GW-040

Annual Report

DATE:
March, 2010

Western Refining

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April 13, 2010

Glen Von Gonten
Project Manager
Environmental Bureau
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Western Refining, Inc.'s (Western's) 2009 Annual Report for the former Giant Bloomfield Refinery

Certified Mail # 7009 3410 0000 3636 2022

Dear Mr. Von Gonten;

Please find enclosed, Western's 2009 annual report for the former Giant Bloomfield Refinery located in the NW ¼ of Section 27 and the SW ¼ of Section 22, Township 29 N, Range 12W in San Juan County, New Mexico.

If you should have any questions or require additional information, please do not hesitate to contact me at 505-632-4077 or Bill.Robertson@wnr.com.

Respectfully Submitted,

Bill Robertson
Health, Safety, Environmental & Regulatory Director
Logistics / HSER
Western Refining Southwest Inc.

San Juan Regional Office
111 County Road 4990
Bloomfield, NM 87413
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CC: Allen Haines
Ashley Ager
WNR File

ANNUAL REPORT

FORMER GIANT BLOOMFIELD REFINERY BLOOMFIELD, NEW MEXICO

Discharge Permit GW-040

MARCH 2010

Western Refining

ANNUAL REPORT

FORMER GIANT BLOOMFIELD REFINERY
BLOOMFIELD, NEW MEXICO

Discharge Permit GW-040

MARCH 2010

Prepared for:

WESTERN REFINING SOUTHWEST, INCORPORATED
111 CR 4990
Bloomfield, New Mexico 87413

Prepared by:

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Western Refining

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EXECUTIVE SUMMARY

This report was prepared by LT Environmental, Inc. (LTE), on behalf of Western Refining Southwest, Incorporated (Western), to document work completed at the former Giant Bloomfield Refinery (Site) in Bloomfield, New Mexico during 2009, including:

- Groundwater elevations gauged in monitoring wells;
- Free-phase product levels observed in groundwater monitoring wells;
- Analytical data obtained from groundwater sampling; and
- Volume of treated water.

The Site is located in the northwest quarter of Section 27 and the southwest quarter of Section 22, Township 29 North, Range 12 West in San Juan County, New Mexico. It is on the corner of Highway 64 and County Road 350, approximately five miles west of the town of Bloomfield, New Mexico (Figure 1).

The scope of work for this project focuses on mitigation of hydrocarbon impacts to groundwater identified after the refinery closed in 1982. During 2009, Western utilized a groundwater recovery and treatment system consisting of groundwater monitoring and recovery wells, remediation by carbon filtration and a treated water infiltration trench. The system was installed in 1988 and has gradually been simplified over time as groundwater quality improved.

LTE conducted regular operations and maintenance on the system hardware and monitored system effectiveness. Regular monitoring included gauging groundwater and product levels in all monitoring wells. The influent and effluent water were sampled on a regular basis, as were specific monitoring wells. LTE implemented recommended changes to the sampling schedule presented in the 2008 annual report. These changes were based on findings of a supplemental evaluation of remedial operations conducted in 2008. A summary of field activities, analytical results from groundwater sampling, conclusions and recommendations are presented in the subsequent sections of this report.

The remediation system at the Site has been successful in reducing phase-separated hydrocarbon accumulations and dissolved phase contaminants in the groundwater. Currently, it is most effective at controlling migration of remaining contaminants. Continued treatment and groundwater monitoring is recommended.

SECTION 1.0

INTRODUCTION

LT Environmental, Inc. (LTE) prepared this report for Western Refining Southwest, Incorporated (Western) to document work completed during 2009 at the former Giant Bloomfield Refinery (Site) in Bloomfield, New Mexico.

1.1 SITE DESCRIPTION

The Site is located on the northeast corner of Highway 64 and County Road 350, approximately five miles west of Bloomfield, New Mexico (Figure 1). The legal description is the northwest quarter of Section 27 and the southwest quarter of Section 22, Township 29 North, Range 12 West in San Juan County.

The Site consists of facilities, tanks and equipment associated with the operation of the former Giant Bloomfield Refinery, as well as remedial equipment, groundwater recovery wells and groundwater monitoring wells within, west and south of the refinery property boundary (Figure 2).

1.2 SITE HISTORY

The refinery operated from 1974 to 1982 and is presently inactive. The refinery produced leaded and unleaded gasoline, diesel, kerosene and other refined petroleum products. Subsequent to closure of the refinery, groundwater contamination was discovered in the late 1980s and investigated within the refinery property. The area within the refinery is referred to as the On-Site Area. Details of the investigation and initial remediation efforts are contained in a report entitled *Soil and Groundwater Investigations and Remedial Action Plan, Giant Industries, Inc. Bloomfield Refinery, Bloomfield, New Mexico.* In 1990, evidence of contamination south of the refinery boundary was investigated. This area is referred to as the Off-Site Area. The results of the investigation and remedial plans for the Off-Site Area are contained in three volumes of the *Remedial Investigation Report for Lee Acres Landfill.*

The Lee Acres Landfill was located up-gradient of the Site and operated as a county landfill from 1962 to 1986. The landfill location is shown in Figure 1. Solid wastes were disposed in trenches, and a series of lagoons were used for disposal of a variety of liquid wastes. The New Mexico Oil Conservation Division (NMOCD) sampled the lagoons in 1985 and showed the liquids in the impoundments contained a variety of chlorinated solvents, petroleum constituents, heavy metals and salts. In April 1985, a breach in the dike of the lagoons released the liquid wastes into an arroyo that flows across from the refinery and the down-stream Lee Acres Subdivision (Figure 1). The NMOCD and the New Mexico Environment Department (NMED) identified contaminated water in private water wells in the Lee Acres Subdivision. The NMOCD required Giant Industries, Arizona (Giant, the former owner of the refinery) to perform a groundwater investigation

related to the refinery's activities, and the NMED required the Bureau of Land Management (BLM) to investigate contaminated water downgradient of the landfill. The investigations identified two separate plumes of contaminated groundwater that became commingled across the refinery and into the Lee Acres Subdivision.

Groundwater contaminants documented in the refinery plume included phase-separated hydrocarbons (PSH) and dissolved phase petroleum products. The dissolved-phase constituents included benzene, toluene, ethyl-benzene and total xylenes (BTEX), naphthalene and 1,2 dichloroethane (EDC). The second groundwater contaminant plume was attributed to the landfill and contained 1,1 dichloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, tetrachloroethene, 1,1,1-trichloroethane, trichloroethene, total dissolved solids (TDS), chloride, sulfate and manganese. More information about landfill groundwater investigations can be found in the references listed at the end of this report.

In addition to the Lee Acres Landfill, historical investigations identified three other source areas within the On-Site Area and shown on Figure 2:

- Northern Area (Diesel Spill Area): 10,000 to 15,000 gallons of diesel leaked from a pipeline in 1985;
- Central Area (Truck Fueling Area): 15,000 gallons of diesel leaked from a pipeline in 1986; and
- Southern Area: representing a former catchment area for stormwater and a seep. This area may have been impacted by historic releases from the former fire fighting drill area.

In response to these findings, Giant installed a groundwater recovery, treatment and disposal system in stages beginning in 1988 to restrict the migration of contaminants and to remediate groundwater from both the On-Site and Off-Site areas. Forty-five monitoring/recovery wells were initially installed and designated GBR wells. Eleven of these wells were put into service as recovery wells and re-numbered as GRW wells. Seventeen monitoring/recovery wells designated as SHS wells were completed south of Highway 64. Through early 2009, four of the wells operated as recovery wells (Figure 2).

As groundwater quality improved, the system was gradually simplified. It currently consists of a series of groundwater monitoring wells, groundwater recovery wells, water treatment facilities and a treated water infiltration gallery (Figure 2). For several years, the groundwater remediation program operated in an operation and maintenance mode. Contaminates within the system's influent and effluent had been at non-detect levels for years. During late 2008, Western began a supplemental evaluation of the remedial operations, which included shutting down the system and sampling all groundwater wells under static conditions in an effort to redefine the area of impact and assess effectiveness of the system. Existing equipment was inspected and repaired to optimize system performance. Results from the sampling event were included in the 2008 Annual Report submitted to the NMOCD last year. On February 19, 2009 pumping and treating operations resumed.

1.3 SITE HYROGEOLOGY

Historical investigations indicate that the Site is located on weathered outcrops of the Nacimiento Formation, which is comprised of shales, sandstones and siltstones of Cretaceous-Teritary age. Immediately to the west of the Site is a large unnamed arroyo, which is underlain by 30 to 60 feet of Quaternary alluvial sediments. Older Quaternary terrace deposits of cobbles and boulders are observed on the interfluvial ridges adjacent to the arroyo. These terrace deposits may have been utilized as fill on the Site. The San Juan River Valley is located immediately to the south. Within the Site, the Nacimiento Formation has been eroded to form a paleo-channel that appears to be similar in morphology to the existing surface arroyo located to the west. The bedrock is overlain by recent alluvial deposits (gravel, sand, silt and clay), which extend to greater depths towards the southwest.

The subsurface geology is a controlling feature determining groundwater flow and contaminant migration at the Site. The Site as a whole is generally unconfined with some local areas potentially under semi-confined conditions. There are two aquifers of concern that are in direct hydraulic communication: 1) a shallow aquifer composed of recent alluvial materials and 2) a bedrock aquifer that exists in the underlying Nacimiento Formation. The alluvial aquifer has generally the higher permeability of the two aquifers and recovery wells completed within this aquifer have higher yields with larger radii of influence.

1.4 SCOPE OF WORK

The scope of work for this project included operations and maintenance of the groundwater pump and treat system, groundwater monitoring and tracking of the amount of groundwater treated between January 1, 2009 and December 31, 2009. A summary of field activities, analytical results from groundwater sampling, conclusions and recommendations are presented in the subsequent sections of this report.

SECTION 2.0

METHODOLOGY

2.1 GROUNDWATER FILTRATION SYSTEM

The groundwater remediation system at the Site is designed to pump impacted groundwater from the local aquifer through a series of recovery wells, which prevent migration of impacted water beyond the influence of the wells. Figure 3 illustrates the concept. The recovered groundwater is collected in a storage tank (Tank 102) and subsequently treated. The method of treatment used at the Site is carbon adsorption, where recovered water is pumped into a carbon matrix lining the tank.

The treated water is discharged into the aquifer through an infiltration trench or gallery. The infiltration trench consists of subsurface distribution system placed within gravel packs. Water infiltrates the surrounding strata and eventually makes its way back to the aquifer. The return of recovered water to the aquifer serves as a recharge mechanism. Figure 4 is a simplified diagram representation of groundwater recovery, treatment and disposal at the Site.

During 2008, Western conducted an assessment of the treatment system, which included turning the pumping system off for an extended period. The system was still off during January, but pumping resumed on February 19, 2009.

2.2 INSPECTIONS AND MAINTENANCE

Regular weekly inspections are performed to assure safe and efficient operation of the remediation system. The Control Panel, located in the Dispatch Office, serves to monitor and control the operation of the treatment system, while providing alarm and shutdown functions to safeguard against overflows and other undesirable events. The Control Panel is checked weekly. An inspection is also made in the control building at Tank 102, the infiltration gallery and each recovery well. Treated effluent volumes and flow rates are monitored weekly with a water meter that has been installed near the carbon adsorption tank. These values are recorded and compared with previous readings to ensure normal operation. Maintenance of the system includes repair and replacement of well pumps, replacement of filters in well houses, equipment lubrication, air compressor oil changes, listening for unusual pump and motor noise, inspecting the carbon pre-filter and repairing all equipment as required. Observations are recorded in a bound field logbook with the date, time and person recording the information noted. Meter readings are entered into a spreadsheet to calculate flow volumes and monitor flow rates. All equipment is inspected for leaks and malfunctions. The operator is familiar with the location of underground lines and notes any surface indication of underground leaks. Leaks of any size are noted and repaired.

2.3 GROUNDWATER MONITORING

Monitoring includes regular sampling of groundwater from select groundwater wells located within and south of the Site (Table 1). Following submittal of the previous annual report in April 2008, a revised sampling schedule was instituted in March 2009 based on recommendations made in that report. Water and product levels in each well are determined quarterly. This information is tabulated and utilized to prepare potentiometric surface maps. Oil absorbent socks are used to recover PSH. The socks are checked quarterly and replaced as necessary. The amount of product recovered by the socks is noted each time the socks are replaced.

Influent water is collected from a system valve before it enters Tank 102. Samples of effluent water are collected through a sample valve as treated water exits the carbon adsorption tank. Water is collected in appropriate pre-cleaned and/or pre-preserved sample bottles or glass vials. For United States Environmental Protection Agency (USEPA) Method 8260 analysis, vials are filled and capped with no air inside to prevent degradation of the sample. Samples are labeled with the date and time of collection, sample designation, project name, collector's name and parameters to be analyzed. They are immediately sealed and packed on ice. The samples are shipped to a laboratory in Albuquerque, New Mexico in a sealed cooler before designated holding times expire. Proper chain-of-custody procedures are followed with logs documenting the date and time sampled, sample number, type of sample, sampler's name, preservative used, analyses required and sampler's signatures.

For groundwater monitoring wells, depth to groundwater and total depth of wells is measured with a Keck oil-water interface probe prior to sampling. Presence of any PSH is also investigated using the interface probe. The interface probe is decontaminated with Alconox^{TM} soap and rinsed with de-ionized water before each measurement. The volume of water in the wells is calculated, and a minimum of three casing volumes of water is purged from each well using a disposable bailer or a permanent decontaminated PVC bailer. As water is extracted, pH, electric conductivity and temperature are monitored. Wells are purged until these properties stabilize or the well bails dry, indicating the purge water is representative of aquifer conditions. Stabilization is defined as three consecutive stable readings for each water property (±0.4 units for pH, ±10 percent for electric conductivity and ±2° Celsius for temperature). Once each monitoring well is properly purged, groundwater samples are collected in bottles or vials and shipped to the laboratory as described above. The method for sampling recovery wells is similar, the difference being that pumps installed within the wells are used to purge groundwater.

SECTION 3.0

RESULTS

3.1 QUARTERLY GROUNDWATER AND PRODUCT LEVELS

Groundwater monitoring wells have been installed throughout the On-Site and Off-Site areas to monitor groundwater quality and flow direction. Groundwater and PSH levels in each well are measured quarterly. These data are presented in Table 2 and are utilized to prepare the potentiometric surface maps shown in Figures 5-8. The maps are used to determine direction of groundwater flow and effectiveness of hydraulic control achieved by the recovery well system.

Groundwater flow is towards the southwest and is consistent throughout the year. Draw-down around recovery wells is evident when the remediation system is pumping water. Little to no drawdown at recovery wells was observed in January 2009, since the remediation system was off as part of an extensive study conducted during 2008. Pumping resumed on February 19, 2009 and groundwater levels in recovery wells declined as a result.

Thin accumulations of PSH were observed in groundwater monitoring wells from each of the source areas in the On-Site Area. Data collected are shown in Table 2 and isopach maps showing thickness of PSH throughout the year are shown in Figures 9 through 12. Within the Northern Area, PSH was measured in GBR-23 year-round, ranging in thickness from 0.03 feet to 0.93 feet. Small thicknesses (<0.1 feet) of PSH were detected in wells GBR-25 and GBR-26, but the presence of PSH in these wells was not consistent throughout the year.

In the Central Area, between 0.32 and 1.19 feet of product was measured in GBR-34 while the pumping system was in operation (last three quarters of 2009). When fluid levels were measured during the first quarter of 2009, the remediation system was off, and no product was detected in GBR-34, but 0.82 feet was detected in nearby GBR-22.

In January 2009, when the remediation system was off, monitoring wells adjacent to the Southern Area contained measurable thicknesses of PSH. GBR-7 contained 0.51 feet of PSH, GBR-20 contained 0.18 feet of PSH and GBR-8 contained 0.05 feet of PSH. The appearance of PSH in these wells corresponds with an overall drop in water levels. No PSH was detected in the Southern Area during the last three quarters of 2009.

The amount of PSH removed from wells is shown in Table 4. The amounts are estimations based on saturation of oil-absorbent socks when they are replaced. The total amount of product removed from the water table during 2009 (0.86 gallons) is also shown. Insufficient records exist to calculate a cumulative amount of product removed since Site remediation began.

3.2 GROUNDWATER SAMPLING

Laboratory results obtained from groundwater sampling at the Site during 2009 are shown in Table 3. Concentrations of analytes over New Mexico Water Quality Control Commission (NMWQCC) standards are shown in bold type. The standards are listed in the table for reference. Laboratory reports are included in Appendix A. The following list summarizes laboratory results:

- Volatile organic compounds were occasionally detected from groundwater samples, but in minor amounts that are well below NMWQCC standards.

- The poly-aromatic hydrocarbon (PAH), Naphthalene, was detected above NMWQCC standards in the annual sample collected from GRW-3. Naphthalene was not detected in any other well sampled.

- Selenium was not detected in the annual effluent sample; however, due to the required dilution matrix interference, the reported value is higher than the screening level. Elevated levels of the selenium and chromium were detected in wells GBR-32, GBR-48 and GBR-49. These wells are located within the arroyo adjacent to and up-gradient of the refinery.

- Chloride concentrations were above standards in four wells sampled in January. Only one of these wells (GBR-30) is located near a source area. The other wells (GBR-32, GBR-48 and GBR-49) are located up-gradient of the refinery.

- Sulfate and total dissolved solids (TDS) were over NMWQCC standards in groundwater samples from most wells and from the influent and effluent samples. Similar results for TDS have been reported from groundwater samples collected in the past, and high concentrations are observed up-gradient of the refinery.

Isopach maps and cross sections showing distribution of analytes are not included, because the sampling events do not sample wells from all current problem areas. Such a presentation of results would not be indicative of true conditions at the Site.

3.3 TOTAL VOLUME HISTORY

Table 5 presents the volume of groundwater managed for the year. Total volume pumped from each well is reported. It should be noted that the recovery wells did not pump water during the month of January and the first part of February during 2009. When the system was turned back on, pumping of SHS wells on the Off-Site Area was not resumed, as recommended in the 2008 annual report. A total of 9,455,408 gallons of groundwater was recovered, treated by carbon filtration and re-injected through an infiltration gallery. This volume represents a significant increase compared to 2008 volumes. The change is a result of pump maintenance and replacement conducted during the system assessment in late 2008.

SECTION 4.0

CONCLUSIONS

Influent and effluent water associated with the pump and treat system at the Site is consistently below standards, with the exception of TDS, sulfate and selenium, which are believed to be sourced up gradient of the refinery. This is confirmed by up-graident sampling results. The primary benefit of the system is a hydraulic barrier generated by the pumping action of the recovery wells. The barrier restricts migration of PSH and contaminants from moving off site.

Groundwater impacts are contained within the On-Site Area and are characterized by a thin accumulation of PSH. PSH is consistently evident in two source locations, the Northern Area and the Central Area. Presence and thickness of PSH within the Southern Area is controlled by pumping and discharging of groundwater at the Site, and PSH is not present in this area when the system is operational.

Groundwater from the Off-Site Area exhibited no PSH and no concentrations of contaminates, confirming that migration of pollutants is restricted by the pumping action.

High sulfate, chloride and TDS levels are historically characteristic of almost all wells at the Site and are related to a release at the Lee Acres Landfill in 1985. These analytes were identified in earlier studies as constituents within the groundwater contaminant plume that originated from the landfill. Previous investigations at the landfill reported elevated levels of chloride present in the water sampled from liquid waste lagoons (McQuillan, D. and Longmire, P. *Water Quality Investigations at the Lee Acres Landfill and Vicinity, San Juan County, New Mexico*), and the landfill accepted produced water from natural gas well operations in the San Juan Basin. Chloride is currently evident in up-gradient, as well as downgradient, monitoring well samples. During initial landfill investigations, the up-gradient area near GBR-32, GBR-48, GBR-49 and GBR-50 was identified as the "northern containment slug." Groundwater representative of this area contained TDS concentrations ranging from 2125-6068 mg/kg, sulfate concentrations ranging from 1920-5830 mg/kg and chloride concentrations ranging from 14.7-2110 mg/kg (Roy F. Weston, Inc., *Remedial Investigation Report for Lee Acres Landfill, Volume 1*).

Chromium and selenium were detected in up-gradient wells during the annual sampling in January 2009. Selenium may also be present in the remedition system effluent within the On-Site Area. Previous studies conducted for the Lee Acres Landfill identified chromium and selenium in groundwater sampled up-gradient of the landfill. *Remedial Investigation Report for Lee Acres Landfill, Volume 1*states that up-gradient background alluvial aquifer contains elevated levels of chromium and suggests an unidentified source that is unrelated to the landfill or the refinery.

Additional sampling parameters (cations, anions, general chemistry, metals and PAHs) have shown consistently low or normal values for many years in almost all groundwater monitoring conducted at the Site.

In the Northern Area, it is apparent that the recovery wells have been successful in removing the PSH and impacted dissolved phase hydrocarbons in the areas close to the recovery wells, but the radius of influence is limited. In this area, the potentiometric surface lies in the bedrock aquifer (Nacimiento Formation). There currently appears to be a thin (less than 1 foot) accumulation of PSH in the Northern Area that is not within the capture zone of the northern recovery wells.

The Central Area is located immediately south of the Northern Area. Product recovery continued at GBR-34 and GBR-22, and measured thicknesses of PSH in those wells decreased throughout the year. Approximately 0.18 ounces of PSH was removed from GBR-22, and approximately 0.10 ounces were removed from GBR-34.

Significant progress has been made in remediation of the Southern Area, with little PSH detected most of the year. Some accumulations were measured in the northeastern portion of this area (GBR-7, GBR-8 and GBR-20) during the first quarter of 2009 when the system was not operational. GRW-4 is located a short distance down-gradient and probably captures most contaminates that flow through this area.

SECTION 5.0

RECOMMENDATIONS

The remediation system at the Site has been successful in reducing phase-separated hydrocarbon accumulations and dissolved phase contaminants in the groundwater. Currently, it is most effective at controlling migration of remaining contaminants. Continued treatment and groundwater monitoring is recommended as follows:

- Continue to operate and maintain the remediation system;
- Continue passive PSH recovery using oil absorbent socks;
- Continue to monitor groundwater flow behavior and quality.

SECTION 6.0

REFERENCES

AEPCO, Inc. *Site Investigation Report for Lee Acres Site, San Juan County, New Mexico (Final Report)*, BLM Contract NO. AA852-CT5-26, U.S. Department of the Interior, BLM, Washing D.C., May 1986.

McQuillan, D. and Longmire, P. *Water Quality Investigations at the Lee Acres Landfill and Vicinity, San Juan County, New Mexico*, Environmental Division, Ground Water/Hazardous Waste Bureau, Santa Fe, NM, February 1986.

Peter, K., Williams, R.A. and King, K.W. *Hydrogeologic Characteristics of the Lee Acres Landfill Area, San Juan County, New Mexico*, U.S. Geological Survey Water Resources Investigations Report 87-4246, Albuquerque, NM, 1987

Roy F. Weston, Inc. *Remedial Investigation Report for Lee Acres Landfill, Volume 1*, Albuquerque, NM, September 1992.

Roy F. Weston, Inc. *Proposed Emergency Action for Lee Acres Landfill*, Albuquerque, NM, November 1990.

Geoscience Consultants, LTD., *Soil and Groundwater Investigations and Remedial Action Plan, Giant Industries, Inc. Bloomfield Refinery, Bloomfield, New Mexico*, 1987.

Lodestar Services, Inc., *Annual Data Report Former Giant Bloomfield Refinery*, March 2009.

RPS JDC Consulting, *Review of Groundwater Remediation System, Old Giant Bloomfield Refinery, Bloomfield, New Mexico*, June 2009.

TABLES

Western Refining

TABLE 1

2009 SAMPLING SCHEDULE
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
System Influent		VOC GWC		VOC GWC			VOC GWC				VOC GWC	
System Effluent		VOC GWC Metals PAH		VOC GWC			VOC GWC				VOC GWC	
GRW-3	VOC GWC PAH											
GRW-6	VOC GWC PAH											
GBR-17	VOC GWC PAH											
GBR-24D	VOC GWC PAH											
GBR-30	VOC GWC PAH											
GBR-31	VOC GWC PAH											
GBR-32	VOC GWC Metals											
GBR-48	VOC GWC Metals											
GBR-49	VOC GWC Metals											
GBR-50	VOC GWC Metals											
GBR-51	VOC GWC											
GBR-52	VOC GWC											
SHS-1	VOC GWC											
SHS-2	VOC GWC											
SHS-5	VOC GWC											
SHS-8	VOC GWC											
SHS-9	VOC GWC											
SHS-18	VOC GWC											
SHS-19	VOC GWC											

Notes:

VOC - volatile organic compounds analyzed by USEPA Method 8260B

GWC - groundwater characteristics: alkalinity, electric conductivity, pH, total dissolved solids, cation/anion balance

PAH - polyaromatic hydrocarbons analyzed by USEPA Method 8310

Metals - RCRA 8 Metals

Influent and Effluent was sampled in February instead of January because the treatment system was restarted on February 19, 2009

TABLE 2

GROUNDWATER ELEVATIONS AND PSH LEVELS
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

Well Number	Wellhead Elevation (ft)	January 2009				April 2009				July 2009				October 2009			
		Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted GWEL (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted GWEL (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted GWEL (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted GWEL (ft)
GRW-1	5394.30	43.12	-	-	5351.18	58.53	-	-	5335.77	60.10	-	-	5334.20	39.77	-	-	5354.53
GRW-2	5391.28	44.70	-	-	5346.58	50.71	-	-	5340.57	51.35	-	-	5339.93	41.65	-	-	5349.63
GRW-3	5388.77	45.11	-	-	5343.66	54.20	-	-	5334.57	52.95	-	-	5335.82	53.42	-	-	5335.35
GRW-4	5390.02	43.96	-	-	5346.06	49.02	-	-	5341.00	48.05	-	-	5341.97	58.80	-	-	5331.22
GRW-5	5390.56	44.35	-	-	5346.21	65.34	-	-	5325.22	65.35	-	-	5325.21	66.91	-	-	5323.65
GRW-6	5390.81	43.75	-	-	5347.06	50.12	-	-	5340.69	48.73	-	-	5342.08	47.95	-	-	5342.86
GRW-9	5395.70	42.02	-	-	5353.68	49.03	-	-	5346.67	52.02	-	-	5343.68	51.48	-	-	5344.22
GRW-10	5395.02	38.62	-	-	5356.40	60.20	-	-	5334.82	55.23	-	-	5339.79	41.32	-	-	5353.70
GRW-11	5397.85	33.24	-	-	5364.61	56.13	-	-	5341.72	57.88	-	-	5339.97	58.03	-	-	5339.82
GRW-12	5397.24	37.63	-	-	5359.61	45.43	-	-	5351.81	41.84	-	-	5355.40	41.12	-	-	5356.12
GRW-13	5396.90	35.72	-	-	5361.18	56.14	-	-	5340.76	56.60	-	-	5340.30	56.30	-	-	5340.60
GBR-5	5395.07	41.32	-	-	5353.75	27.52	-	-	5367.55	26.40	-	-	5368.67	28.10	-	-	5366.97
GBR-7	5395.85	41.88	41.37	0.51	5354.38	30.98	-	-	5364.87	30.69	-	-	5365.16	31.27	-	-	5364.58
GBR-8	5390.50	44.02	43.97	0.05	5346.52	43.55	-	-	5346.95	41.86	-	-	5348.64	42.51	-	-	5347.99
GBR-9	5389.92	43.98	-	-	5345.94	48.45	-	-	5341.47	47.13	-	-	5342.79	47.75	-	-	5342.17
GBR-10	5390.57	47.29	-	-	5343.28	47.28	-	-	5343.29	47.27	-	-	5343.30	47.28	-	-	5343.29
GBR-11	5389.43	43.30	-	-	5346.13	43.18	-	-	5346.25	42.00	-	-	5347.43	47.55	-	-	5341.88
GBR-13	5393.04	43.82	-	-	5349.22	41.85	-	-	5351.19	41.15	-	-	5351.89	42.23	-	-	5350.81
GBR-15	5397.99	35.75	-	-	5362.24	41.07	-	-	5356.92	40.46	-	-	5357.53	39.92	-	-	5358.07
GBR-17	5402.69	37.68	-	-	5365.01	37.85	-	-	5364.84	37.94	-	-	5364.75	38.09	-	-	5364.60
GBR-18	5421.68	36.89	-	-	5384.79	36.41	-	-	5385.27	36.58	-	-	5385.10	36.91	-	-	5384.77
GBR-19	5393.83	40.13	-	-	5353.70	41.25	-	-	5352.58	41.10	-	-	5352.73	40.68	-	-	5353.15
GBR-20	5393.47	41.46	41.28	0.18	5352.15	36.55	-	-	5356.92	36.44	-	-	5357.03	31.66	-	-	5361.81
GBR-21D	5400.19	37.39	-	-	5362.80	41.26	-	-	5358.93	41.15	-	-	5359.04	40.87	-	-	5359.32
GBR-21S	5400.65	32.77	-	-	5367.88	33.33	-	-	5367.32	34.18	-	-	5366.47	no water	-	-	-
GBR-22	5395.91	no water	37.91	0.82	-	no water	-	-	-	no water	-	-	-	no water	-	-	-
GBR-23	5403.72	30.71	30.68	0.03	5373.03	33.83	32.90	0.93	5370.63	36.14	35.72	0.42	5367.92	36.05	35.84	0.21	5367.67
GBR-24D	5396.77	32.58	-	-	5364.19	34.69	-	-	5362.08	34.40	-	-	5362.37	33.94	-	-	5362.83
GBR-24S	5396.08	31.98	-	-	5364.10	33.73	-	-	5362.35	33.26	-	-	5362.82	32.67	-	-	5363.41
GBR-25	5397.03	36.21	-	-	5360.82	38.07	-	-	5358.96	38.62	38.56	0.06	5358.46	39.16	39.08	0.08	5357.87
GBR-26	5396.72	33.62	33.61	0.01	5363.11	36.67	-	-	5360.05	36.35	36.34	0.01	5360.38	36.14	-	-	5360.58
GBR-30	5395.59	35.34	-	-	5360.25	35.64	-	-	5359.95	35.63	-	-	5359.96	35.75	-	-	5359.84
GBR-31	5396.58	35.82	-	-	5360.76	36.22	-	-	5360.36	36.12	-	-	5360.46	36.10	-	-	5360.48
GBR-32	5414.86	38.17	-	-	5376.69	38.10	-	-	5376.76	38.27	-	-	5376.59	38.62	-	-	5376.24
GBR-33	5396.28	36.96	-	-	5359.32	37.83	-	-	5358.45	37.74	-	-	5358.54	37.55	-	-	5358.73
GBR-34	5394.00	36.88	-	-	5357.12	39.00	37.81	1.19	5355.95	39.32	38.48	0.84	5355.35	38.52	38.20	0.32	5355.48
GBR-35	5393.66	37.02	-	-	5356.64	37.77	-	-	5355.89	37.83	-	-	5355.83	37.64	-	-	5356.02
GBR-39	5397.55	35.40	-	-	5362.15	40.44	-	-	5357.11	39.93	-	-	5357.62	39.40	-	-	5358.15
GBR-40	5400.76	35.30	-	-	5365.46	35.24	-	-	5365.52	36.20	-	-	5364.56	32.87	-	-	5367.89
GBR-41	5396.35	32.03	-	-	5364.32	28.90	-	-	5367.45	30.61	-	-	5365.74	27.63	-	-	5368.72
GBR-48	5413.90	39.70	-	-	5374.20	39.60	-	-	5374.30	39.80	-	-	5374.10	39.98	-	-	5373.92
GBR-49	*	36.16	-	-	-	36.11	-	-	-	36.27	-	-	-	36.54	-	-	-
GBR-50	*	35.41	-	-	-	35.35	-	-	-	35.53	-	-	-	35.87	-	-	-
GBR-51	5389.68	40.18	-	-	5349.50	42.62	-	-	5347.06	42.15	-	-	5347.53	41.48	-	-	5348.20
GBR-52	5387.74	42.38	-	-	5345.36	41.56	-	-	5346.18	40.07	-	-	5347.67	40.34	-	-	5347.40

TABLE 2
GROUNDWATER ELEVATIONS AND PSH LEVELS
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

Well Number	Wellhead Elevation (ft)	January 2009				April 2009				July 2009				October 2009			
		Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted GWEL (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted GWEL (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted GWEL (ft)	Depth to Water (ft)	Depth to Product (ft)	Product Thickness (ft)	Adjusted GWEL (ft)
SHS-1	5383.54	40.15	-	-	5343.39	40.27	-	-	5343.27	39.92	-	-	5343.62	40.27	-	-	5343.27
SHS-2	5381.66	41.03	-	-	5340.63	41.25	-	-	5340.41	40.96	-	-	5340.70	40.73	-	-	5340.93
SHS-3	5383.33	**	-	-	-	**	-	-	-	**	-	-	-	**	-	-	-
SHS-4	5383.62	42.51	-	-	5341.11	42.62	-	-	5341.00	42.27	-	-	5341.35	42.61	-	-	5341.01
SHS-5	5378.36	39.62	-	-	5338.74	39.63	-	-	5338.73	39.42	-	-	5338.94	39.79	-	-	5338.57
SHS-6	5378.17	39.34	-	-	5338.83	39.35	-	-	5338.82	39.16	-	-	5339.01	39.52	-	-	5338.65
SHS-8	5380.25	40.03	-	-	5340.22	40.12	-	-	5340.13	39.82	-	-	5340.43	40.19	-	-	5340.06
SHS-9	5380.79	39.12	-	-	5341.67	pump	-	-	-	38.83	-	-	5341.96	39.14	-	-	5341.65
SHS-10	5373.80	36.83	-	-	5336.97	37.58	-	-	5336.22	36.86	-	-	5336.94	37.30	-	-	5336.50
SHS-12	5373.94	40.28	-	-	5333.66	40.02	-	-	5333.92	40.12	-	-	5333.82	40.72	-	-	5333.22
SHS-13	5367.81	36.82	-	-	5330.99	36.45	-	-	5331.36	36.67	-	-	5331.14	37.24	-	-	5330.57
SHS-14	5367.07	35.01	-	-	5332.06	35.62	-	-	5331.45	34.96	-	-	5332.11	35.61	-	-	5331.46
SHS-15	5366.21	33.82	-	-	5332.39	33.40	-	-	5332.81	33.85	-	-	5332.36	34.44	-	-	5331.77
SHS-16	5362.58	31.62	-	-	5330.96	33.21	-	-	5329.37	31.61	-	-	5330.97	32.08	-	-	5330.50
SHS-17	5364.35	33.56	-	-	5330.79	31.28	-	-	5333.07	33.49	-	-	5330.86	34.06	-	-	5330.29
SHS-18	5373.64	40.27	-	-	5333.37	39.96	-	-	5333.68	40.18	-	-	5333.46	40.73	-	-	5332.91
SHS-19	5378.89	39.61	-	-	5339.28	39.36	-	-	5339.53	39.13	-	-	5339.76	39.51	-	-	5339.38

Notes:

PSH - phase-separated hydrocarbon

GWEL - groundwater elevation

* Top-of-casing elevation is unknown

** Well is damaged by a tree root

The remediation system was off from January 1, 2009 until February 19, 2009.

TABLE 3

GROUNDWATER ANALYTICAL RESULTS
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

Analyte	NMWQCC Standard	Unit	INFLUENT				EFFLUENT			
			Feb 2009	Apr 2009	Jul 2009	Oct 2009	Feb 2009	Apr 2009	Jul 2009	Oct 2009
USEPA Method 8260B										
benzene	10	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
toluene	750	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ethylbenzene	750	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
methyl tert-butyl ether (MTBE)		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-trimethylbenzene	620	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-trimethylbenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloroethane (EDC)	10	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dibromoethane (EDB)		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
naphthalene		ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1-methylnaphthalene		ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
2-methylnaphthalene		ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
acetone		ug/L	<10	<10	<10	<10	<10	<10	<10	<10
bromobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
bromodichloromethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
bromoform		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
bromomethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-butanone		ug/L	<10	<10	<10	<10	<10	<10	<10	<10
carbon disulfide		ug/L	<10	<10	<10	<10	<10	<10	<10	<10
carbon tetrachloride	10	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
chlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
chloroethane		ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
chloroform	100	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-chlorotoluene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-chlorotoluene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-DCE		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-dichloropropene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dibromo-3-chloropropane		ug/L	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0	<2.0	<2.0
dibromochloromethane		ug/L	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0	<1.0
dibromomethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-dichlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-dichlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichlorodifluoromethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethane	25	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethene	5	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloropropane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-dichloropropane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2-dichloropropane		ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-dichloropropene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
hexachlorobutadene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-hexanone		ug/L	<10	<10	<10	<10	<10	<10	<10	<10
isopropylbenzene		ug/L	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0
4-isopropytoluene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-methyl-2-pentanone		ug/L	<10	<10	<10	<10	<10	<10	<10	<10
methylene chloride	100	ug/L	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
n-butylbenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-propylbenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sac-butylbenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
styrene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-butylbenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-tetrachloroethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	10	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
tetrachloroethene (PCE)	20	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-DCE		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-dichloropropene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-trichlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-trichlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-trichloroethane	60	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloroethane	10	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trichloroethene (TCE)	100	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trichlorofluoromethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-trichloropropane		ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
vinyl chloride	1	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
xylenes, total	620	ug/L	<1.5	2.1	2.4	<1.5	<1.5	<1.5	<1.5	<1.5

TABLE 3

GROUNDWATER ANALYTICAL RESULTS
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

Analyte	NMWQCC Standard	Unit	INFLUENT				EFFLUENT			
			Feb 2009	Apr 2009	Jul 2009	Oct 2009	Feb 2009	Apr 2009	Jul 2009	Oct 2009
General Chemistry										
total alkalinity		mg/L	260	300	420	440	260	310	420	430
carbonate		mg/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
bicarbonate		mg/L	260	300	420	440	260	310	420	430
specific conductance		umhos/cm	3300	3100	3000	3200	3300	3100	3100	3200
pH	6-9	pH Units	7.35	7.35	7.50	7.59	7.32	7.47	7.85	7.62
total dissolved solids	1000	mg/L	**2800**	**2700**	**2700**	**2700**	**2800**	**2800**	**2700**	**2700**
Anions - Method 300.0										
fluroide		mg/L	0.80	0.72	0.80	0.90	0.79	0.87	0.84	0.88
chloride	250	mg/L	81	87	88	85	82	85	87	83
bromide		mg/L	0.50	<0.5	<0.50	0.18	0.51	0.93	<0.5	<0.5
nitrate + nitrite		mg/L	1.2	0.38	0.51	0.51	1.1	0.37	0.51	0.51
phosphorus		mg/L	<0.5	1.0	2.7	<0.5	<0.5	<0.5	2.3	<0.5
sulfate	600	mg/L	**1800**	**1800**	**1600**	**1400**	**1800**	**1600**	**1500**	**1500**
Cations - Method 6010B										
calcium		mg/L	370	340	300	290	370	340	310	290
iron		mg/L	NT	0.04	1.1	0.066	<0.02	0.03	0.49	0.021
magnesium		mg/L	29	26	32	32	29	27	33	32
manganese		mg/L	NT	0.37	0.54	0.58	0.27	0.36	<0.1	0.58
potassium		mg/L	3.1	3.2	2.7	3.1	3.1	3.0	2.7	3.2
sodium		mg/L	490	420	510	500	480	410	510	490
Other Metals - Method 6010B										
mercury		mg/L					<0.0002			
arsenic	0.1	mg/L					<0.02			
barium		mg/L					<0.02			
cadmium	0.01	mg/L					<0.002			
chromium	0.05	mg/L					<0.006			
lead	0.05	mg/L					<0.005			
selenium	0.05	mg/L					<0.25*			
silver	0.05	mg/L					<0.005			
PAH - Method 8310										
naphthalene	30	ug/L					<2.0			
1-methylnaphthalene		ug/L					<2.0			
2-methylnaphthalene		ug/L					<2.0			
acenaphthylene		ug/L					<2.5			
acenaphthene		ug/L					<5.0			
fluorene		ug/L					<0.8			
phenanthrene		ug/L					<0.6			
anthracene		ug/L					<0.6			
fluoranthene		ug/L					<0.3			
pyrene		ug/L					<0.3			
benz(a)anthracene		ug/L					<0.07			
chrysene		ug/L					<0.2			
benzo(b)fluoranthene		ug/L					<0.1			
benzo(k)fluoranthene		ug/L					<0.07			
benzo(a)pyrene	0.7	ug/L					<0.07			
dibenz(a,h)anthracene		ug/L					<0.07			
benzo(g,h,i)perylene		ug/L					<0.08			
indeno(1,2,3-cd)pyrene		ug/L					<0.08			

TABLE 3

GROUNDWATER ANALYTICAL RESULTS
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

Analyte	NMWQCC Standard	Unit	GRW-3 Jan 13, 2009	GRW-3 Jan 28, 2009	GRW-6 Jan 13, 2009	GRW-6 Jan 28, 2009	GBR-17 Jan 2009	GBR-24D Jan 2009	GBR-30 Jan 2009	GBR-31 Jan 2009	GBR-32 Jan 2009	GBR-48 Jan 2009	GBR-49 Jan 2009
USEPA Method 8260B													
benzene	10	ug/L	<1.0		<1.0		<1.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0
toluene	750	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ethylbenzene	750	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
methyl tert-butyl ether (MTBE)		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-trimethylbenzene	620	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-trimethylbenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloroethane (EDC)	10	ug/L	<1.0		<1.0		<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dibromoethane (EDB)		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
naphthalene		ug/L	<2.0		<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1-methylnaphthalene		ug/L	<4.0		<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
2-methylnaphthalene		ug/L	<4.0		<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
acetone		ug/L	<10		<10		<10	13	<10	<10	<10	<10	<10
bromobenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
bromodichloromethane		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
bromoform		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
bromomethane		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-butanone		ug/L	<10		<10		<10	<10	<10	<10	<10	<10	<10
carbon disulfide		ug/L	<10		<10		<10	<10	<10	<10	<10	<10	<10
carbon tetrachloride	10	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
chlorobenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
chloroethane		ug/L	<2.0		<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
chloroform	100	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-chlorotoluene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-chlorotoluene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-DCE		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-dichloropropene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dibromo-3-chloropropane		ug/L	<2.0		<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
dibromochloromethane		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dibromomethane		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichlorobenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-dichlorobenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-dichlorobenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichlorodifluoromethane		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethane	25	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethene	5	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloropropane		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-dichloropropane		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2-dichloropropane		ug/L	<2.0		<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-dichloropropene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
hexachlorobutadene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-hexanone		ug/L	<10		<10		<10	<10	<10	<10	<10	<10	<10
isopropylbenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-isopropytoluene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-methyl-2-pentanone		ug/L	<10		<10		<10	<10	<10	<10	<10	<10	<10
methylene chloride	100	ug/L	<3.0		<3.0		<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
n-butylbenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-propylbenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sac-butylbenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
styrene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-butylbenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-tetrachloroethane		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	10	ug/L	<2.0		<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
tetrachloroethene (PCE)	20	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	1.3	1.2	2.4
trans-1,2-DCE		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-dichloropropene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-trichlorobenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-trichlorobenzene		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-trichloroethane	60	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloroethane	10	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trichloroethene (TCE)	100	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trichlorofluoromethane		ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-trichloropropane		ug/L	<2.0		<2.0		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
vinyl chloride	1	ug/L	<1.0		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
xylenes, total	620	ug/L	<1.5		<1.5		<1.5	1.8	<1.5	<1.5	<1.5	<1.5	<1.5

TABLE 3

GROUNDWATER ANALYTICAL RESULTS
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

Analyte	NMWQCC Standard	Unit	GRW-3 Jan 13, 2009	GRW-3 Jan 28, 2009	GRW-6 Jan 13, 2009	GRW-6 Jan 28, 2009	GBR-17 Jan 2009	GBR-24D Jan 2009	GBR-30 Jan 2009	GBR-31 Jan 2009	GBR-32 Jan 2009	GBR-48 Jan 2009	GBR-49 Jan 2009
General Chemistry													
total alkalinity		mg/L	670		520		210	230	260	230	350	280	240
carbonate		mg/L	<4.0		<4.0		<2.0	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0
bicarbonate		mg/L	670		520		210	230	260	230	350	280	240
specific conductance		umhos/cm	2600		3000		2300	3900	3700	3300	5000	3900	4000
pH	6-9	pH Units	7.13		7.11		7.39	7.33	7.26	7.30	7.57	7.28	6.93
total dissolved solids	1000	mg/L	**1900**		**2400**		**1800**	**3100**	**3200**	**2600**	**4100**	**2700**	**3300**
Anions - Method 300.0													
fluroide		mg/L	0.85		0.55		0.76	0.98	0.74	0.68	0.57	0.68	0.70
chloride	250	mg/L	75		100		40	230	**270**	83	**530**	**560**	**280**
bromide		mg/L	0.56		0.78		0.22	1.2	0.96	0.29	1.3	2.2	0.74
nitrate + nitrite		mg/L	<1.0		<1.0		3.9	<1.0	0.85	1.3	2.0	4.4	0.11
phosphorus		mg/L	<0.5		<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
sulfate	600	mg/L	**790**		**1100**		**1200**	**2100**	**1700**	**1700**	**2100**	**1300**	**2100**
Cations - Method 6010B													
calcium		mg/L									480	300	420
iron		mg/L									<0.1	<0.10	1.4
magnesium		mg/L									50	32	40
manganese		mg/L									0.7	0.012	3.5
potassium		mg/L									4.2	NT	2.8
sodium		mg/L									710	550	540
Other Metals - Method 6010B													
mercury		mg/L									<0.0002	<0.0002	<0.0002
arsenic	0.1	mg/L									<0.02	<0.10	<0.02
barium		mg/L									0.029	0.072	0.021
cadmium	0.01	mg/L									<0.005	<0.005	<0.005
chromium	0.05	mg/L									**0.10**	**0.43**	**0.056**
lead	0.05	mg/L									<0.005	<0.005	<0.005
selenium	0.05	mg/L									**0.059**	**0.10**	0.047
silver	0.05	mg/L									<0.01	<0.01	<0.01
PAH - Method 8310													
naphthalene	30	ug/L	<4.0	**39**	<4.0	<4.0	<2.0	<2.0	<2.0	<2.0			
1-methylnaphthalene		ug/L	<4.0	<4.0	<4.0	<4.0	<2.0	<2.0	<2.0	<2.0			
2-methylnaphthalene		ug/L	<4.0	<4.0	<4.0	<4.0	<2.0	<2.0	<2.0	<2.0			
acenaphthylene		ug/L	<5.0	<5.0	<5.0	<5.0	<2.5	<2.5	<2.5	<2.5			
acenaphthene		ug/L	<10	<10	<10	<10	<5.0	<5.0	<5.0	<5.0			
fluorene		ug/L	<1.6	3.5	<1.6	<1.6	<0.8	<0.8	<0.8	<0.8			
phenanthrene		ug/L	<1.2	<1.2	<1.2	<1.2	<0.6	<0.6	<0.6	<0.6			
anthracene		ug/L	<1.2	<1.2	<1.2	<1.2	<0.6	<0.6	<0.6	<0.6			
fluoranthene		ug/L	<0.60	<0.60	<0.60	<0.60	<0.3	<0.3	<0.3	<0.3			
pyrene		ug/L	<0.60	<0.60	<0.60	<0.60	<0.3	<0.3	<0.3	<0.3			
benz(a)anthracene		ug/L	<0.14	<0.14	<0.14	<0.14	<0.07	<0.07	<0.07	<0.07			
chrysene		ug/L	<0.40	<0.4	<0.4	<0.40	<0.2	<0.2	<0.2	<0.2			
benzo(b)fluoranthene		ug/L	<0.20	<0.2	<0.2	<0.20	<0.1	<0.1	<0.1	<0.1			
benzo(k)fluoranthene		ug/L	<0.14	<0.14	<0.14	<0.14	<0.07	<0.07	<0.07	<0.07			
benzo(a)pyrene	0.7	ug/L	<0.14	<0.14	<0.14	<0.14	<0.07	<0.07	<0.07	<0.07			
dibenz(a,h)anthracene		ug/L	<0.14	<0.14	<0.14	<0.14	<0.07	<0.07	<0.07	<0.07			
benzo(g,h,i)perylene		ug/L	<0.16	<0.16	<0.16	<0.16	<0.08	<0.08	<0.08	<0.08			
indeno(1,2,3-cd)pyrene		ug/L	<0.16	<0.16	<0.16	<0.16	<0.08	<0.08	<0.08	<0.08			

TABLE 3

GROUNDWATER ANALYTICAL RESULTS
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

Analyte	NMWQCC Standard	Unit	GBR-50	GBR-51	GBR-52	SHS-1	SHS-2	SHS-5	SHS-8	SHS-9	SHS-18	SHS-19
			Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009	Jan 2009
USEPA Method 8260B												
benzene	10	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
toluene	750	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
ethylbenzene	750	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.6	<1.0	<1.0	<1.0
methyl tert-butyl ether (MTBE)		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-trimethylbenzene	620	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3,5-trimethylbenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloroethane (EDC)	10	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dibromoethane (EDB)		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
naphthalene		ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1-methylnaphthalene		ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
2-methylnaphthalene		ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
acetone		ug/L	<10	<10	<10	<10	<10	<10	<10	14	<10	<10
bromobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
bromodichloromethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
bromoform		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
bromomethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-butanone		ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
carbon disulfide		ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
carbon tetrachloride	10	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
chlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
chloroethane		ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
chloroform	100	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-chlorotoluene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-chlorotoluene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,2-DCE		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
cis-1,3-dichloropropene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dibromo-3-chloropropane		ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
dibromochloromethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dibromomethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-dichlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-dichlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
dichlorodifluoromethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethane	25	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethene	5	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloropropane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,3-dichloropropane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2,2-dichloropropane		ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-dichloropropene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
hexachlorobutadene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-hexanone		ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
isopropylbenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0	<1.0
4-isopropyltoluene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4-methyl-2-pentanone		ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
methylene chloride	100	ug/L	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
n-butylbenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
n-propylbenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
sac-butylbenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0
styrene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
tert-butylbenzene		ug/L	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1,2-tetrachloroethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2,2-tetrachloroethane	10	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
tetrachloroethene (PCE)	20	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,2-DCE		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trans-1,3-dichloropropene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-trichlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,4-trichlorobenzene		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,1-trichloroethane	60	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1,2-trichloroethane	10	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trichloroethene (TCE)	100	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
trichlorofluoromethane		ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2,3-trichloropropane		ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
vinyl chloride	1	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
xylenes, total	620	ug/L	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5

TABLE 3

GROUNDWATER ANALYTICAL RESULTS
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

Analyte	NMWQCC Standard	Unit	GBR-50 Jan 2009	GBR-51 Jan 2009	GBR-52 Jan 2009	SHS-1 Jan 2009	SHS-2 Jan 2009	SHS-5 Jan 2009	SHS-8 Jan 2009	SHS-9 Jan 2009	SHS-18 Jan 2009	SHS-19 Jan 2009
General Chemistry												
total alkalinity		mg/L	210	210	190	970	230	210	770	980	760	690
carbonate		mg/L	<4.0	<2.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<2.0	<4.0
bicarbonate		mg/L	210	210	190	970	230	210	770	980	760	690
specific conductance		umhos/cm	3000	2800	3100	2100	4000	2900	1700	2000	2500	2500
pH	6-9	pH Units	7.18	7.21	7.29	7.33	6.36	7.28	6.83	7.33	7.11	7.17
total dissolved solids	1000	mg/L	**2400**	**2200**	**2500**	**1200**	**3700**	**3000**	**1100**	**1300**	**1800**	**1800**
Anions - Method 300.0												
fluroide		mg/L	0.65	0.78	0.88	1.1	0.63	0.8	1.2	0.65	1	0.88
chloride	250	mg/L	44	55	61	89	190	57	110	98	95	93
bromide		mg/L	0.52	0.67	0.43	0.54	2.3	0.74	0.67	0.88	0.93	0.62
nitrate + nitrite		mg/L	3.2	5.8	5.6	0.11	<0.1	4.1	<0.1	<1.0	<1.0	<1.0
phosphorus		mg/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5
sulfate	600	mg/L	**1700**	**1400**	**1700**	85	**2100**	**1400**	39	49	550	**630**
Cations - Method 6010B												
calcium		mg/L	390									
iron		mg/L	0.41									
magnesium		mg/L	29									
manganese		mg/L	0.05									
potassium		mg/L	NT									
sodium		mg/L	340									
Other Metals - Method 6010B												
mercury		mg/L	<0.0002									
arsenic	0.1	mg/L	<0.02									
barium		mg/L	0.034									
cadmium	0.01	mg/L	0.0083									
chromium	0.05	mg/L	0.018									
lead	0.05	mg/L	0.0059									
selenium	0.05	mg/L	0.05									
silver	0.05	mg/L	<0.01									
PAH - Method 8310												
naphthalene	30	ug/L										
1-methylnaphthalene		ug/L										
2-methylnaphthalene		ug/L										
acenaphthylene		ug/L										
acenaphthene		ug/L										
fluorene		ug/L										
phenanthrene		ug/L										
anthracene		ug/L										
fluoranthene		ug/L										
pyrene		ug/L										
benz(a)anthracene		ug/L										
chrysene		ug/L										
benzo(b)fluoranthene		ug/L										
benzo(k)fluoranthene		ug/L										
benzo(a)pyrene	0.7	ug/L										
dibenz(a,h)anthracene		ug/L										
benzo(g,h,i)perylene		ug/L										
indeno(1,2,3-cd)pyrene		ug/L										

Notes

*Due to required dilution matrix interference, reported value is higher than screening level.

NMWQCC - New Mexico Water Quality Control Commission

ug/L - micrograms per liter

mg/L - milligrams per liter

uhmos/cm - microhms per centimeter

NT - lab inadvertently did not analyze

GRW-3 and GRW-6 were inadvertently sampled for PAH's in January 2009.

TABLE 4

ESTIMATED VOLUMES OF PSH REMOVED FROM MONITORING WELLS FORMER GIANT BLOOMFIELD REFINERY WESTERN REFINING

Well Number	Volume Removed (ounces)				
	Jan-09	Apr-09	Jul-09	Oct-09	Total
GBR-7		0.07			0.07
GBR-22	0.13	0.05			0.18
GBR-23	0.10	0.05	0.10	0.05	0.30
GBR-25				0.07	0.07
GBR-26	0.07		0.07		0.14
GBR-34			0.05	0.05	0.10
Total Volume Removed (gallons)					0.86

Notes:

PSH - phase-separated hydrocarbon

TABLE 5

RECOVERY WELL VOLUME TABULATION
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

Well Number	Total Volume Pumped (Gallons)
GRW-1	208,668
GRW-2	98,597
GRW-3	130,001
GRW-4	157,837
GRW-5	134,819
GRW-6	127,499
GRW-9	64,779
GRW-10	8,295,461
GRW-11	191,523
GRW-12	6,329
GRW-13	39,895
Total Volume Pumped (Gallons)	**9,455,408**

FIGURES

Western Refining

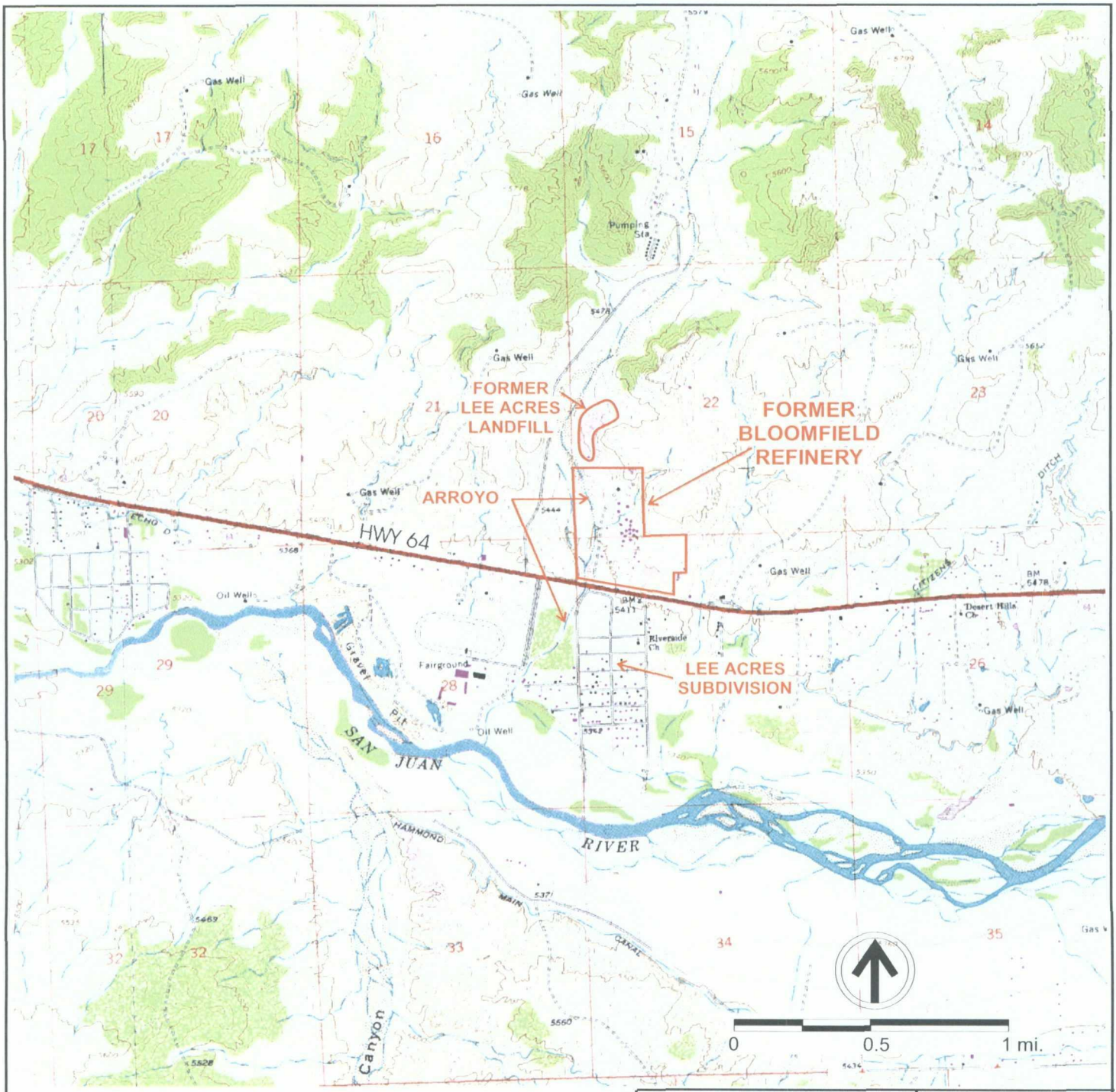

FIGURE 1
REGIONAL MAP
FORMER GIANT
BLOOMFIELD REFINERY
WESTERN REFINING

LTE

03/2010

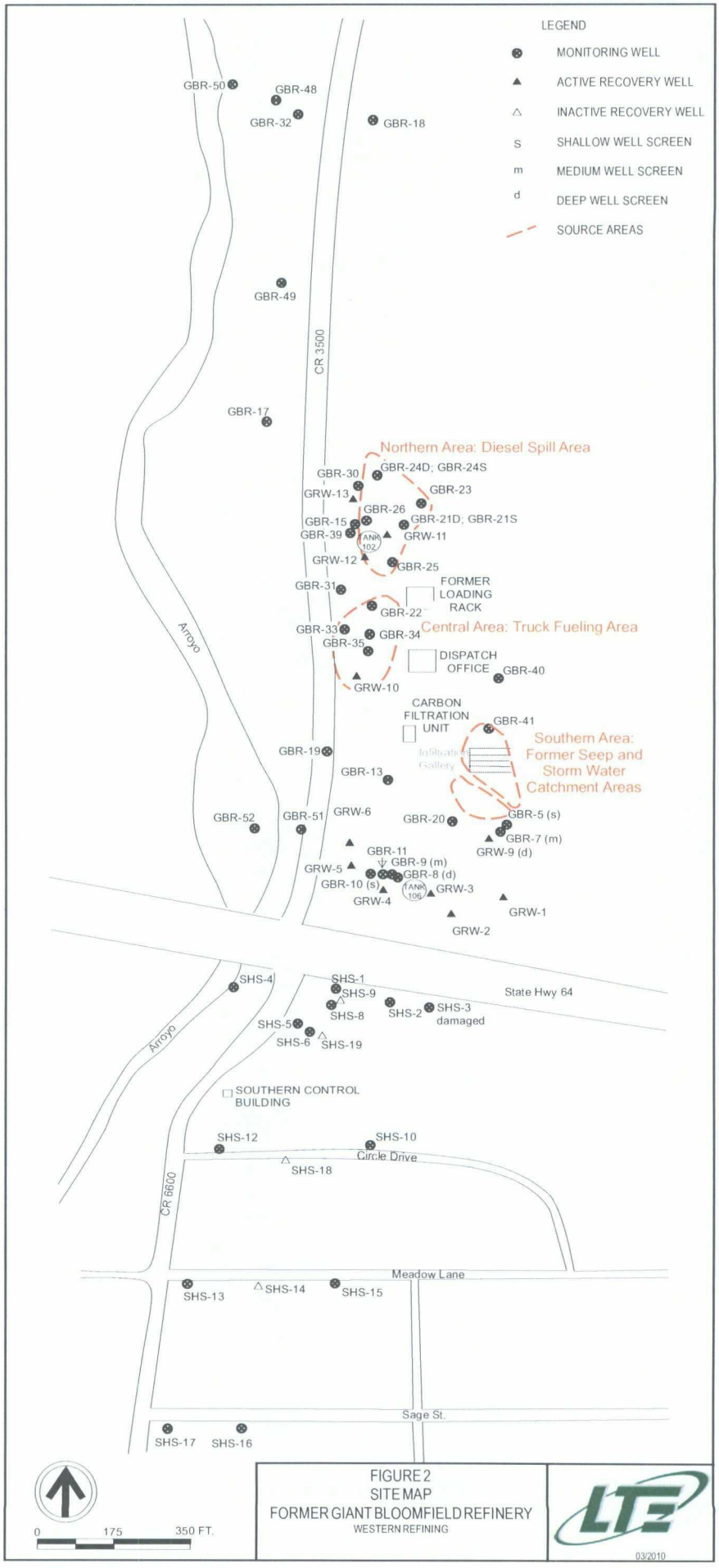

FIGURE 2
SITE MAP
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

LTE

03/2010

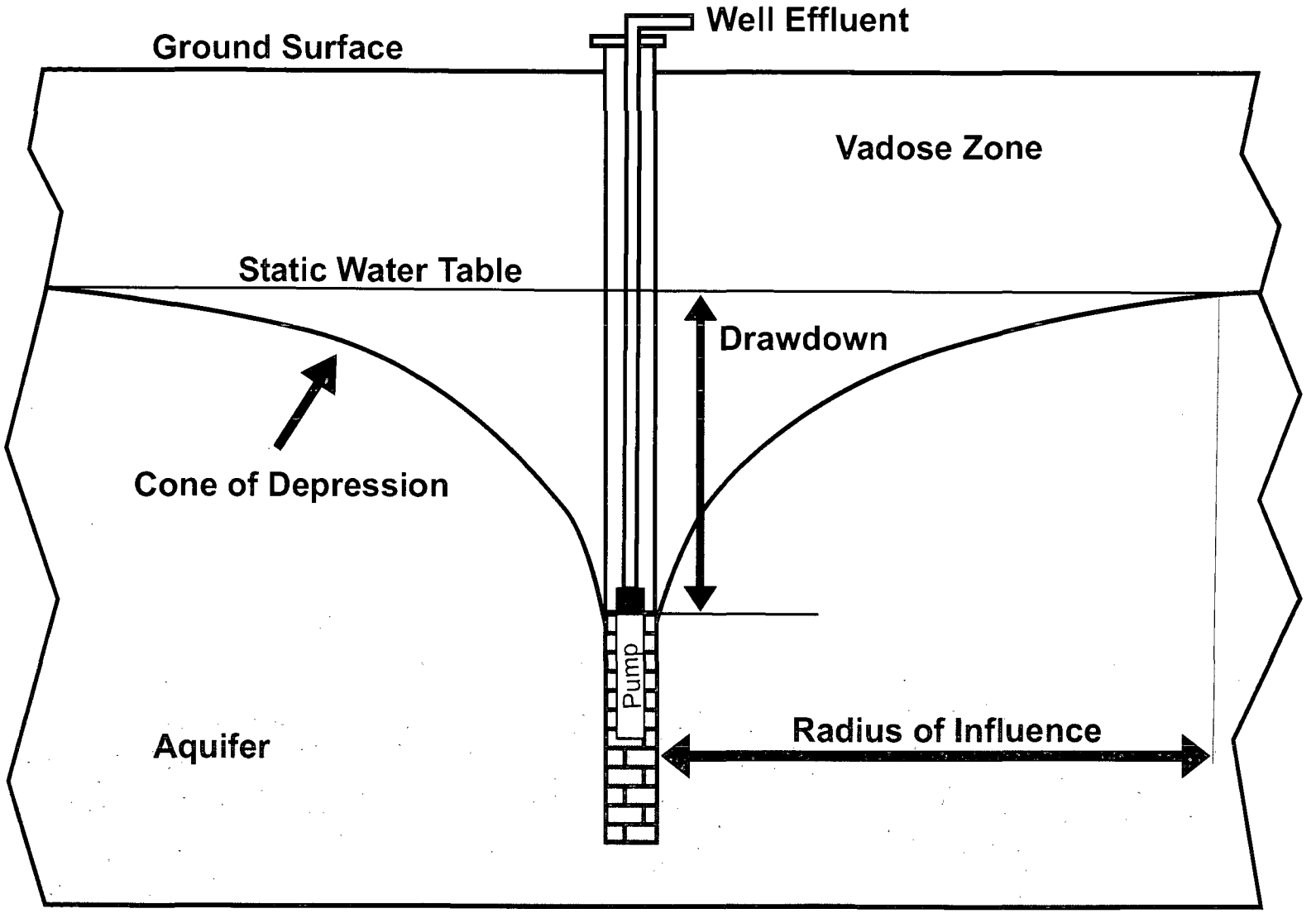

FIGURE 3
HYDRAULIC BARRIER CREATED BY
PUMPING IN AN AQUIFER
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

LTE

03/2010

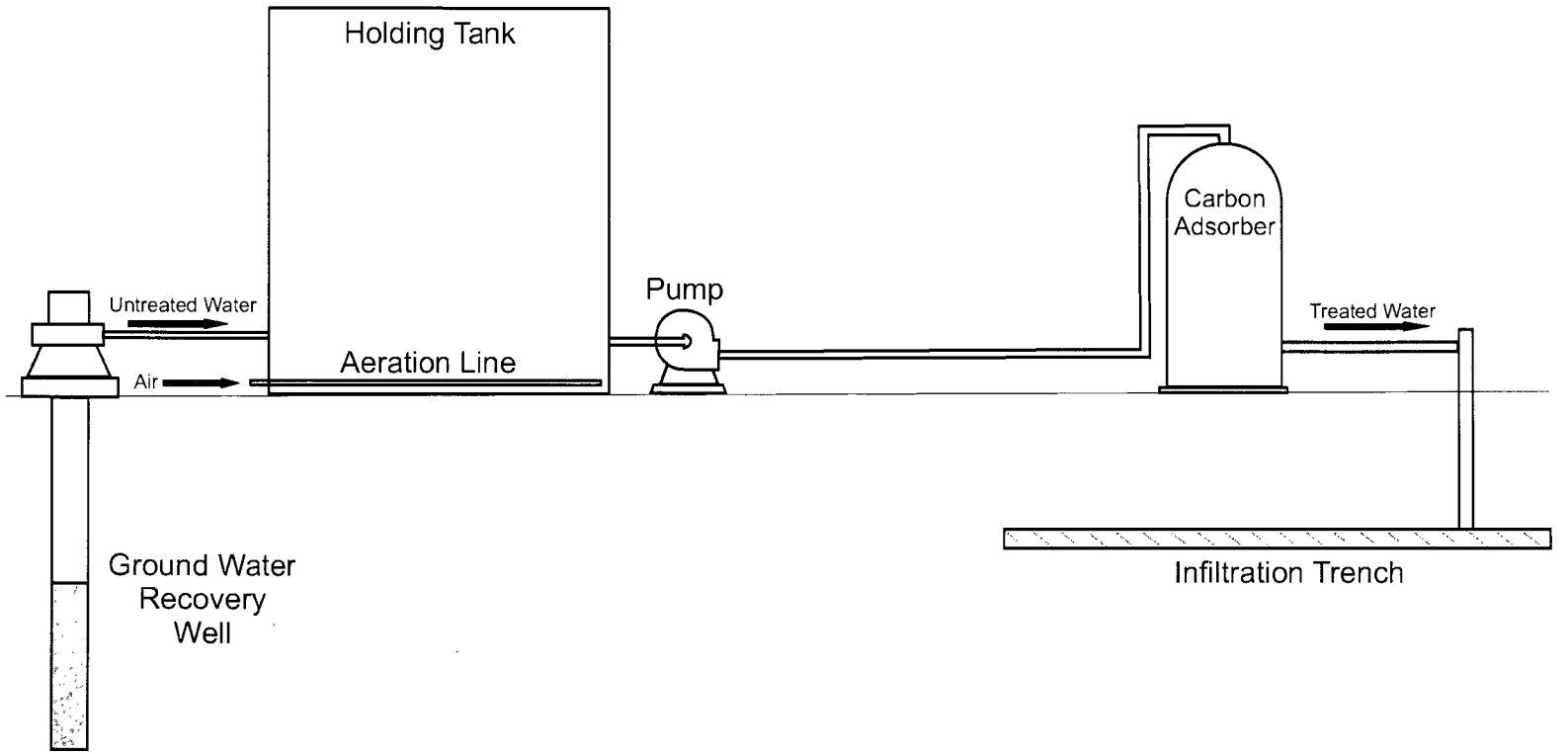

FIGURE 4
SIMPLIFIED REPRESENTATION OF THE GROUNDWATER RECOVERY, TREATMENT AND DISPOSAL SYSTEM
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

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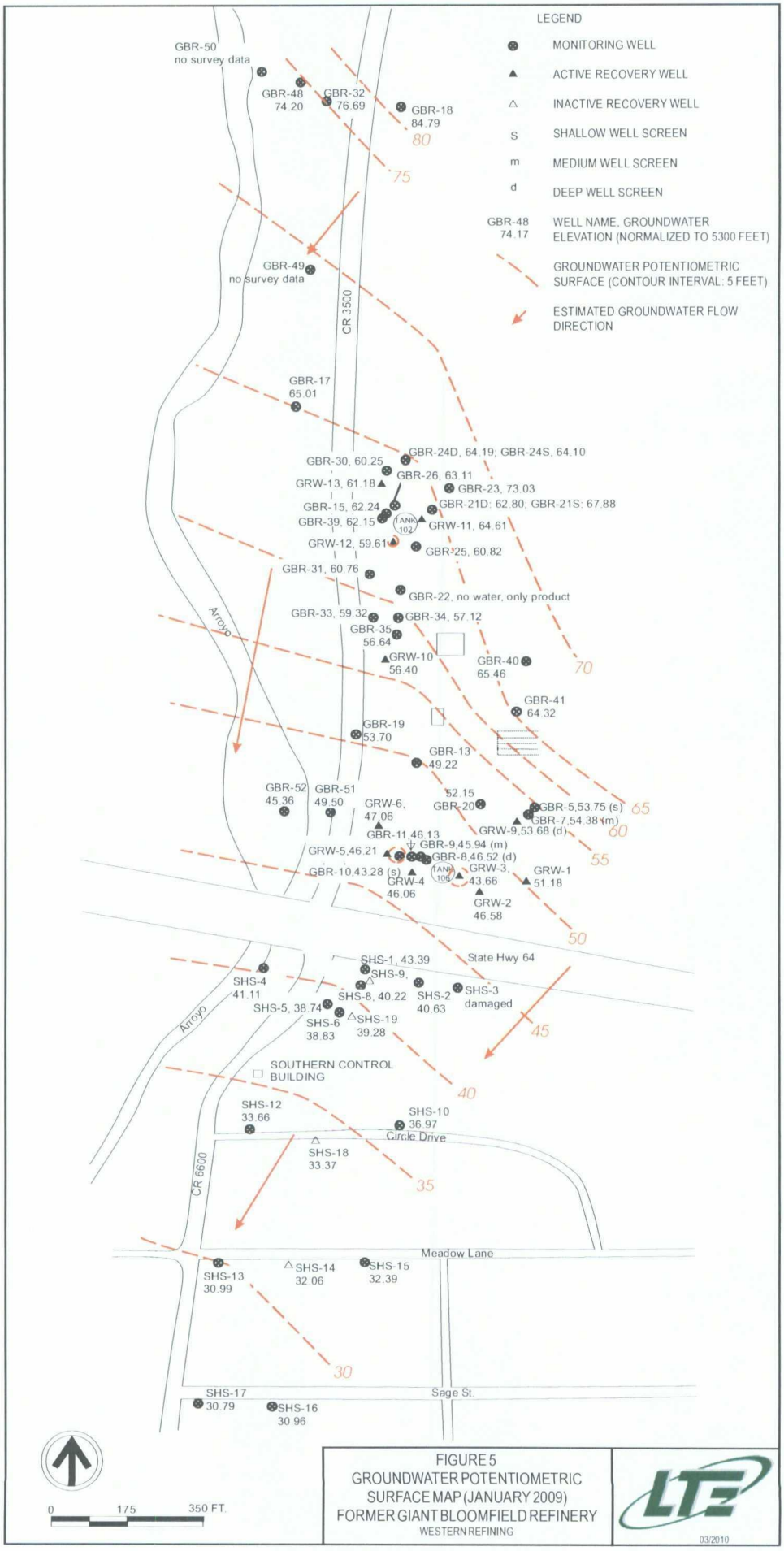

FIGURE 5
GROUNDWATER POTENTIOMETRIC SURFACE MAP (JANUARY 2009)
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

LT Environmental
03/2010

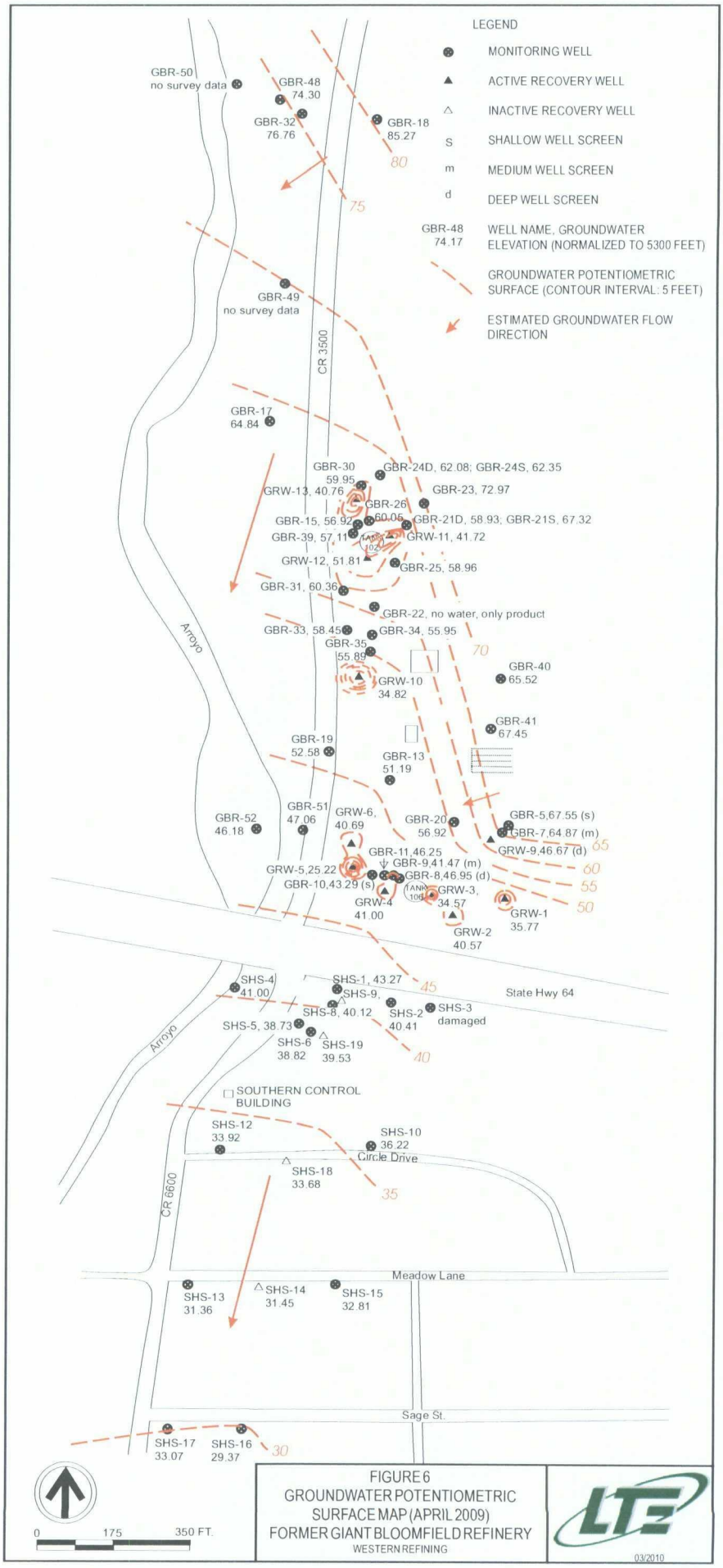

FIGURE 6
GROUNDWATER POTENTIOMETRIC SURFACE MAP (APRIL 2009)
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

03/2010

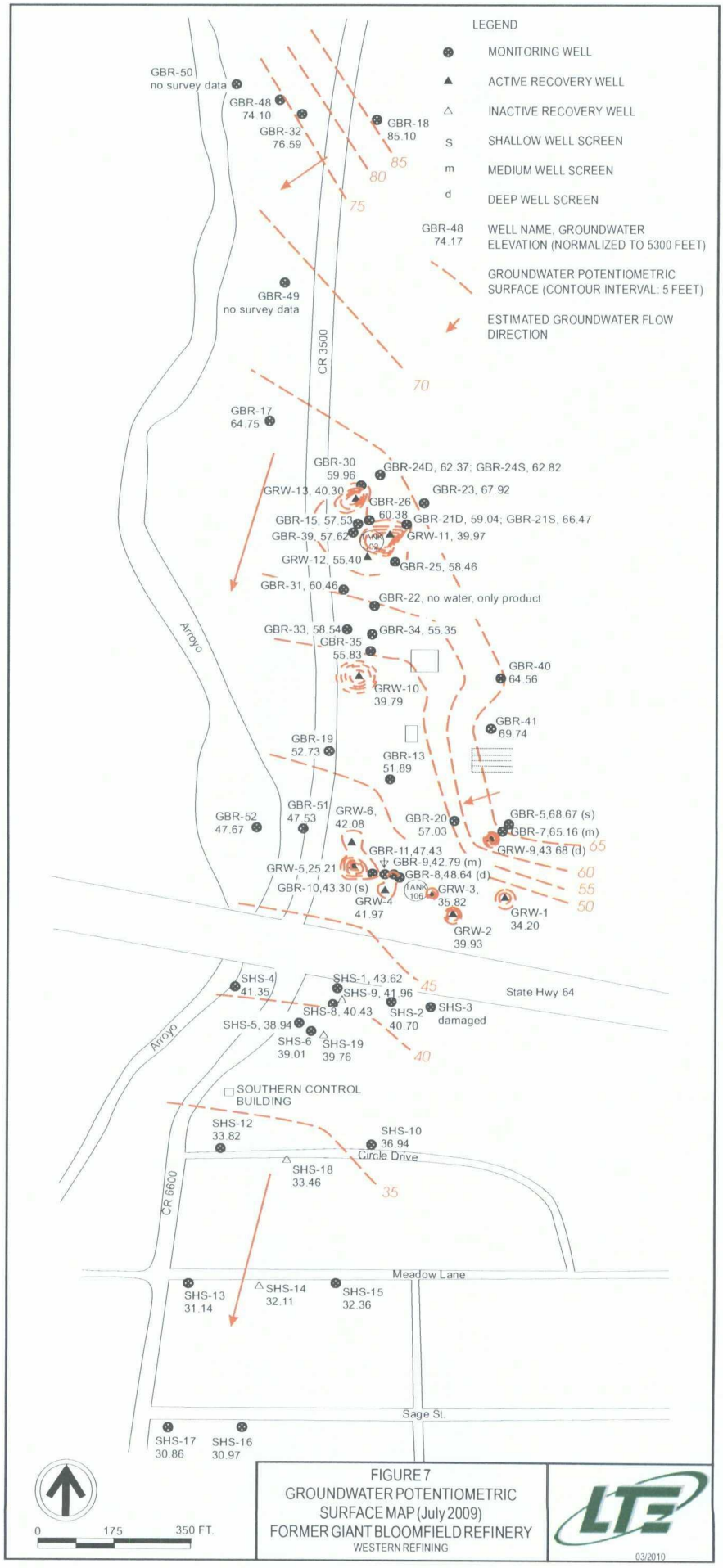

FIGURE 7
GROUNDWATER POTENTIOMETRIC SURFACE MAP (July 2009)
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

LTE

03/2010

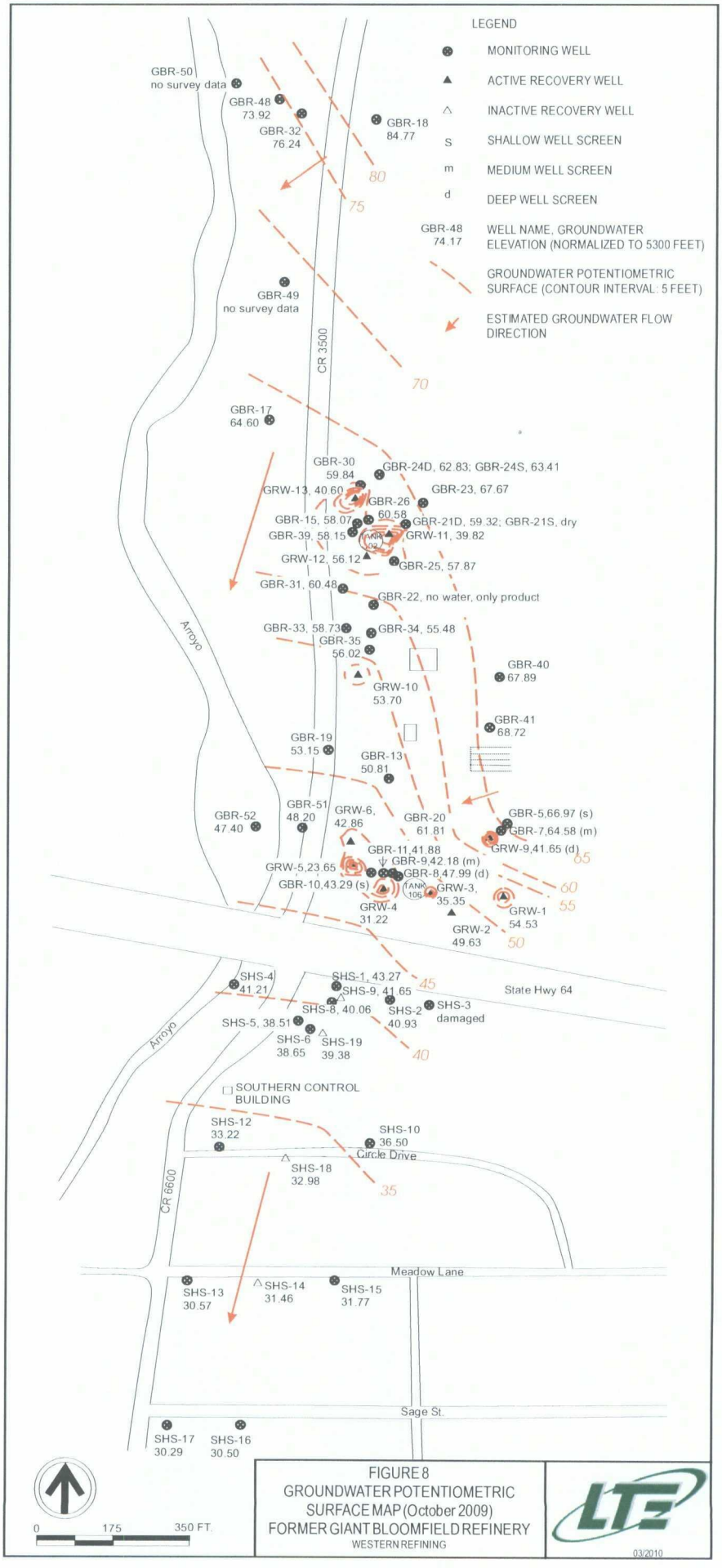

FIGURE 8
GROUNDWATER POTENTIOMETRIC SURFACE MAP (October 2009)
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

LTE

03/2010

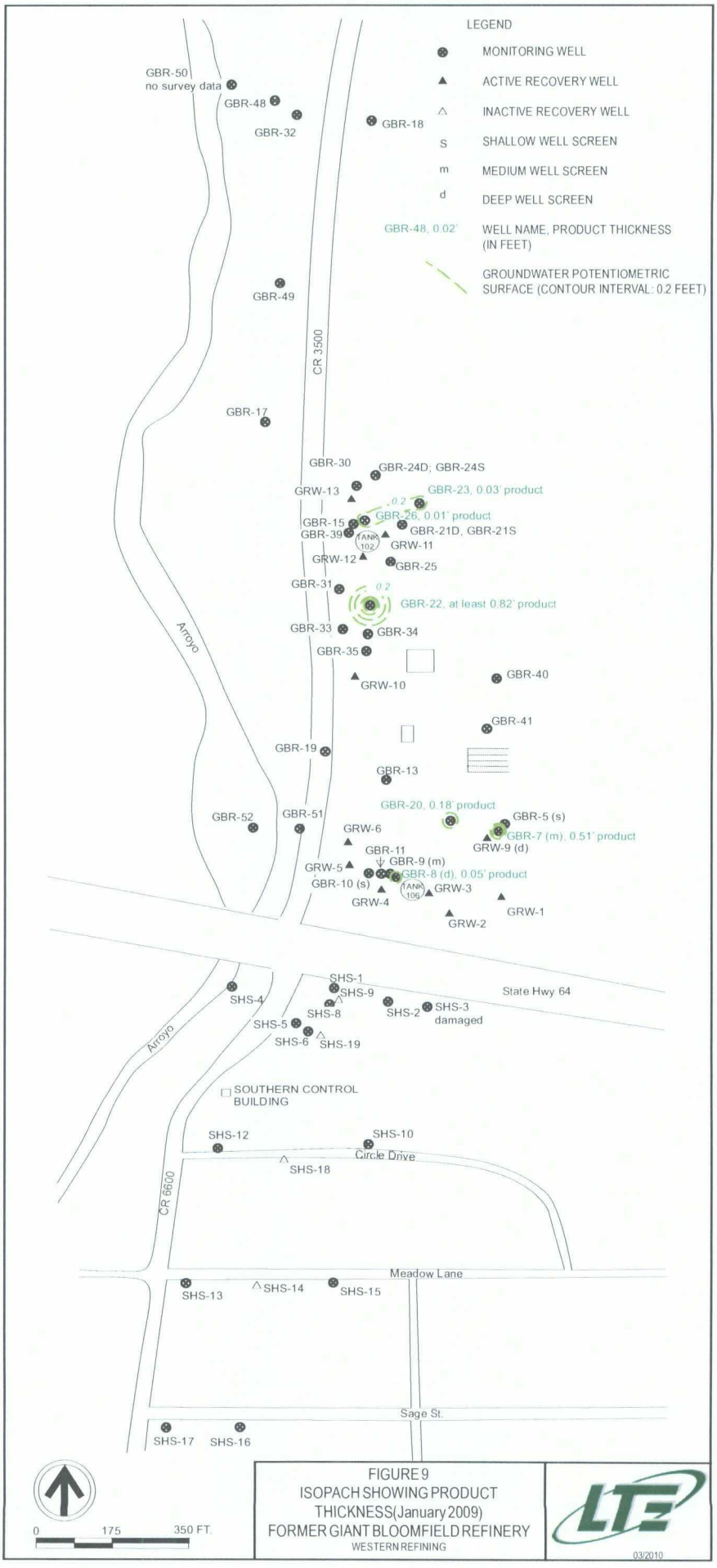

FIGURE 9
ISOPACH SHOWING PRODUCT THICKNESS(January 2009)
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

03/2010

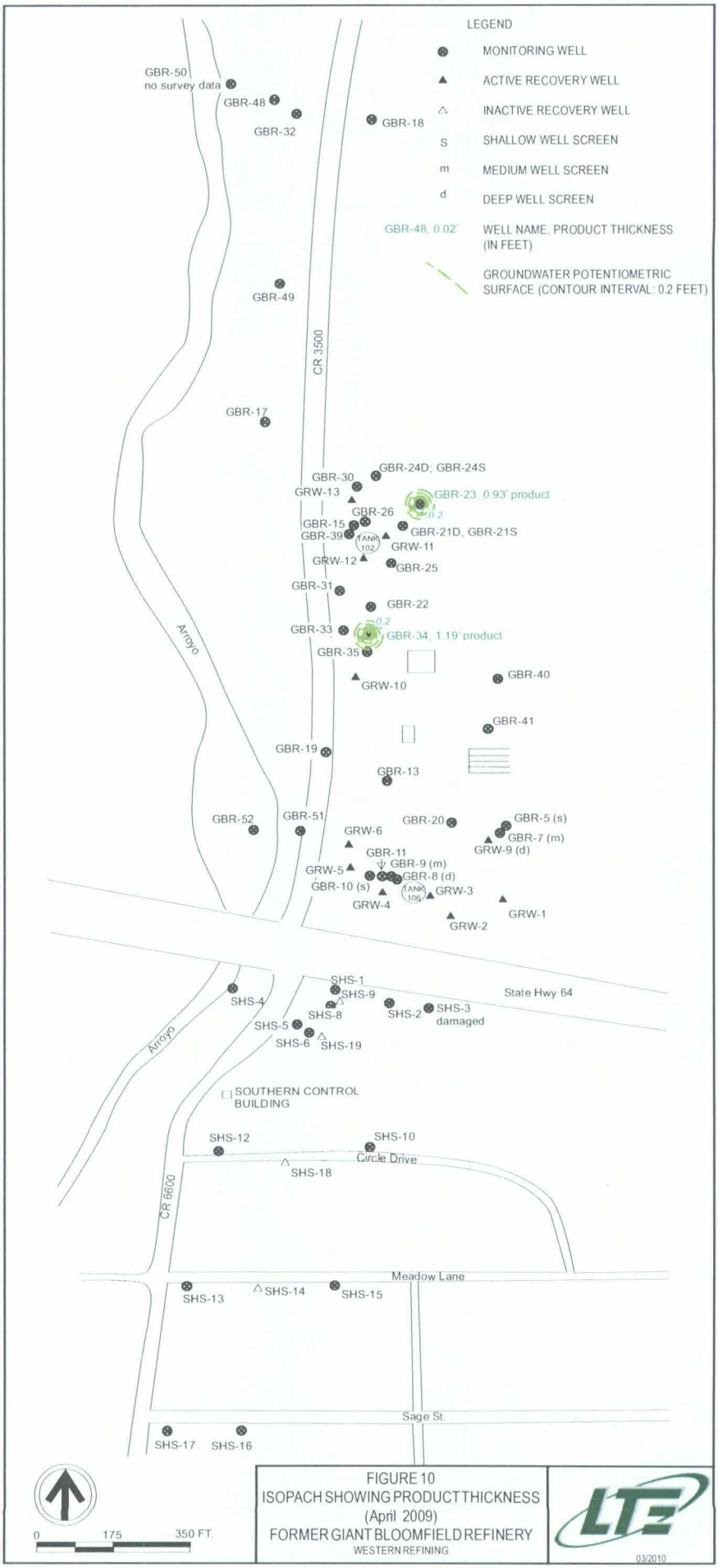

FIGURE 10
ISOPACH SHOWING PRODUCT THICKNESS
(April 2009)
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

LTE

03/2010

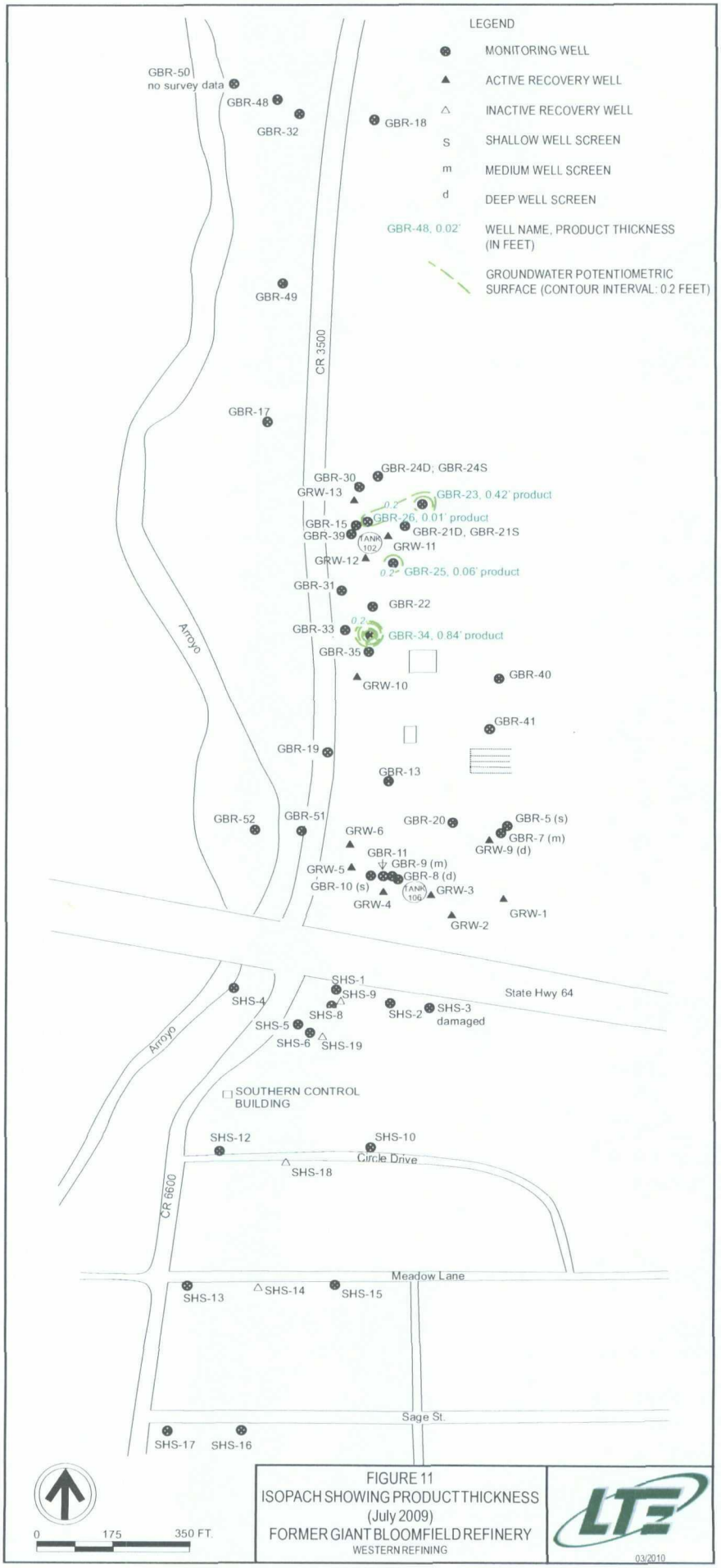

FIGURE 11
ISOPACH SHOWING PRODUCT THICKNESS
(July 2009)
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

03/2010

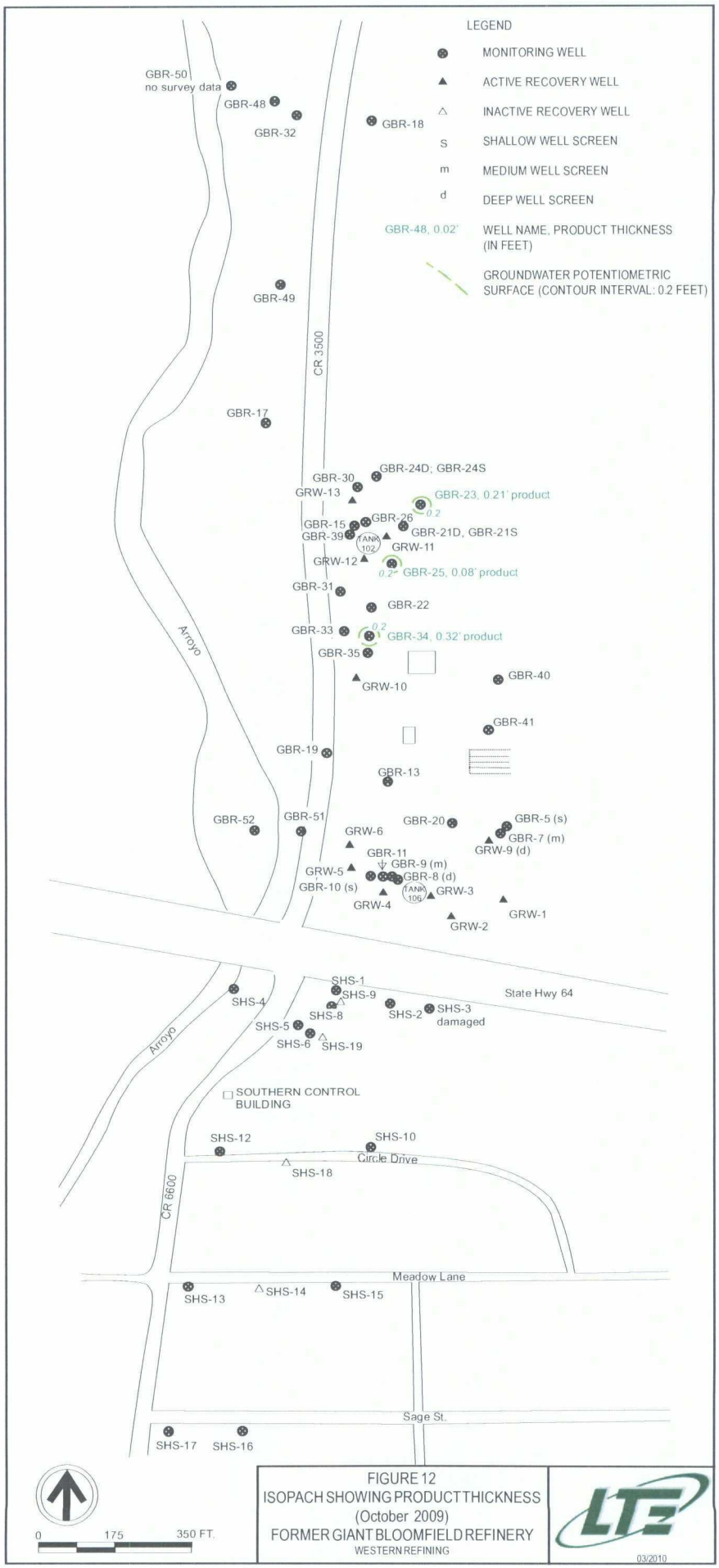

FIGURE 12
ISOPACH SHOWING PRODUCT THICKNESS
(October 2009)
FORMER GIANT BLOOMFIELD REFINERY
WESTERN REFINING

LTE

03/2010

APPENDIX A

LABORATORY REPORTS

Western Refining

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, February 03, 2009

Ashley Ager
Western Refining Southwest, Inc.
#50 CR 4990
Bloomfield, NM 87413

TEL: (970) 946-1093
FAX (505) 632-3911

RE: Giant Former Refinery/Giant Bloomfield Refinery

Order No.: 0901240

Dear Ashley Ager:

Hall Environmental Analysis Laboratory, Inc. received 14 sample(s) on 1/16/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

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 # NM10000I
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-18
Lab Order:	0901240	**Collection Date:**	1/14/2009 12:28:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	1.0	0.10		mg/L	1	1/24/2009 1:35:18 AM
Chloride	95	1.0		mg/L	10	1/24/2009 1:52:42 AM
Bromide	0.93	0.10		mg/L	1	1/24/2009 1:35:18 AM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/26/2009 7:10:14 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/24/2009 1:35:18 AM
Sulfate	550	5.0		mg/L	10	1/24/2009 1:52:42 AM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Toluene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Ethylbenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Naphthalene	ND	2.0		µg/L	1	1/16/2009 10:27:46 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/16/2009 10:27:46 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/16/2009 10:27:46 PM
Acetone	ND	10		µg/L	1	1/16/2009 10:27:46 PM
Bromobenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Bromoform	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Bromomethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
2-Butanone	ND	10		µg/L	1	1/16/2009 10:27:46 PM
Carbon disulfide	ND	10		µg/L	1	1/16/2009 10:27:46 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Chlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Chloroethane	ND	2.0		µg/L	1	1/16/2009 10:27:46 PM
Chloroform	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Chloromethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/16/2009 10:27:46 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Dibromomethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-18
Lab Order:	0901240	**Collection Date:**	1/14/2009 12:28:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
1,1-Dichloroethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/16/2009 10:27:46 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
2-Hexanone	ND	10		µg/L	1	1/16/2009 10:27:46 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/16/2009 10:27:46 PM
Methylene Chloride	ND	3.0		µg/L	1	1/16/2009 10:27:46 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Styrene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/16/2009 10:27:46 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/16/2009 10:27:46 PM
Vinyl chloride	ND	1.0		µg/L	1	1/16/2009 10:27:46 PM
Xylenes, Total	ND	1.5		µg/L	1	1/16/2009 10:27:46 PM
Surr: 1,2-Dichloroethane-d4	62.4	68.1-123		%REC	1	1/16/2009 10:27:46 PM
Surr: 4-Bromofluorobenzene	101	53.2-145		%REC	1	1/16/2009 10:27:46 PM
Surr: Dibromofluoromethane	94.1	68.5-119		%REC	1	1/16/2009 10:27:46 PM
Surr: Toluene-d8	90.1	64-131		%REC	1	1/16/2009 10:27:46 PM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	760	20		mg/L CaCO3	1	1/20/2009
Carbonate	ND	2.0		mg/L CaCO3	1	1/20/2009
Bicarbonate	760	20		mg/L CaCO3	1	1/20/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-18
Lab Order:	0901240	**Collection Date:**	1/14/2009 12:28:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	2500	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.11	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	1800	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-51
Lab Order:	0901240	**Collection Date:**	1/15/2009 11:40:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	0.78	0.10		mg/L	1	1/21/2009 4:59:09 PM
Chloride	55	1.0		mg/L	10	1/16/2009 9:11:43 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/16/2009 8:02:05 PM
Bromide	0.87	0.10		mg/L	1	1/16/2009 8:02:05 PM
Nitrogen, Nitrate (As N)	5.8	0.10		mg/L	1	1/16/2009 8:02:05 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/16/2009 8:02:05 PM
Sulfate	1400	25		mg/L	50	1/21/2009 5:16:34 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Toluene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Ethylbenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Naphthalene	ND	2.0		µg/L	1	1/16/2009 10:56:14 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/16/2009 10:56:14 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/16/2009 10:56:14 PM
Acetone	ND	10		µg/L	1	1/16/2009 10:56:14 PM
Bromobenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Bromoform	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Bromomethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
2-Butanone	ND	10		µg/L	1	1/16/2009 10:56:14 PM
Carbon disulfide	ND	10		µg/L	1	1/16/2009 10:56:14 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Chlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Chloroethane	ND	2.0		µg/L	1	1/16/2009 10:56:14 PM
Chloroform	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Chloromethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/16/2009 10:56:14 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Dibromomethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-51
Lab Order:	0901240	**Collection Date:**	1/15/2009 11:40:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/16/2009 10:56:14 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
2-Hexanone	ND	10		µg/L	1	1/16/2009 10:56:14 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/16/2009 10:56:14 PM
Methylene Chloride	ND	3.0		µg/L	1	1/16/2009 10:56:14 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Styrene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/16/2009 10:56:14 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/16/2009 10:56:14 PM
Vinyl chloride	ND	1.0		µg/L	1	1/16/2009 10:56:14 PM
Xylenes, Total	ND	1.5		µg/L	1	1/16/2009 10:56:14 PM
Surr: 1,2-Dichloroethane-d4	81.6	66.1-123		%REC	1	1/16/2009 10:56:14 PM
Surr: 4-Bromofluorobenzene	97.2	53.2-145		%REC	1	1/16/2009 10:56:14 PM
Surr: Dibromofluoromethane	43.3	68.5-119	S	%REC	1	1/16/2009 10:56:14 PM
Surr: Toluene-d8	88.1	64-131		%REC	1	1/16/2009 10:56:14 PM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	210	20		mg/L CaCO3	1	1/20/2009
Carbonate	ND	2.0		mg/L CaCO3	1	1/20/2009
Bicarbonate	210	20		mg/L CaCO3	1	1/20/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-51
Lab Order:	0901240	**Collection Date:**	1/15/2009 11:40:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	2800	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.21	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	2200	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-9
Lab Order:	0901240	**Collection Date:**	1/14/2009 3:24:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Fluoride	0.65	0.10		mg/L	1	1/26/2009 10:01:29 AM
Chloride	98	1.0		mg/L	10	1/26/2009 10:18:54 AM
Bromide	0.88	0.10		mg/L	1	1/26/2009 10:01:29 AM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/26/2009 7:27:38 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/26/2009 10:01:29 AM
Sulfate	49	0.50		mg/L	1	1/26/2009 10:01:29 AM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Toluene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Ethylbenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Naphthalene	ND	2.0		µg/L	1	1/16/2009 11:24:38 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/16/2009 11:24:38 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/16/2009 11:24:38 PM
Acetone	14	10		µg/L	1	1/16/2009 11:24:38 PM
Bromobenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Bromoform	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Bromomethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
2-Butanone	ND	10		µg/L	1	1/16/2009 11:24:38 PM
Carbon disulfide	ND	10		µg/L	1	1/16/2009 11:24:38 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Chlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Chloroethane	ND	2.0		µg/L	1	1/16/2009 11:24:38 PM
Chloroform	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Chloromethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/16/2009 11:24:38 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Dibromomethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-9
Lab Order:	0901240	**Collection Date:**	1/14/2009 3:24:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
1,1-Dichloroethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/16/2009 11:24:38 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
2-Hexanone	ND	10		µg/L	1	1/16/2009 11:24:38 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/16/2009 11:24:38 PM
Methylene Chloride	ND	3.0		µg/L	1	1/16/2009 11:24:38 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Styrene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/16/2009 11:24:38 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/16/2009 11:24:38 PM
Vinyl chloride	ND	1.0		µg/L	1	1/16/2009 11:24:38 PM
Xylanes, Total	ND	1.5		µg/L	1	1/16/2009 11:24:38 PM
Surr: 1,2-Dichloroethane-d4	81.1	68.1-123		%REC	1	1/16/2009 11:24:38 PM
Surr: 4-Bromofluorobenzene	99.8	53.2-145		%REC	1	1/16/2009 11:24:38 PM
Surr: Dibromofluoromethane	90.7	68.5-119		%REC	1	1/16/2009 11:24:38 PM
Surr: Toluene-d8	89.6	64-131		%REC	1	1/16/2009 11:24:38 PM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	980	40		mg/L CaCO3	2	1/20/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/20/2009
Bicarbonate	980	40		mg/L CaCO3	2	1/20/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-9
Lab Order:	0901240	**Collection Date:**	1/14/2009 3:24:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-03	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	2000	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.33	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	1300	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-8
Lab Order:	0901240	**Collection Date:**	1/14/2009 4:00:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	1.2	0.10		mg/L	1	1/19/2009 6:20:17 PM
Chloride	110	1.0		mg/L	10	1/16/2009 7:44:40 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/16/2009 3:58:20 PM
Bromide	0.67	0.10		mg/L	1	1/16/2009 3:58:20 PM
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	1/16/2009 3:58:20 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/19/2009 6:20:17 PM
Sulfate	39	0.50		mg/L	1	1/16/2009 3:58:20 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Toluene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Ethylbenzene	3.6	1.0		µg/L	1	1/16/2009 11:53:06 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Naphthalene	ND	2.0		µg/L	1	1/16/2009 11:53:06 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/16/2009 11:53:06 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/16/2009 11:53:06 PM
Acetone	ND	10		µg/L	1	1/16/2009 11:53:06 PM
Bromobenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Bromoform	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Bromomethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
2-Butanone	ND	10		µg/L	1	1/16/2009 11:53:06 PM
Carbon disulfide	ND	10		µg/L	1	1/16/2009 11:53:06 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Chlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Chloroethane	ND	2.0		µg/L	1	1/16/2009 11:53:06 PM
Chloroform	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Chloromethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/16/2009 11:53:06 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Dibromomethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-8
Lab Order:	0901240	**Collection Date:**	1/14/2009 4:00:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/16/2009 11:53:06 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
2-Hexanone	ND	10		µg/L	1	1/16/2009 11:53:06 PM
Isopropylbenzene	1.6	1.0		µg/L	1	1/16/2009 11:53:06 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/16/2009 11:53:06 PM
Methylene Chloride	ND	3.0		µg/L	1	1/16/2009 11:53:06 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
sec-Butylbenzene	1.4	1.0		µg/L	1	1/16/2009 11:53:06 PM
Styrene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/16/2009 11:53:06 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/16/2009 11:53:06 PM
Vinyl chloride	ND	1.0		µg/L	1	1/16/2009 11:53:06 PM
Xylenes, Total	ND	1.5		µg/L	1	1/16/2009 11:53:06 PM
Surr: 1,2-Dichloroethane-d4	83.8	68.1-123		%REC	1	1/16/2009 11:53:06 PM
Surr: 4-Bromofluorobenzene	102	53.2-145		%REC	1	1/16/2009 11:53:06 PM
Surr: Dibromofluoromethane	93.1	68.5-119		%REC	1	1/16/2009 11:53:06 PM
Surr: Toluene-d8	89.8	64-131		%REC	1	1/16/2009 11:53:06 PM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	770	40		mg/L CaCO3	2	1/20/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/20/2009
Bicarbonate	770	40		mg/L CaCO3	2	1/20/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-8
Lab Order:	0901240	**Collection Date:**	1/14/2009 4:00:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	1700	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	6.83	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	1100	100		mg/L	1	1/19/2009

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Estimated value	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-48
Lab Order:	0901240	**Collection Date:**	1/15/2009 1:36:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	0.68	0.10		mg/L	1	1/21/2009 6:08:48 PM
Chloride	560	2.0		mg/L	20	1/21/2009 6:26:12 PM
Nitrogen, Nitrite (As N)	ND	1.0		mg/L	10	1/16/2009 10:21:21 PM
Bromide	2.2	1.0		mg/L	10	1/16/2009 10:21:21 PM
Nitrogen, Nitrate (As N)	4.4	0.10		mg/L	1	1/16/2009 10:03:57 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/21/2009 6:08:48 PM
Sulfate	1300	10		mg/L	20	1/21/2009 6:26:12 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Toluene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Ethylbenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Naphthalene	ND	2.0		µg/L	1	1/17/2009 12:49:55 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 12:49:55 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 12:49:55 AM
Acetone	ND	10		µg/L	1	1/17/2009 12:49:55 AM
Bromobenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Bromoform	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Bromomethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
2-Butanone	ND	10		µg/L	1	1/17/2009 12:49:55 AM
Carbon disulfide	ND	10		µg/L	1	1/17/2009 12:49:55 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Chlorobenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Chloroethane	ND	2.0		µg/L	1	1/17/2009 12:49:55 AM
Chloroform	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Chloromethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/17/2009 12:49:55 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Dibromomethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-48
Lab Order:	0901240	**Collection Date:**	1/15/2009 1:36:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/17/2009 12:49:55 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
2-Hexanone	ND	10		µg/L	1	1/17/2009 12:49:55 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/17/2009 12:49:55 AM
Methylene Chloride	ND	3.0		µg/L	1	1/17/2009 12:49:55 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Styrene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/17/2009 12:49:55 AM
Tetrachloroethene (PCE)	1.2	1.0		µg/L	1	1/17/2009 12:49:55 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/17/2009 12:49:55 AM
Vinyl chloride	ND	1.0		µg/L	1	1/17/2009 12:49:55 AM
Xylenes, Total	ND	1.5		µg/L	1	1/17/2009 12:49:55 AM
Surr: 1,2-Dichloroethane-d4	80.7	68.1-123		%REC	1	1/17/2009 12:49:55 AM
Surr: 4-Bromofluorobenzene	97.4	53.2-145		%REC	1	1/17/2009 12:49:55 AM
Surr: Dibromofluoromethane	88.4	68.5-119		%REC	1	1/17/2009 12:49:55 AM
Surr: Toluene-d8	87.1	64-131		%REC	1	1/17/2009 12:49:55 AM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	280	40		mg/L CaCO3	2	1/20/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/20/2009
Bicarbonate	280	40		mg/L CaCO3	2	1/20/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-48
Lab Order:	0901240	**Collection Date:**	1/15/2009 1:36:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	3900	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.28	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	2700	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-50
Lab Order:	0901240	**Collection Date:**	1/15/2009 12:48:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Fluoride	0.65	0.10		mg/L	1	1/21/2009 5:33:59 PM
Chloride	44	1.0		mg/L	10	1/16/2009 9:46:32 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/16/2009 9:29:07 PM
Bromide	0.52	0.10		mg/L	1	1/16/2009 9:29:07 PM
Nitrogen, Nitrate (As N)	3.2	0.10		mg/L	1	1/16/2009 9:29:07 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/21/2009 5:33:59 PM
Sulfate	1700	25		mg/L	50	1/21/2009 5:51:23 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Toluene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Ethylbenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Naphthalene	ND	2.0		µg/L	1	1/17/2009 1:18:21 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 1:18:21 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 1:18:21 AM
Acetone	ND	10		µg/L	1	1/17/2009 1:18:21 AM
Bromobenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Bromoform	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Bromomethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
2-Butanone	ND	10		µg/L	1	1/17/2009 1:18:21 AM
Carbon disulfide	ND	10		µg/L	1	1/17/2009 1:18:21 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Chlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Chloroethane	ND	2.0		µg/L	1	1/17/2009 1:18:21 AM
Chloroform	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Chloromethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/17/2009 1:18:21 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Dibromomethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL 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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-50
Lab Order:	0901240	**Collection Date:**	1/15/2009 12:48:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/17/2009 1:18:21 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
2-Hexanone	ND	10		µg/L	1	1/17/2009 1:18:21 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/17/2009 1:18:21 AM
Methylene Chloride	ND	3.0		µg/L	1	1/17/2009 1:18:21 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Styrene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/17/2009 1:18:21 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/17/2009 1:18:21 AM
Vinyl chloride	ND	1.0		µg/L	1	1/17/2009 1:18:21 AM
Xylenes, Total	ND	1.5		µg/L	1	1/17/2009 1:18:21 AM
Surr: 1,2-Dichloroethane-d4	82.5	68.1-123		%REC	1	1/17/2009 1:18:21 AM
Surr: 4-Bromofluorobenzene	101	53.2-145		%REC	1	1/17/2009 1:18:21 AM
Surr: Dibromofluoromethane	91.9	68.5-119		%REC	1	1/17/2009 1:18:21 AM
Surr: Toluene-d8	88.1	64-131		%REC	1	1/17/2009 1:18:21 AM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	210	40		mg/L CaCO3	2	1/20/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/20/2009
Bicarbonate	210	40		mg/L CaCO3	2	1/20/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-50
Lab Order:	0901240	**Collection Date:**	1/15/2009 12:48:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	3000	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.18	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	2400	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-5
Lab Order:	0901240	**Collection Date:**	1/15/2009 8:34:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	0.80	0.10		mg/L	1	1/21/2009 6:43:37 PM
Chloride	57	1.0		mg/L	10	1/16/2009 10:56:10 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/16/2009 10:38:45 PM
Bromide	0.74	0.10		mg/L	1	1/16/2009 10:38:45 PM
Nitrogen, Nitrate (As N)	4.1	0.10		mg/L	1	1/16/2009 10:38:45 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/21/2009 6:43:37 PM
Sulfate	1400	25		mg/L	50	1/21/2009 7:01:02 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Toluene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Ethylbenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Naphthalene	ND	2.0		µg/L	1	1/17/2009 1:46:48 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 1:46:48 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 1:46:48 AM
Acetone	ND	10		µg/L	1	1/17/2009 1:46:48 AM
Bromobenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Bromoform	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Bromomethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
2-Butanone	ND	10		µg/L	1	1/17/2009 1:46:48 AM
Carbon disulfide	ND	10		µg/L	1	1/17/2009 1:46:48 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Chlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Chloroethane	ND	2.0		µg/L	1	1/17/2009 1:46:48 AM
Chloroform	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Chloromethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/17/2009 1:46:48 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Dibromomethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL 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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-5
Lab Order:	0901240	**Collection Date:**	1/15/2009 8:34:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/17/2009 1:46:48 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
2-Hexanone	ND	10		µg/L	1	1/17/2009 1:46:48 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/17/2009 1:46:48 AM
Methylene Chloride	ND	3.0		µg/L	1	1/17/2009 1:46:48 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Styrene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/17/2009 1:46:48 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/17/2009 1:46:48 AM
Vinyl chloride	ND	1.0		µg/L	1	1/17/2009 1:46:48 AM
Xylenes, Total	ND	1.5		µg/L	1	1/17/2009 1:46:48 AM
Surr: 1,2-Dichloroethane-d4	82.2	68.1-123		%REC	1	1/17/2009 1:46:48 AM
Surr: 4-Bromofluorobenzene	99.2	53.2-145		%REC	1	1/17/2009 1:46:48 AM
Surr: Dibromofluoromethane	88.1	68.5-119		%REC	1	1/17/2009 1:46:48 AM
Surr: Toluene-d8	88.2	64-131		%REC	1	1/17/2009 1:46:48 AM
SM 2320B: ALKALINITY						Analyst: KMS
Alkalinity, Total (As CaCO3)	210	40		mg/L CaCO3	2	1/20/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/20/2009
Bicarbonate	210	40		mg/L CaCO3	2	1/20/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-5
Lab Order:	0901240	**Collection Date:**	1/15/2009 8:34:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	2900	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.28	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	3000	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-2
Lab Order:	0901240	**Collection Date:**	1/15/2009 9:15:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Fluoride	0.63	0.10		mg/L	1	1/21/2009 7:53:14 PM
Chloride	190	1.0		mg/L	10	1/16/2009 11:30:59 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/16/2009 11:13:34 PM
Bromide	2.3	0.10		mg/L	1	1/16/2009 11:13:34 PM
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	1/16/2009 11:13:34 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/21/2009 7:53:14 PM
Sulfate	2100	50		mg/L	100	1/21/2009 8:10:39 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Toluene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Ethylbenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,2-Dibromoethene (EDB)	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Naphthalene	ND	2.0		µg/L	1	1/17/2009 2:15:14 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 2:15:14 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 2:15:14 AM
Acetone	ND	10		µg/L	1	1/17/2009 2:15:14 AM
Bromobenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Bromoform	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Bromomethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
2-Butanone	ND	10		µg/L	1	1/17/2009 2:15:14 AM
Carbon disulfide	ND	10		µg/L	1	1/17/2009 2:15:14 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Chlorobenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Chloroethane	ND	2.0		µg/L	1	1/17/2009 2:15:14 AM
Chloroform	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Chloromethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/17/2009 2:15:14 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Dibromomethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-2
Lab Order:	0901240	**Collection Date:**	1/15/2009 9:15:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/17/2009 2:15:14 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
2-Hexanone	ND	10		µg/L	1	1/17/2009 2:15:14 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/17/2009 2:15:14 AM
Methylene Chloride	ND	3.0		µg/L	1	1/17/2009 2:15:14 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Styrene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/17/2009 2:15:14 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/17/2009 2:15:14 AM
Vinyl chloride	ND	1.0		µg/L	1	1/17/2009 2:15:14 AM
Xylenes, Total	ND	1.5		µg/L	1	1/17/2009 2:15:14 AM
Surr: 1,2-Dichloroethane-d4	83.5	68.1-123		%REC	1	1/17/2009 2:15:14 AM
Surr: 4-Bromofluorobenzene	111	53.2-145		%REC	1	1/17/2009 2:15:14 AM
Surr: Dibromofluoromethane	90.9	68.5-119		%REC	1	1/17/2009 2:15:14 AM
Surr: Toluene-d8	90.9	64-131		%REC	1	1/17/2009 2:15:14 AM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	230	40		mg/L CaCO3	2	1/20/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/20/2009
Bicarbonate	230	40		mg/L CaCO3	2	1/20/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-2
Lab Order:	0901240	**Collection Date:**	1/15/2009 9:15:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-08	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	4000	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	6.36	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	3700	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-52
Lab Order:	0901240	**Collection Date:**	1/13/2009 3:55:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	0.88	0.10		mg/L	1	1/26/2009 10:36:19 AM
Chloride	61	1.0		mg/L	10	1/26/2009 10:53:44 AM
Bromide	0.43	0.10		mg/L	1	1/26/2009 10:36:19 AM
Nitrate (As N)+Nitrite (As N)	5.6	1.0		mg/L	5	1/27/2009 11:17:13 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/26/2009 10:36:19 AM
Sulfate	1700	25		mg/L	50	1/27/2009 5:03:38 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Toluene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Ethylbenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Naphthalene	ND	2.0		µg/L	1	1/17/2009 3:12:09 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 3:12:09 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 3:12:09 AM
Acetone	ND	10		µg/L	1	1/17/2009 3:12:09 AM
Bromobenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Bromoform	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Bromomethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
2-Butanone	ND	10		µg/L	1	1/17/2009 3:12:09 AM
Carbon disulfide	ND	10		µg/L	1	1/17/2009 3:12:09 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Chlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Chloroethane	ND	2.0		µg/L	1	1/17/2009 3:12:09 AM
Chloroform	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Chloromethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/17/2009 3:12:09 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Dibromomethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-52
Lab Order:	0901240	**Collection Date:**	1/13/2009 3:55:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
1,1-Dichloroethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/17/2009 3:12:09 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
2-Hexanone	ND	10		µg/L	1	1/17/2009 3:12:09 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/17/2009 3:12:09 AM
Methylene Chloride	ND	3.0		µg/L	1	1/17/2009 3:12:09 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Styrene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/17/2009 3:12:09 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/17/2009 3:12:09 AM
Vinyl chloride	ND	1.0		µg/L	1	1/17/2009 3:12:09 AM
Xylenes, Total	ND	1.5		µg/L	1	1/17/2009 3:12:09 AM
Surr: 1,2-Dichloroethane-d4	82.3	68.1-123		%REC	1	1/17/2009 3:12:09 AM
Surr: 4-Bromofluorobenzene	99.7	53.2-145		%REC	1	1/17/2009 3:12:09 AM
Surr: Dibromofluoromethane	88.9	68.5-119		%REC	1	1/17/2009 3:12:09 AM
Surr: Toluene-d8	86.2	64-131		%REC	1	1/17/2009 3:12:09 AM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	190	40		mg/L CaCO3	2	1/20/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/20/2009
Bicarbonate	190	40		mg/L CaCO3	2	1/20/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-52
Lab Order:	0901240	**Collection Date:**	1/13/2009 3:55:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-09	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	3100	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.29	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	2500	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GRW-3
Lab Order:	0901240	**Collection Date:**	1/13/2009 12:37:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-10	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **DMG**
Naphthalene	ND	4.0		µg/L	1	1/20/2009 8:44:04 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/20/2009 8:44:04 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/20/2009 8:44:04 PM
Acenaphthylene	ND	5.0		µg/L	1	1/20/2009 8:44:04 PM
Acenaphthene	ND	10		µg/L	1	1/20/2009 8:44:04 PM
Fluorene	ND	1.6		µg/L	1	1/20/2009 8:44:04 PM
Phenanthrene	ND	1.2		µg/L	1	1/20/2009 8:44:04 PM
Anthracene	ND	1.2		µg/L	1	1/20/2009 8:44:04 PM
Fluoranthene	ND	0.80		µg/L	1	1/20/2009 8:44:04 PM
Pyrene	ND	0.60		µg/L	1	1/20/2009 8:44:04 PM
Benz(a)anthracene	ND	0.14		µg/L	1	1/20/2009 8:44:04 PM
Chrysene	ND	0.40		µg/L	1	1/20/2009 8:44:04 PM
Benzo(b)fluoranthene	ND	0.20		µg/L	1	1/20/2009 8:44:04 PM
Benzo(k)fluoranthene	ND	0.14		µg/L	1	1/20/2009 8:44:04 PM
Benzo(a)pyrene	ND	0.14		µg/L	1	1/20/2009 8:44:04 PM
Dibenz(a,h)anthracene	ND	0.14		µg/L	1	1/20/2009 8:44:04 PM
Benzo(g,h,i)perylene	ND	0.16		µg/L	1	1/20/2009 8:44:04 PM
Indeno(1,2,3-cd)pyrene	ND	0.16		µg/L	1	1/20/2009 8:44:04 PM
Surr: Benzo(e)pyrene	134	44.8-104	S	%REC	1	1/20/2009 8:44:04 PM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Fluoride	0.85	0.10		mg/L	1	1/26/2009 11:11:09 AM
Chloride	75	1.0		mg/L	10	1/26/2009 11:28:33 AM
Bromide	0.56	0.10		mg/L	1	1/26/2009 11:11:09 AM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/27/2009 11:34:37 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/26/2009 11:11:09 AM
Sulfate	790	10		mg/L	20	1/27/2009 5:21:02 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Toluene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Ethylbenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Naphthalene	ND	2.0		µg/L	1	1/17/2009 3:40:34 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 3:40:34 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 3:40:34 AM
Acetone	ND	10		µg/L	1	1/17/2009 3:40:34 AM
Bromobenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GRW-3
Lab Order:	0901240	**Collection Date:**	1/13/2009 12:37:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-10	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Bromodichloromethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Bromoform	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Bromomethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
2-Butanone	ND	10		µg/L	1	1/17/2009 3:40:34 AM
Carbon disulfide	ND	10		µg/L	1	1/17/2009 3:40:34 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Chlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Chloroethane	ND	2.0		µg/L	1	1/17/2009 3:40:34 AM
Chloroform	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Chloromethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/17/2009 3:40:34 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Dibromomethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/17/2009 3:40:34 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
2-Hexanone	ND	10		µg/L	1	1/17/2009 3:40:34 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/17/2009 3:40:34 AM
Methylene Chloride	ND	3.0		µg/L	1	1/17/2009 3:40:34 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Styrene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/17/2009 3:40:34 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL 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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GRW-3
Lab Order:	0901240	**Collection Date:**	1/13/2009 12:37:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-10	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/17/2009 3:40:34 AM
Vinyl chloride	ND	1.0		µg/L	1	1/17/2009 3:40:34 AM
Xylenes, Total	ND	1.5		µg/L	1	1/17/2009 3:40:34 AM
Surr: 1,2-Dichloroethane-d4	84.2	68.1-123		%REC	1	1/17/2009 3:40:34 AM
Surr: 4-Bromofluorobenzene	101	53.2-145		%REC	1	1/17/2009 3:40:34 AM
Surr: Dibromofluoromethane	91.7	68.5-119		%REC	1	1/17/2009 3:40:34 AM
Surr: Toluene-d8	88.5	64-131		%REC	1	1/17/2009 3:40:34 AM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	670	40		mg/L CaCO3	2	1/20/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/20/2009
Bicarbonate	670	40		mg/L CaCO3	2	1/20/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	2600	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.13	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	1900	200		mg/L	1	1/19/2009

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Estimated value	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GRW-6
Lab Order:	0901240	**Collection Date:**	1/13/2009 1:58:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-11	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: DMG
Naphthalene	ND	4.0		µg/L	1	1/20/2009 9:04:19 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/20/2009 9:04:19 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/20/2009 9:04:19 PM
Acenaphthylene	ND	5.0		µg/L	1	1/20/2009 9:04:19 PM
Acenaphthene	ND	10		µg/L	1	1/20/2009 9:04:19 PM
Fluorene	ND	1.6		µg/L	1	1/20/2009 9:04:19 PM
Phenanthrene	ND	1.2		µg/L	1	1/20/2009 9:04:19 PM
Anthracene	ND	1.2		µg/L	1	1/20/2009 9:04:19 PM
Fluoranthene	ND	0.60		µg/L	1	1/20/2009 9:04:19 PM
Pyrene	ND	0.60		µg/L	1	1/20/2009 9:04:19 PM
Benz(a)anthracene	ND	0.14		µg/L	1	1/20/2009 9:04:19 PM
Chrysene	ND	0.40		µg/L	1	1/20/2009 9:04:19 PM
Benzo(b)fluoranthene	ND	0.20		µg/L	1	1/20/2009 9:04:19 PM
Benzo(k)fluoranthene	ND	0.14		µg/L	1	1/20/2009 9:04:19 PM
Benzo(a)pyrene	ND	0.14		µg/L	1	1/20/2009 9:04:19 PM
Dibenz(a,h)anthracene	ND	0.14		µg/L	1	1/20/2009 9:04:19 PM
Benzo(g,h,i)perylene	ND	0.16		µg/L	1	1/20/2009 9:04:19 PM
Indeno(1,2,3-cd)pyrene	ND	0.16		µg/L	1	1/20/2009 9:04:19 PM
Surr: Benzo(e)pyrene	92.6	44.8-104		%REC	1	1/20/2009 9:04:19 PM
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	0.55	0.10		mg/L	1	1/26/2009 11:45:58 AM
Chloride	100	1.0		mg/L	10	1/26/2009 12:03:22 PM
Bromide	0.78	0.10		mg/L	1	1/26/2009 11:45:58 AM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/27/2009 11:52:02 AM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/26/2009 11:45:58 AM
Sulfate	1100	25		mg/L	50	1/28/2009 10:22:04 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Toluene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Ethylbenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Naphthalene	ND	2.0		µg/L	1	1/17/2009 4:37:24 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 4:37:24 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 4:37:24 AM
Acetone	ND	10		µg/L	1	1/17/2009 4:37:24 AM
Bromobenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GRW-6
Lab Order:	0901240	**Collection Date:**	1/13/2009 1:58:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-11	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Bromodichloromethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Bromoform	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Bromomethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
2-Butanone	ND	10		µg/L	1	1/17/2009 4:37:24 AM
Carbon disulfide	ND	10		µg/L	1	1/17/2009 4:37:24 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Chlorobenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Chloroethane	ND	2.0		µg/L	1	1/17/2009 4:37:24 AM
Chloroform	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Chloromethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/17/2009 4:37:24 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Dibromomethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/17/2009 4:37:24 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
2-Hexanone	ND	10		µg/L	1	1/17/2009 4:37:24 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/17/2009 4:37:24 AM
Methylene Chloride	ND	3.0		µg/L	1	1/17/2009 4:37:24 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Styrene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/17/2009 4:37:24 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL 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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GRW-6
Lab Order:	0901240	**Collection Date:**	1/13/2009 1:58:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-11	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/17/2009 4:37:24 AM
Vinyl chloride	ND	1.0		µg/L	1	1/17/2009 4:37:24 AM
Xylenes, Total	ND	1.5		µg/L	1	1/17/2009 4:37:24 AM
Surr: 1,2-Dichloroethane-d4	81.2	68.1-123		%REC	1	1/17/2009 4:37:24 AM
Surr: 4-Bromofluorobenzene	101	53.2-145		%REC	1	1/17/2009 4:37:24 AM
Surr: Dibromofluoromethane	92.7	68.5-119		%REC	1	1/17/2009 4:37:24 AM
Surr: Toluene-d8	86.8	64-131		%REC	1	1/17/2009 4:37:24 AM
SM 2320B: ALKALINITY						Analyst: KMS
Alkalinity, Total (As CaCO3)	520	40		mg/L CaCO3	2	1/22/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/22/2009
Bicarbonate	520	40		mg/L CaCO3	2	1/22/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: KMS
Specific Conductance	3000	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: KMS
pH	7.11	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: KMS
Total Dissolved Solids	2400	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-19
Lab Order:	0901240	**Collection Date:**	1/14/2009 2:24:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-12	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Fluoride	0.88	0.10		mg/L	1	1/26/2009 12:55:36 PM
Chloride	93	1.0		mg/L	10	1/26/2009 1:13:00 PM
Bromide	0.82	0.10		mg/L	1	1/26/2009 12:55:36 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/27/2009 12:09:27 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/26/2009 12:55:36 PM
Sulfate	630	5.0		mg/L	10	1/26/2009 1:13:00 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Toluene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Ethylbenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Naphthalene	ND	2.0		µg/L	1	1/17/2009 5:05:47 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 5:05:47 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 5:05:47 AM
Acetone	ND	10		µg/L	1	1/17/2009 5:05:47 AM
Bromobenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Bromoform	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Bromomethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
2-Butanone	ND	10		µg/L	1	1/17/2009 5:05:47 AM
Carbon disulfide	ND	10		µg/L	1	1/17/2009 5:05:47 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Chlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Chloroethane	ND	2.0		µg/L	1	1/17/2009 5:05:47 AM
Chloroform	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Chloromethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/17/2009 5:05:47 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Dibromomethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-19
Lab Order:	0901240	**Collection Date:**	1/14/2009 2:24:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-12	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
1,1-Dichloroethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/17/2009 5:05:47 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
2-Hexanone	ND	10		µg/L	1	1/17/2009 5:05:47 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/17/2009 5:05:47 AM
Methylene Chloride	ND	3.0		µg/L	1	1/17/2009 5:05:47 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Styrene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/17/2009 5:05:47 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/17/2009 5:05:47 AM
Vinyl chloride	ND	1.0		µg/L	1	1/17/2009 5:05:47 AM
Xylenes, Total	ND	1.5		µg/L	1	1/17/2009 5:05:47 AM
Surr: 1,2-Dichloroethane-d4	83.0	68.1-123		%REC	1	1/17/2009 5:05:47 AM
Surr: 4-Bromofluorobenzene	98.9	53.2-145		%REC	1	1/17/2009 5:05:47 AM
Surr: Dibromofluoromethane	91.0	68.5-119		%REC	1	1/17/2009 5:05:47 AM
Surr: Toluene-d8	86.5	64-131		%REC	1	1/17/2009 5:05:47 AM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	690	40		mg/L CaCO3	2	1/22/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/22/2009
Bicarbonate	690	40		mg/L CaCO3	2	1/22/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**

Qualifiers:	* Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E Estimated value	H	Holding times for preparation or analysis exceeded
	J Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-19
Lab Order:	0901240	**Collection Date:**	1/14/2009 2:24:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-12	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	2500	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.17	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	1800	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-1
Lab Order:	0901240	**Collection Date:**	1/14/2009 4:40:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-13	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	1.1	0.10		mg/L	1	1/19/2009 6:37:42 PM
Chloride	89	1.0		mg/L	10	1/16/2009 4:33:09 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/16/2009 4:15:45 PM
Bromide	0.54	0.10		mg/L	1	1/16/2009 4:15:45 PM
Nitrogen, Nitrate (As N)	0.11	0.10		mg/L	1	1/16/2009 4:15:45 PM
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	1/19/2009 6:37:42 PM
Sulfate	85	5.0		mg/L	10	1/16/2009 4:33:09 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Toluene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Ethylbenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Naphthalene	ND	2.0		µg/L	1	1/17/2009 5:34:15 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 5:34:15 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 5:34:15 AM
Acetone	ND	10		µg/L	1	1/17/2009 5:34:15 AM
Bromobenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Bromoform	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Bromomethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
2-Butanone	ND	10		µg/L	1	1/17/2009 5:34:15 AM
Carbon disulfide	ND	10		µg/L	1	1/17/2009 5:34:15 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Chlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Chloroethane	ND	2.0		µg/L	1	1/17/2009 5:34:15 AM
Chloroform	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Chloromethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/17/2009 5:34:15 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Dibromomethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL 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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-1
Lab Order:	0901240	**Collection Date:**	1/14/2009 4:40:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-13	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/17/2009 5:34:15 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
2-Hexanone	ND	10		µg/L	1	1/17/2009 5:34:15 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/17/2009 5:34:15 AM
Methylene Chloride	ND	3.0		µg/L	1	1/17/2009 5:34:15 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Styrene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
tert-Butylbenzene	1.2	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/17/2009 5:34:15 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/17/2009 5:34:15 AM
Vinyl chloride	ND	1.0		µg/L	1	1/17/2009 5:34:15 AM
Xylenes, Total	ND	1.5		µg/L	1	1/17/2009 5:34:15 AM
Surr: 1,2-Dichloroethane-d4	82.2	68.1-123		%REC	1	1/17/2009 5:34:15 AM
Surr: 4-Bromofluorobenzene	101	53.2-145		%REC	1	1/17/2009 5:34:15 AM
Surr: Dibromofluoromethane	91.7	68.5-119		%REC	1	1/17/2009 5:34:15 AM
Surr: Toluene-d8	87.0	64-131		%REC	1	1/17/2009 5:34:15 AM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	970	40		mg/L CaCO3	2	1/22/2009
Carbonate	ND	4.0		mg/L CaCO3	2	1/22/2009
Bicarbonate	970	40		mg/L CaCO3	2	1/22/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	SHS-1
Lab Order:	0901240	**Collection Date:**	1/14/2009 4:40:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-13	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	2100	0.010		µmhos/cm	1	1/19/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.33	0.1		pH units	1	1/16/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	1200	200		mg/L	1	1/19/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Trip Blank
Lab Order:	0901240	**Collection Date:**	
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-14	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Toluene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Ethylbenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Naphthalene	ND	2.0		µg/L	1	1/17/2009 6:02:37 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 6:02:37 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/17/2009 6:02:37 AM
Acetone	ND	10		µg/L	1	1/17/2009 6:02:37 AM
Bromobenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Bromodichloromethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Bromoform	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Bromomethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
2-Butanone	ND	10		µg/L	1	1/17/2009 6:02:37 AM
Carbon disulfide	ND	10		µg/L	1	1/17/2009 6:02:37 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Chlorobenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Chloroethane	ND	2.0		µg/L	1	1/17/2009 6:02:37 AM
Chloroform	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Chloromethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/17/2009 6:02:37 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Dibromomethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/17/2009 6:02:37 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
2-Hexanone	ND	10		µg/L	1	1/17/2009 6:02:37 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *03-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Trip Blank
Lab Order:	0901240	**Collection Date:**	
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/16/2009
Lab ID:	0901240-14	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Isopropylbenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/17/2009 6:02:37 AM
Methylene Chloride	ND	3.0		µg/L	1	1/17/2009 6:02:37 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Styrene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/17/2009 6:02:37 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/17/2009 6:02:37 AM
Vinyl chloride	ND	1.0		µg/L	1	1/17/2009 6:02:37 AM
Xylenes, Total	ND	1.5		µg/L	1	1/17/2009 6:02:37 AM
Surr: 1,2-Dichloroethane-d4	83.6	68.1-123		%REC	1	1/17/2009 6:02:37 AM
Surr: 4-Bromofluorobenzene	99.1	53.2-145		%REC	1	1/17/2009 6:02:37 AM
Surr: Dibromofluoromethane	94.3	68.5-119		%REC	1	1/17/2009 6:02:37 AM
Surr: Toluene-d8	88.6	64-131		%REC	1	1/17/2009 6:02:37 AM

Qualifiers:

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

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Est. 1970

REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

February 03, 2009

Date Received : January 20, 2009
Description : 0901240

Sample ID : GBR-48

Collected By :
Collection Date : 01/15/09 13:36

ESC Sample # : L384270-01

Site ID :

Project # : 0901240

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Calcium,Dissolved	300	0.50	mg/l	6010B	01/26/09	1
Iron,Dissolved	BDL	0.10	mg/l	6010B	01/26/09	1
Magnesium,Dissolved	32.	0.10	mg/l	6010B	01/26/09	1
Manganese,Dissolved	0.012	0.010	mg/l	6010B	01/26/09	1
Sodium,Dissolved	550	0.50	mg/l	6010B	01/26/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/29/09 08:37 Revised: 02/03/09 13:09

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

February 03, 2009

Date Received : January 20, 2009
Description : 0901240

ESC Sample # : L384270-02

Site ID :

Sample ID : GBR-48

Project # : 0901240

Collected By :
Collection Date : 01/15/09 13:36

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	BDL	0.00020	mg/l	7470A	01/22/09	1
Arsenic	BDL	0.10	mg/l	6010B	01/24/09	5
Barium	0.072	0.0050	mg/l	6010B	01/24/09	1
Cadmium	BDL	0.0050	mg/l	6010B	01/24/09	1
Chromium	0.43	0.010	mg/l	6010B	01/24/09	1
Lead	BDL	0.0050	mg/l	6010B	01/24/09	1
Selenium	0.10	0.020	mg/l	6010B	01/24/09	1
Silver	BDL	0.010	mg/l	6010B	01/24/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/29/09 08:37 Revised: 02/03/09 13:09

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

February 03, 2009

ESC Sample # : L384270-03

Site ID :

Project # : 0901240

Date Received : January 20, 2009
Description : 0901240

Sample ID : GBR-50

Collected By :
Collection Date : 01/15/09 12:48

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Calcium,Dissolved	390	0.50	mg/l	6010B	01/26/09	1
Iron,Dissolved	0.41	0.10	mg/l	6010B	01/26/09	1
Magnesium,Dissolved	29.	0.10	mg/l	6010B	01/26/09	1
Manganese,Dissolved	0.050	0.010	mg/l	6010B	01/26/09	1
Sodium,Dissolved	340	0.50	mg/l	6010B	01/26/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/29/09 08:37 Revised: 02/03/09 13:09

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REPORT OF ANALYSIS

Anne Thorne
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February 03, 2009

Date Received : January 20, 2009
Description : 0901240

Sample ID : GBR-50

Collected By :
Collection Date : 01/15/09 12:48

ESC Sample # : L384270-04

Site ID :

Project # : 0901240

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	BDL	0.00020	mg/l	7470A	01/22/09	1
Arsenic	BDL	0.020	mg/l	6010B	01/24/09	1
Barium	0.034	0.0050	mg/l	6010B	01/24/09	1
Cadmium	0.0083	0.0050	mg/l	6010B	01/24/09	1
Chromium	0.018	0.010	mg/l	6010B	01/24/09	1
Lead	0.0059	0.0050	mg/l	6010B	01/24/09	1
Selenium	0.050	0.020	mg/l	6010B	01/24/09	1
Silver	BDL	0.010	mg/l	6010B	01/24/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.
This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 01/29/09 08:37 Revised: 02/03/09 13:09

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L384270-02	WG403395	SAMP	Arsenic	R604545	O
L384270-04	WG403395	SAMP	Barium	R604545	J3
	WG403395	SAMP	Chromium	R604545	P1
	WG403395	SAMP	Lead	R604545	P1
	WG403395	SAMP	Silver	R604545	P1

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J3	The associated batch QC was outside the established quality control range for precision.
O	(ESC) Sample diluted due to matrix interferences that impaired the ability to make an accurate analytical determination. The detection limit is elevated in order to reflect the necessary dilution.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Quality Assurance Report
Level II

L384270

February 03, 2009

[illegible]

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
[illegible]						
Arsenic	< .02	mg/l			WG403395	01/23/09 23:55
[illegible]						
Cadmium	< .005	mg/l			WG403395	01/23/09 23:55
Chromium	< .01	mg/l			WG403395	01/23/09 23:55
[illegible]						
Selenium	< .02	mg/l			WG403395	01/23/09 23:55
Silver	< .01	mg/l			WG403395	01/23/09 23:55
[illegible]						
Calcium, Dissolved	< .5	mg/l			WG403604	01/26/09 20:20
Iron, Dissolved	< .1	mg/l			WG403604	01/26/09 20:20
[illegible]						
Manganese, Dissolved	< .01	mg/l			WG403604	01/26/09 20:20
Sodium, Dissolved	< .5	mg/l			WG403604	01/26/09 20:20

[illegible]

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
[illegible]							
Arsenic	mg/l	0.00	0.00	0.00	20	L384270-04	WG403395
[illegible]							
Cadmium	mg/l	0.00950	0.00830	13.5	20	L384270-04	WG403395
Chromium	mg/l	0.0253	0.0180	33.7*	20	L384270-04	WG403395
[illegible]							
Selenium	mg/l	0.0538	0.0500	7.32	20	L384270-04	WG403395
Silver	mg/l	0.0124	0.00	NA	20	L384270-04	WG403395
[illegible]							
Calcium, Dissolved	mg/l	4.86	4.81	1.03	20	L384278-09	WG403604
Iron, Dissolved	mg/l	0.874	0.860	1.61	20	L384278-09	WG403604
[illegible]							
Manganese, Dissolved	mg/l	0.0223	0.0207	7.44	20	L384278-09	WG403604
Sodium, Dissolved	mg/l	11.5	11.5	0.00	20	L384278-09	WG403604

[illegible]

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
[illegible]						
Arsenic	mg/l	1.13	1.12	99.1	85-115	WG403395
[illegible]						
Cadmium	mg/l	1.13	1.16	103.	85-115	WG403395
Chromium	mg/l	1.13	1.11	98.2	85-115	WG403395
[illegible]						
Selenium	mg/l	1.13	1.07	94.7	85-115	WG403395
Silver	mg/l	1.13	1.10	97.3	85-115	WG403395
[illegible]						
Calcium, Dissolved	mg/l	11.3	11.1	98.2	85-115	WG403604
Iron, Dissolved	mg/l	1.13	1.12	99.1	85-115	WG403604
[illegible]						
Manganese, Dissolved	mg/l	1.13	1.10	97.3	85-115	WG403604

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L384270

February 03, 2009

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Sodium, Dissolved	mg/l	21.5	21.7	101	85-115	WG403604

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Arsenic	mg/l	1.12	0.00	1.13	99.1	75-125	L384270-04	WG403395
Cadmium	mg/l	1.14	0.00830	1.13	100.	75-125	L384270-04	WG403395
Chromium	mg/l	1.12	0.0180	1.13	97.5	75-125	L384270-04	WG403395
Selenium	mg/l	1.16	0.0500	1.13	98.2	75-125	L384270-04	WG403395
Silver	mg/l	0.0620	0.00	1.13	5.49*	75-125	L384270-04	WG403395
Calcium, Dissolved	mg/l	16.0	4.81	11.3	99.0	75-125	L384278-09	WG403604
Iron, Dissolved	mg/l	2.01	0.860	1.13	102.	75-125	L384278-09	WG403604
Manganese, Dissolved	mg/l	1.13	0.0207	1.13	98.2	75-125	L384278-09	WG403604
Sodium, Dissolved	mg/l	21.5	11.5	11.3	88.5	75-125	L384278-09	WG403604

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Arsenic	mg/l	1.10	1.12	97.3	75-125	1.80	20	L384270-04	WG403395
Cadmium	mg/l	1.14	1.14	100.	75-125	0.00	20	L384270-04	WG403395
Chromium	mg/l	1.12	1.12	97.5	75-125	0.00	20	L384270-04	WG403395
Selenium	mg/l	1.14	1.16	96.5	75-125	1.74	20	L384270-04	WG403395
Silver	mg/l	0.0626	0.0620	5.54*	75-125	0.963	20	L384270-04	WG403395
Calcium, Dissolved	mg/l	15.7	16.0	96.4	75-125	1.89	20	L384278-09	WG403604
Iron, Dissolved	mg/l	1.96	2.01	97.3	75-125	2.52	20	L384278-09	WG403604
Manganese, Dissolved	mg/l	1.11	1.13	96.4	75-125	1.79	20	L384278-09	WG403604
Sodium, Dissolved	mg/l	21.0	21.5	84.1	75-125	2.35	20	L384278-09	WG403604

Batch number /Run number / Sample number cross reference

WG403515: R602350: L384270-02 04
WG403395: R604545: L384270-02 04
WG403604: R606786: L384270-01 03

* * Calculations are performed prior to rounding of reported values .
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901240

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MB		*MBLK*			Batch ID:	**R32070**	Analysis Date:	1/16/2009 12:00:50 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB-2		*MBLK*			Batch ID:	**R32070**	Analysis Date:	1/16/2009 3:23:31 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R32089**	Analysis Date:	1/19/2009 10:47:38 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R32123**	Analysis Date:	1/21/2009 9:26:29 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R32152**	Analysis Date:	1/23/2009 9:20:22 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R32170**	Analysis Date:	1/26/2009 9:26:40 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901240

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MB		*MBLK*			Batch ID:	**R32170**	Analysis Date:	1/26/2009 9:26:40 AM	
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R32175**	Analysis Date:	1/26/2009 11:02:46 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R32180**	Analysis Date:	1/27/2009 10:00:38 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R32206**	Analysis Date:	1/28/2009 8:26:20 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB-2		*MBLK*			Batch ID:	**R32206**	Analysis Date:	1/29/2009 3:35:25 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS-b		*LCS*			Batch ID:	**R32070**	Analysis Date:	1/16/2009 8:25:41 AM	
Fluoride	0.5427	mg/L	0.10	109	90	110			
Chloride	4.904	mg/L	0.10	98.1	90	110			
Nitrogen, Nitrite (As N)	1.031	mg/L	0.10	103	90	110			
Bromide	2.641	mg/L	0.10	106	90	110			
Nitrogen, Nitrate (As N)	2.509	mg/L	0.10	100	90	110			
Phosphorus, Orthophosphate (As P)	5.416	mg/L	0.50	108	90	110			
Sulfate	10.42	mg/L	0.50	104	90	110			
Sample ID: LCS-2		*LCS*			Batch ID:	**R32070**	Analysis Date:	1/16/2009 3:40:55 PM	
Fluoride	0.5832	mg/L	0.10	117	90	110			S
Chloride	4.974	mg/L	0.10	99.5	90	110			
Nitrogen, Nitrite (As N)	1.054	mg/L	0.10	105	90	110			
Bromide	2.678	mg/L	0.10	107	90	110			

Qualifiers:

- E Estimated value
- 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: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901240

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: LCS-2		*LCS*			Batch ID: **R32070**		Analysis Date:	1/16/2009 3:40:55 PM	
Nitrogen, Nitrate (As N)	2.576	mg/L	0.10	103	90	110			
Phosphorus, Orthophosphate (As P)	5.526	mg/L	0.50	111	90	110			S
Sulfate	10.51	mg/L	0.50	105	90	110			
Sample ID: LCS		*LCS*			Batch ID: **R32089**		Analysis Date:	1/19/2009 11:05:02 AM	
Fluoride	0.4963	mg/L	0.10	99.3	90	110			
Chloride	4.931	mg/L	0.10	98.6	90	110			
Nitrogen, Nitrite (As N)	1.001	mg/L	0.10	100	90	110			
Bromide	2.635	mg/L	0.10	105	90	110			
Nitrogen, Nitrate (As N)	2.477	mg/L	0.10	99.1	90	110			
Phosphorus, Orthophosphate (As P)	5.235	mg/L	0.50	105	90	110			
Sulfate	10.28	mg/L	0.50	103	90	110			
Sample ID: LCS		*LCS*			Batch ID: **R32123**		Analysis Date:	1/21/2009 9:43:53 AM	
Fluoride	0.5204	mg/L	0.10	104	90	110			
Chloride	4.865	mg/L	0.10	97.3	90	110			
Nitrogen, Nitrite (As N)	0.9892	mg/L	0.10	98.9	90	110			
Bromide	2.577	mg/L	0.10	103	90	110			
Nitrogen, Nitrate (As N)	2.457	mg/L	0.10	98.3	90	110			
Phosphorus, Orthophosphate (As P)	5.110	mg/L	0.50	102	90	110			
Sulfate	10.19	mg/L	0.50	102	90	110			
Sample ID: LCS		*LCS*			Batch ID: **R32152**		Analysis Date:	1/23/2009 9:37:46 AM	
Fluoride	0.5090	mg/L	0.10	102	90	110			
Chloride	4.818	mg/L	0.10	96.4	90	110			
Bromide	2.529	mg/L	0.10	101	90	110			
Nitrate (As N)+Nitrite (As N)	3.423	mg/L	0.20	97.8	90	110			
Phosphorus, Orthophosphate (As P)	4.953	mg/L	0.50	99.1	90	110			
Sulfate	9.935	mg/L	0.50	99.3	90	110			
Sample ID: LCS		*LCS*			Batch ID: **R32170**		Analysis Date:	1/26/2009 9:44:04 AM	
Fluoride	0.4851	mg/L	0.10	97.0	90	110			
Chloride	4.642	mg/L	0.10	92.8	90	110			
Bromide	2.459	mg/L	0.10	98.3	90	110			
Nitrate (As N)+Nitrite (As N)	3.251	mg/L	0.20	92.9	90	110			
Phosphorus, Orthophosphate (As P)	4.699	mg/L	0.50	94.0	90	110			
Sulfate	9.696	mg/L	0.50	97.0	90	110			
Sample ID: LCS		*LCS*			Batch ID: **R32175**		Analysis Date:	1/26/2009 10:10:34 AM	
Fluoride	0.5247	mg/L	0.10	105	90	110			
Chloride	4.893	mg/L	0.10	97.9	90	110			
Bromide	2.404	mg/L	0.10	96.2	90	110			
Nitrate (As N)+Nitrite (As N)	3.335	mg/L	0.20	95.3	90	110			
Phosphorus, Orthophosphate (As P)	5.254	mg/L	0.50	105	90	110			
Sulfate	9.700	mg/L	0.50	97.0	90	110			
Sample ID: LCS		*LCS*			Batch ID: **R32180**		Analysis Date:	1/27/2009 10:18:02 AM	
Fluoride	0.5198	mg/L	0.10	104	90	110			
Chloride	4.841	mg/L	0.10	96.8	90	110			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901240

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: LCS		*LCS*			Batch ID: **R32180**		Analysis Date:	1/27/2009 10:18:02 AM	
Bromide	2.578	mg/L	0.10	103	90	110			
Nitrate (As N)+Nitrite (As N)	3.410	mg/L	0.20	97.4	90	110			
Phosphorus, Orthophosphate (As P)	5.082	mg/L	0.50	102	90	110			
Sulfate	10.20	mg/L	0.50	102	90	110			
Sample ID: LCS		*LCS*			Batch ID: **R32206**		Analysis Date:	1/28/2009 8:43:44 AM	
Fluoride	0.5296	mg/L	0.10	106	90	110			
Chloride	4.769	mg/L	0.10	95.4	90	110			
Bromide	2.435	mg/L	0.10	97.4	90	110			
Nitrate (As N)+Nitrite (As N)	3.411	mg/L	0.20	97.4	90	110			
Phosphorus, Orthophosphate (As P)	5.094	mg/L	0.50	102	90	110			
Sulfate	10.13	mg/L	0.50	101	90	110			
Sample ID: LCS-2		*LCS*			Batch ID: **R32206**		Analysis Date:	1/29/2009 3:52:50 AM	
Fluoride	0.5294	mg/L	0.10	106	90	110			
Chloride	4.819	mg/L	0.10	96.4	90	110			
Bromide	2.476	mg/L	0.10	99.0	90	110			
Nitrate (As N)+Nitrite (As N)	3.443	mg/L	0.20	98.4	90	110			
Phosphorus, Orthophosphate (As P)	5.073	mg/L	0.50	101	90	110			
Sulfate	10.12	mg/L	0.50	101	90	110			
Method: SM 2320B: Alkalinity									
Sample ID: MB-R32099		*MBLK*			Batch ID: **R32099**		Analysis Date:	1/20/2009	
Alkalinity, Total (As CaCO3)	ND	mg/L CaC	20						
Carbonate	ND	mg/L CaC	2.0						
Bicarbonate	ND	mg/L CaC	20						
Sample ID: MB		*MBLK*			Batch ID: **R32142**		Analysis Date:	1/22/2009	
Alkalinity, Total (As CaCO3)	ND	mg/L CaC	20						
Carbonate	ND	mg/L CaC	2.0						
Bicarbonate	ND	mg/L CaC	20						
Sample ID: LCS-R32099		*LCS*			Batch ID: **R32099**		Analysis Date:	1/20/2009	
Alkalinity, Total (As CaCO3)	83.00	mg/L CaC	20	101	80	120			
Sample ID: LCS		*LCS*			Batch ID: **R32142**		Analysis Date:	1/22/2009	
Alkalinity, Total (As CaCO3)	84.00	mg/L CaC	20	103	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901240

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: MB-18113		*MBLK*			Batch ID: **18113**		Analysis Date:	1/20/2009 7:43:26 PM	
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	2.0						
2-Methylnaphthalene	ND	µg/L	2.0						
Acenaphthylene	ND	µg/L	2.5						
Acenaphthene	ND	µg/L	5.0						
Fluorene	ND	µg/L	0.80						
Phenanthrene	ND	µg/L	0.60						
Anthracene	ND	µg/L	0.80						
Fluoranthene	ND	µg/L	0.30						
Pyrene	ND	µg/L	0.30						
Benz(a)anthracene	ND	µg/L	0.070						
Chrysene	ND	µg/L	0.20						
Benzo(b)fluoranthene	ND	µg/L	0.10						
Benzo(k)fluoranthene	ND	µg/L	0.070						
Benzo(a)pyrene	ND	µg/L	0.070						
Dibenz(a,h)anthracene	ND	µg/L	0.070						
Benzo(g,h,i)perylene	ND	µg/L	0.080						
Indeno(1,2,3-cd)pyrene	ND	µg/L	0.080						
Sample ID: LCS-18113		*LCS*			Batch ID: **18113**		Analysis Date:	1/20/2009 8:03:38 PM	
Naphthalene	54.66	µg/L	2.0	68.3	31.5	90.7			
1-Methylnaphthalene	57.28	µg/L	2.0	71.4	32.5	93.3			
2-Methylnaphthalene	56.72	µg/L	2.0	70.9	32.8	89.6			
Acenaphthylene	61.44	µg/L	2.5	76.6	37.8	92.4			
Acenaphthene	64.53	µg/L	5.0	80.7	38.6	93.9			
Fluorene	4.850	µg/L	0.80	60.5	38	95.5			
Phenanthrene	3.020	µg/L	0.60	75.1	32.9	107			
Anthracene	2.830	µg/L	0.60	70.4	35.2	98.3			
Fluoranthene	6.400	µg/L	0.30	79.8	36.4	104			
Pyrene	4.770	µg/L	0.30	59.5	37.1	102			
Benz(a)anthracene	0.6300	µg/L	0.070	78.6	33.7	101			
Chrysene	3.230	µg/L	0.20	80.3	35.2	96.1			
Benzo(b)fluoranthene	0.7800	µg/L	0.10	77.8	33.6	94.2			
Benzo(k)fluoranthene	0.4100	µg/L	0.070	82.0	25.4	110			
Benzo(a)pyrene	0.4200	µg/L	0.070	83.7	26.9	102			
Dibenz(a,h)anthracene	0.8100	µg/L	0.070	80.6	40.7	92.1			
Benzo(g,h,i)perylene	0.7600	µg/L	0.080	76.0	24.3	109			
Indeno(1,2,3-cd)pyrene	1.460	µg/L	0.080	72.9	42.6	99.9			
Sample ID: LCSD-18113		*LCSD*			Batch ID: **18113**		Analysis Date:	1/20/2009 8:23:50 PM	
Naphthalene	45.72	µg/L	2.0	57.2	31.5	90.7	17.8	32.1	
1-Methylnaphthalene	49.30	µg/L	2.0	61.5	32.5	93.3	15.0	32.7	
2-Methylnaphthalene	47.41	µg/L	2.0	59.3	32.8	89.6	17.9	34	
Acenaphthylene	48.33	µg/L	2.5	60.3	37.8	92.4	23.9	38.8	
Acenaphthene	51.01	µg/L	5.0	63.8	38.6	93.9	23.4	38.6	
Fluorene	3.860	µg/L	0.80	48.1	38	95.5	22.7	29.3	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901240

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Ssmple ID: LCSD-18113		*LCSD*			Batch ID:	**18113**	Analysis Date:		1/20/2009 8:23:50 PM
Phenanthrene	2.450	µg/L	0.60	60.9	32.9	107	20.8	25	
Anthracene	2.050	µg/L	0.60	51.0	35.2	98.3	32.0	23.9	R
Fluoranthene	4.760	µg/L	0.30	59.4	36.4	104	29.4	15.7	R
Pyrene	3.690	µg/L	0.30	46.0	37.1	102	25.5	15.3	R
Benz(a)anthracene	0.4700	µg/L	0.070	56.6	33.7	101	29.1	19	R
Chrysene	2.430	µg/L	0.20	60.4	35.2	96.1	28.3	16.6	R
Benzo(b)fluoranthene	0.5800	µg/L	0.10	57.9	33.6	94.2	29.4	21.7	R
Benzo(k)fluoranthene	0.2900	µg/L	0.070	58.0	25.4	110	34.3	19.4	R
Benzo(a)pyrene	0.3100	µg/L	0.070	61.8	26.9	102	30.1	16.7	R
Dibenz(a,h)anthracene	0.6100	µg/L	0.070	60.9	40.7	92.1	28.2	17.3	R
Benzo(g,h,i)perylene	0.5600	µg/L	0.080	56.0	24.3	109	30.3	18	R
Indeno(1,2,3-cd)pyrene	1.100	µg/L	0.080	54.9	42.6	99.9	28.1	17.7	R
Method: SM 2540 C: Total Dissolved Solids									
Sample ID: MBLK-18115		*MBLK*			Batch ID:	**18115**	Analysis Date:		1/19/2009
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-18115		*LCS*			Batch ID:	**18115**	Analysis Date:		1/19/2009
Total Dissolved Solids	1011	mg/L	20	101	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901240

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 0901240-01A MSD		*MSD*			Batch ID:	**R32059**	Analysis Date:		1/17/2009 6:59:26 AM
Benzene	20.11	µg/L	1.0	101	84.9	122	0.879	15	
Toluene	18.42	µg/L	1.0	92.1	80.3	114	0.884	15	
Chlorobenzene	19.46	µg/L	1.0	97.3	71.9	134	1.86	15	
1,1-Dichloroethene	22.37	µg/L	1.0	112	88	144	1.53	17.8	
Trichloroethene (TCE)	20.43	µg/L	1.0	102	87.1	114	1.19	19.8	
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R32059**	Analysis Date:		1/16/2009 8:37:15 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropene	ND	µg/L	1.0						

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901240

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID: **R32059**		Analysis Date:	1/16/2009 8:37:15 AM	
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: b5		*MBLK*			Batch ID: **R32059**		Analysis Date:	1/16/2009 8:33:56 PM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901240

Method: EPA Method 8260B: VOLATILES
Sample ID: b5 *MBLK* Batch ID: R32059 Analysis Date: 1/16/2009 8:33:58 PM

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901240

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: b5		*MBLK*			Batch ID:	**R32059**	Analysis Date:	1/16/2009 8:33:56 PM	
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R32059**	Analysis Date:	1/16/2009 9:34:07 AM	
Benzene	19.45	µg/L	1.0	97.3	88	116			
Toluene	18.09	µg/L	1.0	90.4	82.9	112			
Chlorobenzene	19.41	µg/L	1.0	97.0	71.4	133			
1,1-Dichloroethene	20.80	µg/L	1.0	104	97.9	140			
Trichloroethene (TCE)	19.84	µg/L	1.0	99.2	90.5	112			
Sample ID: 100ng lcs		*LCS*			Batch ID:	**R32059**	Analysis Date:	1/16/2009 9:30:50 PM	
Benzene	20.45	µg/L	1.0	102	88	116			
Toluene	18.80	µg/L	1.0	94.0	82.9	112			
Chlorobenzene	19.81	µg/L	1.0	99.1	71.4	133			
1,1-Dichloroethene	22.98	µg/L	1.0	115	97.9	140			
Trichloroethene (TCE)	20.41	µg/L	1.0	102	90.5	112			
Sample ID: 0901240-01A MS		*MS*			Batch ID:	**R32059**	Analysis Date:	1/17/2009 6:30:59 AM	
Benzene	19.93	µg/L	1.0	99.7	84.9	122			
Toluene	18.26	µg/L	1.0	91.3	80.3	114			
Chlorobenzene	19.82	µg/L	1.0	99.1	71.9	134			
1,1-Dichloroethene	22.72	µg/L	1.0	114	88	144			
Trichloroethene (TCE)	20.19	µg/L	1.0	101	87.1	114			

Qualifiers:

E	Estimated value	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 WESTERN REFINING SOUT

Date Received: 1/16/2009

Work Order Number 0901240

Received by: TLS

Sample ID labels checked by: TS (Initials)

Checklist completed by: [signature] (Signature) 1/16/09 (Date)

Matrix:

Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	3°	<6° C *Acceptable* If given sufficient time to cool.		

COMMENTS:

- -

Client contacted ____ Date contacted: ____ Person contacted ____

Contacted by: ____ Regarding: ____

Comments: As per A.A. analysis requested is 8260, cation/anion balance, RCRA8 metals, ~~8310~~. AS 1/16 ~~for~~ GBR 48 + GBR 50

no 8310 Analysis ~~for~~ GRW-3 + GRW-6 / A 1/19/09

Per AA added Dissolved Fe, Mn to head # 5C + 6C. Called ESC and

Corrective Action added test. TS 1/27/09

~~1/27/09 Requested AA to Redo COC for samples collected on 1/13,14,15/09~~

1/09

2

Chain-of-Custody Record

Client: Giant Refinery
Bill Richardson
Mailing Address: 111 CR 4990
Bloomfield NM 87413
Phone #:
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other ______
☐ EDD (Type) ______

Turn-Around Time:
☒ Standard ☐ Rush ______
Project Name: Giant Former Refinery / Giant Bloomfield Refinery
Project #:
Project Manager: Ashley Ager
970-946-1093
Sampler: Troy Urban
On Ice: ☒ Yes ☐ No
Sample Temperature: 3

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0901210	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4) + Br	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA) → See of file	601/602 / BTEX	TDS, Alk, EC, pH			Air Bubbles (Y or N)
011409	1228	GW	SHS-18	5 total	HCl, None H_2SO_4	1								X				X	X			
011509	1140	GW	GBR-51	5 total	HCl, None H_2SO_4	2								X				X	X			
011409	1524	GW	SHS-9	5 total	HCl None H_2SO_4	3								X				X	X			
011409	1600	GW	SHS-8	5 total	HCl, None H_2SO_4	4								X				X	X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
011609	0830	[signature] Troy Urban	[signature]	1/16/09	1545
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: see checklist for analysis

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

Client: Giant Refining
Bill Richardson
Mailing Address: 111 CR 4990
Bloomfield NM 87413
Phone #:
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Giant former Refinery
Giant Bloomfield Refinery
Project #:
Project Manager: Ashley Ager
970-946-1093
Sampler: Troy Urban
On Ice: ☒ Yes ☐ No
Sample Temperature: 2

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 601296	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO3,NO2,PO4,SO4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA) 8260 BTEX	601/602 BTEX	TDS, Alk, EC, pH	Sb, As, Be, Cd, Cr, Ni	Cu, Pb, Se, Ag, Tl, Zn, Hg	Air Bubbles (Y or N)
011509	1336	GW	GBR-48	7 total	HCl, None, H2SO4, HNO3	5								X				X	X	X	X	
011509	1248	GW	GBR-50	7 total	HCl, None, H2SO4, HNO3	6								X				X	X	X	X	
011509	0834	GW	SHS-5	5 total	HCl, None, H2SO4	7								X				X	X			
011509	0915	GW	SHS-2	5 total	HCl, None, H2SO4	8								X				X	X			
011309	1555	GW	GBR-52	5 total	HCl, None, H2SO4	9								X				X	X			

Date	Time	Relinquished by:	Received by:	Date	Time
011609	0830	Troy Urban		1/16/09	1545
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: please send results to ALA@lodestarservices.com
see checklist for analysis

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Client: Giant

Contact Bill Richardson

Mailing Address: 111 CR 4990

Bloomfield NM 87413

Phone #:

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: Giant Former Refinery / Giant Bloomfield Refinery

Project #:

Project Manager: Ashley Ager 970-946-1093

Sampler: Troy Urban

On Ice: ☒ Yes ☐ No

Sample Temperature: 3

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0901240	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	~~8310 (PNA or PAH)~~ 8015 TPH	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4) Br	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	601/602 BTEX	~~Hardness, Ca, Mg, K, Na, Cl, TDS~~ TK	TDS, Alk, EC, pH	Air Bubbles (Y or N)
011309	1237	GW	GRW-3	6 total	HCl, None, H_2SO_4	10						X		X				X		X	
011309	1358	GW	GRW-6	6 total	HCl, None, H_2SO_4	11						X		X				X		X	
011409	1424	GW	SHS-19	5 total	HCl, None, H_2SO_4	12								X				X		X	
011409	1640	GW	SHS-1	5 total	HCl, None, H_2SO_4	13								X				X		X	
011309	0700	GW	trip blank	2	HCl	14												X			

Date:	Time:	Relinquished by:	Received by:	Date	Time
011609	8:30	Troy Urban	[signature]	1/16/09	
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: please send results to ALA@lodestarservices.com

see checklist for analysis

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, February 09, 2009

Ashley Ager
Western Refining Southwest, Inc.
#50 CR 4990
Bloomfield, NM 87413

TEL: (970) 946-1093
FAX (505) 632-3911

RE: Giant Former Refinery/Giant Bloomfield Refinery

Order No.: 0901286

Dear Ashley Ager:

Hall Environmental Analysis Laboratory, Inc. received 7 sample(s) on 1/21/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

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
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-24D
Lab Order:	0901286	**Collection Date:**	1/20/2009 8:37:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **DMG**
Naphthalene	ND	2.0		µg/L	1	1/28/2009 2:34:31 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	1/28/2009 2:34:31 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	1/28/2009 2:34:31 PM
Acenaphthylene	ND	2.5		µg/L	1	1/28/2009 2:34:31 PM
Acenaphthene	ND	5.0		µg/L	1	1/28/2009 2:34:31 PM
Fluorene	ND	0.80		µg/L	1	1/28/2009 2:34:31 PM
Phenanthrene	ND	0.80		µg/L	1	1/28/2009 2:34:31 PM
Anthracene	ND	0.60		µg/L	1	1/28/2009 2:34:31 PM
Fluoranthene	ND	0.30		µg/L	1	1/28/2009 2:34:31 PM
Pyrene	ND	0.30		µg/L	1	1/28/2009 2:34:31 PM
Benz(a)anthracene	ND	0.070		µg/L	1	1/28/2009 2:34:31 PM
Chrysene	ND	0.20		µg/L	1	1/28/2009 2:34:31 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	1/28/2009 2:34:31 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	1/28/2009 2:34:31 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	1/28/2009 2:34:31 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	1/28/2009 2:34:31 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	1/28/2009 2:34:31 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	1/28/2009 2:34:31 PM
Surr: Benzo(e)pyrene	70.2	44.8-104		%REC	1	1/28/2009 2:34:31 PM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Fluoride	0.98	0.10		mg/L	1	1/22/2009 1:23:07 PM
Chloride	230	1.0		mg/L	10	1/23/2009 4:52:38 PM
Bromide	1.2	0.10		mg/L	1	1/22/2009 1:23:07 PM
Nitrate (As N)+Nitrite (As N)	ND	1.0		mg/L	5	1/22/2009 1:05:42 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/22/2009 1:23:07 PM
Sulfate	2100	25		mg/L	50	1/23/2009 5:10:03 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	1.5	1.0		µg/L	1	1/23/2009 7:04:56 AM
Toluene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Ethylbenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,2-Dichloroethane (EDC)	1.1	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Naphthalene	ND	2.0		µg/L	1	1/23/2009 7:04:56 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/23/2009 7:04:56 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/23/2009 7:04:56 AM
Acetone	13	10		µg/L	1	1/23/2009 7:04:56 AM
Bromobenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-24D
Lab Order:	0901286	**Collection Date:**	1/20/2009 8:37:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Bromodichloromethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Bromoform	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Bromomethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
2-Butanone	ND	10		µg/L	1	1/23/2009 7:04:56 AM
Carbon disulfide	ND	10		µg/L	1	1/23/2009 7:04:56 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Chlorobenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Chloroethane	ND	2.0		µg/L	1	1/23/2009 7:04:56 AM
Chloroform	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Chloromethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
2-Chlorotoluene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
4-Chlorotoluene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
cis-1,2-DCE	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/23/2009 7:04:56 AM
Dibromochloromethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Dibromomethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/23/2009 7:04:56 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
2-Hexanone	ND	10		µg/L	1	1/23/2009 7:04:56 AM
Isopropylbenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/23/2009 7:04:56 AM
Methylene Chloride	ND	3.0		µg/L	1	1/23/2009 7:04:56 AM
n-Butylbenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
n-Propylbenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
sec-Butylbenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Styrene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
tert-Butylbenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/23/2009 7:04:56 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
trans-1,2-DCE	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL 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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-24D
Lab Order:	0901286	**Collection Date:**	1/20/2009 8:37:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/23/2009 7:04:56 AM
Vinyl chloride	ND	1.0		µg/L	1	1/23/2009 7:04:56 AM
Xylenes, Total	1.8	1.5		µg/L	1	1/23/2009 7:04:56 AM
Surr: 1,2-Dichloroethane-d4	113	68.1-123		%REC	1	1/23/2009 7:04:56 AM
Surr: 4-Bromofluorobenzene	104	53.2-145		%REC	1	1/23/2009 7:04:56 AM
Surr: Dibromofluoromethane	97.6	68.5-119		%REC	1	1/23/2009 7:04:56 AM
Surr: Toluene-d8	100	64-131		%REC	1	1/23/2009 7:04:56 AM
SM 2320B: ALKALINITY						Analyst: KMS
Alkalinity, Total (As CaCO3)	230	20		mg/L CaCO3	1	2/2/2009
Carbonate	ND	2.0		mg/L CaCO3	1	2/2/2009
Bicarbonate	230	20		mg/L CaCO3	1	2/2/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: KMS
Specific Conductance	3900	0.010		µmhos/cm	1	1/27/2009
SM4500-H+B: PH						Analyst: KMS
pH	7.33	0.1		pH units	1	1/23/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: KMS
Total Dissolved Solids	3100	200		mg/L	1	1/22/2009

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Estimated value	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-32
Lab Order:	0901286	**Collection Date:**	1/20/2009 12:36:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	0.57	0.10		mg/L	1	1/22/2009 11:21:15 AM
Chloride	530	5.0		mg/L	50	1/23/2009 3:43:00 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/22/2009 11:21:15 AM
Bromide	1.3	0.10		mg/L	1	1/22/2009 11:21:15 AM
Nitrogen, Nitrate (As N)	2.0	0.10		mg/L	1	1/22/2009 11:21:15 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/22/2009 11:21:15 AM
Sulfate	2100	25		mg/L	50	1/23/2009 3:43:00 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Toluene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Ethylbenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Naphthalene	ND	2.0		µg/L	1	1/22/2009 2:25:41 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 2:25:41 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 2:25:41 PM
Acetone	ND	10		µg/L	1	1/22/2009 2:25:41 PM
Bromobenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Bromoform	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Bromomethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
2-Butanone	ND	10		µg/L	1	1/22/2009 2:25:41 PM
Carbon disulfide	ND	10		µg/L	1	1/22/2009 2:25:41 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Chlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Chloroethane	ND	2.0		µg/L	1	1/22/2009 2:25:41 PM
Chloroform	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Chloromethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/22/2009 2:25:41 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Dibromomethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-32
Lab Order:	0901286	**Collection Date:**	1/20/2009 12:36:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/22/2009 2:25:41 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
2-Hexanone	ND	10		µg/L	1	1/22/2009 2:25:41 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/22/2009 2:25:41 PM
Methylene Chloride	ND	3.0		µg/L	1	1/22/2009 2:25:41 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Styrene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/22/2009 2:25:41 PM
Tetrachloroethene (PCE)	1.3	1.0		µg/L	1	1/22/2009 2:25:41 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/22/2009 2:25:41 PM
Vinyl chloride	ND	1.0		µg/L	1	1/22/2009 2:25:41 PM
Xylenes, Total	ND	1.5		µg/L	1	1/22/2009 2:25:41 PM
Surr: 1,2-Dichloroethane-d4	105	68.1-123		%REC	1	1/22/2009 2:25:41 PM
Surr: 4-Bromofluorobenzene	99.9	53.2-145		%REC	1	1/22/2009 2:25:41 PM
Surr: Dibromofluoromethane	105	68.5-119		%REC	1	1/22/2009 2:25:41 PM
Surr: Toluene-d8	110	64-131		%REC	1	1/22/2009 2:25:41 PM
SM 2320B: ALKALINITY						Analyst: KMS
Alkalinity, Total (As CaCO3)	350	20		mg/L CaCO3	1	2/2/2009
Carbonate	ND	2.0		mg/L CaCO3	1	2/2/2009
Bicarbonate	350	20		mg/L CaCO3	1	2/2/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-32
Lab Order:	0901286	**Collection Date:**	1/20/2009 12:36:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	5000	0.010		µmhos/cm	1	1/27/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.57	0.1		pH units	1	1/29/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	4100	200		mg/L	1	1/22/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Trip Blank
Lab Order:	0901286	**Collection Date:**	
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-03	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Toluene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Ethylbenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Naphthalene	ND	2.0		µg/L	1	1/22/2009 2:54:31 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 2:54:31 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 2:54:31 PM
Acetone	ND	10		µg/L	1	1/22/2009 2:54:31 PM
Bromobenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Bromoform	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Bromomethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
2-Butanone	ND	10		µg/L	1	1/22/2009 2:54:31 PM
Carbon disulfide	ND	10		µg/L	1	1/22/2009 2:54:31 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Chlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Chloroethane	ND	2.0		µg/L	1	1/22/2009 2:54:31 PM
Chloroform	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Chloromethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/22/2009 2:54:31 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Dibromomethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/22/2009 2:54:31 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
2-Hexanone	ND	10		µg/L	1	1/22/2009 2:54:31 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Trip Blank
Lab Order:	0901286	**Collection Date:**	
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-03	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Isopropylbenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/22/2009 2:54:31 PM
Methylene Chloride	ND	3.0		µg/L	1	1/22/2009 2:54:31 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Styrene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/22/2009 2:54:31 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/22/2009 2:54:31 PM
Vinyl chloride	ND	1.0		µg/L	1	1/22/2009 2:54:31 PM
Xylenes, Total	ND	1.5		µg/L	1	1/22/2009 2:54:31 PM
Surr: 1,2-Dichloroethane-d4	103	68.1-123		%REC	1	1/22/2009 2:54:31 PM
Surr: 4-Bromofluorobenzene	110	53.2-145		%REC	1	1/22/2009 2:54:31 PM
Surr: Dibromofluoromethane	96.5	68.5-119		%REC	1	1/22/2009 2:54:31 PM
Surr: Toluene-d8	106	64-131		%REC	1	1/22/2009 2:54:31 PM

Qualifiers:

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

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-17
Lab Order:	0901286	**Collection Date:**	1/20/2009 11:02:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **DMG**
Naphthalene	ND	2.0		µg/L	1	1/28/2009 2:54:50 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	1/28/2009 2:54:50 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	1/28/2009 2:54:50 PM
Acenaphthylene	ND	2.5		µg/L	1	1/28/2009 2:54:50 PM
Acenaphthene	ND	5.0		µg/L	1	1/28/2009 2:54:50 PM
Fluorene	ND	0.80		µg/L	1	1/28/2009 2:54:50 PM
Phenanthrene	ND	0.60		µg/L	1	1/28/2009 2:54:50 PM
Anthracene	ND	0.60		µg/L	1	1/28/2009 2:54:50 PM
Fluoranthene	ND	0.30		µg/L	1	1/28/2009 2:54:50 PM
Pyrene	ND	0.30		µg/L	1	1/28/2009 2:54:50 PM
Benz(a)anthracene	ND	0.070		µg/L	1	1/28/2009 2:54:50 PM
Chrysene	ND	0.20		µg/L	1	1/28/2009 2:54:50 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	1/28/2009 2:54:50 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	1/28/2009 2:54:50 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	1/28/2009 2:54:50 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	1/28/2009 2:54:50 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	1/28/2009 2:54:50 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	1/28/2009 2:54:50 PM
Surr: Benzo(e)pyrene	71.8	44.8-104		%REC	1	1/28/2009 2:54:50 PM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Fluoride	0.76	0.10		mg/L	1	1/22/2009 10:11:37 AM
Chloride	40	0.10		mg/L	1	1/22/2009 10:11:37 AM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/22/2009 10:11:37 AM
Bromide	0.22	0.10		mg/L	1	1/22/2009 10:11:37 AM
Nitrogen, Nitrate (As N)	3.9	0.10		mg/L	1	1/22/2009 10:11:37 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/22/2009 10:11:37 AM
Sulfate	1200	10		mg/L	20	1/23/2009 3:08:11 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Toluene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Ethylbenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Naphthalene	ND	2.0		µg/L	1	1/22/2009 3:23:20 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 3:23:20 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 3:23:20 PM
Acetone	ND	10		µg/L	1	1/22/2009 3:23:20 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-17
Lab Order:	0901286	**Collection Date:**	1/20/2009 11:02:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Bromobenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Bromoform	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Bromomethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
2-Butanone	ND	10		µg/L	1	1/22/2009 3:23:20 PM
Carbon disulfide	ND	10		µg/L	1	1/22/2009 3:23:20 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Chlorobenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Chloroethane	ND	2.0		µg/L	1	1/22/2009 3:23:20 PM
Chloroform	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Chloromethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/22/2009 3:23:20 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Dibromomethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/22/2009 3:23:20 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
2-Hexanone	ND	10		µg/L	1	1/22/2009 3:23:20 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/22/2009 3:23:20 PM
Methylene Chloride	ND	3.0		µg/L	1	1/22/2009 3:23:20 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Styrene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/22/2009 3:23:20 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM

Qualifiers:

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

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-17
Lab Order:	0901286	**Collection Date:**	1/20/2009 11:02:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-04	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
trans-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/22/2009 3:23:20 PM
Vinyl chloride	ND	1.0		µg/L	1	1/22/2009 3:23:20 PM
Xylenes, Total	ND	1.5		µg/L	1	1/22/2009 3:23:20 PM
Surr: 1,2-Dichloroethane-d4	104	68.1-123		%REC	1	1/22/2009 3:23:20 PM
Surr: 4-Bromofluorobenzene	97.6	53.2-145		%REC	1	1/22/2009 3:23:20 PM
Surr: Dibromofluoromethane	96.9	68.5-119		%REC	1	1/22/2009 3:23:20 PM
Surr: Toluene-d8	110	64-131		%REC	1	1/22/2009 3:23:20 PM
SM 2320B: ALKALINITY						Analyst: KMS
Alkalinity, Total (As CaCO3)	210	20		mg/L CaCO3	1	2/2/2009
Carbonate	ND	2.0		mg/L CaCO3	1	2/2/2009
Bicarbonate	210	20		mg/L CaCO3	1	2/2/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: KMS
Specific Conductance	2300	0.010		µmhos/cm	1	1/27/2009
SM4500-H+B: PH						Analyst: KMS
pH	7.39	0.1		pH units	1	1/23/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: KMS
Total Dissolved Solids	1800	200		mg/L	1	1/22/2009

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

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-30
Lab Order:	0901286	**Collection Date:**	1/20/2009 10:03:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: DMG
Naphthalene	ND	2.0		µg/L	1	1/28/2009 3:15:05 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	1/28/2009 3:15:05 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	1/28/2009 3:15:05 PM
Acenaphthylene	ND	2.5		µg/L	1	1/28/2009 3:15:05 PM
Acenaphthene	ND	5.0		µg/L	1	1/28/2009 3:15:05 PM
Fluorene	ND	0.80		µg/L	1	1/28/2009 3:15:05 PM
Phenanthrene	ND	0.60		µg/L	1	1/28/2009 3:15:05 PM
Anthracene	ND	0.80		µg/L	1	1/28/2009 3:15:05 PM
Fluoranthene	ND	0.30		µg/L	1	1/28/2009 3:15:05 PM
Pyrene	ND	0.30		µg/L	1	1/28/2009 3:15:05 PM
Benz(a)anthracene	ND	0.070		µg/L	1	1/28/2009 3:15:05 PM
Chrysene	ND	0.20		µg/L	1	1/28/2009 3:15:05 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	1/28/2009 3:15:05 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	1/28/2009 3:15:05 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	1/28/2009 3:15:05 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	1/28/2009 3:15:05 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	1/28/2009 3:15:05 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	1/28/2009 3:15:05 PM
Surr: Benzo(e)pyrene	82.7	44.8-104		%REC	1	1/28/2009 3:15:05 PM
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	0.74	0.10		mg/L	1	1/22/2009 9:38:48 AM
Chloride	270	1.0		mg/L	10	1/22/2009 9:54:12 AM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/22/2009 9:36:48 AM
Bromide	0.96	0.10		mg/L	1	1/22/2009 9:36:48 AM
Nitrogen, Nitrate (As N)	0.85	0.10		mg/L	1	1/22/2009 9:36:48 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/22/2009 9:36:48 AM
Sulfate	1700	25		mg/L	50	1/23/2009 2:50:47 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Toluene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Ethylbenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Naphthalene	ND	2.0		µg/L	1	1/22/2009 4:50:55 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 4:50:55 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 4:50:55 PM
Acetone	ND	10		µg/L	1	1/22/2009 4:50:55 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-30
Lab Order:	0901286	**Collection Date:**	1/20/2009 10:03:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Bromobenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Bromoform	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Bromomethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
2-Butanone	ND	10		µg/L	1	1/22/2009 4:50:55 PM
Carbon disulfide	ND	10		µg/L	1	1/22/2009 4:50:55 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Chlorobenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Chloroethane	ND	2.0		µg/L	1	1/22/2009 4:50:55 PM
Chloroform	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Chloromethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/22/2009 4:50:55 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Dibromomethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/22/2009 4:50:55 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
2-Hexanone	ND	10		µg/L	1	1/22/2009 4:50:55 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/22/2009 4:50:55 PM
Methylene Chloride	ND	3.0		µg/L	1	1/22/2009 4:50:55 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Styrene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/22/2009 4:50:55 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- 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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-30
Lab Order:	0901286	**Collection Date:**	1/20/2009 10:03:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-05	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
trans-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/22/2009 4:50:55 PM
Vinyl chloride	ND	1.0		µg/L	1	1/22/2009 4:50:55 PM
Xylenes, Total	1.8	1.5		µg/L	1	1/22/2009 4:50:55 PM
Surr: 1,2-Dichloroethane-d4	106	68.1-123		%REC	1	1/22/2009 4:50:55 PM
Surr: 4-Bromofluorobenzene	99.6	53.2-145		%REC	1	1/22/2009 4:50:55 PM
Surr: Dibromofluoromethane	92.7	68.5-119		%REC	1	1/22/2009 4:50:55 PM
Surr: Toluene-d8	100	64-131		%REC	1	1/22/2009 4:50:55 PM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	260	20		mg/L CaCO3	1	2/2/2009
Carbonate	ND	2.0		mg/L CaCO3	1	2/2/2009
Bicarbonate	260	20		mg/L CaCO3	1	2/2/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	3700	0.010		µmhos/cm	1	1/27/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.26	0.1		pH units	1	1/23/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	3200	200		mg/L	1	1/22/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-31
Lab Order:	0901286	**Collection Date:**	1/20/2009 1:38:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **DMG**
Naphthalene	ND	2.0		µg/L	1	1/28/2009 3:35:22 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	1/28/2009 3:35:22 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	1/28/2009 3:35:22 PM
Acenaphthylene	ND	2.5		µg/L	1	1/28/2009 3:35:22 PM
Acenaphthene	ND	5.0		µg/L	1	1/28/2009 3:35:22 PM
Fluorene	ND	0.60		µg/L	1	1/28/2009 3:35:22 PM
Phenanthrene	ND	0.60		µg/L	1	1/28/2009 3:35:22 PM
Anthracene	ND	0.60		µg/L	1	1/28/2009 3:35:22 PM
Fluoranthene	ND	0.30		µg/L	1	1/28/2009 3:35:22 PM
Pyrene	ND	0.30		µg/L	1	1/28/2009 3:35:22 PM
Benz(a)anthracene	ND	0.070		µg/L	1	1/28/2009 3:35:22 PM
Chrysene	ND	0.20		µg/L	1	1/28/2009 3:35:22 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	1/28/2009 3:35:22 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	1/28/2009 3:35:22 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	1/28/2009 3:35:22 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	1/28/2009 3:35:22 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	1/28/2009 3:35:22 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	1/28/2009 3:35:22 PM
Surr: Benzo(e)pyrene	83.0	44.8-104		%REC	1	1/28/2009 3:35:22 PM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Fluoride	0.68	0.10		mg/L	1	1/22/2009 12:30:54 PM
Chloride	83	1.0		mg/L	10	1/22/2009 12:48:18 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/22/2009 12:30:54 PM
Bromide	0.29	0.10		mg/L	1	1/22/2009 12:30:54 PM
Nitrogen, Nitrate (As N)	1.3	0.10		mg/L	1	1/22/2009 12:30:54 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/22/2009 12:30:54 PM
Sulfate	1700	25		mg/L	50	1/23/2009 4:00:25 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Toluene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Ethylbenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Naphthalene	ND	2.0		µg/L	1	1/22/2009 5:20:15 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 5:20:15 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 5:20:15 PM
Acetone	ND	10		µg/L	1	1/22/2009 5:20:15 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-31
Lab Order:	0901286	**Collection Date:**	1/20/2009 1:38:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Bromobenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Bromoform	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Bromomethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
2-Butanone	ND	10		µg/L	1	1/22/2009 5:20:15 PM
Carbon disulfide	ND	10		µg/L	1	1/22/2009 5:20:15 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Chlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Chloroethane	ND	2.0		µg/L	1	1/22/2009 5:20:15 PM
Chloroform	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Chloromethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/22/2009 5:20:15 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Dibromomethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/22/2009 5:20:15 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
2-Hexanone	ND	10		µg/L	1	1/22/2009 5:20:15 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/22/2009 5:20:15 PM
Methylene Chloride	ND	3.0		µg/L	1	1/22/2009 5:20:15 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Styrene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/22/2009 5:20:15 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL 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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-31
Lab Order:	0901286	**Collection Date:**	1/20/2009 1:38:00 PM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-06	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
trans-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/22/2009 5:20:15 PM
Vinyl chloride	ND	1.0		µg/L	1	1/22/2009 5:20:15 PM
Xylenes, Total	ND	1.5		µg/L	1	1/22/2009 5:20:15 PM
Surr: 1,2-Dichloroethane-d4	99.9	68.1-123		%REC	1	1/22/2009 5:20:15 PM
Surr: 4-Bromofluorobenzene	99.2	53.2-145		%REC	1	1/22/2009 5:20:15 PM
Surr: Dibromofluoromethane	92.7	68.5-119		%REC	1	1/22/2009 5:20:15 PM
Surr: Toluene-d8	101	64-131		%REC	1	1/22/2009 5:20:15 PM
SM 2320B: ALKALINITY						Analyst: **KMS**
Alkalinity, Total (As CaCO3)	230	20		mg/L CaCO3	1	2/2/2009
Carbonate	ND	2.0		mg/L CaCO3	1	2/2/2009
Bicarbonate	230	20		mg/L CaCO3	1	2/2/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	3300	0.010		µmhos/cm	1	1/27/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	7.30	0.1		pH units	1	1/23/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	2600	200		mg/L	1	1/22/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-49
Lab Order:	0901286	**Collection Date:**	1/20/2009 11:40:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	0.70	0.10		mg/L	1	1/22/2009 10:46:25 AM
Chloride	280	1.0		mg/L	10	1/22/2009 11:03:50 AM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	1/22/2009 10:46:25 AM
Bromide	0.74	0.10		mg/L	1	1/22/2009 10:46:25 AM
Nitrogen, Nitrate (As N)	0.11	0.10		mg/L	1	1/22/2009 10:46:25 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	1/22/2009 10:46:25 AM
Sulfate	2100	25		mg/L	50	1/23/2009 3:25:36 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Toluene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Ethylbenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Naphthalene	ND	2.0		µg/L	1	1/22/2009 5:49:30 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 5:49:30 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	1/22/2009 5:49:30 PM
Acetone	ND	10		µg/L	1	1/22/2009 5:49:30 PM
Bromobenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Bromodichloromethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Bromoform	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Bromomethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
2-Butanone	ND	10		µg/L	1	1/22/2009 5:49:30 PM
Carbon disulfide	ND	10		µg/L	1	1/22/2009 5:49:30 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Chlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Chloroethane	ND	2.0		µg/L	1	1/22/2009 5:49:30 PM
Chloroform	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Chloromethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
2-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
4-Chlorotoluene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
cis-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	1/22/2009 5:49:30 PM
Dibromochloromethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Dibromomethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM

Qualifiers:

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

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-49
Lab Order:	0901286	**Collection Date:**	1/20/2009 11:40:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Dichlorodifluoromethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	1/22/2009 5:49:30 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
2-Hexanone	ND	10		µg/L	1	1/22/2009 5:49:30 PM
Isopropylbenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	1/22/2009 5:49:30 PM
Methylene Chloride	ND	3.0		µg/L	1	1/22/2009 5:49:30 PM
n-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
n-Propylbenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
sec-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Styrene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
tert-Butylbenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	1/22/2009 5:49:30 PM
Tetrachloroethene (PCE)	2.4	1.0		µg/L	1	1/22/2009 5:49:30 PM
trans-1,2-DCE	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	1/22/2009 5:49:30 PM
Vinyl chloride	ND	1.0		µg/L	1	1/22/2009 5:49:30 PM
Xylenes, Total	ND	1.5		µg/L	1	1/22/2009 5:49:30 PM
Surr: 1,2-Dichloroethane-d4	104	68.1-123		%REC	1	1/22/2009 5:49:30 PM
Surr: 4-Bromofluorobenzene	98.1	53.2-145		%REC	1	1/22/2009 5:49:30 PM
Surr: Dibromofluoromethane	103	68.5-119		%REC	1	1/22/2009 5:49:30 PM
Surr: Toluene-d8	104	64-131		%REC	1	1/22/2009 5:49:30 PM
SM 2320B: ALKALINITY						Analyst: KMS
Alkalinity, Total (As CaCO3)	240	20		mg/L CaCO3	1	2/2/2009
Carbonate	ND	2.0		mg/L CaCO3	1	2/2/2009
Bicarbonate	240	20		mg/L CaCO3	1	2/2/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GBR-49
Lab Order:	0901286	**Collection Date:**	1/20/2009 11:40:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/21/2009
Lab ID:	0901286-07	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **KMS**
Specific Conductance	4000	0.010		µmhos/cm	1	1/27/2009
SM4500-H+B: PH						Analyst: **KMS**
pH	6.93	0.1		pH units	1	1/29/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	3300	200		mg/L	1	1/22/2009

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

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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

January 30, 2009

Date Received : January 23, 2009
Description : 0901286

ESC Sample # : L384827-01

Site ID :

Sample ID : GBR-32

Project # : 0901286

Collected By :
Collection Date : 01/20/09 12:36

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Calcium, Dissolved	480	0.50	mg/l	6010B	01/29/09	1
Iron, Dissolved	BDL	0.10	mg/l	6010B	01/29/09	1
Magnesium, Dissolved	50.	0.10	mg/l	6010B	01/29/09	1
Manganese, Dissolved	0.70	0.010	mg/l	6010B	01/29/09	1
Potassium, Dissolved	4.2	0.50	mg/l	6010B	01/29/09	1
Sodium, Dissolved	710	0.50	mg/l	6010B	01/29/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/30/09 16:33 Printed: 01/30/09 16:34

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

January 30, 2009

Date Received : January 23, 2009
Description : 0901286

Sample ID : GBR-32

Collected By :
Collection Date : 01/20/09 12:36

ESC Sample # : L384827-02

Site ID :

Project # : 0901286

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	BDL	0.00020	mg/l	7470A	01/29/09	1
Arsenic	BDL	0.020	mg/l	6010B	01/29/09	1
Barium	0.029	0.0050	mg/l	6010B	01/29/09	1
Cadmium	BDL	0.0050	mg/l	6010B	01/29/09	1
Chromium	0.10	0.010	mg/l	6010B	01/29/09	1
Lead	BDL	0.0050	mg/l	6010B	01/29/09	1
Selenium	0.059	0.020	mg/l	6010B	01/29/09	1
Silver	BDL	0.010	mg/l	6010B	01/29/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/30/09 16:33 Printed: 01/30/09 16:34

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

January 30, 2009

Date Received : January 23, 2009
Description : 0901286

Sample ID : GBR-49

Collected By :
Collection Date : 01/20/09 11:40

ESC Sample # : L384827-03

Site ID :

Project # : 0901286

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Calcium,Dissolved	420	0.50	mg/l	6010B	01/29/09	1
Iron,Dissolved	1.4	0.10	mg/l	6010B	01/29/09	1
Magnesium,Dissolved	40.	0.10	mg/l	6010B	01/29/09	1
Manganese,Dissolved	3.5	0.010	mg/l	6010B	01/29/09	1
Potassium,Dissolved	2.8	0.50	mg/l	6010B	01/29/09	1
Sodium,Dissolved	540	0.50	mg/l	6010B	01/29/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/30/09 16:33 Printed: 01/30/09 16:34

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

January 30, 2009

Date Received : January 23, 2009
Description : 0901286

Sample ID : GBR-49

Collected By :
Collection Date : 01/20/09 11:40

ESC Sample # : L384827-04

Site ID :

Project # : 0901286

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Mercury	BDL	0.00020	mg/l	7470A	01/29/09	1
Arsenic	BDL	0.020	mg/l	6010B	01/29/09	1
Barium	0.021	0.0050	mg/l	6010B	01/29/09	1
Cadmium	BDL	0.0050	mg/l	6010B	01/29/09	1
Chromium	0.056	0.010	mg/l	6010B	01/29/09	1
Lead	BDL	0.0050	mg/l	6010B	01/29/09	1
Selenium	0.047	0.020	mg/l	6010B	01/29/09	1
Silver	BDL	0.010	mg/l	6010B	01/29/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 01/30/09 16:33 Printed: 01/30/09 16:34

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: 0901286-06CMSD		*MSD*			Batch ID:	**R32137**	Analysis Date:		1/22/2009 2:15:19 PM
Fluoride	1.105	mg/L	0.10	84.1	65.1	121	1.61	20	
Nitrogen, Nitrite (As N)	1.003	mg/L	0.10	100	52.9	128	2.25	20	
Bromide	2.545	mg/L	0.10	90.2	75.6	132	10.9	20	
Nitrogen, Nitrate (As N)	3.508	mg/L	0.10	86.7	83.8	112	0.360	20	
Nitrate (As N)+Nitrite (As N)	4.512	mg/L	0.20	90.6	78.4	118	0.777	20	
Phosphorus, Orthophosphate (As P)	4.299	mg/L	0.50	86.0	77.6	118	0.116	20	
Sample ID: MB		*MBLK*			Batch ID:	**R32137**	Analysis Date:		1/22/2009 9:01:59 AM
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R32155**	Analysis Date:		1/23/2009 9:54:47 AM
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Nitrate (As N)+Nitrite (As N)	ND	mg/L	0.20						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: LCS		*LCS*			Batch ID:	**R32137**	Analysis Date:		1/22/2009 9:19:24 AM
Fluoride	0.4836	mg/L	0.10	96.7	90	110			
Chloride	4.924	mg/L	0.10	98.5	90	110			
Nitrogen, Nitrite (As N)	0.9496	mg/L	0.10	95.0	90	110			
Bromide	2.518	mg/L	0.10	101	90	110			
Nitrogen, Nitrate (As N)	2.446	mg/L	0.10	97.8	90	110			
Nitrate (As N)+Nitrite (As N)	3.396	mg/L	0.20	97.0	90	110			
Phosphorus, Orthophosphate (As P)	4.821	mg/L	0.50	96.4	90	110			
Sulfate	10.51	mg/L	0.50	105	90	110			
Sample ID: LCS-b		*LCS*			Batch ID:	**R32155**	Analysis Date:		1/23/2009 10:47:00 AM
Fluoride	0.4562	mg/L	0.10	91.2	90	110			
Chloride	4.671	mg/L	0.10	93.4	90	110			
Nitrogen, Nitrite (As N)	0.9169	mg/L	0.10	91.7	90	110			
Bromide	2.397	mg/L	0.10	95.9	90	110			
Nitrogen, Nitrate (As N)	2.337	mg/L	0.10	93.5	90	110			
Nitrate (As N)+Nitrite (As N)	3.254	mg/L	0.20	93.0	90	110			
Phosphorus, Orthophosphate (As P)	4.648	mg/L	0.50	93.0	90	110			
Sulfate	9.410	mg/L	0.50	94.1	90	110			
Sample ID: 0901286-06CMS		*MS*			Batch ID:	**R32137**	Analysis Date:		1/22/2009 1:57:55 PM

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: 0901286-08CMS		*MS*			Batch ID: **R32137**		Analysis Date:	1/22/2009 1:57:55 PM	
Fluoride	1.088	mg/L	0.10	80.5	65.1	121			
Nitrogen, Nitrite (As N)	0.9810	mg/L	0.10	98.1	52.9	128			
Bromide	2.840	mg/L	0.10	102	75.6	132			
Nitrogen, Nitrate (As N)	3.496	mg/L	0.10	86.2	83.8	112			
Nitrate (As N)+Nitrite (As N)	4.477	mg/L	0.20	89.6	78.4	118			
Phosphorus, Orthophosphate (As P)	4.304	mg/L	0.50	86.1	77.6	118			
Method: SM 2320B: Alkalinity									
Sample ID: MB		*MBLK*			Batch ID: **R32266**		Analysis Date:	2/2/2009	
Alkalinity, Total (As CaCO3)	ND	mg/L CaC	20						
Carbonate	ND	mg/L CaC	2.0						
Bicarbonate	ND	mg/L CaC	20						
Sample ID: LCS		*LCS*			Batch ID: **R32266**		Analysis Date:	2/2/2009	
Alkalinity, Total (As CaCO3)	85.00	mg/L CaC	20	104	80	120			

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Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: MB-18144		*MBLK*			Batch ID:	**18144**	Analysis Date:	1/28/2009 1:33:44 PM	
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	2.0						
2-Methylnaphthalene	ND	µg/L	2.0						
Acenaphthylene	ND	µg/L	2.5						
Acenaphthene	ND	µg/L	5.0						
Fluorene	ND	µg/L	0.80						
Phenanthrene	ND	µg/L	0.60						
Anthracene	ND	µg/L	0.60						
Fluoranthene	ND	µg/L	0.30						
Pyrene	ND	µg/L	0.30						
Benz(a)anthracene	ND	µg/L	0.070						
Chrysene	ND	µg/L	0.20						
Benzo(b)fluoranthene	ND	µg/L	0.10						
Benzo(k)fluoranthene	ND	µg/L	0.070						
Benzo(a)pyrene	ND	µg/L	0.070						
Dibenz(a,h)anthracene	ND	µg/L	0.070						
Benzo(g,h,i)perylene	ND	µg/L	0.080						
Indeno(1,2,3-cd)pyrene	ND	µg/L	0.080						
Sample ID: LCS-18144		*LCS*			Batch ID:	**18144**	Analysis Date:	1/28/2009 1:54:01 PM	
Naphthalene	52.84	µg/L	2.0	68.1	31.5	90.7			
1-Methylnaphthalene	53.01	µg/L	2.0	66.1	32.5	93.3			
2-Methylnaphthalene	52.88	µg/L	2.0	66.1	32.8	89.6			
Acenaphthylene	56.18	µg/L	2.5	70.0	37.8	92.4			
Acenaphthene	57.06	µg/L	5.0	71.3	38.6	93.9			
Fluorene	4.230	µg/L	0.80	52.7	38	95.5			
Phenanthrene	2.550	µg/L	0.60	63.4	32.9	107			
Anthracene	2.420	µg/L	0.60	60.2	35.2	98.3			
Fluoranthene	5.570	µg/L	0.30	69.5	36.4	104			
Pyrene	4.340	µg/L	0.30	54.1	37.1	102			
Benz(a)anthracene	0.5400	µg/L	0.070	67.3	33.7	101			
Chrysene	2.770	µg/L	0.20	68.9	35.2	96.1			
Benzo(b)fluoranthene	0.6700	µg/L	0.10	66.9	33.6	94.2			
Benzo(k)fluoranthene	0.3500	µg/L	0.070	70.0	25.4	110			
Benzo(a)pyrene	0.3600	µg/L	0.070	71.7	26.9	102			
Dibenz(a,h)anthracene	0.7000	µg/L	0.070	69.9	40.7	92.1			
Benzo(g,h,i)perylene	0.7000	µg/L	0.080	70.0	24.3	109			
Indeno(1,2,3-cd)pyrene	1.350	µg/L	0.080	67.4	42.6	99.9			
Sample ID: LCSD-18144		*LCSD*			Batch ID:	**18144**	Analysis Date:	1/28/2009 2:14:18 PM	
Naphthalene	53.61	µg/L	2.0	67.0	31.5	90.7	1.45	32.1	
1-Methylnaphthalene	54.67	µg/L	2.0	68.2	32.5	93.3	3.08	32.7	
2-Methylnaphthalene	53.48	µg/L	2.0	66.9	32.8	89.6	1.13	34	
Acenaphthylene	57.78	µg/L	2.5	72.0	37.8	92.4	2.81	38.8	
Acenaphthene	58.57	µg/L	5.0	73.2	38.6	93.9	2.61	38.6	
Fluorene	4.500	µg/L	0.80	56.1	38	95.5	6.19	29.3	

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QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901286

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: LCSD-18144		*LCSD*			Batch ID:	**18144**	Analysis Date:		1/28/2009 2:14:18 PM
Phenanthrene	2.690	µg/L	0.60	66.9	32.9	107	5.34	25	
Anthracene	2.540	µg/L	0.60	63.2	35.2	98.3	4.84	23.9	
Fluoranthene	5.680	µg/L	0.30	70.8	36.4	104	1.96	15.7	
Pyrene	4.540	µg/L	0.30	56.6	37.1	102	4.50	15.3	
Benz(a)anthracene	0.5600	µg/L	0.070	69.8	33.7	101	3.64	19	
Chrysene	2.830	µg/L	0.20	70.4	35.2	96.1	2.14	16.6	
Benzo(b)fluoranthene	0.6900	µg/L	0.10	68.9	33.6	94.2	2.94	21.7	
Benzo(k)fluoranthene	0.3500	µg/L	0.070	70.0	25.4	110	0	19.4	
Benzo(a)pyrene	0.3700	µg/L	0.070	73.7	28.9	102	2.74	16.7	
Dibenz(a,h)anthracene	0.7100	µg/L	0.070	70.9	40.7	92.1	1.42	17.3	
Benzo(g,h,i)perylene	0.7200	µg/L	0.080	72.0	24.3	109	2.82	18	
Indeno(1,2,3-cd)pyrene	1.390	µg/L	0.080	69.4	42.6	99.9	2.92	17.7	
Method: SM 2540 C: Total Dissolved Solids									
Sample ID: MBLK-18137		*MBLK*			Batch ID:	**18137**	Analysis Date:		1/22/2009
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-18137		*LCS*			Batch ID:	**18137**	Analysis Date:		1/22/2009
Total Dissolved Solids	1011	mg/L	20	101	80	120			

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QA/QC SUMMARY REPORT

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Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 0901286-04a MSD		*MSD*			Batch ID: **R32131**		Analysis Date:		1/22/2009 4:21:28 PM
Benzene	19.28	µg/L	1.0	96.4	84.9	122	0.507	15	
Toluene	17.04	µg/L	1.0	84.3	80.3	114	3.32	15	
Chlorobenzene	17.22	µg/L	1.0	86.1	71.9	134	2.47	15	
1,1-Dichloroethene	22.63	µg/L	1.0	113	88	144	5.80	17.8	
Trichloroethene (TCE)	19.12	µg/L	1.0	95.6	87.1	114	0.553	19.8	
Sample ID: 5ml rb		*MBLK*			Batch ID: **R32131**		Analysis Date:		1/22/2009 8:36:53 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						

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Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID: **R32131**		Analysis Date:	1/22/2009 8:36:53 AM	
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: b8		*MBLK*			Batch ID: **R32131**		Analysis Date:	1/23/2009 2:09:01 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						

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Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: b8		*MBLK*			Batch ID: **R32131**		Analysis Date:	1/23/2009 2:09:01 AM	
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						

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Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: b8		*MBLK*			Batch ID: **R32131**		Analysis Date:	1/23/2009 2:09:01 AM	
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs_b		*LCS*			Batch ID: **R32131**		Analysis Date:	1/22/2009 12:58:57 PM	
Benzene	19.44	µg/L	1.0	97.2	88	116			
Toluene	17.62	µg/L	1.0	88.1	82.9	112			
Chlorobenzene	18.25	µg/L	1.0	91.2	71.4	133			
1,1-Dichloroethene	22.68	µg/L	1.0	113	97.9	140			
Trichloroethene (TCE)	18.92	µg/L	1.0	94.6	90.5	112			
Sample ID: 100ng lcs_c		*LCS*			Batch ID: **R32131**		Analysis Date:	1/23/2009 1:39:58 AM	
Benzene	19.59	µg/L	1.0	98.0	88	116			
Toluene	17.90	µg/L	1.0	89.5	82.9	112			
Chlorobenzene	17.74	µg/L	1.0	87.8	71.4	133			
1,1-Dichloroethene	22.54	µg/L	1.0	113	97.9	140			
Trichloroethene (TCE)	18.67	µg/L	1.0	93.4	90.5	112			
Sample ID: 0901286-04a MS		*MS*			Batch ID: **R32131**		Analysis Date:	1/22/2009 3:52:12 PM	
Benzene	19.38	µg/L	1.0	96.9	84.9	122			
Toluene	17.61	µg/L	1.0	87.1	80.3	114			
Chlorobenzene	17.65	µg/L	1.0	88.3	71.9	134			
1,1-Dichloroethene	21.35	µg/L	1.0	107	88	144			
Trichloroethene (TCE)	19.22	µg/L	1.0	96.1	87.1	114			

Qualifiers:

E	Estimated value	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 WESTERN REFINING SOUT | Date Received: 1/21/2009

Work Order Number 0901286 | Received by: ARS

Checklist completed by: _____ 1/21/09 (Signature / Date) | Sample ID labels checked by: _____ (Initials)

Matrix: | Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	5°	<6° C *Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: As per AA analysis requested 8260, cat/anion balance, 8310 (GBR-240, GBR-17, GBR-30, GBR-31) and RCRA metals (GBR-32, GBR-49) AS 1/26/09 00
Per AA added fe, Mn to head #2c + 7c. Called ESC to add test. TS 1/27/09

Corrective Action

Requested AA to Redo COC 1/27/09 AT for Samples collected on 1/20/09 /AT 1/27/09

Chain-of-Custody Record

Client: Western Refining
Bruce Cauthen
Mailing Address: 111 CR 4990
Bloomfield, NM
Phone #:
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Giant Former Refinery Bloomfield
Project #:
Project Manager: Ashley Ager 970 946 1093
Sampler:

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	Lab ID	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) [illegible]	8270 (Semi-VOA)	Cat/Anion + Fe, Mn (?)	RCRA 8	TDS, Alk, EC (?)	pH	Air Bubbles (Y or N)
1/20/09	837	Aq	GBR-24D			0901286-1						X		X		X				X	X	
1/20/09	1236		GBR-32 (?)			-2										X		X	X		X	
			Trip Blank			-3										X						
1/20/09	1102		GBR-17			-4						X		X		X				X	X	
1/20/09	1003		GBR-30			-5						X		X		X				X	X	
1/20/09	1335		GBR-31			-6						X		X		X				X	X	
1/20/09	1140		GBR-49			-7										X		X	X		X	

Date: 01-21-09 Time: 0835 Relinquished by: Ashley L Ager
Received by: [signature] Date: 1/21/09 Time: 0835
Date: Time: Relinquished by:
Received by: Date Time
Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, February 09, 2009

Ashley Ager
Western Refining Southwest, Inc.
#50 CR 4990
Bloomfield, NM 87413

TEL: (970) 946-1093
FAX (505) 632-3911

RE: Giant Former Refinery/Giant Bloomfield Refinery

Order No.: 0901383

Dear Ashley Ager:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 1/28/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

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
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GRW-3
Lab Order:	0901383	**Collection Date:**	1/28/2009 7:40:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/28/2009
Lab ID:	0901383-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **DMG**
Naphthalene	39	4.0		µg/L	1	2/5/2009 8:27:35 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	2/5/2009 8:27:35 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	2/5/2009 8:27:35 PM
Acenaphthylene	ND	5.0		µg/L	1	2/5/2009 8:27:35 PM
Acenaphthene	ND	10		µg/L	1	2/5/2009 8:27:35 PM
Fluorene	3.5	1.6		µg/L	1	2/5/2009 8:27:35 PM
Phenanthrene	ND	1.2		µg/L	1	2/5/2009 8:27:35 PM
Anthracene	ND	1.2		µg/L	1	2/5/2009 8:27:35 PM
Fluoranthene	ND	0.60		µg/L	1	2/5/2009 8:27:35 PM
Pyrene	ND	0.60		µg/L	1	2/5/2009 8:27:35 PM
Benz(a)anthracene	ND	0.14		µg/L	1	2/5/2009 8:27:35 PM
Chrysene	ND	0.40		µg/L	1	2/5/2009 8:27:35 PM
Benzo(b)fluoranthene	ND	0.20		µg/L	1	2/5/2009 8:27:35 PM
Benzo(k)fluoranthene	ND	0.14		µg/L	1	2/5/2009 8:27:35 PM
Benzo(a)pyrene	ND	0.14		µg/L	1	2/5/2009 8:27:35 PM
Dibenz(a,h)anthracene	ND	0.14		µg/L	1	2/5/2009 8:27:35 PM
Benzo(g,h,i)perylene	ND	0.16		µg/L	1	2/5/2009 8:27:35 PM
Indeno(1,2,3-cd)pyrene	ND	0.16		µg/L	1	2/5/2009 8:27:35 PM
Surr: Benzo(e)pyrene	62.3	44.8-104		%REC	1	2/5/2009 8:27:35 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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: *09-Feb-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	GRW-6
Lab Order:	0901383	**Collection Date:**	1/28/2009 7:52:00 AM
Project:	Giant Former Refinery/Giant Bloomfield Refiner	**Date Received:**	1/28/2009
Lab ID:	0901383-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **DMG**
Naphthalene	ND	4.0		µg/L	1	2/5/2009 8:47:50 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	2/5/2009 8:47:50 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	2/5/2009 8:47:50 PM
Acenaphthylene	ND	5.0		µg/L	1	2/5/2009 8:47:50 PM
Acenaphthene	ND	10		µg/L	1	2/5/2009 8:47:50 PM
Fluorene	ND	1.6		µg/L	1	2/5/2009 8:47:50 PM
Phenanthrene	ND	1.2		µg/L	1	2/5/2009 8:47:50 PM
Anthracene	ND	1.2		µg/L	1	2/5/2009 8:47:50 PM
Fluoranthene	ND	0.60		µg/L	1	2/5/2009 8:47:50 PM
Pyrene	ND	0.60		µg/L	1	2/5/2009 8:47:50 PM
Benz(a)anthracene	ND	0.14		µg/L	1	2/5/2009 8:47:50 PM
Chrysene	ND	0.40		µg/L	1	2/5/2009 8:47:50 PM
Benzo(b)fluoranthene	ND	0.20		µg/L	1	2/5/2009 8:47:50 PM
Benzo(k)fluoranthene	ND	0.14		µg/L	1	2/5/2009 8:47:50 PM
Benzo(a)pyrene	ND	0.14		µg/L	1	2/5/2009 8:47:50 PM
Dibenz(a,h)anthracene	ND	0.14		µg/L	1	2/5/2009 8:47:50 PM
Benzo(g,h,i)perylene	ND	0.16		µg/L	1	2/5/2009 8:47:50 PM
Indeno(1,2,3-cd)pyrene	ND	0.16		µg/L	1	2/5/2009 8:47:50 PM
Surr: Benzo(e)pyrene	83.3	44.8-104		%REC	1	2/5/2009 8:47:50 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected 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: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901383

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: MB-18212		*MBLK*			Batch ID: **18212**		Analysis Date:		2/5/2009 7:26:53 PM
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	2.0						
2-Methylnaphthalene	ND	µg/L	2.0						
Acenaphthylene	ND	µg/L	2.5						
Acenaphthene	ND	µg/L	5.0						
Fluorene	ND	µg/L	0.80						
Phenanthrene	ND	µg/L	0.60						
Anthracene	ND	µg/L	0.80						
Fluoranthene	ND	µg/L	0.30						
Pyrene	ND	µg/L	0.30						
Benz(a)anthracene	ND	µg/L	0.070						
Chrysene	ND	µg/L	0.20						
Benzo(b)fluoranthene	ND	µg/L	0.10						
Benzo(k)fluoranthene	ND	µg/L	0.070						
Benzo(a)pyrene	ND	µg/L	0.070						
Dibenz(a,h)anthracene	ND	µg/L	0.070						
Benzo(g,h,i)perylene	ND	µg/L	0.080						
Indeno(1,2,3-cd)pyrene	ND	µg/L	0.080						
Sample ID: LCS-18212		*LCS*			Batch ID: **18212**		Analysis Date:		2/5/2009 7:47:07 PM
Naphthalene	49.75	µg/L	2.0	62.2	31.5	90.7			
1-Methylnaphthalene	52.33	µg/L	2.0	65.2	32.5	93.3			
2-Methylnaphthalene	51.58	µg/L	2.0	64.5	32.8	89.6			
Acenaphthylene	53.21	µg/L	2.5	66.3	37.8	92.4			
Acenaphthene	54.64	µg/L	5.0	68.3	38.6	93.9			
Fluorene	4.060	µg/L	0.80	50.6	38	95.5			
Phenanthrene	2.560	µg/L	0.60	63.7	32.9	107			
Anthracene	2.430	µg/L	0.60	60.4	35.2	98.3			
Fluoranthene	5.090	µg/L	0.30	63.5	36.4	104			
Pyrene	4.680	µg/L	0.30	58.4	37.1	102			
Benz(a)anthracene	0.5400	µg/L	0.070	67.3	33.7	101			
Chrysene	2.680	µg/L	0.20	68.7	35.2	96.1			
Benzo(b)fluoranthene	0.5900	µg/L	0.10	56.9	33.6	94.2			
Benzo(k)fluoranthene	0.3500	µg/L	0.070	70.0	25.4	110			
Benzo(a)pyrene	0.3400	µg/L	0.070	67.7	26.9	102			
Dibenz(a,h)anthracene	0.6400	µg/L	0.070	63.9	40.7	92.1			
Benzo(g,h,i)perylene	0.6500	µg/L	0.080	65.0	24.3	109			
Indeno(1,2,3-cd)pyrene	1.250	µg/L	0.080	62.4	42.6	99.9			
Sample ID: LCSD-18212		*LCSD*			Batch ID: **18212**		Analysis Date:		2/5/2009 8:07:21 PM
Naphthalene	55.94	µg/L	2.0	69.9	31.5	90.7	11.7	32.1	
1-Methylnaphthalene	59.44	µg/L	2.0	74.1	32.5	93.3	12.7	32.7	
2-Methylnaphthalene	55.97	µg/L	2.0	70.0	32.8	89.6	8.16	34	
Acenaphthylene	60.31	µg/L	2.5	75.2	37.8	92.4	12.5	38.8	
Acenaphthene	62.81	µg/L	5.0	78.5	38.6	93.9	13.9	38.6	
Fluorene	4.340	µg/L	0.80	54.1	38	95.5	6.67	29.3	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery/Giant Bloomfield Refiner **Work Order:** 0901383

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: LCSD-18212		*LCSD*			Batch ID:	**18212**	Analysis Date:		2/5/2009 6:07:21 PM
Phenanthrene	2.780	µg/L	0.60	69.2	32.9	107	8.24	25	
Anthracene	2.730	µg/L	0.60	67.9	35.2	98.3	11.6	23.9	
Fluoranthene	5.890	µg/L	0.30	73.4	36.4	104	14.6	15.7	
Pyrene	5.080	µg/L	0.30	63.3	37.1	102	8.20	15.3	
Benz(a)anthracene	0.5900	µg/L	0.070	73.6	33.7	101	8.85	19	
Chrysene	2.990	µg/L	0.20	74.4	35.2	96.1	10.9	16.6	
Benzo(b)fluoranthene	0.6900	µg/L	0.10	68.9	33.6	94.2	15.6	21.7	
Benzo(k)fluoranthene	0.3800	µg/L	0.070	72.0	25.4	110	2.82	19.4	
Benzo(a)pyrene	0.3900	µg/L	0.070	77.7	26.9	102	13.7	16.7	
Dibenz(a,h)anthracene	0.7400	µg/L	0.070	73.9	40.7	92.1	14.5	17.3	
Benzo(g,h,i)perylene	0.7400	µg/L	0.080	74.0	24.3	109	12.9	18	
Indeno(1,2,3-cd)pyrene	1.430	µg/L	0.080	71.4	42.6	99.9	13.4	17.7	

Qualifiers:

E	Estimated value	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 WESTERN REFINING SOUT — Date Received: 1/28/2009

Work Order Number 0901383 — Received by: TLS

Checklist completed by: _____ 1/28/09 — Sample ID labels checked by: _____

Signature — Date — Initials

Matrix: — Carrier name Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☑	Yes ☐	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☐	No ☐	N/A ☑	
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑	
Container/Temp Blank temperature?	9°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Chain-of-Custody Record

Client: Giant Refining

Contact: Bill Richardson

Address: 111 CR 4990

Bloomfield NM 87413

Phone #:

email or Fax#:

QA/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

☐ Other

☐ EDD (Type)

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: Giant Former Refinery / Giant Bloomfield Refinery

Project #:

Project Manager: Ashley Ager

970-946-1093

Sampler: Troy Urban

On Ice: ☒ Yes ☐ No

Sample Temperature: 9°

HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0901383	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH) PAH	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)					Air Bubbles (Y or N)
01 28 09	0740	GRW-3	1 brown glass	NONE	1							X									
01 28 09	0752	GRW-6	1 brown glass	NONE	2							X									

Date: 1/28/09 Time: 0855 Relinquished by: Troy Urban

Received by: 1/28/09 1440

Date: Time: Relinquished by:

Received by:

Remarks: please copy results to: ala@ladestarservices.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Thursday, March 12, 2009

Bruce Cauthen
Western Refining Southwest, Inc.
#50 CR 4990
Bloomfield, NM 87413

TEL: (505) 632-4161
FAX (505) 632-3911

RE: Giant Former Refinery

Order No.: 0902314

Dear Bruce Cauthen:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 2/27/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

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
Texas Lab# T104704424-08-TX

4901 Hawkins NE ▪ Suite D ▪ Albuquerque, NM 87109
505.345.3975 ▪ Fax 505.345.4107
www.hallenvironmental.com

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0902314	**Collection Date:**	2/26/2009 10:24:00 AM
Project:	Giant Former Refinery	**Date Received:**	2/27/2009
Lab ID:	0902314-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8310: PAHS						Analyst: **DMG**
Naphthalene	ND	2.0		µg/L	1	3/6/2009 3:37:33 PM
1-Methylnaphthalene	ND	2.0		µg/L	1	3/6/2009 3:37:33 PM
2-Methylnaphthalene	ND	2.0		µg/L	1	3/6/2009 3:37:33 PM
Acenaphthylene	ND	2.5		µg/L	1	3/6/2009 3:37:33 PM
Acenaphthene	ND	5.0		µg/L	1	3/6/2009 3:37:33 PM
Fluorene	ND	0.80		µg/L	1	3/6/2009 3:37:33 PM
Phenanthrene	ND	0.60		µg/L	1	3/6/2009 3:37:33 PM
Anthracene	ND	0.60		µg/L	1	3/6/2009 3:37:33 PM
Fluoranthene	ND	0.30		µg/L	1	3/6/2009 3:37:33 PM
Pyrene	ND	0.30		µg/L	1	3/6/2009 3:37:33 PM
Benz(a)anthracene	ND	0.070		µg/L	1	3/6/2009 3:37:33 PM
Chrysene	ND	0.20		µg/L	1	3/6/2009 3:37:33 PM
Benzo(b)fluoranthene	ND	0.10		µg/L	1	3/6/2009 3:37:33 PM
Benzo(k)fluoranthene	ND	0.070		µg/L	1	3/6/2009 3:37:33 PM
Benzo(a)pyrene	ND	0.070		µg/L	1	3/6/2009 3:37:33 PM
Dibenz(a,h)anthracene	ND	0.070		µg/L	1	3/6/2009 3:37:33 PM
Benzo(g,h,i)perylene	ND	0.080		µg/L	1	3/6/2009 3:37:33 PM
Indeno(1,2,3-cd)pyrene	ND	0.080		µg/L	1	3/6/2009 3:37:33 PM
Surr: Benzo(e)pyrene	73.6	44.8-104		%REC	1	3/6/2009 3:37:33 PM
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Fluoride	0.79	0.10		mg/L	1	2/28/2009 12:26:56 AM
Chloride	82	1.0		mg/L	10	2/28/2009 12:44:21 AM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	2/28/2009 12:26:56 AM
Bromide	0.51	0.10		mg/L	1	2/28/2009 12:26:56 AM
Nitrogen, Nitrate (As N)	1.1	0.10		mg/L	1	2/28/2009 12:26:56 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	2/28/2009 12:26:56 AM
Sulfate	1800	25		mg/L	50	3/4/2009 5:03:01 AM
EPA METHOD 7470: MERCURY						Analyst: **SNV**
Mercury	ND	0.00020		mg/L	1	3/9/2009 4:50:57 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **TES**
Calcium	370	10		mg/L	10	3/2/2009 6:09:43 PM
Iron	ND	0.020		mg/L	1	3/2/2009 5:12:35 PM
Magnesium	29	1.0		mg/L	1	3/2/2009 5:12:35 PM
Manganese	0.27	0.0020		mg/L	1	3/2/2009 5:12:35 PM
Potassium	3.1	1.0		mg/L	1	3/2/2009 5:12:35 PM
Sodium	480	10		mg/L	10	3/2/2009 6:09:43 PM
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: **TES**
Arsenic	ND	0.020		mg/L	1	3/5/2009 12:02:05 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0902314	**Collection Date:**	2/26/2009 10:24:00 AM
Project:	Giant Former Refinery	**Date Received:**	2/27/2009
Lab ID:	0902314-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 6010B: TOTAL RECOVERABLE METALS						Analyst: TES
Barium	ND	0.020		mg/L	1	3/5/2009 12:02:05 PM
Cadmium	ND	0.0020		mg/L	1	3/5/2009 12:02:05 PM
Chromium	ND	0.0060		mg/L	1	3/5/2009 12:02:05 PM
Lead	ND	0.0050		mg/L	1	3/5/2009 12:02:05 PM
Selenium	ND	0.25		mg/L	5	3/5/2009 2:07:04 PM
Silver	ND	0.0050		mg/L	1	3/5/2009 12:02:05 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Toluene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Ethylbenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Naphthalene	ND	2.0		µg/L	1	2/27/2009 5:27:39 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	2/27/2009 5:27:39 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	2/27/2009 5:27:39 PM
Acetone	ND	10		µg/L	1	2/27/2009 5:27:39 PM
Bromobenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Bromodichloromethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Bromoform	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Bromomethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
2-Butanone	ND	10		µg/L	1	2/27/2009 5:27:39 PM
Carbon disulfide	ND	10		µg/L	1	2/27/2009 5:27:39 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Chlorobenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Chloroethane	ND	2.0		µg/L	1	2/27/2009 5:27:39 PM
Chloroform	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Chloromethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
2-Chlorotoluene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
4-Chlorotoluene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
cis-1,2-DCE	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/27/2009 5:27:39 PM
Dibromochloromethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Dibromomethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0902314	**Collection Date:**	2/26/2009 10:24:00 AM
Project:	Giant Former Refinery	**Date Received:**	2/27/2009
Lab ID:	0902314-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
1,1-Dichloroethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	2/27/2009 5:27:39 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
2-Hexanone	ND	10		µg/L	1	2/27/2009 5:27:39 PM
Isopropylbenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	2/27/2009 5:27:39 PM
Methylene Chloride	ND	3.0		µg/L	1	2/27/2009 5:27:39 PM
n-Butylbenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
n-Propylbenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
sec-Butylbenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Styrene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
tert-Butylbenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/27/2009 5:27:39 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
trans-1,2-DCE	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/27/2009 5:27:39 PM
Vinyl chloride	ND	1.0		µg/L	1	2/27/2009 5:27:39 PM
Xylenes, Total	ND	1.5		µg/L	1	2/27/2009 5:27:39 PM
Surr: 1,2-Dichloroethane-d4	106	68.1-123		%REC	1	2/27/2009 5:27:39 PM
Surr: 4-Bromofluorobenzene	110	53.2-145		%REC	1	2/27/2009 5:27:39 PM
Surr: Dibromofluoromethane	110	68.5-119		%REC	1	2/27/2009 5:27:39 PM
Surr: Toluene-d8	94.4	64-131		%REC	1	2/27/2009 5:27:39 PM
SM 2320B: ALKALINITY						Analyst: BDH
Alkalinity, Total (As CaCO3)	260	20		mg/L CaCO3	1	3/3/2009
Carbonate	ND	2.0		mg/L CaCO3	1	3/3/2009
Bicarbonate	260	20		mg/L CaCO3	1	3/3/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: BDH

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0902314	**Collection Date:**	2/26/2009 10:24:00 AM
Project:	Giant Former Refinery	**Date Received:**	2/27/2009
Lab ID:	0902314-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **BDH**
Specific Conductance	3300	0.010		µmhos/cm	1	3/3/2009
SM4500-H+B: PH						Analyst: **BDH**
pH	7.32	0.1		pH units	1	3/3/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **JMP**
Total Dissolved Solids	2800	40		mg/L	1	3/2/2009

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0902314	**Collection Date:**	2/26/2009 11:07:00 AM
Project:	Giant Former Refinery	**Date Received:**	2/27/2009
Lab ID:	0902314-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **RAGS**
Fluoride	0.80	0.10		mg/L	1	2/28/2009 1:01:45 AM
Chloride	81	1.0		mg/L	10	2/28/2009 1:19:10 AM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	2/28/2009 1:01:45 AM
Bromide	0.50	0.10		mg/L	1	2/28/2009 1:01:45 AM
Nitrogen, Nitrate (As N)	1.2	0.10		mg/L	1	2/28/2009 1:01:45 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	2/28/2009 1:01:45 AM
Sulfate	1800	25		mg/L	50	3/4/2009 5:20:25 AM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **TES**
Calcium	370	5.0		mg/L	5	3/2/2009 5:29:18 PM
Magnesium	29	1.0		mg/L	1	3/2/2009 5:16:45 PM
Potassium	3.1	1.0		mg/L	1	3/2/2009 5:16:45 PM
Sodium	490	5.0		mg/L	5	3/2/2009 5:29:18 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Toluene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Ethylbenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Naphthalene	ND	2.0		µg/L	1	2/27/2009 6:54:28 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	2/27/2009 6:54:28 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	2/27/2009 6:54:28 PM
Acetone	ND	10		µg/L	1	2/27/2009 6:54:28 PM
Bromobenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Bromodichloromethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Bromoform	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Bromomethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
2-Butanone	ND	10		µg/L	1	2/27/2009 6:54:28 PM
Carbon disulfide	ND	10		µg/L	1	2/27/2009 6:54:28 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Chlorobenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Chloroethane	ND	2.0		µg/L	1	2/27/2009 6:54:28 PM
Chloroform	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Chloromethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
2-Chlorotoluene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
4-Chlorotoluene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
cis-1,2-DCE	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0902314	**Collection Date:**	2/26/2009 11:07:00 AM
Project:	Giant Former Refinery	**Date Received:**	2/27/2009
Lab ID:	0902314-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	2/27/2009 6:54:28 PM
Dibromochloromethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Dibromomethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	2/27/2009 6:54:28 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
2-Hexanone	ND	10		µg/L	1	2/27/2009 6:54:28 PM
Isopropylbenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	2/27/2009 6:54:28 PM
Methylene Chloride	ND	3.0		µg/L	1	2/27/2009 6:54:28 PM
n-Butylbenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
n-Propylbenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
sec-Butylbenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Styrene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
tert-Butylbenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	2/27/2009 6:54:28 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
trans-1,2-DCE	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	2/27/2009 6:54:28 PM
Vinyl chloride	ND	1.0		µg/L	1	2/27/2009 6:54:28 PM
Xylenes, Total	ND	1.5		µg/L	1	2/27/2009 6:54:28 PM
Surr: 1,2-Dichloroethane-d4	109	68.1-123		%REC	1	2/27/2009 6:54:28 PM
Surr: 4-Bromofluorobenzene	104	53.2-145		%REC	1	2/27/2009 6:54:28 PM
Surr: Dibromofluoromethane	107	68.5-119		%REC	1	2/27/2009 6:54:28 PM
Surr: Toluene-d8	95.1	64-131		%REC	1	2/27/2009 6:54:28 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *12-Mar-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0902314	**Collection Date:**	2/26/2009 11:07:00 AM
Project:	Giant Former Refinery	**Date Received:**	2/27/2009
Lab ID:	0902314-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
SM 2320B: ALKALINITY						Analyst: **BDH**
Alkalinity, Total (As CaCO3)	260	20		mg/L CaCO3	1	3/3/2009
Carbonate	ND	2.0		mg/L CaCO3	1	3/3/2009
Bicarbonate	260	20		mg/L CaCO3	1	3/3/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **BDH**
Specific Conductance	3300	0.010		µmhos/cm	1	3/3/2009
SM4500-H+B: PH						Analyst: **BDH**
pH	7.35	0.1		pH units	1	3/3/2009
SM 2540 C: TOTAL DISSOLVED SOLIDS						Analyst: **JMP**
Total Dissolved Solids	2800	40		mg/L	1	3/2/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected 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: Western Refining Southwest, Inc.
Project: Giant Former Refinery **Work Order:** 0902314

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MB		*MBLK*			Batch ID:	**R32617**	Analysis Date:	2/27/2009 12:37:37 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R32646**	Analysis Date:	3/3/2009 10:46:14 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (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		*LCS*			Batch ID:	**R32617**	Analysis Date:	2/27/2009 1:42:48 PM	
Fluoride	0.4937	mg/L	0.10	98.7	90	110			
Chloride	4.930	mg/L	0.10	98.6	90	110			
Nitrogen, Nitrite (As N)	0.9198	mg/L	0.10	92.0	90	110			
Bromide	2.468	mg/L	0.10	98.7	90	110			
Nitrogen, Nitrate (As N)	2.547	mg/L	0.10	102	90	110			
Phosphorus, Orthophosphate (As P)	4.955	mg/L	0.50	99.1	90	110			
Sulfate	10.06	mg/L	0.50	101	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R32646**	Analysis Date:	3/3/2009 11:03:38 AM	
Fluoride	0.5639	mg/L	0.10	113	90	110			S
Chloride	5.038	mg/L	0.10	101	90	110			
Nitrogen, Nitrite (As N)	1.053	mg/L	0.10	105	90	110			
Bromide	2.664	mg/L	0.10	107	90	110			
Nitrogen, Nitrate (As N)	2.517	mg/L	0.10	101	90	110			
Phosphorus, Orthophosphate (As P)	5.013	mg/L	0.50	100	90	110			
Sulfate	10.40	mg/L	0.50	104	90	110			
Method: SM 2320B: Alkalinity									
Sample ID: 0902314-01CMSD		*MSD*			Batch ID:	**R32639**	Analysis Date:	3/3/2009	
Alkalinity, Total (As CaCO3)	337.2	mg/L CaC	20	93.8	80	120	0.238	20	
Sample ID: MB		*MBLK*			Batch ID:	**R32639**	Analysis Date:	3/3/2009	
Alkalinity, Total (As CaCO3)	ND	mg/L CaC	20						
Carbonate	ND	mg/L CaC	2.0						
Bicarbonate	ND	mg/L CaC	20						
Sample ID: 80PPM LCS		*LCS*			Batch ID:	**R32639**	Analysis Date:	3/3/2009	
Alkalinity, Total (As CaCO3)	80.04	mg/L CaC	20	100	80	120			
Sample ID: 0902314-01CMS		*MS*			Batch ID:	**R32639**	Analysis Date:	3/3/2009	
Alkalinity, Total (As CaCO3)	336.4	mg/L CaC	20	92.7	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery **Work Order:** 0902314

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 0902314-01a MSD		*MSD*			Batch ID:	**R32600**	Analysis Date:		2/27/2009 6:25:32 PM
Benzene	21.90	µg/L	1.0	110	84.9	122	6.25	15	
Toluene	19.29	µg/L	1.0	96.4	80.3	114	0.551	15	
Chlorobenzene	17.59	µg/L	1.0	88.0	71.9	134	3.76	15	
1,1-Dichloroethene	24.64	µg/L	1.0	123	88	144	2.54	17.8	
Trichloroethene (TCE)	21.42	µg/L	1.0	107	87.1	114	10.3	19.8	
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R32600**	Analysis Date:		2/27/2009 8:59:55 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery **Work Order:** 0902314

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID: **R32600**		Analysis Date:	2/27/2009 8:59:55 AM	
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID: **R32600**		Analysis Date:	2/27/2009 9:58:07 AM	
Benzene	21.36	µg/L	1.0	107	88	116			
Toluene	20.05	µg/L	1.0	100	82.9	112			
Chlorobenzene	18.13	µg/L	1.0	90.7	71.4	133			
1,1-Dichloroethene	24.58	µg/L	1.0	123	97.9	140			
Trichloroethene (TCE)	20.50	µg/L	1.0	102	90.5	112			
Sample ID: 0902314-01a MS		*MS*			Batch ID: **R32600**		Analysis Date:	2/27/2009 5:56:32 PM	
Benzene	23.31	µg/L	1.0	117	84.9	122			
Toluene	19.18	µg/L	1.0	95.9	80.3	114			
Chlorobenzene	18.26	µg/L	1.0	91.3	71.9	134			
1,1-Dichloroethene	25.28	µg/L	1.0	126	68	144			
Trichloroethene (TCE)	23.74	µg/L	1.0	119	87.1	114			S

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery **Work Order:** 0902314

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: MB-18439		*MBLK*			Batch ID: **18439**		Analysis Date:	3/6/2009 11:14:14 AM	
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	2.0						
2-Methylnaphthalene	ND	µg/L	2.0						
Acenaphthylene	ND	µg/L	2.5						
Acenaphthene	ND	µg/L	5.0						
Fluorene	ND	µg/L	0.80						
Phenanthrene	ND	µg/L	0.60						
Anthracene	ND	µg/L	0.60						
Fluoranthene	ND	µg/L	0.30						
Pyrene	ND	µg/L	0.30						
Benz(a)anthracene	ND	µg/L	0.070						
Chrysene	ND	µg/L	0.20						
Benzo(b)fluoranthene	ND	µg/L	0.10						
Benzo(k)fluoranthene	ND	µg/L	0.070						
Benzo(a)pyrene	ND	µg/L	0.070						
Dibenz(a,h)anthracene	ND	µg/L	0.070						
Benzo(g,h,i)perylene	ND	µg/L	0.080						
Indeno(1,2,3-cd)pyrene	ND	µg/L	0.080						
Sample ID: LCS-18439		*LCS*			Batch ID: **18439**		Analysis Date:	3/6/2009 11:34:29 AM	
Naphthalene	53.54	µg/L	2.0	66.9	31.5	90.7			
1-Methylnaphthalene	59.92	µg/L	2.0	74.7	32.5	93.3			
2-Methylnaphthalene	53.67	µg/L	2.0	67.1	32.8	89.6			
Acenaphthylene	60.32	µg/L	2.5	75.2	37.8	92.4			
Acenaphthene	60.13	µg/L	5.0	75.2	38.6	93.9			
Fluorene	4.400	µg/L	0.80	54.9	38	95.5			
Phenanthrene	2.870	µg/L	0.60	71.4	32.9	107			
Anthracene	2.740	µg/L	0.60	68.2	35.2	98.3			
Fluoranthene	6.030	µg/L	0.30	75.2	36.4	104			
Pyrene	5.170	µg/L	0.30	64.5	37.1	102			
Benz(a)anthracene	0.6200	µg/L	0.070	77.3	33.7	101			
Chrysene	3.120	µg/L	0.20	77.6	35.2	96.1			
Benzo(b)fluoranthene	0.7400	µg/L	0.10	73.9	33.6	94.2			
Benzo(k)fluoranthene	0.3800	µg/L	0.070	76.0	25.4	110			
Benzo(a)pyrene	0.4200	µg/L	0.070	83.7	26.9	102			
Dibenz(a,h)anthracene	0.7900	µg/L	0.070	78.8	40.7	92.1			
Benzo(g,h,i)perylene	0.8000	µg/L	0.080	80.0	24.3	109			
Indeno(1,2,3-cd)pyrene	1.500	µg/L	0.080	74.9	42.6	99.9			
Sample ID: LCSD-18439		*LCSD*			Batch ID: **18439**		Analysis Date:	3/6/2009 11:54:44 AM	
Naphthalene	46.09	µg/L	2.0	57.6	31.5	90.7	15.0	32.1	
1-Methylnaphthalene	51.49	µg/L	2.0	64.2	32.5	93.3	15.1	32.7	
2-Methylnaphthalene	45.14	µg/L	2.0	56.4	32.8	89.6	17.3	34	
Acenaphthylene	55.60	µg/L	2.5	69.3	37.8	92.4	8.14	38.8	
Acenaphthene	57.43	µg/L	5.0	71.8	38.6	93.9	4.59	38.6	
Fluorene	4.150	µg/L	0.80	51.7	38	95.5	5.85	29.3	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery **Work Order:** 0902314

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8310: PAHs									
Sample ID: LCSD-18439		*LCSD*			Batch ID:	**18439**	Analysis Date:	3/6/2009 11:54:44 AM	
Phenanthrene	2.930	µg/L	0.60	72.9	32.9	107	2.07	25	
Anthracene	2.740	µg/L	0.60	68.2	35.2	98.3	0	23.9	
Fluoranthene	6.040	µg/L	0.30	75.3	36.4	104	0.166	15.7	
Pyrene	5.270	µg/L	0.30	65.7	37.1	102	1.92	15.3	
Benz(a)anthracene	0.6400	µg/L	0.070	79.8	33.7	101	3.17	19	
Chrysene	3.280	µg/L	0.20	81.1	35.2	96.1	4.39	16.6	
Benzo(b)fluoranthene	0.7700	µg/L	0.10	76.8	33.6	94.2	3.97	21.7	
Benzo(k)fluoranthene	0.3900	µg/L	0.070	78.0	25.4	110	2.60	19.4	
Benzo(a)pyrene	0.4200	µg/L	0.070	83.7	26.9	102	0	16.7	
Dibenz(a,h)anthracene	0.8100	µg/L	0.070	80.8	40.7	92.1	2.50	17.3	
Benzo(g,h,i)perylene	0.8200	µg/L	0.080	82.0	24.3	109	2.47	18	
Indeno(1,2,3-cd)pyrene	1.540	µg/L	0.080	76.8	42.6	99.9	2.63	17.7	
Method: EPA Method 7470: Mercury									
Sample ID: MB-18477		*MBLK*			Batch ID:	**18477**	Analysis Date:	3/9/2009 4:16:39 PM	
Mercury	ND	mg/L	0.00020						
Sample ID: LCS-18477		*LCS*			Batch ID:	**18477**	Analysis Date:	3/9/2009 4:18:24 PM	
Mercury	0.004668	mg/L	0.00020	93.4	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery **Work Order:** 0902314

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Dissolved Metals									
Sample ID: 0902314-02CMSD		*MSD*			Batch ID: **R32628**		Analysis Date:		3/2/2009 5:25:06 PM
Iron	0.5840	mg/L	0.020	97.5	75	125	0.314	20	
Magnesium	81.40	mg/L	1.0	103	75	125	1.57	20	
Manganese	0.7624	mg/L	0.0020	97.8	75	125	1.62	20	
Potassium	61.15	mg/L	1.0	106	75	125	1.80	20	
Sample ID: 0902314-02CMSD		*MSD*			Batch ID: **R32628**		Analysis Date:		3/2/2009 5:49:58 PM
Calcium	611.5	mg/L	5.0	95.3	75	125	2.71	20	E
Sodium	724.1	mg/L	5.0	94.6	75	125	2.75	20	E
Sample ID: MB		*MBLK*			Batch ID: **R32628**		Analysis Date:		3/2/2009 3:58:23 PM
Calcium	ND	mg/L	1.0						
Iron	ND	mg/L	0.020						
Magnesium	ND	mg/L	1.0						
Manganese	ND	mg/L	0.0020						
Potassium	ND	mg/L	1.0						
Sodium	ND	mg/L	1.0						
Sample ID: LCS		*LCS*			Batch ID: **R32628**		Analysis Date:		3/2/2009 4:01:25 PM
Calcium	48.16	mg/L	1.0	95.3	80	120			
Iron	0.4909	mg/L	0.020	98.2	80	120			
Magnesium	50.46	mg/L	1.0	99.9	80	120			
Manganese	0.4830	mg/L	0.0020	92.6	80	120			
Potassium	54.91	mg/L	1.0	99.7	80	120			
Sodium	50.97	mg/L	1.0	101	80	120			
Sample ID: 0902314-02CMS		*MS*			Batch ID: **R32628**		Analysis Date:		3/2/2009 5:21:00 PM
Iron	0.5658	mg/L	0.020	97.8	75	125			
Magnesium	80.13	mg/L	1.0	101	75	125			
Manganese	0.7502	mg/L	0.0020	95.3	75	125			
Potassium	60.06	mg/L	1.0	104	75	125			
Sample ID: 0902314-02CMS		*MS*			Batch ID: **R32628**		Analysis Date:		3/2/2009 5:34:02 PM
Calcium	595.2	mg/L	5.0	88.8	75	125			E
Sodium	704.4	mg/L	5.0	86.8	75	125			E

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: Giant Former Refinery **Work Order:** 0902314

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA 6010B: Total Recoverable Metals									
Sample ID: MB-18449		*MBLK*			Batch ID:	**18449**	Analysis Date:	3/5/2009 11:35:13 AM	
Arsenic	ND	mg/L	0.020						
Barium	ND	mg/L	0.010						
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-18449		*LCS*			Batch ID:	**18449**	Analysis Date:	3/5/2009 11:38:15 AM	
Arsenic	0.4725	mg/L	0.020	94.5	80	120			
Barium	0.4524	mg/L	0.010	90.5	80	120			
Cadmium	0.4577	mg/L	0.0020	91.5	80	120			
Chromium	0.4606	mg/L	0.0060	92.1	80	120			
Lead	0.4609	mg/L	0.0050	92.2	80	120			
Selenium	0.4538	mg/L	0.050	90.8	80	120			
Silver	0.4560	mg/L	0.0050	91.2	80	120			
Method: SM 2540 C: Total Dissolved Solids									
Sample ID: MB-18436		*MBLK*			Batch ID:	**18436**	Analysis Date:	3/2/2009	
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-18436		*LCS*			Batch ID:	**18436**	Analysis Date:	3/2/2009	
Total Dissolved Solids	1014	mg/L	20	101	80	120			

Qualifiers:

- E *Estimated value*
- 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 WESTERN REFINING SOUT

Date Received: 2/27/2009

Work Order Number 0902314

Received by: TLS

Checklist completed by: _____ 2/27/09
Signature Date

Sample ID labels checked by: _____
Initials

Matrix: Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	1°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

_____

_____

Corrective Action _____

_____

_____

Chain-of-Custody Record

Client: Western Refining
Bruce Cauthen
Address: 111 CR 4990
Bloomfield NM 87413
Phone #:
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: Giant Former Refinery
Project #:
Project Manager: Ashley Ager
970-946-1093
Sampler: Troy Urban
On Ice: ☒ Yes ☐ No
Sample Temperature: 1

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

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0902314	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	cation/anion Fe Mn	RCRA 8 metals	TDS, Alk, EC	pH	Air Bubbles (Y or N)
022609	1024	Effluent	9 total		1							X			X		X	X	X	X	
022609	1107	Influent	7 total		2										X		X		X	X	

Analysis Request

Date:	Time:	Relinquished by:	Received by:	Date:	Time:
2/27/09	0835			2/27/09	1515
Date:	Time:	Relinquished by:	Received by:		

Remarks: On cation/anion add Fe, Mn for Effluent only. Influent only requires cation anion balance, Copy results to Ashley Ager - ala@lodestarservices.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Monday, May 11, 2009

Bruce Cauthen
Western Refining Southwest, Inc.
#50 CR 4990
Bloomfield, NM 87413

TEL: (505) 632-4161
FAX (505) 632-3911

RE: GBR

Order No.: 0905001

Dear Bruce Cauthen:

Hall Environmental Analysis Laboratory, Inc. received 2 sample(s) on 5/1/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

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
Texas Lab# T104704424-08-TX

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-May-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0905001	**Collection Date:**	4/30/2009 12:14:00 PM
Project:	GBR	**Date Received:**	5/1/2009
Lab ID:	0905001-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: TAF
Fluoride	0.72	0.10		mg/L	1	5/1/2009 8:25:30 AM
Chloride	87	1.0		mg/L	10	5/1/2009 8:42:55 AM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	5/1/2009 8:25:30 AM
Bromide	0.38	0.10		mg/L	1	5/1/2009 8:25:30 AM
Nitrogen, Nitrate (As N)	1.0	0.10		mg/L	1	5/1/2009 8:25:30 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	5/1/2009 8:25:30 AM
Sulfate	1800	25		mg/L	50	5/2/2009 3:37:59 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: NMO
Calcium	340	10		mg/L	10	5/5/2009 11:57:31 AM
Iron	0.040	0.020		mg/L	1	5/5/2009 11:14:15 AM
Magnesium	26	1.0		mg/L	1	5/5/2009 11:14:15 AM
Manganese	0.37	0.0020		mg/L	1	5/5/2009 11:14:15 AM
Potassium	3.2	1.0		mg/L	1	5/5/2009 1:14:04 PM
Sodium	420	10		mg/L	10	5/5/2009 11:57:31 AM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Toluene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Ethylbenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Naphthalene	ND	2.0		µg/L	1	5/2/2009 4:26:04 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2009 4:26:04 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2009 4:26:04 PM
Acetone	ND	10		µg/L	1	5/2/2009 4:26:04 PM
Bromobenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Bromodichloromethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Bromoform	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Bromomethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
2-Butanone	ND	10		µg/L	1	5/2/2009 4:26:04 PM
Carbon disulfide	ND	10		µg/L	1	5/2/2009 4:26:04 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Chlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Chloroethane	ND	2.0		µg/L	1	5/2/2009 4:26:04 PM
Chloroform	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Chloromethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
2-Chlorotoluene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
4-Chlorotoluene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM

Qualifiers:

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

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0905001	**Collection Date:**	4/30/2009 12:14:00 PM
Project:	GBR	**Date Received:**	5/1/2009
Lab ID:	0905001-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
cis-1,2-DCE	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/2/2009 4:26:04 PM
Dibromochloromethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Dibromomethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	5/2/2009 4:26:04 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
2-Hexanone	ND	10		µg/L	1	5/2/2009 4:26:04 PM
Isopropylbenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	5/2/2009 4:26:04 PM
Methylene Chloride	ND	3.0		µg/L	1	5/2/2009 4:26:04 PM
n-Butylbenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
n-Propylbenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
sec-Butylbenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Styrene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
tert-Butylbenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/2/2009 4:26:04 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
trans-1,2-DCE	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/2/2009 4:26:04 PM
Vinyl chloride	ND	1.0		µg/L	1	5/2/2009 4:26:04 PM
Xylenes, Total	2.1	1.5		µg/L	1	5/2/2009 4:26:04 PM
Surr: 1,2-Dichloroethane-d4	82.8	68.1-123		%REC	1	5/2/2009 4:26:04 PM
Surr: 4-Bromofluorobenzene	86.2	53.2-145		%REC	1	5/2/2009 4:26:04 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *11-May-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0905001	**Collection Date:**	4/30/2009 12:14:00 PM
Project:	GBR	**Date Received:**	5/1/2009
Lab ID:	0905001-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Surr: Dibromofluoromethane	84.1	68.5-119		%REC	1	5/2/2009 4:26:04 PM
Surr: Toluene-d8	95.3	64-131		%REC	1	5/2/2009 4:26:04 PM
SM 2320B: ALKALINITY						Analyst: **BDH**
Alkalinity, Total (As CaCO3)	300	20		mg/L CaCO3	1	5/1/2009
Carbonate	ND	2.0		mg/L CaCO3	1	5/1/2009
Bicarbonate	300	20		mg/L CaCO3	1	5/1/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **BDH**
Specific Conductance	3100	0.010		µmhos/cm	1	5/1/2009
SM4500-H+B: PH						Analyst: **BDH**
pH	7.35	0.1		pH units	1	5/1/2009
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	2700	40		mg/L	1	5/6/2009

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *11-May-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0905001	**Collection Date:**	4/30/2009 12:45:00 PM
Project:	GBR	**Date Received:**	5/1/2009
Lab ID:	0905001-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: TAF
Fluoride	0.87	0.10		mg/L	1	5/1/2009 9:00:20 AM
Chloride	85	1.0		mg/L	10	5/1/2009 9:17:45 AM
Nitrogen, Nitrite (As N)	0.15	0.10		mg/L	1	5/1/2009 9:00:20 AM
Bromide	0.37	0.10		mg/L	1	5/1/2009 9:00:20 AM
Nitrogen, Nitrate (As N)	0.78	0.10		mg/L	1	5/1/2009 9:00:20 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	5/1/2009 9:00:20 AM
Sulfate	1600	25		mg/L	50	5/2/2009 4:30:13 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: NMO
Calcium	340	10		mg/L	10	5/5/2009 11:59:57 AM
Iron	0.030	0.020		mg/L	1	5/5/2009 11:17:24 AM
Magnesium	27	1.0		mg/L	1	5/5/2009 11:17:24 AM
Manganese	0.36	0.0020		mg/L	1	5/5/2009 11:17:24 AM
Potassium	3.0	1.0		mg/L	1	5/5/2009 1:15:56 PM
Sodium	410	10		mg/L	10	5/5/2009 11:59:57 AM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Toluene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Ethylbenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Naphthalene	ND	2.0		µg/L	1	5/2/2009 4:54:41 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2009 4:54:41 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	5/2/2009 4:54:41 PM
Acetone	ND	10		µg/L	1	5/2/2009 4:54:41 PM
Bromobenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Bromodichloromethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Bromoform	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Bromomethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
2-Butanone	ND	10		µg/L	1	5/2/2009 4:54:41 PM
Carbon disulfide	ND	10		µg/L	1	5/2/2009 4:54:41 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Chlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Chloroethane	ND	2.0		µg/L	1	5/2/2009 4:54:41 PM
Chloroform	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Chloromethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
2-Chlorotoluene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
4-Chlorotoluene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM

Qualifiers:

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

Hall Environmental Analysis Laboratory, Inc.

Date: *11-May-09*

CLIENT: Western Refining Southwest, Inc.
Lab Order: 0905001
Project: GBR
Lab ID: 0905001-02

Client Sample ID: Effluent
Collection Date: 4/30/2009 12:45:00 PM
Date Received: 5/1/2009
Matrix: AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
cis-1,2-DCE	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/2/2009 4:54:41 PM
Dibromochloromethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Dibromomethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	5/2/2009 4:54:41 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
2-Hexanone	ND	10		µg/L	1	5/2/2009 4:54:41 PM
Isopropylbenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	5/2/2009 4:54:41 PM
Methylene Chloride	ND	3.0		µg/L	1	5/2/2009 4:54:41 PM
n-Butylbenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
n-Propylbenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
sec-Butylbenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Styrene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
tert-Butylbenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/2/2009 4:54:41 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
trans-1,2-DCE	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/2/2009 4:54:41 PM
Vinyl chloride	ND	1.0		µg/L	1	5/2/2009 4:54:41 PM
Xylenes, Total	ND	1.5		µg/L	1	5/2/2009 4:54:41 PM
Surr: 1,2-Dichloroethane-d4	86.0	68.1-123		%REC	1	5/2/2009 4:54:41 PM
Surr: 4-Bromofluorobenzene	88.2	53.2-145		%REC	1	5/2/2009 4:54:41 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
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: *11-May-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0905001	**Collection Date:**	4/30/2009 12:45:00 PM
Project:	GBR	**Date Received:**	5/1/2009
Lab ID:	0905001-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Surr: Dibromofluoromethane	87.6	68.5-119		%REC	1	5/2/2009 4:54:41 PM
Surr: Toluene-d8	93.4	64-131		%REC	1	5/2/2009 4:54:41 PM
SM 2320B: ALKALINITY						Analyst: **BDH**
Alkalinity, Total (As CaCO3)	310	20		mg/L CaCO3	1	5/1/2009
Carbonate	ND	2.0		mg/L CaCO3	1	5/1/2009
Bicarbonate	310	20		mg/L CaCO3	1	5/1/2009
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **BDH**
Specific Conductance	3100	0.010		µmhos/cm	1	5/1/2009
SM4500-H+B: PH						Analyst: **BDH**
pH	7.47	0.1		pH units	1	5/1/2009
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	2800	40		mg/L	1	5/6/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level
E	Estimated value
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: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0905001

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MB		*MBLK*			Batch ID:	**R33502**	Analysis Date:	5/1/2009 7:50:41 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB-2		*MBLK*			Batch ID:	**R33502**	Analysis Date:	5/1/2009 11:13:20 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R33509**	Analysis Date:	5/2/2009 1:01:19 PM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (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		*LCS*			Batch ID:	**R33502**	Analysis Date:	5/1/2009 8:08:05 AM	
Fluoride	0.5169	mg/L	0.10	103	90	110			
Chloride	5.237	mg/L	0.10	105	90	110			
Nitrogen, Nitrite (As N)	0.9641	mg/L	0.10	96.4	90	110			
Bromide	2.657	mg/L	0.10	106	90	110			
Nitrogen, Nitrate (As N)	2.668	mg/L	0.10	107	90	110			
Phosphorus, Orthophosphate (As P)	5.230	mg/L	0.50	105	90	110			
Sulfate	10.43	mg/L	0.50	104	90	110			
Sample ID: LCS-2		*LCS*			Batch ID:	**R33502**	Analysis Date:	5/1/2009 11:30:45 PM	
Fluoride	0.5035	mg/L	0.10	101	90	110			
Chloride	5.098	mg/L	0.10	102	90	110			
Nitrogen, Nitrite (As N)	0.9539	mg/L	0.10	95.4	90	110			
Bromide	2.602	mg/L	0.10	104	90	110			
Nitrogen, Nitrate (As N)	2.631	mg/L	0.10	105	90	110			
Phosphorus, Orthophosphate (As P)	5.167	mg/L	0.50	103	90	110			
Sulfate	10.26	mg/L	0.50	103	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R33509**	Analysis Date:	5/2/2009 1:18:43 PM	
Fluoride	0.4675	mg/L	0.10	93.5	90	110			
Chloride	5.064	mg/L	0.10	101	90	110			
Nitrogen, Nitrite (As N)	0.9170	mg/L	0.10	91.7	90	110			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0905001

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: LCS		*LCS*			Batch ID: **R33509**		Analysis Date:		5/2/2009 1:18:43 PM
Bromide	2.553	mg/L	0.10	102	90	110			
Nitrogen, Nitrate (As N)	2.621	mg/L	0.10	105	90	110			
Phosphorus, Orthophosphate (As P)	5.077	mg/L	0.50	102	90	110			
Sulfate	10.20	mg/L	0.50	102	90	110			
Method: SM 2320B: Alkalinity									
Sample ID: 0905001-02BMSD		*MSD*			Batch ID: **R33508**		Analysis Date:		5/1/2009
Alkalinity, Total (As CaCO3)	381.4	mg/L CaC	20	94.1	80	120	0.0315	20	
Sample ID: MB-R33508		*MBLK*			Batch ID: **R33508**		Analysis Date:		5/1/2009
Alkalinity, Total (As CaCO3)	ND	mg/L CaC	20						
Carbonate	ND	mg/L CaC	2.0						
Bicarbonate	ND	mg/L CaC	20						
Sample ID: LCS-R33508		*LCS*			Batch ID: **R33508**		Analysis Date:		5/1/2009
Alkalinity, Total (As CaCO3)	82.20	mg/L CaC	20	103	80	120			
Sample ID: 0905001-02BMS		*MS*			Batch ID: **R33508**		Analysis Date:		5/1/2009
Alkalinity, Total (As CaCO3)	381.3	mg/L CaC	20	93.9	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0905001

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Dissolved Metals									
Sample ID: 0905001-02CMSD		*MSD*			Batch ID:	**R33635**	Analysis Date:		5/5/2009 11:38:47 AM
Iron	0.5004	mg/L	0.020	94.1	75	125	4.30	20	
Magnesium	72.00	mg/L	1.0	89.3	75	125	12.2	20	
Manganese	0.8511	mg/L	0.0020	97.3	75	125	2.30	20	
Sample ID: 0905001-02CMSD		*MSD*			Batch ID:	**R33535**	Analysis Date:		5/5/2009 1:30:56 PM
Potassium	56.96	mg/L	1.0	98.0	75	125	12.4	20	
Sample ID: MB		*MBLK*			Batch ID:	**R33535**	Analysis Date:		5/5/2009 10:03:59 AM
Calcium	ND	mg/L	1.0						
Iron	ND	mg/L	0.020						
Magnesium	ND	mg/L	1.0						
Manganese	ND	mg/L	0.0020						
Potassium	ND	mg/L	1.0						
Sodium	ND	mg/L	1.0						
Sample ID: LCS		*LCS*			Batch ID:	**R33536**	Analysis Date:		5/5/2009 10:07:02 AM
Calcium	52.58	mg/L	1.0	104	80	120			
Iron	0.4987	mg/L	0.020	99.7	80	120			
Magnesium	52.26	mg/L	1.0	103	80	120			
Manganese	0.4851	mg/L	0.0020	97.0	80	120			
Potassium	54.47	mg/L	1.0	98.9	80	120			
Sodium	56.98	mg/L	1.0	113	80	120			
Sample ID: 0905001-02CMS		*MS*			Batch ID:	**R33536**	Analysis Date:		5/5/2009 11:34:48 AM
Iron	0.5224	mg/L	0.020	98.5	75	125			
Magnesium	81.37	mg/L	1.0	108	75	125			
Manganese	0.8317	mg/L	0.0020	93.5	75	125			
Sample ID: 0905001-02CMS		*MS*			Batch ID:	**R33535**	Analysis Date:		5/5/2009 1:29:03 PM
Potassium	64.50	mg/L	1.0	112	75	125			
Method: SM2540C MOD: Total Dissolved Solids									
Sample ID: 0905001-02BMSD		*MSD*			Batch ID:	**19030**	Analysis Date:		5/6/2009
Total Dissolved Solids	4810	mg/L	40	103	80	120	0.375	20	
Sample ID: MB-19030		*MBLK*			Batch ID:	**19030**	Analysis Date:		5/6/2009
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-19030		*LCS*			Batch ID:	**19030**	Analysis Date:		5/6/2009
Total Dissolved Solids	1020	mg/L	20	102	80	120			
Sample ID: 0905001-02BMS		*MS*			Batch ID:	**19030**	Analysis Date:		5/6/2009
Total Dissolved Solids	4792	mg/L	40	102	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0905001

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID: **R33496**		Analysis Date:	5/1/2009 8:54:14 AM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0905001

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID: **R33496**		Analysis Date:	5/1/2009 8:54:14 AM	
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: b5		*MBLK*			Batch ID: **R33496**		Analysis Date:	5/1/2009 10:42:43 PM	
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0905001

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: b5		*MBLK*			Batch ID: **R33496**		Analysis Date:	5/1/2009 10:42:43 PM	
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: b8		*MBLK*			Batch ID: **R33496**		Analysis Date:	5/2/2009 11:10:33 AM	

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0905001

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual

Method: EPA Method 8260B: VOLATILES
Sample ID: b6 *MBLK* Batch ID: **R33498** Analysis Date: 5/2/2009 11:10:33 AM

Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0905001

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: b8		*MBLK*			Batch ID: **R33496**		Analysis Date:	5/2/2009 11:10:33 AM	
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs_b		*LCS*			Batch ID: **R33496**		Analysis Date:	5/1/2009 10:58:26 AM	
Benzene	19.52	µg/L	1.0	97.6	76.7	114			
Toluene	19.53	µg/L	1.0	97.7	78.4	117			
Chlorobenzene	21.67	µg/L	1.0	108	80.7	127			
1,1-Dichloroethene	21.66	µg/L	1.0	108	80.2	128			
Trichloroethene (TCE)	18.53	µg/L	1.0	92.6	77.4	115			
Sample ID: 100ng lcs_c		*LCS*			Batch ID: **R33496**		Analysis Date:	5/1/2009 11:40:04 PM	
Benzene	19.21	µg/L	1.0	96.1	76.7	114			
Toluene	19.61	µg/L	1.0	98.1	78.4	117			
Chlorobenzene	21.31	µg/L	1.0	107	80.7	127			
1,1-Dichloroethene	20.84	µg/L	1.0	104	80.2	128			
Trichloroethene (TCE)	18.05	µg/L	1.0	90.3	77.4	115			

Qualifiers:

E	Estimated value	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 WESTERN REFINING SOUT | Date Received: 5/1/2009

Work Order Number 0905001 | Received by: TLS

Checklist completed by: _____ 5/1/09 | Sample ID labels checked by: _____

Signature | Date | Initials

Matrix: | Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4°	*<6° C Acceptable* If given sufficient time to cool.		

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: Per TLI Head #2 was collected at 1245. TS 5/1/09

Corrective Action _____

Chain-of-Custody Record

Client: Western Refining
Bruce Cauthen
Address: 111 C.R 4990
Bloomfield, NM 87413
Phone #:
email or Fax#:
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: GBR
Project #:
Project Manager: Ashley Ager
Sampler:
On Ice: ☒ Yes ☐ No
Sample Temperature: 4°C

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

Date	Time	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0905001	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	EDC (Method 8260)	8310 (PNA or PAH)	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	cations, anions, Fe, Mn	TDS, Alk, EC	pH		Air Bubbles (Y or N)
043009	1214	Influent			1										✓		✓	✓	✓		
043009	~~1250~~ 1245	Effluent			2										✓		✓	✓	✓		

Date: 4/30/09 Time: 1410 Relinquished by: Troy Urban
Received by: 5/1/09 715

Date: Time: Relinquished by:
Received by:

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Wednesday, July 15, 2009

Bruce Cauthen
Western Refining Southwest, Inc.
#50 CR 4990
Bloomfield, NM 87413

TEL: (505) 632-4161
FAX (505) 632-3911

RE: GBR

Order No.: 0907100

Dear Bruce Cauthen:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 7/7/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

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 McDuffic, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *15-Jul-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0907100	**Collection Date:**	7/6/2009 8:12:00 AM
Project:	GBR	**Date Received:**	7/7/2009
Lab ID:	0907100-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	0.80	0.10		mg/L	1	7/7/2009 11:06:01 PM
Chloride	88	2.0		mg/L	20	7/7/2009 11:23:26 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	7/7/2009 11:06:01 PM
Bromide	0.51	0.10		mg/L	1	7/7/2009 11:06:01 PM
Nitrogen, Nitrate (As N)	2.7	0.10		mg/L	1	7/7/2009 11:06:01 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	7/7/2009 11:06:01 PM
Sulfate	1600	25		mg/L	50	7/8/2009 8:13:37 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Toluene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Ethylbenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Naphthalene	ND	2.0		µg/L	1	7/9/2009 5:10:27 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2009 5:10:27 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2009 5:10:27 PM
Acetone	ND	10		µg/L	1	7/9/2009 5:10:27 PM
Bromobenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Bromoform	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Bromomethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
2-Butanone	ND	10		µg/L	1	7/9/2009 5:10:27 PM
Carbon disulfide	ND	10		µg/L	1	7/9/2009 5:10:27 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Chlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Chloroethane	ND	2.0		µg/L	1	7/9/2009 5:10:27 PM
Chloroform	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Chloromethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/9/2009 5:10:27 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Dibromomethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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-Jul-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0907100	**Collection Date:**	7/6/2009 8:12:00 AM
Project:	GBR	**Date Received:**	7/7/2009
Lab ID:	0907100-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/9/2009 5:10:27 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
2-Hexanone	ND	10		µg/L	1	7/9/2009 5:10:27 PM
Isopropylbenzene	1.2	1.0		µg/L	1	7/9/2009 5:10:27 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/9/2009 5:10:27 PM
Methylene Chloride	ND	3.0		µg/L	1	7/9/2009 5:10:27 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Styrene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/9/2009 5:10:27 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/9/2009 5:10:27 PM
Vinyl chloride	ND	1.0		µg/L	1	7/9/2009 5:10:27 PM
Xylenes, Total	2.4	1.5		µg/L	1	7/9/2009 5:10:27 PM
Surr: 1,2-Dichloroethane-d4	105	68.1-123		%REC	1	7/9/2009 5:10:27 PM
Surr: 4-Bromofluorobenzene	107	53.2-145		%REC	1	7/9/2009 5:10:27 PM
Surr: Dibromofluoromethane	111	68.5-119		%REC	1	7/9/2009 5:10:27 PM
Surr: Toluene-d8	100	64-131		%REC	1	7/9/2009 5:10:27 PM
SM 2320B: ALKALINITY						Analyst: NSB
Alkalinity, Total (As CaCO3)	420	20		mg/L CaCO3	1	7/10/2009
Carbonate	ND	2.0		mg/L CaCO3	1	7/10/2009
Bicarbonate	420	20		mg/L CaCO3	1	7/10/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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-Jul-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0907100	**Collection Date:**	7/6/2009 8:12:00 AM
Project:	GBR	**Date Received:**	7/7/2009
Lab ID:	0907100-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	3000	0.010		µmhos/cm	1	7/10/2009
SM4500-H+B: PH						Analyst: **NSB**
pH	7.50	0.1		pH units	1	7/13/2009
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	2700	20		mg/L	1	7/8/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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-Jul-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0907100	**Collection Date:**	7/6/2009 8:40:00 AM
Project:	GBR	**Date Received:**	7/7/2009
Lab ID:	0907100-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: RAGS
Fluoride	0.84	0.10		mg/L	1	7/7/2009 11:40:51 PM
Chloride	87	2.0		mg/L	20	7/7/2009 11:58:16 PM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	7/7/2009 11:40:51 PM
Bromide	0.51	0.10		mg/L	1	7/7/2009 11:40:51 PM
Nitrogen, Nitrate (As N)	2.3	0.10		mg/L	1	7/7/2009 11:40:51 PM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	7/7/2009 11:40:51 PM
Sulfate	1500	25		mg/L	50	7/8/2009 8:31:02 PM
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Toluene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Ethylbenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Naphthalene	ND	2.0		µg/L	1	7/9/2009 5:39:49 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2009 5:39:49 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2009 5:39:49 PM
Acetone	ND	10		µg/L	1	7/9/2009 5:39:49 PM
Bromobenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Bromoform	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Bromomethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
2-Butanone	ND	10		µg/L	1	7/9/2009 5:39:49 PM
Carbon disulfide	ND	10		µg/L	1	7/9/2009 5:39:49 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Chlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Chloroethane	ND	2.0		µg/L	1	7/9/2009 5:39:49 PM
Chloroform	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Chloromethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/9/2009 5:39:49 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Dibromomethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL 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-Jul-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0907100	**Collection Date:**	7/6/2009 8:40:00 AM
Project:	GBR	**Date Received:**	7/7/2009
Lab ID:	0907100-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/9/2009 5:39:49 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
2-Hexanone	ND	10		µg/L	1	7/9/2009 5:39:49 PM
Isopropylbenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/9/2009 5:39:49 PM
Methylene Chloride	ND	3.0		µg/L	1	7/9/2009 5:39:49 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Styrene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/9/2009 5:39:49 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/9/2009 5:39:49 PM
Vinyl chloride	ND	1.0		µg/L	1	7/9/2009 5:39:49 PM
Xylenes, Total	ND	1.5		µg/L	1	7/9/2009 5:39:49 PM
Surr: 1,2-Dichloroethane-d4	108	68.1-123		%REC	1	7/9/2009 5:39:49 PM
Surr: 4-Bromofluorobenzene	102	53.2-145		%REC	1	7/9/2009 5:39:49 PM
Surr: Dibromofluoromethane	106	68.5-119		%REC	1	7/9/2009 5:39:49 PM
Surr: Toluene-d8	104	64-131		%REC	1	7/9/2009 5:39:49 PM
SM 2320B: ALKALINITY						Analyst: **NSB**
Alkalinity, Total (As CaCO3)	420	20		mg/L CaCO3	1	7/10/2009
Carbonate	ND	2.0		mg/L CaCO3	1	7/10/2009
Bicarbonate	420	20		mg/L CaCO3	1	7/10/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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-Jul-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0907100	**Collection Date:**	7/6/2009 8:40:00 AM
Project:	GBR	**Date Received:**	7/7/2009
Lab ID:	0907100-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **NSB**
Specific Conductance	3100	0.010		µmhos/cm	1	7/10/2009
SM4500-H+B: PH						Analyst: **NSB**
pH	7.85	0.1		pH units	1	7/13/2009
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **KMS**
Total Dissolved Solids	2700	20		mg/L	1	7/8/2009

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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-Jul-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	TRIP BLANK
Lab Order:	0907100	**Collection Date:**	
Project:	GBR	**Date Received:**	7/7/2009
Lab ID:	0907100-03	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Toluene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Ethylbenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Naphthalene	ND	2.0		µg/L	1	7/9/2009 7:07:52 PM
1-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2009 7:07:52 PM
2-Methylnaphthalene	ND	4.0		µg/L	1	7/9/2009 7:07:52 PM
Acetone	ND	10		µg/L	1	7/9/2009 7:07:52 PM
Bromobenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Bromodichloromethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Bromoform	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Bromomethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
2-Butanone	ND	10		µg/L	1	7/9/2009 7:07:52 PM
Carbon disulfide	ND	10		µg/L	1	7/9/2009 7:07:52 PM
Carbon Tetrachloride	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Chlorobenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Chloroethane	ND	2.0		µg/L	1	7/9/2009 7:07:52 PM
Chloroform	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Chloromethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
2-Chlorotoluene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
4-Chlorotoluene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
cis-1,2-DCE	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	7/9/2009 7:07:52 PM
Dibromochloromethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Dibromomethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Dichlorodifluoromethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,1-Dichloroethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,1-Dichloroethene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,2-Dichloropropane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,3-Dichloropropane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
2,2-Dichloropropane	ND	2.0		µg/L	1	7/9/2009 7:07:52 PM
1,1-Dichloropropene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Hexachlorobutadiene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
2-Hexanone	ND	10		µg/L	1	7/9/2009 7:07:52 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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-Jul-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	TRIP BLANK
Lab Order:	0907100	**Collection Date:**	
Project:	GBR	**Date Received:**	7/7/2009
Lab ID:	0907100-03	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Isopropylbenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
4-Isopropyltoluene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/9/2009 7:07:52 PM
Methylene Chloride	ND	3.0		µg/L	1	7/9/2009 7:07:52 PM
n-Butylbenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
n-Propylbenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
sec-Butylbenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Styrene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
tert-Butylbenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	7/9/2009 7:07:52 PM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
trans-1,2-DCE	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Trichloroethene (TCE)	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Trichlorofluoromethane	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	7/9/2009 7:07:52 PM
Vinyl chloride	ND	1.0		µg/L	1	7/9/2009 7:07:52 PM
Xylenes, Total	ND	1.5		µg/L	1	7/9/2009 7:07:52 PM
Surr: 1,2-Dichloroethane-d4	105	68.1-123		%REC	1	7/9/2009 7:07:52 PM
Surr: 4-Bromofluorobenzene	100	53.2-145		%REC	1	7/9/2009 7:07:52 PM
Surr: Dibromofluoromethane	112	68.5-119		%REC	1	7/9/2009 7:07:52 PM
Surr: Toluene-d8	103	64-131		%REC	1	7/9/2009 7:07:52 PM

Qualifiers:

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

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

July 15, 2009

Date Received : July 08, 2009
Description : 0907100

Sample ID : INFLUENT

Collected By :
Collection Date : 07/06/09 08:12

ESC Sample # : L411159-01

Site ID :

Project # : 0907100

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Calcium,Dissolved	300	0.50	mg/l	6010B	07/12/09	1
Magnesium,Dissolved	32.	0.10	mg/l	6010B	07/12/09	1
Potassium,Dissolved	2.7	0.50	mg/l	6010B	07/12/09	1
Sodium,Dissolved	510	0.50	mg/l	6010B	07/12/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 07/15/09 10:31 Printed: 07/15/09 10:31

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

July 15, 2009

Date Received : July 08, 2009
Description : 0907100

ESC Sample # : L411159-02

Sample ID : INFLUENT

Site ID :

Project # : 0907100

Collected By :
Collection Date : 07/06/09 08:12

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Manganese	0.54	0.0020	mg/l	6020	07/14/09	1
Iron	1.1	0.10	mg/l	6010B	07/14/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 07/15/09 10:31 Printed: 07/15/09 10:31

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

July 15, 2009

Date Received : July 08, 2009
Description : 0907100

Sample ID : EFFLUENT

Collected By :
Collection Date : 07/06/09 08:40

ESC Sample # : L411159-03

Site ID :

Project # : 0907100

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Calcium,Dissolved	310	0.50	mg/l	6010B	07/12/09	1
Magnesium,Dissolved	33.	0.10	mg/l	6010B	07/12/09	1
Potassium,Dissolved	2.7	0.50	mg/l	6010B	07/12/09	1
Sodium,Dissolved	510	0.50	mg/l	6010B	07/12/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 07/15/09 10:31 Printed: 07/15/09 10:31

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REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

July 15, 2009

Date Received : July 08, 2009
Description : 0907100

Sample ID : EFFLUENT

Collected By :
Collection Date : 07/06/09 08:40

ESC Sample # : L411159-04

Site ID :

Project # : 0907100

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Manganese	0.49	0.0020	mg/l	6020	07/14/09	1
Iron	BDL	0.10	mg/l	6010B	07/14/09	1

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)
Note:
The reported analytical results relate only to the sample submitted.

Reported: 07/15/09 10:31 Printed: 07/15/09 10:31

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L411159-04	WG430518	SAMP	Manganese	R818246	V

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
V	(ESC) - Additional QC Info: The sample concentration is too high to evaluate accurate spike recoveries.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable unless qualified as 'R' (Rejected).

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Hall Environmental Analysis Laboratory
Anne Thorne
4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L411159

July 15, 2009

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
Calcium,Dissolved	< .25	mg/l			WG430704	07/13/09 03:58
Magnesium,Dissolved	< .1	mg/l			WG430704	07/13/09 03:58
Potassium,Dissolved	< .5	mg/l			WG430704	07/13/09 03:58
Sodium,Dissolved	< .5	mg/l			WG430704	07/13/09 03:58
Manganese	< .002	mg/l			WG430518	07/14/09 17:09
Iron	< .1	mg/l			WG430880	07/14/09 02:00

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
Calcium,Dissolved	mg/l	104	106	2.21	20	L411168-08	WG430704
Magnesium,Dissolved	mg/l	4.38	4.48	2.26	20	L411168-08	WG430704
Potassium,Dissolved	mg/l	3.07	3.07	0.00	20	L411168-08	WG430704
Sodium,Dissolved	mg/l	133	136	1.19	20	L411168-08	WG430704
Manganese	mg/l	0.506	0.490	3.21	20	L411159-04	WG430518
Iron	mg/l	6.15	6.10	0.816	20	L411428-02	WG430880

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Calcium,Dissolved	mg/l	10.3	10.1	98.1	85-115	WG430704
Magnesium,Dissolved	mg/l	11.3	11.0	97.3	85-115	WG430704
Potassium,Dissolved	mg/l	11.3	10.6	93.8	85-115	WG430704
Sodium,Dissolved	mg/l	11.3	10.8	95.6	85-115	WG430704
Manganese	mg/l	.0567	0.0545	96.1	85-115	WG430518
Iron	mg/l	1.13	1.12	99.1	85-115	WG430880

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Calcium,Dissolved	mg/l	254	104	11.3	132	75-125	L411168-08	WG430704
Magnesium,Dissolved	mg/l	14.1	4.48	11.3	85.1	75-125	L411168-08	WG430704
Potassium,Dissolved	mg/l	12.5	3.07	11.3	83.5	75-125	L411168-08	WG430704
Sodium,Dissolved	mg/l	320	136	11.3	1670	75-125	L411168-08	WG430704
Manganese	mg/l	0.559	0.490	.0567	122.	70-130	L411159-04	WG430518
Iron	mg/l	7.23	6.10	1.13	100.	75-125	L411428-02	WG430880

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Calcium,Dissolved	mg/l	268	104	140	75-125	5.49	20	L411168-08	WG430704
Magnesium,Dissolved	mg/l	15.8	14.1	100.	75-125	11.4	20	L411168-08	WG430704
Potassium,Dissolved	mg/l	14.0	12.5	96.7	75-125	11.3	20	L411168-08	WG430704

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Hall Environmental Analysis Laboratory
Anne Thorne
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Quality Assurance Report
Level II

L411159

July 15, 2009

				Matrix Spike Duplicate					
Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Sodium, Dissolved	mg/l	317.	329	[illegible]	75-125	[illegible]	20	L411100-08	WG430704
Manganese	mg/l	0.570	0.559	141.093*	70-130	1.95	20	L411159-04	WG430518
Iron	mg/l	7.36	7.23	112.	75-125	1.78	20	L411428-02	WG430880

Batch number /Run number / Sample number cross reference

WG430704: R813886: L411159-01 03
WG430518: R818246: L411159-02 04
WG430880: R818306: L411159-02 04

* * Calculations are performed prior to rounding of reported values .
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0907100

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions									
Sample ID: MB		*MBLK*			Batch ID:	**R34419**	Analysis Date:	7/7/2009 8:00:43 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (As N)	ND	mg/L	0.10						
Phosphorus, Orthophosphate (As P)	ND	mg/L	0.50						
Sulfate	ND	mg/L	0.50						
Sample ID: MB		*MBLK*			Batch ID:	**R34435**	Analysis Date:	7/8/2009 6:03:53 AM	
Fluoride	ND	mg/L	0.10						
Chloride	ND	mg/L	0.10						
Nitrogen, Nitrite (As N)	ND	mg/L	0.10						
Bromide	ND	mg/L	0.10						
Nitrogen, Nitrate (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		*LCS*			Batch ID:	**R34419**	Analysis Date:	7/7/2009 8:18:08 AM	
Fluoride	0.4974	mg/L	0.10	99.5	90	110			
Chloride	4.785	mg/L	0.10	95.7	90	110			
Nitrogen, Nitrite (As N)	0.9147	mg/L	0.10	91.5	90	110			
Bromide	2.511	mg/L	0.10	100	90	110			
Nitrogen, Nitrate (As N)	2.445	mg/L	0.10	97.8	90	110			
Phosphorus, Orthophosphate (As P)	4.768	mg/L	0.50	95.4	90	110			
Sulfate	9.675	mg/L	0.50	96.7	90	110			
Sample ID: LCS		*LCS*			Batch ID:	**R34435**	Analysis Date:	7/8/2009 6:21:18 AM	
Fluoride	0.5170	mg/L	0.10	103	90	110			
Chloride	4.947	mg/L	0.10	98.9	90	110			
Nitrogen, Nitrite (As N)	0.9284	mg/L	0.10	92.8	90	110			
Bromide	2.574	mg/L	0.10	103	90	110			
Nitrogen, Nitrate (As N)	2.551	mg/L	0.10	102	90	110			
Phosphorus, Orthophosphate (As P)	4.903	mg/L	0.50	98.1	90	110			
Sulfate	9.833	mg/L	0.50	98.3	90	110			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0907100

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SM 2320B: Alkalinity									
Sample ID: 0907100-02BMSD		*MSD*			Batch ID: **R34488**		Analysis Date:		7/10/2009
Alkalinity, Total (As CaCO3)	477.7	mg/L CaC	20	73.1	80	120	1.80	20	S
Sample ID: MB		*MBLK*			Batch ID: **R34488**		Analysis Date:		7/10/2009
Alkalinity, Total (As CaCO3)	ND	mg/L CaC	20						
Carbonate	ND	mg/L CaC	2.0						
Bicarbonate	ND	mg/L CaC	20						
Sample ID: MB		*MBLK*			Batch ID: **R34503**		Analysis Date:		7/13/2009
Alkalinity, Total (As CaCO3)	ND	mg/L CaC	20						
Carbonate	ND	mg/L CaC	2.0						
Bicarbonate	ND	mg/L CaC	20						
Sample ID: 80PPM LCS		*LCS*			Batch ID: **R34488**		Analysis Date:		7/10/2009
Alkalinity, Total (As CaCO3)	79.28	mg/L CaC	20	87.2	80	120			
Sample ID: 80PPM LCS		*LCS*			Batch ID: **R34503**		Analysis Date:		7/13/2009
Alkalinity, Total (As CaCO3)	79.92	mg/L CaC	20	83.9	80	120			
Sample ID: 0907100-02BMS		*MS*			Batch ID: **R34488**		Analysis Date:		7/10/2009
Alkalinity, Total (As CaCO3)	486.4	mg/L CaC	20	84.0	80	120			

Qualifiers:

- E Estimated value
- 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: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0907100

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 0907100-02a MSD		*MSD*			Batch ID:	**R34458**	Analysis Date:		7/9/2009 6:38:37 PM
Benzene	20.73	µg/L	1.0	104	84.9	122	2.03	15	
Toluene	19.13	µg/L	1.0	95.6	80.3	114	6.27	15	
Chlorobenzene	19.17	µg/L	1.0	95.8	71.9	134	4.62	15	
1,1-Dichloroethene	23.12	µg/L	1.0	116	88	144	0.621	17.8	
Trichloroethene (TCE)	19.51	µg/L	1.0	97.5	87.1	114	3.89	19.8	
Sample ID: 5ml rb		*MBLK*			Batch ID:	**R34458**	Analysis Date:		7/9/2009 10:46:20 AM
Benzene	ND	µg/L	1.0						
Toluene	ND	µg/L	1.0						
Ethylbenzene	ND	µg/L	1.0						
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0						
1,2,4-Trimethylbenzene	ND	µg/L	1.0						
1,3,5-Trimethylbenzene	ND	µg/L	1.0						
1,2-Dichloroethane (EDC)	ND	µg/L	1.0						
1,2-Dibromoethane (EDB)	ND	µg/L	1.0						
Naphthalene	ND	µg/L	2.0						
1-Methylnaphthalene	ND	µg/L	4.0						
2-Methylnaphthalene	ND	µg/L	4.0						
Acetone	ND	µg/L	10						
Bromobenzene	ND	µg/L	1.0						
Bromodichloromethane	ND	µg/L	1.0						
Bromoform	ND	µg/L	1.0						
Bromomethane	ND	µg/L	1.0						
2-Butanone	ND	µg/L	10						
Carbon disulfide	ND	µg/L	10						
Carbon Tetrachloride	ND	µg/L	1.0						
Chlorobenzene	ND	µg/L	1.0						
Chloroethane	ND	µg/L	2.0						
Chloroform	ND	µg/L	1.0						
Chloromethane	ND	µg/L	1.0						
2-Chlorotoluene	ND	µg/L	1.0						
4-Chlorotoluene	ND	µg/L	1.0						
cis-1,2-DCE	ND	µg/L	1.0						
cis-1,3-Dichloropropene	ND	µg/L	1.0						
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0						
Dibromochloromethane	ND	µg/L	1.0						
Dibromomethane	ND	µg/L	1.0						
1,2-Dichlorobenzene	ND	µg/L	1.0						
1,3-Dichlorobenzene	ND	µg/L	1.0						
1,4-Dichlorobenzene	ND	µg/L	1.0						
Dichlorodifluoromethane	ND	µg/L	1.0						
1,1-Dichloroethane	ND	µg/L	1.0						
1,1-Dichloroethene	ND	µg/L	1.0						
1,2-Dichloropropane	ND	µg/L	1.0						
1,3-Dichloropropane	ND	µg/L	1.0						

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0907100

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES									
Sample ID: 5ml rb		*MBLK*			Batch ID: **R34458**		Analysis Date:	7/9/2009 10:46:20 AM	
2,2-Dichloropropane	ND	µg/L	2.0						
1,1-Dichloropropene	ND	µg/L	1.0						
Hexachlorobutadiene	ND	µg/L	1.0						
2-Hexanone	ND	µg/L	10						
Isopropylbenzene	ND	µg/L	1.0						
4-Isopropyltoluene	ND	µg/L	1.0						
4-Methyl-2-pentanone	ND	µg/L	10						
Methylene Chloride	ND	µg/L	3.0						
n-Butylbenzene	ND	µg/L	1.0						
n-Propylbenzene	ND	µg/L	1.0						
sec-Butylbenzene	ND	µg/L	1.0						
Styrene	ND	µg/L	1.0						
tert-Butylbenzene	ND	µg/L	1.0						
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0						
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0						
Tetrachloroethene (PCE)	ND	µg/L	1.0						
trans-1,2-DCE	ND	µg/L	1.0						
trans-1,3-Dichloropropene	ND	µg/L	1.0						
1,2,3-Trichlorobenzene	ND	µg/L	1.0						
1,2,4-Trichlorobenzene	ND	µg/L	1.0						
1,1,1-Trichloroethane	ND	µg/L	1.0						
1,1,2-Trichloroethane	ND	µg/L	1.0						
Trichloroethene (TCE)	ND	µg/L	1.0						
Trichlorofluoromethane	ND	µg/L	1.0						
1,2,3-Trichloropropane	ND	µg/L	2.0						
Vinyl chloride	ND	µg/L	1.0						
Xylenes, Total	ND	µg/L	1.5						
Sample ID: 100ng lcs		*LCS*			Batch ID: **R34458**		Analysis Date:	7/9/2009 11:44:36 AM	
Benzene	20.62	µg/L	1.0	103	76.7	114			
Toluene	20.57	µg/L	1.0	103	78.4	117			
Chlorobenzene	20.21	µg/L	1.0	101	80.7	127			
1,1-Dichloroethene	23.91	µg/L	1.0	120	80.2	128			
Trichloroethene (TCE)	21.14	µg/L	1.0	106	77.4	115			
Sample ID: 0907100-02a MS		*MS*			Batch ID: **R34458**		Analysis Date:	7/9/2009 6:09:16 PM	
Benzene	20.32	µg/L	1.0	102	84.9	122			
Toluene	20.37	µg/L	1.0	102	80.3	114			
Chlorobenzene	20.07	µg/L	1.0	100	71.9	134			
1,1-Dichloroethene	23.27	µg/L	1.0	116	88	144			
Trichloroethene (TCE)	20.28	µg/L	1.0	101	87.1	114			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0907100

Analyte	Result	Units	PQL	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: SM2540C MOD: Total Dissolved Solids									
Sample ID: MB-19568		*MBLK*			Batch ID:	**19568**	Analysis Date:		7/8/2009
Total Dissolved Solids	ND	mg/L	20						
Sample ID: LCS-19568		*LCS*			Batch ID:	**19568**	Analysis Date:		7/8/2009
Total Dissolved Solids	1024	mg/L	20	102	80	120			

Qualifiers:

E	Estimated value	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 **WESTERN REFINING SOUT** Date Received: **7/7/2009**

Work Order Number **0907100** Received by: TLS

Checklist completed by: _____ 7/7/09 Sample ID labels checked by: _____

Signature Date Initials

Matrix: Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	4.9°	*<6° C Acceptable* If given sufficient time to cool.		

Number of preserved bottles checked for pH: 4

(2) >12 unless noted below.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

_____

_____

Corrective Action _____

_____

_____

Chain-of-Custody Record

Client: Western Refining
Bruce Cauthen
Mailing Address: 111 CR 4990
Bloomfield NM 87413
Phone #:
email or Fax#:
QA/QC Package:
[X] Standard [ ] Level 4 (Full Validation)
[ ] Other
[ ] EDD (Type)

Turn-Around Time:
[X] Standard [ ] Rush
Project Name: GBR
Project #:
Project Manager: Ashley Ager
Sampler: Troy Urban
On Ice: [X] Yes [ ] No
Sample Temperature: 4.5

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

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 090-7100	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions ($F, Cl, NO_3, NO_2, PO_4, SO_4$)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	Cations, anions, Fe, Mn	TDS, Alk, EC	pH		Air Bubbles (Y or N)
070609	0812	GW	Influent			1										✓		✓	✓	✓		
070609	840	GW	Effluent			2										✓		✓	✓	✓		
070609	0700	GW	trip blank			3										✓						

Date:	Time:	Relinquished by:	Received by:	Date	Time
7/6/09	0920			7/6/09	925
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: please copy results to ala @ lodestar services.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY

COVER LETTER

Tuesday, October 27, 2009

Ashley Ager
Western Refining Southwest, Inc.
#50 CR 4990
Bloomfield, NM 87413

TEL: (970) 946-1093
FAX (505) 632-3911

RE: GBR

Order No.: 0910270

Dear Ashley Ager:

Hall Environmental Analysis Laboratory, Inc. received 3 sample(s) on 10/15/2009 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

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, Laboratory Manager

NM Lab # NM9425
AZ license # AZ0682
ORELAP Lab # NM100001
Texas Lab# T104704424-08-TX

Hall Environmental Analysis Laboratory, Inc.

Date: *27-Oct-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0910270	**Collection Date:**	10/14/2009 11:31:00 AM
Project:	GBR	**Date Received:**	10/15/2009
Lab ID:	0910270-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TAF**
Fluoride	0.88	0.10		mg/L	1	10/16/2009 1:58:14 AM
Chloride	83	2.0		mg/L	20	10/16/2009 2:15:39 AM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	10/16/2009 1:58:14 AM
Bromide	0.51	0.10		mg/L	1	10/16/2009 1:58:14 AM
Nitrogen, Nitrate (As N)	ND	0.10		mg/L	1	10/16/2009 1:58:14 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	10/16/2009 1:58:14 AM
Sulfate	1500	25		mg/L	50	10/20/2009 10:34:26 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **SNV**
Calcium	290	5.0		mg/L	5	10/16/2009 2:37:42 PM
Iron	0.021	0.020		mg/L	1	10/16/2009 12:36:10 PM
Magnesium	32	1.0		mg/L	1	10/16/2009 12:36:10 PM
Manganese	0.58	0.0020		mg/L	1	10/16/2009 12:36:10 PM
Potassium	3.2	1.0		mg/L	1	10/16/2009 12:36:10 PM
Sodium	490	5.0		mg/L	5	10/16/2009 2:37:42 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Toluene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Ethylbenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Naphthalene	ND	2.0		µg/L	1	10/16/2009 12:10:41 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/16/2009 12:10:41 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/16/2009 12:10:41 AM
Acetone	ND	10		µg/L	1	10/16/2009 12:10:41 AM
Bromobenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Bromoform	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Bromomethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
2-Butanone	ND	10		µg/L	1	10/16/2009 12:10:41 AM
Carbon disulfide	ND	10		µg/L	1	10/16/2009 12:10:41 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Chlorobenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Chloroethane	ND	2.0		µg/L	1	10/16/2009 12:10:41 AM
Chloroform	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Chloromethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0910270	**Collection Date:**	10/14/2009 11:31:00 AM
Project:	GBR	**Date Received:**	10/15/2009
Lab ID:	0910270-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
cis-1,2-DCE	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/16/2009 12:10:41 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Dibromomethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/16/2009 12:10:41 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
2-Hexanone	ND	10		µg/L	1	10/16/2009 12:10:41 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/16/2009 12:10:41 AM
Methylene Chloride	ND	3.0		µg/L	1	10/16/2009 12:10:41 AM
n-Butylbenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Styrene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/16/2009 12:10:41 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/16/2009 12:10:41 AM
Vinyl chloride	ND	1.0		µg/L	1	10/16/2009 12:10:41 AM
Xylenes, Total	ND	1.5		µg/L	1	10/16/2009 12:10:41 AM
Surr: 1,2-Dichloroethane-d4	91.5	54.6-141		%REC	1	10/16/2009 12:10:41 AM
Surr: 4-Bromofluorobenzene	95.5	60.1-133		%REC	1	10/16/2009 12:10:41 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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-09

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Effluent
Lab Order:	0910270	**Collection Date:**	10/14/2009 11:31:00 AM
Project:	GBR	**Date Received:**	10/15/2009
Lab ID:	0910270-01	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Surr: Dibromofluoromethane	92.7	78.5-130		%REC	1	10/16/2009 12:10:41 AM
Surr: Toluene-d8	91.5	79.5-126		%REC	1	10/16/2009 12:10:41 AM
SM 2320B: ALKALINITY						Analyst: DAM
Alkalinity, Total (As CaCO3)	430	20		mg/L CaCO3	1	10/19/2009 5:34:00 PM
Carbonate	ND	2.0		mg/L CaCO3	1	10/19/2009 5:34:00 PM
Bicarbonate	430	20		mg/L CaCO3	1	10/19/2009 5:34:00 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: DAM
Specific Conductance	3200	0.010		µmhos/cm	1	10/19/2009 5:34:00 PM
SM4500-H+B: PH						Analyst: DAM
pH	7.62	0.1		pH units	1	10/19/2009 5:34:00 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: MMS
Total Dissolved Solids	2700	20.0		mg/L	1	10/22/2009 5:32:00 PM

Qualifiers:				
	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	E	Estimated value	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	MCL	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-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0910270	**Collection Date:**	10/14/2009 11:51:00 AM
Project:	GBR	**Date Received:**	10/15/2009
Lab ID:	0910270-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS						Analyst: **TAF**
Fluoride	0.90	0.10		mg/L	1	10/16/2009 2:33:04 AM
Chloride	85	2.0		mg/L	20	10/16/2009 2:50:28 AM
Nitrogen, Nitrite (As N)	ND	0.10		mg/L	1	10/16/2009 2:33:04 AM
Bromide	0.51	0.10		mg/L	1	10/16/2009 2:33:04 AM
Nitrogen, Nitrate (As N)	0.18	0.10		mg/L	1	10/16/2009 2:33:04 AM
Phosphorus, Orthophosphate (As P)	ND	0.50		mg/L	1	10/16/2009 2:33:04 AM
Sulfate	1400	25		mg/L	50	10/20/2009 10:51:50 PM
EPA METHOD 6010B: DISSOLVED METALS						Analyst: **SNV**
Calcium	290	5.0		mg/L	5	10/16/2009 2:40:57 PM
Iron	0.066	0.020		mg/L	1	10/16/2009 12:40:31 PM
Magnesium	32	1.0		mg/L	1	10/16/2009 12:40:31 PM
Manganese	0.58	0.0020		mg/L	1	10/16/2009 12:40:31 PM
Potassium	3.1	1.0		mg/L	1	10/16/2009 12:40:31 PM
Sodium	500	5.0		mg/L	5	10/16/2009 2:40:57 PM
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Benzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Toluene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Ethylbenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Naphthalene	ND	2.0		µg/L	1	10/16/2009 1:33:40 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/16/2009 1:33:40 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/16/2009 1:33:40 AM
Acetone	ND	10		µg/L	1	10/16/2009 1:33:40 AM
Bromobenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Bromoform	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Bromomethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
2-Butanone	ND	10		µg/L	1	10/16/2009 1:33:40 AM
Carbon disulfide	ND	10		µg/L	1	10/16/2009 1:33:40 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Chlorobenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Chloroethane	ND	2.0		µg/L	1	10/16/2009 1:33:40 AM
Chloroform	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Chloromethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- B Analyte detected in the associated Method Blank
- E Estimated value
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- MCL 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-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0910270	**Collection Date:**	10/14/2009 11:51:00 AM
Project:	GBR	**Date Received:**	10/15/2009
Lab ID:	0910270-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
cis-1,2-DCE	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/16/2009 1:33:40 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Dibromomethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/16/2009 1:33:40 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
2-Hexanone	ND	10		µg/L	1	10/16/2009 1:33:40 AM
Isopropylbenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/16/2009 1:33:40 AM
Methylene Chloride	ND	3.0		µg/L	1	10/16/2009 1:33:40 AM
n-Butylbenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Styrene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/16/2009 1:33:40 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/16/2009 1:33:40 AM
Vinyl chloride	ND	1.0		µg/L	1	10/16/2009 1:33:40 AM
Xylenes, Total	ND	1.5		µg/L	1	10/16/2009 1:33:40 AM
Surr: 1,2-Dichloroethane-d4	93.2	54.6-141		%REC	1	10/16/2009 1:33:40 AM
Surr: 4-Bromofluorobenzene	94.1	60.1-133		%REC	1	10/16/2009 1:33:40 AM

Qualifiers:

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

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	Influent
Lab Order:	0910270	**Collection Date:**	10/14/2009 11:51:00 AM
Project:	GBR	**Date Received:**	10/15/2009
Lab ID:	0910270-02	**Matrix:**	AQUEOUS

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: **HL**
Surr: Dibromofluoromethane	93.1	78.5-130		%REC	1	10/16/2009 1:33:40 AM
Surr: Toluene-d8	95.7	79.5-126		%REC	1	10/16/2009 1:33:40 AM
SM 2320B: ALKALINITY						Analyst: **DAM**
Alkalinity, Total (As CaCO3)	440	20		mg/L CaCO3	1	10/19/2009 5:52:00 PM
Carbonate	ND	2.0		mg/L CaCO3	1	10/19/2009 5:52:00 PM
Bicarbonate	440	20		mg/L CaCO3	1	10/19/2009 5:52:00 PM
EPA 120.1: SPECIFIC CONDUCTANCE						Analyst: **DAM**
Specific Conductance	3200	0.010		µmhos/cm	1	10/19/2009 5:52:00 PM
SM4500-H+B: PH						Analyst: **DAM**
pH	7.59	0.1		pH units	1	10/19/2009 5:52:00 PM
SM2540C MOD: TOTAL DISSOLVED SOLIDS						Analyst: **MMS**
Total Dissolved Solids	2700	20.0		mg/L	1	10/22/2009 5:32:00 PM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	TRIP BLANK
Lab Order:	0910270	**Collection Date:**	
Project:	GBR	**Date Received:**	10/15/2009
Lab ID:	0910270-03	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Benzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Toluene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Ethylbenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Naphthalene	ND	2.0		µg/L	1	10/16/2009 2:01:22 AM
1-Methylnaphthalene	ND	4.0		µg/L	1	10/16/2009 2:01:22 AM
2-Methylnaphthalene	ND	4.0		µg/L	1	10/16/2009 2:01:22 AM
Acetone	ND	10		µg/L	1	10/16/2009 2:01:22 AM
Bromobenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Bromodichloromethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Bromoform	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Bromomethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
2-Butanone	ND	10		µg/L	1	10/16/2009 2:01:22 AM
Carbon disulfide	ND	10		µg/L	1	10/16/2009 2:01:22 AM
Carbon Tetrachloride	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Chlorobenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Chloroethane	ND	2.0		µg/L	1	10/16/2009 2:01:22 AM
Chloroform	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Chloromethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
2-Chlorotoluene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
4-Chlorotoluene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
cis-1,2-DCE	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	10/16/2009 2:01:22 AM
Dibromochloromethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Dibromomethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,2-Dichlorobenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,3-Dichlorobenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,4-Dichlorobenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Dichlorodifluoromethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,1-Dichloroethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,1-Dichloroethene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,2-Dichloropropane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,3-Dichloropropane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
2,2-Dichloropropane	ND	2.0		µg/L	1	10/16/2009 2:01:22 AM
1,1-Dichloropropene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Hexachlorobutadiene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
2-Hexanone	ND	10		µg/L	1	10/16/2009 2:01:22 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	MCL	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-09*

CLIENT:	Western Refining Southwest, Inc.	**Client Sample ID:**	TRIP BLANK
Lab Order:	0910270	**Collection Date:**	
Project:	GBR	**Date Received:**	10/15/2009
Lab ID:	0910270-03	**Matrix:**	TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8260B: VOLATILES						Analyst: HL
Isopropylbenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
4-Isopropyltoluene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	10/16/2009 2:01:22 AM
Methylene Chloride	ND	3.0		µg/L	1	10/16/2009 2:01:22 AM
n-Butylbenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
n-Propylbenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
sec-Butylbenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Styrene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
tert-Butylbenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	10/16/2009 2:01:22 AM
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
trans-1,2-DCE	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,1,1-Trichloroethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,1,2-Trichloroethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Trichloroethene (TCE)	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Trichlorofluoromethane	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
1,2,3-Trichloropropane	ND	2.0		µg/L	1	10/16/2009 2:01:22 AM
Vinyl chloride	ND	1.0		µg/L	1	10/16/2009 2:01:22 AM
Xylenes, Total	ND	1.5		µg/L	1	10/16/2009 2:01:22 AM
Surr: 1,2-Dichloroethane-d4	91.5	54.6-141		%REC	1	10/16/2009 2:01:22 AM
Surr: 4-Bromofluorobenzene	98.1	60.1-133		%REC	1	10/16/2009 2:01:22 AM
Surr: Dibromofluoromethane	92.2	78.5-130		%REC	1	10/16/2009 2:01:22 AM
Surr: Toluene-d8	97.5	79.5-126		%REC	1	10/16/2009 2:01:22 AM

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected 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: Western Refining Southwest, Inc.
Project: GBR
Work Order: 0910270

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 300.0: Anions											
Sample ID: MB		*MBLK*				Batch ID:	**R35809**	Analysis Date:	10/20/2009 10:58:03 AM		
Fluoride	ND	mg/L	0.10								
Chloride	ND	mg/L	0.10								
Nitrogen, Nitrite (As N)	ND	mg/L	0.10								
Bromide	ND	mg/L	0.10								
Nitrogen, Nitrate (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		*LCS*				Batch ID:	**R36809**	Analysis Date:	10/20/2009 11:15:27 AM		
Fluoride	0.5029	mg/L	0.10	0.5	0	101	90	110			
Chloride	4.952	mg/L	0.10	5	0	99.0	90	110			
Nitrogen, Nitrite (As N)	1.010	mg/L	0.10	1	0	101	90	110			
Bromide	2.519	mg/L	0.10	2.5	0	101	90	110			
Nitrogen, Nitrate (As N)	2.486	mg/L	0.10	2.5	0	99.4	90	110			
Phosphorus, Orthophosphate (As P)	4.913	mg/L	0.50	5	0	98.3	90	110			
Sulfate	9.919	mg/L	0.50	10	0	99.2	90	110			
Method: SM 2320B: Alkalinity											
Sample ID: MB		*MBLK*				Batch ID:	**R35785**	Analysis Date:	10/19/2009 2:36:00 PM		
Alkalinity, Total (As CaCO3)	ND	mg/L Ca	20								
Carbonate	ND	mg/L Ca	2.0								
Bicarbonate	ND	mg/L Ca	20								
Sample ID: LCS		*LCS*				Batch ID:	**R36785**	Analysis Date:	10/19/2009 2:16:00 PM		
Alkalinity, Total (As CaCO3)	80.52	mg/L Ca	20	80	0	101	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0910270

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 6010B: Dissolved Metals											
Sample ID: MB		*MBLK*				Batch ID:	R35782	Analysis Date:	10/16/2009 11:22:02 AM		
Calcium	ND	mg/L	1.0								
Iron	ND	mg/L	0.020								
Magnesium	ND	mg/L	1.0								
Manganese	ND	mg/L	0.0020								
Potassium	ND	mg/L	1.0								
Sodium	ND	mg/L	1.0								
Sample ID: LCS		*LCS*				Batch ID:	R35782	Analysis Date:	10/16/2009 11:25:15 AM		
Calcium	51.44	mg/L	1.0	50.5	0.0232	102	80	120			
Iron	0.4807	mg/L	0.020	0.5	0	96.1	80	120			
Magnesium	51.02	mg/L	1.0	50.5	0.0224	101	80	120			
Manganese	0.4724	mg/L	0.0020	0.5	0	94.5	80	120			
Potassium	53.50	mg/L	1.0	55	0.1543	97.0	80	120			
Sodium	54.13	mg/L	1.0	50.5	0.0669	107	80	120			
Sample ID: LCS		*LCS*				Batch ID:	R35782	Analysis Date:	10/16/2009 11:28:41 AM		
Calcium	51.76	mg/L	1.0	50.5	0.0232	102	80	120			
Iron	0.4832	mg/L	0.020	0.5	0	96.6	80	120			
Magnesium	51.23	mg/L	1.0	50.5	0.0224	101	80	120			
Manganese	0.4698	mg/L	0.0020	0.5	0	94.0	80	120			
Potassium	53.88	mg/L	1.0	55	0.1543	97.7	80	120			
Sodium	54.39	mg/L	1.0	50.5	0.0669	108	80	120			
Method: SM2540C MOD: Total Dissolved Solids											
Sample ID: MB-20383		*MBLK*				Batch ID:	20383	Analysis Date:	10/22/2009 5:32:00 PM		
Total Dissolved Solids	ND	mg/L	20.0								
Sample ID: LCS-20383		*LCS*				Batch ID:	20383	Analysis Date:	10/22/2009 5:32:00 PM		
Total Dissolved Solids	1029	mg/L	20.0	1000	0	103	80	120			

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0910270

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: 5ml rb		*MBLK*					Batch ID: **R35736**		Analysis Date: 10/15/2009 8:51:09 AM		
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
1,2-Dichloroethane (EDC)	ND	µg/L	1.0								
1,2-Dibromoethane (EDB)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Acetone	ND	µg/L	10								
Bromobenzene	ND	µg/L	1.0								
Bromodichloromethane	ND	µg/L	1.0								
Bromoform	ND	µg/L	1.0								
Bromomethane	ND	µg/L	1.0								
2-Butanone	ND	µg/L	10								
Carbon disulfide	ND	µg/L	10								
Carbon Tetrachloride	ND	µg/L	1.0								
Chlorobenzene	ND	µg/L	1.0								
Chloroethane	ND	µg/L	2.0								
Chloroform	ND	µg/L	1.0								
Chloromethane	ND	µg/L	1.0								
2-Chlorotoluene	ND	µg/L	1.0								
4-Chlorotoluene	ND	µg/L	1.0								
cis-1,2-DCE	ND	µg/L	1.0								
cis-1,3-Dichloropropene	ND	µg/L	1.0								
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0								
Dibromochloromethane	ND	µg/L	1.0								
Dibromomethane	ND	µg/L	1.0								
1,2-Dichlorobenzene	ND	µg/L	1.0								
1,3-Dichlorobenzene	ND	µg/L	1.0								
1,4-Dichlorobenzene	ND	µg/L	1.0								
Dichlorodifluoromethane	ND	µg/L	1.0								
1,1-Dichloroethane	ND	µg/L	1.0								
1,1-Dichloroethene	ND	µg/L	1.0								
1,2-Dichloropropane	ND	µg/L	1.0								
1,3-Dichloropropane	ND	µg/L	1.0								
2,2-Dichloropropane	ND	µg/L	2.0								
1,1-Dichloropropene	ND	µg/L	1.0								
Hexachlorobutadiene	ND	µg/L	1.0								
2-Hexanone	ND	µg/L	10								
Isopropylbenzene	ND	µg/L	1.0								
4-Isopropyltoluene	ND	µg/L	1.0								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR
Work Order: 0910270

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: 5ml rb		*MBLK*				Batch ID: **R35736**		Analysis Date:	10/15/2009 8:51:09 AM		
4-Methyl-2-pentanone	ND	µg/L	10								
Methylene Chloride	ND	µg/L	3.0								
n-Butylbenzene	ND	µg/L	1.0								
n-Propylbenzene	ND	µg/L	1.0								
sec-Butylbenzene	ND	µg/L	1.0								
Styrene	ND	µg/L	1.0								
tert-Butylbenzene	ND	µg/L	1.0								
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0								
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0								
Tetrachloroethene (PCE)	ND	µg/L	1.0								
trans-1,2-DCE	ND	µg/L	1.0								
trans-1,3-Dichloropropene	ND	µg/L	1.0								
1,2,3-Trichlorobenzene	ND	µg/L	1.0								
1,2,4-Trichlorobenzene	ND	µg/L	1.0								
1,1,1-Trichloroethane	ND	µg/L	1.0								
1,1,2-Trichloroethane	ND	µg/L	1.0								
Trichloroethene (TCE)	ND	µg/L	1.0								
Trichlorofluoromethane	ND	µg/L	1.0								
1,2,3-Trichloropropane	ND	µg/L	2.0								
Vinyl chloride	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	1.5								
Sample ID: b7		*MBLK*				Batch ID: **R35736**		Analysis Date:	10/15/2009 9:24:35 PM		
Benzene	ND	µg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Methyl tert-butyl ether (MTBE)	ND	µg/L	1.0								
1,2,4-Trimethylbenzene	ND	µg/L	1.0								
1,3,5-Trimethylbenzene	ND	µg/L	1.0								
1,2-Dichloroethane (EDC)	ND	µg/L	1.0								
1,2-Dibromoethane (EDB)	ND	µg/L	1.0								
Naphthalene	ND	µg/L	2.0								
1-Methylnaphthalene	ND	µg/L	4.0								
2-Methylnaphthalene	ND	µg/L	4.0								
Acetone	ND	µg/L	10								
Bromobenzene	ND	µg/L	1.0								
Bromodichloromethane	ND	µg/L	1.0								
Bromoform	ND	µg/L	1.0								
Bromomethane	ND	µg/L	1.0								
2-Butanone	ND	µg/L	10								
Carbon disulfide	ND	µg/L	10								
Carbon Tetrachloride	ND	µg/L	1.0								
Chlorobenzene	ND	µg/L	1.0								
Chloroethane	ND	µg/L	2.0								
Chloroform	ND	µg/L	1.0								

Qualifiers:

E	Estimated value	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
R	RPD outside accepted recovery limits	S	Spike recovery outside accepted recovery limits

QA/QC SUMMARY REPORT

Client: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0910270

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: b7		*MBLK*									
Chloromethane	ND	µg/L	1.0								
2-Chlorotoluene	ND	µg/L	1.0								
4-Chlorotoluene	ND	µg/L	1.0								
cis-1,2-DCE	ND	µg/L	1.0								
cis-1,3-Dichloropropene	ND	µg/L	1.0								
1,2-Dibromo-3-chloropropane	ND	µg/L	2.0								
Dibromochloromethane	ND	µg/L	1.0								
Dibromomethane	ND	µg/L	1.0								
1,2-Dichlorobenzene	ND	µg/L	1.0								
1,3-Dichlorobenzene	ND	µg/L	1.0								
1,4-Dichlorobenzene	ND	µg/L	1.0								
Dichlorodifluoromethane	ND	µg/L	1.0								
1,1-Dichloroethane	ND	µg/L	1.0								
1,1-Dichloroethene	ND	µg/L	1.0								
1,2-Dichloropropane	ND	µg/L	1.0								
1,3-Dichloropropane	ND	µg/L	1.0								
2,2-Dichloropropane	ND	µg/L	2.0								
1,1-Dichloropropene	ND	µg/L	1.0								
Hexachlorobutadiene	ND	µg/L	1.0								
2-Hexanone	ND	µg/L	10								
Isopropylbenzene	ND	µg/L	1.0								
4-Isopropyltoluene	ND	µg/L	1.0								
4-Methyl-2-pentanone	ND	µg/L	10								
Methylene Chloride	ND	µg/L	3.0								
n-Butylbenzene	ND	µg/L	1.0								
n-Propylbenzene	ND	µg/L	1.0								
sec-Butylbenzene	ND	µg/L	1.0								
Styrene	ND	µg/L	1.0								
tert-Butylbenzene	ND	µg/L	1.0								
1,1,1,2-Tetrachloroethane	ND	µg/L	1.0								
1,1,2,2-Tetrachloroethane	ND	µg/L	2.0								
Tetrachloroethene (PCE)	ND	µg/L	1.0								
trans-1,2-DCE	ND	µg/L	1.0								
trans-1,3-Dichloropropene	ND	µg/L	1.0								
1,2,3-Trichlorobenzene	ND	µg/L	1.0								
1,2,4-Trichlorobenzene	ND	µg/L	1.0								
1,1,1-Trichloroethane	ND	µg/L	1.0								
1,1,2-Trichloroethane	ND	µg/L	1.0								
Trichloroethene (TCE)	ND	µg/L	1.0								
Trichlorofluoromethane	ND	µg/L	1.0								
1,2,3-Trichloropropane	ND	µg/L	2.0								
Vinyl chloride	ND	µg/L	1.0								
Xylenes, Total	ND	µg/L	1.5								
Sample ID: 100ng lcs		*LCS*									

Batch ID: **R36736** Analysis Date: 10/15/2009 9:24:35 PM

Batch ID: **R36736** Analysis Date: 10/15/2009 9:46:33 AM

Qualifiers:

- E *Estimated value*
- 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: Western Refining Southwest, Inc.
Project: GBR **Work Order:** 0910270

Analyte	Result	Units	PQL	SPK Va	SPK ref	%Rec	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Method: EPA Method 8260B: VOLATILES											
Sample ID: 100ng lcs		*LCS*				Batch ID:	**R35736**	Analysis Date:	10/15/2009 9:46:33 AM		
Benzene	18.69	µg/L	1.0	20	0	93.4	76.7	114			
Toluene	20.85	µg/L	1.0	20	0	104	78.4	117			
Chlorobenzene	20.22	µg/L	1.0	20	0	101	80.7	127			
1,1-Dichloroethene	21.58	µg/L	1.0	20	0	108	80.2	128			
Trichloroethene (TCE)	16.79	µg/L	1.0	20	0	84.0	77.4	115			
Sample ID: 100ng lcs_b		*LCS*				Batch ID:	**R35736**	Analysis Date:	10/15/2009 10:19:57 PM		
Benzene	18.64	µg/L	1.0	20	0	93.2	76.7	114			
Toluene	20.30	µg/L	1.0	20	0	102	78.4	117			
Chlorobenzene	19.82	µg/L	1.0	20	0	99.1	80.7	127			
1,1-Dichloroethene	20.92	µg/L	1.0	20	0	105	80.2	128			
Trichloroethene (TCE)	16.74	µg/L	1.0	20	0	83.7	77.4	115			

Qualifiers:

E	Estimated value	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 WESTERN REFINING SOUT

Date Received: 10/15/2009

Work Order Number 0910270

Received by: TLS

Checklist completed by: [signature] 10/15/09
Signature Date

Sample ID labels checked by: M
Initials

Matrix: Carrier name: Greyhound

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐	Not Shipped ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	N/A ☑	
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Water - VOA vials have zero headspace? No VOA vials submitted ☐		Yes ☑	No ☐	
Water - Preservation labels on bottle and cap match?	Yes ☑	No ☐	N/A ☐	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐	
Container/Temp Blank temperature?	2.9°	<6° C Acceptable If given sufficient time to cool.		

Number of preserved bottles checked for pH: H

(<2) >12 unless noted below.

COMMENTS:

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

_____

_____

_____

_____

Corrective Action _____

_____

_____

Chain-of-Custody Record

Client: Western Refining

Mailing Address: 111 CR 4990
Bloomfield NM 87413

Phone #:

email or Fax#:

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

Accreditation
☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____

Project Name: GBR

Project #:

Project Manager: Ashley Ager

Sampler: Troy URBAN

On Ice: ☒ Yes ☐ No

Sample Temperature: 0.9

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

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 0910210	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH Method 8015B (Gas/Diesel)	TPH (Method 418.1)	EDB (Method 504.1)	8310 (PNA or PAH)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA)	8270 (Semi-VOA)	cations, anions, Fe, Mn	TDS, AK, EC	pH		Air Bubbles (Y or N)
10/4/09	~~0914~~ 1131	GW	Effluent	6	various	1										✓		✓	✓	✓		
10/4/09	1151	GW	Influent	6	various	2										✓		✓	✓	✓		
10/4/09	0900	GW	Trip Blank	2	HCl	3										✓						

Date:	Time:	Relinquished by:	Received by:	Date	Time
10/4/09	1245			10/5/09	935
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: please copy results to ala@ladestar-services.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.