCS-10143** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **4/8/2006** RunNo: **18898**
Client ID: **ZZZZZ** Batch ID: **10143** TestNo: **SW6010A** Analysis Date: **4/11/2006** SeqNo: **468965**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5072	0.020	0.5	0	101	80	120				
Barium	0.4720	0.020	0.5	0	94.4	80	120				
Cadmium	0.4770	0.0020	0.5	0	95.4	80	120				
Chromium	0.4800	0.0060	0.5	0	96.0	80	120				
Lead	0.4760	0.0050	0.5	0	95.2	80	120				
Selenium	0.4500	0.050	0.5	0	90.0	80	120				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Date: *12-Apr-06*

CLIENT: Giant Refining Co
Work Order: 0603345
Project: NMED Mntly & OCD Qtly Samp 3/30/06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8260_W

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **8260_W** Units: **µg/L** Prep Date: RunNo: **18824**
Client ID: **ZZZZZ** Batch ID: **R18824** TestNo: **SW8260B** Analysis Date: **4/4/2006** SeqNo: **467040**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	20.05	1.0	20	0	100	79.2	130				
Toluene	19.07	1.0	20	0	95.3	81.5	118				
Chlorobenzene	20.94	1.0	20	0	105	81.2	132				
1,1-Dichloroethene	18.70	1.0	20	0	93.5	65.5	134				
Trichloroethene (TCE)	20.53	1.0	20	0	103	67	131				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

''all Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/31/2006

Work Order Number 0603345

Received by AT

Checklist completed by _____ Signature _____ Date 3/31/06

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 - 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

HALL ENVIRONMENTAL ANALYSIS LABORATORY
4901 Hawkins NE, Suite D
Albuquerque, New Mexico 87109
Tel. 505.345.3975 Fax 505.345.4107
www.hallenvironmental.com

QA / QC Package:
Std ☐ Level 4 ☐
Other:

Client: Giant Refining Company - Ciniza
Address: Route 3 Box 7
Gallup, NM 87301

Phone #: 505 7223833
Fax #: 505 7220210

Project Name: NMED Monthly and OCD Quarterly Water Samples 3-30-2006
~~Project #~~:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 2°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative HgCl2	Preservative HNO3		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)	BOD				Air Bubbles or Headspace (Y or N)
3/30/06	0945	H_2O	Pilot Eff.					0603345-1			X					X			X	X	X				
"	1010	"	NAPIS Eff.					-2			X								X						
"	1039	"	AL-2 to EP-1					-3			X					X			X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
3/31/06	0905	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 3/31/06

Remarks: Rush
OAPIS Had no flow.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Tuesday, July 18, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Pilot Travel Center 2nd Quarter 2006

Order No.: 0606101

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 6/9/2006 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

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: *18-Jul-06*

CLIENT: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006

Lab Order: 0606101

Lab ID: 0606101-01
Client Sample ID: Pilot TC-2 QTR.

Collection Date: 6/8/2006 8:45:00 AM
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	ND	0.00020		mg/L	1	6/20/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	6/21/2006 2:42:32 PM
Barium	ND	0.020		mg/L	1	6/21/2006 2:42:32 PM
Cadmium	ND	0.0020		mg/L	1	6/21/2006 2:42:32 PM
Chromium	ND	0.0060		mg/L	1	6/21/2006 2:42:32 PM
Lead	ND	0.0050		mg/L	1	6/21/2006 2:42:32 PM
Selenium	ND	0.050		mg/L	1	6/21/2006 2:42:32 PM
Silver	ND	0.0050		mg/L	1	6/21/2006 2:42:32 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: **BL**
Acenaphthene	ND	100		µg/L	5	7/14/2006
Acenaphthylene	ND	100		µg/L	5	7/14/2006
Aniline	ND	200		µg/L	5	7/14/2006
Anthracene	ND	100		µg/L	5	7/14/2006
Azobenzene	ND	100		µg/L	5	7/14/2006
Benz(a)anthracene	ND	150		µg/L	5	7/14/2006
Benzo(a)pyrene	ND	150		µg/L	5	7/14/2006
Benzo(b)fluoranthene	ND	150		µg/L	5	7/14/2006
Benzo(g,h,i)perylene	ND	100		µg/L	5	7/14/2006
Benzo(k)fluoranthene	ND	100		µg/L	5	7/14/2006
Benzoic acid	770	500		µg/L	5	7/14/2006
Benzyl alcohol	ND	200		µg/L	5	7/14/2006
Bis(2-chloroethoxy)methane	ND	100		µg/L	5	7/14/2006
Bis(2-chloroethyl)ether	ND	150		µg/L	5	7/14/2006
Bis(2-chloroisopropyl)ether	ND	150		µg/L	5	7/14/2006
Bis(2-ethylhexyl)phthalate	ND	150		µg/L	5	7/14/2006
4-Bromophenyl phenyl ether	ND	100		µg/L	5	7/14/2006
Butyl benzyl phthalate	ND	150		µg/L	5	7/14/2006
Carbazole	ND	100		µg/L	5	7/14/2006
4-Chloro-3-methylphenol	ND	200		µg/L	5	7/14/2006
4-Chloroaniline	ND	200		µg/L	5	7/14/2006
2-Chloronaphthalene	ND	100		µg/L	5	7/14/2006
2-Chlorophenol	ND	100		µg/L	5	7/14/2006
4-Chlorophenyl phenyl ether	ND	150		µg/L	5	7/14/2006
Chrysene	ND	150		µg/L	5	7/14/2006
Di-n-butyl phthalate	ND	100		µg/L	5	7/14/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *18-Jul-06*

CLIENT: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006

Lab Order: 0606101

EPA METHOD 8270C: SEMIVOLATILES

Analyst: **BL**

Di-n-octyl phthalate	ND	150	µg/L	5	7/14/2006
Dibenz(a,h)anthracene	ND	100	µg/L	5	7/14/2006
Dibenzofuran	ND	100	µg/L	5	7/14/2006
1,2-Dichlorobenzene	ND	100	µg/L	5	7/14/2006
1,3-Dichlorobenzene	ND	100	µg/L	5	7/14/2006
1,4-Dichlorobenzene	ND	100	µg/L	5	7/14/2006
3,3´-Dichlorobenzidine	ND	150	µg/L	5	7/14/2006
Diethyl phthalate	ND	100	µg/L	5	7/14/2006
Dimethyl phthalate	ND	100	µg/L	5	7/14/2006
2,4-Dichlorophenol	ND	100	µg/L	5	7/14/2006
2,4-Dimethylphenol	ND	100	µg/L	5	7/14/2006
4,6-Dinitro-2-methylphenol	ND	500	µg/L	5	7/14/2006
2,4-Dinitrophenol	ND	500	µg/L	5	7/14/2006
2,4-Dinitrotoluene	ND	100	µg/L	5	7/14/2006
2,6-Dinitrotoluene	ND	100	µg/L	5	7/14/2006
Fluoranthene	ND	100	µg/L	5	7/14/2006
Fluorene	ND	100	µg/L	5	7/14/2006
Hexachlorobenzene	ND	100	µg/L	5	7/14/2006
Hexachlorobutadiene	ND	100	µg/L	5	7/14/2006
Hexachlorocyclopentadiene	ND	100	µg/L	5	7/14/2006
Hexachloroethane	ND	100	µg/L	5	7/14/2006
Indeno(1,2,3-cd)pyrene	ND	100	µg/L	5	7/14/2006
Isophorone	ND	100	µg/L	5	7/14/2006
2-Methylnaphthalene	ND	100	µg/L	5	7/14/2006
2-Methylphenol	ND	150	µg/L	5	7/14/2006
3+4-Methylphenol	330	200	µg/L	5	7/14/2006
N-Nitrosodi-n-propylamine	ND	100	µg/L	5	7/14/2006
N-Nitrosodimethylamine	ND	100	µg/L	5	7/14/2006
N-Nitrosodiphenylamine	ND	100	µg/L	5	7/14/2006
Naphthalene	ND	100	µg/L	5	7/14/2006
2-Nitroaniline	ND	500	µg/L	5	7/14/2006
3-Nitroaniline	ND	500	µg/L	5	7/14/2006
4-Nitroaniline	ND	200	µg/L	5	7/14/2006
Nitrobenzene	ND	100	µg/L	5	7/14/2006
2-Nitrophenol	ND	150	µg/L	5	7/14/2006
4-Nitrophenol	ND	500	µg/L	5	7/14/2006
Pentachlorophenol	ND	500	µg/L	5	7/14/2006
Phenanthrene	ND	100	µg/L	5	7/14/2006
Phenol	ND	100	µg/L	5	7/14/2006
Pyrene	ND	150	µg/L	5	7/14/2006
Pyridine	ND	300	µg/L	5	7/14/2006
1,2,4-Trichlorobenzene	ND	100	µg/L	5	7/14/2006
2,4,5-Trichlorophenol	ND	100	µg/L	5	7/14/2006
2,4,6-Trichlorophenol	ND	150	µg/L	5	7/14/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *18-Jul-06*

CLIENT: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006

Lab Order: 0606101

EPA METHOD 8270C: SEMIVOLATILES

Analyst: **BL**

Surr: 2,4,6-Tribromophenol	83.6	16.6-150	%REC	5	7/14/2006
Surr: 2-Fluorobiphenyl	68.7	19.6-134	%REC	5	7/14/2006
Surr: 2-Fluorophenol	47.6	9.54-113	%REC	5	7/14/2006
Surr: 4-Terphenyl-d14	84.8	22.7-145	%REC	5	7/14/2006
Surr: Nitrobenzene-d5	64.1	14.6-134	%REC	5	7/14/2006
Surr: Phenol-d5	38.4	10.7-80.3	%REC	5	7/14/2006

EPA METHOD 8260B: VOLATILES

Analyst: **KTM**

Benzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Toluene	9.8	1.0	µg/L	1	6/12/2006 6:10:59 PM
Ethylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Methyl tert-butyl ether (MTBE)	ND	1.5	µg/L	1	6/12/2006 6:10:59 PM
1,2,4-Trimethylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,3,5-Trimethylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2-Dichloroethane (EDC)	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2-Dibromoethane (EDB)	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Naphthalene	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
1-Methylnaphthalene	ND	4.0	µg/L	1	6/12/2006 6:10:59 PM
2-Methylnaphthalene	ND	4.0	µg/L	1	6/12/2006 6:10:59 PM
Acetone	900	100	µg/L	10	6/10/2006 6:17:34 AM
Bromobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Bromochloromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Bromodichloromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Bromoform	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Bromomethane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
2-Butanone	ND	10	µg/L	1	6/12/2006 6:10:59 PM
Carbon disulfide	ND	10	µg/L	1	6/12/2006 6:10:59 PM
Carbon Tetrachloride	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
Chlorobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Chloroethane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
Chloroform	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Chloromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
2-Chlorotoluene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
4-Chlorotoluene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
cis-1,2-DCE	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
cis-1,3-Dichloropropene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2-Dibromo-3-chloropropane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
Dibromochloromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Dibromomethane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
1,2-Dichlorobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,3-Dichlorobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,4-Dichlorobenzene	5.1	1.0	µg/L	1	6/12/2006 6:10:59 PM
Dichlorodifluoromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,1-Dichloroethane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *18-Jul-06*

CLIENT: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006

Lab Order: 0606101

Analyst: **KTM**

EPA METHOD 8260B: VOLATILES

1,1-Dichloroethene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2-Dichloropropane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,3-Dichloropropane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
2,2-Dichloropropane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
1,1-Dichloropropene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Hexachlorobutadiene	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
2-Hexanone	ND	10	µg/L	1	6/12/2006 6:10:59 PM
Isopropylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
4-Isopropyltoluene	6.6	1.0	µg/L	1	6/12/2006 6:10:59 PM
4-Methyl-2-pentanone	ND	10	µg/L	1	6/12/2006 6:10:59 PM
Methylene Chloride	ND	3.0	µg/L	1	6/12/2006 6:10:59 PM
n-Butylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
n-Propylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
sec-Butylbenzene	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
Styrene	ND	1.5	µg/L	1	6/12/2006 6:10:59 PM
tert-Butylbenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,1,2,2-Tetrachloroethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Tetrachloroethene (PCE)	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
trans-1,2-DCE	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
trans-1,3-Dichloropropene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2,3-Trichlorobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2,4-Trichlorobenzene	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,1,1-Trichloroethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,1,2-Trichloroethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Trichloroethene (TCE)	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Trichlorofluoromethane	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
1,2,3-Trichloropropane	ND	2.0	µg/L	1	6/12/2006 6:10:59 PM
Vinyl chloride	ND	1.0	µg/L	1	6/12/2006 6:10:59 PM
Xylenes, Total	ND	3.0	µg/L	1	6/12/2006 6:10:59 PM
Surr: 1,2-Dichloroethane-d4	87.9	69.9-130	%REC	1	6/12/2006 6:10:59 PM
Surr: 4-Bromofluorobenzene	103	75-139	%REC	1	6/12/2006 6:10:59 PM
Surr: Dibromofluoromethane	92.3	57.3-135	%REC	1	6/12/2006 6:10:59 PM
Surr: Toluene-d8	97.3	81.9-122	%REC	1	6/12/2006 6:10:59 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	ND	Not Detected at the 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: **0606101**
Order: **0606215** **HAL03** Receipt: **06-09-06**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***0606101-01D/ PILOT TC-2 QTR.*** Collected: *06-08-06 8:45:00* By:
atrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0606215-0001A		**EPA 405.1 Biochemical Oxygen Demand**					By:	NJL		
BOD06071	WC.2006.1470.5	10-26-4	Biochemical Oxygen Demand	472	mg/L	1	2		06-09-06	06-14-06

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: 6/19/2006 4:06:51 PM

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Pilot Travel Center 2nd Quarter 2006 **Work Order:** 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-10617		*MBLK*			Batch ID:	**10617**	Analysis Date:		7/14/2006
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	15						
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: Pilot Travel Center 2nd Quarter 2006 **Work Order:** 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: MB-10617		*MBLK*			Batch ID:	**10617**	Analysis Date:		7/14/2006
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	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-10617		*LCS*			Batch ID:	**10617**	Analysis Date:		7/14/2006
Acenaphthene	72.64	µg/L	10	72.6	11	123			
4-Chloro-3-methylphenol	132.4	µg/L	20	66.2	15.4	119			
2-Chlorophenol	105.1	µg/L	10	52.6	12.2	122			
1,4-Dichlorobenzene	43.10	µg/L	10	43.1	16.9	100			
2,4-Dinitrotoluene	62.40	µg/L	10	62.4	13	138			
N-Nitrosodi-n-propylamine	60.56	µg/L	10	60.6	9.93	122			
4-Nitrophenol	89.46	µg/L	50	44.7	12.5	87.4			
Pentachlorophenol	140.9	µg/L	50	70.4	3.55	114			
Phenol	59.16	µg/L	10	29.6	7.53	73.1			
Pyrene	68.16	µg/L	15	68.2	12.6	140			
1,2,4-Trichlorobenzene	52.22	µg/L	10	52.2	17.4	98.7			
Sample ID: LCSD-10617		*LCSD*			Batch ID:	**10617**	Analysis Date:		7/17/2006
Acenaphthene	66.58	µg/L	10	66.6	11	123	8.71	30.5	
4-Chloro-3-methylphenol	130.9	µg/L	20	65.4	15.4	119	1.14	28.6	
2-Chlorophenol	101.7	µg/L	10	50.9	12.2	122	3.29	107	
1,4-Dichlorobenzene	45.50	µg/L	10	45.5	16.9	100	5.42	62.1	
2,4-Dinitrotoluene	59.42	µg/L	10	59.4	13	138	4.89	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: Pilot Travel Center 2nd Quarter 2006 **Work Order:** 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8270C									
Sample ID: LCSD-10617		*LCSD*			Batch ID:	**10617**	Analysis Date:		7/17/2006
N-Nitrosodi-n-propylamine	64.20	µg/L	10	64.2	9.93	122	5.84	30.3	
4-Nitrophenol	81.02	µg/L	50	40.5	12.5	87.4	9.90	36.3	
Pentachlorophenol	143.6	µg/L	50	71.8	3.55	114	1.90	49	
Phenol	59.46	µg/L	10	29.7	7.53	73.1	0.506	52.4	
Pyrene	66.34	µg/L	15	66.3	12.6	140	2.71	16.3	
1,2,4-Trichlorobenzene	54.60	µg/L	10	54.6	17.4	98.7	4.46	36.4	
Method: SW7470									
Sample ID: MB-10646		*MBLK*			Batch ID:	**10646**	Analysis Date:		6/20/2006
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-10646		*LCS*			Batch ID:	**10646**	Analysis Date:		6/20/2006
Mercury	0.004830	mg/L	0.00020	96.6	80	120			
Method: SW6010A									
Sample ID: MB-10640		*MBLK*			Batch ID:	**10640**	Analysis Date:		6/21/2006 2:25:56 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-10640		*LCS*			Batch ID:	**10640**	Analysis Date:		6/21/2006 2:28:59 PM
Barium	0.4993	mg/L	0.020	99.9	80	120			
Cadmium	0.5070	mg/L	0.0020	101	80	120			
Chromium	0.5076	mg/L	0.0060	101	80	120			
Lead	0.4989	mg/L	0.0050	99.8	80	120			
Selenium	0.4945	mg/L	0.050	98.9	80	120			
Silver	0.5125	mg/L	0.0050	103	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: Pilot Travel Center 2nd Quarter 2006 **Work Order:** 0606101

Method: **SW8260B**
Sample ID: **5mL rb2** *MBLK* Batch ID: **R19563** Analysis Date: 6/9/2006 1:12:59 PM

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	1.5						
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: Pilot Travel Center 2nd Quarter 2006 **Work Order:** 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb2		*MBLK*			Batch ID:	**R19563**	Analysis Date:	6/9/2006 1:12:59 PM	
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: 5mL rb-f		*MBLK*			Batch ID:	**R19579**	Analysis Date:	6/12/2006 11:31:16 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	1.5						
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						

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: Pilot Travel Center 2nd Quarter 2006 **Work Order:** 0606101

Method: **SW8260B**
Sample ID: **5mL rb-f** *MBLK* Batch ID: **R19579** Analysis Date: 6/12/2006 11:31:16 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	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						
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						

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: Pilot Travel Center 2nd Quarter 2006 **Work Order:** 0606101

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: 5mL rb-f		*MBLK*			Batch ID:	**R19579**	Analysis Date:	6/12/2006 11:31:16 AM	
Xylenes, Total	ND	µg/L	3.0						
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R19563**	Analysis Date:	6/9/2006 2:57:32 PM	
Benzene	18.70	µg/L	1.0	93.5	71	124			
Toluene	18.04	µg/L	1.0	90.2	81.5	118			
Chlorobenzene	18.06	µg/L	1.0	90.3	81.2	132			
1,1-Dichloroethene	16.38	µg/L	1.0	81.9	65.5	134			
Trichloroethene (TCE)	16.64	µg/L	1.0	83.2	69.5	119			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R19579**	Analysis Date:	6/12/2006 12:55:56 PM	
Benzene	19.76	µg/L	1.0	98.8	71	124			
Toluene	18.70	µg/L	1.0	93.5	81.5	118			
Chlorobenzene	18.11	µg/L	1.0	90.5	81.2	132			
1,1-Dichloroethene	16.06	µg/L	1.0	80.3	65.5	134			
Trichloroethene (TCE)	17.96	µg/L	1.0	89.8	69.5	119			

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

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 6/9/2006

Work Order Number 0606101

Received by GLS

Checklist completed by D Schlappe 6-9-06
Signature Date

Matrix

Carrier name FedEx

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

Project Name: Pilot Travel Center 2nd Quarter 2006
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.	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)	BOD				Air Bubbles or Headspace (Y or N)
6/8/06	0845	H_2O	Pilot TC-2QTR.					0606101-1								X			X	X	X				

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
6/8/06	0900	Steve Morris	[signature] 6-9-06 9:10
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, April 10, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: PDA/SRU Excavation Wall Samples

Order No.: 0603351

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 4 sample(s) on 3/31/2006 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

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 Date: *10-Apr-06*

CLIENT: Giant Refining Co
Project: PDA/SRU Excavation Wall Samples
Lab Order: 0603351

CASE NARRATIVE

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

Hall Environmental Analysis Laboratory

Date: *10-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	East Wall
Lab Order:	0603351	**Collection Date:**	3/29/2006 7:15:00 AM
Project:	PDA/SRU Excavation Wall Samples	**Date Received:**	3/31/2006
Lab ID:	0603351-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	32000	500		mg/Kg	50	4/7/2006 2:30:21 PM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	4/7/2006 2:30:21 PM
Surr: DNOP	0	60-124	S	%REC	50	4/7/2006 2:30:21 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	170	100		mg/Kg	20	4/5/2006 10:23:05 PM
Surr: BFB	128	79-128		%REC	20	4/5/2006 10:23:05 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		mg/Kg	20	4/5/2006 10:23:05 PM
Toluene	5.6	1.0		mg/Kg	20	4/5/2006 10:23:05 PM
Ethylbenzene	5.4	1.0		mg/Kg	20	4/5/2006 10:23:05 PM
Xylenes, Total	29	1.0		mg/Kg	20	4/5/2006 10:23:05 PM
Surr: 4-Bromofluorobenzene	107	84.4-117		%REC	20	4/5/2006 10:23:05 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *10-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	West Wall
Lab Order:	0603351	**Collection Date:**	3/29/2006 7:30:00 AM
Project:	PDA/SRU Excavation Wall Samples	**Date Received:**	3/31/2006
Lab ID:	0603351-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	4/7/2006 1:23:59 PM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	4/7/2006 1:23:59 PM
Surr: DNOP	107	60-124		%REC	1	4/7/2006 1:23:59 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	4/6/2006 11:44:34 AM
Surr: BFB	107	79-128		%REC	1	4/6/2006 11:44:34 AM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	0.050		mg/Kg	1	4/6/2006 11:44:34 AM
Toluene	ND	0.050		mg/Kg	1	4/6/2006 11:44:34 AM
Ethylbenzene	ND	0.050		mg/Kg	1	4/6/2006 11:44:34 AM
Xylenes, Total	ND	0.050		mg/Kg	1	4/6/2006 11:44:34 AM
Surr: 4-Bromofluorobenzene	96.7	84.4-117		%REC	1	4/6/2006 11:44:34 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *10-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	North Wall
Lab Order:	0603351	**Collection Date:**	3/29/2006 7:45:00 AM
Project:	PDA/SRU Excavation Wall Samples	**Date Received:**	3/31/2006
Lab ID:	0603351-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	45000	500		mg/Kg	50	4/7/2006 1:50:51 AM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	4/7/2006 1:50:51 AM
Surr: DNOP	0	60-124	S	%REC	50	4/7/2006 1:50:51 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: NSB
Gasoline Range Organics (GRO)	240	100		mg/Kg	20	4/5/2006 11:19:39 PM
Surr: BFB	138	79-128	S	%REC	20	4/5/2006 11:19:39 PM
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		mg/Kg	20	4/5/2006 11:19:39 PM
Toluene	3.5	1.0		mg/Kg	20	4/5/2006 11:19:39 PM
Ethylbenzene	ND	1.0		mg/Kg	20	4/5/2006 11:19:39 PM
Xylenes, Total	33	1.0		mg/Kg	20	4/5/2006 11:19:39 PM
Surr: 4-Bromofluorobenzene	113	84.4-117		%REC	20	4/5/2006 11:19:39 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *10-Apr-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	South Wall
Lab Order:	0603351	**Collection Date:**	3/29/2006 8:00:00 AM
Project:	PDA/SRU Excavation Wall Samples	**Date Received:**	3/31/2006
Lab ID:	0603351-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	40000	500		mg/Kg	50	4/7/2006 2:23:58 AM
Motor Oil Range Organics (MRO)	ND	2500		mg/Kg	50	4/7/2006 2:23:58 AM
Surr: DNOP	0	60-124	S	%REC	50	4/7/2006 2:23:58 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	220	100		mg/Kg	20	4/6/2006 12:40:36 PM
Surr: BFB	149	79-128	S	%REC	20	4/6/2006 12:40:36 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	1.0		mg/Kg	20	4/6/2006 12:40:36 PM
Toluene	5.8	1.0		mg/Kg	20	4/6/2006 12:40:36 PM
Ethylbenzene	7.4	1.0		mg/Kg	20	4/6/2006 12:40:36 PM
Xylenes, Total	44	1.0		mg/Kg	20	4/6/2006 12:40:36 PM
Surr: 4-Bromofluorobenzene	116	84.4-117		%REC	20	4/6/2006 12:40:36 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	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *10-Apr-06*

CLIENT: Giant Refining Co
Work Order: 0603351
Project: PDA/SRU Excavation Wall Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_S

Sample ID: MB-10113 | SampType: MBLK | TestCode: 8015DRO_S | Units: mg/Kg | Prep Date: 4/4/2006 | RunNo: 18818
Client ID: ZZZZZ | Batch ID: 10113 | TestNo: SW8015 | Analysis Date: 4/5/2006 | SeqNo: 467263

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									

Sample ID: LCS-10113 | SampType: LCS | TestCode: 8015DRO_S | Units: mg/Kg | Prep Date: 4/4/2006 | RunNo: 18818
Client ID: ZZZZZ | Batch ID: 10113 | TestNo: SW8015 | Analysis Date: 4/5/2006 | SeqNo: 467264

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	41.47	10	50	0	82.9	67.4	117				

Sample ID: LCSD-10113 | SampType: LCSD | TestCode: 8015DRO_S | Units: mg/Kg | Prep Date: 4/4/2006 | RunNo: 18818
Client ID: ZZZZZ | Batch ID: 10113 | TestNo: SW8015 | Analysis Date: 4/5/2006 | SeqNo: 467265

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	38.68	10	50	0	77.4	67.4	117	41.47	6.97	17.4	

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Qualifiers:
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside accepted recovery limits
- J Analyte detected below quantitation limits
- S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0603351
Project: PDA/SRU Excavation Wall Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_S

Sample ID: MB-10098	SampType: MBLK	TestCode: 8015GRO_S	Units: mg/Kg	Prep Date: 3/31/2006	RunNo: 18842
Client ID: ZZZZZ	Batch ID: 10098	TestNo: SW8015	(SW5035)	Analysis Date: 4/5/2006	SeqNo: 467547

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0									

7 / 9

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

CLIENT: Giant Refining Co
Work Order: 0603351
Project: PDA/SRU Excavation Wall Samples

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_S

Sample ID: MB-10098 | SampType: MBLK | TestCode: 8021BTEX_S | Units: mg/Kg | Prep Date: 3/31/2006 | RunNo: 18842
Client ID: ZZZZZ | Batch ID: 10098 | TestNo: SW8021 | (SW5035) | Analysis Date: 4/5/2006 | SeqNo: 467531

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	0.050									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.050									

Sample ID: LCS-10098 | SampType: LCS | TestCode: 8021BTEX_S | Units: mg/Kg | Prep Date: 3/31/2006 | RunNo: 18842
Client ID: ZZZZZ | Batch ID: 10098 | TestNo: SW8021 | (SW5035) | Analysis Date: 4/5/2006 | SeqNo: 467532

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.4721	0.050	0.452	0	104	85.6	116				
Toluene	1.859	0.050	1.62	0	115	82.4	120				
Ethylbenzene	0.4260	0.050	0.456	0	93.4	86.4	111				
Xylenes, Total	2.002	0.050	1.8	0	111	78.4	125				

6 / 8

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/31/2006

Work Order Number 0603351

Received by AT

Checklist completed by _____ Signature _____ 3/31/06 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 #: 505 722 3833
Fax #: 505 722 0210

Project Name: PDA/SRU Excavation Wall Samples
Project #:
Project Manager: Jim Lieb
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)					Air Bubbles or Headspace (Y or N)
3/29/06	0715	Soil	East Wall	2				0603351-1	X		X														
"	0730	"	West Wall	2				-2	X		X														
"	0745	"	North Wall	2				-3	X		X														
"	0800	"	South Wall	2				-4	X		X														

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
3/31/06	0917	[signature]	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 3/31/06 0917

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, May 15, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Stockpile Banks from Lagoons & Ponds

Order No.: 0605060

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 12 sample(s) on 5/5/2006 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

AZ license # AZ0682
ORELAP Lab # NM100001

CLIENT: Giant Refining Co
Project: Stockpile Banks from Lagoons & Ponds
Lab Order: 0605060

CASE NARRATIVE

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

Reporting limits for many of the 8260 and 8270 samples are elevated due to the high amounts of diesel and motor oil range organic compounds in the samples.

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NW Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:30:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	82000	1000		mg/Kg	100	5/10/2006 10:59:28 AM
Motor Oil Range Organics (MRO)	8000	5000		mg/Kg	100	5/10/2006 10:59:28 AM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 10:59:28 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	5/8/2006 11:29:07 AM
Surr: BFB	104	81.7-127		%REC	20	5/8/2006 11:29:07 AM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:26:43 PM
Barium	ND	100		mg/L	1	5/12/2006 2:26:43 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:26:43 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:26:43 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:26:43 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:26:43 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:26:43 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NW Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:30:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NW Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:30:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	110	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	0	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	91.8	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	537	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	0	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	136	26.5-122	S	%REC	20	5/10/2006
Surr: Phenol-d5	204	37.6-118	S	%REC	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NE Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:35:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	44000	1000		mg/Kg	100	5/10/2006 11:32:15 AM
Motor Oil Range Organics (MRO)	6700	5000		mg/Kg	100	5/10/2006 11:32:15 AM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 11:32:15 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	5/10/2006 10:42:03 PM
Surr: BFB	97.5	81.7-127		%REC	10	5/10/2006 10:42:03 PM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:31:03 PM
Barium	ND	100		mg/L	1	5/12/2006 2:31:03 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:31:03 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:31:03 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:31:03 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:31:03 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:31:03 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NE Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:35:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	NE Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:35:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	58	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	0	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	79.8	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	535	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	679	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	116	26.5-122		%REC	20	5/10/2006
Surr: Phenol-d5	210	37.6-118	S	%REC	20	5/10/2006

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	MID W Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:40:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	65000	1000		mg/Kg	100	5/10/2006 12:05:06 PM
Motor Oil Range Organics (MRO)	9400	5000		mg/Kg	100	5/10/2006 12:05:06 PM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 12:05:06 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	5/8/2006 12:27:18 PM
Surr: BFB	157	81.7-127	S	%REC	10	5/8/2006 12:27:18 PM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:35:12 PM
Barium	ND	100		mg/L	1	5/12/2006 2:35:12 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:35:12 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:35:12 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:35:12 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:35:12 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:35:12 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT: Giant Refining Co
Lab Order: 0605060
Project: Stockpile Banks from Lagoons & Ponds
Lab ID: 0605060-03

Client Sample ID: MID W Comp
Collection Date: 5/3/2006 9:40:00 AM
Date Received: 5/5/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: BL
EPA METHOD 8270C: SEMIVOLATILES						
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	MID W Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:40:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: BL
EPA METHOD 8270C: SEMIVOLATILES						
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	57	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	0	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	71.9	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	553	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	659	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	128	26.5-122	S	%REC	20	5/10/2006
Surr: Phenol-d5	202	37.6-118	S	%REC	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	MID E Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:45:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	82000	1000		mg/Kg	100	5/10/2006 12:37:54 PM
Motor Oil Range Organics (MRO)	9500	5000		mg/Kg	100	5/10/2006 12:37:54 PM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 12:37:54 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	5/10/2006 11:40:17 PM
Surr: BFB	100	81.7-127		%REC	10	5/10/2006 11:40:17 PM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:39:29 PM
Barium	ND	100		mg/L	1	5/12/2006 2:39:29 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:39:29 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:39:29 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:39:29 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:39:29 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:39:29 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	MID E Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:45:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	MID E Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:45:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	100	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	0	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	95.8	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	545	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	671	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	124	26.5-122	S	%REC	20	5/10/2006
Surr: Phenol-d5	214	37.6-118	S	%REC	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	SW Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:50:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	53000	1000		mg/Kg	100	5/10/2006 1:10:37 PM
Motor Oil Range Organics (MRO)	8700	5000		mg/Kg	100	5/10/2006 1:10:37 PM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 1:10:37 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	5/11/2006 12:38:15 AM
Surr: BFB	105	81.7-127		%REC	10	5/11/2006 12:38:15 AM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:43:46 PM
Barium	ND	100		mg/L	1	5/12/2006 2:43:46 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:43:46 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:43:46 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:43:46 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:43:46 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:43:46 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	SW Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:50:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: BL
EPA METHOD 8270C: SEMIVOLATILES						
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	SW Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:50:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: BL
EPA METHOD 8270C: SEMIVOLATILES						
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	55	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	468	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	83.8	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	539	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	679	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	124	26.5-122	S	%REC	20	5/10/2006
Surr: Phenol-d5	204	37.6-118	S	%REC	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	SE Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:55:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-06	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	51000	1000		mg/Kg	100	5/10/2006 1:43:20 PM
Motor Oil Range Organics (MRO)	9800	5000		mg/Kg	100	5/10/2006 1:43:20 PM
Surr: DNOP	0	61.7-135	S	%REC	100	5/10/2006 1:43:20 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	5/11/2006 1:36:08 AM
Surr: BFB	96.6	81.7-127		%REC	5	5/11/2006 1:36:08 AM
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	5/11/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/12/2006 2:47:55 PM
Barium	ND	100		mg/L	1	5/12/2006 2:47:55 PM
Cadmium	ND	1.0		mg/L	1	5/12/2006 2:47:55 PM
Chromium	ND	5.0		mg/L	1	5/12/2006 2:47:55 PM
Lead	ND	5.0		mg/L	1	5/12/2006 2:47:55 PM
Selenium	ND	1.0		mg/L	1	5/12/2006 2:47:55 PM
Silver	ND	5.0		mg/L	1	5/12/2006 2:47:55 PM
EPA METHOD 8270C: SEMIVOLATILES						Analyst: BL
Acenaphthene	ND	40		mg/Kg	20	5/10/2006
Acenaphthylene	ND	40		mg/Kg	20	5/10/2006
Aniline	ND	40		mg/Kg	20	5/10/2006
Anthracene	ND	40		mg/Kg	20	5/10/2006
Azobenzene	ND	40		mg/Kg	20	5/10/2006
Benz(a)anthracene	ND	50		mg/Kg	20	5/10/2006
Benzo(a)pyrene	ND	40		mg/Kg	20	5/10/2006
Benzo(b)fluoranthene	ND	40		mg/Kg	20	5/10/2006
Benzo(g,h,i)perylene	ND	60		mg/Kg	20	5/10/2006
Benzo(k)fluoranthene	ND	100		mg/Kg	20	5/10/2006
Benzoic acid	ND	100		mg/Kg	20	5/10/2006
Benzyl alcohol	ND	200		mg/Kg	20	5/10/2006
Bis(2-chloroethoxy)methane	ND	100		mg/Kg	20	5/10/2006
Bis(2-chloroethyl)ether	ND	50		mg/Kg	20	5/10/2006
Bis(2-chloroisopropyl)ether	ND	100		mg/Kg	20	5/10/2006
Bis(2-ethylhexyl)phthalate	ND	40		mg/Kg	20	5/10/2006
4-Bromophenyl phenyl ether	ND	50		mg/Kg	20	5/10/2006

Qualifiers:

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT: Giant Refining Co
Lab Order: 0605060
Project: Stockpile Banks from Lagoons & Ponds
Lab ID: 0605060-06

Client Sample ID: SE Comp
Collection Date: 5/3/2006 9:55:00 AM
Date Received: 5/5/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: BL
EPA METHOD 8270C: SEMIVOLATILES						
Butyl benzyl phthalate	ND	40		mg/Kg	20	5/10/2006
Carbazole	ND	40		mg/Kg	20	5/10/2006
4-Chloro-3-methylphenol	ND	40		mg/Kg	20	5/10/2006
4-Chloroaniline	ND	40		mg/Kg	20	5/10/2006
2-Chloronaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Chlorophenol	ND	40		mg/Kg	20	5/10/2006
4-Chlorophenyl phenyl ether	ND	40		mg/Kg	20	5/10/2006
Chrysene	ND	40		mg/Kg	20	5/10/2006
Di-n-butyl phthalate	ND	100		mg/Kg	20	5/10/2006
Di-n-octyl phthalate	ND	100		mg/Kg	20	5/10/2006
Dibenz(a,h)anthracene	ND	50		mg/Kg	20	5/10/2006
Dibenzofuran	ND	100		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	40		mg/Kg	20	5/10/2006
3,3'-Dichlorobenzidine	ND	40		mg/Kg	20	5/10/2006
Diethyl phthalate	ND	40		mg/Kg	20	5/10/2006
Dimethyl phthalate	ND	40		mg/Kg	20	5/10/2006
2,4-Dichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4-Dimethylphenol	ND	40		mg/Kg	20	5/10/2006
4,6-Dinitro-2-methylphenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrophenol	ND	100		mg/Kg	20	5/10/2006
2,4-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
2,6-Dinitrotoluene	ND	40		mg/Kg	20	5/10/2006
Fluoranthene	ND	40		mg/Kg	20	5/10/2006
Fluorene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobenzene	ND	40		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	40		mg/Kg	20	5/10/2006
Hexachlorocyclopentadiene	ND	50		mg/Kg	20	5/10/2006
Hexachloroethane	ND	100		mg/Kg	20	5/10/2006
Indeno(1,2,3-cd)pyrene	ND	40		mg/Kg	20	5/10/2006
Isophorone	ND	40		mg/Kg	20	5/10/2006
2-Methylnaphthalene	ND	40		mg/Kg	20	5/10/2006
2-Methylphenol	ND	40		mg/Kg	20	5/10/2006
3+4-Methylphenol	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodi-n-propylamine	ND	40		mg/Kg	20	5/10/2006
N-Nitrosodiphenylamine	ND	40		mg/Kg	20	5/10/2006
Naphthalene	ND	40		mg/Kg	20	5/10/2006
2-Nitroaniline	ND	100		mg/Kg	20	5/10/2006
3-Nitroaniline	ND	100		mg/Kg	20	5/10/2006

Qualifiers:
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	SE Comp
Lab Order:	0605060	**Collection Date:**	5/3/2006 9:55:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-06	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: BL
EPA METHOD 8270C: SEMIVOLATILES						
4-Nitroaniline	ND	50		mg/Kg	20	5/10/2006
Nitrobenzene	ND	40		mg/Kg	20	5/10/2006
2-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
4-Nitrophenol	ND	40		mg/Kg	20	5/10/2006
Pentachlorophenol	ND	100		mg/Kg	20	5/10/2006
Phenanthrene	47	40		mg/Kg	20	5/10/2006
Phenol	ND	40		mg/Kg	20	5/10/2006
Pyrene	ND	40		mg/Kg	20	5/10/2006
Pyridine	ND	100		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	40		mg/Kg	20	5/10/2006
2,4,5-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
2,4,6-Trichlorophenol	ND	40		mg/Kg	20	5/10/2006
Surr: 2,4,6-Tribromophenol	0	35.5-141	S	%REC	20	5/10/2006
Surr: 2-Fluorobiphenyl	95.8	30.4-128		%REC	20	5/10/2006
Surr: 2-Fluorophenol	543	28.1-129	S	%REC	20	5/10/2006
Surr: 4-Terphenyl-d14	663	34.6-151	S	%REC	20	5/10/2006
Surr: Nitrobenzene-d5	116	26.5-122		%REC	20	5/10/2006
Surr: Phenol-d5	208	37.6-118	S	%REC	20	5/10/2006

Qualifiers:

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT: Giant Refining Co
Lab Order: 0605060
Project: Stockpile Banks from Lagoons & Ponds
Lab ID: 0605060-07

Client Sample ID: #1 More Contam.
Collection Date: 5/3/2006 10:00:00 AM
Date Received: 5/5/2006
Matrix: SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
Benzene	ND	1.0		mg/Kg	20	5/10/2006
Toluene	ND	1.0		mg/Kg	20	5/10/2006
Ethylbenzene	ND	1.0		mg/Kg	20	5/10/2006
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	5/10/2006
1,2,4-Trimethylbenzene	2.0	1.0		mg/Kg	20	5/10/2006
1,3,5-Trimethylbenzene	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	5/10/2006
Naphthalene	2.9	2.0		mg/Kg	20	5/10/2006
1-Methylnaphthalene	16	4.0		mg/Kg	20	5/10/2006
2-Methylnaphthalene	21	4.0		mg/Kg	20	5/10/2006
Acetone	ND	15		mg/Kg	20	5/10/2006
Bromobenzene	ND	1.0		mg/Kg	20	5/10/2006
Bromochloromethane	ND	1.0		mg/Kg	20	5/10/2006
Bromodichloromethane	ND	1.0		mg/Kg	20	5/10/2006
Bromoform	ND	1.0		mg/Kg	20	5/10/2006
Bromomethane	ND	2.0		mg/Kg	20	5/10/2006
2-Butanone	ND	10		mg/Kg	20	5/10/2006
Carbon disulfide	ND	10		mg/Kg	20	5/10/2006
Carbon tetrachloride	ND	2.0		mg/Kg	20	5/10/2006
Chlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
Chloroethane	ND	2.0		mg/Kg	20	5/10/2006
Chloroform	ND	1.0		mg/Kg	20	5/10/2006
Chloromethane	ND	1.0		mg/Kg	20	5/10/2006
2-Chlorotoluene	ND	1.0		mg/Kg	20	5/10/2006
4-Chlorotoluene	ND	1.0		mg/Kg	20	5/10/2006
cis-1,2-DCE	ND	1.0		mg/Kg	20	5/10/2006
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	5/10/2006
Dibromochloromethane	ND	1.0		mg/Kg	20	5/10/2006
Dibromomethane	ND	2.0		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	5/10/2006
1,1-Dichloroethane	ND	2.0		mg/Kg	20	5/10/2006
1,1-Dichloroethene	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dichloropropane	ND	1.0		mg/Kg	20	5/10/2006
1,3-Dichloropropane	ND	1.0		mg/Kg	20	5/10/2006
2,2-Dichloropropane	ND	2.0		mg/Kg	20	5/10/2006

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	#1 More Contam.
Lab Order:	0605060	**Collection Date:**	5/3/2006 10:00:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-07	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
1,1-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	2.0		mg/Kg	20	5/10/2006
2-Hexanone	ND	10		mg/Kg	20	5/10/2006
Isopropylbenzene	ND	1.0		mg/Kg	20	5/10/2006
4-Isopropyltoluene	ND	1.0		mg/Kg	20	5/10/2006
4-Methyl-2-pentanone	ND	10		mg/Kg	20	5/10/2006
Methylene chloride	ND	3.0		mg/Kg	20	5/10/2006
n-Butylbenzene	ND	1.0		mg/Kg	20	5/10/2006
n-Propylbenzene	ND	1.0		mg/Kg	20	5/10/2006
sec-Butylbenzene	ND	1.0		mg/Kg	20	5/10/2006
Styrene	ND	1.0		mg/Kg	20	5/10/2006
tert-Butylbenzene	ND	1.0		mg/Kg	20	5/10/2006
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	5/10/2006
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	5/10/2006
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	5/10/2006
trans-1,2-DCE	ND	1.0		mg/Kg	20	5/10/2006
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	5/10/2006
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	5/10/2006
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	5/10/2006
Trichlorofluoromethane	ND	1.0		mg/Kg	20	5/10/2006
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	5/10/2006
Vinyl chloride	ND	1.0		mg/Kg	20	5/10/2006
Xylenes, Total	ND	1.0		mg/Kg	20	5/10/2006
Surr: 1,2-Dichloroethane-d4	124	74.2-135		%REC	20	5/10/2006
Surr: 4-Bromofluorobenzene	92.5	75.2-127		%REC	20	5/10/2006
Surr: Dibromofluoromethane	115	76.9-138		%REC	20	5/10/2006
Surr: Toluene-d8	95.9	74-119		%REC	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	#2 More Contam.
Lab Order:	0605060	**Collection Date:**	5/3/2006 10:05:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-08	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: KTM
Benzene	ND	5.0		mg/Kg	100	5/9/2006
Toluene	ND	5.0		mg/Kg	100	5/9/2006
Ethylbenzene	ND	5.0		mg/Kg	100	5/9/2006
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	100	5/9/2006
1,2,4-Trimethylbenzene	ND	5.0		mg/Kg	100	5/9/2006
1,3,5-Trimethylbenzene	ND	5.0		mg/Kg	100	5/9/2006
1,2-Dichloroethane (EDC)	ND	5.0		mg/Kg	100	5/9/2006
1,2-Dibromoethane (EDB)	ND	5.0		mg/Kg	100	5/9/2006
Naphthalene	ND	10		mg/Kg	100	5/9/2006
1-Methylnaphthalene	43	20		mg/Kg	100	5/9/2006
2-Methylnaphthalene	ND	20		mg/Kg	100	5/9/2006
Acetone	ND	75		mg/Kg	100	5/9/2006
Bromobenzene	ND	5.0		mg/Kg	100	5/9/2006
Bromochloromethane	ND	5.0		mg/Kg	100	5/9/2006
Bromodichloromethane	ND	5.0		mg/Kg	100	5/9/2006
Bromoform	ND	5.0		mg/Kg	100	5/9/2006
Bromomethane	ND	10		mg/Kg	100	5/9/2006
2-Butanone	ND	50		mg/Kg	100	5/9/2006
Carbon disulfide	ND	50		mg/Kg	100	5/9/2006
Carbon tetrachloride	ND	10		mg/Kg	100	5/9/2006
Chlorobenzene	ND	5.0		mg/Kg	100	5/9/2006
Chloroethane	ND	10		mg/Kg	100	5/9/2006
Chloroform	ND	5.0		mg/Kg	100	5/9/2006
Chloromethane	ND	5.0		mg/Kg	100	5/9/2006
2-Chlorotoluene	ND	5.0		mg/Kg	100	5/9/2006
4-Chlorotoluene	ND	5.0		mg/Kg	100	5/9/2006
cis-1,2-DCE	ND	5.0		mg/Kg	100	5/9/2006
cis-1,3-Dichloropropene	ND	5.0		mg/Kg	100	5/9/2006
1,2-Dibromo-3-chloropropane	ND	10		mg/Kg	100	5/9/2006
Dibromochloromethane	ND	5.0		mg/Kg	100	5/9/2006
Dibromomethane	ND	10		mg/Kg	100	5/9/2006
1,2-Dichlorobenzene	ND	5.0		mg/Kg	100	5/9/2006
1,3-Dichlorobenzene	ND	5.0		mg/Kg	100	5/9/2006
1,4-Dichlorobenzene	ND	5.0		mg/Kg	100	5/9/2006
Dichlorodifluoromethane	ND	5.0		mg/Kg	100	5/9/2006
1,1-Dichloroethane	ND	10		mg/Kg	100	5/9/2006
1,1-Dichloroethene	ND	5.0		mg/Kg	100	5/9/2006
1,2-Dichloropropane	ND	5.0		mg/Kg	100	5/9/2006
1,3-Dichloropropane	ND	5.0		mg/Kg	100	5/9/2006
2,2-Dichloropropane	ND	10		mg/Kg	100	5/9/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	#2 More Contam.
Lab Order:	0605060	**Collection Date:**	5/3/2006 10:05:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-08	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: KTM
EPA METHOD 8260B: VOLATILES						
1,1-Dichloropropene	ND	5.0		mg/Kg	100	5/9/2006
Hexachlorobutadiene	ND	10		mg/Kg	100	5/9/2006
2-Hexanone	ND	50		mg/Kg	100	5/9/2006
Isopropylbenzene	ND	5.0		mg/Kg	100	5/9/2006
4-Isopropyltoluene	ND	5.0		mg/Kg	100	5/9/2006
4-Methyl-2-pentanone	ND	50		mg/Kg	100	5/9/2006
Methylene chloride	ND	15		mg/Kg	100	5/9/2006
n-Butylbenzene	ND	5.0		mg/Kg	100	5/9/2006
n-Propylbenzene	ND	5.0		mg/Kg	100	5/9/2006
sec-Butylbenzene	ND	5.0		mg/Kg	100	5/9/2006
Styrene	ND	5.0		mg/Kg	100	5/9/2006
tert-Butylbenzene	ND	5.0		mg/Kg	100	5/9/2006
1,1,1,2-Tetrachloroethane	ND	5.0		mg/Kg	100	5/9/2006
1,1,2,2-Tetrachloroethane	ND	5.0		mg/Kg	100	5/9/2006
Tetrachloroethene (PCE)	ND	5.0		mg/Kg	100	5/9/2006
trans-1,2-DCE	ND	5.0		mg/Kg	100	5/9/2006
trans-1,3-Dichloropropene	ND	5.0		mg/Kg	100	5/9/2006
1,2,3-Trichlorobenzene	ND	10		mg/Kg	100	5/9/2006
1,2,4-Trichlorobenzene	ND	5.0		mg/Kg	100	5/9/2006
1,1,1-Trichloroethane	ND	5.0		mg/Kg	100	5/9/2006
1,1,2-Trichloroethane	ND	5.0		mg/Kg	100	5/9/2006
Trichloroethene (TCE)	ND	5.0		mg/Kg	100	5/9/2006
Trichlorofluoromethane	ND	5.0		mg/Kg	100	5/9/2006
1,2,3-Trichloropropane	ND	10		mg/Kg	100	5/9/2006
Vinyl chloride	ND	5.0		mg/Kg	100	5/9/2006
Xylenes, Total	ND	5.0		mg/Kg	100	5/9/2006
Surr: 1,2-Dichloroethane-d4	136	74.2-135	S	%REC	100	5/9/2006
Surr: 4-Bromofluorobenzene	96.4	75.2-127		%REC	100	5/9/2006
Surr: Dibromofluoromethane	116	76.9-138		%REC	100	5/9/2006
Surr: Toluene-d8	102	74-119		%REC	100	5/9/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT: Giant Refining Co
Lab Order: 0605060
Project: Stockpile Banks from Lagoons & Ponds
Lab ID: 0605060-09

Client Sample ID: #3 More Contam.
Collection Date: 5/3/2006 10:10:00 AM
Date Received: 5/5/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: KTM
EPA METHOD 8260B: VOLATILES						
Benzene	ND	1.0		mg/Kg	20	5/10/2006
Toluene	ND	1.0		mg/Kg	20	5/10/2006
Ethylbenzene	ND	1.0		mg/Kg	20	5/10/2006
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	20	5/10/2006
1,2,4-Trimethylbenzene	ND	1.0		mg/Kg	20	5/10/2006
1,3,5-Trimethylbenzene	1.2	1.0		mg/Kg	20	5/10/2006
1,2-Dichloroethane (EDC)	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dibromoethane (EDB)	ND	1.0		mg/Kg	20	5/10/2006
Naphthalene	2.2	2.0		mg/Kg	20	5/10/2006
1-Methylnaphthalene	12	4.0		mg/Kg	20	5/10/2006
2-Methylnaphthalene	11	4.0		mg/Kg	20	5/10/2006
Acetone	ND	15		mg/Kg	20	5/10/2006
Bromobenzene	ND	1.0		mg/Kg	20	5/10/2006
Bromochloromethane	ND	1.0		mg/Kg	20	5/10/2006
Bromodichloromethane	ND	1.0		mg/Kg	20	5/10/2006
Bromoform	ND	1.0		mg/Kg	20	5/10/2006
Bromomethane	ND	2.0		mg/Kg	20	5/10/2006
2-Butanone	ND	10		mg/Kg	20	5/10/2006
Carbon disulfide	ND	10		mg/Kg	20	5/10/2006
Carbon tetrachloride	ND	2.0		mg/Kg	20	5/10/2006
Chlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
Chloroethane	ND	2.0		mg/Kg	20	5/10/2006
Chloroform	ND	1.0		mg/Kg	20	5/10/2006
Chloromethane	ND	1.0		mg/Kg	20	5/10/2006
2-Chlorotoluene	ND	1.0		mg/Kg	20	5/10/2006
4-Chlorotoluene	ND	1.0		mg/Kg	20	5/10/2006
cis-1,2-DCE	ND	1.0		mg/Kg	20	5/10/2006
cis-1,3-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dibromo-3-chloropropane	ND	2.0		mg/Kg	20	5/10/2006
Dibromochloromethane	ND	1.0		mg/Kg	20	5/10/2006
Dibromomethane	ND	2.0		mg/Kg	20	5/10/2006
1,2-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,3-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,4-Dichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
Dichlorodifluoromethane	ND	1.0		mg/Kg	20	5/10/2006
1,1-Dichloroethane	ND	2.0		mg/Kg	20	5/10/2006
1,1-Dichloroethene	ND	1.0		mg/Kg	20	5/10/2006
1,2-Dichloropropane	ND	1.0		mg/Kg	20	5/10/2006
1,3-Dichloropropane	ND	1.0		mg/Kg	20	5/10/2006
2,2-Dichloropropane	ND	2.0		mg/Kg	20	5/10/2006

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	#3 More Contam.
Lab Order:	0605060	**Collection Date:**	5/3/2006 10:10:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-09	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: KTM
EPA METHOD 8260B: VOLATILES						
1,1-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
Hexachlorobutadiene	ND	2.0		mg/Kg	20	5/10/2006
2-Hexanone	ND	10		mg/Kg	20	5/10/2006
Isopropylbenzene	ND	1.0		mg/Kg	20	5/10/2006
4-Isopropyltoluene	ND	1.0		mg/Kg	20	5/10/2006
4-Methyl-2-pentanone	ND	10		mg/Kg	20	5/10/2006
Methylene chloride	ND	3.0		mg/Kg	20	5/10/2006
n-Butylbenzene	1.3	1.0		mg/Kg	20	5/10/2006
n-Propylbenzene	ND	1.0		mg/Kg	20	5/10/2006
sec-Butylbenzene	ND	1.0		mg/Kg	20	5/10/2006
Styrene	ND	1.0		mg/Kg	20	5/10/2006
tert-Butylbenzene	ND	1.0		mg/Kg	20	5/10/2006
1,1,1,2-Tetrachloroethane	ND	1.0		mg/Kg	20	5/10/2006
1,1,2,2-Tetrachloroethane	ND	1.0		mg/Kg	20	5/10/2006
Tetrachloroethene (PCE)	ND	1.0		mg/Kg	20	5/10/2006
trans-1,2-DCE	ND	1.0		mg/Kg	20	5/10/2006
trans-1,3-Dichloropropene	ND	1.0		mg/Kg	20	5/10/2006
1,2,3-Trichlorobenzene	ND	2.0		mg/Kg	20	5/10/2006
1,2,4-Trichlorobenzene	ND	1.0		mg/Kg	20	5/10/2006
1,1,1-Trichloroethane	ND	1.0		mg/Kg	20	5/10/2006
1,1,2-Trichloroethane	ND	1.0		mg/Kg	20	5/10/2006
Trichloroethene (TCE)	ND	1.0		mg/Kg	20	5/10/2006
Trichlorofluoromethane	ND	1.0		mg/Kg	20	5/10/2006
1,2,3-Trichloropropane	ND	2.0		mg/Kg	20	5/10/2006
Vinyl chloride	ND	1.0		mg/Kg	20	5/10/2006
Xylenes, Total	ND	1.0		mg/Kg	20	5/10/2006
Surr: 1,2-Dichloroethane-d4	117	74.2-135		%REC	20	5/10/2006
Surr: 4-Bromofluorobenzene	105	75.2-127		%REC	20	5/10/2006
Surr: Dibromofluoromethane	111	76.9-138		%REC	20	5/10/2006
Surr: Toluene-d8	102	74-119		%REC	20	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	#4 Less Contam.
Lab Order:	0605060	**Collection Date:**	5/3/2006 10:15:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-10	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: KTM
EPA METHOD 8260B: VOLATILES						
Benzene	ND	0.050		mg/Kg	1	5/10/2006
Toluene	ND	0.050		mg/Kg	1	5/10/2006
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	5/10/2006
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	5/10/2006
Naphthalene	ND	0.10		mg/Kg	1	5/10/2006
1-Methylnaphthalene	ND	0.20		mg/Kg	1	5/10/2006
2-Methylnaphthalene	ND	0.20		mg/Kg	1	5/10/2006
Acetone	ND	0.75		mg/Kg	1	5/10/2006
Bromobenzene	ND	0.050		mg/Kg	1	5/10/2006
Bromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromodichloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromoform	ND	0.050		mg/Kg	1	5/10/2006
Bromomethane	ND	0.10		mg/Kg	1	5/10/2006
2-Butanone	ND	0.50		mg/Kg	1	5/10/2006
Carbon disulfide	ND	0.50		mg/Kg	1	5/10/2006
Carbon tetrachloride	ND	0.10		mg/Kg	1	5/10/2006
Chlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Chloroethane	ND	0.10		mg/Kg	1	5/10/2006
Chloroform	ND	0.050		mg/Kg	1	5/10/2006
Chloromethane	ND	0.050		mg/Kg	1	5/10/2006
2-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
cis-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	5/10/2006
Dibromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Dibromomethane	ND	0.10		mg/Kg	1	5/10/2006
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,1-Dichloroethane	ND	0.10		mg/Kg	1	5/10/2006
1,1-Dichloroethene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
2,2-Dichloropropane	ND	0.10		mg/Kg	1	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	#4 Less Contam.
Lab Order:	0605060	**Collection Date:**	5/3/2006 10:15:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-10	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: KTM
EPA METHOD 8260B: VOLATILES						
1,1-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
Hexachlorobutadiene	ND	0.10		mg/Kg	1	5/10/2006
2-Hexanone	ND	0.50		mg/Kg	1	5/10/2006
Isopropylbenzene	ND	0.050		mg/Kg	1	5/10/2006
4-Isopropyltoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	5/10/2006
Methylene chloride	ND	0.15		mg/Kg	1	5/10/2006
n-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
n-Propylbenzene	ND	0.050		mg/Kg	1	5/10/2006
sec-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Styrene	ND	0.050		mg/Kg	1	5/10/2006
tert-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	5/10/2006
trans-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	5/10/2006
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	5/10/2006
Trichlorofluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	5/10/2006
Vinyl chloride	ND	0.050		mg/Kg	1	5/10/2006
Xylenes, Total	ND	0.050		mg/Kg	1	5/10/2006
Surr: 1,2-Dichloroethane-d4	116	74.2-135		%REC	1	5/10/2006
Surr: 4-Bromofluorobenzene	93.4	75.2-127		%REC	1	5/10/2006
Surr: Dibromofluoromethane	105	76.9-138		%REC	1	5/10/2006
Surr: Toluene-d8	96.9	74-119		%REC	1	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	#5 Less Contam.
Lab Order:	0605060	**Collection Date:**	5/3/2006 10:20:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-11	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: KTM
EPA METHOD 8260B: VOLATILES						
Benzene	ND	0.050		mg/Kg	1	5/10/2006
Toluene	ND	0.050		mg/Kg	1	5/10/2006
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	5/10/2006
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	5/10/2006
Naphthalene	ND	0.10		mg/Kg	1	5/10/2006
1-Methylnaphthalene	ND	0.20		mg/Kg	1	5/10/2006
2-Methylnaphthalene	ND	0.20		mg/Kg	1	5/10/2006
Acetone	ND	0.75		mg/Kg	1	5/10/2006
Bromobenzene	ND	0.050		mg/Kg	1	5/10/2006
Bromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromodichloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromoform	ND	0.050		mg/Kg	1	5/10/2006
Bromomethane	ND	0.10		mg/Kg	1	5/10/2006
2-Butanone	ND	0.50		mg/Kg	1	5/10/2006
Carbon disulfide	ND	0.50		mg/Kg	1	5/10/2006
Carbon tetrachloride	ND	0.10		mg/Kg	1	5/10/2006
Chlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Chloroethane	ND	0.10		mg/Kg	1	5/10/2006
Chloroform	ND	0.050		mg/Kg	1	5/10/2006
Chloromethane	ND	0.050		mg/Kg	1	5/10/2006
2-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
cis-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	5/10/2006
Dibromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Dibromomethane	ND	0.10		mg/Kg	1	5/10/2006
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,1-Dichloroethane	ND	0.10		mg/Kg	1	5/10/2006
1,1-Dichloroethene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
2,2-Dichloropropane	ND	0.10		mg/Kg	1	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	#5 Less Contam.
Lab Order:	0605060	**Collection Date:**	5/3/2006 10:20:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-11	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: KTM
EPA METHOD 8260B: VOLATILES						
1,1-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
Hexachlorobutadiene	ND	0.10		mg/Kg	1	5/10/2006
2-Hexanone	ND	0.50		mg/Kg	1	5/10/2006
Isopropylbenzene	ND	0.050		mg/Kg	1	5/10/2006
4-Isopropyltoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	5/10/2006
Methylene chloride	ND	0.15		mg/Kg	1	5/10/2006
n-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
n-Propylbenzene	ND	0.050		mg/Kg	1	5/10/2006
sec-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Styrene	ND	0.050		mg/Kg	1	5/10/2006
tert-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	5/10/2006
trans-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	5/10/2006
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	5/10/2006
Trichlorofluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	5/10/2006
Vinyl chloride	ND	0.050		mg/Kg	1	5/10/2006
Xylenes, Total	ND	0.050		mg/Kg	1	5/10/2006
Surr: 1,2-Dichloroethane-d4	132	74.2-135		%REC	1	5/10/2006
Surr: 4-Bromofluorobenzene	103	75.2-127		%REC	1	5/10/2006
Surr: Dibromofluoromethane	118	76.9-138		%REC	1	5/10/2006
Surr: Toluene-d8	101	74-119		%REC	1	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	#6 Less Contam.
Lab Order:	0605060	**Collection Date:**	5/3/2006 10:25:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-12	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: KTM
EPA METHOD 8260B: VOLATILES						
Benzene	ND	0.050		mg/Kg	1	5/10/2006
Toluene	ND	0.050		mg/Kg	1	5/10/2006
Ethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Methyl tert-butyl ether (MTBE)	ND	0.050		mg/Kg	1	5/10/2006
1,2,4-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3,5-Trimethylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloroethane (EDC)	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromoethane (EDB)	ND	0.050		mg/Kg	1	5/10/2006
Naphthalene	ND	0.10		mg/Kg	1	5/10/2006
1-Methylnaphthalene	0.56	0.20		mg/Kg	1	5/10/2006
2-Methylnaphthalene	0.43	0.20		mg/Kg	1	5/10/2006
Acetone	ND	0.75		mg/Kg	1	5/10/2006
Bromobenzene	ND	0.050		mg/Kg	1	5/10/2006
Bromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromodichloromethane	ND	0.050		mg/Kg	1	5/10/2006
Bromoform	ND	0.050		mg/Kg	1	5/10/2006
Bromomethane	ND	0.10		mg/Kg	1	5/10/2006
2-Butanone	ND	0.50		mg/Kg	1	5/10/2006
Carbon disulfide	ND	0.50		mg/Kg	1	5/10/2006
Carbon tetrachloride	ND	0.10		mg/Kg	1	5/10/2006
Chlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Chloroethane	ND	0.10		mg/Kg	1	5/10/2006
Chloroform	ND	0.050		mg/Kg	1	5/10/2006
Chloromethane	ND	0.050		mg/Kg	1	5/10/2006
2-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Chlorotoluene	ND	0.050		mg/Kg	1	5/10/2006
cis-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
cis-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dibromo-3-chloropropane	ND	0.10		mg/Kg	1	5/10/2006
Dibromochloromethane	ND	0.050		mg/Kg	1	5/10/2006
Dibromomethane	ND	0.10		mg/Kg	1	5/10/2006
1,2-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,4-Dichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
Dichlorodifluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,1-Dichloroethane	ND	0.10		mg/Kg	1	5/10/2006
1,1-Dichloroethene	ND	0.050		mg/Kg	1	5/10/2006
1,2-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
1,3-Dichloropropane	ND	0.050		mg/Kg	1	5/10/2006
2,2-Dichloropropane	ND	0.10		mg/Kg	1	5/10/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *15-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	#6 Less Contam.
Lab Order:	0605060	**Collection Date:**	5/3/2006 10:25:00 AM
Project:	Stockpile Banks from Lagoons & Ponds	**Date Received:**	5/5/2006
Lab ID:	0605060-12	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: KTM
EPA METHOD 8260B: VOLATILES						
1,1-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
Hexachlorobutadiene	ND	0.10		mg/Kg	1	5/10/2006
2-Hexanone	ND	0.50		mg/Kg	1	5/10/2006
Isopropylbenzene	ND	0.050		mg/Kg	1	5/10/2006
4-Isopropyltoluene	ND	0.050		mg/Kg	1	5/10/2006
4-Methyl-2-pentanone	ND	0.50		mg/Kg	1	5/10/2006
Methylene chloride	ND	0.15		mg/Kg	1	5/10/2006
n-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
n-Propylbenzene	ND	0.050		mg/Kg	1	5/10/2006
sec-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
Styrene	ND	0.050		mg/Kg	1	5/10/2006
tert-Butylbenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2,2-Tetrachloroethane	ND	0.050		mg/Kg	1	5/10/2006
Tetrachloroethene (PCE)	ND	0.050		mg/Kg	1	5/10/2006
trans-1,2-DCE	ND	0.050		mg/Kg	1	5/10/2006
trans-1,3-Dichloropropene	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichlorobenzene	ND	0.10		mg/Kg	1	5/10/2006
1,2,4-Trichlorobenzene	ND	0.050		mg/Kg	1	5/10/2006
1,1,1-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
1,1,2-Trichloroethane	ND	0.050		mg/Kg	1	5/10/2006
Trichloroethene (TCE)	ND	0.050		mg/Kg	1	5/10/2006
Trichlorofluoromethane	ND	0.050		mg/Kg	1	5/10/2006
1,2,3-Trichloropropane	ND	0.10		mg/Kg	1	5/10/2006
Vinyl chloride	ND	0.050		mg/Kg	1	5/10/2006
Xylenes, Total	ND	0.050		mg/Kg	1	5/10/2006
Surr: 1,2-Dichloroethane-d4	128	74.2-135		%REC	1	5/10/2006
Surr: 4-Bromofluorobenzene	93.6	75.2-127		%REC	1	5/10/2006
Surr: Dibromofluoromethane	112	76.9-138		%REC	1	5/10/2006
Surr: Toluene-d8	99.6	74-119		%REC	1	5/10/2006

Qualifiers:

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

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-001
Client Sample ID: MW Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:30
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Corrosivity - pH	7.46	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 08:53 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:21 / jl
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:14 / ell-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-002
Client Sample ID: NE Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:35
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Corrosivity - pH	7.53	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 11:00 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:23 / jl
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:16 / eli-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-003
Client Sample ID: MID W Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:40
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Corrosivity - pH	7.17	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 13:10 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:26 / jl
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:18 / ell-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-004
Client Sample ID: MID E Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:45
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Corrosivity - pH	7.21	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 14:44 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:28 / jl
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:20 / efi-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-005
Client Sample ID: SW Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:50
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Corrosivity - pH	7.41	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 15:45 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:31 / jl
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:21 / eli-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0605060
Lab ID: C06050423-006
Client Sample ID: SE Comp

Report Date: 05/12/06
Collection Date: 05/03/06 09:55
Date Received: 05/09/06
Matrix: Soil

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Corrosivity - pH	7.33	s.u.		0.01		SW9045C	05/11/06 14:23 / ph
Flash Point (Ignitability)	>140	°F		60	140	SW1010	05/11/06 16:49 / bah
REACTIVITY							
Sulfide, Reactive	ND	mg/kg		20.0	500	SW846 Ch 7	05/10/06 14:34 / jl
Cyanide, Reactive	ND	mg/kg		1.0	250	SW846 Ch 7	05/11/06 14:23 / eli-b

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
Project: 0605060

Report Date: 05/12/06
Work Order: C06050423

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
								Batch: 060511A-FLSHPNT-S	
Method: SW1010									
Sample ID: C06050423-001ADUP	Sample Duplicate				Run: PM_FLASHPOINT_060511A			05/11/06 10:00	
Flash Point (Ignitability)	> 140	°F	60				0.0	5	
Sample ID: MBLK1_060511A	Method Blank				Run: PM_FLASHPOINT_060511A			05/11/06 16:58	
Flash Point (Ignitability)	ND	°F	60						
Sample ID: LCS1_060511A	Laboratory Control Sample				Run: PM_FLASHPOINT_060511A			05/11/06 07:54	
Flash Point (Ignitability)	82.0	°F	60	100	96	104			
								Batch: 10942	
Method: SW846 Ch 7									
Sample ID: MB-10942-S	Method Blank				Run: TITRATION_060510A			05/10/06 14:17	
Sulfide, Reactive	ND	mg/kg	1						
Sample ID: C06050423-006B	Sample Duplicate				Run: TITRATION_060510A			05/10/06 14:39	
Sulfide, Reactive	12.0	mg/kg	20				0.0	20	
								Batch: B_21065	
Method: SW846 Ch 7									
Sample ID: MB-21065	Method Blank				Run: SUB-B75568			05/11/06 14:27	
Cyanide, Reactive	ND	mg/kg	0.05						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Date: *15-May-06*

Hall Environmental Analysis Laboratory

QA/QC SUMMARY REPORT

..ent: Giant Refining Co

roject: Stockpile Banks from Lagoons & Ponds

Work Order: 0605060

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
									Batch ID: 10369
ethod: SW8015									Analysis Date: 5/10/2006
ample ID: MB-10369		*MBLK*							
iesel Range Organics (DRO)	ND	mg/Kg	10						
otor Oil Range Organics (MRO)	ND	mg/Kg	50						
									Analysis Date: 5/10/2006
ample ID: LCS-10369		*LCS*							
iesel Range Organics (DRO)	43.73	mg/Kg	10	87.5	64.6	116			
									Analysis Date: 5/10/2006
ample ID: LCSD-10369		*LCSD*							
iesel Range Organics (DRO)	45.86	mg/Kg	10	91.7	64.6	116	4.76	17.4	
									Batch ID: 10361
ethod: SW8015									Analysis Date: 5/8/2006
ample ID: MB-10361		*MBLK*							
asoline Range Organics (GRO)	ND	mg/Kg	5.0						
									Analysis Date: 5/8/2006
ample ID: LCS-10361		*LCS*							
asoline Range Organics (GRO)	20.20	mg/Kg	5.0	80.8	77	115			
									Analysis Date: 5/8/2006
ample ID: LCSD-10361		*LCSD*							
asoline Range Organics (GRO)	22.00	mg/Kg	5.0	88.0	77	115	8.53	11.6	

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

..nt: Giant Refining Co
'oject: Stockpile Banks from Lagoons & Ponds
Work Order: 0605060

Batch ID: 10367
Analysis Date: 5/10/2006

nalyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
:thod: SW8270C									
mple ID: MB-10367		*MBLK*							
enaphthene	ND	mg/Kg	0.20						
enaphthylene	ND	mg/Kg	0.20						
line	ND	mg/Kg	0.20						
thracene	ND	mg/Kg	0.20						
obenzene	ND	mg/Kg	0.20						
nz(a)anthracene	ND	mg/Kg	0.25						
nzo(a)pyrene	ND	mg/Kg	0.20						
nzo(b)fluoranthene	ND	mg/Kg	0.20						
nzo(g,h,i)perylene	ND	mg/Kg	0.30						
nzo(k)fluoranthene	ND	mg/Kg	0.50						
nzoic acid	ND	mg/Kg	0.50						
nzyl alcohol	ND	mg/Kg	1.0						
;(2-chloroethoxy)methane	ND	mg/Kg	0.50						
;(2-chloroethyl)ether	ND	mg/Kg	0.25						
;(2-chloroisopropyl)ether	ND	mg/Kg	0.50						
;(2-ethylhexyl)phthalate	0.2097	mg/Kg	0.20						
romophenyl phenyl ether	ND	mg/Kg	0.25						
benzyl phthalate	ND	mg/Kg	0.20						
.oazole	ND	mg/Kg	0.20						
Chloro-3-methylphenol	ND	mg/Kg	0.20						
Chloroaniline	ND	mg/Kg	0.20						
Chloronaphthalene	ND	mg/Kg	0.20						
Chlorophenol	ND	mg/Kg	0.20						
Chlorophenyl phenyl ether	ND	mg/Kg	0.20						
rysene	ND	mg/Kg	0.20						
n-butyl phthalate	ND	mg/Kg	0.50						
n-octyl phthalate	ND	mg/Kg	0.50						
benz(a,h)anthracene	ND	mg/Kg	0.25						
benzofuran	ND	mg/Kg	0.50						
-Dichlorobenzene	ND	mg/Kg	0.20						
-Dichlorobenzene	ND	mg/Kg	0.20						
-Dichlorobenzene	ND	mg/Kg	0.20						
'-Dichlorobenzidine	ND	mg/Kg	0.20						
ethyl phthalate	ND	mg/Kg	0.20						
nethyl phthalate	ND	mg/Kg	0.20						
-Dichlorophenol	ND	mg/Kg	0.20						
-Dimethylphenol	ND	mg/Kg	0.20						
-Dinitro-2-methylphenol	ND	mg/Kg	0.50						
-Dinitrophenol	ND	mg/Kg	0.50						
-Dinitrotoluene	ND	mg/Kg	0.20						
-Dinitrotoluene	ND	mg/Kg	0.20						
oranthene	ND	mg/Kg	0.20						
orene	ND	mg/Kg	0.20						
xachlorobenzene	ND	mg/Kg	0.20						

ualifiers:

E	Value 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

ıent: Giant Refining Co
'oject: Stockpile Banks from Lagoons & Ponds
Work Order: 0605060

nalyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
:thod: SW8270C									Batch ID: 10367
mple ID: MB-10367		*MBLK*							Analysis Date: 5/10/2006
xachlorobutadiene	ND	mg/Kg	0.20						
xachlorocyclopentadiene	ND	mg/Kg	0.25						
xachloroethane	ND	mg/Kg	0.50						
'eno(1,2,3-cd)pyrene	ND	mg/Kg	0.20						
phorone	ND	mg/Kg	0.20						
/lethylnaphthalene	ND	mg/Kg	0.20						
/lethylphenol	ND	mg/Kg	0.20						
4-Methylphenol	ND	mg/Kg	0.20						
Jitrosodi-n-propylamine	ND	mg/Kg	0.20						
Jitrosodiphenylamine	ND	mg/Kg	0.20						
phthalene	ND	mg/Kg	0.20						
Jitroaniline	ND	mg/Kg	0.50						
Jitroaniline	ND	mg/Kg	0.50						
Jitroaniline	ND	mg/Kg	0.25						
robenzene	ND	mg/Kg	0.20						
Jitrophenol	ND	mg/Kg	0.20						
itrophenol	ND	mg/Kg	0.20						
achlorophenol	ND	mg/Kg	0.50						
enanthrene	ND	mg/Kg	0.20						
enol	ND	mg/Kg	0.20						
'ene	ND	mg/Kg	0.20						
idine	ND	mg/Kg	0.50						
,4-Trichlorobenzene	ND	mg/Kg	0.20						
,5-Trichlorophenol	ND	mg/Kg	0.20						
,6-Trichlorophenol	ND	mg/Kg	0.20						
mple ID: LCS-10367		*LCS*							Analysis Date: 5/10/2006
enaphthene	1.223	mg/Kg	0.20	73.3	24	125			
:hloro-3-methylphenol	2.391	mg/Kg	0.20	71.8	14.6	154			
:hlorophenol	2.073	mg/Kg	0.20	62.3	13.3	149			
-Dichlorobenzene	0.8983	mg/Kg	0.20	53.8	23.6	118			
-Dinitrotoluene	1.072	mg/Kg	0.20	64.2	28	136			
Jitrosodi-n-propylamine	1.098	mg/Kg	0.20	65.8	28	114			
litrophenol	2.234	mg/Kg	0.20	67.1	13.1	150			
ıtachlorophenol	2.441	mg/Kg	0.50	73.3	20.1	139			
enol	2.037	mg/Kg	0.20	61.2	17.3	141			
'ene	1.224	mg/Kg	0.20	73.3	29	131			
,4-Trichlorobenzene	0.9813	mg/Kg	0.20	58.8	17.9	126			
nple ID: LCSD-10367		*LCSD*							Analysis Date: 5/10/2006
enaphthene	1.200	mg/Kg	0.20	71.9	24	125	1.93	25	
:hloro-3-methylphenol	2.163	mg/Kg	0.20	65.0	14.6	154	9.98	25	
:hlorophenol	1.725	mg/Kg	0.20	51.8	13.3	149	18.3	25	
-Dichlorobenzene	0.7727	mg/Kg	0.20	46.3	23.6	118	15.0	25	
-Dinitrotoluene	1.086	mg/Kg	0.20	65.0	28	136	1.30	25	
Jitrosodi-n-propylamine	0.9733	mg/Kg	0.20	58.3	28	114	12.1	25	

ıalifiers:

: Value above quantitation range
Analyte detected below quantitation limits
. 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

..ent: Giant Refining Co
'roject: Stockpile Banks from Lagoons & Ponds

Work Order: 0605060

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
									Batch ID: 10367
lethod: SW8270C									Analysis Date: 5/10/2006
ample ID: LCSD-10367		*LCSD*							
-Nitrophenol	2.254	mg/Kg	0.20	67.7	13.1	150	0.862	25	
entachlorophenol	2.344	mg/Kg	0.50	70.4	20.1	139	4.05	25	
henol	1.721	mg/Kg	0.20	51.7	17.3	141	16.8	25	
yrene	1.193	mg/Kg	0.20	71.4	29	131	2.54	25	
2,4-Trichlorobenzene	0.8497	mg/Kg	0.20	50.9	17.9	126	14.4	25	
									Batch ID: 10399
ethod: SW7470									Analysis Date: 5/11/2006
ample ID: MB-10399		*MBLK*							
ercury	ND	mg/L	0.020						Analysis Date: 5/11/2006
ample ID: LCS-10399		*LCS*							
ercury	0.004860	mg/L	0.0020	97.2	80	120			Analysis Date: 5/11/2006
ample ID: 0605060-02AMS		*MS*							
ercury	0.004785	mg/L	0.0020	95.7	75	125			Analysis Date: 5/11/2006
ample ID: 0605060-02AMSD		*MSD*							
ercury	0.004530	mg/L	0.0020	90.6	75	125	5.48	20	

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

QA/QC SUMMARY REPORT

ıt: Giant Refining Co
·oject: Stockpile Banks from Lagoons & Ponds Work Order: 0605060

nalyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
ıthod: SW1311/6010								Batch ID: 10391	
mple ID: MB-10391		*MBLK*						Analysis Date: 5/12/2006	
;enic	ND	mg/L	5.0						
rium	ND	mg/L	100						
dmium	ND	mg/L	1.0						
romium	ND	mg/L	5.0						
ad	ND	mg/L	5.0						
lenium	ND	mg/L	1.0						
ver	ND	mg/L	5.0						
mple ID: LCS-10391		*LCS*						Analysis Date: 5/12/2006	
;enic	0.5714	mg/L	0.20	114	80	120			
rium	0.4692	mg/L	0.20	93.6	80	120			
dmium	0.5199	mg/L	0.20	104	80	120			
romium	0.4823	mg/L	0.20	96.5	80	120			
ad	0.4641	mg/L	0.20	92.8	80	120			
lenium	0.5610	mg/L	0.20	112	80	120			
ver	0.5307	mg/L	0.20	106	80	120			
mple ID: 0605060-05AMS		*MS*						Analysis Date: 5/12/2006	
·nic	0.6494	mg/L	0.20	120	75	125			
m	0.8321	mg/L	0.20	97.6	75	125			
dmium	0.5350	mg/L	0.20	107	75	125			
romium	0.4697	mg/L	0.20	93.9	75	125			
ad	0.4574	mg/L	0.20	90.9	75	125			
:enium	0.5508	mg/L	0.20	110	75	125			
ver	0.5574	mg/L	0.20	111	75	125			
mple ID: 0605060-05AMSD		*MSD*						Analysis Date: 5/12/2006	
;enic	0.6296	mg/L	0.20	116	75	125	3.10	20	
·ium	0.8358	mg/L	0.20	98.4	75	125	0.444	20	
dmium	0.5327	mg/L	0.20	107	75	125	0.421	20	
romium	0.5057	mg/L	0.20	101	75	125	7.39	20	
ıd	0.4547	mg/L	0.20	90.4	75	125	0.596	20	
enium	0.5251	mg/L	0.20	105	75	125	4.78	20	
ver	0.5582	mg/L	0.20	112	75	125	0.138	20	

ıalifiers:

: Value above quantitation range
Analyte detected below quantitation limits
. 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

.t: Giant Refining Co
'oject: Stockpile Banks from Lagoons & Ponds
Work Order: 0605060

nalyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
:thod: SW8260B								Batch ID:	10361
mple ID: mb-10361		*MBLK*						Analysis Date:	5/9/2006
nzene	ND	mg/Kg	0.050						
luene	ND	mg/Kg	0.050						
ıylbenzene	ND	mg/Kg	0.050						
:thyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
:,4-Trimethylbenzene	ND	mg/Kg	0.050						
;,5-Trimethylbenzene	ND	mg/Kg	0.050						
:-Dichloroethane (EDC)	ND	mg/Kg	0.050						
:-Dibromoethane (EDB)	ND	mg/Kg	0.050						
phthalene	ND	mg/Kg	0.10						
Methylnaphthalene	ND	mg/Kg	0.20						
Methylnaphthalene	ND	mg/Kg	0.20						
etone	ND	mg/Kg	0.75						
›mobenzene	ND	mg/Kg	0.050						
›mochloromethane	ND	mg/Kg	0.050						
›modichloromethane	ND	mg/Kg	0.050						
›moform	ND	mg/Kg	0.050						
nomethane	ND	mg/Kg	0.10						
'anone	ND	mg/Kg	0.50						
,on disulfide	ND	mg/Kg	0.50						
rbon tetrachloride	ND	mg/Kg	0.10						
lorobenzene	ND	mg/Kg	0.050						
loroethane	ND	mg/Kg	0.10						
loroform	ND	mg/Kg	0.050						
loromethane	ND	mg/Kg	0.050						
:hlorotoluene	ND	mg/Kg	0.050						
:hlorotoluene	ND	mg/Kg	0.050						
-1,2-DCE	ND	mg/Kg	0.050						
-1,3-Dichloropropene	ND	mg/Kg	0.050						
-Dibromo-3-chloropropane	ND	mg/Kg	0.10						
ıromochloromethane	ND	mg/Kg	0.050						
ıromomethane	ND	mg/Kg	0.10						
-Dichlorobenzene	ND	mg/Kg	0.050						
-Dichlorobenzene	ND	mg/Kg	0.050						
-Dichlorobenzene	ND	mg/Kg	0.050						
:hlorodifluoromethane	ND	mg/Kg	0.050						
-Dichloroethane	ND	mg/Kg	0.10						
-Dichloroethene	ND	mg/Kg	0.050						
-Dichloropropane	ND	mg/Kg	0.050						
-Dichloropropane	ND	mg/Kg	0.050						
-Dichloropropane	ND	mg/Kg	0.10						
-Dichloropropene	ND	mg/Kg	0.050						
xachlorobutadiene	ND	mg/Kg	0.10						
lexanone	ND	mg/Kg	0.50						
,ropylbenzene	ND	mg/Kg	0.050						

ualifiers:

:	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
:	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

ıt: Giant Refining Co
roject: Stockpile Banks from Lagoons & Ponds Work Order: 0605060

ıalyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
ethod: SW8260B									Batch ID: 10361
ımple ID: mb-10361		*MBLK*							Analysis Date: 5/9/2006
Isopropyltoluene	ND	mg/Kg	0.050						
Methyl-2-pentanone	ND	mg/Kg	0.50						
ethylene chloride	ND	mg/Kg	0.15						
Butylbenzene	ND	mg/Kg	0.050						
Propylbenzene	ND	mg/Kg	0.050						
c-Butylbenzene	ND	mg/Kg	0.050						
yrene	ND	mg/Kg	0.050						
t-Butylbenzene	ND	mg/Kg	0.050						
1,1,2-Tetrachloroethane	ND	mg/Kg	0.050						
1,2,2-Tetrachloroethane	ND	mg/Kg	0.050						
trachloroethene (PCE)	ND	mg/Kg	0.050						
ns-1,2-DCE	ND	mg/Kg	0.050						
ns-1,3-Dichloropropene	ND	mg/Kg	0.050						
2,3-Trichlorobenzene	ND	mg/Kg	0.10						
2,4-Trichlorobenzene	ND	mg/Kg	0.050						
1,1-Trichloroethane	ND	mg/Kg	0.050						
2-Trichloroethane	ND	mg/Kg	0.050						
loroethene (TCE)	ND	mg/Kg	0.050						
ılorofluoromethane	ND	mg/Kg	0.050						
2,3-Trichloropropane	ND	mg/Kg	0.10						
ıyl chloride	ND	mg/Kg	0.050						
lenes, Total	ND	mg/Kg	0.050						
mple ID: mb-10361		*MBLK*							Analysis Date: 5/10/2006
nzene	ND	mg/Kg	0.050						
luene	ND	mg/Kg	0.050						
ıylbenzene	ND	mg/Kg	0.050						
ethyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
1,4-Trimethylbenzene	ND	mg/Kg	0.050						
3,5-Trimethylbenzene	ND	mg/Kg	0.050						
2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
phthalene	ND	mg/Kg	0.10						
Methylnaphthalene	ND	mg/Kg	0.20						
Methylnaphthalene	ND	mg/Kg	0.20						
etone	ND	mg/Kg	0.75						
ıromobenzene	ND	mg/Kg	0.050						
ıromochloromethane	ND	mg/Kg	0.050						
ıromodichloromethane	ND	mg/Kg	0.050						
ıromoform	ND	mg/Kg	0.050						
ıromomethane	ND	mg/Kg	0.10						
Butanone	ND	mg/Kg	0.50						
rbon disulfide	ND	mg/Kg	0.50						
bon tetrachloride	ND	mg/Kg	0.10						
orobenzene	ND	mg/Kg	0.050						

ualifiers:

:	Value above quantitation range	H	Holding times for preparation or analysis exceeded
·	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
ı	RPD outside accepted recovery limits	S	Spike Recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

:: Giant Refining Co
oject: Stockpile Banks from Lagoons & Ponds Work Order: 0605060

nalyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
thod: SW8260B								Batch ID: 10361	
mple ID: mb-10361		*MBLK*						Analysis Date: 5/10/2005	
loroethane	ND	mg/Kg	0.10						
loroform	ND	mg/Kg	0.050						
loromethane	ND	mg/Kg	0.050						
:hlorotoluene	ND	mg/Kg	0.050						
:hlorotoluene	ND	mg/Kg	0.050						
-1,2-DCE	ND	mg/Kg	0.050						
-1,3-Dichloropropene	ND	mg/Kg	0.050						
-Dibromo-3-chloropropane	ND	mg/Kg	0.10						
ıromochloromethane	ND	mg/Kg	0.050						
ıromomethane	ND	mg/Kg	0.10						
-Dichlorobenzene	ND	mg/Kg	0.050						
-Dichlorobenzene	ND	mg/Kg	0.050						
-Dichlorobenzene	ND	mg/Kg	0.050						
:hlorodifluoromethane	ND	mg/Kg	0.050						
-Dichloroethane	ND	mg/Kg	0.10						
-Dichloroethene	ND	mg/Kg	0.050						
Dichloropropane	ND	mg/Kg	0.050						
lchloropropane	ND	mg/Kg	0.050						
ıichloropropane	ND	mg/Kg	0.10						
-Dichloropropene	ND	mg/Kg	0.050						
xachlorobutadiene	ND	mg/Kg	0.10						
lexanone	ND	mg/Kg	0.50						
propylbenzene	ND	mg/Kg	0.050						
sopropyltoluene	ND	mg/Kg	0.050						
lethyl-2-pentanone	ND	mg/Kg	0.50						
thylene chloride	ND	mg/Kg	0.15						
lutylbenzene	ND	mg/Kg	0.050						
'ropylbenzene	ND	mg/Kg	0.050						
:-Butylbenzene	ND	mg/Kg	0.050						
rene	ND	mg/Kg	0.050						
-Butylbenzene	ND	mg/Kg	0.050						
,1,2-Tetrachloroethane	ND	mg/Kg	0.050						
,2,2-Tetrachloroethane	ND	mg/Kg	0.050						
rachloroethene (PCE)	ND	mg/Kg	0.050						
ıs-1,2-DCE	ND	mg/Kg	0.050						
ıs-1,3-Dichloropropene	ND	mg/Kg	0.050						
,3-Trichlorobenzene	ND	mg/Kg	0.10						
,4-Trichlorobenzene	ND	mg/Kg	0.050						
,1-Trichloroethane	ND	mg/Kg	0.050						
,2-Trichloroethane	ND	mg/Kg	0.050						
:hloroethene (TCE)	ND	mg/Kg	0.050						
:hlorofluoromethane	ND	mg/Kg	0.050						
,3-Trichloropropane	ND	mg/Kg	0.10						
,l chloride	ND	mg/Kg	0.050						

ıalifiers:

. Value above quantitation range
Analyte detected below quantitation limits
. 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

ıt: Giant Refining Co
roject: Stockpile Banks from Lagoons & Ponds
Work Order: 0605060

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
								Batch ID:	10361
ethod: SW8260B								Analysis Date:	5/10/2006
ımple ID: mb-10361		*MBLK*							
/lenes, Total	ND	mg/Kg	0.050						
								Analysis Date:	5/9/2006
ımple ID: lcs-10361		*LCS*							
ınzene	0.8252	mg/Kg	0.050	82.5	80.8	132			
ıluene	0.9339	mg/Kg	0.050	93.4	72.1	126			
ılorobenzene	1.078	mg/Kg	0.050	108	75.4	140			
1-Dichloroethene	0.9166	mg/Kg	0.050	91.7	59	147			
ichloroethene (TCE)	0.7785	mg/Kg	0.050	77.8	77.2	123			
								Analysis Date:	5/9/2006
ımple ID: 0605060-12a ms		*MS*							
ınzene	0.8676	mg/Kg	0.050	86.8	80.8	132			
ıluene	0.9851	mg/Kg	0.050	98.5	72.1	126			
ılorobenzene	1.092	mg/Kg	0.050	109	75.4	140			
1-Dichloroethene	1.066	mg/Kg	0.050	107	59	147			
ichloroethene (TCE)	0.8804	mg/Kg	0.050	88.0	77.2	123			
								Analysis Date:	5/9/2006
ımple ID: 0605060-12a msd		*MSD*							
ınzene	0.7971	mg/Kg	0.050	79.7	80.8	132	8.47	20	S
luene	0.8644	mg/Kg	0.050	86.4	72.1	126	13.1	20	
orobenzene	1.061	mg/Kg	0.050	106	75.4	140	2.92	20	
Dichloroethene	0.9447	mg/Kg	0.050	94.5	59	147	12.0	20	
chloroethene (TCE)	0.7631	mg/Kg	0.050	76.3	77.2	123	14.3	20	S

ualifiers:

E Value above quantitation range
I 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

'all Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 5/5/2006

Work Order Number 0605060

Received by AT

Checklist completed by _____ Signature _____ Date 5/5/06

Matrix

Carrier name UPS

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 ☐		
ll 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?	15°	*4° C ± 2 Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding _____

Comments: _____

Corrective Action _____

HAIN-OF-CUSTODY RECORD

ent: Giant Refining Co. Ciniza
ddress: Route 3 Box 7 Gallup NM 87301
Phone #: 505-722-3833
Fax #: 505-722-0210

QA/QC Package: Std ☐ Level 4 ☐
Other:

Project Name: STOCKPILE BANKS FROM LAGOONS + PONDS
Project #: 111605
Project Manager: ED RIEGE
Sampler: JOHNNY SANCHEZ
Sample Temperature: 15°

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	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 TCLP	Anions (F, Cl, NO_2, NO_3, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	REACTIVITY	IGNITABILITY	CORROSIVITY (RIC)	Air Bubbles or Headspace (Y or N)
5-3-06	0930	SOIL	N.W. Comp	2			0505060-1			X					X				X	X	X	X	
	0935		N.E.				-2			X					X				X	X	X	X	
	0940		MID. W.				-3			X					X				X	X	X	X	
	0945		MID. E.				-4			X					X				X	X	X	X	
	0950		S.W.				-5			X					X				X	X	X	X	
	0955		S.E.				-6			X					X				X	X	X	X	
	10:00	BLACK SOLIDS	#1 MORE CONTAM.	1			-7											X					
	10:05		#2 MORE CONTAM				-8											X					
	10:10		#3 MORE CONTAM.				-9											X					
	10:15	SOIL	#4 LESS CONTAM.				-10											X					
	10:20		#5 LESS CONTAM				-11											X					
	10:25		#6 LESS CONTAM.				-12											X					

Remarks: RUSH!

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
5-4-06	0800	[signature]	[signature] 5/5/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
			405

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, April 07, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Bank Material

Order No.: 0603352

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 3 sample(s) on 3/31/2006 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

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

Hall Environmental Analysis Laboratory

Date: *07-Apr-06*

CLIENT: Giant Refining Co
Project: Evap. Pond #2 Bank Material
Lab Order: 0603352

CASE NARRATIVE

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

Hall Environmental Analysis Laboratory

Date: *07-Apr-06*

CLIENT: Giant Refining Co
Lab Order: 0603352
Project: Evap. Pond #2 Bank Material
Lab ID: 0603352-01

Client Sample ID: Pond 2 Bank 1
Collection Date: 3/30/2006 3:00:00 PM
Date Received: 3/31/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **SCC**
EPA METHOD 8015B: DIESEL RANGE ORGANICS						
Diesel Range Organics (DRO)	64000	2000		mg/Kg	200	4/7/2006 4:36:46 AM
Motor Oil Range Organics (MRO)	ND	10000		mg/Kg	200	4/7/2006 4:36:46 AM
Surr: DNOP	0	60-124	S	%REC	200	4/7/2006 4:36:46 AM
						Analyst: **NSB**
EPA METHOD 8015B: GASOLINE RANGE						
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	4/6/2006 2:04:24 PM
Surr: BFB	109	79-128		%REC	50	4/6/2006 2:04:24 PM
						Analyst: **NSB**
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	4/6/2006 2:04:24 PM
Benzene	ND	2.5		mg/Kg	50	4/6/2006 2:04:24 PM
Toluene	ND	2.5		mg/Kg	50	4/6/2006 2:04:24 PM
Ethylbenzene	ND	2.5		mg/Kg	50	4/6/2006 2:04:24 PM
Xylenes, Total	ND	2.5		mg/Kg	50	4/6/2006 2:04:24 PM
Surr: 4-Bromofluorobenzene	99.2	84.4-117		%REC	50	4/6/2006 2:04:24 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *07-Apr-06*

CLIENT: Giant Refining Co
Lab Order: 0603352
Project: Evap. Pond #2 Bank Material
Lab ID: 0603352-02

Client Sample ID: Pond 2 Bank 2
Collection Date: 3/30/2006 3:20:00 PM
Date Received: 3/31/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **SCC**
EPA METHOD 8015B: DIESEL RANGE ORGANICS						
Diesel Range Organics (DRO)	200000	2000		mg/Kg	200	4/7/2006 5:41:56 AM
Motor Oil Range Organics (MRO)	ND	10000		mg/Kg	200	4/7/2006 5:41:56 AM
Surr: DNOP	0	60-124	S	%REC	200	4/7/2006 5:41:56 AM
						Analyst: **NSB**
EPA METHOD 8015B: GASOLINE RANGE						
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	4/6/2006 2:32:15 PM
Surr: BFB	113	79-128		%REC	50	4/6/2006 2:32:15 PM
						Analyst: **NSB**
EPA METHOD 8021B: VOLATILES						
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	4/6/2006 2:32:15 PM
Benzene	ND	2.5		mg/Kg	50	4/6/2006 2:32:15 PM
Toluene	ND	2.5		mg/Kg	50	4/6/2006 2:32:15 PM
Ethylbenzene	ND	2.5		mg/Kg	50	4/6/2006 2:32:15 PM
Xylenes, Total	ND	2.5		mg/Kg	50	4/6/2006 2:32:15 PM
Surr: 4-Bromofluorobenzene	103	84.4-117		%REC	50	4/6/2006 2:32:15 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *07-Apr-06*

CLIENT: Giant Refining Co
Lab Order: 0603352
Project: Evap. Pond #2 Bank Material
Lab ID: 0603352-03

Client Sample ID: Pond 2 Bank 3
Collection Date: 3/30/2006 3:40:00 PM
Date Received: 3/31/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	110000	2000		mg/Kg	200	4/7/2006 6:15:18 AM
Motor Oil Range Organics (MRO)	ND	10000		mg/Kg	200	4/7/2006 6:15:18 AM
Surr: DNOP	0	60-124	S	%REC	200	4/7/2006 6:15:18 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	250		mg/Kg	50	4/6/2006 3:00:08 PM
Surr: BFB	116	79-128		%REC	50	4/6/2006 3:00:08 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	4/6/2006 3:00:08 PM
Benzene	ND	2.5		mg/Kg	50	4/6/2006 3:00:08 PM
Toluene	ND	2.5		mg/Kg	50	4/6/2006 3:00:08 PM
Ethylbenzene	ND	2.5		mg/Kg	50	4/6/2006 3:00:08 PM
Xylenes, Total	ND	2.5		mg/Kg	50	4/6/2006 3:00:08 PM
Surr: 4-Bromofluorobenzene	107	84.4-117		%REC	50	4/6/2006 3:00:08 PM

Qualifiers:

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

Date: *07-Apr-06*

Hall Environmental Analysis Laboratory

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_S

CLIENT: Giant Refining Co
Work Order: 0603352
Project: Evap. Pond #2 Bank Material

Sample ID: **MB-10114** SampType: **MBLK** TestCode: **8015DRO_S** Units: **mg/Kg** Prep Date: **4/4/2006** RunNo: **18818**
Client ID: **ZZZZZ** Batch ID: **10114** TestNo: **SW8015** Analysis Date: **4/5/2006** SeqNo: **467037**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10									
Motor Oil Range Organics (MRO)	ND	50									

Sample ID: **LCS-10114** SampType: **LCS** TestCode: **8015DRO_S** Units: **mg/Kg** Prep Date: **4/4/2006** RunNo: **18818**
Client ID: **ZZZZZ** Batch ID: **10114** TestNo: **SW8015** Analysis Date: **4/5/2006** SeqNo: **467095**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42.18	10	50	0	84.4	67.4	117				

Sample ID: **LCSD-10114** SampType: **LCSD** TestCode: **8015DRO_S** Units: **mg/Kg** Prep Date: **4/4/2006** RunNo: **18818**
Client ID: **ZZZZZ** Batch ID: **10114** TestNo: **SW8015** Analysis Date: **4/5/2006** SeqNo: **467096**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	40.59	10	50	0	81.2	67.4	117	42.18	3.84	17.4	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_S

CLIENT: Giant Refining Co
Work Order: 0603352
Project: Evap. Pond #2 Bank Material

Sample ID: **MB-10098** SampType: **MBLK** TestCode: **8015GRO_S** Units: **mg/Kg** Prep Date: **3/31/2006** RunNo: **18842**
Client ID: **ZZZZZ** Batch ID: **10098** TestNo: **SW8015** **(SW5035)** Analysis Date: **4/5/2006** SeqNo: **467547**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0									

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_S

CLIENT: Giant Refining Co
Work Order: 0603352
Project: Evap. Pond #2 Bank Material

Sample ID: **MB-10098** SampType: **MBLK** TestCode: **8021BTEX_S** Units: **mg/Kg** Prep Date: **3/31/2006** RunNo: **18842**
Client ID: **ZZZZZ** Batch ID: **10098** TestNo: **SW8021** **(SW5035)** Analysis Date: **4/5/2006** SeqNo: **467531**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10									
Benzene	ND	0.050									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.050									

Sample ID: **LCS-10098** SampType: **LCS** TestCode: **8021BTEX_S** Units: **mg/Kg** Prep Date: **3/31/2006** RunNo: **18842**
Client ID: **ZZZZZ** Batch ID: **10098** TestNo: **SW8021** **(SW5035)** Analysis Date: **4/5/2006** SeqNo: **467532**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.4064	0.10	0.4	0	102	65	132				
Benzene	0.4721	0.050	0.452	0	104	85.6	116				
Toluene	1.859	0.050	1.62	0	115	82.4	120				
Ethylbenzene	0.4260	0.050	0.456	0	93.4	86.4	111				
Xylenes, Total	2.002	0.050	1.8	0	111	78.4	125				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

all Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/31/2006

Work Order Number 0603352

Received by AT

Checklist completed by _____ Signature _____ Date 3/31/06

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 #: 505 722 3833
Fax #: 505 722 0210

Project Name: Evap. Pond # 2 Bank Material
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	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)
							0603352																	
30/06	1500	Non Aqueous	Pond 2 Bank 1				0603352-1	X		X														
"	1520	"	" " 2				-2	X		X														
"	1540	"	" " 3				-3	X		X														

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
3/31/06	0900	[signature]	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 3/31/06

Remarks:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Wednesday, June 07, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Evap. Pond #2 Post Cleanup 6-1-2006

Order No.: 0606032

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/2/2006 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

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

Hall Environmental Analysis Laboratory

Date: *07-Jun-06*

CLIENT: Giant Refining Co
Project: Evap. Pond #2 Post Cleanup 6-1-2006
Lab Order: 0606032

CASE NARRATIVE

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

Hall Environmental Analysis Laboratory

Date: *07-Jun-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 2 Bank 1
Lab Order:	0606032	**Collection Date:**	6/1/2006 10:00:00 AM
Project:	Evap. Pond #2 Post Cleanup 6-1-2006	**Date Received:**	6/2/2006
Lab ID:	0606032-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	18000	2000		mg/Kg	200	6/6/2006 8:38:24 AM
Motor Oil Range Organics (MRO)	ND	10000		mg/Kg	200	6/6/2006 8:38:24 AM
Surr: DNOP	0	61.7-135	S	%REC	200	6/6/2006 8:38:24 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	100		mg/Kg	20	6/6/2006 12:05:02 PM
Surr: BFB	142	81.7-127	S	%REC	20	6/6/2006 12:05:02 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	2.0		mg/Kg	20	6/6/2006 12:05:02 PM
Benzene	ND	1.0		mg/Kg	20	6/6/2006 12:05:02 PM
Toluene	ND	1.0		mg/Kg	20	6/6/2006 12:05:02 PM
Ethylbenzene	ND	1.0		mg/Kg	20	6/6/2006 12:05:02 PM
Xylenes, Total	ND	3.0		mg/Kg	20	6/6/2006 12:05:02 PM
Surr: 4-Bromofluorobenzene	113	77.6-114		%REC	20	6/6/2006 12:05:02 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *07-Jun-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 2 BTM
Lab Order:	0606032	**Collection Date:**	6/1/2006 10:15:00 AM
Project:	Evap. Pond #2 Post Cleanup 6-1-2006	**Date Received:**	6/2/2006
Lab ID:	0606032-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	1400	200		mg/Kg	20	6/6/2006 9:11:13 AM
Motor Oil Range Organics (MRO)	ND	1000		mg/Kg	20	6/6/2006 9:11:13 AM
Surr: DNOP	0	61.7-135	S	%REC	20	6/6/2006 9:11:13 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	25		mg/Kg	5	6/6/2006 12:34:13 PM
Surr: BFB	149	81.7-127	S	%REC	5	6/6/2006 12:34:13 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	5	6/6/2006 12:34:13 PM
Benzene	ND	0.25		mg/Kg	5	6/6/2006 12:34:13 PM
Toluene	ND	0.25		mg/Kg	5	6/6/2006 12:34:13 PM
Ethylbenzene	ND	0.25		mg/Kg	5	6/6/2006 12:34:13 PM
Xylenes, Total	1.3	0.75		mg/Kg	5	6/6/2006 12:34:13 PM
Surr: 4-Bromofluorobenzene	125	77.6-114	S	%REC	5	6/6/2006 12:34:13 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *07-Jun-06*

CLIENT: Giant Refining Co
Lab Order: 0606032
Project: Evap. Pond #2 Post Cleanup 6-1-2006
Lab ID: 0606032-03

Client Sample ID: Pond 2 Bank 2
Collection Date: 6/1/2006 10:30:00 AM
Date Received: 6/2/2006
Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	9900	1000		mg/Kg	100	6/6/2006 9:44:02 AM
Motor Oil Range Organics (MRO)	ND	5000		mg/Kg	100	6/6/2006 9:44:02 AM
Surr: DNOP	0	61.7-135	S	%REC	100	6/6/2006 9:44:02 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	50		mg/Kg	10	6/6/2006 1:03:18 PM
Surr: BFB	117	81.7-127		%REC	10	6/6/2006 1:03:18 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	1.0		mg/Kg	10	6/6/2006 1:03:18 PM
Benzene	ND	0.50		mg/Kg	10	6/6/2006 1:03:18 PM
Toluene	ND	0.50		mg/Kg	10	6/6/2006 1:03:18 PM
Ethylbenzene	ND	0.50		mg/Kg	10	6/6/2006 1:03:18 PM
Xylenes, Total	ND	1.5		mg/Kg	10	6/6/2006 1:03:18 PM
Surr: 4-Bromofluorobenzene	118	77.6-114	S	%REC	10	6/6/2006 1:03:18 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *07-Jun-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Pond 2 Bank 3
Lab Order:	0606032	**Collection Date:**	6/1/2006 10:45:00 AM
Project:	Evap. Pond #2 Post Cleanup 6-1-2006	**Date Received:**	6/2/2006
Lab ID:	0606032-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/6/2006 10:17:06 AM
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/6/2006 10:17:06 AM
Surr: DNOP	97.8	61.7-135		%REC	1	6/6/2006 10:17:06 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	6/6/2006 2:01:31 PM
Surr: BFB	110	81.7-127		%REC	1	6/6/2006 2:01:31 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	0.10		mg/Kg	1	6/6/2006 2:01:31 PM
Benzene	ND	0.050		mg/Kg	1	6/6/2006 2:01:31 PM
Toluene	ND	0.050		mg/Kg	1	6/6/2006 2:01:31 PM
Ethylbenzene	ND	0.050		mg/Kg	1	6/6/2006 2:01:31 PM
Xylenes, Total	ND	0.15		mg/Kg	1	6/6/2006 2:01:31 PM
Surr: 4-Bromofluorobenzene	107	77.6-114		%REC	1	6/6/2006 2:01:31 PM

Qualifiers:

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

QA/QC SUMMARY REPORT

:: Giant Refining Co
roject: Evap. Pond #2 Post Cleanup 6-1-2006 **Work Order:** 0606032

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
ethod: SW8015								Batch ID:	**10554**
ample ID: MB-10554		*MBLK*						Analysis Date:	6/6/2006
iesel Range Organics (DRO)	ND	mg/Kg	10						
otor Oil Range Organics (MRO)	ND	mg/Kg	50						
ample ID: LCS-10554		*LCS*						Analysis Date:	6/6/2006
iesel Range Organics (DRO)	47.47	mg/Kg	10	94.9	64.6	116			
ample ID: LCSD-10554		*LCSD*						Analysis Date:	6/6/2006
iesel Range Organics (DRO)	50.04	mg/Kg	10	100	64.6	116	5.27	17.4	
ethod: SW8015								Batch ID:	**10550**
ample ID: MB-10550		*MBLK*						Analysis Date:	6/5/2006
asoline Range Organics (GRO)	ND	mg/Kg	5.0						
ample ID: LCS-10550		*LCS*						Analysis Date:	6/6/2006
asoline Range Organics (GRO)	22.40	mg/Kg	5.0	89.6	73.4	115			
ample ID: LCSD-10550		*LCSD*						Analysis Date:	6/6/2006
asoline Range Organics (GRO)	22.80	mg/Kg	5.0	91.2	73.4	115	1.77	11.6	
lethod: SW8021								Batch ID:	**10550**
ple ID: MB-10550		*MBLK*						Analysis Date:	6/5/2006
tert-butyl ether (MTBE)	ND	mg/Kg	0.10						
enzene	ND	mg/Kg	0.050						
oluene	ND	mg/Kg	0.050						
thylbenzene	ND	mg/Kg	0.050						
ylenes, Total	ND	mg/Kg	0.15						
ample ID: LCS-10550		*LCS*						Analysis Date:	6/5/2006
lethyl tert-butyl ether (MTBE)	0.3799	mg/Kg	0.10	95.0	67.9	135			
enzene	0.3061	mg/Kg	0.050	80.6	77.5	123			
oluene	1.909	mg/Kg	0.050	90.9	85.3	129			
thylbenzene	0.3925	mg/Kg	0.050	101	79.6	121			
ylenes, Total	2.273	mg/Kg	0.15	108	80	130			
ample ID: LCSD-10550		*LCSD*						Analysis Date:	6/5/2006
lethyl tert-butyl ether (MTBE)	0.3753	mg/Kg	0.10	93.8	67.9	135	1.22	28	
enzene	0.3074	mg/Kg	0.050	80.9	77.5	123	0.424	27	
oluene	1.991	mg/Kg	0.050	94.8	85.3	129	4.20	19	
thylbenzene	0.4160	mg/Kg	0.050	107	79.6	121	5.81	10	
ylenes, Total	2.422	mg/Kg	0.15	115	80	130	6.36	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

all Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 6/2/2006

Work Order Number 0606032

Received by AT

Checklist completed by _____ Signature | Date 6/2/06

Matrix

Carrier name UPS

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 ☐		
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? **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 Post Cleanup 6-1-2006
Project #:
Project Manager: Steve Moore
Sampler: Johnny Sanchez
Sample Temperature: 6°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)					Air Bubbles or Headspace (Y or N)
6/1/06	1000	non aqueous	Pond 2 Bank (1)				0606032-1	X		X														
"	1015	"	Pond 2 BTM.				-2	X		X														
"	1030	"	Pond 2 Bank (2)				-3	X		X														
"	1045	"	Pond 2 Bank (3)				-4	X		X														

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
6/1/06		Steve Moore	6/2/06 1232
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, March 13, 2006

Johnny Sanchez
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-0231
FAX (505) 722-0210

RE: Tank 339 Scale 1-25-06

Order No.: 0601272

Dear Johnny Sanchez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/27/2006 for the analyses presented in the following report.

This report is an addendum to the report dated February 6, 2006. TCLP Hg has been added to this report. Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

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

Date: *13-Mar-06*

CLIENT: Giant Refining Co
Project: Tank 339 Scale 1-25-06
Lab Order: 0601272

CASE NARRATIVE

TCLP Mercury was analyzed past the EPA holding time at the clients request.

Hall Environmental Analysis Laboratory

Date: *13-Mar-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Tank 339 Scale
Lab Order:	0601272	**Collection Date:**	1/25/2006 2:00:00 PM
Project:	Tank 339 Scale 1-25-06	**Date Received:**	1/27/2006
Lab ID:	0601272-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	50	2/2/2006 9:53:57 PM
Benzene	14	2.5		mg/Kg	50	2/2/2006 9:53:57 PM
Toluene	160	2.5		mg/Kg	50	2/2/2006 9:53:57 PM
Ethylbenzene	80	2.5		mg/Kg	50	2/2/2006 9:53:57 PM
Xylenes, Total	470	2.5		mg/Kg	50	2/2/2006 9:53:57 PM
Surr: 4-Bromofluorobenzene	115	87.5-115		%REC	50	2/2/2006 9:53:57 PM
EPA METHOD 7471: MERCURY						Analyst: **CMC**
Mercury	150	33		mg/Kg	1000	1/27/2006
MERCURY, TCLP LEACHED						Analyst: **CMC**
Mercury	ND	0.020	H	mg/L	1	3/8/2006

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *13-Mar-06*

CLIENT: Giant Refining Co
Work Order: 0601272
Project: Tank 339 Scale 1-25-06

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_S

Sample ID: **MB-9699** SampType: **MBLK** TestCode: **8021BTEX_S** Units: **mg/Kg** Prep Date: **2/1/2006** RunNo: **18141**
Client ID: **ZZZZZ** Batch ID: **9699** TestNo: **SW8021** **(SW5035)** Analysis Date: **2/2/2006** SeqNo: **447429**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10									
Benzene	ND	0.050									
Toluene	ND	0.050									
Ethylbenzene	ND	0.050									
Xylenes, Total	ND	0.050									

Sample ID: **LCS-9699** SampType: **LCS** TestCode: **8021BTEX_S** Units: **mg/Kg** Prep Date: **2/1/2006** RunNo: **18141**
Client ID: **ZZZZZ** Batch ID: **9699** TestNo: **SW8021** **(SW5035)** Analysis Date: **2/2/2006** SeqNo: **447430**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	0.3558	0.050	0.372	0	95.6	85.6	116				
Toluene	1.725	0.050	1.78	0	96.9	82.4	120				
Ethylbenzene	0.5558	0.050	0.554	0	100	86.4	111				
Xylenes, Total	1.615	0.050	1.64	0	98.5	78.4	125				

3/5

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

CLIENT: Giant Refining Co
Work Order: 0601272
Project: Tank 339 Scale 1-25-06

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTS

Sample ID: **MB-9667**	SampType: **MBLK**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **1/27/2006**	RunNo: **18067**
Client ID: **ZZZZZ**	Batch ID: **9667**	TestNo: **SW7471**	**(SW7471)**	Analysis Date: **1/27/2006**	SeqNo: **445282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.033									

Sample ID: **LCS-9667**	SampType: **LCS**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **1/27/2006**	RunNo: **18067**
Client ID: **ZZZZZ**	Batch ID: **9667**	TestNo: **SW7471**	**(SW7471)**	Analysis Date: **1/27/2006**	SeqNo: **445283**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.1773	0.033	0.1667	0	106	80	120				

4 / 5

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

CLIENT: Giant Refining Co
Work Order: 0601272
Project: Tank 339 Scale 1-25-06

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_TCLP

Sample ID: **MB-9949** SampType: **MBLK** TestCode: **HG_TCLP** Units: **mg/L** Prep Date: **3/8/2006** RunNo: **18515**
Client ID: **ZZZZZ** Batch ID: **9949** TestNo: **SW7470** **(SW7470)** Analysis Date: **3/8/2006** SeqNo: **457586**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.020									

Sample ID: **LCS-9949** SampType: **LCS** TestCode: **HG_TCLP** Units: **mg/L** Prep Date: **3/8/2006** RunNo: **18515**
Client ID: **ZZZZZ** Batch ID: **9949** TestNo: **SW7470** **(SW7470)** Analysis Date: **3/8/2006** SeqNo: **457587**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004826	0.0020	0.005	0	96.5	80	120				

Sample ID: **LCSD-9949** SampType: **LCSD** TestCode: **HG_TCLP** Units: **mg/L** Prep Date: **3/8/2006** RunNo: **18515**
Client ID: **ZZZZZ** Batch ID: **9949** TestNo: **SW7470** **(SW7470)** Analysis Date: **3/8/2006** SeqNo: **457595**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.005090	0.0020	0.005	0	102	80	120	0.004826	5.32	20	

5 / 5

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

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: Tank 339 Scale 1-25-06
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 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)
1-25-06	1400	non Aqueous	Tank 339 Scale	2				0601272-1	X							X									

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-26-06	0900	Steve Morris	Lisa Hallenkamp 1/27/06 10:15
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH
3/3/06 per JS added TCLP Hg /AT

FORM RL

HALL ENVIRONMENTAL ANALYSIS LABORATORY

COVER LETTER

Monday, January 30, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Soil Cleanup by TK 576

Order No.: 0601121

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/13/2006 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

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

Date: *30-Jan-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Soil Cleanup by TK 576
Lab Order:	0601121	**Collection Date:**	1/9/2006 4:00:00 PM
Project:	Soil Cleanup by TK 576	**Date Received:**	1/13/2006
Lab ID:	0601121-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES TKI						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	10		mg/Kg	100	1/20/2006 9:37:08 PM
Benzene	17	2.5		mg/Kg	100	1/20/2006 9:37:08 PM
Toluene	100	2.5		mg/Kg	100	1/20/2006 9:37:08 PM
Ethylbenzene	39	2.5		mg/Kg	100	1/20/2006 9:37:08 PM
Xylenes, Total	250	2.5		mg/Kg	100	1/20/2006 9:37:08 PM
Surr: 4-Bromofluorobenzene	107	87.5-115		%REC	100	1/20/2006 9:37:08 PM
EPA METHOD 7471: MERCURY						Analyst: **CMC**
Mercury	ND	0.033		mg/Kg	1	1/27/2006
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	ND	2.5		mg/Kg	1	1/18/2006 9:25:22 AM
Barium	41	0.10		mg/Kg	1	1/18/2006 9:25:22 AM
Cadmium	0.24	0.10		mg/Kg	1	1/18/2006 9:25:22 AM
Chromium	3.3	0.30		mg/Kg	1	1/18/2006 9:25:22 AM
Lead	23	0.25		mg/Kg	1	1/18/2006 9:25:22 AM
Selenium	ND	2.5		mg/Kg	1	1/18/2006 9:25:22 AM
Silver	ND	0.25		mg/Kg	1	1/18/2006 9:25:22 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *30-Jan-06*

CLIENT: Giant Refining Co
Work Order: 0601121
Project: Soil Cleanup by TK 576

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_S

Sample ID: **MB-9603** SampType: **MBLK** TestCode: **8021BTEX_S** Units: **mg/Kg** Prep Date: **1/18/2006** RunNo: **17996**
Client ID: **ZZZZZ** Batch ID: **9603** TestNo: **SW8021** **(SW5035)** Analysis Date: **1/20/2006** SeqNo: **442540**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10									
Benzene	ND	0.025									
Toluene	ND	0.025									
Ethylbenzene	ND	0.025									
Xylenes, Total	ND	0.025									

Sample ID: **LCS-9603** SampType: **LCS** TestCode: **8021BTEX_S** Units: **mg/Kg** Prep Date: **1/18/2006** RunNo: **17996**
Client ID: **ZZZZZ** Batch ID: **9603** TestNo: **SW8021** **(SW5035)** Analysis Date: **1/20/2006** SeqNo: **442541**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.840	0.10	2	0	92.0	65	132				
Benzene	0.4132	0.025	0.42	0	98.4	85.6	116				
Toluene	2.102	0.025	1.9	0	111	82.4	120				
Ethylbenzene	0.3893	0.025	0.41	0	95.0	86.4	111				
Xylenes, Total	2.064	0.025	1.9	0	109	78.4	125				

2/6

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601121
Project: Soil Cleanup by TK 576

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTS

Sample ID: **MB-9667**	SampType: **MBLK**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **1/27/2006**	RunNo: **18067**
Client ID: **ZZZZZ**	Batch ID: **9667**	TestNo: **SW7471**	**(SW7471)**	Analysis Date: **1/27/2006**	SeqNo: **445282**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.033									

Sample ID: **LCS-9667**	SampType: **LCS**	TestCode: **HG_CTS**	Units: **mg/Kg**	Prep Date: **1/27/2006**	RunNo: **18067**
Client ID: **ZZZZZ**	Batch ID: **9667**	TestNo: **SW7471**	**(SW7471)**	Analysis Date: **1/27/2006**	SeqNo: **445283**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.1773	0.033	0.1667	0	106	80	120				

3 / 6

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

CLIENT: Giant Refining Co
Work Order: 0601121
Project: Soil Cleanup by TK 576

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_SOIL

Sample ID: **MB-9582** SampType: **MBLK** TestCode: **METALS_SOI** Units: **mg/Kg** Prep Date: **1/16/2006** RunNo: **17954**
Client ID: **ZZZZZ** Batch ID: **9582** TestNo: **SW6010A** Analysis Date: **1/18/2006** SeqNo: **441307**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	2.5									
Barium	ND	0.10									
Cadmium	ND	0.10									
Chromium	ND	0.30									
Lead	ND	0.25									
Selenium	ND	2.5									
Silver	ND	0.25									

Sample ID: **LCS-9582** SampType: **LCS** TestCode: **METALS_SOI** Units: **mg/Kg** Prep Date: **1/16/2006** RunNo: **17954**
Client ID: **ZZZZZ** Batch ID: **9582** TestNo: **SW6010A** Analysis Date: **1/18/2006** SeqNo: **441308**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	24.72	2.5	25	0	98.9	80	120				
Barium	23.67	0.10	25	0	94.7	80	120				
Cadmium	24.07	0.10	25	0.02615	96.2	80	120				
Chromium	24.29	0.30	25	0	97.2	80	120				
Lead	23.26	0.25	25	0	93.0	80	120				
Selenium	24.21	2.5	25	0	96.8	80	120				
Silver	24.79	0.25	25	0	99.2	80	120				

Sample ID: **LCSD-9582** SampType: **LCSD** TestCode: **METALS_SOI** Units: **mg/Kg** Prep Date: **1/16/2006** RunNo: **17954**
Client ID: **ZZZZZ** Batch ID: **9582** TestNo: **SW6010A** Analysis Date: **1/18/2006** SeqNo: **441309**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	24.04	2.5	25	0	96.2	80	120	24.72	2.79	20	
Barium	23.42	0.10	25	0	93.7	80	120	23.67	1.07	20	
Cadmium	24.00	0.10	25	0.02615	95.9	80	120	24.07	0.281	20	
Chromium	24.04	0.30	25	0	96.2	80	120	24.29	1.04	20	
Lead	23.23	0.25	25	0	92.9	80	120	23.26	0.132	20	
Selenium	24.17	2.5	25	0	96.7	80	120	24.21	0.148	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601121
Project: Soil Cleanup by TK 576

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_SOIL

Sample ID: **LCSD-9582**	SampType: **LCSD**	TestCode: **METALS_SOI**	Units: **mg/Kg**	Prep Date: **1/16/2006**	RunNo: **17954**
Client ID: **ZZZZZ**	Batch ID: **9582**	TestNo: **SW6010A**		Analysis Date: **1/18/2006**	SeqNo: **441309**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	24.60	0.25	25	0	98.4	80	120	24.79	0.800	20	

5/6

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

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 1/13/2006

Work Order Number 0601121 | Received by LMM

Checklist completed by Lisa Hallwood (Signature) 1/13/06 (Date)

Matrix | Carrier name UPS

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? **7°** *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 REFINERY - CINIZA
Address: ROUTE 3, BOX 7 GALLUP, NM
Phone #: 505-722-3833
Fax #:

Project Name: SOIL CLEANUP BY TK 576
Project #:
Project Manager: ED RIEGE
Sampler: JOHNNY SANCHEZ
Sample Temperature: -10

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 + TPH (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)
1-9-06	16:00	SOIL	(SOIL CLEANUP BY TK 576)	2 - JARS				0601120-1	X							X								

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	Remarks:
1-12-06	0900	J Sanchez	Lisa Hallinkis 1140 1/13/06	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

FORM R

Hall Environmental Analysis Laboratory

Date: *26-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Process Sewer Sludge
Lab Order:	0605213	**Collection Date:**	5/17/2006 2:00:00 PM
Project:	Process Sewer Sludge	**Date Received:**	5/19/2006
Lab ID:	0605213-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: SCC
Diesel Range Organics (DRO)	98000	2000		mg/Kg	200	5/25/2006 9:17:41 PM
Motor Oil Range Organics (MRO)	16000	10000		mg/Kg	200	5/25/2006 9:17:41 PM
Surr: DNOP	0	61.7-135	S	%REC	200	5/25/2006 9:17:41 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: HLM
Gasoline Range Organics (GRO)	ND	500		mg/Kg	100	5/24/2006 3:50:06 PM
Surr: BFB	96.0	81.7-127		%REC	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: <C5	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C05-C6	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C06-C7	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C07-C8	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C08-C9	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C09-C10	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C10-C11	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C11-C12	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C12-C14	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
% GRO Hydrocarbons: C14+	ND	0		mg/Kg	100	5/24/2006 3:50:06 PM
EPA METHOD 8021B: VOLATILES						Analyst: HLM
Methyl tert-butyl ether (MTBE)	ND	10		mg/Kg	100	5/24/2006 3:50:06 PM
Benzene "TCLP" = 0.7	14	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
TRI Toluene	19	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
Ethylbenzene TRI	12	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
Xylenes, Total	74	15		mg/Kg	100	5/24/2006 3:50:06 PM
Surr: 4-Bromofluorobenzene	97.8	77.6-114		%REC	100	5/24/2006 3:50:06 PM
TRI m,p-Xylene	55	10		mg/Kg	100	5/24/2006 3:50:06 PM
o-Xylene	19	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
1,2,4-Trimethylbenzene TRI	33	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
1,3,5-Trimethylbenzene NOT TRI	11	5.0		mg/Kg	100	5/24/2006 3:50:06 PM
MERCURY, TCLP LEACHED						Analyst: CMC
TRI Mercury	ND	0.020		mg/L	1	5/23/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	5/25/2006 9:59:52 AM
Barium	ND	100		mg/L	1	5/25/2006 9:59:52 AM
Cadmium	ND	1.0		mg/L	1	5/25/2006 9:59:52 AM
Chromium	ND	5.0		mg/L	1	5/25/2006 9:59:52 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *26-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Process Sewer Sludge
Lab Order:	0605213	**Collection Date:**	5/17/2006 2:00:00 PM
Project:	Process Sewer Sludge	**Date Received:**	5/19/2006
Lab ID:	0605213-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Lead	ND	5.0		mg/L	1	5/25/2006 9:59:52 AM
Selenium	ND	1.0		mg/L	1	5/25/2006 9:59:52 AM
Silver	ND	5.0		mg/L	1	5/25/2006 9:59:52 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Form R ✓

Thursday, April 13, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Tank #112 Diesel Sludge

Order No.: 0603301

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/28/2006 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

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

Date: *13-Apr-06*

CLIENT: Giant Refining Co
Project: Tank #112 Diesel Sludge
Lab Order: 0603301

CASE NARRATIVE

Analytical Comments for METHOD 8021BTEX_PROD, SAMPLE 0603301-01A: Necessary dilution for high amount of DRO hydrocarbons.

Hall Environmental Analysis Laboratory

Date: *13-Apr-06*

CLIENT: Giant Refining Co
Project: Tank #112 Diesel Sludge

Lab Order: 0603301

Lab ID: 0603301-01
Client Sample ID: TK 112 Diesel Sludge

Collection Date: 3/23/2006 1:30:00 PM
Matrix: PRODUCT

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	120		mg/Kg	100	4/10/2006 6:09:46 PM
Toluene	ND	120		mg/Kg	100	4/10/2006 6:09:46 PM
Ethylbenzene	ND	120		mg/Kg	100	4/10/2006 6:09:46 PM
Xylenes, Total	600	120		mg/Kg	100	4/10/2006 6:09:46 PM
Surr: 4-Bromofluorobenzene	107	74-118		%REC	100	4/10/2006 6:09:46 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0603301
Lab ID: C06031281-001
Client Sample ID: TK 112 Diesel Sludge

Report Date: 04/12/06
Collection Date: 03/23/06 13:30
Date Received: 03/30/06
Matrix: Sludge

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Filterable	No					SW1311	04/04/06 08:02 / dj
METALS - TCLP							
Arsenic	ND	mg/L		0.50	5	SW6010B	04/06/06 09:46 / cp
Barium	ND	mg/L		10	100	SW6010B	04/06/06 09:46 / cp
Cadmium	ND	mg/L		0.10	1	SW6010B	04/06/06 09:46 / cp
Chromium	ND	mg/L		0.50	5	SW6010B	04/06/06 09:46 / cp
Lead	ND	mg/L		0.50	5	SW6010B	04/06/06 09:46 / cp
Mercury	ND	mg/L		0.02	0.2	SW7470A	04/05/06 16:05 / sjl
Selenium	ND	mg/L		0.10	1	SW6010B	04/06/06 09:46 / cp
Silver	ND	mg/L		0.50	5	SW6010B	04/06/06 09:46 / cp

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
Project: 0603301

Report Date: 04/12/06
Work Order: C06031281

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B									Batch: 10636
Sample ID: MB-10636	Method Blank				Run: ICP2-C_060405B				04/05/06 19:10
Arsenic	ND	mg/L	0.01						
Barium	ND	mg/L	0.0006						
Cadmium	ND	mg/L	0.0008						
Chromium	0.001	mg/L	0.001						
Lead	0.02	mg/L	0.004						
Selenium	ND	mg/L	0.02						
Silver	ND	mg/L	0.002						
Sample ID: C06040040-001CMS	Matrix Spike				Run: ICP2-C_060405B				04/06/06 09:59
Arsenic	0.96	mg/L	0.50	95.7	75	125			
Barium	1.7	mg/L	10	111	75	125			
Cadmium	0.90	mg/L	0.10	89.5	75	125			
Chromium	0.92	mg/L	0.50	91.6	75	125			
Lead	0.93	mg/L	0.50	93	75	125			
Selenium	0.91	mg/L	0.10	90.8	75	125			
Silver	0.79	mg/L	0.50	79.3	75	125			
Sample ID: C06040040-001CMSD	Matrix Spike Duplicate				Run: ICP2-C_060405B				04/06/06 10:03
Arsenic	0.95	mg/L	0.50	95.4	75	125	0.3	20	
Barium	1.7	mg/L	10	114	75	125	0	20	
Cadmium	0.88	mg/L	0.10	88.1	75	125	1.6	20	
Chromium	0.92	mg/L	0.50	91.6	75	125	0	20	
Lead	0.93	mg/L	0.50	93	75	125	0	20	
Selenium	0.91	mg/L	0.10	91.3	75	125	0.5	20	
Silver	0.77	mg/L	0.50	77.4	75	125	2.4	20	
Sample ID: LCS-10636	Laboratory Control Spike				Run: ICP2-C_060405B				04/06/06 10:26
Arsenic	1.04	mg/L	0.50	104	90	110			
Barium	1.09	mg/L	10	109	90	110			
Cadmium	1.02	mg/L	0.10	102	90	110			
Chromium	1.03	mg/L	0.50	102	90	110			
Lead	1.01	mg/L	0.50	99.5	90	110			
Selenium	1.05	mg/L	0.10	105	90	110			
Silver	1.02	mg/L	0.50	102	90	110			
Method: SW7470A									Batch: HG3112-060405
Sample ID: MBLK	Method Blank				Run: CVAA-C201_060405A				04/05/06 16:44
Mercury	ND	mg/L	0.001						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Hall Environmental Analysis Laboratory

Date: *13-Apr-06*

CLIENT: Giant Refining Co
Work Order: 0603301
Project: Tank #112 Diesel Sludge

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_PROD

Sample ID: **MB-10131**	SampType: **MBLK**	TestCode: **8021BTEX_P**	Units: **mg/Kg**	Prep Date: **4/6/2006**	RunNo: **18885**
Client ID: **ZZZZZ**	Batch ID: **10131**	TestNo: **SW8021**	**(SW5035)**	Analysis Date: **4/10/2006**	SeqNo: **468612**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.2									
Toluene	ND	1.2									
Ethylbenzene	ND	1.2									
Xylenes, Total	ND	1.2									

5/6

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

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 3/28/2006

Work Order Number 0603301

Received by LMM

Checklist completed by Lisa Hebrikad (Signature) 3/28/06 (Date)

Matrix

Carrier name UPS

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? **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 Co Ciniza
Address: Route 3 Box 7 Gallup NM ~~87301~~ 87301
Phone #: 505-722-3337
Fax #:

Project Name: TANK #112 DIESEL SLUDGE
Project #: 031406 WASTE
Project Manager: ED RIEGE
Sampler: ED
Sample Temperature: 60

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0603301	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)	TCLP METALS				Air Bubbles or Headspace (Y or N)
3-23-06	13:30	SLUDGE	TK 112 DIESEL SLUDGE	2				-1	X												X				

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
3-27-06	0900	[signature]	Lisa Hedenk (CL) 1207 3/28/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: ~ 10 TO 15 % DIESEL

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, January 19, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-0258
FAX (505) 722-0210

RE: Tank 577 Waste Analysis

Order No.: 0601056

Dear Steve Morris:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/6/2006 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

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

Date: *19-Jan-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Tank 577 BTTMS Scale
Lab Order:	0601056	**Collection Date:**	1/4/2006 3:30:00 PM
Project:	Tank 577 Waste Analysis	**Date Received:**	1/6/2006
Lab ID:	0601056-01A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: **CMC**
Mercury	0.14	0.033		mg/Kg	1	1/10/2006
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	29	12		mg/Kg	5	1/18/2006 11:50:31 AM
Barium	25	0.50		mg/Kg	5	1/18/2006 11:50:31 AM
Cadmium	ND	1.0		mg/Kg	10	1/18/2006 11:47:51 AM
Chromium	62	1.5		mg/Kg	5	1/18/2006 11:50:31 AM
Lead	ND	2.5		mg/Kg	10	1/18/2006 11:47:51 AM
Selenium	ND	25		mg/Kg	10	1/18/2006 11:47:51 AM
Silver	ND	1.2		mg/Kg	5	1/18/2006 11:50:31 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *19-Jan-06*

CLIENT: Giant Refining Co
Work Order: 0601056
Project: Tank 577 Waste Analysis

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTS

Sample ID: **MB-9554** SampType: **MBLK** TestCode: **HG_CTS** Units: **mg/Kg** Prep Date: **1/10/2006** RunNo: **17862**
Client ID: **ZZZZZ** Batch ID: **9554** TestNo: **SW7471** **(SW7471)** Analysis Date: **1/10/2006** SeqNo: **439127**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.033									

Sample ID: **LCS-9554** SampType: **LCS** TestCode: **HG_CTS** Units: **mg/Kg** Prep Date: **1/10/2006** RunNo: **17862**
Client ID: **ZZZZZ** Batch ID: **9554** TestNo: **SW7471** **(SW7471)** Analysis Date: **1/10/2006** SeqNo: **439128**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.1477	0.033	0.1667	0	88.6	80	120				

Sample ID: **LCSD-9554** SampType: **LCSD** TestCode: **HG_CTS** Units: **mg/Kg** Prep Date: **1/10/2006** RunNo: **17862**
Client ID: **ZZZZZ** Batch ID: **9554** TestNo: **SW7471** **(SW7471)** Analysis Date: **1/10/2006** SeqNo: **439137**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.1786	0.033	0.1667	0	107	80	120	0.1477	18.9	20	

2 / 5

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601056
Project: Tank 577 Waste Analysis

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_SOIL

Sample ID: **MB-9545** SampType: **MBLK** TestCode: **METALS_SOI** Units: **mg/Kg** Prep Date: **1/9/2006** RunNo: **17873**
Client ID: **ZZZZZ** Batch ID: **9545** TestNo: **SW6010A** Analysis Date: **1/11/2006** SeqNo: **439442**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	2.5									
Barium	ND	0.10									
Cadmium	ND	0.10									
Chromium	ND	0.30									
Lead	ND	0.25									
Selenium	ND	2.5									
Silver	ND	0.25									

Sample ID: **LCS-9545** SampType: **LCS** TestCode: **METALS_SOI** Units: **mg/Kg** Prep Date: **1/9/2006** RunNo: **17873**
Client ID: **ZZZZZ** Batch ID: **9545** TestNo: **SW6010A** Analysis Date: **1/11/2006** SeqNo: **439443**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	25.33	2.5	25	0	101	80	120				
Barium	23.21	0.10	25	0	92.8	80	120				
Cadmium	23.93	0.10	25	0	95.7	80	120				
Chromium	23.49	0.30	25	0	93.9	80	120				
Lead	24.08	0.25	25	0	96.3	80	120				
Selenium	25.57	2.5	25	0	102	80	120				
Silver	24.27	0.25	25	0	97.1	80	120				

Sample ID: **LCSD-9545** SampType: **LCSD** TestCode: **METALS_SOI** Units: **mg/Kg** Prep Date: **1/9/2006** RunNo: **17873**
Client ID: **ZZZZZ** Batch ID: **9545** TestNo: **SW6010A** Analysis Date: **1/11/2006** SeqNo: **439444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	25.64	2.5	25	0	103	80	120	25.33	1.21	20	
Barium	23.58	0.10	25	0	94.3	80	120	23.21	1.56	20	
Cadmium	24.07	0.10	25	0	96.3	80	120	23.93	0.557	20	
Chromium	23.91	0.30	25	0	95.6	80	120	23.49	1.77	20	
Lead	24.44	0.25	25	0	97.8	80	120	24.08	1.51	20	
Selenium	25.08	2.5	25	0	100	80	120	25.57	1.94	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

3 / 5

CLIENT: Giant Refining Co
Work Order: 0601056
Project: Tank 577 Waste Analysis

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_SOIL

Sample ID: **LCSD-9545** SampType: **LCSD** TestCode: **METALS_SOI** Units: **mg/Kg** Prep Date: **1/9/2006** RunNo: **17873**
Client ID: **ZZZZZ** Batch ID: **9545** TestNo: **SW6010A** Analysis Date: **1/11/2006** SeqNo: **439444**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	24.52	0.25	25	0	98.1	80	120	24.27	1.02	20	

4 / 5

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

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 1/6/2006

Work Order Number 0601056

Received by AT

Checklist completed by _____ Signature _____ Date 1/6/06

Matrix

Carrier name UPS

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? **7°** *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 #:

Project Name: TANK 577 WASTE ANALYSIS
Project #:
Project Manager:
Sampler: Johnny Sanchez
Sample Temperature: 7°

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 (TCLP)	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)
1-4-06	1530	SCALE	(TANK 577 BITMS SCALE)	1				0601056-1								X									

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	
1-5-06	0900	J. Sanchez	D. Michelle	1/6/06 @ 1340
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

FORM RL

Thursday, April 13, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Tank #116 Diesel Sludge

Order No.: 0603300

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 1 sample(s) on 3/28/2006 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

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

Date: *13-Apr-06*

CLIENT: Giant Refining Co
Project: Tank #116 Diesel Sludge
Lab Order: 0603300

CASE NARRATIVE

Analytical Comments for METHOD 8021BTEX_PROD, SAMPLE 0603300-01A: Necessary dilution for high amount of DRO hydrocarbons.

Hall Environmental Analysis Laboratory

Date: *13-Apr-06*

CLIENT: Giant Refining Co
Project: Tank #116 Diesel Sludge

Lab Order: 0603300

Lab ID: 0603300-01
Client Sample ID: TK 116 Diesel Sludge

TRI

Collection Date: 3/23/2006 2:00:00 PM
Matrix: PRODUCT

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	120		mg/Kg	100	4/10/2006 5:07:23 PM
Toluene	ND	120		mg/Kg	100	4/10/2006 5:07:23 PM
Ethylbenzene	ND	120		mg/Kg	100	4/10/2006 5:07:23 PM
Xylenes, Total	430	120		mg/Kg	100	4/10/2006 5:07:23 PM
Surr: 4-Bromofluorobenzene	103	74-118		%REC	100	4/10/2006 5:07:23 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

LABORATORY ANALYTICAL REPORT

Client: Hall Environmental
Project: 0603300
Lab ID: C06031279-001
Client Sample ID: TK 116 Diesel Sludge

Report Date: 04/11/06
Collection Date: 03/23/06 14:00
Date Received: 03/30/06
Matrix: Sludge

Analyses	Result	Units	Qual	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Filterable	No					SW1311	04/04/06 08:02 / dj
METALS - TCLP							
Arsenic	ND	mg/L		0.50	5	SW6010B	04/06/06 09:43 / cp
Barium	ND	mg/L		10	100	SW6010B	04/06/06 09:43 / cp
Cadmium	ND	mg/L		0.10	1	SW6010B	04/06/06 09:43 / cp
Chromium	ND	mg/L		0.50	5	SW6010B	04/06/06 09:43 / cp
Lead	ND	mg/L		0.50	5	SW6010B	04/06/06 09:43 / cp
Mercury	ND	mg/L		0.0001	0.2	SW7470A	04/05/06 15:28 / sjl
Selenium	ND	mg/L		0.10	1	SW6010B	04/06/06 09:43 / cp
Silver	ND	mg/L		0.50	5	SW6010B	04/06/06 09:43 / cp

Report Definitions:
RL - Analyte reporting limit.
QCL - Quality control limit.
MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

QA/QC Summary Report

Client: Hall Environmental
Project: 0603300

Report Date: 04/11/06
Work Order: C06031279

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6010B									Batch: 10636
Sample ID: MB-10636	Method Blank				Run: ICP2-C_060405B				04/05/06 19:10
Arsenic	ND	mg/L	0.01						
Barium	ND	mg/L	0.0006						
Cadmium	ND	mg/L	0.0008						
Chromium	0.001	mg/L	0.001						
Lead	0.02	mg/L	0.004						
Selenium	ND	mg/L	0.02						
Silver	ND	mg/L	0.002						
Sample ID: C06040040-001CMS	Matrix Spike				Run: ICP2-C_060405B				04/06/06 09:59
Arsenic	0.96	mg/L	0.50	95.7	75	125			
Barium	1.7	mg/L	10	111	75	125			
Cadmium	0.90	mg/L	0.10	89.5	75	125			
Chromium	0.92	mg/L	0.50	91.6	75	125			
Lead	0.93	mg/L	0.50	93	75	125			
Selenium	0.91	mg/L	0.10	90.8	75	125			
Silver	0.79	mg/L	0.50	79.3	75	125			
Sample ID: C06040040-001CMSD	Matrix Spike Duplicate				Run: ICP2-C_060405B				04/06/06 10:03
Arsenic	0.95	mg/L	0.50	95.4	75	125	0.3	20	
Barium	1.7	mg/L	10	114	75	125	0	20	
Cadmium	0.88	mg/L	0.10	88.1	75	125	1.6	20	
Chromium	0.92	mg/L	0.50	91.6	75	125	0	20	
Lead	0.93	mg/L	0.50	93	75	125	0	20	
Selenium	0.91	mg/L	0.10	91.3	75	125	0.5	20	
Silver	0.77	mg/L	0.50	77.4	75	125	2.4	20	
Sample ID: LCS-10636	Laboratory Control Spike				Run: ICP2-C_060405B				04/06/06 10:26
Arsenic	1.04	mg/L	0.50	104	90	110			
Barium	1.09	mg/L	10	109	90	110			
Cadmium	1.02	mg/L	0.10	102	90	110			
Chromium	1.03	mg/L	0.50	102	90	110			
Lead	1.01	mg/L	0.50	99.5	90	110			
Selenium	1.05	mg/L	0.10	105	90	110			
Silver	1.02	mg/L	0.50	102	90	110			
Method: SW7470A									Batch: HG3112-060405
Sample ID: MBLK	Method Blank				Run: CVAA-C201_060405A				04/05/06 16:44
Mercury	ND	mg/L	0.001						

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

Hall Environmental Analysis Laboratory

Date: *13-Apr-06*

CLIENT: Giant Refining Co
Work Order: 0603300
Project: Tank #116 Diesel Sludge

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_PROD

Sample ID: **MB-10131**	SampType: **MBLK**	TestCode: **8021BTEX_P**	Units: **mg/Kg**	Prep Date: **4/6/2006**	RunNo: **18885**
Client ID: **ZZZZZ**	Batch ID: **10131**	TestNo: **SW8021**	**(SW5035)**	Analysis Date: **4/10/2006**	SeqNo: **468612**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.2									
Toluene	ND	1.2									
Ethylbenzene	ND	1.2									
Xylenes, Total	ND	1.2									

5 / 6

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

Sample Receipt Checklist

Client Name GIANTREFIN — Date and Time Received: 3/28/2006

Work Order Number 0603300 — Received by LMM

Checklist completed by Lisa Hebrikas (Signature) 3/28/06 (Date)

Matrix — Carrier name UPS

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? **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 Ciniza Refining Co. Cinizo
Address: Route 3, Box 7 Gallup NM 87301
Phone #: 505-722-3333
Fax #:

Project Name: TANK #116 DIESEL SLUDGE
Project #: 032306 SLUDGE WASTE
Project Manager: Ed Riege
Sampler:
Sample Temperature: 6°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0603300	BTEX + ~~EDB~~ ~~EDC~~'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)	TCLP METALS				Air Bubbles or Headspace (Y or N)
3-23-06	14:00	SLUDGE	TK 116 DIESEL SLUDGE	2				-1	X												X				

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
3-27-06	0900	[signature]	[signature] 3/28/06 1200
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: ≈ 10 TO 15% DIESEL

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, November 15, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Alky? Waste Determination 10/31/06

Order No.: 0611010

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/1/2006 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky?
Lab Order:	0611010	**Collection Date:**	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	**Date Received:**	11/1/2006
Lab ID:	0611010-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: MAP
Mercury	5.1	0.66		mg/Kg	20	11/13/2006
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Arsenic	11	2.5		mg/Kg	1	11/9/2006 1:19:15 PM
Barium	23	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Cadmium	ND	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Chromium	230	3.0		mg/Kg	10	11/9/2006 11:25:10 AM
Lead	4.9	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
Selenium	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Silver	ND	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	ND	0.50		mg/Kg	10	11/7/2006
Toluene	ND	0.50		mg/Kg	10	11/7/2006
Ethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	11/7/2006
1,2,4-Trimethylbenzene	1.3	0.50		mg/Kg	10	11/7/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	11/7/2006
Naphthalene	ND	1.0		mg/Kg	10	11/7/2006
1-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
2-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
Acetone	ND	7.5		mg/Kg	10	11/7/2006
Bromobenzene	ND	0.50		mg/Kg	10	11/7/2006
Bromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromoform	ND	0.50		mg/Kg	10	11/7/2006
Bromomethane	ND	1.0		mg/Kg	10	11/7/2006
2-Butanone	ND	5.0		mg/Kg	10	11/7/2006
Carbon disulfide	ND	5.0		mg/Kg	10	11/7/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	11/7/2006
Chlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Chloroethane	ND	1.0		mg/Kg	10	11/7/2006
Chloroform	ND	0.50		mg/Kg	10	11/7/2006
Chloromethane	ND	0.50		mg/Kg	10	11/7/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky?
Lab Order:	0611010	**Collection Date:**	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	**Date Received:**	11/1/2006
Lab ID:	0611010-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	11/7/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Dibromomethane	ND	1.0		mg/Kg	10	11/7/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	11/7/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	11/7/2006
2-Hexanone	ND	5.0		mg/Kg	10	11/7/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	11/7/2006
4-Isopropyltoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	11/7/2006
Methylene chloride	ND	1.5		mg/Kg	10	11/7/2006
n-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	11/7/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Styrene	ND	0.50		mg/Kg	10	11/7/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	11/7/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	11/7/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	11/7/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	11/7/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	11/7/2006
Vinyl chloride	ND	0.50		mg/Kg	10	11/7/2006
Xylenes, Total	ND	1.0		mg/Kg	10	11/7/2006

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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky?
Lab Order:	0611010	**Collection Date:**	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	**Date Received:**	11/1/2006
Lab ID:	0611010-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 1,2-Dichloroethane-d4	87.1	62-127		%REC	10	11/7/2006
Surr: 4-Bromofluorobenzene	92.2	75.2-127		%REC	10	11/7/2006
Surr: Dibromofluoromethane	92.1	68.1-120		%REC	10	11/7/2006
Surr: Toluene-d8	92.4	74-119		%REC	10	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: Alky? Waste Determination 10/31/06 **Work Order:** 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW7471									
Sample ID: MB-11739		*MBLK*			Batch ID:	11739	Analysis Date:		11/13/2006
Mercury	ND	mg/Kg	0.033						
Sample ID: LCS-11739		*LCS*			Batch ID:	11739	Analysis Date:		11/13/2006
Mercury	0.1680	mg/Kg	0.033	101	80	120			
Method: SW6010A									
Sample ID: MB-11677		*MBLK*			Batch ID:	11677	Analysis Date:		11/9/2006 10:31:33 AM
Arsenic	ND	mg/Kg	2.5						
Barium	ND	mg/Kg	0.10						
Cadmium	ND	mg/Kg	0.10						
Chromium	ND	mg/Kg	0.30						
Lead	ND	mg/Kg	0.25						
Selenium	ND	mg/Kg	2.5						
Silver	ND	mg/Kg	0.25						
Sample ID: LCS-11677		*LCS*			Batch ID:	11677	Analysis Date:		11/9/2006 10:22:40 AM
Arsenic	26.17	mg/Kg	2.5	105	80	120			
Barium	24.59	mg/Kg	0.10	98.3	80	120			
Cadmium	24.59	mg/Kg	0.10	98.3	80	120			
Chromium	24.24	mg/Kg	0.30	96.9	80	120			
Lead	24.46	mg/Kg	0.25	97.8	80	120			
Selenium	19.76	mg/Kg	2.5	79.0	80	120			S
Silver	23.78	mg/Kg	0.25	95.1	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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Alky? Waste Determination 10/31/06 **Work Order:** 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: MB-11635		*MBLK*			Batch ID:	11635	Analysis Date:		11/4/2006
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
Benzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050						
Naphthalene	ND	mg/Kg	0.10						
2-Methylnaphthalene	ND	mg/Kg	0.20						
1-Methylnaphthalene	ND	mg/Kg	0.20						
Sample ID: LCS-11635		*LCS*			Batch ID:	11635	Analysis Date:		11/4/2006
Benzene	1.074	mg/Kg	0.050	107	78	126			
Toluene	0.8104	mg/Kg	0.050	81.0	79.4	117			
Sample ID: LCSD-11635		*LCSD*			Batch ID:	11635	Analysis Date:		11/4/2006
Benzene	1.025	mg/Kg	0.050	103	78	126	8.88	19	
Toluene	0.8683	mg/Kg	0.050	86.8	79.4	117	0.670	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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 11/1/2006

Work Order Number 0611010 | Received by AT

Checklist completed by _____ Signature _____ Date 11/1/06

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? 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: Alky ? Waste Determination 10/31/06
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.	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)
10/31/06	1430	Sludge	Alky ?	2 x 4 oz				0611010-1								X			X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-1-06	1100	Steve Morris	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Caution: This sample may contain trace amounts of Hydrofluoric Acid under hood only

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, October 27, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Main Col. Btm. Solids + Desalter Solids

Order No.: 0610223

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 10/19/2006 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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Desalter Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 11:40:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: MAP
Mercury	77	33		mg/Kg	1000	10/24/2006
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	41	2.5		mg/Kg	1	10/25/2006 10:26:03 AM
Barium	130	1.0		mg/Kg	10	10/25/2006 11:19:57 AM
Cadmium	1.4	0.10		mg/Kg	1	10/25/2006 10:26:03 AM
Chromium	90	3.0		mg/Kg	10	10/25/2006 11:19:57 AM
Lead	250	2.5		mg/Kg	10	10/25/2006 11:19:57 AM
Selenium	ND	25		mg/Kg	10	10/25/2006 11:19:57 AM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:26:03 AM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	24	0.50		mg/Kg	10	10/23/2006
Toluene	140	5.0		mg/Kg	100	10/24/2006
Ethylbenzene	35	0.50		mg/Kg	10	10/23/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/23/2006
1,2,4-Trimethylbenzene	56	5.0		mg/Kg	100	10/24/2006
1,3,5-Trimethylbenzene	21	0.50		mg/Kg	10	10/23/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/23/2006
Naphthalene	24	1.0		mg/Kg	10	10/23/2006
1-Methylnaphthalene	33	2.0		mg/Kg	10	10/23/2006
2-Methylnaphthalene	47	2.0		mg/Kg	10	10/23/2006
Acetone	ND	7.5		mg/Kg	10	10/23/2006
Bromobenzene	ND	0.50		mg/Kg	10	10/23/2006
Bromochloromethane	ND	0.50		mg/Kg	10	10/23/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	10/23/2006
Bromoform	ND	0.50		mg/Kg	10	10/23/2006
Bromomethane	ND	1.0		mg/Kg	10	10/23/2006
2-Butanone	ND	5.0		mg/Kg	10	10/23/2006
Carbon disulfide	ND	5.0		mg/Kg	10	10/23/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/23/2006
Chlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
Chloroethane	ND	1.0		mg/Kg	10	10/23/2006
Chloroform	ND	0.50		mg/Kg	10	10/23/2006
Chloromethane	ND	0.50		mg/Kg	10	10/23/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2006

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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Desalter Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 11:40:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/23/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	10/23/2006
Dibromomethane	ND	1.0		mg/Kg	10	10/23/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/23/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/23/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/23/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/23/2006
2-Hexanone	ND	5.0		mg/Kg	10	10/23/2006
Isopropylbenzene	9.1	0.50		mg/Kg	10	10/23/2006
4-Isopropyltoluene	6.2	0.50		mg/Kg	10	10/23/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/23/2006
Methylene chloride	ND	1.5		mg/Kg	10	10/23/2006
n-Butylbenzene	8.6	0.50		mg/Kg	10	10/23/2006
n-Propylbenzene	13	0.50		mg/Kg	10	10/23/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	10/23/2006
Styrene	ND	0.50		mg/Kg	10	10/23/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/23/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/23/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/23/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/23/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/23/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/23/2006
Vinyl chloride	ND	0.50		mg/Kg	10	10/23/2006
Xylenes, Total	200	10		mg/Kg	100	10/24/2006
Surr: 1,2-Dichloroethane-d4	104	62-127		%REC	10	10/23/2006

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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Desalter Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 11:40:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 4-Bromofluorobenzene	114	75.2-127		%REC	10	10/23/2006
Surr: Dibromofluoromethane	98.9	68.1-120		%REC	10	10/23/2006
Surr: Toluene-d8	84.6	74-119		%REC	10	10/23/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Main Col. Btm. Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 12:10:00 PM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-02	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: MAP
Mercury	26	3.3		mg/Kg	100	10/26/2006
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	40	2.5		mg/Kg	1	10/25/2006 10:30:30 AM
Barium	110	1.0		mg/Kg	10	10/25/2006 1:57:51 PM
Cadmium	2.1	0.10		mg/Kg	1	10/25/2006 10:30:30 AM
Chromium	91	3.0		mg/Kg	10	10/25/2006 1:57:51 PM
Lead	290	2.5		mg/Kg	10	10/25/2006 1:57:51 PM
Selenium	ND	25		mg/Kg	10	10/25/2006 1:57:51 PM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:30:30 AM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	80	5.0		mg/Kg	100	10/24/2006
Toluene	450	5.0		mg/Kg	100	10/24/2006
Ethylbenzene	92	5.0		mg/Kg	100	10/24/2006
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	100	10/24/2006
1,2,4-Trimethylbenzene	120	5.0		mg/Kg	100	10/24/2006
1,3,5-Trimethylbenzene	48	5.0		mg/Kg	100	10/24/2006
1,2-Dichloroethane (EDC)	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dibromoethane (EDB)	ND	5.0		mg/Kg	100	10/24/2006
Naphthalene	46	10		mg/Kg	100	10/24/2006
1-Methylnaphthalene	58	20		mg/Kg	100	10/24/2006
2-Methylnaphthalene	86	20		mg/Kg	100	10/24/2006
Acetone	ND	75		mg/Kg	100	10/24/2006
Bromobenzene	ND	5.0		mg/Kg	100	10/24/2006
Bromochloromethane	ND	5.0		mg/Kg	100	10/24/2006
Bromodichloromethane	ND	5.0		mg/Kg	100	10/24/2006
Bromoform	ND	5.0		mg/Kg	100	10/24/2006
Bromomethane	ND	10		mg/Kg	100	10/24/2006
2-Butanone	ND	50		mg/Kg	100	10/24/2006
Carbon disulfide	ND	50		mg/Kg	100	10/24/2006
Carbon tetrachloride	ND	10		mg/Kg	100	10/24/2006
Chlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
Chloroethane	ND	10		mg/Kg	100	10/24/2006
Chloroform	ND	5.0		mg/Kg	100	10/24/2006
Chloromethane	ND	5.0		mg/Kg	100	10/24/2006
2-Chlorotoluene	ND	5.0		mg/Kg	100	10/24/2006
4-Chlorotoluene	ND	5.0		mg/Kg	100	10/24/2006
cis-1,2-DCE	ND	5.0		mg/Kg	100	10/24/2006

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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Main Col. Btm. Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 12:10:00 PM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-02	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,3-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dibromo-3-chloropropane	ND	10		mg/Kg	100	10/24/2006
Dibromochloromethane	ND	5.0		mg/Kg	100	10/24/2006
Dibromomethane	ND	10		mg/Kg	100	10/24/2006
1,2-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,3-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,4-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
Dichlorodifluoromethane	ND	5.0		mg/Kg	100	10/24/2006
1,1-Dichloroethane	ND	10		mg/Kg	100	10/24/2006
1,1-Dichloroethene	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dichloropropane	ND	5.0		mg/Kg	100	10/24/2006
1,3-Dichloropropane	ND	5.0		mg/Kg	100	10/24/2006
2,2-Dichloropropane	ND	10		mg/Kg	100	10/24/2006
1,1-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
Hexachlorobutadiene	ND	10		mg/Kg	100	10/24/2006
2-Hexanone	ND	50		mg/Kg	100	10/24/2006
Isopropylbenzene	23	5.0		mg/Kg	100	10/24/2006
4-Isopropyltoluene	12	5.0		mg/Kg	100	10/24/2006
4-Methyl-2-pentanone	ND	50		mg/Kg	100	10/24/2006
Methylene chloride	ND	15		mg/Kg	100	10/24/2006
n-Butylbenzene	19	5.0		mg/Kg	100	10/24/2006
n-Propylbenzene	33	5.0		mg/Kg	100	10/24/2006
sec-Butylbenzene	7.6	5.0		mg/Kg	100	10/24/2006
Styrene	ND	5.0		mg/Kg	100	10/24/2006
tert-Butylbenzene	ND	5.0		mg/Kg	100	10/24/2006
1,1,1,2-Tetrachloroethane	ND	5.0		mg/Kg	100	10/24/2006
1,1,2,2-Tetrachloroethane	ND	5.0		mg/Kg	100	10/24/2006
Tetrachloroethene (PCE)	ND	5.0		mg/Kg	100	10/24/2006
trans-1,2-DCE	ND	5.0		mg/Kg	100	10/24/2006
trans-1,3-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
1,2,3-Trichlorobenzene	ND	10		mg/Kg	100	10/24/2006
1,2,4-Trichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,1,1-Trichloroethane	ND	5.0		mg/Kg	100	10/24/2006
1,1,2-Trichloroethane	ND	5.0		mg/Kg	100	10/24/2006
Trichloroethene (TCE)	ND	5.0		mg/Kg	100	10/24/2006
Trichlorofluoromethane	ND	5.0		mg/Kg	100	10/24/2006
1,2,3-Trichloropropane	ND	10		mg/Kg	100	10/24/2006
Vinyl chloride	ND	5.0		mg/Kg	100	10/24/2006
Xylenes, Total	540	10		mg/Kg	100	10/24/2006
Surr: 1,2-Dichloroethane-d4	95.8	62-127		%REC	100	10/24/2006

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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Main Col. Btm. Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 12:10:00 PM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-02	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 4-Bromofluorobenzene	97.2	75.2-127		%REC	100	10/24/2006
Surr: Dibromofluoromethane	92.5	68.1-120		%REC	100	10/24/2006
Surr: Toluene-d8	94.9	74-119		%REC	100	10/24/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	FCC Clean up
Lab Order:	0610223	**Collection Date:**	10/19/2006 11:30:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-03	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: MAP
Mercury	1.7	0.33		mg/Kg	10	10/26/2006
EPA METHOD 6010B: SOIL METALS						Analyst: NMO
Arsenic	74	25		mg/Kg	10	10/25/2006 11:25:47 AM
Barium	250	1.0		mg/Kg	10	10/25/2006 11:25:47 AM
Cadmium	2.1	0.10		mg/Kg	1	10/25/2006 10:33:03 AM
Chromium	81	3.0		mg/Kg	10	10/25/2006 11:25:47 AM
Lead	130	2.5		mg/Kg	10	10/25/2006 11:25:47 AM
Selenium	ND	25		mg/Kg	10	10/25/2006 11:25:47 AM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:33:03 AM
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Benzene	ND	0.50		mg/Kg	10	10/24/2006
Toluene	0.62	0.50		mg/Kg	10	10/24/2006
Ethylbenzene	ND	0.50		mg/Kg	10	10/24/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/24/2006
1,2,4-Trimethylbenzene	0.86	0.50		mg/Kg	10	10/24/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/24/2006
Naphthalene	2.3	1.0		mg/Kg	10	10/24/2006
1-Methylnaphthalene	26	2.0		mg/Kg	10	10/24/2006
2-Methylnaphthalene	23	2.0		mg/Kg	10	10/24/2006
Acetone	ND	7.5		mg/Kg	10	10/24/2006
Bromobenzene	ND	0.50		mg/Kg	10	10/24/2006
Bromochloromethane	ND	0.50		mg/Kg	10	10/24/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	10/24/2006
Bromoform	ND	0.50		mg/Kg	10	10/24/2006
Bromomethane	ND	1.0		mg/Kg	10	10/24/2006
2-Butanone	ND	5.0		mg/Kg	10	10/24/2006
Carbon disulfide	ND	5.0		mg/Kg	10	10/24/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/24/2006
Chlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
Chloroethane	ND	1.0		mg/Kg	10	10/24/2006
Chloroform	ND	0.50		mg/Kg	10	10/24/2006
Chloromethane	ND	0.50		mg/Kg	10	10/24/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/24/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/24/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/24/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	FCC Clean up
Lab Order:	0610223	**Collection Date:**	10/19/2006 11:30:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-03	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/24/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	10/24/2006
Dibromomethane	ND	1.0		mg/Kg	10	10/24/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/24/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/24/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/24/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/24/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/24/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/24/2006
2-Hexanone	ND	5.0		mg/Kg	10	10/24/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	10/24/2006
4-Isopropyltoluene	0.95	0.50		mg/Kg	10	10/24/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/24/2006
Methylene chloride	ND	1.5		mg/Kg	10	10/24/2006
n-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	10/24/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
Styrene	ND	0.50		mg/Kg	10	10/24/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/24/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/24/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/24/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/24/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/24/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/24/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/24/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/24/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/24/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/24/2006
Vinyl chloride	ND	0.50		mg/Kg	10	10/24/2006
Xylenes, Total	ND	1.0		mg/Kg	10	10/24/2006
Surr: 1,2-Dichloroethane-d4	90.5	62-127		%REC	10	10/24/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	FCC Clean up
Lab Order:	0610223	**Collection Date:**	10/19/2006 11:30:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-03	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: LMM
Surr: 4-Bromofluorobenzene	102	75.2-127		%REC	10	10/24/2006
Surr: Dibromofluoromethane	89.8	68.1-120		%REC	10	10/24/2006
Surr: Toluene-d8	102	74-119		%REC	10	10/24/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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

COVER LETTER

Monday, December 18, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Alky? Waste Determination 10/31/06

Order No.: 0611010

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/1/2006 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: *18-Dec-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky?
Lab Order:	0611010	**Collection Date:**	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	**Date Received:**	11/1/2006
Lab ID:	0611010-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Fluoride	13000	600		mg/Kg	2000	12/12/2006 6:10:54 PM
EPA METHOD 7471: MERCURY						Analyst: **MAP**
Mercury	5.1	0.66		mg/Kg	20	11/13/2006
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Arsenic	11	2.5		mg/Kg	1	11/9/2006 1:19:15 PM
Barium	23	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Cadmium	ND	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Chromium	230	3.0		mg/Kg	10	11/9/2006 11:25:10 AM
Lead	4.9	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
Selenium	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Silver	ND	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	0.50		mg/Kg	10	11/7/2006
Toluene	ND	0.50		mg/Kg	10	11/7/2006
Ethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	11/7/2006
1,2,4-Trimethylbenzene	1.3	0.50		mg/Kg	10	11/7/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	11/7/2006
Naphthalene	ND	1.0		mg/Kg	10	11/7/2006
1-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
2-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
Acetone	ND	7.5		mg/Kg	10	11/7/2006
Bromobenzene	ND	0.50		mg/Kg	10	11/7/2006
Bromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromoform	ND	0.50		mg/Kg	10	11/7/2006
Bromomethane	ND	1.0		mg/Kg	10	11/7/2006
2-Butanone	ND	5.0		mg/Kg	10	11/7/2006
Carbon disulfide	ND	5.0		mg/Kg	10	11/7/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	11/7/2006
Chlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Chloroethane	ND	1.0		mg/Kg	10	11/7/2006
Chloroform	ND	0.50		mg/Kg	10	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *18-Dec-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky?
Lab Order:	0611010	**Collection Date:**	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	**Date Received:**	11/1/2006
Lab ID:	0611010-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Chloromethane	ND	0.50		mg/Kg	10	11/7/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	11/7/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Dibromomethane	ND	1.0		mg/Kg	10	11/7/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	11/7/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	11/7/2006
2-Hexanone	ND	5.0		mg/Kg	10	11/7/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	11/7/2006
4-Isopropyltoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	11/7/2006
Methylene chloride	ND	1.5		mg/Kg	10	11/7/2006
n-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	11/7/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Styrene	ND	0.50		mg/Kg	10	11/7/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	11/7/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	11/7/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	11/7/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	11/7/2006

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: *18-Dec-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky?
Lab Order:	0611010	**Collection Date:**	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	**Date Received:**	11/1/2006
Lab ID:	0611010-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	11/7/2006
Vinyl chloride	ND	0.50		mg/Kg	10	11/7/2006
Xylenes, Total	ND	1.0		mg/Kg	10	11/7/2006
Surr: 1,2-Dichloroethane-d4	87.1	62-127		%REC	10	11/7/2006
Surr: 4-Bromofluorobenzene	92.2	75.2-127		%REC	10	11/7/2006
Surr: Dibromofluoromethane	92.1	68.1-120		%REC	10	11/7/2006
Surr: Toluene-d8	92.4	74-119		%REC	10	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: Alky? Waste Determination 10/31/06
Work Order: 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11958		*MBLK*			Batch ID:	**11958**	Analysis Date:	12/12/2006 5:36:05 PM	
Fluoride	ND	mg/Kg	0.30						
Sample ID: LCS-11958		*LCS*			Batch ID:	**11958**	Analysis Date:	12/12/2006 5:53:30 PM	
Fluoride	1.545	mg/Kg	0.30	103	90	110			
Method: SW7471									
Sample ID: MB-11739		*MBLK*			Batch ID:	**11739**	Analysis Date:	11/13/2006	
Mercury	ND	mg/Kg	0.033						
Sample ID: LCS-11739		*LCS*			Batch ID:	**11739**	Analysis Date:	11/13/2006	
Mercury	0.1680	mg/Kg	0.033	101	80	120			
Method: SW6010A									
Sample ID: MB-11677		*MBLK*			Batch ID:	**11677**	Analysis Date:	11/15/2006 1:58:47 PM	
Barium	ND	mg/Kg	0.10						
Cadmium	ND	mg/Kg	0.10						
Chromium	ND	mg/Kg	0.30						
Lead	ND	mg/Kg	0.25						
Silver	ND	mg/Kg	0.25						
Sample ID: MB-11677		*MBLK*			Batch ID:	**11677**	Analysis Date:	11/15/2006 3:43:41 PM	
Selenium	ND	mg/Kg	2.5						
Sample ID: LCS-11677		*LCS*			Batch ID:	**11677**	Analysis Date:	11/15/2006 2:00:55 PM	
Barium	24.54	mg/Kg	0.10	98.2	80	120			
Cadmium	25.13	mg/Kg	0.10	101	80	120			
Chromium	25.39	mg/Kg	0.30	102	80	120			
Lead	24.79	mg/Kg	0.25	99.2	80	120			
Silver	25.00	mg/Kg	0.25	100	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: Alky? Waste Determination 10/31/06

Work Order: 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: MB-11635		*MBLK*			Batch ID:	**11635**	Analysis Date:		11/4/2006
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
Benzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050						
Naphthalene	ND	mg/Kg	0.10						
2-Methylnaphthalene	ND	mg/Kg	0.20						
1-Methylnaphthalene	ND	mg/Kg	0.20						
Sample ID: LCS-11635		*LCS*			Batch ID:	**11635**	Analysis Date:		11/4/2006
Benzene	1.074	mg/Kg	0.050	107	78	126			
Toluene	0.8104	mg/Kg	0.050	81.0	79.4	117			
Sample ID: LCSD-11635		*LCSD*			Batch ID:	**11635**	Analysis Date:		11/4/2006
Benzene	1.025	mg/Kg	0.050	103	78	126	8.88	19	
Toluene	0.8683	mg/Kg	0.050	86.8	79.4	117	0.670	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

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: Alky? Waste Determination 10/31/06
Project #:
Project Manager: Steve Morris
Sampler: Steve Morris
Sample Temperature: 3°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 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)
10/31/06	1430	Sludge	Alky?	2 x 40z				~~0611010~~ 0611010-1								X			X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-1-06	1100	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Caution: This sample may contain trace amounts of Hydro Fluoric Acid.

initials on added F

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, November 15, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Alky? Waste Determination 10/31/06

Order No.: 0611010

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/1/2006 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky?
Lab Order:	0611010	**Collection Date:**	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	**Date Received:**	11/1/2006
Lab ID:	0611010-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: **MAP**
Mercury	5.1	0.66		mg/Kg	20	11/13/2006
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Arsenic	11	2.5		mg/Kg	1	11/9/2006 1:19:15 PM
Barium	23	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Cadmium	ND	1.0		mg/Kg	10	11/9/2006 11:25:10 AM
Chromium	230	3.0		mg/Kg	10	11/9/2006 11:25:10 AM
Lead	4.9	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
Selenium	ND	25		mg/Kg	10	11/9/2006 11:25:10 AM
Silver	ND	2.5		mg/Kg	10	11/9/2006 11:25:10 AM
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	0.50		mg/Kg	10	11/7/2006
Toluene	ND	0.50		mg/Kg	10	11/7/2006
Ethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	11/7/2006
1,2,4-Trimethylbenzene	1.3	0.50		mg/Kg	10	11/7/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	11/7/2006
Naphthalene	ND	1.0		mg/Kg	10	11/7/2006
1-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
2-Methylnaphthalene	ND	2.0		mg/Kg	10	11/7/2006
Acetone	ND	7.5		mg/Kg	10	11/7/2006
Bromobenzene	ND	0.50		mg/Kg	10	11/7/2006
Bromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	11/7/2006
Bromoform	ND	0.50		mg/Kg	10	11/7/2006
Bromomethane	ND	1.0		mg/Kg	10	11/7/2006
2-Butanone	ND	5.0		mg/Kg	10	11/7/2006
Carbon disulfide	ND	5.0		mg/Kg	10	11/7/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	11/7/2006
Chlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Chloroethane	ND	1.0		mg/Kg	10	11/7/2006
Chloroform	ND	0.50		mg/Kg	10	11/7/2006
Chloromethane	ND	0.50		mg/Kg	10	11/7/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky?
Lab Order:	0611010	**Collection Date:**	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	**Date Received:**	11/1/2006
Lab ID:	0611010-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
cis-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	11/7/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	11/7/2006
Dibromomethane	ND	1.0		mg/Kg	10	11/7/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	11/7/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	11/7/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	11/7/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	11/7/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	11/7/2006
2-Hexanone	ND	5.0		mg/Kg	10	11/7/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	11/7/2006
4-Isopropyltoluene	ND	0.50		mg/Kg	10	11/7/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	11/7/2006
Methylene chloride	ND	1.5		mg/Kg	10	11/7/2006
n-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	11/7/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
Styrene	ND	0.50		mg/Kg	10	11/7/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	11/7/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	11/7/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	11/7/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	11/7/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	11/7/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	11/7/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	11/7/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	11/7/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	11/7/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	11/7/2006
Vinyl chloride	ND	0.50		mg/Kg	10	11/7/2006
Xylenes, Total	ND	1.0		mg/Kg	10	11/7/2006

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: *15-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky?
Lab Order:	0611010	**Collection Date:**	10/31/2006 2:30:00 PM
Project:	Alky? Waste Determination 10/31/06	**Date Received:**	11/1/2006
Lab ID:	0611010-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Surr: 1,2-Dichloroethane-d4	87.1	62-127		%REC	10	11/7/2006
Surr: 4-Bromofluorobenzene	92.2	75.2-127		%REC	10	11/7/2006
Surr: Dibromofluoromethane	92.1	68.1-120		%REC	10	11/7/2006
Surr: Toluene-d8	92.4	74-119		%REC	10	11/7/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: Alky? Waste Determination 10/31/06 **Work Order:** 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW7471									
Sample ID: MB-11739		*MBLK*			Batch ID:	**11739**	Analysis Date:		11/13/2006
Mercury	ND	mg/Kg	0.033						
Sample ID: LCS-11739		*LCS*			Batch ID:	**11739**	Analysis Date:		11/13/2006
Mercury	0.1680	mg/Kg	0.033	101	80	120			
Method: SW6010A									
Sample ID: MB-11677		*MBLK*			Batch ID:	**11677**	Analysis Date:		11/9/2006 10:31:33 AM
Arsenic	ND	mg/Kg	2.5						
Barium	ND	mg/Kg	0.10						
Cadmium	ND	mg/Kg	0.10						
Chromium	ND	mg/Kg	0.30						
Lead	ND	mg/Kg	0.25						
Selenium	ND	mg/Kg	2.5						
Silver	ND	mg/Kg	0.25						
Sample ID: LCS-11677		*LCS*			Batch ID:	**11677**	Analysis Date:		11/9/2006 10:22:40 AM
Arsenic	26.17	mg/Kg	2.5	105	80	120			
Barium	24.59	mg/Kg	0.10	98.3	80	120			
Cadmium	24.59	mg/Kg	0.10	98.3	80	120			
Chromium	24.24	mg/Kg	0.30	96.9	80	120			
Lead	24.46	mg/Kg	0.25	97.8	80	120			
Selenium	19.76	mg/Kg	2.5	79.0	80	120			S
Silver	23.78	mg/Kg	0.25	95.1	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

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Alky? Waste Determination 10/31/06 **Work Order:** 0611010

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: MB-11635		*MBLK*			Batch ID:	**11635**	Analysis Date:		11/4/2006
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
Benzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050						
Naphthalene	ND	mg/Kg	0.10						
2-Methylnaphthalene	ND	mg/Kg	0.20						
1-Methylnaphthalene	ND	mg/Kg	0.20						
Sample ID: LCS-11635		*LCS*			Batch ID:	**11635**	Analysis Date:		11/4/2006
Benzene	1.074	mg/Kg	0.050	107	78	126			
Toluene	0.8104	mg/Kg	0.050	81.0	79.4	117			
Sample ID: LCSD-11635		*LCSD*			Batch ID:	**11635**	Analysis Date:		11/4/2006
Benzene	1.025	mg/Kg	0.050	103	78	126	8.88	19	
Toluene	0.8683	mg/Kg	0.050	86.8	79.4	117	0.670	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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 11/1/2006

Work Order Number 0611010

Received by AT

Checklist completed by Signature Date 11/1/06

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? **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: Alky ? Waste Determination 10/31/06
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.	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)
10/31/06	1430	Sludge	Alky ?	2 x 4oz				~~0611010~~ AT 0611010-1								X			X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-1-06	1100	Steve Morris	[signature]
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: Caution: This sample may contain trace amounts of Hydro Fluoric Acid.

TRI ✓

Hall Environmental Analysis Laboratory

Date: *26-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Crude Tk Bottoms
Lab Order:	0605211	**Collection Date:**	5/17/2006 1:00:00 PM
Project:	Crude TK Bottoms 101 & 102	**Date Received:**	5/19/2006
Lab ID:	0605211-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE ORGANICS						Analyst: **SCC**
Diesel Range Organics (DRO)	140000	2000		mg/Kg	200	5/25/2006 8:44:18 PM
Motor Oil Range Organics (MRO)	ND	10000		mg/Kg	200	5/25/2006 8:44:18 PM
Surr: DNOP	0	61.7-135	S	%REC	200	5/25/2006 8:44:18 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **HLM**
Gasoline Range Organics (GRO)	2700	500		mg/Kg	100	5/24/2006 2:52:00 PM
Surr: BFB	106	81.7-127		%REC	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: <C5	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C05-C6	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C06-C7	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C07-C8	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C08-C9	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C09-C10	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C10-C11	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C11-C12	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C12-C14	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
% GRO Hydrocarbons: C14+	ND	0		mg/Kg	100	5/24/2006 2:52:00 PM
EPA METHOD 8021B: VOLATILES						Analyst: **HLM**
Methyl tert-butyl ether (MTBE)	ND ✓	10		mg/Kg	100	5/24/2006 2:52:00 PM
Benzene "TCLP" = 3.3	66 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
Toluene	270 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
Ethylbenzene	63 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
Xylenes, Total	300 ✓	15		mg/Kg	100	5/24/2006 2:52:00 PM
Surr: 4-Bromofluorobenzene	97.2	77.6-114		%REC	100	5/24/2006 2:52:00 PM
m,p-Xylene	220	10		mg/Kg	100	5/24/2006 2:52:00 PM
o-Xylene	74 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
1,2,4-Trimethylbenzene	100 ✓	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
1,3,5-Trimethylbenzene	34	5.0		mg/Kg	100	5/24/2006 2:52:00 PM
MERCURY, TCLP LEACHED						Analyst: **CMC**
Mercury	ND	0.020		mg/L	1	5/23/2006
EPA METHOD 6010B: TCLP METALS						Analyst: **NMO**
Arsenic	ND	5.0		mg/L	1	5/25/2006 9:55:35 AM
Barium	ND	100		mg/L	1	5/25/2006 9:55:35 AM
Cadmium	ND	1.0		mg/L	1	5/25/2006 9:55:35 AM
Chromium	ND	5.0		mg/L	1	5/25/2006 9:55:35 AM

Qualifiers:

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

Hall Environmental Analysis Laboratory

Date: *26-May-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Crude Tk Bottoms
Lab Order:	0605211	**Collection Date:**	5/17/2006 1:00:00 PM
Project:	Crude TK Bottoms 101 & 102	**Date Received:**	5/19/2006
Lab ID:	0605211-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Lead	ND	5.0		mg/L	1	5/25/2006 9:55:35 AM
Selenium	ND	1.0		mg/L	1	5/25/2006 9:55:35 AM
Silver	ND	5.0		mg/L	1	5/25/2006 9:55:35 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, October 27, 2006

Form R

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Main Col. Btm. Solids + Desalter Solids

Order No.: 0610223

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 10/19/2006 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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Desalter Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 11:40:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: **MAP**
Mercury	77	33		mg/Kg	1000	10/24/2006
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	41	2.5		mg/Kg	1	10/25/2006 10:26:03 AM
Barium	130	1.0		mg/Kg	10	10/25/2006 11:19:57 AM
Cadmium	1.4	0.10		mg/Kg	1	10/25/2006 10:26:03 AM
Chromium	90	3.0		mg/Kg	10	10/25/2006 11:19:57 AM
Lead	250	2.5		mg/Kg	10	10/25/2006 11:19:57 AM
Selenium	ND	25		mg/Kg	10	10/25/2006 11:19:57 AM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:26:03 AM
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	24	0.50		mg/Kg	10	10/23/2006
Toluene	140	5.0		mg/Kg	100	10/24/2006
Ethylbenzene	35	0.50		mg/Kg	10	10/23/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/23/2006
1,2,4-Trimethylbenzene	56	5.0		mg/Kg	100	10/24/2006
1,3,5-Trimethylbenzene	21	0.50		mg/Kg	10	10/23/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/23/2006
Naphthalene	24	1.0		mg/Kg	10	10/23/2006
1-Methylnaphthalene	33	2.0		mg/Kg	10	10/23/2006
2-Methylnaphthalene	47	2.0		mg/Kg	10	10/23/2006
Acetone	ND	7.5		mg/Kg	10	10/23/2006
Bromobenzene	ND	0.50		mg/Kg	10	10/23/2006
Bromochloromethane	ND	0.50		mg/Kg	10	10/23/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	10/23/2006
Bromoform	ND	0.50		mg/Kg	10	10/23/2006
Bromomethane	ND	1.0		mg/Kg	10	10/23/2006
2-Butanone	ND	5.0		mg/Kg	10	10/23/2006
Carbon disulfide	ND	5.0		mg/Kg	10	10/23/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/23/2006
Chlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
Chloroethane	ND	1.0		mg/Kg	10	10/23/2006
Chloroform	ND	0.50		mg/Kg	10	10/23/2006
Chloromethane	ND	0.50		mg/Kg	10	10/23/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/23/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2006

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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Desalter Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 11:40:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/23/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	10/23/2006
Dibromomethane	ND	1.0		mg/Kg	10	10/23/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/23/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/23/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/23/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/23/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/23/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/23/2006
2-Hexanone	ND	5.0		mg/Kg	10	10/23/2006
Isopropylbenzene (cumene)	9.1	0.50		mg/Kg	10	10/23/2006
4-Isopropyltoluene	6.2	0.50		mg/Kg	10	10/23/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/23/2006
Methylene chloride	ND	1.5		mg/Kg	10	10/23/2006
n-Butylbenzene	8.6	0.50		mg/Kg	10	10/23/2006
n-Propylbenzene	13	0.50		mg/Kg	10	10/23/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	10/23/2006
Styrene	ND	0.50		mg/Kg	10	10/23/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/23/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/23/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/23/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/23/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/23/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/23/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/23/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/23/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/23/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/23/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/23/2006
Vinyl chloride	ND	0.50		mg/Kg	10	10/23/2006
Xylenes, Total	200	10		mg/Kg	100	10/24/2006
Surr: 1,2-Dichloroethane-d4	104	62-127		%REC	10	10/23/2006

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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Desalter Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 11:40:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-01	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Surr: 4-Bromofluorobenzene	114	75.2-127		%REC	10	10/23/2006
Surr: Dibromofluoromethane	98.9	68.1-120		%REC	10	10/23/2006
Surr: Toluene-d8	84.6	74-119		%REC	10	10/23/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Main Col. Btm. Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 12:10:00 PM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-02	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: **MAP**
Mercury	26	3.3		mg/Kg	100	10/26/2006
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	40	2.5		mg/Kg	1	10/25/2006 10:30:30 AM
Barium	110	1.0		mg/Kg	10	10/25/2006 1:57:51 PM
Cadmium	2.1	0.10		mg/Kg	1	10/25/2006 10:30:30 AM
Chromium	91	3.0		mg/Kg	10	10/25/2006 1:57:51 PM
Lead	290	2.5		mg/Kg	10	10/25/2006 1:57:51 PM
Selenium	ND	25		mg/Kg	10	10/25/2006 1:57:51 PM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:30:30 AM
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	80	5.0		mg/Kg	100	10/24/2006
Toluene	450	5.0		mg/Kg	100	10/24/2006
Ethylbenzene	92	5.0		mg/Kg	100	10/24/2006
Methyl tert-butyl ether (MTBE)	ND	5.0		mg/Kg	100	10/24/2006
1,2,4-Trimethylbenzene	120	5.0		mg/Kg	100	10/24/2006
1,3,5-Trimethylbenzene	48	5.0		mg/Kg	100	10/24/2006
1,2-Dichloroethane (EDC)	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dibromoethane (EDB)	ND	5.0		mg/Kg	100	10/24/2006
Naphthalene	46	10		mg/Kg	100	10/24/2006
1-Methylnaphthalene	58	20		mg/Kg	100	10/24/2006
2-Methylnaphthalene	86	20		mg/Kg	100	10/24/2006
Acetone	ND	75		mg/Kg	100	10/24/2006
Bromobenzene	ND	5.0		mg/Kg	100	10/24/2006
Bromochloromethane	ND	5.0		mg/Kg	100	10/24/2006
Bromodichloromethane	ND	5.0		mg/Kg	100	10/24/2006
Bromoform	ND	5.0		mg/Kg	100	10/24/2006
Bromomethane	ND	10		mg/Kg	100	10/24/2006
2-Butanone	ND	50		mg/Kg	100	10/24/2006
Carbon disulfide	ND	50		mg/Kg	100	10/24/2006
Carbon tetrachloride	ND	10		mg/Kg	100	10/24/2006
Chlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
Chloroethane	ND	10		mg/Kg	100	10/24/2006
Chloroform	ND	5.0		mg/Kg	100	10/24/2006
Chloromethane	ND	5.0		mg/Kg	100	10/24/2006
2-Chlorotoluene	ND	5.0		mg/Kg	100	10/24/2006
4-Chlorotoluene	ND	5.0		mg/Kg	100	10/24/2006
cis-1,2-DCE	ND	5.0		mg/Kg	100	10/24/2006

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: *27-Oct-06*

CLIENT: Giant Refining Co
Lab Order: 0610223
Project: Main Col. Btm. Solids + Desalter Solids
Lab ID: 0610223-02

Client Sample ID: Main Col. Btm. Solids
Collection Date: 10/13/2006 12:10:00 PM
Date Received: 10/19/2006
Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
cis-1,3-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dibromo-3-chloropropane	ND	10		mg/Kg	100	10/24/2006
Dibromochloromethane	ND	5.0		mg/Kg	100	10/24/2006
Dibromomethane	ND	10		mg/Kg	100	10/24/2006
1,2-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,3-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,4-Dichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
Dichlorodifluoromethane	ND	5.0		mg/Kg	100	10/24/2006
1,1-Dichloroethane	ND	10		mg/Kg	100	10/24/2006
1,1-Dichloroethene	ND	5.0		mg/Kg	100	10/24/2006
1,2-Dichloropropane	ND	5.0		mg/Kg	100	10/24/2006
1,3-Dichloropropane	ND	5.0		mg/Kg	100	10/24/2006
2,2-Dichloropropane	ND	10		mg/Kg	100	10/24/2006
1,1-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
Hexachlorobutadiene	ND	10		mg/Kg	100	10/24/2006
2-Hexanone	ND	50		mg/Kg	100	10/24/2006
Isopropylbenzene	23	5.0		mg/Kg	100	10/24/2006
4-Isopropyltoluene	12	5.0		mg/Kg	100	10/24/2006
4-Methyl-2-pentanone	ND	50		mg/Kg	100	10/24/2006
Methylene chloride	ND	15		mg/Kg	100	10/24/2006
n-Butylbenzene	19	5.0		mg/Kg	100	10/24/2006
n-Propylbenzene	33	5.0		mg/Kg	100	10/24/2006
sec-Butylbenzene	7.6	5.0		mg/Kg	100	10/24/2006
Styrene	ND	5.0		mg/Kg	100	10/24/2006
tert-Butylbenzene	ND	5.0		mg/Kg	100	10/24/2006
1,1,1,2-Tetrachloroethane	ND	5.0		mg/Kg	100	10/24/2006
1,1,2,2-Tetrachloroethane	ND	5.0		mg/Kg	100	10/24/2006
Tetrachloroethene (PCE)	ND	5.0		mg/Kg	100	10/24/2006
trans-1,2-DCE	ND	5.0		mg/Kg	100	10/24/2006
trans-1,3-Dichloropropene	ND	5.0		mg/Kg	100	10/24/2006
1,2,3-Trichlorobenzene	ND	10		mg/Kg	100	10/24/2006
1,2,4-Trichlorobenzene	ND	5.0		mg/Kg	100	10/24/2006
1,1,1-Trichloroethane	ND	5.0		mg/Kg	100	10/24/2006
1,1,2-Trichloroethane	ND	5.0		mg/Kg	100	10/24/2006
Trichloroethene (TCE)	ND	5.0		mg/Kg	100	10/24/2006
Trichlorofluoromethane	ND	5.0		mg/Kg	100	10/24/2006
1,2,3-Trichloropropane	ND	10		mg/Kg	100	10/24/2006
Vinyl chloride	ND	5.0		mg/Kg	100	10/24/2006
Xylenes, Total	540	10		mg/Kg	100	10/24/2006
Surr: 1,2-Dichloroethane-d4	95.8	62-127		%REC	100	10/24/2006

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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Main Col. Btm. Solids
Lab Order:	0610223	**Collection Date:**	10/13/2006 12:10:00 PM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-02	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Surr: 4-Bromofluorobenzene	97.2	75.2-127		%REC	100	10/24/2006
Surr: Dibromofluoromethane	92.5	68.1-120		%REC	100	10/24/2006
Surr: Toluene-d8	94.9	74-119		%REC	100	10/24/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Oct-06*

CLIENT: Giant Refining Co
Lab Order: 0610223
Project: Main Col. Btm. Solids + Desalter Solids
Lab ID: 0610223-03

Client Sample ID: FCC Clean up
Collection Date: 10/19/2006 11:30:00 AM
Date Received: 10/19/2006
Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 7471: MERCURY						Analyst: **MAP**
Mercury	1.7	0.33		mg/Kg	10	10/26/2006
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Arsenic	74	25		mg/Kg	10	10/25/2006 11:25:47 AM
Barium	250	1.0		mg/Kg	10	10/25/2006 11:25:47 AM
Cadmium	2.1	0.10		mg/Kg	1	10/25/2006 10:33:03 AM
Chromium	81	3.0		mg/Kg	10	10/25/2006 11:25:47 AM
Lead	130	2.5		mg/Kg	10	10/25/2006 11:25:47 AM
Selenium	ND	25		mg/Kg	10	10/25/2006 11:25:47 AM
Silver	ND	0.25		mg/Kg	1	10/25/2006 10:33:03 AM
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Benzene	ND	0.50		mg/Kg	10	10/24/2006
Toluene	0.62	0.50		mg/Kg	10	10/24/2006
Ethylbenzene	ND	0.50		mg/Kg	10	10/24/2006
Methyl tert-butyl ether (MTBE)	ND	0.50		mg/Kg	10	10/24/2006
1,2,4-Trimethylbenzene	0.86	0.50		mg/Kg	10	10/24/2006
1,3,5-Trimethylbenzene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dichloroethane (EDC)	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dibromoethane (EDB)	ND	0.50		mg/Kg	10	10/24/2006
Naphthalene	2.3	1.0		mg/Kg	10	10/24/2006
1-Methylnaphthalene	26	2.0		mg/Kg	10	10/24/2006
2-Methylnaphthalene	23	2.0		mg/Kg	10	10/24/2006
Acetone	ND	7.5		mg/Kg	10	10/24/2006
Bromobenzene	ND	0.50		mg/Kg	10	10/24/2006
Bromochloromethane	ND	0.50		mg/Kg	10	10/24/2006
Bromodichloromethane	ND	0.50		mg/Kg	10	10/24/2006
Bromoform	ND	0.50		mg/Kg	10	10/24/2006
Bromomethane	ND	1.0		mg/Kg	10	10/24/2006
2-Butanone	ND	5.0		mg/Kg	10	10/24/2006
Carbon disulfide	ND	5.0		mg/Kg	10	10/24/2006
Carbon tetrachloride	ND	1.0		mg/Kg	10	10/24/2006
Chlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
Chloroethane	ND	1.0		mg/Kg	10	10/24/2006
Chloroform	ND	0.50		mg/Kg	10	10/24/2006
Chloromethane	ND	0.50		mg/Kg	10	10/24/2006
2-Chlorotoluene	ND	0.50		mg/Kg	10	10/24/2006
4-Chlorotoluene	ND	0.50		mg/Kg	10	10/24/2006
cis-1,2-DCE	ND	0.50		mg/Kg	10	10/24/2006

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: *27-Oct-06*

CLIENT: Giant Refining Co
Lab Order: 0610223
Project: Main Col. Btm. Solids + Desalter Solids
Lab ID: 0610223-03

Client Sample ID: FCC Clean up
Collection Date: 10/19/2006 11:30:00 AM
Date Received: 10/19/2006
Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
						Analyst: **LMM**
EPA METHOD 8260B: VOLATILES						
cis-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dibromo-3-chloropropane	ND	1.0		mg/Kg	10	10/24/2006
Dibromochloromethane	ND	0.50		mg/Kg	10	10/24/2006
Dibromomethane	ND	1.0		mg/Kg	10	10/24/2006
1,2-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,3-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,4-Dichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
Dichlorodifluoromethane	ND	0.50		mg/Kg	10	10/24/2006
1,1-Dichloroethane	ND	1.0		mg/Kg	10	10/24/2006
1,1-Dichloroethene	ND	0.50		mg/Kg	10	10/24/2006
1,2-Dichloropropane	ND	0.50		mg/Kg	10	10/24/2006
1,3-Dichloropropane	ND	0.50		mg/Kg	10	10/24/2006
2,2-Dichloropropane	ND	1.0		mg/Kg	10	10/24/2006
1,1-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
Hexachlorobutadiene	ND	1.0		mg/Kg	10	10/24/2006
2-Hexanone	ND	5.0		mg/Kg	10	10/24/2006
Isopropylbenzene	ND	0.50		mg/Kg	10	10/24/2006
4-Isopropyltoluene	0.95	0.50		mg/Kg	10	10/24/2006
4-Methyl-2-pentanone	ND	5.0		mg/Kg	10	10/24/2006
Methylene chloride	ND	1.5		mg/Kg	10	10/24/2006
n-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
n-Propylbenzene	ND	0.50		mg/Kg	10	10/24/2006
sec-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
Styrene	ND	0.50		mg/Kg	10	10/24/2006
tert-Butylbenzene	ND	0.50		mg/Kg	10	10/24/2006
1,1,1,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/24/2006
1,1,2,2-Tetrachloroethane	ND	0.50		mg/Kg	10	10/24/2006
Tetrachloroethene (PCE)	ND	0.50		mg/Kg	10	10/24/2006
trans-1,2-DCE	ND	0.50		mg/Kg	10	10/24/2006
trans-1,3-Dichloropropene	ND	0.50		mg/Kg	10	10/24/2006
1,2,3-Trichlorobenzene	ND	1.0		mg/Kg	10	10/24/2006
1,2,4-Trichlorobenzene	ND	0.50		mg/Kg	10	10/24/2006
1,1,1-Trichloroethane	ND	0.50		mg/Kg	10	10/24/2006
1,1,2-Trichloroethane	ND	0.50		mg/Kg	10	10/24/2006
Trichloroethene (TCE)	ND	0.50		mg/Kg	10	10/24/2006
Trichlorofluoromethane	ND	0.50		mg/Kg	10	10/24/2006
1,2,3-Trichloropropane	ND	1.0		mg/Kg	10	10/24/2006
Vinyl chloride	ND	0.50		mg/Kg	10	10/24/2006
Xylenes, Total	ND	1.0		mg/Kg	10	10/24/2006
Surr: 1,2-Dichloroethane-d4	90.5	62-127		%REC	10	10/24/2006

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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	FCC Clean up
Lab Order:	0610223	**Collection Date:**	10/19/2006 11:30:00 AM
Project:	Main Col. Btm. Solids + Desalter Solids	**Date Received:**	10/19/2006
Lab ID:	0610223-03	**Matrix:**	SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **LMM**
Surr: 4-Bromofluorobenzene	102	75.2-127		%REC	10	10/24/2006
Surr: Dibromofluoromethane	89.8	68.1-120		%REC	10	10/24/2006
Surr: Toluene-d8	102	74-119		%REC	10	10/24/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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

lient: Giant Refining Co
Project: Main Col. Btm. Solids + Desalter Solids **Work Order:** 0610223

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW7471									
Sample ID: MB-11561		*MBLK*			Batch ID:	**11561**	Analysis Date:	10/24/2006	
Mercury	ND	mg/Kg	0.033						
Sample ID: MB-11584		*MBLK*			Batch ID:	**11584**	Analysis Date:	10/26/2006	
Mercury	ND	mg/Kg	0.033						
Sample ID: LCS-11561		*LCS*			Batch ID:	**11561**	Analysis Date:	10/24/2006	
Mercury	0.1780	mg/Kg	0.033	107	80	120			
Sample ID: LCS-11584		*LCS*			Batch ID:	**11584**	Analysis Date:	10/26/2006	
Mercury	0.1727	mg/Kg	0.033	104	80	120			
Method: SW6010A									
Sample ID: MB-11559		*MBLK*			Batch ID:	**11559**	Analysis Date:	10/25/2006 9:40:55 AM	
Arsenic	ND	mg/Kg	2.5						
Barium	ND	mg/Kg	0.10						
Cadmium	ND	mg/Kg	0.10						
Chromium	ND	mg/Kg	0.30						
Lead	ND	mg/Kg	0.25						
Selenium	ND	mg/Kg	2.5						
Silver	ND	mg/Kg	0.25						
ample ID: LCS-11559		*LCS*			Batch ID:	**11559**	Analysis Date:	10/25/2006 9:44:01 AM	
Arsenic	23.83	mg/Kg	2.5	95.3	80	120			
Barium	22.76	mg/Kg	0.10	91.1	80	120			
Cadmium	23.07	mg/Kg	0.10	92.1	80	120			
Chromium	23.26	mg/Kg	0.30	93.1	80	120			
Lead	22.52	mg/Kg	0.25	89.4	80	120			
Selenium	21.13	mg/Kg	2.5	84.5	80	120			
Silver	23.17	mg/Kg	0.25	92.7	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

lient: Giant Refining Co
Project: Main Col. Btm. Solids + Desalter Solids **Work Order:** 0610223

Method: **SW8260B**
Sample ID: **MB-11543** *MBLK* Batch ID: **11543** Analysis Date: 10/23/2006

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Methyl tert-butyl ether (MTBE)	ND	mg/Kg	0.050						
1,2,4-Trimethylbenzene	ND	mg/Kg	0.050						
1,3,5-Trimethylbenzene	ND	mg/Kg	0.050						
1,2-Dichloroethane (EDC)	ND	mg/Kg	0.050						
1,2-Dibromoethane (EDB)	ND	mg/Kg	0.050						
Naphthalene	ND	mg/Kg	0.10						
1-Methylnaphthalene	ND	mg/Kg	0.20						
2-Methylnaphthalene	ND	mg/Kg	0.20						
Acetone	ND	mg/Kg	0.75						
Bromobenzene	ND	mg/Kg	0.050						
Bromochloromethane	ND	mg/Kg	0.050						
Bromodichloromethane	ND	mg/Kg	0.050						
Bromoform	ND	mg/Kg	0.050						
Bromomethane	ND	mg/Kg	0.10						
2-Butanone	ND	mg/Kg	0.50						
Carbon disulfide	ND	mg/Kg	0.50						
Carbon tetrachloride	ND	mg/Kg	0.10						
Chlorobenzene	ND	mg/Kg	0.050						
Chloroethane	ND	mg/Kg	0.10						
Chloroform	ND	mg/Kg	0.050						
Chloromethane	ND	mg/Kg	0.050						
2-Chlorotoluene	ND	mg/Kg	0.050						
4-Chlorotoluene	ND	mg/Kg	0.050						
cis-1,2-DCE	ND	mg/Kg	0.050						
cis-1,3-Dichloropropene	ND	mg/Kg	0.050						
1,2-Dibromo-3-chloropropane	ND	mg/Kg	0.10						
Dibromochloromethane	ND	mg/Kg	0.050						
Dibromomethane	ND	mg/Kg	0.10						
1,2-Dichlorobenzene	ND	mg/Kg	0.050						
1,3-Dichlorobenzene	ND	mg/Kg	0.050						
1,4-Dichlorobenzene	ND	mg/Kg	0.050						
Dichlorodifluoromethane	ND	mg/Kg	0.050						
1,1-Dichloroethane	ND	mg/Kg	0.10						
1,1-Dichloroethene	ND	mg/Kg	0.050						
1,2-Dichloropropane	ND	mg/Kg	0.050						
1,3-Dichloropropane	ND	mg/Kg	0.050						
2,2-Dichloropropane	ND	mg/Kg	0.10						
1,1-Dichloropropene	ND	mg/Kg	0.050						
Hexachlorobutadiene	ND	mg/Kg	0.10						
2-Hexanone	ND	mg/Kg	0.50						
Isopropylbenzene	ND	mg/Kg	0.050						

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

lient: Giant Refining Co
Project: Main Col. Btm. Solids + Desalter Solids

Work Order: 0610223

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8260B									
Sample ID: MB-11543		*MBLK*			Batch ID:	**11543**	Analysis Date:		10/23/2006
4-Isopropyltoluene	ND	mg/Kg	0.050						
4-Methyl-2-pentanone	ND	mg/Kg	0.50						
Methylene chloride	ND	mg/Kg	0.15						
n-Butylbenzene	ND	mg/Kg	0.050						
n-Propylbenzene	ND	mg/Kg	0.050						
sec-Butylbenzene	ND	mg/Kg	0.050						
Styrene	ND	mg/Kg	0.050						
tert-Butylbenzene	ND	mg/Kg	0.050						
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.050						
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.050						
Tetrachloroethene (PCE)	ND	mg/Kg	0.050						
trans-1,2-DCE	ND	mg/Kg	0.050						
trans-1,3-Dichloropropene	ND	mg/Kg	0.050						
1,2,3-Trichlorobenzene	ND	mg/Kg	0.10						
1,2,4-Trichlorobenzene	ND	mg/Kg	0.050						
1,1,1-Trichloroethane	ND	mg/Kg	0.050						
1,1,2-Trichloroethane	ND	mg/Kg	0.050						
Trichloroethene (TCE)	ND	mg/Kg	0.050						
Trichlorofluoromethane	ND	mg/Kg	0.050						
1,2,3-Trichloropropane	ND	mg/Kg	0.10						
Vinyl chloride	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.10						
Sample ID: LCS-11543		*LCS*			Batch ID:	**11543**	Analysis Date:		10/23/2006
Benzene	0.9974	mg/Kg	0.050	99.7	80.8	132			
Toluene	0.9484	mg/Kg	0.050	94.8	72.1	126			
Chlorobenzene	1.024	mg/Kg	0.050	102	75.4	140			
1,1-Dichloroethene	1.119	mg/Kg	0.050	112	59	147			
Trichloroethene (TCE)	0.9363	mg/Kg	0.050	93.6	63.5	123			

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.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 10/19/2006

Work Order Number 0610223

Received by AT

Checklist completed by Signature 10-20-06 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? **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 9210

Project Name: Main Col - Btm. Solids + Desalter Solids
Project #:
Project Manager: Steve Moris
Sampler: Cheryl Johnson
Sample Temperature: 3°

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0610223	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)
10/13/06	1140	Non Aqueous	Desalter Solids	2				-1								X			X					
10/13/06	1210	"	Main Col Btm Solids	2				-2								X			X					
10/19/06	1130		FCC Clean up	2				-3								X			X					

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
10/19/06	1540	[signature]	[signature] 10/19/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 1540

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, July 05, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Zinc Oxide Cat. Waste Determination

Order No.: 0606269

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 6/23/2006 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

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

TRI ✓

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Jul-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Zinc Oxide Cat
Lab Order:	0606269	**Collection Date:**	6/22/2006 9:30:00 AM
Project:	Zinc Oxide Cat. Waste Determination	**Date Received:**	6/23/2006
Lab ID:	0606269-01	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED						Analyst: **CMC**
Mercury	ND	0.020		mg/L	1	6/29/2006
EPA METHOD 6010B: TCLP METALS						Analyst: **NMO**
Arsenic	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
Barium	ND	100		mg/L	1	7/5/2006 10:46:11 AM
Cadmium	ND	1.0		mg/L	1	7/5/2006 10:46:11 AM
Chromium	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
Lead	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
Selenium	ND	1.0		mg/L	1	7/5/2006 11:59:42 AM
Silver	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
VOLATILES BY 8260B/1311						Analyst: **KTM**
Benzene	1.3 × 20 =	0.50		mg/L	1	7/3/2006 3:54:35 PM
2-Butanone	ND	10		mg/L	1	7/3/2006 3:54:35 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Chlorobenzene	ND	100		mg/L	1	7/3/2006 3:54:35 PM
Chloroform	ND	6.0		mg/L	1	7/3/2006 3:54:35 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	7/3/2006 3:54:35 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	7/3/2006 3:54:35 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	7/3/2006 3:54:35 PM
Trichloroethene (TCE)	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Vinyl chloride	ND	0.20		mg/L	1	7/3/2006 3:54:35 PM
Surr: 1,2-Dichloroethane-d4	105	69.9-130		%REC	1	7/3/2006 3:54:35 PM
Surr: 4-Bromofluorobenzene	104	71.2-123		%REC	1	7/3/2006 3:54:35 PM
Surr: Dibromofluoromethane	101	73.9-134		%REC	1	7/3/2006 3:54:35 PM
Surr: Toluene-d8	101	81.9-122		%REC	1	7/3/2006 3:54:35 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

QA/QC SUMMARY REPORT

: Giant Refining Co
roject: Zinc Oxide Cat. Waste Determination **Work Order:** 0606269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
lethod: SW7470									
ample ID: MB-10721		*MBLK*			Batch ID:	**10721**	Analysis Date:		6/29/2006
lercury	ND	mg/L	0.020						
ample ID: LCS-10721		*LCS*			Batch ID:	**10721**	Analysis Date:		6/29/2006
lercury	0.004770	mg/L	0.0020	95.4	80	120			
lethod: SW1311/6010									
ample ID: MB-10728		*MBLK*			Batch ID:	**10728**	Analysis Date:		7/5/2006 10:30:12 AM
rsenic	ND	mg/L	5.0						
arium	ND	mg/L	100						
admium	ND	mg/L	1.0						
hromium	ND	mg/L	5.0						
ead	ND	mg/L	5.0						
ilver	ND	mg/L	5.0						
ample ID: MB-10728		*MBLK*			Batch ID:	**10728**	Analysis Date:		7/5/2006 11:49:27 AM
elenium	ND	mg/L	1.0						
ample ID: LCS-10728		*LCS*			Batch ID:	**10728**	Analysis Date:		7/5/2006 10:34:30 AM
rsenic	0.5912	mg/L	0.20	118	80	120			
m	0.5011	mg/L	0.20	99.9	80	120			
ium	0.5239	mg/L	0.20	105	80	120			
hromium	0.5022	mg/L	0.20	100	80	120			
ead	0.5182	mg/L	0.20	104	80	120			
ilver	0.5395	mg/L	0.20	107	80	120			
ample ID: LCS-10728		*LCS*			Batch ID:	**10728**	Analysis Date:		7/5/2006 11:52:01 AM
elenium	0.5370	mg/L	0.20	107	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	Sp overy outside accepted recovery limits

QA/QC SUMMARY REPORT

:: Giant Refining Co
roject: Zinc Oxide Cat. Waste Determination **Work Order:** 0606269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
ethod: SW8260B									
ample ID: MB-10678		*MBLK*			Batch ID:	**10678**	Analysis Date:	7/3/2006 5:04:23 PM	
enzene	ND	mg/L	0.50						
Butanone	ND	mg/L	10						
arbon Tetrachloride	ND	mg/L	0.50						
hlorobenzene	ND	mg/L	100						
hloroform	ND	mg/L	6.0						
4-Dichlorobenzene	ND	mg/L	7.5						
2-Dichloroethane (EDC)	ND	mg/L	0.50						
1-Dichloroethene	ND	mg/L	0.70						
exachlorobutadiene	ND	mg/L	0.50						
etrachloroethene (PCE)	ND	mg/L	0.70						
richloroethene (TCE)	ND	mg/L	0.50						
inyl chloride	ND	mg/L	0.20						
ample ID: LCS-10678		*LCS*			Batch ID:	**10678**	Analysis Date:	7/3/2006 4:29:26 PM	
enzene	30.06	mg/L	0.50	150	51.1	171			
hlorobenzene	ND	mg/L	100	147	36.1	191			
,1-Dichloroethene	25.57	mg/L	0.70	128	49.1	162			
richloroethene (TCE)	29.98	mg/L	0.50	150	41.2	166			

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	Spi[illegible]very outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 6/23/2006

Work Order Number 0606269 | Received by AT

Checklist completed by _____ Signature | 6/23/06 Date

Matrix | Carrier name FedEx

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? **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: Zinc Oxide Cat. Waste Determination
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	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)	TCLP Volatiles	TCLP Metals			Air Bubbles or Headspace (Y or N)
6/22/06	0930	Non Aqueous	Zinc Oxide Cat.	2			0606269-1													X	X			

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
6/22/06	1030	Steve Morris	[signature] 6-23-06 950
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, December 13, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Desalter & Main Column Sludge

Order No.: 0612129

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 12/8/2006 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: *13-Dec-06*

CLIENT: Giant Refining Co
Project: Desalter & Main Column Sludge
Lab Order: 0612129

Lab ID: 0612129-01
Collection Date: 12/7/2006 1:00:00 PM
Client Sample ID: Desalter Sludge
Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Fluoride	2.0	1.5		mg/Kg	5	12/12/2006 3:51:40 PM

Lab ID: 0612129-02
Collection Date: 12/7/2006 1:15:00 PM
Client Sample ID: Main Col Sludge
Matrix: SLUDGE

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Fluoride	ND	1.5		mg/Kg	5	12/12/2006 4:09:04 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: Desalter & Main Column Sludge **Work Order:** 0612129

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: 0612129-02AMSD		*MSD*			Batch ID:	**11958**	Analysis Date:	12/12/2006 4:43:53 PM	
Fluoride	2.190	mg/Kg	1.5	67.0	80	120	12.2	20	S
Sample ID: MB-11958		*MBLK*			Batch ID:	**11958**	Analysis Date:	12/12/2006 5:36:05 PM	
Fluoride	ND	mg/Kg	0.30						
Sample ID: LCS-11958		*LCS*			Batch ID:	**11958**	Analysis Date:	12/12/2006 5:53:30 PM	
Fluoride	1.545	mg/Kg	0.30	103	90	110			
Sample ID: 0612129-02AMS		*MS*			Batch ID:	**11958**	Analysis Date:	12/12/2006 4:26:29 PM	
Fluoride	2.475	mg/Kg	1.5	86.0	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

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 12/8/2006

Work Order Number 0612129

Received by AT

Checklist completed by _____ Signature | 12/8/06 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? **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: Desalter and Main Column Sludge
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. 0612129-1	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)
12-7-06	1300	Non Aqueous	Desalter Sludge	2				-1									X							
"	"	1315	"	Main Col. Sludge	2				-2								X							

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
12-8-06	1010	[signature]	[signature] 12/8/06 1010
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, October 09, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: FCC Refractory From Regenerator

Order No.: 0609376

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 9/29/2006 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: *09-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	FCC Refractory
Lab Order:	0609376	**Collection Date:**	9/28/2006 9:30:00 AM
Project:	FCC Refractory From Regenerator	**Date Received:**	9/29/2006
Lab ID:	0609376-01	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED						Analyst: **MAP**
Mercury	ND	0.020		mg/L	1	10/6/2006
EPA METHOD 6010B: TCLP METALS						Analyst: **CMC**
Arsenic	ND	5.0		mg/L	1	10/5/2006 4:56:33 PM
Barium	ND	100		mg/L	1	10/5/2006 4:56:33 PM
Cadmium	ND	1.0		mg/L	1	10/5/2006 4:56:33 PM
Chromium	ND	5.0		mg/L	1	10/5/2006 4:56:33 PM
Lead	ND	5.0		mg/L	1	10/5/2006 4:56:33 PM
Selenium	ND	1.0		mg/L	1	10/5/2006 4:56:33 PM
Silver	ND	5.0		mg/L	1	10/5/2006 4:56:33 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: FCC Refractory From Regenerator **Work Order:** 0609376

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW7470									
Sample ID: MB-11439		*MBLK*			Batch ID:	**11439**	Analysis Date:		10/6/2006
Mercury	ND	mg/L	0.020						
Sample ID: LCS-11439		*LCS*			Batch ID:	**11439**	Analysis Date:		10/6/2006
Mercury	0.005445	mg/L	0.0020	109	80	120			
Method: SW1311/6010									
Sample ID: 0609376-01A MSD		*MSD*			Batch ID:	**11427**	Analysis Date:		10/5/2006 5:06:25 PM
Barium	0.7008	mg/L	0.20	96.7	75	125	5.45	20	
Cadmium	0.5177	mg/L	0.20	104	75	125	7.94	20	
Lead	0.5643	mg/L	0.20	113	75	125	7.16	20	
Selenium	0.4709	mg/L	0.20	94.2	75	125	7.44	20	
Sample ID: MB-11427		*MBLK*			Batch ID:	**11427**	Analysis Date:		10/5/2006 4:42:11 PM
Arsenic	ND	mg/L	5.0						
Barium	ND	mg/L	100						
Cadmium	ND	mg/L	1.0						
Chromium	ND	mg/L	5.0						
Lead	ND	mg/L	5.0						
Selenium	ND	mg/L	1.0						
Silver	ND	mg/L	5.0						
Sample ID: LCS-11427		*LCS*			Batch ID:	**11427**	Analysis Date:		10/5/2006 4:46:19 PM
Arsenic	0.5536	mg/L	0.20	111	80	120			
Barium	0.4925	mg/L	0.20	98.1	80	120			
Cadmium	0.5212	mg/L	0.20	104	80	120			
Chromium	0.5024	mg/L	0.20	100	80	120			
Lead	0.5057	mg/L	0.20	101	80	120			
Selenium	0.4586	mg/L	0.20	91.7	80	120			
Silver	0.5353	mg/L	0.20	104	80	120			
Sample ID: 0609376-01A MS		*MS*			Batch ID:	**11427**	Analysis Date:		10/5/2006 5:00:28 PM
Barium	0.6637	mg/L	0.20	89.2	75	125			
Cadmium	0.4782	mg/L	0.20	95.6	75	125			
Lead	0.5252	mg/L	0.20	105	75	125			
Selenium	0.4371	mg/L	0.20	87.4	75	125			

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: 9/29/2006

Work Order Number 0609376

Received by AT

Checklist completed by G Schlyope 9-29-06
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 - 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: FCC Refractory from Regenerator
Project #:
Project Manager: Steve Morris
Sampler: 2°
Sample Temperature:

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)	TCLP-RCRA Metals			Air Bubbles or Headspace (Y or N)
9/28/06	0930	Non aqueous Solid	FCC Refractory	1 8oz				0609376-1													X			

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
9/29/06	1025	Steve Morris	
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature) 9/29/06 1025

Remarks:

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Jul-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Zinc Oxide Cat
Lab Order:	0606269	**Collection Date:**	6/22/2006 9:30:00 AM
Project:	Zinc Oxide Cat. Waste Determination	**Date Received:**	6/23/2006
Lab ID:	0606269-01	**Matrix:**	SOLID

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
MERCURY, TCLP LEACHED						Analyst: CMC
Mercury	ND	0.020		mg/L	1	6/29/2006
EPA METHOD 6010B: TCLP METALS						Analyst: NMO
Arsenic	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
Barium	ND	100		mg/L	1	7/5/2006 10:46:11 AM
Cadmium	ND	1.0		mg/L	1	7/5/2006 10:46:11 AM
Chromium	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
Lead	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
Selenium	ND	1.0		mg/L	1	7/5/2006 11:59:42 AM
Silver	ND	5.0		mg/L	1	7/5/2006 10:46:11 AM
VOLATILES BY 8260B/1311						Analyst: KTM
Benzene	1.3	0.50		mg/L	1	7/3/2006 3:54:35 PM
2-Butanone	ND	10		mg/L	1	7/3/2006 3:54:35 PM
Carbon Tetrachloride	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Chlorobenzene	ND	100		mg/L	1	7/3/2006 3:54:35 PM
Chloroform	ND	6.0		mg/L	1	7/3/2006 3:54:35 PM
1,4-Dichlorobenzene	ND	7.5		mg/L	1	7/3/2006 3:54:35 PM
1,2-Dichloroethane (EDC)	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
1,1-Dichloroethene	ND	0.70		mg/L	1	7/3/2006 3:54:35 PM
Hexachlorobutadiene	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Tetrachloroethene (PCE)	ND	0.70		mg/L	1	7/3/2006 3:54:35 PM
Trichloroethene (TCE)	ND	0.50		mg/L	1	7/3/2006 3:54:35 PM
Vinyl chloride	ND	0.20		mg/L	1	7/3/2006 3:54:35 PM
Surr: 1,2-Dichloroethane-d4	105	69.9-130		%REC	1	7/3/2006 3:54:35 PM
Surr: 4-Bromofluorobenzene	104	71.2-123		%REC	1	7/3/2006 3:54:35 PM
Surr: Dibromofluoromethane	101	73.9-134		%REC	1	7/3/2006 3:54:35 PM
Surr: Toluene-d8	101	81.9-122		%REC	1	7/3/2006 3:54:35 PM

$1.3/20 = 0.065 < 0.5$ mg/l

non-hazardous

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *05-Jul-06*

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Zinc Oxide Cat. Waste Determination

Work Order: 0606269

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW7470									
Sample ID: MB-10721		*MBLK*			Batch ID:	10721	Analysis Date:		6/29/2006
Mercury	ND	mg/L	0.020						
Sample ID: LCS-10721		*LCS*			Batch ID:	10721	Analysis Date:		6/29/2006
Mercury	0.004770	mg/L	0.0020	95.4	80	120			
Method: SW1311/6010									
Sample ID: MB-10728		*MBLK*			Batch ID:	10728	Analysis Date:		7/5/2006 10:30:12 AM
Arsenic	ND	mg/L	5.0						
Barium	ND	mg/L	100						
Cadmium	ND	mg/L	1.0						
Chromium	ND	mg/L	5.0						
Lead	ND	mg/L	5.0						
Silver	ND	mg/L	5.0						
Sample ID: MB-10728		*MBLK*			Batch ID:	10728	Analysis Date:		7/5/2006 11:49:27 AM
Selenium	ND	mg/L	1.0						
Sample ID: LCS-10728		*LCS*			Batch ID:	10728	Analysis Date:		7/5/2006 10:34:30 AM
Arsenic	0.5912	mg/L	0.20	118	80	120			
Barium	0.5011	mg/L	0.20	99.9	80	120			
Cadmium	0.5239	mg/L	0.20	105	80	120			
Chromium	0.5022	mg/L	0.20	100	80	120			
Lead	0.5182	mg/L	0.20	104	80	120			
Silver	0.5395	mg/L	0.20	107	80	120			
Sample ID: LCS-10728		*LCS*			Batch ID:	10728	Analysis Date:		7/5/2006 11:52:01 AM
Selenium	0.5370	mg/L	0.20	107	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

COVER LETTER

Thursday, November 30, 2006

Cheryl Johnson
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: T-344 Spill

Order No.: 0611210

Dear Cheryl Johnson:

Hall Environmental Analysis Laboratory, Inc. received 1 sample(s) on 11/16/2006 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: *30-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	T 344
Lab Order:	0611210	**Collection Date:**	11/16/2006 10:10:00 AM
Project:	T-344 Spill	**Date Received:**	11/16/2006
Lab ID:	0611210-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Benzene	ND	0.50		mg/Kg	10	11/28/2006 10:46:03 AM
Toluene	2.4	0.50		mg/Kg	10	11/28/2006 10:46:03 AM
Ethylbenzene	1.5	0.50		mg/Kg	10	11/28/2006 10:46:03 AM
Xylenes, Total	15	1.5		mg/Kg	10	11/28/2006 10:46:03 AM
Surr: 4-Bromofluorobenzene	98.9	68.2-109		%REC	10	11/28/2006 10:46:03 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: T-344 Spill **Work Order:** 0611210

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW8021									
Sample ID: MB-11794		*MBLK*			Batch ID:	**11794**	Analysis Date:	11/27/2006 5:56:02 PM	
Benzene	ND	mg/Kg	0.050						
Toluene	ND	mg/Kg	0.050						
Ethylbenzene	ND	mg/Kg	0.050						
Xylenes, Total	ND	mg/Kg	0.15						
Sample ID: LCS-11794		*LCS*			Batch ID:	**11794**	Analysis Date:	11/27/2006 6:26:31 PM	
Benzene	0.2577	mg/Kg	0.050	80.5	62.7	114			
Toluene	1.719	mg/Kg	0.050	86.0	68.2	121			
Ethylbenzene	0.3347	mg/Kg	0.050	85.8	71.4	115			
Xylenes, Total	1.961	mg/Kg	0.15	93.4	65	135			
Sample ID: LCSD-11794		*LCSD*			Batch ID:	**11794**	Analysis Date:	11/27/2006 6:57:05 PM	
Benzene	0.2690	mg/Kg	0.050	84.1	62.7	114	4.29	27	
Toluene	1.808	mg/Kg	0.050	90.4	68.2	121	5.02	19	
Ethylbenzene	0.3538	mg/Kg	0.050	90.7	71.4	115	5.55	10	
Xylenes, Total	2.048	mg/Kg	0.15	97.5	65	135	4.37	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 GIANT REFINERY BLOOM

Date and Time Received: 11/16/2006

Work Order Number 0611210

Received by AMF

Checklist completed by B Schlepe 11-16-06
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 - 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 Co. Ciniza
Address: Rt 3 Box 7 Gallup NM 87301
Phone #: 505 722 3833
Fax #: 505 722 0210

Project Name: T-344 Spill
Project #:
Project Manager: C Johson
Sampler: Cheryl Johnson
Sample Temperature: 5°C

ANALYSIS REQUEST

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative $HgCl_2$	Preservative HNO_3	Preservative	HEAL No. 0611210	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)
11-16-06	10:10AM	Soil	T344	2/4oz				-1	X															

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
11-16-06	1530	[signature]	[signature] 11/16/06 15:30
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, October 27, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Post Alky Fire Soil Samples 10-25-06

Order No.: 0610285

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 10/25/2006 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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky SE
Lab Order:	0610285	**Collection Date:**	10/25/2006 12:35:00 PM
Project:	Post Alky Fire Soil Samples 10-25-06	**Date Received:**	10/25/2006
Lab ID:	0610285-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Fluoride	33	1.5		mg/Kg	5	10/26/2006 12:55:35 PM
Chloride	1900	6.0		mg/Kg	20	10/26/2006 2:22:36 PM
EPA METHOD 150.1: PH						Analyst: **CMC**
pH	7.64	0.010		pH Units	1	10/26/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: *27-Oct-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky NE
Lab Order:	0610285	**Collection Date:**	10/25/2006 12:50:00 PM
Project:	Post Alky Fire Soil Samples 10-25-06	**Date Received:**	10/25/2006
Lab ID:	0610285-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Fluoride	86	3.0		mg/Kg	10	10/27/2006 12:08:20 PM
Chloride	350	1.5		mg/Kg	5	10/26/2006 1:12:59 PM
EPA METHOD 150.1: PH						Analyst: **CMC**
pH	8.53	0.010		pH Units	1	10/26/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: Post Alky Fire Soil Samples 10-25-06 **Work Order:** 0610285

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11576		*MBLK*			Batch ID:	**11576**	Analysis Date:	10/27/2006 9:49:05 AM	
Fluoride	ND	mg/Kg	0.30						
Chloride	ND	mg/Kg	0.30						
Sample ID: LCS-11576		*LCS*			Batch ID:	**11576**	Analysis Date:	10/26/2006 11:57:08 PM	
Fluoride	1.506	mg/Kg	0.30	100	90	110			
Chloride	14.94	mg/Kg	0.30	99.6	90	110			
Method: SW9045B									
Sample ID: 0610285-01ADUP		*DUP*			Batch ID:	**R21176**	Analysis Date:	10/26/2006	
pH	7.600	pH Units	0.010						

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	3 / 4recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 10/25/2006

Work Order Number 0610285

Received by AT

Checklist completed by D Schlupe 10-25-06
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 - 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: Post Alky Fire Soil Samples 10-25-2006
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		HEAL No. 0610285	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)	pH				Air Bubbles or Headspace (Y or N)
10/25/06	1235	Soil	Alky SE					1									X				X				
"	1259	"	Alky NE					2									X				X				

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
10/25/06	1600	Steve Morris	10/25/06 1600
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Friday, November 10, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Post Alky Fire Soil Samples 10-25-06

Order No.: 0610285

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 10/25/2006 for the analyses presented in the following report.

This report is an addendum to the report dated October 27, 2006. Na and K have been added to this report. Please don't hesitate to contact us for any additional information or clarifications.

Sincerely,

Andy Freeman, Business Manager
Nancy McDuffie, Laboratory Manager

Hall Environmental Analysis Laboratory, Inc.

Date: *10-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky SE
Lab Order:	0610285	**Collection Date:**	10/25/2006 12:35:00 PM
Project:	Post Alky Fire Soil Samples 10-25-06	**Date Received:**	10/25/2006
Lab ID:	0610285-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Fluoride	33	1.5		mg/Kg	5	10/26/2006 12:55:35 PM
Chloride	1900	6.0		mg/Kg	20	10/26/2006 2:22:36 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Potassium	1200	100		mg/Kg	2	11/9/2006 11:14:45 AM
Sodium	1100	50		mg/Kg	2	11/9/2006 11:14:45 AM
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	7.64	0.010		pH Units	1	10/26/2006

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-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	Alky NE
Lab Order:	0610285	**Collection Date:**	10/25/2006 12:50:00 PM
Project:	Post Alky Fire Soil Samples 10-25-06	**Date Received:**	10/25/2006
Lab ID:	0610285-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Fluoride	86	3.0		mg/Kg	10	10/27/2006 12:08:20 PM
Chloride	350	1.5		mg/Kg	5	10/26/2006 1:12:59 PM
EPA METHOD 150.1: PH						Analyst: **CMS**
pH	8.53	0.010		pH Units	1	10/26/2006

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected 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: Post Alky Fire Soil Samples 10-25-06 **Work Order:** 0610285

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11576		*MBLK*			Batch ID:	**11576**	Analysis Date:	10/27/2006 9:49:05 AM	
Fluoride	ND	mg/Kg	0.30						
Chloride	ND	mg/Kg	0.30						
Sample ID: LCS-11576		*LCS*			Batch ID:	**11576**	Analysis Date:	10/26/2006 11:57:08 PM	
Fluoride	1.506	mg/Kg	0.30	100	90	110			
Chloride	14.94	mg/Kg	0.30	99.6	90	110			
Method: SW6010A									
Sample ID: MB-11677		*MBLK*			Batch ID:	**11677**	Analysis Date:	11/9/2006 10:31:33 AM	
Potassium	ND	mg/Kg	50						
Sodium	ND	mg/Kg	25						
Sample ID: LCS-11677		*LCS*			Batch ID:	**11677**	Analysis Date:	11/9/2006 10:22:40 AM	
Potassium	2644	mg/Kg	50	106	80	120			
Sodium	2641	mg/Kg	25	106	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

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: Post Alky Fire Soil Samples 10-25-2006
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		HEAL No. 0610285	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)	pH				Air Bubbles or Headspace (Y or N)
9/25/06	1235	Soil	Alky SE					1									X				X				
"	1250	"	Alky NE					2									X				X				

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
9/25/06	1600	Steve Morris	10/25/06 1600
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

add Na + K to Alky SE
per S. Morris 11/6/06

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, November 21, 2006

Steve Morris
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: Post Alky Fire Soil Samples Phase 2. 11-7-2

Order No.: 0611098

Dear Steve Morris:

Hall Environmental Analysis Laboratory, Inc. received 8 sample(s) on 11/8/2006 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: *21-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PAF-1A
Lab Order:	0611098	**Collection Date:**	11/7/2006 10:30:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	**Date Received:**	11/8/2006
Lab ID:	0611098-01	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	42	1.5		mg/Kg	5	11/14/2006 9:41:40 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Sodium	300	25		mg/Kg	1	11/17/2006 12:21:24 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-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PAF-1B
Lab Order:	0611098	**Collection Date:**	11/7/2006 10:35:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	**Date Received:**	11/8/2006
Lab ID:	0611098-02	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	31	1.5		mg/Kg	5	11/14/2006 9:59:05 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Sodium	210	50		mg/Kg	2	11/17/2006 12:55:00 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-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PAF-2A
Lab Order:	0611098	**Collection Date:**	11/7/2006 10:45:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	**Date Received:**	11/8/2006
Lab ID:	0611098-03	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	75	1.5		mg/Kg	5	11/14/2006 10:16:29 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Sodium	420	25		mg/Kg	1	11/17/2006 12:28:10 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-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PAF-2B
Lab Order:	0611098	**Collection Date:**	11/7/2006 10:50:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	**Date Received:**	11/8/2006
Lab ID:	0611098-04	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	40	1.5		mg/Kg	5	11/14/2006 10:33:54 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Sodium	380	25		mg/Kg	1	11/17/2006 12:30:25 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: *21-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PAF-3A
Lab Order:	0611098	**Collection Date:**	11/7/2006 11:00:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	**Date Received:**	11/8/2006
Lab ID:	0611098-05	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	35	1.5		mg/Kg	5	11/14/2006 10:51:19 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Sodium	310	25		mg/Kg	1	11/17/2006 12:32:39 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-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PAF-3B
Lab Order:	0611098	**Collection Date:**	11/7/2006 11:05:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	**Date Received:**	11/8/2006
Lab ID:	0611098-06	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	43	1.5		mg/Kg	5	11/14/2006 11:08:44 AM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Sodium	420	25		mg/Kg	1	11/17/2006 12:34:07 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-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PAF-4A
Lab Order:	0611098	**Collection Date:**	11/7/2006 11:15:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	**Date Received:**	11/8/2006
Lab ID:	0611098-07	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	260	1.5		mg/Kg	5	11/17/2006 9:41:59 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Sodium	450	25		mg/Kg	1	11/17/2006 12:41:41 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-Nov-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	PAF-4B
Lab Order:	0611098	**Collection Date:**	11/7/2006 11:20:00 AM
Project:	Post Alky Fire Soil Samples Phase 2. 11-7-2006	**Date Received:**	11/8/2006
Lab ID:	0611098-08	**Matrix:**	SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 9056A: ANIONS						Analyst: **TES**
Chloride	240	1.5		mg/Kg	5	11/17/2006 9:59:23 PM
EPA METHOD 6010B: SOIL METALS						Analyst: **NMO**
Sodium	450	25		mg/Kg	1	11/17/2006 12:43:55 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		

QA/QC SUMMARY REPORT

Client: Giant Refining Co
Project: Post Alky Fire Soil Samples Phase 2. 11-7-2006 **Work Order:** 0611098

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SW9056A									
Sample ID: MB-11734		*MBLK*			Batch ID:	**11734**	Analysis Date:	11/14/2006 4:10:55 AM	
Chloride	ND	mg/Kg	0.30						
Sample ID: MB-11756		*MBLK*			Batch ID:	**11756**	Analysis Date:	11/15/2006 11:30:14 PM	
Chloride	ND	mg/Kg	0.30						
Sample ID: LCS-11734		*LCS*			Batch ID:	**11734**	Analysis Date:	11/14/2006 4:28:20 AM	
Chloride	15.05	mg/Kg	0.30	100	90	110			
Sample ID: LCS-11756		*LCS*			Batch ID:	**11756**	Analysis Date:	11/15/2006 11:47:39 PM	
Chloride	14.85	mg/Kg	0.30	99.0	90	110			
Method: SW6010A									
Sample ID: 0611098-08B MSD		*MSD*			Batch ID:	**11749**	Analysis Date:	11/17/2006 12:48:33 PM	
Sodium	2796	mg/Kg	25	94.1	75	125	6.95	30	
Sample ID: MB-11749		*MBLK*			Batch ID:	**11749**	Analysis Date:	11/17/2006 12:12:53 PM	
Sodium	ND	mg/Kg	25						
Sample ID: LCS-11749		*LCS*			Batch ID:	**11749**	Analysis Date:	11/17/2006 12:15:33 PM	
Sodium	2838	mg/Kg	25	114	80	120			
Sample ID: 0611098-08B MS		*MS*			Batch ID:	**11749**	Analysis Date:	11/17/2006 12:46:08 PM	
Sodium	2608	mg/Kg	25	87.1	75	125			

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: 11/8/2006

Work Order Number 0611098

Received by AT

Checklist completed by D Schlupp 11-8-06
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 - 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: Post alky Fire Soil samples Phase 2 - 11-7-2006
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		HEAL No. 0611098	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)	Sodium	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	Chloride	8270 (Semi-VOA)					Air Bubbles or Headspace (Y or N)
11-7-06	1030	Soil	PAF-1A	2				1								X			X						
"	1035	"	PAF-1B	2				2								X			X						
"	1045	"	PAF-2A	2				3								X			X						
"	1050	"	PAF-2B	2				4								X			X						
"	1100	"	PAF-3A	2				5								X			X						
"	1105	"	PAF-3B	2				6								X			X						
"	1115	"	PAF-4A	2				7								X			X						
"	1120	"	PAF-4B	2				8								X			X						

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
11-8-06	1155	Steve Morris	11/8/06 1155
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, February 09, 2006

Johnny Sanchez
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: AL-2 To EP-1 Week of 1-27-2006

Order No.: 0601271

Dear Johnny Sanchez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/27/2006 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

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

Date: *09-Feb-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0601271	**Collection Date:**	1/26/2006 8:30:00 AM
Project:	AL-2 To EP-1 Week of 1-27-2006	**Date Received:**	1/27/2006
Lab ID:	0601271-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	6.0	3.0		mg/L	1	2/6/2006 7:51:13 PM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	2/6/2006 7:51:13 PM
Surr: DNOP	139	58-140		%REC	1	2/6/2006 7:51:13 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	2.0	0.50		mg/L	10	1/31/2006 6:08:47 PM
Surr: BFB	106	79.7-118		%REC	10	1/31/2006 6:08:47 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	430	25		µg/L	10	1/31/2006 6:08:47 PM
Benzene	180	10		µg/L	10	1/31/2006 6:08:47 PM
Toluene	230	10		µg/L	10	1/31/2006 6:08:47 PM
Ethylbenzene	20	10		µg/L	10	1/31/2006 6:08:47 PM
Xylenes, Total	150	30		µg/L	10	1/31/2006 6:08:47 PM
Surr: 4-Bromofluorobenzene	105	82.2-119		%REC	10	1/31/2006 6:08:47 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.0048	0.00020		mg/L	1	2/2/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/30/2006 10:12:56 AM
Barium	0.11	0.020		mg/L	1	1/30/2006 10:12:56 AM
Cadmium	ND	0.0020		mg/L	1	1/30/2006 10:12:56 AM
Chromium	0.0072	0.0060		mg/L	1	1/30/2006 10:12:56 AM
Lead	ND	0.0050		mg/L	1	1/30/2006 10:12:56 AM
Selenium	ND	0.050		mg/L	1	1/30/2006 10:12:56 AM
Silver	ND	0.0050		mg/L	1	1/30/2006 10:12:56 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	ND	Not Detected at the 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: **0601271**
Order: **0601599** **HAL03** Receipt: **01-27-06**

William P. Biava: President of Assaigai Analytical Laboratories, Inc.

Sample: ***AL-2 TO EP-1*** Collected: *01-26-06 8:30:00* By:
Matrix: ***AQUEOUS***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0601599-0001A		**EPA 405.1 Biochemical Oxygen Demand**					By:	MKM		
BOD06013	WC.2006.260.14	10-26-4	Biochemical Oxygen Demand	594	mg/L	1	2		01-27-06	02-01-06

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

Date: *09-Feb-06*

CLIENT: Giant Refining Co
Work Order: 0601271
Project: AL-2 To EP-1 Week of 1-27-2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **MB-9682** SampType: **MBLK** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/31/2006** RunNo: **18151**
Client ID: **ZZZZZ** Batch ID: **9682** TestNo: **SW8015** Analysis Date: **2/6/2006** SeqNo: **447798**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCS-9682** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/31/2006** RunNo: **18151**
Client ID: **ZZZZZ** Batch ID: **9682** TestNo: **SW8015** Analysis Date: **2/6/2006** SeqNo: **447799**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.643	1.0	5	0	113	81.2	149				

Sample ID: **LCSD-9682** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/31/2006** RunNo: **18151**
Client ID: **ZZZZZ** Batch ID: **9682** TestNo: **SW8015** Analysis Date: **2/6/2006** SeqNo: **447800**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.624	1.0	5	0	112	81.2	149	5.643	0.337	23	

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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

CLIENT: Giant Refining Co
Work Order: 0601271
Project: AL-2 To EP-1 Week of 1-27-2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18110**
Client ID: **ZZZZZ** Batch ID: **R18110** TestNo: **SW8015** Analysis Date: **1/31/2006** SeqNo: **446513**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18110**
Client ID: **ZZZZZ** Batch ID: **R18110** TestNo: **SW8015** Analysis Date: **1/31/2006** SeqNo: **446514**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4620	0.050	0.5	0	92.4	82.6	114				

Sample ID: **2.5UG GRO LCSD** SampType: **LCSD** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18110**
Client ID: **ZZZZZ** Batch ID: **R18110** TestNo: **SW8015** Analysis Date: **2/1/2006** SeqNo: **446515**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4680	0.050	0.5	0	93.6	82.6	114	0.462	1.29	8.39	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601271
Project: AL-2 To EP-1 Week of 1-27-2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8021BTEX_W** Units: **µg/L** Prep Date: RunNo: **18110**
Client ID: **ZZZZZ** Batch ID: **R18110** TestNo: **SW8021** Analysis Date: **1/31/2006** SeqNo: **446495**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	3.0									

Sample ID: **100NG BTEX LCS** SampType: **LCS** TestCode: **8021BTEX_W** Units: **µg/L** Prep Date: RunNo: **18110**
Client ID: **ZZZZZ** Batch ID: **R18110** TestNo: **SW8021** Analysis Date: **1/31/2006** SeqNo: **446496**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	19.75	2.5	20	0	98.8	64.5	133				
Benzene	19.36	1.0	20	0	96.8	88.5	114				
Toluene	19.02	1.0	20	0	95.1	87.2	114				
Ethylbenzene	19.36	1.0	20	0	96.8	88.6	113				
Xylenes, Total	39.77	3.0	40	0	99.4	83.3	114				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601271
Project: AL-2 To EP-1 Week of 1-27-2006

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: **MB-9703** SampType: **MBLK** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **2/2/2006** RunNo: **18136**
Client ID: **ZZZZZ** Batch ID: **9703** TestNo: **SW7470** **(SW7470)** Analysis Date: **2/2/2006** SeqNo: **447052**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: **LCS-9703** SampType: **LCS** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **2/2/2006** RunNo: **18136**
Client ID: **ZZZZZ** Batch ID: **9703** TestNo: **SW7470** **(SW7470)** Analysis Date: **2/2/2006** SeqNo: **447053**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004489	0.00020	0.005	0	89.8	80	120				

Sample ID: **LCSD-9703** SampType: **LCSD** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **2/2/2006** RunNo: **18136**
Client ID: **ZZZZZ** Batch ID: **9703** TestNo: **SW7470** **(SW7470)** Analysis Date: **2/2/2006** SeqNo: **447071**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004458	0.00020	0.005	0	89.2	80	120	0.004489	0.697	0	

8/9

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601271
Project: AL-2 To EP-1 Week of 1-27-2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **MB-9665** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/27/2006** RunNo: **18082**
Client ID: **ZZZZZ** Batch ID: **9665** TestNo: **SW6010A** Analysis Date: **1/30/2006** SeqNo: **445679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **LCS-9665** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/27/2006** RunNo: **18082**
Client ID: **ZZZZZ** Batch ID: **9665** TestNo: **SW6010A** Analysis Date: **1/30/2006** SeqNo: **445680**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5067	0.020	0.5	0.01183	99.0	80	120				
Barium	0.4787	0.020	0.5	0	95.7	80	120				
Cadmium	0.4827	0.0020	0.5	0	96.5	80	120				
Chromium	0.4856	0.0060	0.5	0	97.1	80	120				
Lead	0.4888	0.0050	0.5	0	97.8	80	120				
Selenium	0.4637	0.050	0.5	0	92.7	80	120				

Sample ID: **LCSD-9665** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/27/2006** RunNo: **18082**
Client ID: **ZZZZZ** Batch ID: **9665** TestNo: **SW6010A** Analysis Date: **1/30/2006** SeqNo: **445681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.5096	0.020	0.5	0.01183	99.5	80	120	0.5067	0.558	20	
Barium	0.4787	0.020	0.5	0	95.7	80	120	0.4787	0.00151	20	
Cadmium	0.4865	0.0020	0.5	0	97.3	80	120	0.4827	0.786	20	
Chromium	0.4868	0.0060	0.5	0	97.4	80	120	0.4856	0.231	20	
Lead	0.4925	0.0050	0.5	0	98.5	80	120	0.4888	0.758	20	
Selenium	0.4670	0.050	0.5	0	93.4	80	120	0.4637	0.693	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN | Date and Time Received: 1/27/2006

Work Order Number 0601271 | Received by LMM

Checklist completed by Lisa Hedrick 1/27/06
Signature | Date

Matrix | Carrier name UPS

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? **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: AL-2 to EP-1 Week of 1-27-2006
Project #:
Project Manager: Johnny Sanchez
Sampler: Johnny Sanchez
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 Total	Anions (F, Cl, NO_3, NO_2, PO_4, SO_4)	8081 Pesticides / PCB's (8082)	8260B (VOA)	8270 (Semi-VOA)	BOD				Air Bubbles or Headspace (Y or N)
1-26-06	0830	H_2O	AL-2 to EP-1					0601271-1	X		X					X					X				

Remarks: RUSH

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-26-06	0900	[signature]	[signature] 10:05 1/27/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, February 01, 2006

Johnny Sanchez
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: AL-2 to EP-1 Week of 1/20/2006

Order No.: 0601205

Dear Johnny Sanchez:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/20/2006 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

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

Date: *01-Feb-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0601205	**Collection Date:**	1/18/2006 2:30:00 PM
Project:	AL-2 to EP-1 Week of 1/20/2006	**Date Received:**	1/20/2006
Lab ID:	0601205-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	180	3.0		mg/L	1	1/24/2006 7:47:17 PM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	1/24/2006 7:47:17 PM
Surr: DNOP	125	58-140		%REC	1	1/24/2006 7:47:17 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	0.46	0.25		mg/L	5	1/30/2006 2:01:56 PM
Surr: BFB	122	79.7-118	S	%REC	5	1/30/2006 2:01:56 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	42	12		µg/L	5	1/30/2006 2:01:56 PM
Benzene	16	5.0		µg/L	5	1/30/2006 2:01:56 PM
Toluene	29	5.0		µg/L	5	1/30/2006 2:01:56 PM
Ethylbenzene	ND	5.0		µg/L	5	1/30/2006 2:01:56 PM
Xylenes, Total	29	15		µg/L	5	1/30/2006 2:01:56 PM
Surr: 4-Bromofluorobenzene	104	82.2-119		%REC	5	1/30/2006 2:01:56 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.0041	0.00020		mg/L	1	1/24/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/25/2006 9:43:22 AM
Barium	0.14	0.020		mg/L	1	1/25/2006 9:43:22 AM
Cadmium	ND	0.0020		mg/L	1	1/25/2006 9:43:22 AM
Chromium	0.0069	0.0060		mg/L	1	1/25/2006 9:43:22 AM
Lead	ND	0.0050		mg/L	1	1/25/2006 9:43:22 AM
Selenium	ND	0.050		mg/L	1	1/25/2006 9:43:22 AM
Silver	ND	0.0050		mg/L	1	1/25/2006 9:43:22 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *01-Feb-06*

CLIENT: Giant Refining Co
Work Order: 0601205
Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **MB-9636** SampType: **MBLK** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **17998**
Client ID: **ZZZZZ** Batch ID: **9636** TestNo: **SW8015** Analysis Date: **1/24/2006** SeqNo: **444110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCS-9636** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **17998**
Client ID: **ZZZZZ** Batch ID: **9636** TestNo: **SW8015** Analysis Date: **1/24/2006** SeqNo: **444111**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.020	1.0	5	0	100	81.2	149				

Sample ID: **LCSD-9636** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **17998**
Client ID: **ZZZZZ** Batch ID: **9636** TestNo: **SW8015** Analysis Date: **1/24/2006** SeqNo: **444112**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	4.355	1.0	5	0	87.1	81.2	149	5.02	14.2	23	

2 / 8

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

CLIENT: Giant Refining Co
Work Order: 0601205
Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18092**
Client ID: **ZZZZZ** Batch ID: **R18092** TestNo: **SW8015** Analysis Date: **1/30/2006** SeqNo: **445964**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18092**
Client ID: **ZZZZZ** Batch ID: **R18092** TestNo: **SW8015** Analysis Date: **1/30/2006** SeqNo: **445965**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.5340	0.050	0.5	0	107	82.6	114				

Sample ID: **2.5UG GRO LCSD** SampType: **LCSD** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18092**
Client ID: **ZZZZZ** Batch ID: **R18092** TestNo: **SW8015** Analysis Date: **1/30/2006** SeqNo: **445966**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
asoline Range Organics (GRO)	0.5280	0.050	0.5	0	106	82.6	114	0.534	1.13	8.39	

3/8

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601205
Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8021BTEX_W** Units: **µg/L** Prep Date: RunNo: **18092**
Client ID: **ZZZZZ** Batch ID: **R18092** TestNo: **SW8021** Analysis Date: **1/30/2006** SeqNo: **445946**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	3.0									

Sample ID: **100NG BTEX LCS** SampType: **LCS** TestCode: **8021BTEX_W** Units: **µg/L** Prep Date: RunNo: **18092**
Client ID: **ZZZZZ** Batch ID: **R18092** TestNo: **SW8021** Analysis Date: **1/30/2006** SeqNo: **445947**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.63	2.5	20	0	93.1	64.5	133				
Benzene	19.75	1.0	20	0	98.8	88.5	114				
Toluene	19.74	1.0	20	0	98.7	87.2	114				
Ethylbenzene	20.13	1.0	20	0	101	88.6	113				
Xylenes, Total	40.89	3.0	40	0	102	83.3	114				

4/8

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601205
Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: Hg_CTW

Sample ID: **MB-9640** SampType: **MBLK** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **18026**
Client ID: **ZZZZZ** Batch ID: **9640** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/24/2006** SeqNo: **444078**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: **LCS-9640** SampType: **LCS** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **18026**
Client ID: **ZZZZZ** Batch ID: **9640** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/24/2006** SeqNo: **444079**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004155	0.00020	0.005	0	83.1	80	120				

Sample ID: **LCSD-9640** SampType: **LCSD** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **1/24/2006** RunNo: **18026**
Client ID: **ZZZZZ** Batch ID: **9640** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/24/2006** SeqNo: **444089**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
lercury	0.004467	0.00020	0.005	0	89.3	80	120	0.004155	7.23	0	

5 / 8

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601205
Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **MB-9629** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444662**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **MB-9629** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444679**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									

8/9

ample ID: **LCS-9629** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444663**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.4498	0.020	0.5	0	90.0	80	120				
Cadmium	0.4478	0.0020	0.5	0.000571	89.5	80	120				
Chromium	0.4627	0.0060	0.5	0.0006937	92.4	80	120				
Lead	0.4351	0.0050	0.5	0	87.0	80	120				
Selenium	0.4084	0.050	0.5	0	81.7	80	120				
Silver	0.4570	0.0050	0.5	0.002855	90.8	80	120				

Sample ID: **LCS-9629** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444680**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4862	0.020	0.5	0	97.2	80	120				

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601205
Project: AL-2 to EP-1 Week of 1/20/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **LCSD-9629** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444664**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Barium	0.4638	0.020	0.5	0	92.8	80	120	0.4498	3.05	20	
Cadmium	0.4579	0.0020	0.5	0.000571	91.5	80	120	0.4478	2.21	20	
Chromium	0.4720	0.0060	0.5	0.0006937	94.3	80	120	0.4627	2.00	20	
Lead	0.4458	0.0050	0.5	0	89.2	80	120	0.4351	2.44	20	
Selenium	0.4230	0.050	0.5	0	84.6	80	120	0.4084	3.53	20	
Silver	0.4701	0.0050	0.5	0.002855	93.4	80	120	0.457	2.82	20	

Sample ID: **LCSD-9629** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/23/2006** RunNo: **18037**
Client ID: **ZZZZZ** Batch ID: **9629** TestNo: **SW6010A** Analysis Date: **1/25/2006** SeqNo: **444681**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4915	0.020	0.5	0	98.3	80	120	0.4862	1.10	20	

7 / 8

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Receive 1/20/2006

Work Order Numbe 0601205

Received by AT

Checklist completed by _____ Signature 1/20/06 Date

Reviewed by MM Initials 1/20/06 Date

Matrix

Carrier name UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Presen ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Presen ☑
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 ☐	
ll samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	

Adjusted? _____ Checked b _____

Any No and/or NA (not applicable) response must be detailed in the comments section bel

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: AL-2 to EP-1 Week of 1-20-2006
Project #:
Project Manager: Johnny Sanchez
Sampler: Johnny Sanchez
Sample Temperature: 2

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 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)
1-18-06	1430	H_2O	AL-2 to EP-1					0601205-1	X		X					X									

Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)
1-19-06	0950	[signature]	[signature] 1/20/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks: RUSH

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, January 31, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

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

RE: AL-2 to EP-1 Week of 1/13/2006

Order No.: 0601120

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 1 sample(s) on 1/13/2006 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

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

Date: *31-Jan-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0601120	**Collection Date:**	1/11/2006 2:00:00 PM
Project:	AL-2 to EP-1 Week of 1/13/2006	**Date Received:**	1/13/2006
Lab ID:	0601120-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	78	3.0		mg/L	1	1/17/2006 10:13:22 AM
Motor Oil Range Organics (MRO)	ND	15		mg/L	1	1/17/2006 10:13:22 AM
Surr: DNOP	129	58-140		%REC	1	1/17/2006 10:13:22 AM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	1.0		mg/L	20	1/23/2006 2:20:52 PM
Surr: BFB	113	79.7-118		%REC	20	1/23/2006 2:20:52 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	ND	50		µg/L	20	1/23/2006 2:20:52 PM
Benzene	ND	20		µg/L	20	1/23/2006 2:20:52 PM
Toluene	21	20		µg/L	20	1/23/2006 2:20:52 PM
Ethylbenzene	ND	20		µg/L	20	1/23/2006 2:20:52 PM
Xylenes, Total	ND	60		µg/L	20	1/23/2006 2:20:52 PM
Surr: 4-Bromofluorobenzene	107	82.2-119		%REC	20	1/23/2006 2:20:52 PM
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.0053	0.00020		mg/L	1	1/20/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **NMO**
Arsenic	ND	0.020		mg/L	1	1/20/2006 10:31:27 AM
Barium	0.11	0.020		mg/L	1	1/20/2006 10:31:27 AM
Cadmium	ND	0.0020		mg/L	1	1/20/2006 10:31:27 AM
Chromium	0.0092	0.0060		mg/L	1	1/20/2006 10:31:27 AM
Lead	0.0073	0.0050		mg/L	1	1/20/2006 10:31:27 AM
Selenium	ND	0.050		mg/L	1	1/20/2006 10:31:27 AM
Silver	ND	0.0050		mg/L	1	1/20/2006 10:31:27 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *31-Jan-06*

CLIENT: Giant Refining Co
Work Order: 0601120
Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **LCS-9583** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/16/2006** RunNo: **17928**
Client ID: **ZZZZZ** Batch ID: **9583** TestNo: **SW8015** Analysis Date: **1/16/2006** SeqNo: **440598**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.618	1.0	5	0	112	81.2	149				
Motor Oil Range Organics (MRO)	ND	5.0									

Sample ID: **LCSD-9583** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/16/2006** RunNo: **17928**
Client ID: **ZZZZZ** Batch ID: **9583** TestNo: **SW8015** Analysis Date: **1/16/2006** SeqNo: **440599**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.779	1.0	5	0	116	81.2	149	5.618	2.82	23	
Motor Oil Range Organics (MRO)	ND	5.0						0	0	0	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601120
Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18017**
Client ID: **ZZZZZ** Batch ID: **R18017** TestNo: **SW8015** Analysis Date: **1/23/2006** SeqNo: **443323**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									

Sample ID: **2.5UG GRO LCS** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18017**
Client ID: **ZZZZZ** Batch ID: **R18017** TestNo: **SW8015** Analysis Date: **1/23/2006** SeqNo: **443324**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4740	0.050	0.5	0	94.8	82.6	114				

Sample ID: **2.5UG GRO LCSD** SampType: **LCSD** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **18017**
Client ID: **ZZZZZ** Batch ID: **R18017** TestNo: **SW8015** Analysis Date: **1/23/2006** SeqNo: **443349**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4840	0.050	0.5	0	96.8	82.6	114	0.474	2.09	8.39	

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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

CLIENT: Giant Refining Co
Work Order: 0601120
Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_W

Sample ID: **5ML RB** SampType: **MBLK** TestCode: **8021BTEX_W** Units: **µg/L** Prep Date: RunNo: **18017**
Client ID: **ZZZZZ** Batch ID: **R18017** TestNo: **SW8021** Analysis Date: **1/23/2006** SeqNo: **443231**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	3.0									

Sample ID: **100NG BTEX LCS** SampType: **LCS** TestCode: **8021BTEX_W** Units: **µg/L** Prep Date: RunNo: **18017**
Client ID: **ZZZZZ** Batch ID: **R18017** TestNo: **SW8021** Analysis Date: **1/23/2006** SeqNo: **443265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	17.80	2.5	20	0	89.0	64.5	133				
Benzene	20.29	1.0	20	0	101	88.5	114				
Toluene	20.07	1.0	20	0	100	87.2	114				
Ethylbenzene	20.52	1.0	20	0	103	88.6	113				
Xylenes, Total	41.52	3.0	40	0	104	83.3	114				

Sample ID: **100NG BTEX LCSD** SampType: **LCSD** TestCode: **8021BTEX_W** Units: **µg/L** Prep Date: RunNo: **18017**
Client ID: **ZZZZZ** Batch ID: **R18017** TestNo: **SW8021** Analysis Date: **1/23/2006** SeqNo: **443266**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	18.37	2.5	20	0	91.9	64.5	133	17.8	3.15	28	
Benzene	20.73	1.0	20	0	104	88.5	114	20.29	2.13	27	
Toluene	20.12	1.0	20	0	101	87.2	114	20.07	0.249	19	
Ethylbenzene	20.39	1.0	20	0	102	88.6	113	20.52	0.636	10	
Xylenes, Total	41.56	3.0	40	0	104	83.3	114	41.52	0.106	13	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601120
Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: Hg_CTW

Sample ID: **MB-9625** SampType: **MBLK** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **1/20/2006** RunNo: **17989**
Client ID: **ZZZZZ** Batch ID: **9625** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/20/2006** SeqNo: **442366**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

Sample ID: **LCS-9625** SampType: **LCS** TestCode: **Hg_CTW** Units: **mg/L** Prep Date: **1/20/2006** RunNo: **17989**
Client ID: **ZZZZZ** Batch ID: **9625** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/20/2006** SeqNo: **442367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004124	0.00020	0.005	0	82.5	80	120				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601120
Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **MB-9615** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/19/2006** RunNo: **17983**
Client ID: **ZZZZZ** Batch ID: **9615** TestNo: **SW6010A** Analysis Date: **1/20/2006** SeqNo: **442110**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **LCS-9615** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/19/2006** RunNo: **17983**
Client ID: **ZZZZZ** Batch ID: **9615** TestNo: **SW6010A** Analysis Date: **1/20/2006** SeqNo: **442101**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4712	0.020	0.5	0	94.2	80	120				
Barium	0.4652	0.020	0.5	0	93.0	80	120				
Cadmium	0.4572	0.0020	0.5	0	91.4	80	120				
Chromium	0.4752	0.0060	0.5	0	95.0	80	120				
Lead	0.4433	0.0050	0.5	0	88.7	80	120				
Selenium	0.4317	0.050	0.5	0	86.3	80	120				
Silver	0.4764	0.0050	0.5	0	95.3	80	120				

Sample ID: **LCSD-9615** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/19/2006** RunNo: **17983**
Client ID: **ZZZZZ** Batch ID: **9615** TestNo: **SW6010A** Analysis Date: **1/20/2006** SeqNo: **442102**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4736	0.020	0.5	0	94.7	80	120	0.4712	0.500	20	
Barium	0.4662	0.020	0.5	0	93.2	80	120	0.4652	0.211	20	
Cadmium	0.4649	0.0020	0.5	0	93.0	80	120	0.4572	1.65	20	
Chromium	0.4763	0.0060	0.5	0	95.3	80	120	0.4752	0.235	20	
Lead	0.4476	0.0050	0.5	0	89.5	80	120	0.4433	0.956	20	
Selenium	0.4415	0.050	0.5	0	88.3	80	120	0.4317	2.24	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

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CLIENT: Giant Refining Co
Work Order: 0601120
Project: AL-2 to EP-1 Week of 1/13/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **LCSD-9615** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/19/2006** RunNo: **17983**
Client ID: **ZZZZZ** Batch ID: **9615** TestNo: **SW6010A** Analysis Date: **1/20/2006** SeqNo: **442102**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.4772	0.0050	0.5	0	95.4	80	120	0.4764	0.179	20	

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 1/13/2006

Work Order Number 0601120

Received by LMM

Checklist completed by Lisa Hall-Reed
Signature

1/13/06
Date

Matrix

Carrier name UPS

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? **7°** *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 Co. Ciniza
Address: Route 3, Box 7 Gallup, NM 87301
Phone #: 505 722-3833
Fax #: 505-722-0210

Project Name: AL-2 to EP-1 Week of 1-13-06
Project #:
Project Manager: ED RIEGE
Sampler: Johnny Sanchez
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 + [redacted] (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)
1-11-06	2:00p	H_2O	AL-2 to EP-1	5				0601129-1	X		X					X									

Date	Time	Relinquished By: (Signature)	Received By: (Signature)
1-12-06	0900	J Sanchez	Lisa Hallsted 1140 1/13/06
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)

Remarks:

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, January 18, 2006

Ed Riege
Giant Refining Co
Rt. 3 Box 7
Gallup, NM 87301

TEL: (505) 722-0258
FAX (505) 722-0210

RE: AL-2 to EP-1 Week of 1/6/2006

Order No.: 0601058

Dear Ed Riege:

Hall Environmental Analysis Laboratory received 2 sample(s) on 1/6/2006 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

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

Date: *18-Jan-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0601058	**Collection Date:**	1/4/2006 3:00:00 PM
Project:	AL-2 to EP-1 Week of 1/6/2006	**Date Received:**	1/6/2006
Lab ID:	0601058-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 8015B: DIESEL RANGE						Analyst: **SCC**
Diesel Range Organics (DRO)	570	30		mg/L	10	1/13/2006 4:06:26 PM
Motor Oil Range Organics (MRO)	ND	150		mg/L	10	1/13/2006 4:06:26 PM
Surr: DNOP	105	58-140		%REC	10	1/13/2006 4:06:26 PM
EPA METHOD 8015B: GASOLINE RANGE						Analyst: **NSB**
Gasoline Range Organics (GRO)	ND	1.0		mg/L	20	1/12/2006 5:46:16 PM
Surr: BFB	110	79.7-118		%REC	20	1/12/2006 5:46:16 PM
EPA METHOD 8021B: VOLATILES						Analyst: **NSB**
Methyl tert-butyl ether (MTBE)	66	50		µg/L	20	1/12/2006 5:46:16 PM
Benzene	22	20		µg/L	20	1/12/2006 5:46:16 PM
Toluene	45	20		µg/L	20	1/12/2006 5:46:16 PM
Ethylbenzene	ND	20		µg/L	20	1/12/2006 5:46:16 PM
Xylenes, Total	67	60		µg/L	20	1/12/2006 5:46:16 PM
Surr: 4-Bromofluorobenzene	110	82.2-119		%REC	20	1/12/2006 5:46:16 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *18-Jan-06*

CLIENT:	Giant Refining Co	**Client Sample ID:**	AL-2 to EP-1
Lab Order:	0601058	**Collection Date:**	1/4/2006 3:00:00 PM
Project:	AL-2 to EP-1 Week of 1/6/2006	**Date Received:**	1/6/2006
Lab ID:	0601058-01B	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
EPA METHOD 7470: MERCURY						Analyst: **CMC**
Mercury	0.0040	0.00020		mg/L	1	1/9/2006
EPA 6010: TOTAL RECOVERABLE METALS						Analyst: **CMC**
Arsenic	ND	0.020		mg/L	1	1/16/2006 2:26:13 PM
Barium	0.11	0.020		mg/L	1	1/16/2006 2:26:13 PM
Cadmium	ND	0.0020		mg/L	1	1/16/2006 2:26:13 PM
Chromium	0.0061	0.0060		mg/L	1	1/16/2006 2:26:13 PM
Lead	0.0064	0.0050		mg/L	1	1/16/2006 2:26:13 PM
Selenium	ND	0.050		mg/L	1	1/16/2006 2:26:13 PM
Silver	ND	0.0050		mg/L	1	1/16/2006 2:26:13 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	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits		

Hall Environmental Analysis Laboratory

Date: *18-Jan-06*

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **MB-9535** SampType: **MBLK** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17852**
Client ID: **ZZZZZ** Batch ID: **9535** TestNo: **SW8015** Analysis Date: **1/9/2006** SeqNo: **438884**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	1.0									
Motor Oil Range Organics (MRO)	ND	5.0									
Surr: DNOP	1.156	0	1	0	116	58	140				

3 / 16

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **Reagent Blank 5ml** SampType: **MBLK** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **17890**
Client ID: **ZZZZZ** Batch ID: **R17890** TestNo: **SW8015** Analysis Date: **1/12/2006** SeqNo: **439931**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	0.050									
Surr: BFB	20.34	0	20	0	102	79.7	118				

4 / 16

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

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_W

Sample ID: **Reagent Blank 5ml** SampType: **MBLK** TestCode: **8021BTEX_W** Units: **µg/L** Prep Date: RunNo: **17890**
Client ID: **ZZZZZ** Batch ID: **R17890** TestNo: **SW8021** Analysis Date: **1/12/2006** SeqNo: **439913**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	2.5									
Benzene	ND	1.0									
Toluene	ND	1.0									
Ethylbenzene	ND	1.0									
Xylenes, Total	ND	3.0									
Surr: 4-Bromofluorobenzene	20.16	0	20	0	101	82.2	119				

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: **MB-9544**	SampType: **MBLK**	TestCode: **HG_CTW**	Units: **mg/L**	Prep Date: **1/9/2006**	RunNo: **17848**
Client ID: **ZZZZZ**	Batch ID: **9544**	TestNo: **SW7470**	**(SW7470)**	Analysis Date: **1/9/2006**	SeqNo: **438823**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020									

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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

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **MB-9536** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17885**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/12/2006** SeqNo: **439739**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

Sample ID: **MB-9536** SampType: **MBLK** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17932**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/16/2006** SeqNo: **440773**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020									
Barium	ND	0.020									
Cadmium	ND	0.0020									
Chromium	ND	0.0060									
Lead	ND	0.0050									
Selenium	ND	0.050									
Silver	ND	0.0050									

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Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Date: *18-Jan-06*

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: **0601064-04D DUP** SampType: **DUP** TestCode: **HG_CTW** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17848**
Client ID: **ZZZZZ** Batch ID: **9544** TestNo: **SW7470** **(SW7470)** Analysis Date: **1/9/2006** SeqNo: **438841**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.00020						0	0	20	

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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

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **0601065-04A DUP** SampType: **DUP** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17932**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/16/2006** SeqNo: **440787**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.020						0	0	30	
Barium	0.5651	0.020						0.565	0.0205	30	
Cadmium	ND	0.0020						0	0	30	
Chromium	ND	0.0060						0	0	30	
Lead	ND	0.0050						0.004291	0	30	
Selenium	ND	0.050						0	0	30	
Silver	ND	0.0050						0	0	30	

9 / 16

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

Hall Environmental Analysis Laboratory

Date: *18-Jan-06*

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015DRO_W

Sample ID: **LCS-9535** SampType: **LCS** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17852**
Client ID: **ZZZZZ** Batch ID: **9535** TestNo: **SW8015** Analysis Date: **1/9/2006** SeqNo: **438885**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.740	1.0	5	0	115	81.2	149				

Sample ID: **LCSD-9535** SampType: **LCSD** TestCode: **8015DRO_W** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17852**
Client ID: **ZZZZZ** Batch ID: **9535** TestNo: **SW8015** Analysis Date: **1/9/2006** SeqNo: **438886**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	5.962	1.0	5	0	119	81.2	149	5.74	3.80	23	

10 / 16

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8015GRO_W

Sample ID: **GRO lcs 2.5ug** SampType: **LCS** TestCode: **8015GRO_W** Units: **mg/L** Prep Date: RunNo: **17890**
Client ID: **ZZZZZ** Batch ID: **R17890** TestNo: **SW8015** Analysis Date: **1/13/2006** SeqNo: **439932**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	0.4586	0.050	0.5	0	91.7	82.6	114				

11/16

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

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: 8021BTEX_W

Sample ID: **BTEX lcs 100ng** SampType: **LCS** TestCode: **8021BTEX_W** Units: **µg/L** Prep Date: RunNo: **17890**
Client ID: **ZZZZZ** Batch ID: **R17890** TestNo: **SW8021** Analysis Date: **1/12/2006** SeqNo: **440002**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	20.00	2.5	20	0	100	64.5	133				
Benzene	18.85	1.0	20	0	94.2	88.5	114				
Toluene	19.12	1.0	20	0	95.6	87.2	114				
Ethylbenzene	19.76	1.0	20	0	98.8	88.6	113				
Xylenes, Total	39.56	3.0	40	0	98.9	83.3	114				

12/16

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: HG_CTW

Sample ID: **LCS-9544**	SampType: **LCS**	TestCode: **HG_CTW**	Units: **mg/L**	Prep Date: **1/9/2006**	RunNo: **17848**
Client ID: **ZZZZZ**	Batch ID: **9544**	TestNo: **SW7470**	**(SW7470)**	Analysis Date: **1/9/2006**	SeqNo: **438824**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004253	0.00020	0.005	0	85.1	80	120				

Sample ID: **LCSD-9544**	SampType: **LCSD**	TestCode: **HG_CTW**	Units: **mg/L**	Prep Date: **1/9/2006**	RunNo: **17848**
Client ID: **ZZZZZ**	Batch ID: **9544**	TestNo: **SW7470**	**(SW7470)**	Analysis Date: **1/9/2006**	SeqNo: **438848**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.004311	0.00020	0.005	0	86.2	80	120	0.004253	1.35	0	

13/16

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

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **LCS-9536** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17885**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/12/2006** SeqNo: **439740**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.4894	0.0050	0.5	0	97.9	80	120				

Sample ID: **LCS-9536** SampType: **LCS** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17932**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/16/2006** SeqNo: **440774**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4853	0.020	0.5	0	97.1	80	120				
Barium	0.4613	0.020	0.5	0	92.3	80	120				
Cadmium	0.4680	0.0020	0.5	0	93.6	80	120				
Chromium	0.4714	0.0060	0.5	0	94.3	80	120				
Lead	0.4601	0.0050	0.5	0	92.0	80	120				
Selenium	0.4684	0.050	0.5	0	93.7	80	120				
Silver	0.4791	0.0050	0.5	0.001109	95.6	80	120				

Sample ID: **LCSD-9536** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17885**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/12/2006** SeqNo: **439741**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	0.4769	0.0050	0.5	0	95.4	80	120	0.4894	2.60	20	

Sample ID: **LCSD-9536** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17932**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/16/2006** SeqNo: **440775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	0.4891	0.020	0.5	0	97.8	80	120	0.4853	0.775	20	
Barium	0.4627	0.020	0.5	0	92.5	80	120	0.4613	0.308	20	
Cadmium	0.4676	0.0020	0.5	0	93.5	80	120	0.468	0.0760	20	
Chromium	0.4741	0.0060	0.5	0	94.8	80	120	0.4714	0.582	20	
Lead	0.4560	0.0050	0.5	0	91.2	80	120	0.4601	0.907	20	
Selenium	0.4633	0.050	0.5	0	92.7	80	120	0.4684	1.11	20	

Qualifiers:
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside accepted recovery limits
J Analyte detected below quantitation limits
S Spike Recovery outside accepted recovery limits

CLIENT: Giant Refining Co
Work Order: 0601058
Project: AL-2 to EP-1 Week of 1/6/2006

ANALYTICAL QC SUMMARY REPORT

TestCode: METALS_TOTAL

Sample ID: **LCSD-9536** SampType: **LCSD** TestCode: **METALS_TO** Units: **mg/L** Prep Date: **1/9/2006** RunNo: **17932**
Client ID: **ZZZZZ** Batch ID: **9536** TestNo: **SW6010A** Analysis Date: **1/16/2006** SeqNo: **440775**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	0.4795	0.0050	0.5	0.001109	95.7	80	120	0.4791	0.0776	20	

15/16

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

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received: 1/6/2006

Work Order Number 0601058

Received by AT

Checklist completed by Signature Date 1/6/06

Matrix

Carrier name UPS

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? **7°** *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: AL-2 to EP-1 Week of 1-6-2006
Project #:
Project Manager: Steve Morris
Sampler:
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	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)
1-4-06	1500	H_2O	AL-2 to EP-1	5				0601058-1	X		X					X									

Date	Time	Relinquished By: (Signature)	Received By: (Signature)	
1-5-06	0900	[signature]	[signature]	1/6/06 1340
Date:	Time:	Relinquished By: (Signature)	Received By: (Signature)	

Remarks:

OCD Permit Condition 21:

c. Waste and Wastewater Disposal Summary and Pond Evaporation Balance

2006 WASTE WATER SUMMARY

	TRAVEL CENTER TO PONDS			TOTAL FLOW TO PONDS			RAIN GAUGE INCHES	FREEBOARD AT PONDS											
								2	3	4	5	6	8	7	11	12a	12b	9	
DATE	TEMP	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	Comments
1/3/2006	42	2	7.16	40	6	193		1.58	BM	BM	2.42	0.25	BM	BM	2	2.5	1.08	BM	
1/4/2006	42	2	7.16	40	6	193		1.58	BM	BM	2.42	0.25	BM	BM	2	2.5	1.08	BM	
1/5/2006	44	2	7.16	42	5	123		1.58	BM	BM	2.42	0.25	BM	BM	2	2.5	1.08	BM	
1/6/2006	41	2	7.16	40	5	123		1.58	BM	BM	2.42	0.25	BM	BM	2.17	2.5	1.08	BM	
1/9/2006	38	2	7.16	36	5	123		1.58	BM	BM	2.5	0.33	BM	BM	2	2.5	1.08	BM	
1/10/2006	37	2	7.16	36	5	123		1.58	BM	BM	2.5	0.33	BM	BM	2	2.5	1.08	BM	
1/11/2006	38	2	7.16	38	5	123		1.58	BM	BM	2.5	0.33	BM	BM	2	2.5	1.08	BM	
1/12/2006	39	2	7.16	38	5	123		1.58	BM	BM	2.5	0.33	BM	BM	2	2.5	1.08	BM	
1/16/2006	39	2	7.16	38	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1.08	BM	
1/17/2006	32	2 1/2	12.5	30	5	123		1.58	BM	BM	BM	0.5	BM	BM	2	2.5	1.08	BM	
1/18/2006	33	2	7.16	30	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1.08	BM	
1/19/2006	32	2	7.16	30	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1.08	BM	
1/23/2006	30	2	7.16	28	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1.08	BM	
1/24/2006	30	2	7.16	26	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1	BM	
1/25/2006	30	2	7.16	26	5	123		1.58	BM	BM	2.5	0.5	BM	BM	2	2.5	1	BM	
1/26/2006	32	2	7.16	30	6	193	0.2	1.58	BM	BM	2.5	0.5	BM	BM	1.75	2.5	1	BM	
1/30/2006	32	2	7.16	29	5 1/2	156		1.58	BM	BM	2.5	0.5	BM	BM	1.75	2.5	1	BM	
1/31/2006	33	2	7.16	30	5	123		1.58	BM	BM	2.5	0.5	BM	BM	1.75	2.5	1	BM	
2/1/2006	32	2	7.16	28	5	123		1.58	BM	BM	2.5	0.5	BM	BM	1.75	2.5	1	BM	
2/2/2006	34	2	7.16	31	5	123		1.58	BM	BM	BM	0.58	BM	BM	1.67	2.42	1	BM	
2/6/2006	37	3	19.7	34	6	193		1.58	BM	BM	BM	0.5	BM	BM	1.67	2.5	1	BM	
2/7/2006	36	2	7.16	34	5	123		1.58	BM	BM	BM	0.58	BM	BM	1.67	2.5	1	BM	
2/8/2006	36	3	19.7	33	5	123		1.58	BM	BM	BM	0.58	BM	BM	1.67	2.5	1	BM	
2/9/2006	35	2	7.16	33	6	193		1.58	BM	BM	BM	0.58	BM	BM	1.67	2.5	1	BM	
2/13/2006	34	2	7.16	30	5	123		1.58	BM	BM	BM	0.67	BM	BM	1.67	2.58	1	BM	
2/14/2006	33	2	7.16	30	5	123		1.58	BM	BM	BM	0.67	BM	BM	1.67	2.58	1	BM	
2/15/2006	34	2	7.16	32	5	123		1.58	BM	BM	BM	BM	BM	BM	1.67	2.58	1	BM	
2/16/2006	34	3	19.7	32	5	123		1.58	BM	BM	BM	BM	BM	BM	1.67	2.58	1	BM	
2/21/2006	38	2	7.16	36	5 1/2	156		1.67	BM	BM	BM	0.67	BM	3	1.58	2.58	1	BM	
2/22/2006	36	2	7.16	34	5	123		1.67	BM	BM	BM	0.67	BM	3	1.58	2.58	1	BM	
2/23/2006	37	2	7.16	34	5	123		1.67	BM	BM	BM	0.67	BM	3	1.58	2.58	1	BM	
2/27/2006	38	3	19.7	35	6	193		1.67	BM	BM	BM	0.67	BM	3	1.58	2.67	1.08	BM	
2/28/2006	38	2	7.16	36	5	123		1.67	BM	BM	BM	0.67	BM	3	1.58	2.67	1.08	BM	
3/1/2006	39	2	7.16	37	5	123		1.67	BM	BM	BM	0.67	BM	3	1.58	2.67	1.08	BM	

Waste Water Summary 1-06 TO BE CONTINUED

2006 WASTE WATER SUMMARY

	TRAVEL CENTER TO PONDS			TOTAL FLOW TO PONDS			RAIN GAUGE INCHES	FREEBOARD AT PONDS											
								2	3	4	5	6	8	7	11	12a	12b	9	
DATE	TEMP	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	Comments
3/2/2006	38	2	7.16	36	5	123		1.67	BM	BM	BM	0.67	BM	3	1.58	2.67	1.08	BM	
3/6/2006	38	2	7.16	35	6	193		1.67	1.75	1.83	BM	BM	BM	3	1.75	BM	1.17	BM	
3/7/2006	38	2	7.16	34	5	123		1.67	1.75	1.83	BM	BM	BM	3	1.75	BM	1.17	BM	
3/8/2006	38	2	7.16	34	5	123		1.67	1.67	1.75	2.5	BM	BM	3	1.75	BM	1.25	BM	
3/9/2006	38	2	7.16	34	5	123		1.67	1.67	1.75	2.5	BM	BM	3	1.75	BM	1.25	BM	
3/13/2006	32	2	7.16	29	5	123	0.3	1.67	1.5	1.58	2.33	BM	BM	3	1.75	BM	1.25	BM	
3/14/2006	32	2	7.16	29	5	123		1.67	1.5	1.58	2.33	BM	BM	3	1.75	BM	1.25	BM	
3/15/2006	32	2	7.16	29	5	123		1.67	1.5	1.58	2.92	BM	BM	3	1.75	BM	1.25	BM	
3/16/2006	34	2	7.16	31	5	123		1.67	1.5	1.58	2.92	BM	BM	3	1.75	BM	1.25	BM	
3/20/2006	37	2	7.16	34	6	193	0.02	1.67	1.67	1.75	2.25	0.5	BM	3	1.75	BM	1.17	BM	
3/21/2006	36	2	7.16	34	6	193		1.67	1.67	1.75	2.25	0.5	BM	3	1.75	BM	1.17	BM	
3/22/2006	38	2	7.16	35	6	193		1.67	1.67	1.75	2.25	0.5	BM	3	1.75	BM	1.17	BM	
3/23/2006	38	2	7.16	36	5	123		1.67	1.67	1.75	2.25	0.5	BM	3	1.75	BM	1.17	BM	
3/27/2006	37	0		35	5	123	0.1	1.67	1.83	1.83	2.33	0.5	BM	3	1.75	BM	1	BM	
3/28/2006	37	2	7.16	35	5	123		1.67	1.83	1.83	2.33	0.5	BM	3	1.75	BM	1	BM	
3/29/2006	36	2	7.16	35	5	123		1.67	1.83	1.83	2.33	0.5	BM	3	1.75	BM	1	BM	
3/30/2006	34	2	7.16	32	5	123		1.67	1.83	1.83	2.33	0.5	BM	3	1.67	BM	1	BM	
4/3/2006	38	2	7.16	35	5	123	0.1	1.67	1.75	1.83	2.17	0.5	BM	3	1.67	BM	1.25	BM	
4/4/2006	38	2	7.16	36	5	123		1.67	1.75	1.83	2.17	0.5	BM	3	1.67	BM	1.25	BM	
4/5/2006	36	2	7.16	34	5	123		1.67	1.75	1.83	2.25	0.5	BM	3	1.67	BM	1.25	BM	
4/6/2006	33	3	19.7	30	5	123	0.2	1.67	1.67	1.75	2.08	0.42	BM	3	1.67	BM	1.17	BM	
4/10/2006	38	2	7.16	26	5	123		1.67	1.5	1.67	2	0.42	BM	3	1.75	BM	1.33	BM	
4/11/2006	37	5	123	34	5	123		1.67	1.5	1.67	2	0.42	BM	3	1.75	BM	1.33	BM	
4/12/2006	38	3	19.7	36	5	123		1.67	1.5	1.67	2	0.42	BM	3	1.75	BM	1.33	BM	
4/13/2006	38	2	7.16	36	5	123		1.67	1.5	1.67	2	0.42	BM	3	1.75	BM	1.33	BM	
4/17/2006	40	0		37	5	123		1.67	BM	BM	2.25	0.5	BM	3	1.83	BM	1.25	BM	
4/18/2006	38	0		35	5	123		1.67	BM	BM	2.25	0.5	BM	3	1.83	BM	1.25	BM	
4/19/2006	38	1	1.27	35	5	123		1.67	BM	BM	2.33	0.5	BM	3	1.83	BM	1.25	BM	
4/20/2006	38	2	7.16	34	5	123		1.67	BM	BM	2.33	0.5	BM	3	1.83	BM	1.17	BM	
4/24/2006	39	1	1.27	36	5	123		1.67	BM	BM	2.17	0.5	BM	3	2	BM	1.25	BM	
4/25/2006	39	2	7.16	36	5	123		1.67	BM	BM	2.17	0.5	BM	3	2	BM	1.25	BM	
4/26/2006	38	2	7.16	35	5	123		1.67	BM	BM	2.17	0.5	BM	3	2	BM	1.25	BM	
4/27/2006	40	1	1.27	36	5	123		1.67	BM	BM	2.17	0.5	BM	3	2	BM	1.25	BM	
5/1/2006	42	2	7.16	38	5	123		1.67	1.08	1.92	2.42	0.67	BM	3.33	2.25	BM	1.25	BM	

Waste Water Summary 1-06 TO BE CONTINUED

2006 WASTE WATER SUMMARY

	TRAVEL CENTER TO PONDS			TOTAL FLOW TO PONDS			RAIN GAUGE INCHES	FREEBOARD AT PONDS											
								2	3	4	5	6	8	7	11	12a	12b	9	
DATE	TEMP	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	Comments
5/2/2006	42	1	1.27	38	5	123		1.67	1.92	1.92	2.42	0.67	BM	3.33	2.25	BM	1.25	BM	
5/3/2006	41	2	7.16	37	5	123		1.67	1.83	1.92	2.42	0.67	BM	3.17	2.25	BM	1.25	BM	
5/4/2006	40	2	7.16	36	5	123		1.67	1.83	1.92	2.42	0.67	BM	3.17	2.25	BM	1.25	BM	
5/8/2006	43	0		38	5	123		1.67	1.5	1.75	2.5	0.83	BM	BM	2.33	BM	1.42	BM	
5/9/2006	42	2	7.16	38	5	123		1.67	1.5	1.75	2.5	0.83	BM	BM	2.33	BM	1.42	BM	
5/10/2006	44	2	7.16	39	5	123		1.67	1.5	1.75	2.5	0.83	BM	BM	2.33	BM	1.42	BM	
5/11/2006	44	1	1.27	40	5	123		1.67	1.5	1.75	2.5	0.83	BM	BM	2.33	BM	1.42	BM	
5/15/2006	41	0		37	4	70.2		1.67	1.5	1.67	2	0.83	BM	BM	2.33	BM	1.5	BM	
5/16/2006	42	0		39	4	70.2		1.67	1.5	1.67	2	0.83	BM	BM	2.33	BM	1.5	BM	
5/17/2006	44	1	1.27	40	4	70.2		1.67	1.5	1.67	2	0.83	BM	BM	2.33	BM	1.5	BM	
5/18/2006	46	2	7.16	42	4	70.2		1.67	1.5	1.67	2	0.83	BM	BM	2.33	BM	1.5	BM	
5/22/2006	54	0		52	4	70.2		1.67	1.42	1.58	2.17	BM	BM	BM	2.5	BM	1.5	BM	
5/23/2006	56	2	7.16	52	4	70.2		1.67	1.42	1.58	2.17	BM	BM	BM	2.5	BM	1.5	BM	
5/24/2006	56	2	7.16	54	4	70.2		1.67	1.42	1.58	2.17	BM	BM	BM	BM	BM	1.5	BM	
5/25/2006	56	1	1.27	54	5	12.3		1.67	1.42	1.58	2.17	BM	BM	BM	BM	BM	1.5	BM	
5/30/2006	48	2	7.16	46	4	70.2		1.67	1.5	1.67	2.33	BM	BM	BM	BM	BM	1.5	BM	
5/31/2006	48	2	7.16	46	5	123		1.67	1.5	1.67	2.33	BM	BM	BM	BM	BM	1.5	BM	
6/5/2006	50	0		42	5	123		1.67	1.5	1.67	2	0.83	BM	BM	BM	BM	1.67	BM	
6/6/2006	52	2	7.16	50	5	123		1.67	1.5	1.67	2	0.83	BM	BM	BM	BM	1.67	BM	
6/7/2006	52	2	7.16	50	5	123		1.67	1.5	1.67	2	0.83	BM	BM	BM	BM	1.67	BM	
6/8/2006	53	2	7.16	50	5	123		1.67	1.5	1.67	2	0.83	BM	BM	BM	BM	1.5	BM	
6/12/2006	60	5	70.8	56	5	123		1.67	1.58	1.75	2.25	BM	BM	BM	BM	BM	1.25	BM	
6/13/2006	60	2	7.16	56	5	123		1.67	1.58	1.75	2.25	BM	BM	BM	BM	BM	1.25	BM	
6/14/2006	60	2	7.16	56	5	123		1.67	1.58	1.75	2.25	BM	BM	BM	BM	BM	1.25	BM	
6/15/2006	62	1	1.27	58	5	123		1.67	1.58	1.75	2.25	BM	BM	BM	BM	BM	1.25	BM	
6/19/2006	60	2	7.16	60	5	123		1.67	1.58	1.67	2.25	BM	BM	BM	BM	BM	1.33	BM	
6/20/2006	62	2	7.16	60	5	123		1.67	1.58	1.67	2.25	BM	BM	BM	BM	BM	1.33	BM	
6/21/2006	62	2	7.16	60	5	123		1.67	1.58	1.67	2.25	BM	BM	BM	BM	BM	1.33	BM	
6/22/2006	62	3	19.7	60	5	123		1.67	1.58	1.67	2.25	BM	BM	BM	BM	BM	1.33	BM	
6/26/2006	60	0		54	5	123		1.67	1.58	1.67	2.25	BM	BM	BM	BM	BM	1.25	BM	
6/27/2006	60	2	7.16	56	5	123		1.67	1.58	1.67	2.25	BM	BM	BM	BM	BM	1.25	BM	
6/29/2006	60	0		56	4	70.2		1.67	1.58	1.67	2.25	BM	BM	BM	BM	BM	1.17	BM	
7/10/2006	60	0		58	5	123	1	1.67	1.58	1.58	1.58	BM	BM	BM	BM	BM	1.17	BM	
7/11/2006	60	2	7.16	58	5	123		1.67	1.58	1.58	1.58	BM	BM	BM	BM	BM	1.17	BM	

Waste Water Summary 1-06 TO BE CONTINUED

2006 WASTE WATER SUMMARY

	TRAVEL CENTER TO PONDS			TOTAL FLOW TO PONDS			RAIN GAUGE INCHES	FREEBOARD AT PONDS											
								2	3	4	5	6	8	7	11	12a	12b	9	
DATE	TEMP	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	Comments
7/12/2006	60	1	1.27	58	5	123		1.67	1.58	1.58	1.58	BM	BM	BM	BM	BM	1.17	BM	
7/13/2006	61	2	7.16	58	5	123		1.67	1.58	1.58	1.58	BM	BM	BM	BM	BM	1.08	BM	
7/17/2006	62	0		59	5	123		1.67	BM	BM	2	BM	BM	BM	BM	BM	1.08	BM	
7/18/2006	62	0		59	5	123		1.67	BM	BM	2	BM	BM	BM	BM	BM	1.08	BM	
7/19/2006	62	0		60	5	123		1.67	BM	BM	2.33	BM	BM	BM	BM	BM	1.08	BM	
7/20/2006	63	0		60	5	123		1.67	BM	BM	2.08	BM	BM	BM	BM	BM	1.08	BM	
7/24/2006	60	2	7.16	58	5	123	0.4	1.67	1.75	1.83	2	BM	BM	BM	BM	BM	1.17	BM	
4/25/2006	60	0		58	5	123		1.67	1.75	1.83	2	BM	BM	BM	BM	BM	1.17	BM	
7/26/2006	60	2	7.16	58	5	123		1.67	1.75	1.83	2	BM	BM	BM	BM	BM	1.17	BM	
7/27/2006	60	2	7.16	58	5	123		1.67	1.83	1.92	2	BM	BM	BM	BM	BM	1.08	BM	
7/31/2006	58	1	1.27	56	4	70.2	0.3	1.67	1.83	1.83	2	BM	BM	BM	BM	BM	1.08	BM	
8/1/2006	56	2	7.16	53	4	70.2	0.1	1.67	1.83	1.92	2	BM	BM	BM	BM	BM	1.08	BM	
8/2/2006	56	1	1.27	53	5	123		1.67	1.83	1.92	2	BM	BM	BM	BM	BM	1.08	BM	
8/3/2006	57	2	7.16	54	5	123		1.67	1.83	1.92	2	BM	BM	BM	BM	BM	1.08	BM	
8/7/2006	56	0		52	5	123	**0.35**	1.67	1.75	1.75	2	BM	BM	BM	BM	BM	1.08	BM	
8/8/2006	58	2	7.16	54	5	123		1.67	1.75	1.75	2	BM	BM	BM	BM	BM	1.08	BM	
8/9/2006	58	2	7.16	54	5	123	**0.2**	1.67	1.75	1.75	2	BM	BM	BM	BM	BM	1.08	BM	
8/10/2006	56	4	40.5	52	5	123	**0.3**	1.67	1.83	1.83	2	BM	BM	BM	BM	BM	1.08	BM	
8/14/2006	56	2	7.16	53	5	123	**0.5**	1.67	1.25	1.5	1.75	BM	BM	BM	BM	BM	1.08	BM	
8/15/2006	52	2	7.16	49	5	123	**0.2**	1.67	1.25	1.5	1.75	BM	BM	BM	BM	BM	1.08	BM	
8/16/2006	54	0		52	5	123	**0.1**	1.67	1.25	1.42	1.58	BM	BM	BM	BM	BM	1.08	BM	
8/17/2006	54	2	7.16	52	5	123		1.67	1.25	1.42	1.58	BM	BM	BM	BM	BM	1.08	BM	
8/21/2006	52	5.5	89.9	49	5	123	**0.3**	1.67	1.67	1.75	1.83	BM	BM	BM	BM	2.58	1.08	BM	
8/22/2006	52	0	0	48	5	123	**0.1**	1.67	1.67	1.75	1.75	BM	BM	BM	BM	2.58	1.08	BM	
8/23/2006	53	0	0	50	6	193	**1.4**	1.67	1.5	1.67	1.67	BM	BM	BM	2.75	2.42	1.08	BM	
8/24/2006	54	2	7.16	50	5	123	**0.1**	1.67	1.5	1.67	1.67	BM	BM	BM	2.75	2.42	1.08	BM	
8/25/2006	52	2	7.16	48	6	193	**1**	1.67	1.5	1.58	1.67	BM	BM	BM	2.67	2.5	1	BM	
8/28/2006	54	0	0	50	5	123	**0.1**	1.67	1.58	1.67	1.25	BM	BM	BM	2.5	2.5	1.08	BM	
8/29/2006	52	2	7.16	48	5	123		1.67	1.58	1.67	1.25	BM	BM	BM	2.5	2.5	1.08	BM	
8/30/2006	52	1	1.27	48	5	123		1.67	1.58	1.67	1.25	BM	BM	BM	2.5	2.5	1.08	BM	
8/31/2006	51	2	7.16	48	5	123	**0.1**	1.67	1.58	1.67	1.25	BM	BM	BM	2.5	2.5	1.08	BM	
9/5/2006	50	0	0	47	5	123	**0.2**	1.67	BM	BM	1.25	BM	BM	BM	2.25	BM	1.08	BM	
9/6/2006	51	2	7.16	48	5	123		1.67	BM	BM	1.25	BM	BM	BM	2.25	BM	1.08	BM	
9/7/2006	52	2	7.16	48	5	123	**0.1**	1.67	BM	BM	1.25	BM	BM	BM	2.25	BM	1.08	BM	

Waste Water Summary 1-06 TO BE CONTINUED

2006 WASTE WATER SUMMARY

	TRAVEL CENTER TO PONDS			TOTAL FLOW TO PONDS			RAIN GAUGE INCHES	FREEBOARD AT PONDS											
								2	3	4	5	6	8	7	11	12a	12b	9	
DATE	TEMP	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	Comments
9/11/2006	50	3	19.7	46	5	123	**0.15**	1.67	2	BM	1.25	BM	BM	BM	2	BM	1.08	BM	
9/12/2006	48	2	7.16	45	5	123		1.67	2	BM	1.25	BM	BM	BM	2	BM	1.08	BM	
9/13/2006	48	0		44	5	123		1.67	2	BM	1.25	BM	BM	BM	2	BM	1.08	BM	
9/14/2006	48	2	7.16	44	5	123		1.67	2	BM	1.25	BM	BM	BM	2	BM	1.08	BM	
9/15/2006							**1**												
9/18/2006	46	2	7.16	42	6	193	**0.1**	1.67	1.58	1.67	1.08	BM	BM	BM	2	BM	1.25	BM	muddy
9/19/2006	42	1	1.27	39	5	123		1.67	1.58	1.68	1.08	BM	BM	BM	2	BM	1.25	BM	
9/20/2006	42	2	7.16	38	5	123		1.67	1.58	1.67	1.08	BM	BM	BM	2	BM	1.25	BM	
9/21/2006	40	0		37	5	123	**0.5**	1.67	1.58	1.67	1.08	BM	BM	BM	2	BM	1.17	BM	
9/25/2006	38	2	7.16	34	5	123	**0.1**	1.67	1.58	1.67	1.08	BM	BM	BM	2	BM	1.17	BM	
9/26/2006	38	0		34	5	123		1.67	1.58	1.75	1.08	BM	BM	BM	2.08	BM	1.17	BM	
9/27/2006	38	0		34	5	123		1.67	1.58	1.75	1.08	BM	BM	BM	2.08	BM	1.17	BM	
10/2/2006	42	2	7.16	38	5	123		1.67	1.58	1.75	1	BM	BM	BM	2.25	BM	1.42	BM	
10/3/2006	42	0		38	5	123		1.67	1.58	1.75	1.08	BM	BM	BM	2.17	BM	1.17	BM	
10/4/2006	40	1	1.27	38	5	123		1.67	1.58	1.75	1.08	BM	BM	BM	2.17	BM	1.17	BM	
10/5/2006	40	2	7.16	37	5	123		1.67	1.58	1.75	1.08	BM	BM	BM	2.17	BM	1.17	BM	
10/5/2006	42	2	7.16	37	5	123	**1.3**	1.67											too muddy
10/10/2006	40	2	7.16	36	5	123		1.67	1.5	1.67	1.75	1	BM	BM	2.25	BM	1.33	BM	
10/11/2006	40	1	1.27	36	5	123		1.67	1.5	1.67	1.75	1	BM	BM	2.25	BM	1.33	BM	
10/12/2006	36	0		32	6	193		1.67	1.5	1.67	1.75	1	BM	BM	2.25	BM	1.33	BM	
10/16/2006	36	2	7.16	32	5	123	**0.3**	1.58	1.33	1.5	1.75	4	BM	BM	2.25	BM	1.33	BM	
10/17/2006	36	2	7.16	32	5	123		1.58	1.33	1.5	1.75	4	BM	BM	2.25	BM	1.33	BM	
10/18/2006	36	1	1.27	31	6	193	**0.2**	1.58	1.75	1.83	2	4	BM	BM	2.25	BM	1.08	BM	
10/19/2006	34	1	1.27	30	5	123		1.58	1.75	1.83	2	4	BM	BM	2.25	BM	1.08	BM	
10/23/2006	34	2	7.16	30	5	123		1.58	BM	BM	2.25	4	BM	BM	2.25	BM	1.08	BM	
10/24/2006	36	1	1.27	32	5	123		1.58	BM	BM	2.25	4	BM	BM	2.25	BM	1.08	BM	
10/25/2006	36	0		32	5	123	**0.2**	1.58	BM	BM	2.33	4	BM	BM	2.25	BM	1.08	BM	
10/26/2006	34	2	7.16	30	5	123		1.58	BM	BM	2.33	4	BM	BM	2.25	BM	1.08	BM	
10/30/2006	34	2	7.16	30	5	123		1.58	BM	BM	2.33	4	BM	BM	2.25	BM	1.17	BM	
10/31/2006	35	1	1.27	32	5	123		1.58	BM	BM	2.33	4	BM	BM	2.25	BM	1.17	BM	
11/1/2006	36	0		32	5	123		1.58	BM	BM	2.33	4	BM	BM	2.25	BM	1.17	BM	
11/2/2006	33	2	7.16	34	5	123		1.58	BM	BM	2.33	4	BM	BM	2.25	BM	1.17	BM	
11/6/2006	37	0		34	5	123		1.58	BM	BM	2.33	4	BM	BM	1.75	BM	1.25	BM	
11/7/2006	35	2	7.16	32	5	123		1.58	BM	BM	2.33	4	BM	BM	1.75	BM	1.25	BM	

Waste Water Summary 1-06 TO BE CONTINUED

2006 WASTE WATER SUMMARY

	TRAVEL CENTER TO PONDS			TOTAL FLOW TO PONDS			RAIN GAUGE INCHES	FREEBOARD AT PONDS											
								2	3	4	5	6	8	7	11	12a	12b	9	
DATE	TEMP	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	Comments
11/8/2006	35	1	1.27	32	5	123		1.58	BM	BM	2.33	4	BM	BM	1.75	BM	1.25	BM	
11/9/2006	34	2	7.16	32	5	123		1.58	BM	BM	2.33	3	BM	BM	1.75	BM	1.25	BM	
11/13/2006	38	0		30	5	123		1.67	BM	BM	2.42	4	BM	BM	1.75	BM	1.25	BM	
11/14/2006	36	0		30	5	123		1.67	BM	BM	2.5	4	BM	BM	1.75	BM	1.25	BM	
11/15/2006	36	2	7.16	30	5	123		1.67	BM	BM	2.5	4	BM	BM	1.75	BM	1.25	BM	
11/16/2006	40	5	70.8	28	5	123		1.67	BM	BM	2.5	4	BM	BM	1.75	BM	1.25	BM	
11/20/2006	38	4	40.5	34	5	123		1.67	BM	BM	2.5	4	BM	BM	1.33	BM	1.25	BM	
11/21/2006	37	1	1.27	33	5	123		1.67	BM	BM	2.5	4	BM	BM	1.33	BM	1.25	BM	
11/27/2006	36	0		32	5	123		1.67	1.58	1.75	2.08	4	BM	BM	1.75	BM	1.25	BM	
11/28/2006	34	0		32	5	123		1.67	1.58	1.75	2.08	3	BM	BM	1.75	BM	1.25	BM	
11/29/2006	34	2	7.16	30	5	123		1.67	1.58	1.75	2.08	3	BM	BM	1.75	BM	1.25	BM	
11/30/2006	32	2	7.16	28	5	123		1.67	1.58	1.75	2.08	3	BM	BM	1.75	BM	1.25	BM	
12/4/2006	32	1	1.27	29	5	123		1.67	1.5	1.67	2.25	BM	BM	BM	1.5	BM	1.25	BM	
12/5/2006	32	0		28	5	123		1.67	1.5	1.67	2.25	BM	BM	BM	1.5	BM	1.25	BM	
12/6/2006	32	0		26	5	123		1.67	1.5	1.67	2.25	BM	BM	BM	1.5	BM	1.25	BM	
12/7/2006								1.67	1.5	1.67	2.25	BM	BM	BM	1.5	BM	1.25	BM	
12/11/2006	34	4	40.5	30	5	123		1.67	1.5	1.67	2.25	BM	BM	BM	1.5	BM	1.25	BM	
12/12/2006	34	0		30	5	123		1.67	1.5	1.67	2.25	BM	BM	BM	1.5	BM	1.33	BM	
12/13/2006	36	0		30	5	123		1.67	1.5	1.67	2.25	BM	BM	BM	1.42	BM	1.25	BM	
12/14/2006	36	1	1.27	30	5	123		1.67	1.5	1.67	2.25	BM	BM	BM	1.42	BM	1.25	BM	
	AVG 43.20	AVG 1.61	AVG 9.56	AVG 39.94	AVG 5.03	AVG 125.26	TOTAL 11.62	AVG 1.65	AVG 1.60	AVG 1.71	AVG 2.06	AVG 1.41	AVG #####	AVG 3.02	AVG 1.94	AVG BM	AVG 1.19	AVG #####	

* BM denotes Below Marker (Marker ~ 3 Feet)

Waste Water Summary 1-06 TO BE CONTINUED

2006 WASTE WATER SUMMARY

	TRAVEL CENTER TO PONDS			TOTAL FLOW TO PONDS			RAIN GAUGE INCHES	FREEBOARD AT PONDS										
								2	3	4	5	6	8	7	11	12a	12b	9
DATE	TEMP	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

SNOW MACHINES

#1 North Z-84-P25 #2 South Z-84-B24

4754 Hrs. 4839 Hrs. 1230pm 8-11-06

Evaporation rate for each is 40gpm

Snow machines were not operated in 2006

	Hours	Total hours	Hours	Total Hours
2006	0		0	
2006	0	0	0	0

0days x .25 working time = 0days
0 days x 24hrs/day = 0hrs
0 hrs X 60min = 0 minutes for each machine
0min/yr X 40gpm = 0 gals/yr for each machine
0 X 2 machines = 0 gals/yr for both machines

2006 POND WATER SALES
WW CONSTRUCTION
0 Dollars x 4000gals/dollar = 0gals

CINIZA REFINERY

2006 Waste Water Balance/Evaporation Pond Rates

	GALLONS
Discharged to Ponds (measured at V notch	65,836,656
Rainfall to Ponds	38,242,173
Total to Ponds	104,078,829
Pond Evaporation (150 gpm)	78,840,000
Snow Machines Evaporation(80gpm)	0
Water Sold to WW Construction	0
Total Balance in Ponds	25,238,829

OCD Permit Condition 21:

d. Sump and Underground Lines Tested

UNDERGROUND PROCESS AND WASTEWATER LINES

CRUDE UNIT Update to 7/24/07

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/ Test Performed	Investigation Results	Prior Repairs
7/1/2010	C-1	P-2 (From Plat Unit) to C-1	1957	EC-09-125 & EP-09-102	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010	C-2	C-1 to C-2	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-V2 to C-2	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-P4 to C-P5B to C-2	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-P10B to C-P5A to C-2	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010	C-3	C-2 to C-3	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-P10A to C-P9A to C-P9B to C-3	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-P8 to C-3	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010	C-4	to C-4	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-E8 to C-4	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-24A to C-24B to C-P7 to C-4	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010	C-5	C-4 to C-5	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-P1B to C-P3 to C-5	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		N.26+11'-6" W.6+56'-9" (C-PV109) to C-5	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010	C-6	C-P23A To C-P23B To C-6	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
		C-V10 To C-6	1957	EC-09-125	N/A	N/A	N/A	N/A	N/A	Capped	
7/1/2010		A To C-P21 To C-P16A To C-P15 To C-P14B To C-P14A To C-6	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-V13 Drain to Pipe Between C-6 & C-7	1967	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-P13A To C-P13B To C-6	1957	EC-09-125	07/19/05	Pass	3	60	L.Jeff & A. Becenti		
7/1/2010	C-7	C-6 to C-7	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
7/1/2010		C-E11 To C-7	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
12/1/2007	C-8	FCC Sewer Box N2461.57' W546.5' To C-8	1969	EC-09-125 & EF-09-102 SH.2	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-E10 To C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-11B To F-11A To C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-C1 N2515'11" W590' 0" To C-8	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-C1 N2496" 8" W594' 3" To C-8	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-P12B To FIELD MITER To C-8	1957	EC-09-125	07/13/02				B. Loos	Red Line ????	
12/1/2007		FE-9 To N24+93-0" W6+56' 11" To C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
12/1/2007		to C-8	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
7/1/2010	C-9	C-7 to C-9	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		

UNDERGROUND PROCESS AND WASTEWATER LINES

CRUDE UNIT Update to 7/24/07

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/ Test Performed	Investigation Results	Prior Repairs
7/1/2010		C-8 to C-9	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
12/1/2007		F-3 to C-9	1957	EF-09-102 SH.1	07/31/02	Pass	4	25	B. Loos		
12/1/2007		F-V14 To C-9	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
12/1/2007		C-V6 To C-9	1957	EC-09-125	07/31/02	Pass	4	25	B. Loos		
12/1/2011		C-P11A To C-P11B To C-9 (C-P37A to C-P37B)	1957	EC-09-125	12/19/06	Pass	4 ft	30	Rmartinez	**12-19-06: C-9 Box needs repair.**	WO46749 Cup Repaired 10/23/02
7/1/2010	C-10	C-10	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
12/1/2011		F4 W. to C-10	1957	EC-09-125 & EF-09-102	12/19/06	Pass	4 ft	30	Rmartinez		
		C-9 N. to C-10	1957	EC-09-125	07/20/05	Pass	4	30	L.Jeff & A. Becenti		
12/1/2007		C-5 E. to C-10	1957	EC-09-125	10/31/02	Pass	4	30	B. Loos		
12/1/2011		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	
7/1/2010	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		
7/1/2010		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		
12/1/2011	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	1/30/1900	Rmartinez	End of Alky Unit from ASOPit to CBZ-25	
	C-11 flows N. to CBZ-24			EC-09-125 & EZ-80-09-510EP							
	AT DHT, CBZ-24 2687N 632W	C-11 N to CBZ-24	1957	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	
12/1/2011		CBZ-25 W to CBZ-24	1957	EZ-80-09-510EP	12/20/06	Pass	4 ft	30	Rmartinez	DHT Unit	
	AT DHT, CBZ-23 2729.63N 632W	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

Treaters

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
7/1/2008	Q-1 N2729.63' W582.0'	Q-3 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-T2 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-V6 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-V5 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-V4 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-V1 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008		Q-2 to Q-1	1957	EQ-09-101 SH.1	4/2/2003	Pass	2.33+	30	B Loos	
7/1/2008	Q-1 West to CBZ-23	Q-1 (Treaters) W to CBZ-23	1957	EQ-09-101 SH.1 EZ-80-09-510EP	12/20/06	pass	4	30	Rmartinez	Treaters to CBZ-23 at DHT Unit
7/1/2008	Q-2 N2714.75' W585.33'	Q-T1 to Q-2	1957	EQ-09-101 SH.1	4/2/2003	Pass	1+	30	Philbert Brown	
7/1/2008		Inhibitor Pump House to Q-2	1957	EQ-09-101 SH.1	4/2/2003	Pass	1+	30	Philbert Brown	
7/1/2008		N2709'-3" W585.33' to Q-2	1957	EQ-09-101 SH.1	4/2/2003	Pass	1+	30	Philbert Brown	
7/1/2008		Q-V3A/Q-V3B to Q-2	1957	EQ-09-101 SH.1	4/2/2003	Pass	1+	30	Philbert Brown	
7/1/2008		Q-V2 to Q-2	1957	EQ-09-101 SH.1	4/2/2003	Pass	1+	30	Philbert Brown	
7/1/2008	Q-3 N2760.67' W576.00'	Q-V13 to Q-V12 to Q-3	1957	EQ-09-101 SH.1	4/3/2003	Pass	2.5+	30	Philbert Brown	
7/1/2008		Q-V11 to Q-3	1957	EQ-09-101 SH.1	4/3/2003	Pass	2.5+	30	Philbert Brown	
7/1/2008		Q-V17 to Q-V16 to Q-V9 to Q-V7 to Q-V14 to Q-3	1957	EQ-09-101 SH.2	4/3/2003	Pass	2.5+	30	Philbert Brown	
7/1/2008		Q-T6/Q-P10 to Q-3	1957	EQ-09-101 SH.2	4/3/2003	Pass	2.5+	30	Philbert Brown	
7/1/2008		Q-V15 to Q-3	1957	EQ-09-101 SH.2	4/3/2003	Pass	2.5+	30	Philbert Brown	

NOTE TO SHEET; TREATER DRAINS ARE ALSO KNOWN AS THE FOLLOWING FROM BI-MONTHLY DRAIN SEAL INSPECTION SHEETS: 2006

DRAIN #	LOCATION
1	South of Q-V14
2	West of Q-V14
3	Near Q-V7

	4	Near Q-V9	
	5	Near Q-V16	
	6	North of Q-E1B	
	7	North of Q-E1B	
	8	North of Q-E1B	
	9	East of Drain 8	
	10	SE of Drain 9	
	11	SE of Drain 10	

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM Update 7/24/07

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 / Performed Test	Investigation Results
	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				
12/1/2011	CBZ-19 3073N 935W	CBZ-19 flows W to CBZ-18	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/17/06	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 453 drain flows S connects to Y from Tk 452 continues to Y from Tk 451 to CBZ-19	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/17/06	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-18 3073N 1118W	CBZ-19 flows W to CBZ-18 (See EZ-80-09-514EP)	1957	EZ-80-509-EP, EZ-80-09-514EP, 95103-CC-104, & Z-01-100	11/17/2006	Pass	8 ft	60	Rmartinez/Pmartinez	CBZ-18 was water washed during inspection
12/1/2011		Tk 227 drain flows S to join Tk 228 drain SW to CBZ-18	1957	EZ-80-509-EP, EZ-80-09-514EP, & Z-01-100	11/17/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 342 flows S to join Tk 343 drain S to CBZ-18	1957	EZ-80-509-EP, & Z-01-100	11/17/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		CBZ-18 flows west to CBZ-17	1957		11/17/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-17 3073N 1260W	Tk 107 flows S to join Tk 108 drain onto S to CBZ-17	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
		CBZ-28 flows NW to CBZ-17	1957	EZ-80-09-514EP	OOS				Out of Service	
	CBZ-28 2993.5N 1182.5W	Sump B-6 (Biolerhouse) flows N to CBZ-28		EZ-80-09-513EP, EZ-80-09-514EP & EZ-81-09-102EP	OOS				Out of Service	
12/1/2011	CBZ-16 3073N 1350W	CBZ-17 flows W to CBZ-16	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 321 drain flows S to join Tk 232 drain onto CBZ-16	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-15 3073N 1440W	CBZ-16 flows W to CBZ-15	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 235 drain flows S to join Tk 106 onto CBZ-15	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-14 3073N 1493W	CBZ-15 flows W to CBZ-14	1957	EZ-80-09-514EP, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
		CBZ-30 flows N to CBZ-14	1957	EZ-80-09-513EP & EZ-80-09-514EP	CBZ-14 Main sewer line 24" - unable to test - not authorized (12/06)					
12/1/2011	CBZ-1 3480N 380W	Start Tk 568 drain flows N and W to CBZ-1	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/20/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		T716 flows North to T568 to CBZ-1	2006		11/15/2006	Pass	6 ft	60	IMI Contractor	
12/1/2011		Tk 570 drain flows N to Y from Tk 569 & onto CBZ-1	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/27/2006	Pass	6 ft	60	Rmartinez/Pmartinez	

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM Update 7/24/07

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 / Performed Test	Investigation Results
12/1/2011	CBZ-2 3480N 782W	CBZ-1 flows W to CBZ-2	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/27/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 572 drain flows N to join Y from Tk 571drain to CBZ-2	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/27/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		CBZ-2 flows west to CBZ-3	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/27/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-3 3480N 931.5W	Tk 112 drain flows N to join Y from Tk 111 to CBZ-3	1957	EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 226 drain flows into old box and S to CBZ-3	1957	EZ-80-508EP, EZ-80-509-EP, 95103-CC-104, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	Underground "T" 3480N 1026W	CBZ-3 flows W to "T"	1957	EZ-80-09-509EP & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 116 drain flows N to join Y from Tk 115 drain to "T"	1957	EZ-80-09-509EP & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-4 3480N 1233W	CBZ-3 through "T" to CBZ-4	1957	EZ-80-09-509EP, EZ-80-09-514EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 567 drain flows N to CBZ-4	???	EZ-80-09-514EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 225 drain flows S to CBZ-4	1957	EZ-80-09-514EP, EZ-80-09-515EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-5 3480N 1325W	CBZ-4 flows W to CBZ-5	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
		Tk 338 flows N to CBZ-5	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
		Tk 339 flows S to CBZ-5	1957	EZ-80-09-514EP, EZ-80-09-515EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
	CBZ-6 3480N 1493W	CBZ-5 flows W to CBZ-6	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006 CBZ-6 main sewer line - unable to test - not authorized					
		Drain fr conc floor for booster & charge pumps flows S to CBZ-6	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
		CBZ-14 flows N to CBZ-6	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006 CBZ-6 main sewer line - unable to test - not authorized					
	CBZ-26 3480N 1750W	CBZ-6 flows W to CBZ-26	1957	EZ-80-09-514EP, & Z-01-100	11/28/2006 CBZ-6 main sewer line - unable to test - not authorized					

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM Update 7/24/07

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 / Performed Test	Investigation Results
12/1/2011		Tk 101 drain flows N to CBZ-26	1957	EZ-80-09-514EP, & Z-01-100	11/29/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 102 drain flows N to join Tk 101 drain onto CBZ-26	Prior 1995	EZ-80-514EP, 95103-CC-104, & Z-01-100	11/29/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		CBZ-13 flows S to CBZ-26	1957	EZ-80-09-514EP, EZ-80-09-515EP, & Z-01-100	11/29/2006	Pass	8 ft	60	Rmartinez/Pmartinez	11/26/06: Unable to test - main sewer line
12/1/2011	CBZ-27 3480N 1850W	CBZ-26 flows W to CBZ-27	1957	EZ-80-09-514EP, & Z-01-100	11/29/2006	Pass	8 ft	60	Rmartinez/Pmartinez	11/26/06: Not permitted to test.
	API Separator	CBZ-27 flows N NW to API Separator	1957	EZ-80-09-514EP & EZ-80-08-515EP	11/28/2006 Unable to test - not authorized					Now flows to New API Pit (2004)
12/1/2011	CBZ-7 3745N 370W	Catch Basin at RRR pumped up to CBZ-7		95103-CC-104	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	Sewer Box needs repair
12/1/2011		Tk 582 drain flows N to CBZ-7	1957	EZ-80-09-508EP & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-8 3745N 675W	CBZ-7 flows W to CBZ-8	1957	EZ-80-09-508EP & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	Sewer Box needs repair
12/1/2011		Tk 581 drain flows NW to CBZ-8	1957	EZ-80-09-508EP & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 575 drain flows N to join Tk 577 drain to NE to CBZ-8	1957	EZ-80-09-508EP & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-9 3985N 675W	CBZ-31 uses pump to pump to CBZ-9	1957	EZ-80-09-508EP & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-31 3939N 460W	Drain N3850 W460 flow N to join "Y" from Tk 574 drain to CBZ-31	1957	EZ-80-09-508EP & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		CBZ-32 flows W to CBZ-31	1957	EZ-80-09-508EP & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-32 3939N 425W	Tk 576 drain flows NW to CBZ-32	1957	EZ-80-09-508EP & Z-01-100	11/30/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-10 3985N 780W	CBZ-9 flows W to CBZ-10	1957	EZ-80-09-508EP & Z-01-100	12/1/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 579 drain flows W to CBZ-10	1957	EZ-80-09-508EP & Z-01-100	12/1/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-11 3985N 1136W	CBZ-10 flows W to CBZ-11	1957	EZ-80-09-508EP, EZ-80-09-515EP & Z-01-100	12/1/2006	Pass	9 ft	60	Rmartinez/Pmartinez	
12/1/2011		T583 flows north to CBZ-11			12/1/2006	Pass	9	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-12 3985N 1492W	CBZ-11 flows W to CBZ-12	1957	EZ-80-09-515EP & Z-01-100	12/1/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011		Tk 345, Tk344 & Tk 337 drains to CBZ-12	AFTER 1957	NO Drawing	12/1/2006	Pass	8 ft	60	Rmartinez/Pmartinez	

UNDERGROUND PROCESS AND WASTEWATER LINES

TANK FARM Update 7/24/07

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 / Performed Test	Investigation Results
12/1/2011	CBZ-13 3985N 1750W	CBZ-12 flows W to CBZ-13	1957	EZ-80-09-515EP & Z-01-100	12/1/2006	Pass	8 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-30 2931.17N 1485.50W	Mkt 4 drain N to Mkt 1drain to Mkt 2drain to Mkt 3 drain E & NE to CBZ-30	1957	EZ-80-09-513EP	11/13/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011		CBZ-29 N to CBZ-30	1957	EZ-80-09-513EP	11/9/2006	Pass	6 ft	60	Rmartinez/Pmartinez	
12/1/2011	CBZ-29 2737.82N 1485.50W	Drains fr old Fuel Oil Loading N2618.82 W1619.75 & N2649.94 W1595.0 flow NW to CBZ-29	1957	EZ-80-09-513EP	11/8/2006	Pass	6 ft	30	Rmartinez/Pmartinez	
12/1/2011		2781.17N drain pipe to CBZ-29	1957	EZ-80-09-513EP	11/8/2006	Pass	6 ft	30	Rmartinez/Pmartinez	I & E Shop now
12/1/2011		2756.17N drain pipe to CBZ-29	1957	EZ-80-09-513EP	11/8/2006	Pass	6 ft	30	Rmartinez/Pmartinez	I & E Shop now
12/1/2011		2731.17N drain pipe to CBZ-29	1957	EZ-80-09-513EP	11/8/2006	Pass	6 ft	30	Rmartinez/Pmartinez	I & E Shop now
12/1/2011		Truck Loading, 3 Area Drains flow to sump, then sump flows to CBZ-29	1957	EZ-80-09-513EP & EZ-09-250EP	11/13/2006	Pass	5 ft	60	Rmartinez/Pmartinez	
		4" Oily & Acid Drain from Lab Sinks & Floor to tie in between Truck Loading Sump and CBZ-29	1957	EZ-80-09-513EP, EZ-09-250EP & EZ-09-174	11-13-06: Unable to test - line plugged from Lab building to CBZ-29.					
12/1/2010	C.B. No. 5 ~3590N 112.35W	RRR Drains L S (Loading Spot) #13 to LS #12 to LS #11 to LS #10 to CB #5	1957	EZ-80-09-504EP EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	C.B. No. 4	LS #9, LS #8, LS #7, & LS #6 "T" into C. B. No.5 to C. B. No.4	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	C.B. No. 3	C.B. No.4 to C.B. No. 3	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	C.B. No. 2 3870N 112.35W	LS#5, LS#4, & LS#3 "T" in C.B. No.3 to C.B. No.2	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	C.B. No. 1	LS #2 & LS #1 "T" to C.B. No.2 to C.B. No. 1	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
	C.B. No.1 to Sewerage Basin		1957	EZ-80-09-506EP		Made area where MH No. 8 was to a large concrete containment, sewage basin taken out of service				
12/1/2010	MH No.9 3394N 162W	MH No. 10 3394N 210.32W connects to MH No.9	1957	EZ-80-09-504EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	MH No.6 3606N 162W	MH No 9 to MH No.6	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
12/1/2010	MH No.7 3739.58N 137.00W	MH No.6 to MH No. 7	1957	EZ-80-09-505EP	7/18/2005	Pass	4	120	L. Jeff & A. Becenti	RRR
	MH No.8 4089.58N 137.00W	MH No.7 N to MH No.8	1957	EZ-80-09-505EP		Made area where MH No. 8 was to a large concrete containment, sewage basin taken out of service				
	MH No.8 to Sewerage Basin		1957	EZ -80-09-505EP EZ-80-09-506EP		Made area where MH No. 8 was to a large concrete containment, sewage basin taken out of service				

UNDERGROUND PROCESS AND WASTEWATER LINES

Boiler Plant

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
7/1/2010	CBZ-28 2993.5N 1182.5W (Continued from Tank Farm)	Sump B-6 (BoilerHouse)flows N to CBZ-28	1957	EZ-80-09-513EP, EZ-80-09-514EP & EZ-81-09-102EP						
12/1/2011	Sump B-6 N2852.5 W1180.5	Z-91-T-1 (Raw Water Tk) drain to B-6	1957	EZ-81-09-102EP	11/16/06	Pass	4 ft	60	Rmartinez	
12/1/2011		3 drains from Z86-P1 & Z86-P2 area connect to "Y" from B-4 to B-6	1957	EZ-81-09-102EP	11/16/06	Pass	4 ft	60	Rmartinez	
12/1/2011		Sump B-4 to Sump B-6	1957	EZ-81-09-102EP	11/16/06	Pass	4 ft	60	Rmartinez	
12/1/2011	Sump B-4 N28+16'-9" W1180.5	Z-81-T1 (Boiler Feed Water Tk.) to B-4	1957	EZ-81-09-102EP	11/16/06	Pass	4 ft	60	Rmartinez	
12/1/2011		Sump Just SW of Z-81-T! to B-4	1957	EZ-81-09-102EP	11/16/06	Pass	4 ft	60	Rmartinez	
12/1/2011		Drain By V-3 to B-4	1957	EZ-81-09-102EP	11/16/06	Pass	4 ft	60	Rmartinez	
12/1/2011		B-3 flows W to B-4	1957	EZ-81-09-102EP	11/16/06	Pass	6 ft	30	Rmartinez	
12/1/2007		B-5 flows N to B-4	1957	EZ-81-09-102EP	11/13/2006	Fail	4 ft	60	Rmartinez	**Small Leak will not hold**
	Sump B-5 N27+56' W1180.5	Drains Z-81-P1 & Z-81-P2 to B-5	1957	EZ-81-09-102EP	11/13/2006	Pass	4 ft	60	Rmartinez	
12/1/2011		Drain A to B-5	1957	EZ-81-09-102EP	11/13/2006	Pass	4 ft	60	Rmartinez	
12/1/2011		Drain Z-81 - T-2 to B-5	1957	EZ-81-09-102EP	11/13/2006	Pass	4 ft	60	Rmartinez	
12/1/2011		P-6 & P-5 (Fuel Oil) drain to B-5	1957	EZ-81-09-102EP	11/13/2006	Pass	4 ft	60	Rmartinez	
12/1/2011		A-C2 (Auxiliary Air Compressor) drain to B-5	1957	EZ-81-09-102EP	11/13/2006	Pass	4 ft	60	Rmartinez	
12/1/2011		Drain just N of A-C2 to B-5	1957	EZ-81-09-102EP	11/13/2006	Pass	4 ft	60	Rmartinez	
12/1/2011		6 Drains inclusive Z-91-P4 to B-5	1957	EZ-81-09-102EP	11/13/2006	Pass	4 ft	60	Rmartinez	
12/1/2011	Sump -B-3 N 28+16'-9" W11+46'-6"	B-2 flows N to B-3	1957	EZ-81-09-102EP	11/14/2006	Pass	3 ft	60	Rmartinez	
12/1/2011	Sump B-2 ~N27+76'-9" W11+46"-6"	Drain fr inside boiler house flows SE to B-2	1957	EZ-81-09-102EP	11/14/2006	Pass	3 ft	60	Rmartinez	
12/1/2011		B-102 drain to B-2	1957	EZ-81-09-102EP	11/14/2006	Pass	3 ft	60	Rmartinez	
12/1/2011		Drain fr inside boiler house flows NE to B-2	1957	EZ-81-09-102EP	11/14/2006	Pass	3 ft	60	Rmartinez	
12/1/2011		B-1 flows N to B-2	1957	EZ-81-09-102EP	11/14/2006	Pass	3 ft	60	Rmartinez	
12/1/2011	Sump B-1 N27+36'-5" W11+46'-6"	Drain fr inside boiler house flows E to B-1	1957	EZ-81-09-102EP	11/14/2006	Pass	3 ft	60	Rmartinez	
12/1/2011		Drain fr AD-1 inside boiler house flows NE to B-1	1957	EZ-81-09-102EP	11/14/2006	Pass	3 ft	60	Rmartinez	
12/1/2011		Drain fr B-101 flows NW to B-1	1957	EZ-81-09-102EP	11/14/2006	Pass	3 ft	60	Rmartinez	
12/1/2011		Drain N27+10 W 10+99 flows W then NW to B-1	1957	EZ-81-09-102EP	11/14/2006	Pass	3 ft	60	Rmartinez	
12/1/2011		Drain 1146 50W flows N. to B-1 NOTE. BEGINNING/END POINT	1957	EZ-81-09-102EP	11/14/2006	Pass	3 ft	60	Rmartinez	

OCD Permit Condition 21:

e. Summary of All Leaks, Spills, and Releases and Corrective Actions

OCD Permit Condition 21. 3.e.
Summary of All Spills and Releases
Giant Refining - Ciniza Refinery

Spill/Release	Date	Spilled Material	Volume (barrels)	Volume (gallons)	Corrective Action
Marketing Tank No. 6 MTBE	2/12/2006	MTBE	3	126	soils disposed at Painted Desert LF
Sewer line Leak at PDA/SRU	2/24/2006	slop oil	40	1680	soils disposed at Painted Desert LF
Tank 563 overfill	4/20/2006	natural gasoline	2	84	area cleaned up
Distillate/kerosene spill under pipeway	6/7/2006	distillate/kerosene	2.1	90	remediate in place
Pilot sewer water pipe leak	8/8/2006	sanitary water	33.3	1400	pipe repaired, soil put back in place
Slop line from units to Tank 107	8/9/2006	slop oil	0.5	20	area cleaned up
Tank 334 Sour naptha Spill	9/9/2006	sour naptha	4	168	area cleaned up
API Weir Box spill	9/17/2006	wastewater	1	42	area cleaned up
Sour naptha Rundown Leak	9/17/2006	sour naptha	3	126	area cleaned up
Alky Fire	10/5/2006	mostly water	0.8	34.3	removed soil placed on landfarm
tank 107 Spill	10/8/2006	slop oil	2	84	area cleaned up
Fuel Oil loading Rack	10/9/2006	fuel oil	0.1	3	area cleaned up
DH2 Fire Spill	12/27/2006	diesel	4.8	200	not necessary-no release to soil
Tank 102 Spill	12/31/2006	crude	50	2100	area cleaned up

OCD Permit Condition 21:

f. Summary of Discovery of New Groundwater Contamination

Some arsenic did show up in GWM-1 in 2006 sampling at 0.077 mg/l which exceeds the NMWQS of 0.05 mg/l. Other parameters are generally similar to previous years sampling.

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

2006 Land Treatment Unit Inspections Log

Date of Inspection	Inspector's Name	Findings
1/4/2006	Johny Sanchez	OK/Good
1/6/2006	Kent McKinney	OK/Good
1/10/2006	Johny Sanchez	OK/Good
1/12/2006	Johny Sanchez	OK/Good
1/18/2006	Kent McKinney	OK/Good
1/19/2006	Kent McKinney	OK/Good
1/24/2006	Johny Sanchez	OK/Good
1/26/2006	Kent McKinney	OK/Good
1/30/2006	Johny Sanchez	OK/Good
2/2/2006	Kent McKinney	OK/Good
2/6/2006	Johny Sanchez	OK/Good
2/9/2006	Kent McKinney	OK/Good
2/15/2006	Johny Sanchez	OK/Good
2/16/2006	Kent McKinney	OK/Good
2/22/2006	Johny Sanchez	OK/Good
2/23/2006	Kent McKinney	OK/Good
3/1/2006	Jim Lieb	OK/Good
3/2/2006	Kent McKinney	OK/Good
3/6/2006	Johny Sanchez	OK/Good
3/9/2006	Kent McKinney	OK/Good
3/16/2006	Johny Sanchez	OK/Good
3/20/2006	Johny Sanchez	OK/Good
3/23/2006	Kent McKinney	OK/Good
3/29/2006	Johny Sanchez	OK/Good
3/30/2006	Kent McKinney	OK/Good
4/3/2006	Johny Sanchez	OK/Good
4/6/2006	Kent McKinney	OK/Good
4/10/2006	Johny Sanchez	OK/Good
4/13/2006	Kent McKinney	OK/Good
4/17/2006	Johny Sanchez	OK/Good
4/20/2006	Kent McKinney	OK/Good
4/25/2006	Johny Sanchez	OK/Good
4/27/2006	Kent McKinney	OK/Good
5/2/2006	Johnny Sanchez	OK/Good
5/4/2006	Kent McKinney	OK/Good
5/9/2006	Johnny Sanchez	OK/Good
5/11/2006	Kent McKinney	OK/Good
5/17/2006	Johnny Sanchez	OK/Good
5/24/2006	Johnny Sanchez	OK/Good
5/25/2006	Kent McKinney	OK/Good
5/30/2006	Johnny Sanchez	OK/Good
6/5/2006	Johnny Sanchez	OK/Good
6/8/2006	Kent McKinney	OK/Good
6/12/2006	Johnny Sanchez	OK/Good
6/15/2006	Kent McKinney	OK/Good
6/19/2006	Johnny Sanchez	OK/Good
6/22/2006	Kent McKinney	OK/Good
6/26/2006	Johnny Sanchez	OK/Good

6/27/2006	Kent McKinney	OK/Good
6/29/2006	Kent McKinney	OK/Good
7/3/2006	Johnny Sanchez	OK/Good
7/10/2006	Johnny Sanchez	OK/Good
7/13/2006	Kent McKinney	OK/Good
7/18/2006	Johnny Sanchez	OK/Good
7/20/2006	Kent McKinney	OK/Good
7/24/2006	Johnny Sanchez	OK/Good
7/31/2006	Cheryl Johnson	OK/Good
8/3/2006	Kent McKinney	OK/Good
8/9/2006	Cheryl Johnson	OK/Good
8/16/2006	Cheryl Johnson	OK/Good
8/17/2006	Kent McKinney	OK/Good
8/22/2006	Cheryl Johnson	OK/Good
8/24/2006	Kent McKinney	OK/Good
8/28/2006	Cheryl Johnson	OK/Good
8/31/2006	Kent McKinney	OK/Good
9/6/2006	Cheryl Johnson	OK/Good
9/7/2006	Cheryl Johnson	OK/Good
9/11/2006	Cheryl Johnson	OK/Good
9/14/2006	Kent McKinney	OK/Good
9/18/2006	Cheryl Johnson	OK/Good
9/21/2006	Kent McKinney	OK/Good
9/25/2006	Cheryl Johnson	OK/Good
9/28/2006	Kent McKinney	OK/Good
10/2/2006	Steve Morris	OK/Good
10/3/2006	Kent McKinney	OK/Good
10/10/2006	Cheryl Johnson	OK/Good
10/12/2006	Kent McKinney	OK/Good
10/17/2006	Cheryl Johnson	OK/Good
10/19/2006	Kent McKinney	OK/Good
10/23/2006	Cheryl Johnson	OK/Good
10/26/2006	Kent McKinney	OK/Good
10/31/2006	Cheryl Johnson	OK/Good
11/2/2006	Kent McKinney	OK/Good
11/6/2006	Cheryl Johnson	OK/Good
11/9/2006	Kent McKinney	OK/Good
11/13/2006	Cheryl Johnson	OK/Good
11/16/2006	Kent McKinney	OK/Good
11/21/2006	Cheryl Johnson	OK/Good
11/30/2006	Kent McKinney	OK/Good
12/7/2006	Kent McKinney	OK/Good
12/12/2006	Cheryl Johnson	OK/Good
12/14/2006	Kent McKinney	OK/Good
12/20/2006	Cheryl Johnson	OK/Good
12/29/2006	Jim Lieb	OK/Good

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing? SOME SNOW	✓ Yes		No
Wet or Dry?	✓ Yes		No
Odor?		Yes	✓ No
Erosion?		Yes	✓ No
Is vegetation growing?	✓ Yes		No

Monitoring Wells

Condition: O.K.

Caps and Locks:

Dikes/Berms

Condition:

Water Standing? SOME SCATTERED SNOW	✓ 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 NONE

Time of Day: 1:00 PM ☐ AM ☒ PM Date: 12/29/06

Name of Inspector: JIM LIEB

Repairs Completed

Signature: Jim Lieb Date: 12/29/06

Figure F-1. Land Treatment Unit Inspection Checklist

Land Treatment Unit Inspection Checklist

LTU Surface

Condition:

Water Standing? SNOW	☑ 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:

Dikes/Berms

Condition:

Water Standing? SNOW	☑ 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: 200 ☐ AM ☑ PM Date: 12/20/02

Name of Inspector: Cheryl Johnson

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:

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: 0930 ☑ AM ☐ PM Date: 1-10-06

Name of Inspector: [signature]

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: 01-06-06

Name of Inspector: [illegible]

Repairs Completed

Signature: _____ Date: _____

Figure F-1. Land Treatment Unit Inspection Checklist

OCD LANDFARM TILLING RECORDS SUMMARY 2006

File: OCD 17.C.

DATE	NAME	DESCRIPTION
January 11, 2006	Mack McKinney	Plowed Landfarm
February 6, 2006	Mack McKinney	Disk Landfarm
March 2, 2006	Mack McKinney	Plowed Landfarm
March 27, 2006	Mack McKinney	Disk & Plowed
April 26, 2006	Mack McKinney	Disc
May 31. 2006	Mack McKinney	Plow
June 22, 2006	Mack McKinney	Disc
July 25,2006	Mack McKinney	Plowed Landfarm
Aug 31,2006	Mack McKinney	Unable to disc - too wet
September 27, 2006	Mack McKinney	Unable to disc/till too wet, standing water in NE corner
October 25, 2006	Mack McKinney	Partially plowed, still too wet
November 27, 2006	Mack McKinney	Plowed Landfarm
12/5/2006	Mack McKinney	Plowed Landfarm

NEW MEXICO ENVIRONMENT DEPARTMENT
HAZARDOUS WASTE BUREAU

Report #- NMD000 333 211-2401

2006 ANNUAL HAZARDOUS WASTE FEE REPORT

Note: Complete and return this report with your invoice and payment

SECTION I: FACILITY INFORMATION AND IDENTIFICATION

Facility Name: Giant Refining Company- Gallup Refinery

EPA Identification Number: NMD000333211 **Phone:** 505-722-0217

Facility Address: Interstate 40, Exit 39, 17 miles East of Gallup, Jamestown NM 87347

Mailing Address: Route 3 Box 7, Gallup NM 87301

Facility Contact: Ed Riege

Title: Environmental Superintendent

Reporting Date: 8/20/2007

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: 2006

Month	Total Hazardous Waste (lb)		Recycled (lb)		Non-Recycled (lb)
January	15669	-	0	=	15669
February	3141	-	0	=	3141
March		-		=	
April	52424	-	0	=	52424
May		-		=	
June	47118	-	0	=	47118
July		-		=	
August		-		=	
September	50150	-		=	50150
October	55360	-	55360	=	0
November		-		=	
December	39995	-	0	=	39995
Annual Totals	263857	-	55360	=	208497

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 2,206 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 more than 2,205 lbs (1,000 kg) 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 < 2,206 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.

   208497 pounds for the reporting year X $ 0.01 = $ 2084.97

   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) = $ 2084.97

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 2005 were due on August 1, 2006. Please calculate past due fees and enter them below:

2002 Fees	$ _____
2003 Fees	$ _____
2004 Fees	$ _____
2005 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 20.4.3.107(B)(12) 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	4584.97
Total Past Due Fees Owed (if applicable)	
TOTAL FEES	$4,584.97

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.

ED RIOS
Name (printed or typed)

Refinery Manager
Title

Signature

August 21, 2007
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
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe, New Mexico 87505

RECEIVED AUG 23 2007

GIANT INDUSTRIES, INC.

23733 N. Scottsdale Rd.
Scottsdale, AZ
85255-9969

480
585-8888

Page: 1

Check #:301221

Vendor #:76707

Check Date:08/22/07

Invoice Number	Inv. Date	Description	Gross	Discount	Net
CKRQ-08-21-07	08/21/07		4,584.97		4,584.97
			4,584.97		4,584.97

THE FACE OF THIS CHECK IS PRINTED BLUE - THE BACK CONTAINS A SIMULATED WATERMARK

GIANT INDUSTRIES, INC.

23733 N. Scottsdale Rd.
Scottsdale, AZ
85255-9969

480
585-8888

Bank of America
Bank of America
North Carolina

66-19
530

Valid for 180 days From Date of Issue

Pay

Date 08/22/07

Check No. 301221

$*****4,584.97
Amount

FOUR THOUSAND FIVE HUNDRED EIGHTY FOUR AND 97/100

To the Order of

NMED / HRMB
Hazardous Waste Bureau
2905 Rodeo Park Dr E Bldg 1
PO Box 26110
Santa Fe NM 87502

MDMG

State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Telephone (505) 428-2500
Fax (505) 428-2567
www.nmenv.state.nm.us

BILL RICHARDSON
GOVERNOR

RON CURRY
SECRETARY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

June 29, 2006

Mr. Ed Riege
Environmental Superintendent
Giant Refining Company
Route 3 Box 7
Gallup, New Mexico 87301

SUBJECT: "CONTAINED-IN" DETERMINATION APPROVAL REGARDING CONTAMINATED SOIL REMOVED FROM THE AERATION LAGOONS AND EVAPORATON PONDS AUGUST 2005 API SEPARATOR RELEASE GIANT REFINING COMPANY, CINIZA REFINERY EPA ID NO. NMD000333211 HWB-GRCC-MISC

Dear Mr. Riege:

The New Mexico Environment Department (NMED) is in receipt of Giant Refining Company, Ciniza Refinery's (the Permittee) letter titled *Request For Waste Determination At The Giant Ciniza Refinery* dated June 15, 2006. This letter requests a "contained-in" determination for petroleum contaminated soil excavated from the banks of Aeration Lagoons (AL) No. 1 and No. 2 and Evaporation Ponds (EP) No. 1 and No. 2. The soil was contaminated, in part, by API separator releases that occurred on August 3 and 15, 2005. Oily wastewater containing benzene (D018) and F037/F038-listed waste was released from the API separator, entered the ALs and EPs and was eventually deposited on the banks of the ponds. Six composite and six discrete soil samples were obtained from excavated soils removed from the banks of the ALs and EPs. The discrete samples were analyzed in a laboratory for volatile organic compounds (VOCs). The composite samples were analyzed in a laboratory for semi-volatile organic compounds (SVOCs),

toxicity characteristic leaching procedure (TCLP) metals, reactivity, ignitability, corrosivity, diesel range organics (DRO) and gasoline range organics (GRO).

NMED has determined that the Permittee is not required to manage the soils excavated from around the banks of the ALs and EPs as hazardous waste. This determination is based on analytical data indicating concentrations of all detected constituents were below the residential NM SSLs and EPA Region 6 Residential standards. As part of this approval, the Permittee must dispose of the soil in an appropriate landfill or on-site in a designated Oil Conservation Division (OCD) landfarm, if approved by OCD. If the excavated soil is not disposed of in the OCD landfarm, the Permittee must obtain approval for final disposal from both NMED and OCD.

If you have questions regarding this approval please contact Hope Monzeglio of my staff at 505-428-2545.

Sincerely,

James P. Bearzi
Chief
Hazardous Waste Bureau

JPB:hm

cc: J. Kieling, NMED HWB
D. Cobrain, NMED HWB
H. Monzeglio, NMED HWB
W. Price, NMEMNRD OCD
S. Morris, GRCC
J. Lieb, GRCC

File: Reading GRCC 2006

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-1
Revised June 10, 2

Submit Origi
Plus 1 C
to Appropri
District Off

2005 DEC 26 PM 1:13

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☒ Non-Exempt: ☐ ☐Verbal Approval Received: Yes ☐ No ☐	4. Generator Giant Industries 5. Originating Site Ciniga refinery
2. Management Facility Destination Gandy Marley	6. Transporter not sure
3. Address of Facility Operator US 380 E Roswell NM	8. State Acmestown NM
7. Location of Material (Street Address or ULSTR) Exit 39 I-40	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

(B.) All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

300 yd of oil impacted soil from clean up of lagoon and pond banks

Estimated Volume 300 cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE [signature] TITLE: VP DATE: 12/13/6
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Bill Marley TELEPHONE NO. 505-347-0434

E-MAIL ADDRESS GMI@DFN.COM

(This space for State Use)

APPROVED BY: [signature] TITLE: Envirio Engr DATE: 12/28/06

APPROVED BY: _____ TITLE: _____ DATE: _____

GANDY MARLEY, INC.
P. O. BOX 827
TATUM, NEW MEXICO 88267
TATUM, NEW MEXICO ROSWELL, NEW MEXICO

CERTIFICATE OF WASTE STATUS

OILFIELD EXEMPT WASTE MATERIAL

Originating Location: Giant Industries Ciniza Refinery Exit 39 I-40 Jamestown NM

Source: Cleanup of Lagoon & Pond

Disposal Location: Gandy Marley Landfill

"As a condition of acceptance for disposal, I hereby certify that this waste is an exempt waste as defined by the Environmental Protection Agency's (EPA) July 1988 Regulatory Determination. To my knowledge, this waste will be analyzed pursuant to the provisions of 40 CFR Part 261 to verify the nature as non-hazardous. I further certify that to my knowledge no "hazardous or listed waste" pursuant to the provisions of 40 CFR, Part 261, Subparts C and D, has been added or mixed with the waste so as to make the resultant mixture a "hazardous waste" pursuant to the provisions of 40 CFR, Section 261.3 (b)."

I, the undersigned as the agent for Giant Industries concur with the status of the waste from the subject site.

PER the NMED'S CONTAINED IN DETERMINATION THE SOIL IS RCRA NON-HAZARDOUS.

Name Ed Riege

Title/Agency Environmental Superintendent

Address Rt 3 Box 7
Gallup NM 87301

Signature [signature]

Date 12-21-06