

GW - 32

## REPORTS

YEAR(S):

2007 RR LAGOON

**RAILROAD RACK LAGOON OVERFLOW DITCH  
AND FAN-OUT AREA, SWMU #8  
SUBSURFACE INVESTIGATION  
GIANT REFINING COMPANY  
CINIZA REFINERY  
GALLUP, NEW MEXICO**

---

**February 8, 2007**

**Project No: 072-006-001**

---

**PREPARED BY: TRIHYDRO CORPORATION**

1252 Commerce Drive  
Laramie, WY 82070

---

**SUBMITTED BY: GIANT REFINING COMPANY**

I-40 Exit 39  
Jamestown, NM 87347



**ENGINEERING SOLUTIONS. ADVANCING BUSINESS.**

**Home Office | 1252 Commerce Drive | Laramie, WY 82070 | phone 307/745.7474 | fax 307/745.7729 | [www.trihydro.com](http://www.trihydro.com)**

## Executive Summary

In June 2006, the Ciniza Refinery (Ciniza) located near Gallup, New Mexico, was requested by the New Mexico Environmental Department (NMED) to investigate the presence of residual contamination in the overflow ditch and fan-out area. These two areas are considered to be part of Solid Waste Management Unit (SWMU) #8. A subsurface soil investigation of the railroad rack lagoon overflow ditch and fan-out area was conducted on October 16, 17, and 18, 2006. A soil sampling work plan was submitted to the NMED on August 29, 2006. Two sample location modifications were requested by the NMED in a letter titled *Approval with Modifications Work Plan For Investigation of the Overflow Ditch and Fan-Out Area of Railroad Rack Lagoon, SWMU #8*, dated September 19, 2006. Ciniza modified the sampling locations accordingly. The remainder of the work plan was approved by the NMED.

Ten test pits were completed in the overflow ditch and fan-out area. Each test pit displayed very similar lithology. Test pits B-1 and B-6 were the only test pits that displayed visual contamination. Low density, black, asphalt-like clumps were noted on the surface around both of these test pits. Groundwater was not encountered during excavation of the test pits. Samples taken from the test pits at depths of 2 and 5 feet below ground surface (ft bgs), were analyzed for diesel range organics (DRO) and semi-volatile organic compounds (SVOCs), if the concentration of DRO exceeded 500 milligrams per kilogram (mg/kg). Samples were also analyzed for volatile organic compounds (VOCs), Resource Conservation and Recovery Act (RCRA) metals, mercury, and cyanide. No cyanide, mercury, VOCs, or SVOCs were detected in the samples analyzed. Barium, chromium, and lead were the only metals detected, however detections were below the cleanup standards. DRO was detected in six of the 2 ft bgs samples and one of the 5 ft bgs samples. Four of the samples collected at the 2-ft sample interval were above the cleanup standard of 200 mg/kg for DRO. Further actions, such as additional sampling and/or cleanup requirements, will be discussed with NMED.



# Table of Contents

|       |                                                  |     |
|-------|--------------------------------------------------|-----|
| 1.0   | INTRODUCTION .....                               | 1-1 |
| 2.0   | BACKGROUND.....                                  | 2-1 |
| 3.0   | SCOPE OF SERVICES .....                          | 3-1 |
| 4.0   | FIELD INVESTIGATION RESULTS .....                | 4-1 |
| 4.1   | Surface Conditions.....                          | 4-1 |
| 4.2   | Soil Investigation Methodology.....              | 4-1 |
| 4.2.1 | Sample Locations .....                           | 4-1 |
| 4.2.2 | Equipment Decontamination Procedures .....       | 4-1 |
| 4.2.3 | Field Documentation and Logging.....             | 4-2 |
| 4.2.4 | Soil Sampling .....                              | 4-2 |
| 4.3   | Subsurface Conditions .....                      | 4-3 |
| 4.4   | Investigation Derived Waste.....                 | 4-4 |
| 5.0   | REGULATORY CRITERIA.....                         | 5-1 |
| 6.0   | SOIL SAMPLING ANALYTICAL RESULTS .....           | 6-1 |
| 6.1   | Quality Assurance/Quality Control Protocol ..... | 6-1 |
| 7.0   | CONCLUSIONS.....                                 | 7-1 |



**Trihydro**



## List of Tables

- 1 Soil Sample Field Screening Summary, Railroad Rack Lagoon Overflow Ditch and Fan-Out Area, Giant Refining Company, Ciniza Refinery, Gallup, New Mexico
- 2 Soil Sample Analytical Result Summary, Railroad Rack Lagoon Overflow Ditch and Fan-Out Area, Giant Refining Company, Ciniza Refinery, Gallup, New Mexico



## List of Figures

- 1 Topographic Map of Ciniza Refinery Site, Giant Refining Company, Ciniza Refinery, Gallup, New Mexico
- 2 SWMU No. 8 and Surrounding Wells, Giant Refining Company, Ciniza Refinery, Gallup, New Mexico
- 3 Railroad Rack Lagoon Overflow Ditch and Fan-Out Area Soil Sample Locations, Giant Refining Company, Ciniza Refinery, Gallup, New Mexico
- 4 Railroad Rack Lagoon Overflow Ditch and Fan-Out Area Soil Sample Locations and Results, Giant Refining Company, Ciniza Refinery, Gallup, New Mexico



## List of Appendices

- A INVESTIGATION PHOTOS AND PHOTO LOG
- B TEST PIT LOGS
- C SAMPLE LOGS
- D RECORD OF CALIBRATION
- E ANALYTICAL DATA WITH TIER I AND II DATA VALIDATIONS
- F NMED CLEANUP STANDARDS



## 1.0 INTRODUCTION

Giant Industries Arizona, Inc. requested that Trihydro Corporation (Trihydro) conduct a soil sampling investigation at the Ciniza Refinery (Ciniza) near Gallup, New Mexico. The purpose of this field investigation was to characterize soil in the railroad rack lagoon overflow ditch and fan-out area. The railroad rack lagoon overflow ditch and fan-out area is located on Ciniza property northeast of the main process area. A topographic map of Ciniza that also shows the relative location of the overflow ditch and fan-out area is included as Figure 1. Figure 2 shows SWMU #8 and surrounding well locations as required by NMED. A subsurface soil investigation was conducted on October 16, 17, and 18. This report describes the field activities to collect the soil samples and presents the soil analytical results.



## 2.0 BACKGROUND

The overflow ditch and fan-out area was used to manage overflow when the railroad rack lagoon was filled beyond capacity. The railroad rack lagoon has not been used since the mid-1980's. Figure 3 shows the dimensions and relative location of the overflow ditch and fan-out area. Both of these areas are considered to be part of SWMU # 8. The fan-out area is surrounded by earthen berms approximately 2-3 feet (ft) high. The railroad rack lagoon, overflow ditch, and fan-out area were sampled during the RCRA Facility Investigation (RFI) in 1992. During this investigation, soil samples from these areas were analyzed for VOCs, SVOCs, and total metals. The RFI concluded that VOCs/SVOCs were at minimal levels, and inorganic levels were below background contamination levels with the exception of chromium. However, chromium levels were below the RCRA Corrective Action levels, thus no remediation action was required.

A subsurface soil investigation of the railroad rack lagoon overflow ditch and fan-out area was conducted on October 16, 17, and 18, 2006. This investigation was conducted in response to a letter that Ciniza received from the NMED, dated June 29, 2006. In this correspondence, comment # 26 requested information regarding the presence of residual contamination at the overflow ditch and fan-out area locations. A soil sampling work plan was submitted to the NMED on August 29, 2006. Two sample location changes were requested by the NMED in a letter titled Approval with Modifications Work Plan For Investigation of the Overflow Ditch and Fan-Out Area of Railroad Rack Lagoon, SWMU #8, dated September 19, 2006. Ciniza modified the sampling locations accordingly. The remainder of the work plan was approved by the NMED.



### 3.0 SCOPE OF SERVICES

Ten sample locations, approved by the NMED, were located and staked using the overflow ditch and berms of the fan-out area as reference points. Samples were collected at 2 ft bgs using a hang auger at each of the 10 locations. Test pits were then installed at these locations to a depth of 4 ft bgs. A hand auger was then used to bore the remaining 1 ft to collect a sample at 5 ft bgs. Each sample location was logged and field screened for total organic vapors (TOVs). The test pits were backfilled after sample collection. The collected samples were then shipped to Hall Environmental located in Albuquerque, New Mexico for analysis. The soil samples were analyzed for DRO, SVOCs, VOCs, RCRA metals, mercury, and cyanide.



## **4.0 FIELD INVESTIGATION RESULTS**

Soil sampling was conducted on October 17 and 18, 2006, by Trihydro personnel. The sample locations, methods, equipment, decontamination procedures, field screening techniques, documentation and logging, and investigation derived waste (IDW) disposal are described in this section.

### **4.1 SURFACE CONDITIONS**

The surface topography of the area of investigation is relatively flat with the fan-out area being surrounded by earthen berms approximately 2-3 ft high. Vegetation at the site is sparse and consists mainly of sagebrush and natural grasses. The railroad rack lagoon and fan-out areas are located on land owned and controlled by Ciniza industrial property boundaries shown as figure 1.

### **4.2 SOIL INVESTIGATION METHODOLOGY**

#### **4.2.1 SAMPLE LOCATIONS**

The ten sample locations were selected based on the sample locations from the RFI in 1992. These locations were submitted to the NMED for approval in the soil sampling work plan submitted on August 29, 2006. Two sample locations were modified at the NMED's request. The sample locations were then located in the field by Trihydro using the overflow ditch and the berms of the fan-out area as measurement reference points. The locations were staked and labeled with the applicable sample identification. Photographs of the staked locations are presented as Appendix A. Figure 3 illustrates the measured dimensions of the overflow ditch, the fan-out area, and the sample locations.

#### **4.2.2 EQUIPMENT DECONTAMINATION PROCEDURES**

Sampling equipment was decontaminated before sampling commenced and after each sample was collected. All sampling devices were decontaminated using a non-phosphate detergent solution followed by two distilled water rinses. Prior to use, the equipment was either air-dried or dried with clean paper towels. Decontaminated sampling devices were stored in a contaminant-free location until use.

The backhoe used to install the test pits was not decontaminated, because this equipment never came in contact with the material to be sampled.



#### 4.2.3 FIELD DOCUMENTATION AND LOGGING

A qualified geologist was on site to log all test pits/boreholes during the sampling event. The test pit logs were completed according to the work plan specifications. Test pit logs and sample logs are included as Appendices B and C, respectively.

Each sample interval was field screened for TOVs using a MiniRae 2000 photoionization detector (PID). The PID was calibrated by Trihydro personnel each morning prior to field screening. Calibration logs are presented as Appendix D. The soil was collected with a decontaminated hand auger. The portion of soil to be field screened was then transferred to a clean, sealable plastic bag. The soil sample in the sealable bag was then allowed to reach standard temperature (approximately 70 degrees F). Once the sample reached the required temperature, the PID probe was inserted into the bag. The maximum reading was recorded on the test pit logs provided as Appendix A and summarized in Table 1. As shown in Table 1 TOVs were not detected above 11 ppm during field screening activities.

Photographs were also used to document field activities. Three photographs were taken at each sample location: one of the staked sample location, one of the 2 ft bgs hand augured borehole, and one displaying the completed test pit along with the two sealed plastic bags containing the samples that were used for field screening. All photographs, along with a photo log including a description of each photograph, are included as Appendix A.

#### 4.2.4 SOIL SAMPLING

Soil samples were collected at the 10 locations (B-1 through B-10) identified on Figure 3. Two sample sets (a sample set consists of three - 4 ounce jars) were collected at each location for laboratory analysis: one from 2 ft bgs and one from 5 ft bgs. Each sample set submitted for laboratory analysis was collected with a decontaminated hand auger. Sampling at each location was completed in the following manner:

- A decontaminated, manually driven hand auger was used to create a borehole from 0 to 2 ft bgs.
- The 2 ft bgs sample was collected from the bottom of the borehole with the hand auger.
- A test pit was installed with a backhoe at the 2 ft bgs borehole location to a depth of 4 ft bgs.
- The hand auger was decontaminated.
- The decontaminated hand auger was used to create a borehole from 4 to 5 ft bgs from the bottom of the test pit.





- The 5 ft bgs sample was collected from the bottom of the 5 ft borehole.
- The hand auger was decontaminated.

Soil samples were transferred directly from the decontaminated hand auger to three clean 4-ounce jars. Three 4-ounce jars were required by the Hall Environmental laboratory in order to run all of the required analyses. The sample containers were completely filled to minimize headspace (by tamping during filling) and immediately sealed. Sample containers were immediately labeled, recorded on the sample logs (Appendix C), and stored on ice until each day's sampling was complete. The samples were then sealed with a custody seal by Trihydro personnel and stored in an on-site Ciniza sample refrigerator. A chain-of-custody (CoC) was completed by Trihydro personnel. A copy of the CoC is presented along with the laboratory analysis as Appendix E. The custody-sealed samples and the CoC were delivered to Hall Environmental located in Albuquerque, New Mexico. As specified on the CoC and work plan, the samples were analyzed for DRO by method 8015B, SVOCs by method 8270 if the DRO exceeded 500 mg/kg, VOCs by method 8260, RCRA metals by method 6010C, mercury by method 7471, and cyanide by method 335.2. The only preservation requirement specified by Hall Environmental was that the samples be cooled to 4 degrees Celsius or less and remain at that temperature until analysis.

#### **4.3 SUBSURFACE CONDITIONS**

As shown in the test pit logs, presented as Appendix B, the 10 test pits completed in the overflow ditch and fan-out area all displayed very similar lithology. Test pits B-3, B-4, B-5, B-7, B-8, and B-10 were composed of brown silt with some clay from ground surface to depths ranging from 2.5 to 3 ft bgs. Brown clay with some silt was present below this interval to total depth. This group of test pits, along with B-9, composes the central and southeast portions of the fan-out area as well as the entire overflow ditch. Test pit B-9 was composed of brown silt with some clay from ground surface to total depth. Test pits B-2 (in the northeast corner of the fan-out area) and B-6 (in the southwest corner of the fan out area) resembled B-3, B-4, B-5, B-7, B-8, and B-10, except brown clayey silt was present from 4 to 5 ft bgs. Test pit B-1 (in the northwest portion of the fan-out area) was composed of brown silty clay from ground surface to total depth. Groundwater was not encountered at any of the test pits.

Low density, black, asphalt-like material was noted on the surface around test pits B-1 and B-6. The material was also present in the subsurface at B-1 from 0 to 3 ft bgs and at B-6 from 0 to 1.5 ft bgs. Test pits B-1 and B-6 are the two western-most test pits in the fan-out area. This material was slightly sticky, soft, subrounded where eroded, and subangular on fresh surfaces and emitted an asphalt-like odor, noted when installing the test pits through the above-

referenced intervals. A photograph of one of the asphalt-like material is presented on page 31 of Appendix A. Staining or odor was noted only at test pits B-1 and B-6. TOVs were not above 11 parts per million (ppm) at any test pit.

#### **4.4 INVESTIGATION DERIVED WASTE**

All test pits were back-filled with excavated soil immediately after completion. Other wastes associated with sampling, including personal protective equipment (PPE), rinse water from decontamination, and other sampling-associated disposables were disposed appropriately by Ciniza.

## 5.0 REGULATORY CRITERIA

The NMED provided cleanup standards for DRO, SVOCs, VOCs, RCRA metals, mercury, and cyanide. Table A-1 of the New Mexico Soil Screening Levels, June 2006, Revision 4.0, provided the residential and industrial cleanup standards for RCRA metals, VOCs, mercury, and cyanide. The NMED instructed Ciniza that Table 2a of the total petroleum hydrocarbon (TPH) screening levels was to be used to for the cleanup standard of DRO. These tables are included as Appendix F.



## 6.0 SOIL SAMPLING ANALYTICAL RESULTS

Samples were analyzed for DRO by method 8015B, SVOCs by method 8270 if the DRO exceeded 500 mg/kg, VOCs by method 8260, RCRA metals by method 6010C, mercury by method 7471, and cyanide by method 335.2. A summary of the analytical data is provided in Table 2. No cyanide, mercury, VOCs, or SVOCs were detected in the samples analyzed. Barium, chromium, and lead were the only metals detected in the samples analyzed. Barium was detected in all samples at concentrations ranging from 200 to 310 mg/kg. Chromium was detected in all samples at concentrations ranging from 8.2 to 11.0 mg/kg, while lead was detected in all samples at concentrations ranging from 5.0 to 8.9 mg/kg. All of these concentrations are below the NMED residential soil screening levels (15,600 mg/kg for barium, 234 mg/kg for chromium, and 400 mg/kg for lead). DRO was detected in six of the 2 ft bgs samples (B-1, B-5, B-7, B-8, B-9, and B-10) and one of the 5 ft bgs samples (B-8). Concentrations ranged from 43 to 15,000 mg/kg. The NMED-approved cleanup standard for DRO is 200 mg/kg (from "Unknown oil" on Table 2a of NMED's TPH Screening Guidelines for Potable Groundwater (GW-1)). Four 2 ft bgs sample results (B-1, B-7, B-8, and B-9) exceeded this standard. Samples B-8 and B-9 are located in the northern most portion of the overflow ditch. Sample B-7 is located in close proximity to where the overflow ditch enters the fan-out area, and sample B-1 is located in the northeast portion of the fan-out area.

### 6.1 QUALITY ASSURANCE/QUALITY CONTROL PROTOCOL

Analytical data was validated through EPA Tier 1 and Tier 2 data validation standards. Analytical parameters, such as surrogate recoveries and duplicate sample analyses, were reviewed to verify the quality of data submitted. Laboratory data were also validated to verify that the samples were analyzed according to the specified USEPA Methods. Based on the Tier II data validation, several results were flagged with a "J," indicating that the detection value is estimated, or with a "UJ," indicating that the reporting limit is estimated. The analytical results as well as the data validations are included as Appendix E.



**Trihydro**

## 7.0 CONCLUSIONS

Soil samples were collected from 2 ft and 5 ft bgs at 10 locations in the railroad rack lagoon overflow ditch and fan-out area. In 1992, the overflow ditch and fan-out area was investigated during the RFI. Soil samples collected during the RFI were analyzed for VOCs, SVOCs, and total metals. Nine samples from the RFI sample set had low VOC and/or SVOCs detected. Neither VOCs nor SVOCs were detected in the samples collected in the 2006 investigation.

Soil samples collected during the RFI were also analyzed for total metals. Chromium was the only metal that showed elevated detections in the RFI samples. However, the chromium levels were below the RCRA Corrective Action limits for remediation (40 ppm). Chromium levels in the sample collected during 2006 did not exceed the RCRA corrective action levels. For this sample set, the chromium levels, as well as the other RCRA metals, are below the cleanup standards specified by NMED.

As discussed in Section 6.0, four of the 2 ft. bags soil samples exceeded the DRO TPH screening level of 200 Mg/Kg. It is important to note that the deeper 5 ft. bag samples did not exceed screening levels. In addition, all other detected constituents were reported at concentrations below applicable screening levels.

Further actions, such as additional sampling and/or cleanup requirements, will be decided upon between Ciniza and the NMED.



TABLES



**TABLE 1. Soil Sample Field Screening Summary, Railroad Rack Lagoon Overflow Ditch and Fan-Out Area, Giant Refining Company, Ciniza Refinery, Gallup, New Mexico**

| Sample ID | Depth (ft) | TOV (ppm) |
|-----------|------------|-----------|
| B-1       | 2          | 0.9       |
| B-1       | 5          | 1.2       |
| B-2       | 2          | 1.0       |
| B-2       | 5          | 1.0       |
| B-3       | 2          | 1.5       |
| B-3       | 5          | 1.3       |
| B-4       | 2          | 1.1       |
| B-4       | 5          | 1.0       |
| B-5       | 2          | 1.9       |
| B-5       | 5          | 1.1       |
| B-6       | 2          | 3.5       |
| B-6       | 5          | 0.8       |
| B-7       | 2          | 2.8       |
| B-7       | 5          | 5.8       |
| B-8       | 2          | 1.5       |
| B-8       | 5          | 1.5       |
| B-9       | 2          | 10.2      |
| B-9       | 5          | 3.0       |
| B-10      | 2          | 2.9       |
| B-10      | 5          | 1.2       |

**TABLE 2. Soil Sample Analytical Result Summary, Railroad Rack Lagoon Overflow Ditch and Fan-Out Area, Giant Refining Company, Cinizia Refinery, Gallup, New Mexico**

| Sample ID                       | Depth  | Diesel Range Organics (mg/Kg) | Metals (mg/Kg) |          |      | Volatiles (mg/Kg) |
|---------------------------------|--------|-------------------------------|----------------|----------|------|-------------------|
|                                 |        |                               | Barium         | Chromium | Lead |                   |
| B-1                             | 2 feet | 470                           | 280            | 11       | 7.9  | ND                |
|                                 | 5 feet | ND                            | 300            | 8.8      | 5    | ND                |
| B-2                             | 2 feet | ND                            | 260            | 10       | 7    | ND                |
|                                 | 5 feet | ND                            | 290            | 9.3      | 5.9  | ND                |
| B-3                             | 2 feet | ND                            | 260            | 9        | 11   | ND                |
|                                 | 5 feet | ND                            | 290            | 9.4      | 8.3  | ND                |
| B-4                             | 2 feet | ND                            | 250            | 11       | 8.1  | ND                |
|                                 | 5 feet | ND                            | 230            | 11       | 7.6  | ND                |
| B-5                             | 2 feet | 130                           | 250            | 10       | 7.3  | ND                |
|                                 | 5 feet | ND                            | 290            | 10       | 7.1  | ND                |
| B-6                             | 2 feet | ND                            | 230            | 13       | 6.8  | ND                |
|                                 | 5 feet | ND                            | 260            | 9.6      | 5.8  | ND                |
| B-7                             | 2 feet | 360                           | 230            | 11       | 8.6  | ND                |
|                                 | 5 feet | ND                            | 280            | 10       | 6.3  | ND                |
| B-8                             | 2 feet | 2400                          | 270            | 9.6      | 8.5  | ND                |
|                                 | 5 feet | 43                            | 260            | 8.2      | 8.9  | ND                |
| B-9                             | 2 feet | 15000                         | 220            | 8.5      | 8.3  | ND                |
|                                 | 5 feet | ND                            | 310            | 9.1      | 7.1  | ND                |
| B-10                            | 2 feet | 63                            | 280            | 9.5      | 8.4  | ND                |
|                                 | 5 feet | ND                            | 230            | 9.3      | 6.3  | ND                |
| Clean Up Standard - Residential |        | 200                           | 15600          | 234      | 400  | --                |
| Clean Up Standard - Industrial  |        | 200                           | 100000         | 3400     | 800  | --                |

**Notes:** Bold numbers indicate analytical result exceeds cleanup standard.

All samples collected on 10/17/06 and 10/18/06.

Clean Up Standards for metals are taken from Table A-1: (NMED Soil Screening Levels) of the NM Soil Screening Levels, June 2006, Revision 4.0. "Unknown Oil" clean up standards taken from Table 2a of the NMED TPH Screening Guidelines are used for DRO.

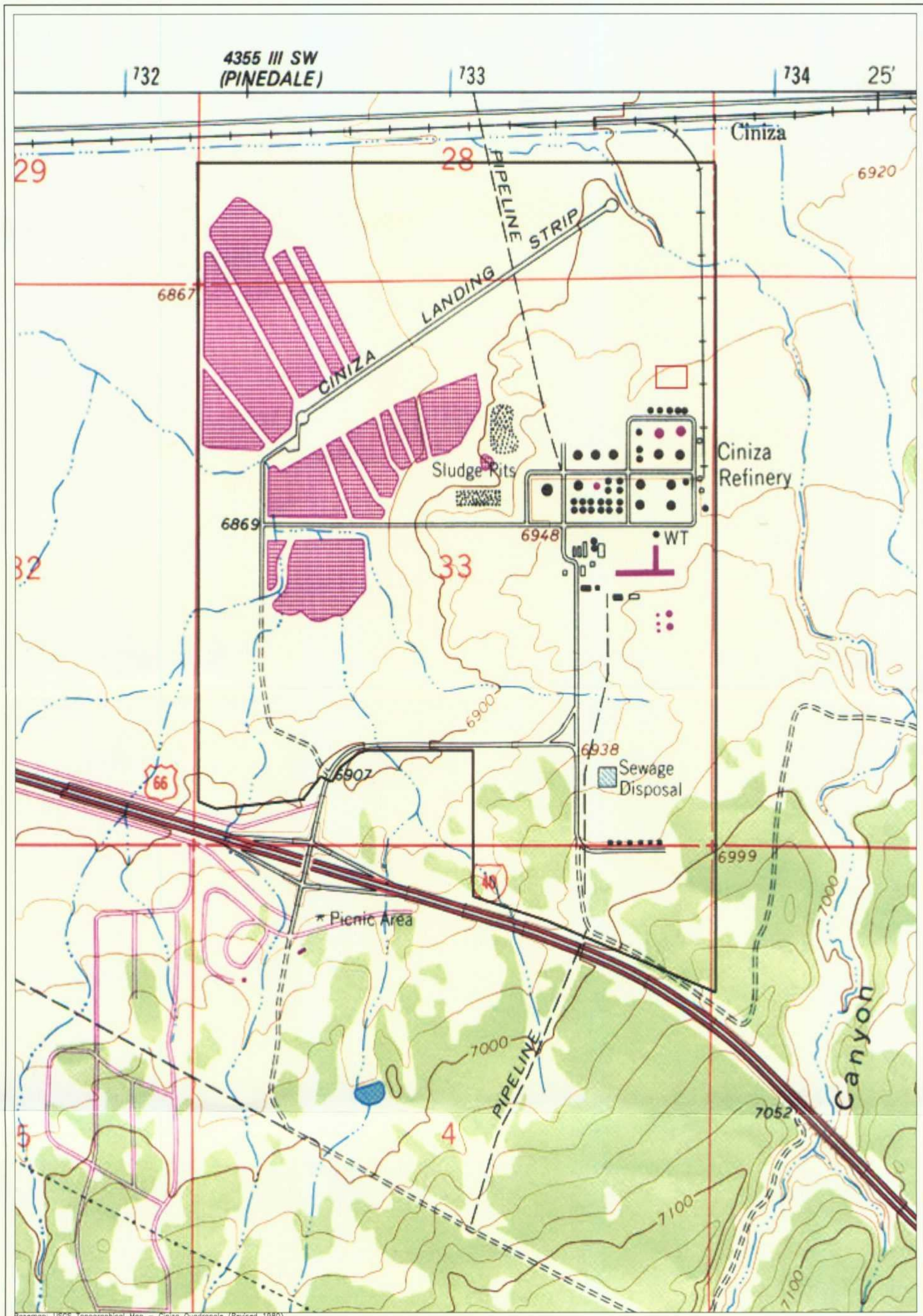


**FIGURES**



**Trihydro**

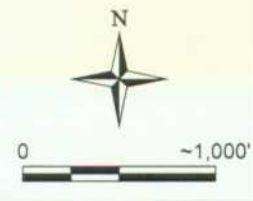




Base map: USGS Topographical Map - Ciniza Quadrangle (Revised 1980)

**EXPLANATION**

- PROPERTY BOUNDARY
- SOIL INVESTIGATION AREA



**Trihydro**  
CORPORATION  
1252 Commerce Drive  
Laramie, Wyoming 82070  
www.trihydro.com  
(P) 307/745.7474 (F) 307/745.7729

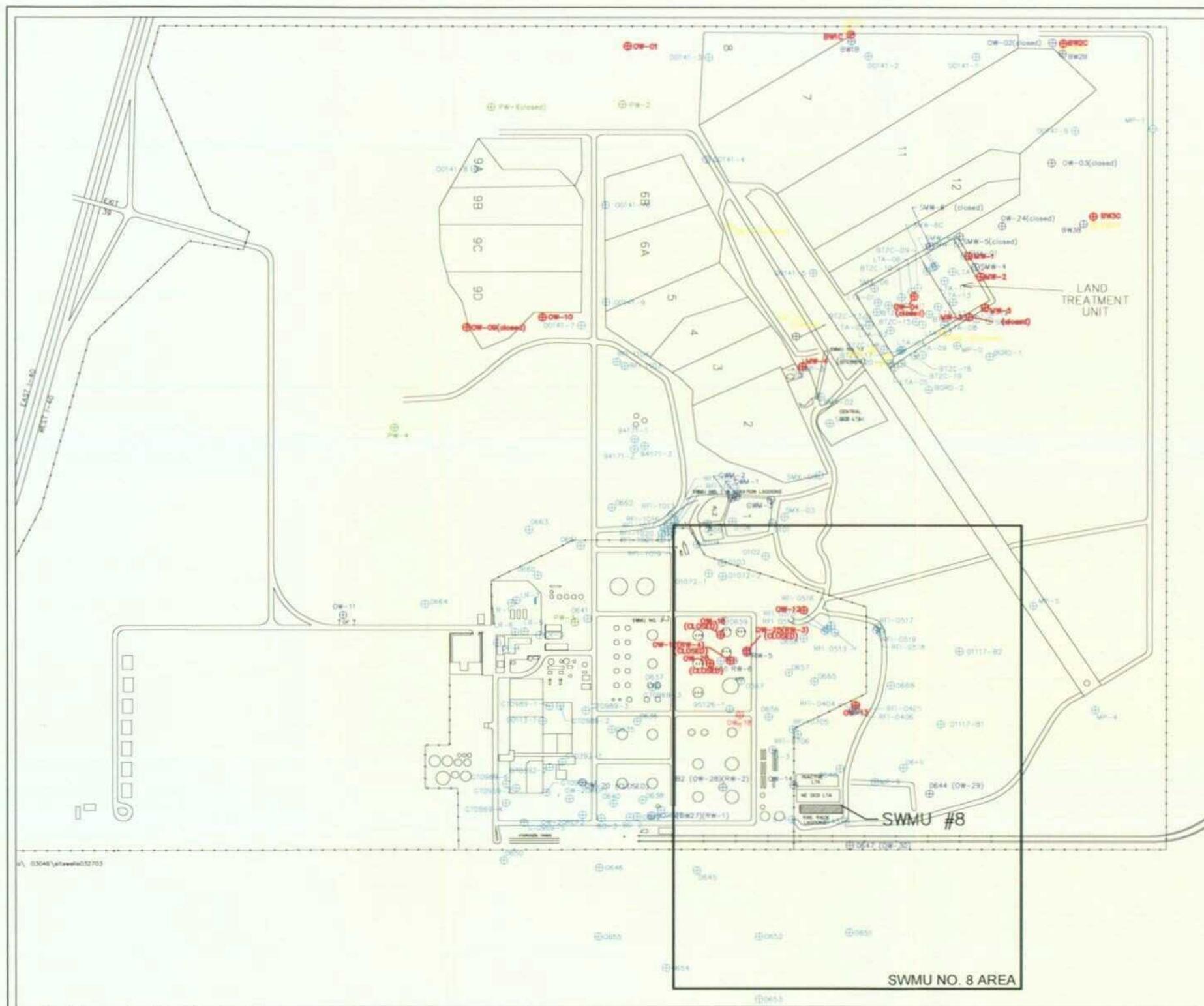
**FIGURE 1**

**TOPOGRAPHIC MAP OF CINIZA REFINERY SITE**

**GIANT REFINING COMPANY  
CINIZA REFINERY  
GALLUP, NEW MEXICO**

Drawn By: REP    Checked By: JE    Scale: 1" = ~1,000'    Date: 12/15/06    File: 072TOPO





Modified From: Precision Engineering, Inc.

**1 OVERALL PLAN VIEW**  
SCALE 1" = 800'

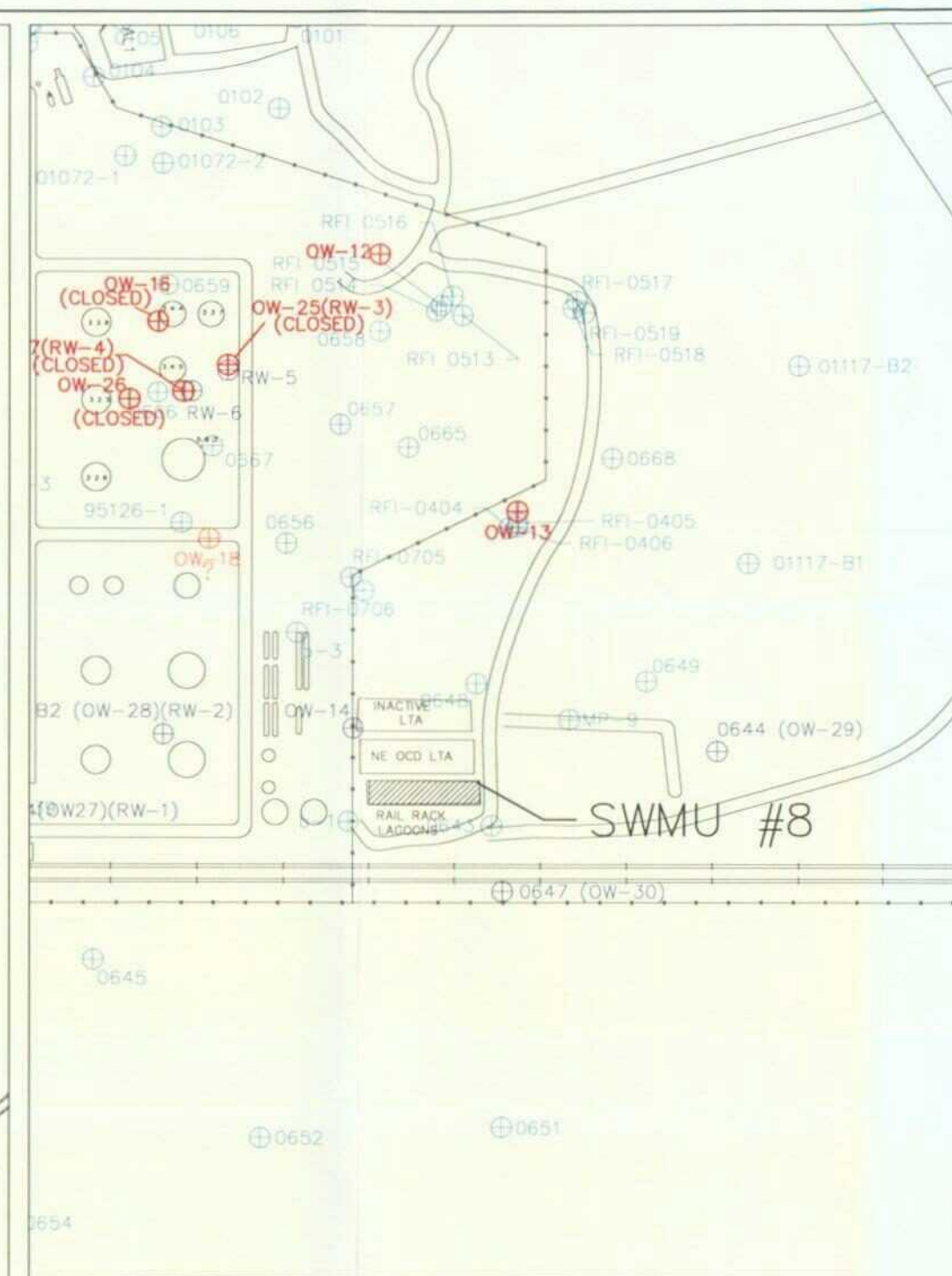
**NOTE**

BASE CADD FILE PROVIDED BY PRECISION ENGINEERING, DATED DECEMBER 18, 2006

**EXPLANATION**

COLOR CODE:  
SOLUBLE WELLS  
CHINEL/ALLUVIUM INTERFACE WELLS  
RAW WATER PRODUCTION WELL  
ALL OTHER EXPLORATORY BORINGS

NOTE: CLOSED = ABANDONED  
Well Locations Updated Through 12/18/06



Modified From: Precision Engineering, Inc.

**2 SWMU NO. 8 AREA**  
SCALE 1" = 400'

0 400'



**FIGURE 2**

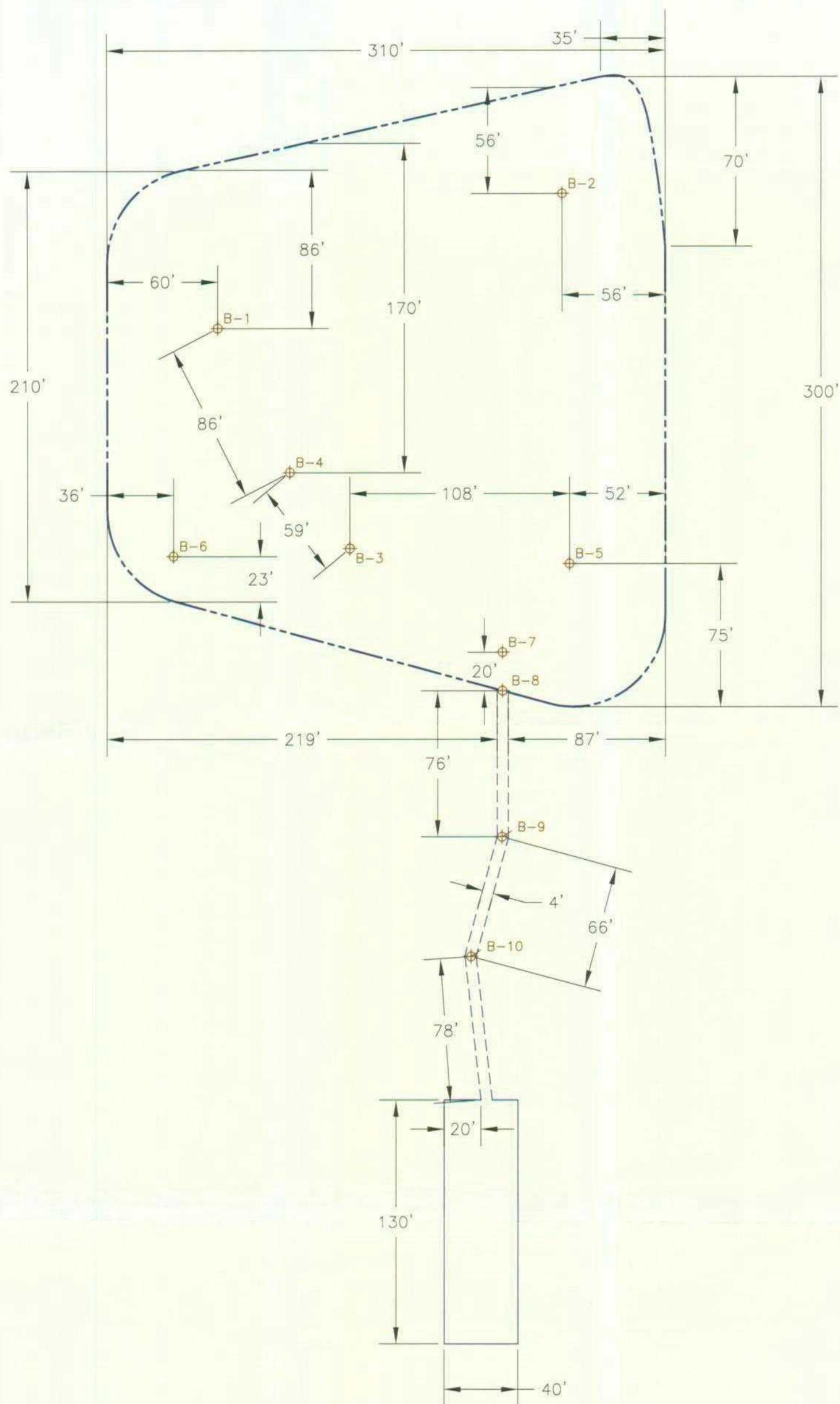
**SWMU NO. 8 AND SURROUNDING WELLS**

**GIANT REFINING, INC.**  
**CINIZA REFINERY**  
**JAMESTOWN, NEW MEXICO**

**Trihydro**  
CORPORATION  
1252 Commerce Drive  
Laramie, Wyoming 82070  
www.trihydro.com  
(P) 307/745.7474 (F) 307/745.7729

Drawn By: SV Checked By: RA Scale: AS SHOWN Date: 12/29/06 File: 072WELLOCFROMOTHR





#### EXPLANATION

- ⊕ B-10 SOIL BORING LOCATION AND DESIGNATION
- OUTFLOW DITCH
- FAN-OUT AREA
- RAIL ROAD RACK LAGOON



**Trihydro**  
CORPORATION  
1252 Commerce Drive  
Laramie, Wyoming 82070  
www.trihydro.com  
(P) 307/745,7474 (F) 307/745,7729

FIGURE 3

RAILROAD RACK LAGOON  
OVERFLOW DITCH AND FAN-OUT AREA  
SOIL SAMPLE LOCATIONS  
GIANT REFINING COMPANY  
CINIZA REFINERY  
GALLUP, NEW MEXICO

Drawn By: REP Checked By: JE Scale: 1" = 60' Date: 10/23/08 File: 072RROVERFLOW200608

|            |            |     |
|------------|------------|-----|
| B-1        | 2'         | 5'  |
| TPH-DRO    | <b>470</b> | ND  |
| Ba         | 280        | 300 |
| Cr         | 11         | 8.8 |
| Pb         | 7.9        | 5.0 |
| ALL OTHERS |            | ND  |

|            |     |     |
|------------|-----|-----|
| B-4        | 2'  | 5'  |
| Ba         | 250 | 230 |
| Cr         | 11  | 11  |
| Pb         | 8.1 | 7.6 |
| ALL OTHERS |     | ND  |

|            |     |     |
|------------|-----|-----|
| B-3        | 2'  | 5'  |
| Ba         | 260 | 290 |
| Cr         | 9.0 | 9.4 |
| Pb         | 11  | 8.3 |
| ALL OTHERS |     | ND  |

|            |     |     |
|------------|-----|-----|
| B-6        | 2'  | 5'  |
| Ba         | 230 | 260 |
| Cr         | 13  | 9.6 |
| Pb         | 6.8 | 5.8 |
| ALL OTHERS |     | ND  |

|            |     |     |
|------------|-----|-----|
| B-2        | 2'  | 5'  |
| Ba         | 260 | 290 |
| Cr         | 10  | 9.3 |
| Pb         | 7.0 | 5.9 |
| ALL OTHERS |     | ND  |

|            |     |     |
|------------|-----|-----|
| B-5        | 2'  | 5'  |
| TPH-DRO    | 130 | ND  |
| Ba         | 250 | 290 |
| Cr         | 10  | 10  |
| Pb         | 7.3 | 7.1 |
| ALL OTHERS |     | ND  |

|            |            |      |
|------------|------------|------|
| B-7        | 2'         | 5'   |
| TPH-DRO    | <b>360</b> | ND   |
| Ba         | 230        | 280  |
| Cr         | 11.0       | 10.0 |
| Pb         | 8.6        | 6.3  |
| ALL OTHERS |            | ND   |

|            |             |     |
|------------|-------------|-----|
| B-8        | 2'          | 5'  |
| TPH-DRO    | <b>2400</b> | 4.3 |
| Ba         | 270         | 260 |
| Cr         | 9.6         | 8.2 |
| Pb         | 8.5         | 8.9 |
| ALL OTHERS |             | ND  |

|            |              |     |
|------------|--------------|-----|
| B-9        | 2'           | 5'  |
| TPH-DRO    | <b>15000</b> | ND  |
| Ba         | 220          | 310 |
| Cr         | 8.5          | 9.1 |
| Pb         | 8.3          | 7.1 |
| ALL OTHERS |              | ND  |

|            |     |     |
|------------|-----|-----|
| B-10       | 2'  | 5'  |
| TPH-DRO    | 63  | ND  |
| Ba         | 280 | 230 |
| Cr         | 9.5 | 9.3 |
| Pb         | 8.4 | 6.3 |
| ALL OTHERS |     | ND  |

#### NOTE:

1. BOLD CONCENTRATIONS EXCEED CLEAN UP STANDARDS
2. CONCENTRATIONS ARE IN UNITS OF mg/kg (MILLIGRAM PER KILOGRAM)

#### CONSTITUENT TABLE EXPLANATION

|                              |            |    |       |                                             |
|------------------------------|------------|----|-------|---------------------------------------------|
| WELL DESIGNATION             | B-10       | 2' | 5'    | SAMPLE DEPTH                                |
| TPH AS DIESEL RANGE ORGANICS | TPH-DRO    |    | 200   |                                             |
| BARIUM                       | Ba         |    | 15600 |                                             |
| CHROMIUM                     | Cr         |    | 234   |                                             |
| LEAD                         | Pb         |    | 400   |                                             |
|                              | ALL OTHERS |    | ND    | CONCENTRATIONS SHOWN HERE IN MAXIMUM VALUES |

#### EXPLANATION

- ⊕ B-10 SOIL BORING LOCATION AND DESIGNATION
- OUTFLOW DITCH
- FAN-OUT AREA
- RAIL ROAD RACK LAGOON
- ND NON DETECT



**FIGURE 4**  
**RAILROAD RACK LAGOON**  
**OVERFLOW DITCH AND FAN-OUT AREA**  
**SOIL SAMPLE LOCATIONS AND RESULTS**  
**GIANT REFINING COMPANY**  
**CINIZA REFINERY**  
**GALLUP, NEW MEXICO**

Drawn By: REP Checked By: CS Scale: 1" = 75' Date: 1/4/07 File: 072SOILSAMPRESULTS

**APPENDIX A**

**INVESTIGATION PHOTOS AND PHOTO LOG**



**Trihydro**



**FIGURE 4. PHOTOGRAPH LOG**  
**Ciniza Refinery, Gallup, New Mexico**

Project Name: Outflow ditch soil sampling  
 Site and Photograph Date: Ciniza Refinery 10/17/06

| Photo Number | Date     | Photograph Description                                |
|--------------|----------|-------------------------------------------------------|
| 105-504      | 10/17/06 | B9 before 2ft sample location                         |
| 105-505      | 10/17/06 | B9 2ft sample hole w/ hand auger                      |
| 105-506      | 10/17/06 | B8 before 2ft sample location                         |
| 105-507      | 10/17/06 | B8 2ft sample hole w/ hand auger                      |
| 105-508      | 10/17/06 | B7 2ft sample location                                |
| 105-509      | 10/17/06 | B7 2ft sample hole w/ hand auger                      |
| 105-510      | 10/17/06 | B10 2ft sample location                               |
| 105-511      | 10/17/06 | B10 2ft sample hole w/ hand auger                     |
| 105-512      | 10/17/06 | B5 2ft sample location                                |
| 105-513      | 10/17/06 | B5 2ft sample hole w/ hand auger                      |
| 105-514      | 10/17/06 | B9 5ft sample location w/ hand auger                  |
| 105-515      | 10/17/06 | B8 5ft sample location w/ hand auger                  |
| 105-516      | 10/18/06 | B8 4ft hole, auger, white board, samples              |
| 105-517      | 10/18/06 | B9 4ft hole, auger, white board, samples              |
| 105-518      | 10/18/06 | B4 before 2ft sample location                         |
| 105-519      | 10/18/06 | B4 2ft sample hole w/ hand auger                      |
| 105-520      | 10/18/06 | B1 before 2ft sample location                         |
| 105-521      | 10/18/06 | B1 2ft sample hole w/ hand auger                      |
| 105-522      | 10/18/06 | B10 hole, auger, white board, samples                 |
| 105-523      | 10/18/06 | B10 hole, auger, white board, samples, data corrected |
| 105-524      | 10/18/06 | B7 hole, auger, white board, samples, 4ft hole        |
| 105-525      | 10/18/06 | B5 hole, white board, samples, 4ft hole               |
| 105-526      | 10/18/06 | B3 before 2ft sample location                         |
| 105-527      | 10/18/06 | B4 hole, white board, samples, 4ft hole               |
| 105-528      | 10/18/06 | B3 2ft sample hole w/ auger                           |
| 105-529      | 10/18/06 | B4 hole, white board, samples, 4ft hole               |
| 105-530      | 10/18/06 | B1 hole, white board, samples, 4ft hole black chunks. |
| 105-531      | 10/18/06 | B3 hole, white board, samples, 4ft hole               |
| 105-532      | 10/18/06 | B2 before 2ft sample location                         |
| 105-533      | 10/18/06 | B2 2ft sample hole w/ hand auger                      |
| 105-534      | 10/18/06 | B6 before 2ft sample location                         |
| 105-535      | 10/18/06 | B6 2ft sample hole w/ hand auger                      |
| 105-536      | 10/18/06 | B2 hole, white board, samples, 4ft hole               |
| 105-537      | 10/18/06 | B2 hole, white board, samples, 4ft hole               |
| 105-538      | 10/18/06 | B6 hole, white board, sample, 4ft hole.               |











10/18/06  
2Ft  
0855

B1

10/18/06  
5Ft  
1140







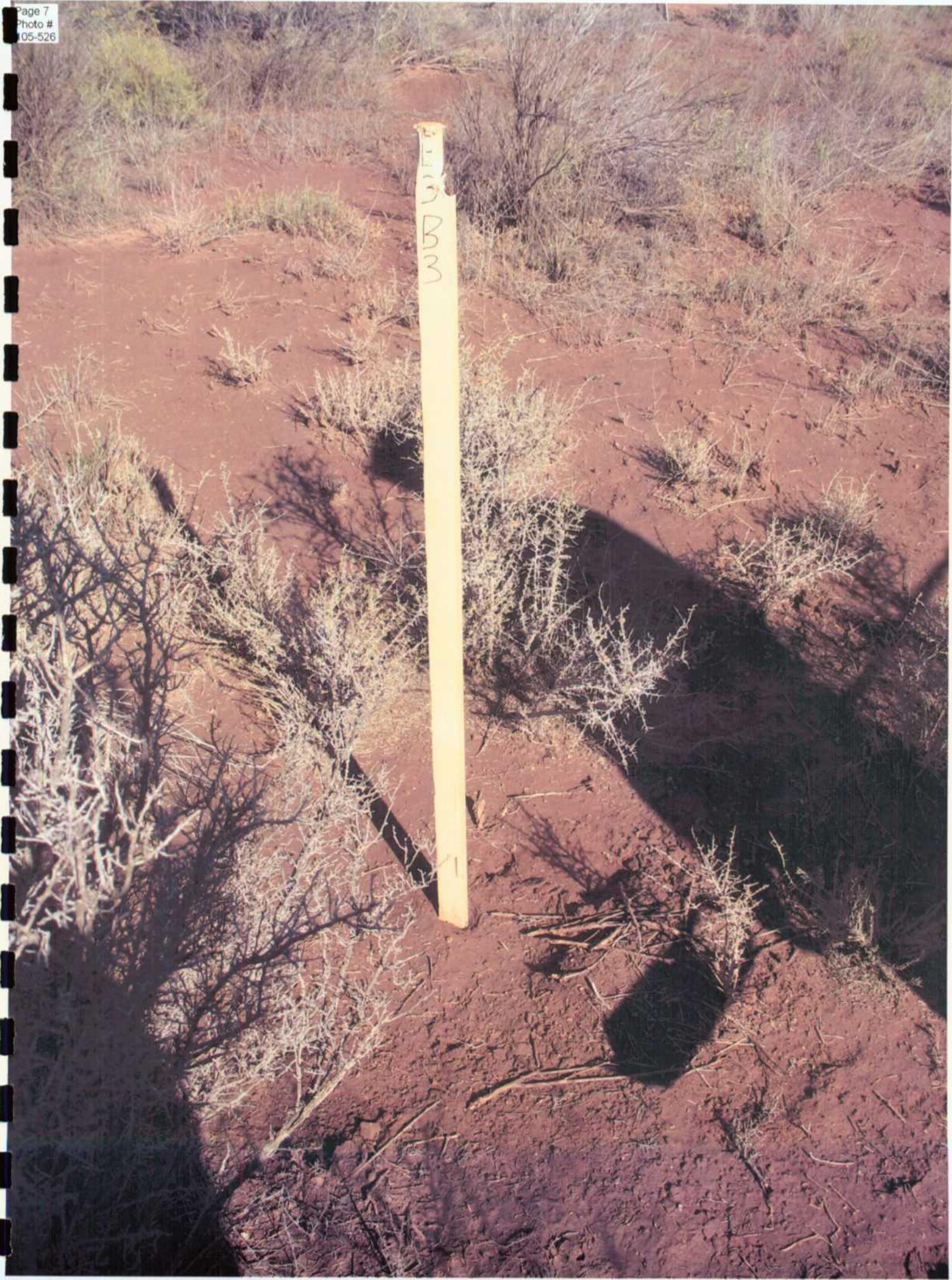








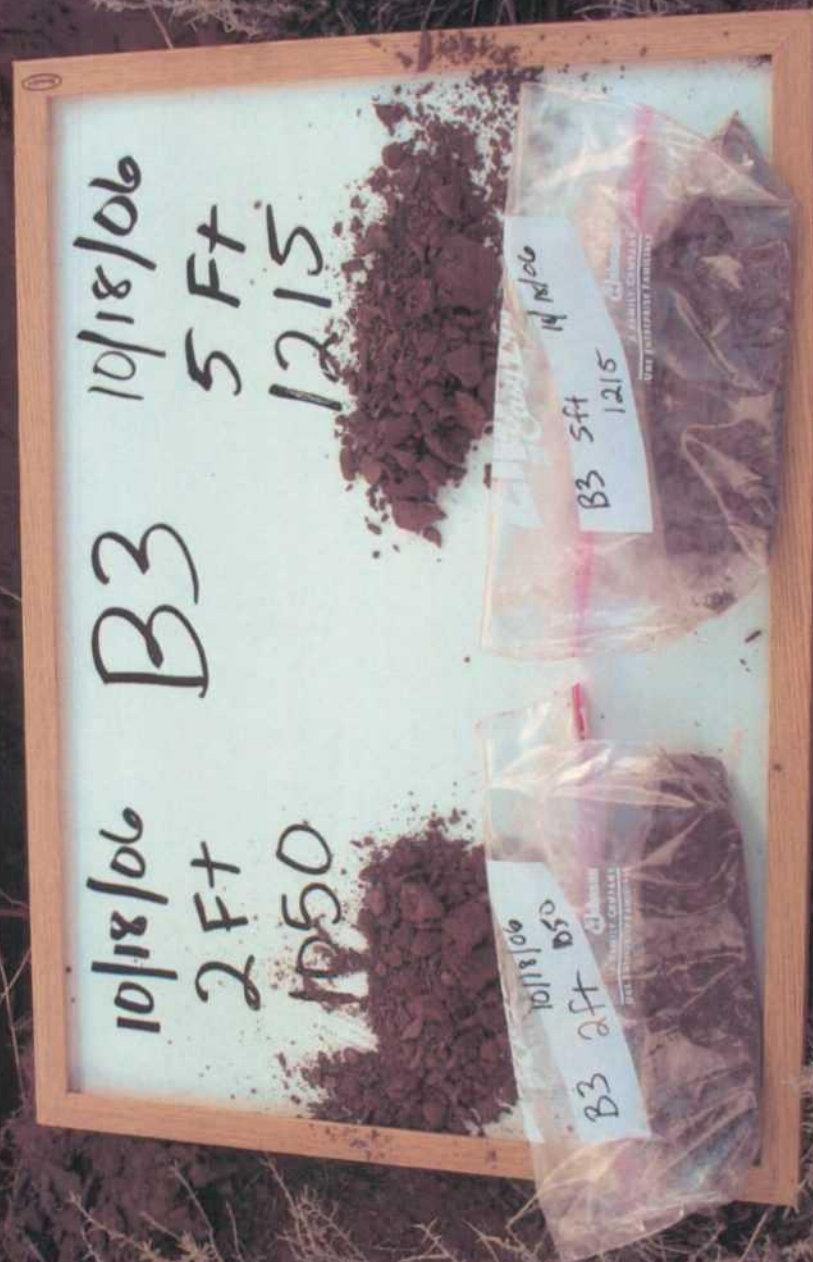












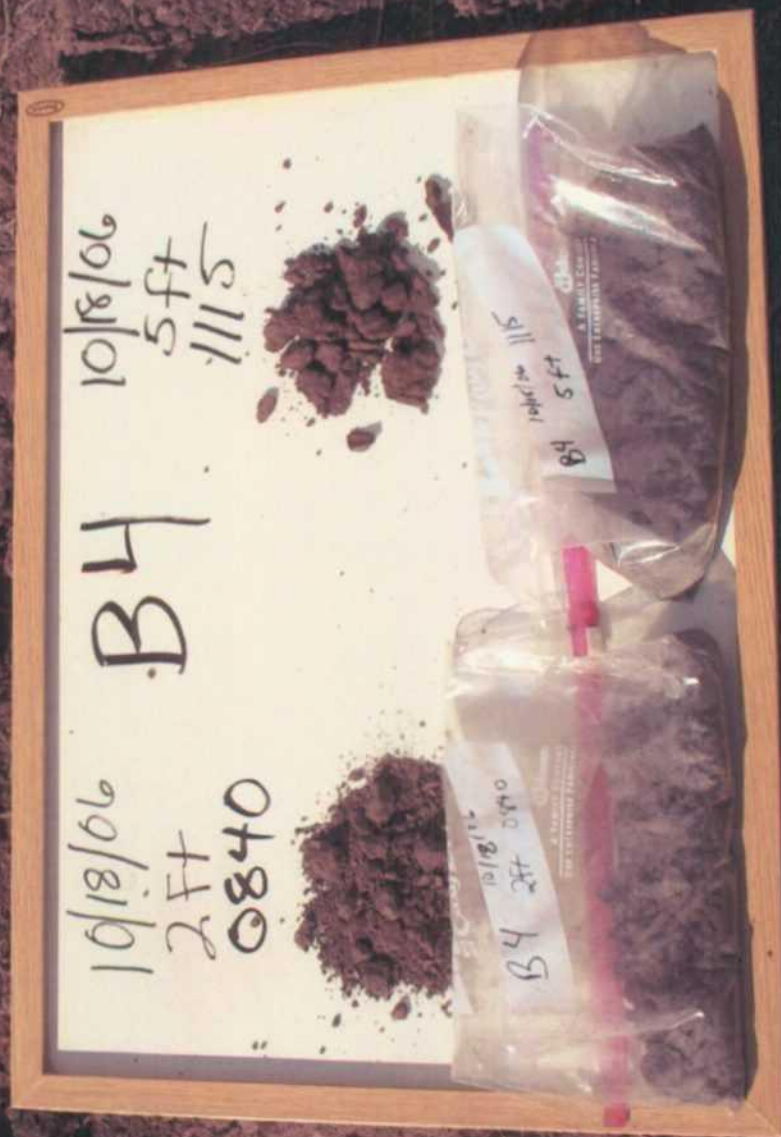












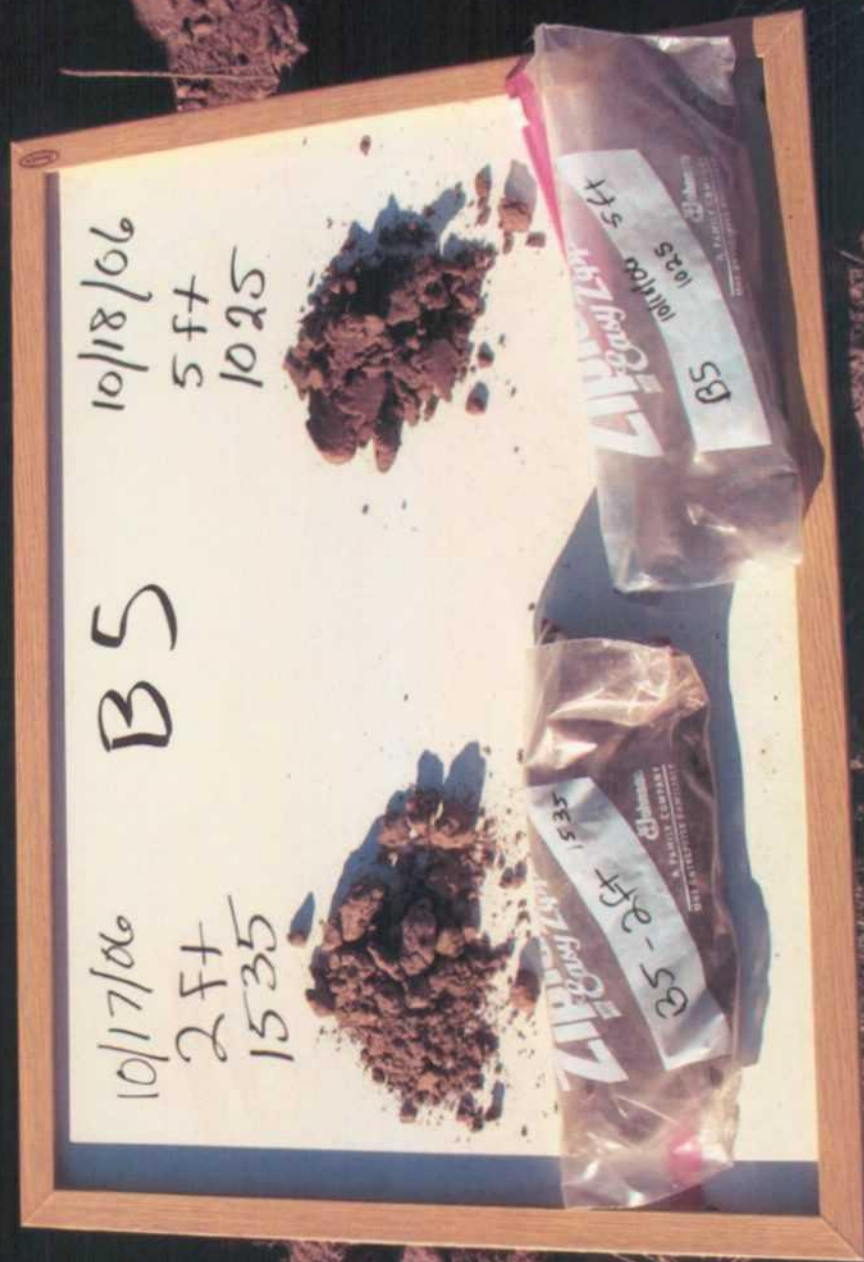




































10/18/06  
5ft  
0980

B7

10/17/06  
2ft  
1545

1545  
B7 2ft

10/18/06  
B7 5' 0" 50













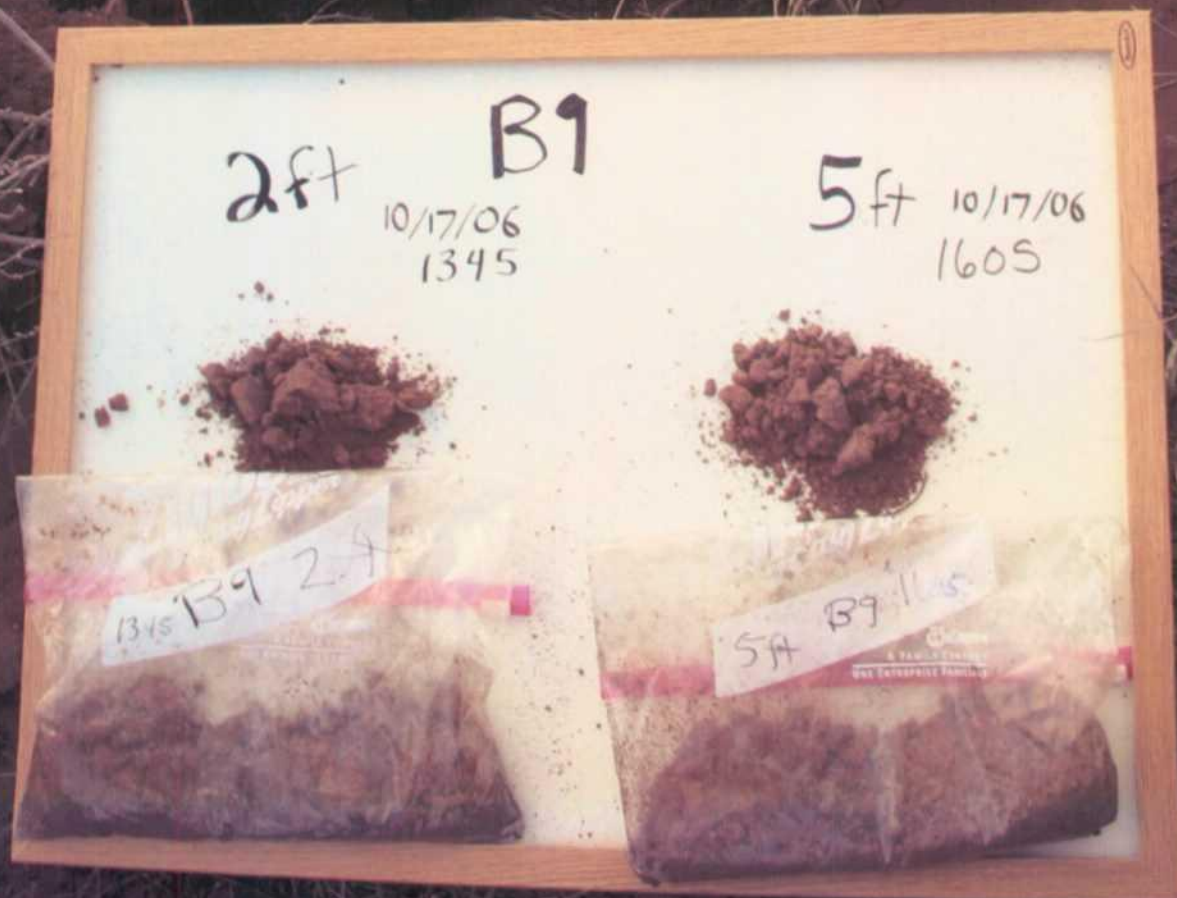












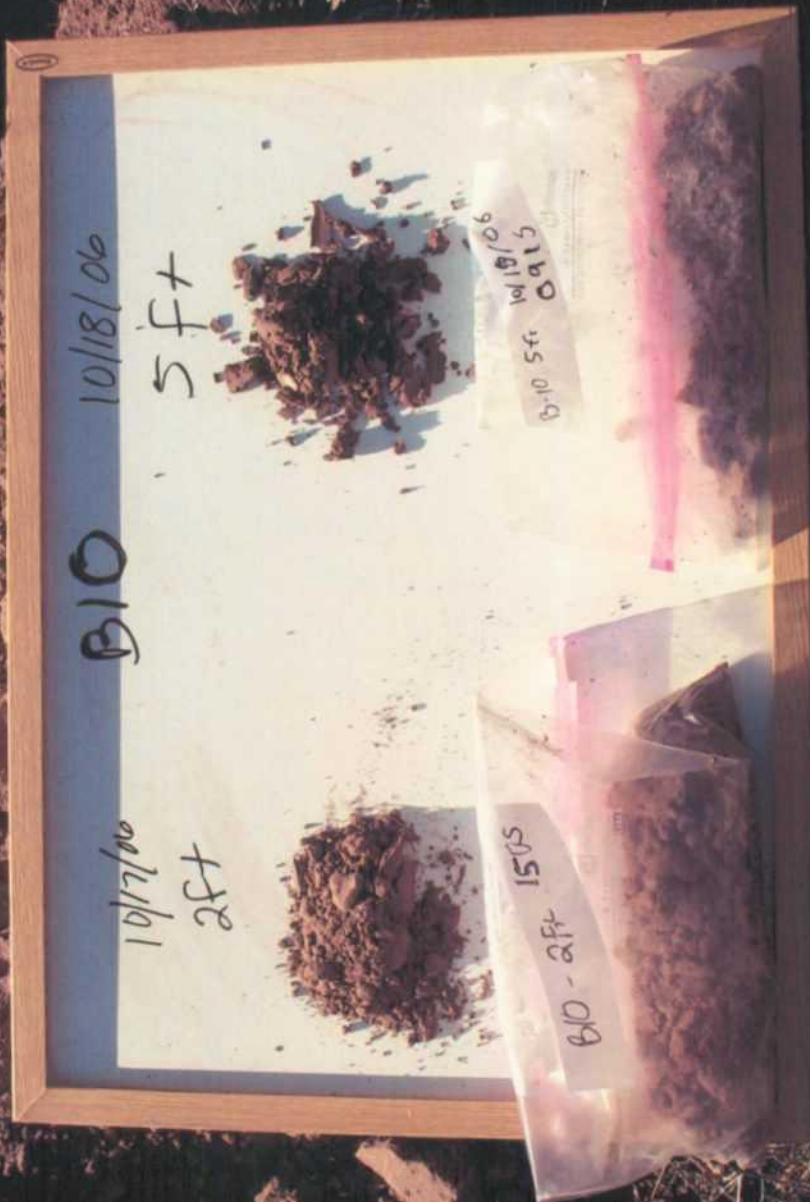


















**APPENDIX B**

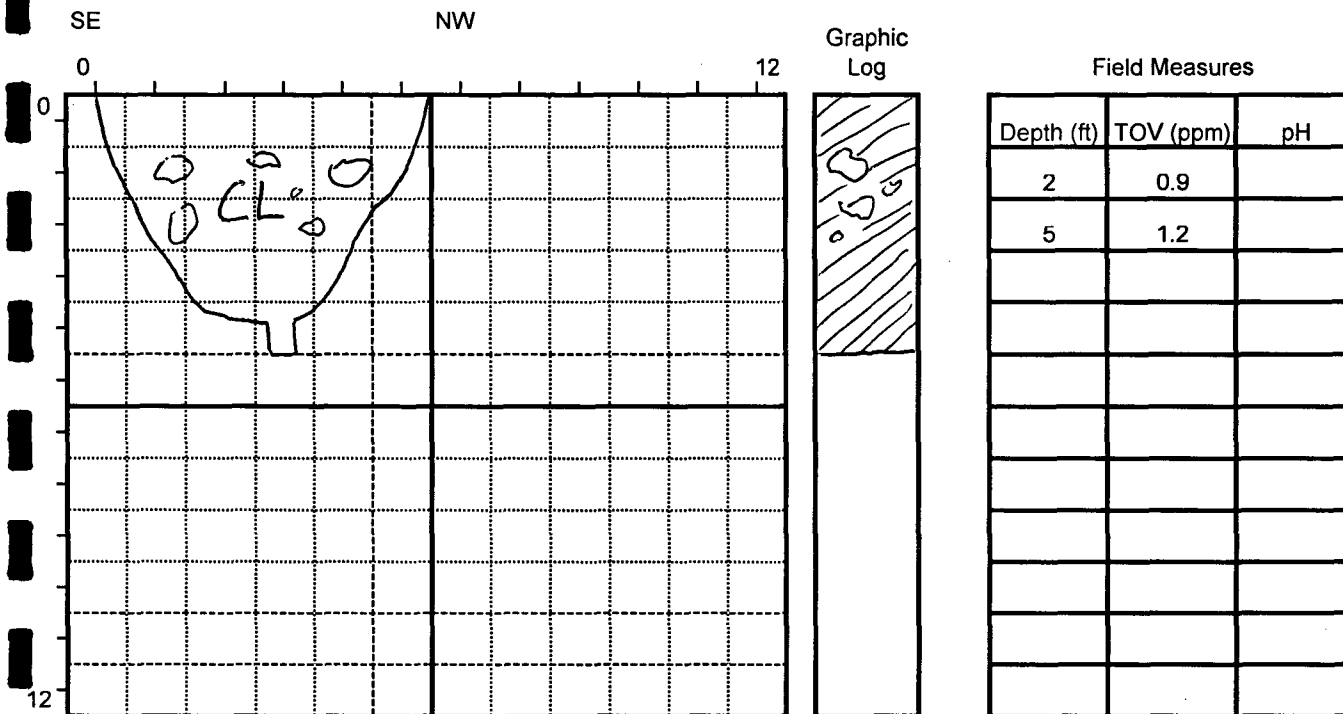
**TEST PIT LOGS**





**FIGURE 3a. TEST PIT LOG**  
**Ciniza Refinery, Gallup, New Mexico**

Project/Job#: 072-006      Logged By: Grant Price      Date: 10/18/06  
 Contractor: \_\_\_\_\_      Operator: Steve Morris      Test Pit: B-1  
 Location: B-1      Elevation: \_\_\_\_\_      Equipment: Back Hoe (Case 580K)  
 Photographs: 105-529      Coordinates(x,y,z): \_\_\_\_\_



Note: Back hoe from 0 to 4.5 ft-bgs  
 Hand Auger from 4.5 to 5 ft-bgs

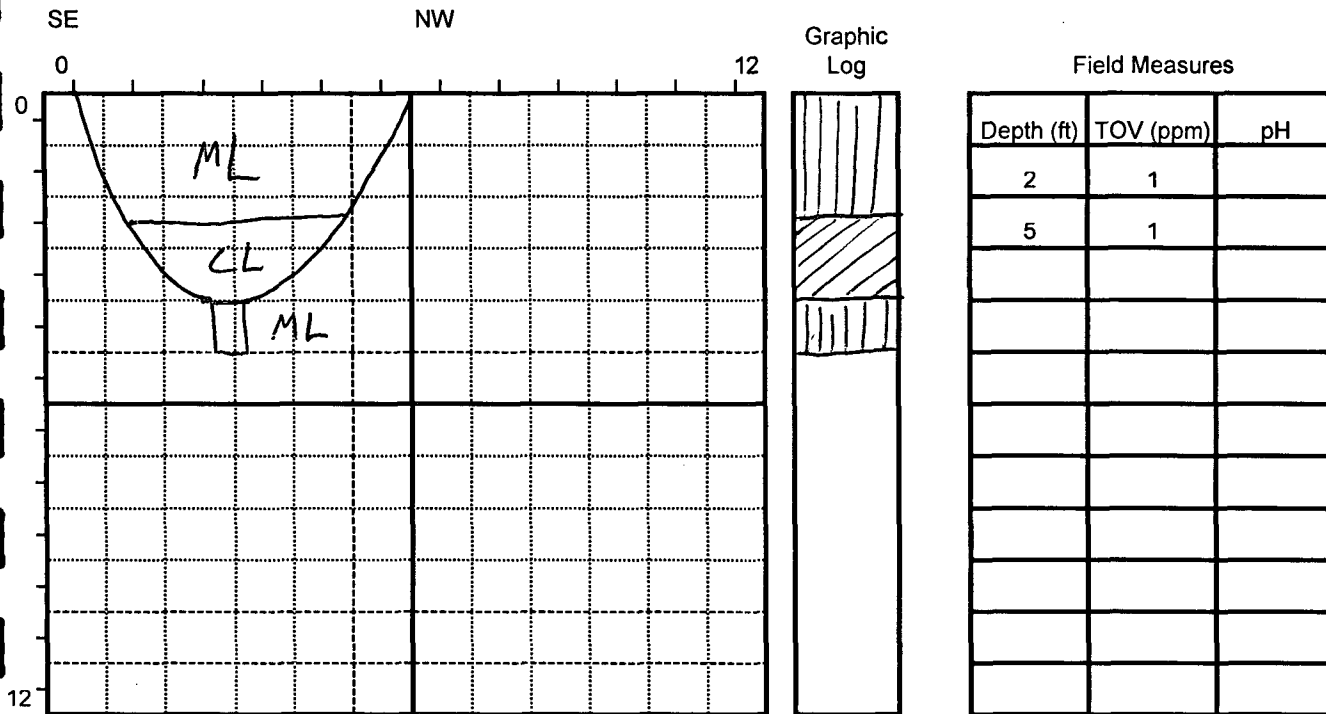
| Depth to Water/ Liquid |      |
|------------------------|------|
| Depth                  | Type |
| none                   | none |
|                        |      |

| Depth (ft-bgs) | Description                                                                                                                                                                         |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Surface        | Some low density, black, asphalt-like rocks on surface. Soft, slightly sticky, able to break w/ hand, subrounded where eroded, subangular where broken (fresh). Asphalt-like odor.  |
| 0 to 3         | Brown silty clay, damp, stiff, low plasticity, black asphalt-like rocks (described above) make up about 10% of subsurface between 1 and 3 ft-bgs. Size ranges from 0.5 to 1.5 feet. |
| 3 to 5         | Same as above with out the asphalt-like rocks, stiffness slightly decreases.                                                                                                        |



**FIGURE 3a. TEST PIT LOG**  
**Ciniza Refinery, Gallup, New Mexico**

Project/Job#: 072-006      Logged By: Grant Price      Date: 10/18/06  
 Contractor: \_\_\_\_\_      Operator: Steve Morris      Test Pit: B-2  
 Location: B-2      Elevation: \_\_\_\_\_      Equipment: Back Hoe (Deere 310G)  
 Photographs: 105-537      Coordinates(x,y,z): \_\_\_\_\_



Note: Back hoe from 0 to 4 ft-bgs  
 Hand Auger from 4 to 5 ft-bgs

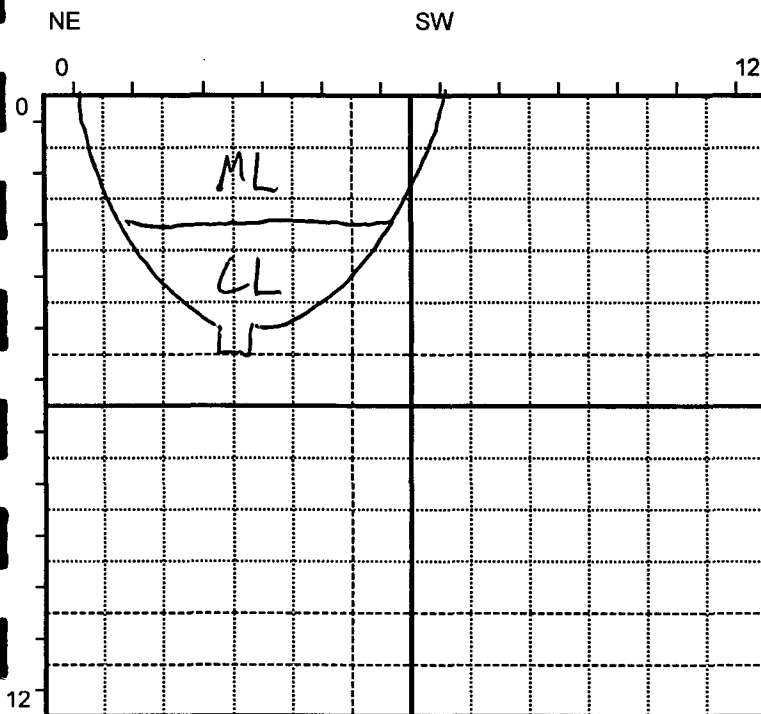
| Depth to Water/ Liquid |      |
|------------------------|------|
| Depth                  | Type |
| none                   | none |
|                        |      |

| Depth (ft-bgs) | Description                                                                      |
|----------------|----------------------------------------------------------------------------------|
| 0 to 2.5       | Brown silt, some clay, damp, low plasticity, medium stiff, no staining, no odor. |
| 2.5 to 4       | Brown clay, some silt, damp, low plasticity, stiff, no staining, no odor.        |
| 4 to 5         | Brown clayey silt, damp, non-platic, medium stiff, no staining, no odor.         |



**FIGURE 3a. TEST PIT LOG**  
**Ciniza Refinery, Gallup, New Mexico**

Project/Job#: 072-006      Logged By: Grant Price      Date: 10/18/06  
 Contractor: \_\_\_\_\_      Operator: Steve Morris      Test Pit: B-3  
 Location: B-3      Elevation: \_\_\_\_\_      Equipment: Back Hoe (Case 580K)  
 Photographs: 105-531      Coordinates(x,y,z): \_\_\_\_\_



Graphic Log



Field Measures

| Depth (ft) | TOV (ppm) | pH |
|------------|-----------|----|
| 2          | 1.5       |    |
| 5          | 1.3       |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |

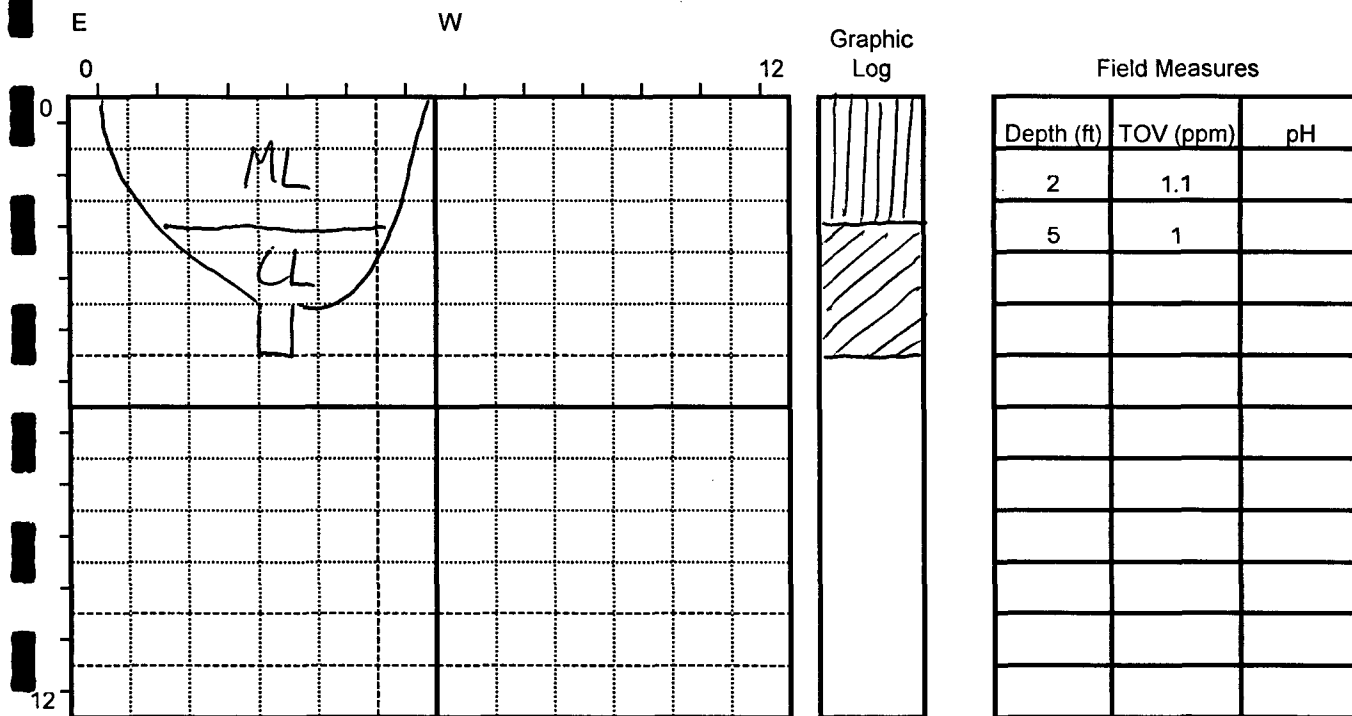
Note: Back hoe from 0 to 4.5 ft-bgs  
 Hand Auger from 4.5 to 5 ft-bgs

| Depth to Water/ Liquid |      |
|------------------------|------|
| Depth                  | Type |
| none                   | none |
|                        |      |

| Depth (ft-bgs) | Description                                                                 |
|----------------|-----------------------------------------------------------------------------|
| 0 to 2.5       | Brown silt, some clay, damp, no odor, no staining.                          |
| 2.5 to 5       | Brown silty clay, damp, medium stiff, low plasticity, no staining, no odor. |



|               |         |                     |              |            |                      |
|---------------|---------|---------------------|--------------|------------|----------------------|
| Project/Job#: | 072-006 | Logged By:          | Grant Price  | Date:      | 10/18/06             |
| Contractor:   |         | Operator:           | Steve Morris | Test Pit:  | B-4                  |
| Location:     | B-4     | Elevation:          |              | Equipment: | Back Hoe (Case 580K) |
| Photographs:  | 105-528 | Coordinates(x,y,z): |              |            |                      |



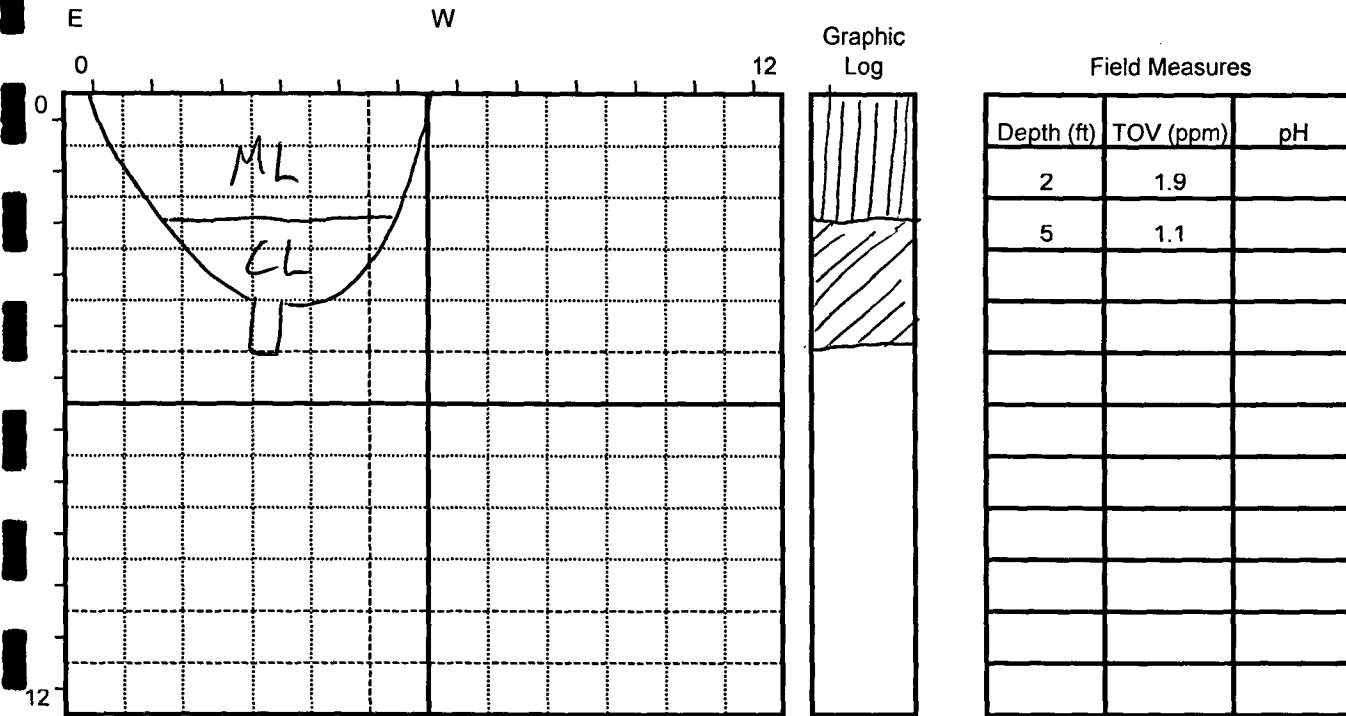
| Depth to Water/ Liquid |      |
|------------------------|------|
| Depth                  | Type |
| none                   | none |

| Depth (ft-bgs) | Description                                                                                                         |
|----------------|---------------------------------------------------------------------------------------------------------------------|
| 0 to 2.5       | Brown silt, some clay, damp, mostly loose, some stiff chunks up to 3/4", very low plasticity, no staining, no odor. |
| 2.5 to 5       | Brown clay, some silt, damp, very stiff, low plasticity, no staining, no odor.                                      |



**FIGURE 3a. TEST PIT LOG**  
**Ciniza Refinery, Gallup, New Mexico**

|               |         |                     |              |            |                      |
|---------------|---------|---------------------|--------------|------------|----------------------|
| Project/Job#: | 072-006 | Logged By:          | Grant Price  | Date:      | 10/18/06             |
| Contractor:   |         | Operator:           | Steve Morris | Test Pit:  | B-5                  |
| Location:     | B-5     | Elevation:          |              | Equipment: | Back Hoe (Case 580K) |
| Photographs:  | 105-525 | Coordinates(x,y,z): |              |            |                      |



**Note:** Back hoe from 0 to 4 ft-bgs  
Hand Auger from 4 to 5 ft-bgs

| Depth to Water/ Liquid |      |
|------------------------|------|
| Depth                  | Type |
| none                   | none |
|                        |      |

| Depth (ft-bgs) | Description                                                                             |
|----------------|-----------------------------------------------------------------------------------------|
| 0 to 2.5       | Brown silt, some clay, dry to damp, low plasticity, mostly loose, no staining, no odor. |
| 2.5 to 5       | Brown clay, some silt, damp, stiff, very low plasticity, no odor, no staining.          |



1

1



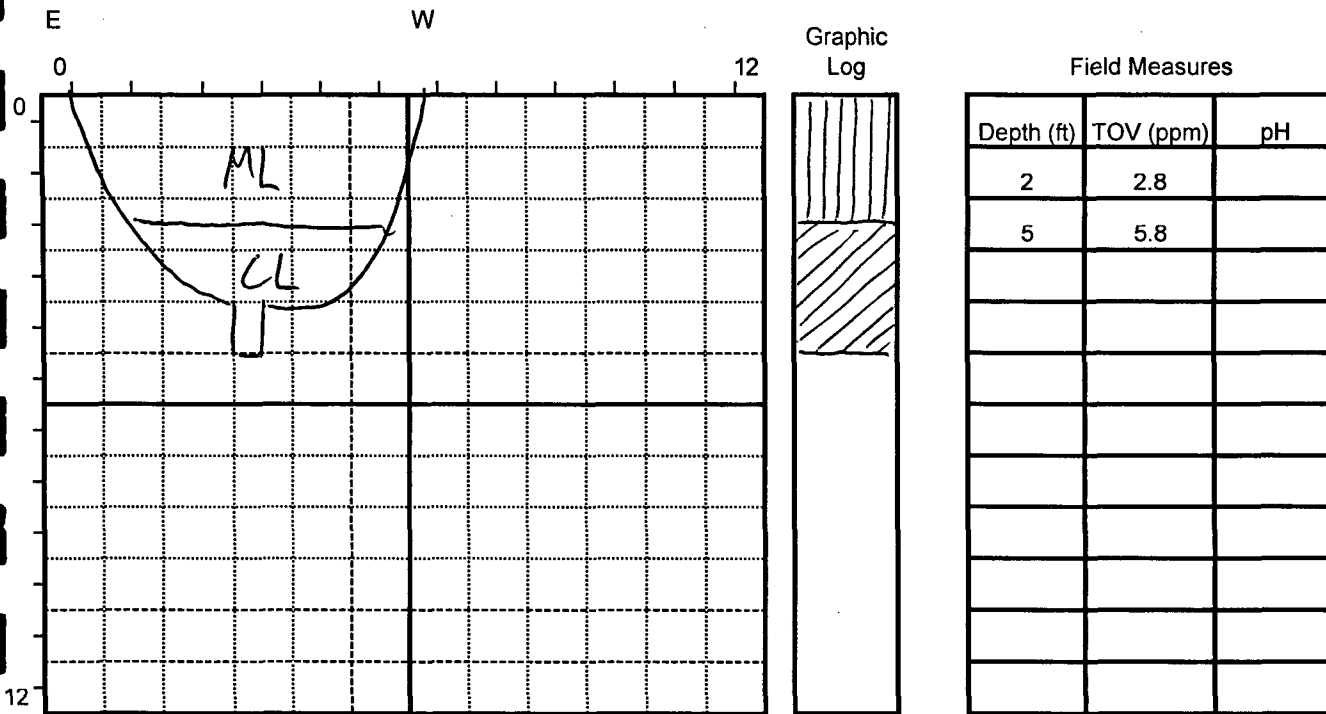
1

1

1

**FIGURE 3a. TEST PIT LOG**  
**Ciniza Refinery, Gallup, New Mexico**

|               |         |                     |              |            |                      |
|---------------|---------|---------------------|--------------|------------|----------------------|
| Project/Job#: | 072-006 | Logged By:          | Grant Price  | Date:      | 10/18/06             |
| Contractor:   |         | Operator:           | Steve Morris | Test Pit:  | B-7                  |
| Location:     | B-7     | Elevation:          |              | Equipment: | Back Hoe (Case 580K) |
| Photographs:  | 105-524 | Coordinates(x,y,z): |              |            |                      |



**Note:** Back hoe from 0 to 4 ft-bgs  
Hand Auger from 4 to 5 ft-bgs

| Depth to Water/ Liquid |      |
|------------------------|------|
| Depth                  | Type |
| none                   | none |

| Depth (ft-bgs) | Description                                                                                  |
|----------------|----------------------------------------------------------------------------------------------|
| 0 to 2.5       | Brown silt, some clay, dry to damp, mostly loose, very low plasticity, no staining, no odor. |
| 2.5 to 5       | Brown silty clay, damp, medium stiff, low plasticity, no staining, no odor.                  |



100

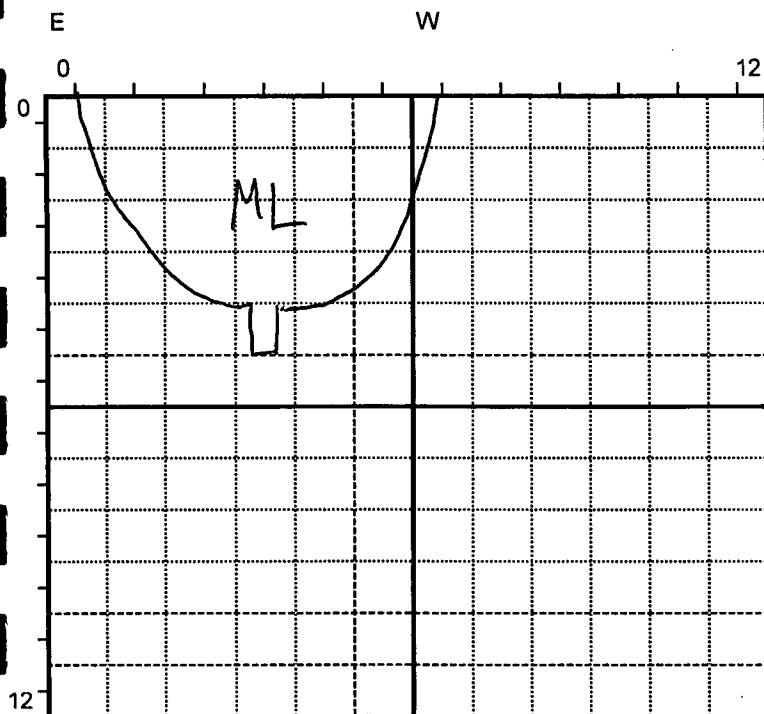


1

1

**FIGURE 3a. TEST PIT LOG**  
**Ciniza Refinery, Gallup, New Mexico**

Project/Job#: 072-006      Logged By: Grant Price      Date: 10/17/06  
 Contractor: \_\_\_\_\_      Operator: Steve Morris      Test Pit: B-9  
 Location: B-9      Elevation: \_\_\_\_\_      Equipment: Back Hoe (Case 580K)  
 Photographs: 105-514      Coordinates(x,y,z): \_\_\_\_\_



Graphic Log



Field Measures

| Depth (ft) | TOV (ppm) | pH |
|------------|-----------|----|
| 2          | 10.2      |    |
| 5          | 3         |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |
|            |           |    |

Note: Back hoe from 0 to 4 ft-bgs  
 Hand Auger from 4 to 5 ft-bgs

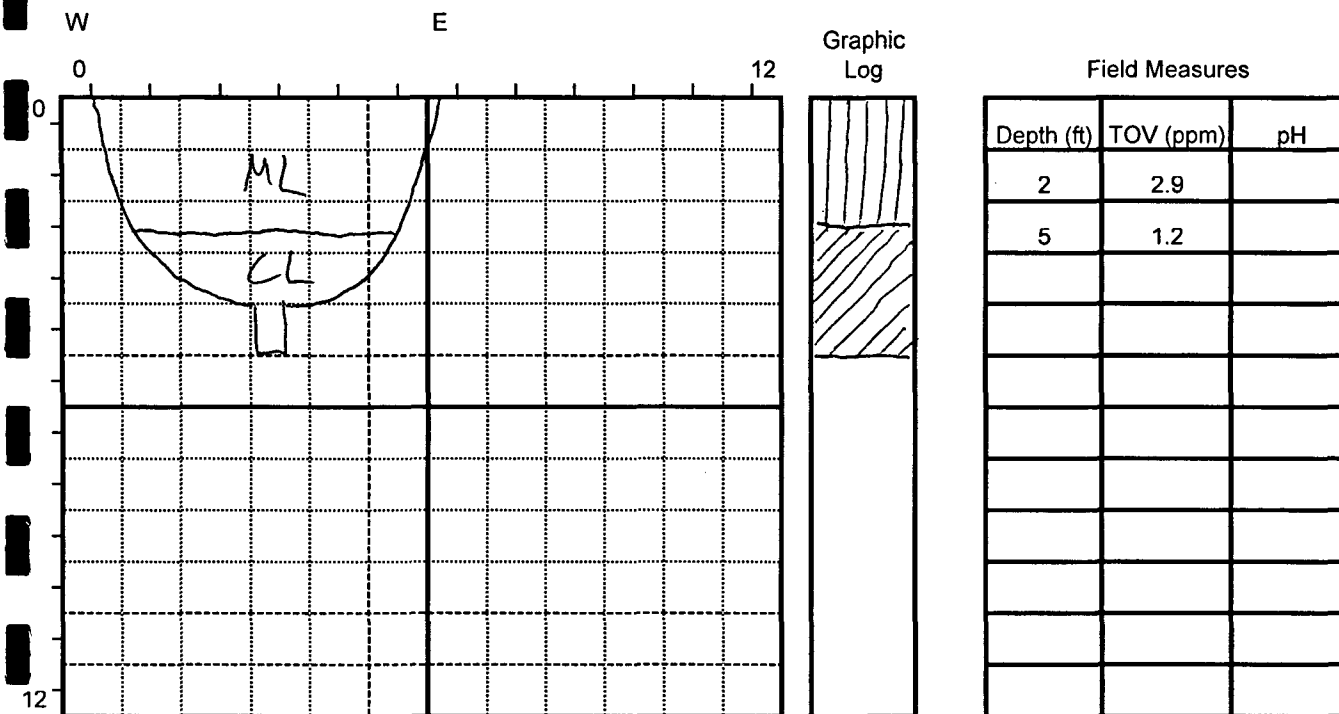
| Depth to Water/ Liquid |      |
|------------------------|------|
| Depth                  | Type |
| none                   | none |
|                        |      |

| Depth (ft-bgs) | Description                                                         |
|----------------|---------------------------------------------------------------------|
| 0 to 2         | Brown silt, some clay, damp, low plasticity, no staining, no odor.  |
| 2 to 5         | Brown clayey silt, damp, very low plasticity, no staining, no odor. |



**FIGURE 3a. TEST PIT LOG**  
**Ciniza Refinery, Gallup, New Mexico**

Project/Job#: 072-006      Logged By: Grant Price      Date: 10/18/06  
 Contractor: \_\_\_\_\_      Operator: Steve Morris      Test Pit: B-10  
 Location: B-10      Elevation: \_\_\_\_\_      Equipment: Back Hoe (Case 580K)  
 Photographs: 105-523      Coordinates(x,y,z): \_\_\_\_\_



Note: Back hoe from 0 to 4 ft-bgs  
 Hand Auger from 4 to 5 ft-bgs

| Depth to Water/ Liquid |      |
|------------------------|------|
| Depth                  | Type |
| none                   | none |
|                        |      |

| Depth (ft-bgs) | Description                                                                               |
|----------------|-------------------------------------------------------------------------------------------|
| 0 to 2.5       | Brown silt, some clay, damp, low plasticity, mostly loose, no staining, no odor.          |
| 2.5-5          | Brown clay, some silt, damp to moist, medium stiff, low plasticity, no staining, no odor. |

**APPENDIX C**

**SAMPLE LOGS**



**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B1 - 2 ft Logged by: Grant Price  
 Sample Location: B-1 Project/Job#: 072-006-001  
 Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
 Time: 08:55 Associated Test Pit: B-1  
 Weather: Sunny about 50 degrees F. If Duplicate List Original Source: \_\_\_\_\_  
 Site Description: NW fan-out area  
 Photographs: 105-520, 105-521, 105-529 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
 Sample Type: Soil  
 USCS Group: CL  
 Color: Brown  
 Texture: Silty clay  
 Moisture Content: Damp  
 Density Characterisitcs (Stiffness / Plasticity, Cementation and Hardness):  
Stiff, low plasticity  
 Grain Size and Shape: NA  
 Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
 Number of Sample Bottles: 3  
 Notes:

Brown silty clay, damp, mostly in chunks (0.1" to 1.0"), stiff, low plasticity, very small amount of unconsolidated fines, no staining, no odor. Background TOV = 0.0 ppm

**Discreet Soil Interval Description**

Graphic Log



0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 2              | 0.9                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |

**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B1 - 5 ft Logged by: Grant Price  
Sample Location: B-1 Project/Job#: 072-006-001  
Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
Time: 11:40 Associated Test Pit: B-1  
Weather: Partly cloudy, about 60 If Duplicate List Original Source: \_\_\_\_\_  
Site Description: NW fan-out area  
Photographs: 105-529 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
Sample Type: Soil  
USCS Group: CL  
Color: Brown  
Texture: Silty clay  
Moisture Content: Damp  
Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Medium Stiff, low plasticity  
Grain Size and Shape: NA  
Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
Number of Sample Bottles: 3  
Notes:

Brown silty clay, damp, 25% unconsolidated, 75% chunks (0.1" to 0.75"), medium stiff, low plasticity, no staining, no odor. Background TOV = 0.3 ppm.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 5              | 1.2                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |



**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B2 - 2 ft Logged by: Grant Price  
 Sample Location: B-2 Project/Job#: 072-006-001  
 Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
 Time: 14:00 Associated Test Pit: B-2  
 Weather: Sunny, about 65 If Duplicate List Original Source: MS/MSD taken here  
 Site Description: NE fan-out area  
 Photographs: 105-532, 105-533, 105-537 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
 Sample Type: Soil  
 USCS Group: ML  
 Color: Brown  
 Texture: silt, some clay  
 Moisture Content: Damp  
 Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Medium stiff, very low plasticity  
 Grain Size and Shape: NA  
 Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
 Number of Sample Bottles: 9  
 Notes: Brown silt, some clay, damp, 75% loose, unconsolidated, 25% chunks, very low plasticity, medium stiff, no staining, no odor. Background TOV = 0.0 ppm. MS/MSD taken at this location.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 2              | 1.0                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |

**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

|                        |                 |                                    |                          |
|------------------------|-----------------|------------------------------------|--------------------------|
| Sample Identification: | B2 - 5 ft       | Logged by:                         | Grant Price              |
| Sample Location:       | B-2             | Project/Job#:                      | 072-006-001              |
| Date:                  | 10/18/2006      | Samplers:                          | Grant Price/Regina Allen |
| Time:                  | 15:10           | Associated Test Pit:               | B-2                      |
| Weather:               | Partly cloudy   | If Duplicate List Original Source: |                          |
| Site Description:      | NE fan-out area |                                    |                          |
| Photographs:           | 105-557         | Coordinates(x,y,z):                |                          |

## Composite Sample Description

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger

☐ Other (Describe):

Sample Type: Soil

USCS Group: ML

Color: Brown

Texture: Clayey silt

Moisture Content: Damp

**Density Characterisitcs (Stiffness / Plasticity, Cementation and Hardness):**

Medium stiff, non-plastic

### Grain Size and Shape:

**Analysis Required:** DRO, VOCs, Metals, Mercury, Cyanide

Number of Sample Bottles:

**Notes:**

Brown clayey silt, damp, 90% loose, 10% chunks, trace of very fine grained sand, non-plastic, medium stiff, no staining, no odor. Background TOV = 0.0.

### Discreet Soil Interval Description

## Graphic Log

**O'**

6'

12'

[illegible]



**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B3 - 2 ft Logged by: Grant Price  
Sample Location: B-3 Project/Job#: 072-006-001  
Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
Time: 10:50 Associated Test Pit: B-3  
Weather: Sunny, about 55 If Duplicate List Original Source: BD101806 collected  
Site Description: SW/S Central fan-out area here  
Photographs: 105-526, 105-527, 105-531 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
Sample Type: Soil  
USCS Group: ML  
Color: Brown  
Texture: silt, some clay  
Moisture Content: Damp  
Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Mostly loose  
Grain Size and Shape: NA  
Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
Number of Sample Bottles: 6  
Notes: Brown silt, some clay, 50% unconsolidated, 50% chunks (0.1" to 0.5"), damp, no staining, no odor. Background TOV = 0.1. BD101806 collected at this location one auger below B3 - 2 ft.

**Discreet Soil Interval Description**

Graphic Log

| <div style="display: flex; align-items: center;"> <div style="width: 10px; height: 100%; border: 1px solid black; margin-right: 5px;"></div> <div style="display: flex; flex-direction: column; justify-content: space-between; width: 20px;"> <span>0'</span> <span>6'</span> <span>12'</span> </div> </div> | Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------|------------------------|
|                                                                                                                                                                                                                                                                                                               | 2              | 1.5                   | See notes/testpit logs |
|                                                                                                                                                                                                                                                                                                               |                |                       |                        |
|                                                                                                                                                                                                                                                                                                               |                |                       |                        |
|                                                                                                                                                                                                                                                                                                               |                |                       |                        |
|                                                                                                                                                                                                                                                                                                               |                |                       |                        |
|                                                                                                                                                                                                                                                                                                               |                |                       |                        |
|                                                                                                                                                                                                                                                                                                               |                |                       |                        |
|                                                                                                                                                                                                                                                                                                               |                |                       |                        |
|                                                                                                                                                                                                                                                                                                               |                |                       |                        |

# FIGURE 3b. SOIL / WASTE SAMPLE LOG

Ciniza Refinery, Gallup New Mexico

Sample Identification: B3 - 5 ft Logged by: Grant Price  
 Sample Location: B-2 Project/Job#: 072-006-001  
 Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
 Time: 12:15 Associated Test Pit: B-3  
 Weather: Partly cloudy, about 60 If Duplicate List Original Source: \_\_\_\_\_  
 Site Description: SW, S Central fan-out area  
 Photographs: 105-531 Coordinates(x,y,z): \_\_\_\_\_

## Composite Sample Description

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
 Sample Type: Soil  
 USCS Group: CL  
 Color: Brown  
 Texture: Silty clay  
 Moisture Content: Damp  
 Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Medium stiff, low plasticity  
 Grain Size and Shape: NA  
 Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
 Number of Sample Bottles: 3  
 Notes:

Brown silty clay, 20% unconsolidated, 80% consolidated chunks (0.2" to 1.0"), damp, medium stiff, low plasticity. Background TOV = 0.0 ppm.

## Discreet Soil Interval Description

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 5              | 1.3                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |



**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B4 - 2 ft Logged by: Grant Price  
Sample Location: B-4 Project/Job#: 072-006-001  
Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
Time: 08:40 Associated Test Pit: B-4  
Weather: Sunny, about 50 If Duplicate List Original Source: \_\_\_\_\_  
Site Description: Central/West Central fan-out area  
Photographs: 105-518, 105-519, 105-528 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
Sample Type: Soil  
USCS Group: ML  
Color: Brown  
Texture: silt, some clay  
Moisture Content: Damp  
Density Characterisitcs (Stiffness / Plasticity, Cementation and Hardness):  
Stiff, low plasticity  
Grain Size and Shape: NA  
Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
Number of Sample Bottles: 6  
Notes:

Brown silt, some clay, damp, mostly loose, some stiff chunks up to 3/4", very low plasticity. Background TOV = 0.0 ppm.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 2              | 1.1                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |

**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

|                        |                                   |                      |                          |
|------------------------|-----------------------------------|----------------------|--------------------------|
| Sample Identification: | B4 - 5 ft                         | Logged by:           | Grant Price              |
| Sample Location:       | B-4                               | Project/Job#:        | 072-006-001              |
| Date:                  | 10/18/2006                        | Samplers:            | Grant Price/Regina Allen |
| Time:                  | 11:15                             | Associated Test Pit: | B-3                      |
| Weather:               | Sunny, about 60                   | If Duplicate List    | Original Source:         |
| Site Description:      | Central/West Central fan-out area |                      |                          |
| Photographs:           | 105-528                           | Coordinates(x,y,z):  |                          |

### Composite Sample Description

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger

**[ \_ ] Other (Describe):**

Sample Type: Soil

USCS Group: CL

Color: Brown

Texture: clay, some silt

Moisture Content: Damp

**Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):**

Very stiff, low plasticity

|                       |    |
|-----------------------|----|
| Grain Size and Shape: | NA |
|-----------------------|----|

**Analysis Required:** DRO, VOCs, Metals, Mercury, Cyanide

Number of Sample Bottles: 3

**Notes:**

Brown clay, some silt, about 10% unconsolidated, 90% chunks (0.3" to 1"), damp, very stiff, low plasticity. Background TOV = 0.1 ppm.

### Discreet Soil Interval Description

## Graphic Log

0'

6'

12'

[illegible]



**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B5 - 2 ft Logged by: Grant Price  
Sample Location: B-5 Project/Job#: 072-006-001  
Date: 10/17/2006 Samplers: Grant Price/Regina Allen  
Time: 15:35 Associated Test Pit: B-5  
Weather: Cloudy, some hail, about 50 If Duplicate List Original Source: \_\_\_\_\_  
Site Description: SE fan-out area  
Photographs: 105-512, 105-513, 105-525 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
Sample Type: Soil  
USCS Group: ML  
Color: Brown  
Texture: silt, some clay  
Moisture Content: Dry to damp  
Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Mostly loose, low plasticity  
Grain Size and Shape: NA  
Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
Number of Sample Bottles: 3  
Notes:

Brown silt, some clay, dry to damp, low plasticity, mostly loose, some cohesive chunks up to .5". Background TOV = 0.7 ppm.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 2              | 1.9                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |

**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B5 - 5 ft Logged by: Grant Price  
Sample Location: B-5 Project/Job#: 072-006-001  
Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
Time: 10:25 Associated Test Pit: B-5  
Weather: Sunny, about 60 If Duplicate List Original Source: \_\_\_\_\_  
Site Description: SE fan-out area  
Photographs: 105-525 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
Sample Type: Soil  
USCS Group: CL  
Color: Brown  
Texture: clay, some silt  
Moisture Content: Damp  
Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Stiff, very low plasticity  
Grain Size and Shape: NA  
Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
Number of Sample Bottles: 3  
Notes:

Brown clay, some silt, damp, almost no unconsolidated fines, all chunks (0.2" to 1"),  
stiff, very low plasticity, no odor, no staining. Background TOV = 0.1.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 5              | 1.1                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |



**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B6 - 2 ft Logged by: Grant Price  
 Sample Location: B-6 Project/Job#: 072-006-001  
 Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
 Time: 14:45 Associated Test Pit: B-6  
 Weather: Partly cloudy, about 60 If Duplicate List Original Source: \_\_\_\_\_  
 Site Description: SW fan-out area  
 Photographs: 105-534, 105-535, 105-538 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
 Sample Type: Soil  
 USCS Group: ML  
 Color: Brown  
 Texture: clayey silt  
 Moisture Content: Dry to damp  
 Density Characterisitcs (Stiffness / Plasticity, Cementation and Hardness):  
Stiff, low plasticity  
 Grain Size and Shape: NA  
 Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
 Number of Sample Bottles: 3  
 Notes:

Brown clayey silt, dry/damp, 40% unconsolidated, 60% chunks (0.2" to 1.0"), low plasticity, stiff, no staining, no odor. Background TOV = 0.0.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 2              | 3.5                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |

**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B6 - 5 ft Logged by: Grant Price  
 Sample Location: B-6 Project/Job#: 072-006-001  
 Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
 Time: 16:05 Associated Test Pit: B-6  
 Weather: Partly cloudy, about 60 If Duplicate List Original Source: \_\_\_\_\_  
 Site Description: SW fan-out area  
 Photographs: 105-538 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
 Sample Type: Soil  
 USCS Group: ML  
 Color: Brown  
 Texture: Silt, some clay  
 Moisture Content: Dry to damp  
 Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Soft to medium stiff, non-plastic  
 Grain Size and Shape: NA  
 Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
 Number of Sample Bottles: 3  
 Notes:

Brown silt, some clay, dry/damp, 80% unconsolidated, 20% chunks up to 0.5", non-plastic, soft to medium stiff. Background TOV = 0.0

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 5              | 0.8                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |



**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B7 - 2 ft Logged by: Grant Price  
 Sample Location: B-7 Project/Job#: 072-006-001  
 Date: 10/17/2006 Samplers: Grant Price/Regina Allen  
 Time: 15:45 Associated Test Pit: B-7  
 Weather: clearing up, about 55 If Duplicate List Original Source: \_\_\_\_\_  
 Site Description: N of out-flow ditch  
 Photographs: 105-508, 105-509, 105-524 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
 Sample Type: Soil  
 USCS Group: ML  
 Color: Brown  
 Texture: Silt, some clay  
 Moisture Content: Dry to damp  
 Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Mostly loose  
 Grain Size and Shape: NA  
 Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
 Number of Sample Bottles: 3  
 Notes:

Brown silt, some clay, dry to damp, very low plasticity, mostly loose, some chunks up to 1.0", no staining, no odor, background TOV = 0.5 ppm.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 2              | 2.8                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |

**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B7 - 5 ft Logged by: Grant Price  
Sample Location: B-7 Project/Job#: 072-006-001  
Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
Time: 09:50 Associated Test Pit: B-7  
Weather: Sunny, about 55 If Duplicate List Original Source: \_\_\_\_\_  
Site Description: N of overflow ditch  
Photographs: 105-524 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
Sample Type: Soil  
USCS Group: CL  
Color: Brown  
Texture: Silty clay  
Moisture Content: Damp  
Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Medium stiff, low plasticity  
Grain Size and Shape: NA  
Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
Number of Sample Bottles: 3  
Notes:

Brown silty clay, damp, very few unconsolidated fines, almost all chunks (0.2" to 1.0"), medium stiff, low plasticity, no odor, no staining. Background TOV = 0.2 ppm.

**Discreet Soil Interval Description**

Graphic Log



0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading<br>(ppm) | Description            |
|----------------|--------------------------|------------------------|
| 5              | 5.8                      | See notes/testpit logs |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |



**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B8 - 2 ft Logged by: Grant Price  
Sample Location: B-8 Project/Job#: 072-006-001  
Date: 10/17/2006 Samplers: Grant Price/Regina Allen  
Time: 14:15 Associated Test Pit: B-8  
Weather: Raining, windy, about 50 If Duplicate List Original Source: \_\_\_\_\_  
Site Description: N end of out-flow ditch  
Photographs: 105-506, 105-507, 105-515 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
Sample Type: Soil  
USCS Group: ML  
Color: Brown  
Texture: Silt, some clay  
Moisture Content: Damp  
Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Mostly loose  
Grain Size and Shape: NA  
Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
Number of Sample Bottles: 3  
Notes:

Brown silt, some clay, damp, mostly loose, some chunks up to 1.0", low plasticity.  
Background TOV = 0.5 ppm.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 2              | 1.5                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |

**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B8 - 5 ft Logged by: Grant Price  
 Sample Location: B-8 Project/Job#: 072-006-001  
 Date: 10/17/2006 Samplers: Grant Price/Regina Allen  
 Time: 10:50 Associated Test Pit: B-8  
 Weather: Cloudy, windy, about 45 If Duplicate List Original Source: \_\_\_\_\_  
 Site Description: N end of overflow ditch  
 Photographs: 105-515 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
 Sample Type: Soil  
 USCS Group: CL  
 Color: Brown  
 Texture: Silty clay  
 Moisture Content: Moist  
 Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Stiff to very stiff, low plasticity  
 Grain Size and Shape: NA  
 Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
 Number of Sample Bottles: 3  
 Notes:

Brown silty clay, damp to moist, low plasticity, stiff to very stiff, no odor, no staining.  
 Background TOV = 1.0 ppm.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading<br>(ppm) | Description            |
|----------------|--------------------------|------------------------|
| 5              | 1.5                      | See notes/testpit logs |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |
|                |                          |                        |



**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B9 - 2 ft Logged by: Grant Price  
Sample Location: B-9 Project/Job#: 072-006-001  
Date: 10/17/2006 Samplers: Grant Price/Regina Allen  
Time: 13:45 Associated Test Pit: B-9  
Weather: Raining, windy, about 50 If Duplicate List Original Source: \_\_\_\_\_  
Site Description: Middle of out-flow ditch  
Photographs: 105-504, 105-505, 105-514 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
Sample Type: Soil  
USCS Group: ML  
Color: Brown  
Texture: Silt, some clay  
Moisture Content: Damp  
Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Low plasticity, mostly loose  
Grain Size and Shape: NA  
Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
Number of Sample Bottles: 3  
Notes:

Brown silt, some clay, damp, low plasticity, no odor, no staining, mostly loose, some chunks up to 1.0". Background TOV = 0.3 ppm.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 2              | 10.2                  | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |

**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B9 - 5 ft Logged by: Grant Price  
Sample Location: B-9 Project/Job#: 072-006-001  
Date: 10/17/2006 Samplers: Grant Price/Regina Allen  
Time: 16:05 Associated Test Pit: B-9  
Weather: Windy, hail, rain, about 40 If Duplicate List Original Source: \_\_\_\_\_  
Site Description: middle of overflow ditch  
Photographs: 105-514 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
Sample Type: Soil  
USCS Group: ML  
Color: Brown  
Texture: Clayey silt  
Moisture Content: Damp  
Density Characteristics (Stiffness / Plasticity, Cementation and Hardness):  
Non-plastic to very low plasticity  
Grain Size and Shape: NA  
Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
Number of Sample Bottles: 3  
Notes:

Brown clayey silt, damp, non-plastic to very low plasticity, no odor, no staining.  
Background TOV = 0.9 ppm.

**Discreet Soil Interval Description**

Graphic Log

|                                                                                                                                                                                                                            |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| <div style="border: 1px solid black; width: 20px; height: 100%; position: relative;"> <span style="position: absolute; top: 0; left: 0;">0'</span> <span style="position: absolute; bottom: 0; left: 0;">12'</span> </div> |  |  |  |
|                                                                                                                                                                                                                            |  |  |  |
|                                                                                                                                                                                                                            |  |  |  |
|                                                                                                                                                                                                                            |  |  |  |
|                                                                                                                                                                                                                            |  |  |  |
|                                                                                                                                                                                                                            |  |  |  |
|                                                                                                                                                                                                                            |  |  |  |
|                                                                                                                                                                                                                            |  |  |  |
|                                                                                                                                                                                                                            |  |  |  |
|                                                                                                                                                                                                                            |  |  |  |

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 5              | 3.0                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |



**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B10 - 2 ft Logged by: Grant Price  
 Sample Location: B-10 Project/Job#: 072-006-001  
 Date: 10/17/2006 Samplers: Grant Price/Regina Allen  
 Time: 15:05 Associated Test Pit: B-10  
 Weather: Cloudy, windy, about 50 If Duplicate List Original Source: \_\_\_\_\_  
 Site Description: S. end of overflow ditch  
 Photographs: 105-510, 105-511, 105-523 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
 Sample Type: Soil  
 USCS Group: ML  
 Color: Brown  
 Texture: Silt, some clay  
 Moisture Content: Damp  
 Density Characterisitcs (Stiffness / Plasticity, Cementation and Hardness):  
Mostly loose, low plasticity  
 Grain Size and Shape: NA  
 Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
 Number of Sample Bottles: 3  
 Notes:

Brown silt, some clay, damp, low plasticity, mostl loose, some stiff chunks up to 1.0".  
 Background TOV = 0.7 ppm.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 2              | 2.9                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |

**FIGURE 3b. SOIL / WASTE SAMPLE LOG**  
**Ciniza Refinery, Gallup New Mexico**

Sample Identification: B10 - 5 ft Logged by: Grant Price  
 Sample Location: B-10 Project/Job#: 072-006-001  
 Date: 10/18/2006 Samplers: Grant Price/Regina Allen  
 Time: 09:15 Associated Test Pit: B-10  
 Weather: Cloudy, about 60 If Duplicate List Original Source: \_\_\_\_\_  
 Site Description: S. end of overflow ditch  
 Photographs: 105-523 Coordinates(x,y,z): \_\_\_\_\_

**Composite Sample Description**

Sampling Method: ☐ Direct Push ☐ Scoop ☒ Auger  
☐ Other (Describe): \_\_\_\_\_  
 Sample Type: Soil  
 USCS Group: CL  
 Color: Brown  
 Texture: Clay, some silt  
 Moisture Content: Mosit  
 Density Characterisitcs (Stiffness / Plasticity, Cementation and Hardness):  
Medium stiff, low plasticity  
 Grain Size and Shape: NA  
 Analysis Required: DRO, VOCs, Metals, Mercury, Cyanide  
 Number of Sample Bottles: 3  
 Notes:

Brown clay, some silt, damp/moist, medium stiff, low plasticity, no staining, no odor.  
 Background TOV = 0.0 ppm.

**Discreet Soil Interval Description**

Graphic Log

0'

6'

12'

| Depth (ft-bgs) | PID/FID Reading (ppm) | Description            |
|----------------|-----------------------|------------------------|
| 5              | 1.2                   | See notes/testpit logs |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |
|                |                       |                        |



**APPENDIX D**

**RECORD OF CALIBRATION**



**FIGURE 1. RECORD OF CALIBRATION ORGANIC VAPOR METER (PID)**  
**Ciniza Refinery, Gallup, New Mexico**

Date: 10/17/2006 Personnel: \_\_\_\_\_ Grant Price \_\_\_\_\_

Time: 05:20 Instrument ID#: MiniRae 2000: PGM7600  
110-013254

Calibration Gas: Isobutylene

Calibration Gas Known Concentration: 100 ppm

Pre-Calibration Reading: 87.7 Accuracy (+/- %): -12.3%

Post-Calibration Reading: 103 Accuracy (+/- %): 3.0%

Comments regarding instrument maintenance, functions, probe cleanliness, general condition:

Probe clean, rented from FarrWest Supply. A 2 point calibration was performed:  
0 ppm (ambient air in hotel room) and 100 ppm isobutylene.

Ambient air:

Precalibration reading = 0.0 Accuracy = 100%

Postcalibration reading = 0.0 Accuracy = 100%



FIGURE 1. RECORD OF CALIBRATION ORGANIC VAPOR METER (PID)  
Ciniza Refinery, Gallup, New Mexico

Date: 10/18/2006 Personnel: Grant Price

Time: 05:10 Instrument ID#: MiniRae 2000: PGM7600  
110-013254

Calibration Gas: Isobutylene

Calibration Gas Known Concentration: 100 ppm

Pre-Calibration Reading: 83.7 Accuracy (+/- %): -16.3%

Post-Calibration Reading: 94.8 Accuracy (+/- %): 5.2%

Comments regarding instrument maintenance, functions, probe cleanliness, general condition:

Probe clean, rented from FarrWest Supply. A 2 point calibration was performed:  
0 ppm (ambient air in hotel room) and 100 ppm isobutylene.

Ambient air:

Precalibration reading = 0.1 Accuracy = ---

Postcalibration reading = 0.0 Accuracy = 100%

**APPENDIX E**

**ANALYTICAL DATA WITH TIER I AND II DATA VALIDATIONS**







## Tier 1 Analytical Data Validation Checklist

|                                                                                                                                          |            |                                            |  |
|------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------------------------------|--|
| Client: <u>Giant Refining Co. Cinza</u>                                                                                                  |            | Laboratory: <u>Hall Energy for cycle</u>   |  |
| Project Name: <u>Fan out A100</u>                                                                                                        |            | Sample Matrix: <u>Sol</u>                  |  |
| Project Number: <u>072-006-001</u>                                                                                                       |            | Sample Start Date: <u>10/17/06</u>         |  |
| Date Validated: <u>11/20/06</u>                                                                                                          |            | Sample End Date: <u>10/18/06</u>           |  |
| Samples Analyzed: <u>See attached COC</u>                                                                                                |            |                                            |  |
| Parameters:                                                                                                                              |            |                                            |  |
| Laboratory Project ID:                                                                                                                   |            |                                            |  |
| Tier 1 Data Reviewer: <u>Cameron Sen</u>                                                                                                 |            |                                            |  |
| Data Validation Type: Tier 2                                                                                                             |            | Tier 3 Other Specialty (RECAP, TRRP, etc.) |  |
| Due Date:                                                                                                                                |            | Hours Budgeted for Data Validation:        |  |
| <b>Validation Criteria Checklist</b>                                                                                                     |            |                                            |  |
| 1. Did the laboratory provide a Quality Control Summary or Narrative for this data report?                                               | <u>Yes</u> | No                                         |  |
| 2. Were sample Chain-of-Custody forms complete?                                                                                          | <u>Yes</u> | No                                         |  |
| 3. Were samples received in good condition, within temperature requirements (2-6°C), and properly preserved?                             | Yes        | <u>No</u> TEMP 14°C                        |  |
| 4. Were sample holding times met?                                                                                                        | Yes        | <u>No</u>                                  |  |
| 5. Were the laboratory detection limits and dilutions in accordance with the QAP, permit, or what was specified to the laboratory?       | Yes        | <u>No</u>                                  |  |
| 6. Were all samples analyzed in accordance with the COC and were all analytical methods performed?                                       | <u>Yes</u> | No                                         |  |
| 7. Were correct concentration units reported?                                                                                            | <u>Yes</u> | No                                         |  |
| 8a. Were compounds detected in the equipment blanks, field blanks or trip blanks?                                                        | Yes        | <u>No</u>                                  |  |
| 8b. If yes, were the same constituents detected at similar levels in the client samples (i.e. Is there evidence of cross-contamination?) | Yes        | No                                         |  |
| 9a. Was a quality control section included with the data set from the laboratory?                                                        | <u>Yes</u> | No                                         |  |
| 9b. Did the quality control section include method blanks, matrix spike / matrix spike duplicates, and laboratory control samples?       | <u>Yes</u> | No                                         |  |
| 10a. Were blind duplicates collected?                                                                                                    | <u>Yes</u> | No                                         |  |
| 10b. Were the numbers properly recorded on the field log?                                                                                | <u>Yes</u> | No                                         |  |
| 11. Is the data consistent with previous sample events?                                                                                  | <u>Yes</u> | No                                         |  |

ENERGY  
SVOC B8-2'  
(not required)  
B9-2'  
DRO for  
B9-2' DROF  
NOT RECOVERED  
DUE TO DILUTION

| Blind Duplicate IDs | Primary Sample ID | Blind Duplicate ID |
|---------------------|-------------------|--------------------|
|                     | B3-2'             | BD101806           |
|                     |                   |                    |
|                     |                   |                    |

Comments: THERE WERE NO PREVIOUS SAMPLE EVENTS.



## Tier 2 Data Validation Report

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Client: Giant Refining Co. Ciniza                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Laboratory: Hall Environmental Analysis Laboratory, Inc. and Energy Laboratories, Inc. (Cyanide results) |
| Project Name: Fan Out Area                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Sample Matrix: Soil                                                                                      |
| Project Number: 072-006-001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Sample Start Date: October 17, 2006                                                                      |
| Date Validated: November 22, 2006                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Sample End Date: October 18, 2006                                                                        |
| Samples Analyzed: B7-2', B7-5', B8-2', B8-5', B9-2', B9-5', B10-2', B10-5', B10-5' MS, B10-5' MSD, BD101806, Trip Blank(0610228-12), B1-2', B1-5', B2-2', B2-5', B3-2', B3-5', B4-2', B4-5', B5-2', B5-5', B6-2', B6-5', EB101806, and EB101706                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                          |
| Parameters: VOCs, SVOCs, Metals, Cyanides, and DRO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                          |
| Laboratory Project ID: 0610228                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                          |
| Data Validator: Lee Grater, Environmental Chemist                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                          |
| <b>Precision, Accuracy, Method Compliance, Completeness Assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                          |
| <b>Precision</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Acceptable                                                                                               |
| Comments: Precision is the measure of variability of sample measurements. Field precision is determined by a comparison of field duplicate sample results. Laboratory precision is determined by examining the laboratory duplicate results. Evaluation of both the field and laboratory duplicates for precision was accomplished using the relative percent difference (RPD). The RPD is defined as the difference between the primary and duplicate samples divided by the mean and expressed as a percentage. Sample B3-2' (0610228-17) was collected as the parent for sample BD101806 (0610228-11). All field duplicate and MS/MSD RPD values were within control limits, with one exception. One MS/MSD RPD value for selenium was reported to be above the control limits. All associated results will be qualified 'J/UJ' due to possible poor repeatability. |                                                                                                          |
| <b>Accuracy</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Acceptable                                                                                               |
| Comments: Accuracy is a measure of sampling and analysis bias. Field accuracy is determined by collecting field, trip and equipment blanks to monitor for possible ambient or cross contamination during sampling. One trip, and two equipment blanks were collected. There were no detections reported in any of the associated blanks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                          |
| Laboratory accuracy is measured by evaluating laboratory control sample (LCS) and MS/MSD recoveries. LCS and MS/MSD recoveries were compared to published or laboratory control limits. All laboratory control and MS/MSD recoveries were within control limits, with a few exceptions. Two MS/MSD recoveries for selenium were reported to be outside of the control limits. All associated results will be qualified 'J/UJ' due to a possible low bias.                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                          |
| <b>Method Compliance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Acceptable                                                                                               |
| Comments: Method compliance was determined by reviewing the holding times, detection limits, surrogate recoveries, method blanks, and laboratory control samples against method specific requirements. The analyte cyanide was detected in one method blank. No qualification is necessary since the associated method blank was only associated with the equipment blanks and since all associated samples were non-detect. All other criteria for method compliance were acceptable. The laboratory met extraction and analytical hold times for all requested analyses.                                                                                                                                                                                                                                                                                             |                                                                                                          |
| <b>Completeness</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Acceptable                                                                                               |
| Comments: Completeness is the overall ration of the number of samples planned versus the number of samples with valid analyses. Determination of completeness included a review of the chain-of-custody and laboratory analytical methods. Completeness also includes a review of the analytical reports and QC summary report. All data were presented in a clear and complete manner. A total of 43 data points were assigned "J" or "UJ" data qualifiers as a result of this data validation review. No data points were qualified or rejected; therefore, this data sets is 100% complete                                                                                                                                                                                                                                                                          |                                                                                                          |





### Validation Criteria Checklist

Data validation flags used in this review: The data flags "J" and "UJ" were used to denote that the reported values are estimated, or that the method reporting limit is estimated in this sample matrix.

1. Did the laboratory identify any non-conformances related to the analytical data?

Yes

Comments: The laboratory noted that the cyanide samples were received by Energy Laboratories at 14°C. The surrogate in the DRO analysis for sample B9-2' (610228-05) failed to recover because the sample was diluted due to high concentrations of target compounds present in the sample.

2. Were sample chain-of-custody forms complete?

Yes

Comments: The sample recorded on the chain-of-custody document as sample B3-5', collected on 10/18/06, at 1050 hrs, should have been labeled B3-2', (0610228-17), which was collected on 10/20/06. The chain-of-custody forms were complete from the field to the laboratory in all other respects.

3. Were detection limits in accordance with the QAPP, permit, or method?

Yes

Comments: All detection limits were acceptable; however, some dilutions were required in order to determine concentrations for target constituents. Dilutions were reviewed and were acceptable for this data set.

4. Were the requested analytical methods in compliance with the QAPP, permit, or COC?

Yes

Comments: All reported analytical methods were in compliance with those noted on the chain-of-custody.

5. Were samples received in good condition?

No

Comments: All samples were received in good condition at temperatures of 1 degree Celsius. The laboratory noted that the cyanide samples were received by Energy Laboratories at 14°C. As a result of this occurrence, all cyanide results will be assigned "UJ" or "J" data qualifiers, denoting the samples were compromised in shipment, and that the reported results are estimated values.

6. Were sample holding times met?

Yes

Comments: All samples were analyzed within the acceptable holding times.

7. Were correct concentration units reported?

Yes

Comments: All sample results were reported in units of mg/kg. These units are acceptable when reporting concentrations for the associated matrix (soil).

8. Do the laboratory reports include all constituents requested to be reported for a specific analytical method?

Yes

Comments: The laboratory appeared to have reported all constituents as requested by the client.

9. Were the reporting requirements for flagged data met?

Yes

Comments: No data were flagged by the laboratory; however, the laboratory did note any dilutions and re-analyses that were performed on the associated samples.

10. Is there indication that the continuous calibration verification was within acceptable limits?

Yes

Comments: There were no continuous calibration results noted in the data sets associated with the water samples; however, it is assumed that all results were acceptable based on other QC data.

11. Were the instrument calibrations within method control limits?

Yes

Comments: There were no instrument calibration results noted in the data sets associated with the water samples; however, it is assumed that all results were acceptable based on other QC data.

12. Were method blank samples analyzed on a 5% basis?

Yes

Comments: Method blank samples were analyzed on a 5% basis for all analyses and all associated batches.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 13. Were method blank detections reported for this data set?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Yes |
| Comments: The analyte cyanide (0.002 mg/L) was detected in the method blank associated with sample A2006-10_26_4_CN-01. No qualification is necessary since this method blank is only associated with equipment blanks and since all associated samples were non-detect.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |     |
| 14. Were matrix spike samples prepared on a 5% basis?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | No  |
| Comments: For the DRO and MRO analysis, a MS/MSD pair was prepared from sample 0610228-08. For the analysis of cyanide, two MS/MSD pairs were prepared from samples from other clients sample sets. For the Method 8260B analysis, two MS/MSD pairs were prepared from samples 0610228-04, and -21. For the Method 8270C analysis, no MS samples were analyzed. The Method 8270C analysis will be accepted on the basis of the LCS and MB results. For the Method 7471 analysis, two MS/MSD pairs were prepared from samples 0610228-15, and -24. For the Method 6010 analysis, three MS/MSD pairs were prepared from samples 0610228-11, -24, and -26.                                                                                                                                                                                                                                                                                    |     |
| 15. Were matrix spike recoveries within acceptable limits?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | No  |
| Comments: For samples 0610228-11B and 24B, the MS (0% and 34.2%, respectively)/MSD (54.4% and 37.8%, respectively) recoveries for selenium were reported to be outside of the control limits of 75-125%. In addition, for sample 11B, the RPD value for selenium (200%; acceptable limit 30%) was reported to be above the acceptable limit of 30%. All associated results will be qualified 'J/UJ' due to possible poor repeatability and a possible low bias.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |
| 16. Were laboratory control samples analyzed on a 5% basis?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Yes |
| Comments: Laboratory control samples were analyzed on a 5% basis for all analyses.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |
| 17. Were laboratory control recoveries within acceptable limits?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Yes |
| Comments: All laboratory control recoveries were within control limits.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |
| 18. Were surrogate recoveries within control limits?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | No  |
| Comments: In sample B9-2', the surrogate DNOP (0%; acceptable range 61.7-135%) was reported to be outside of the control limits. The associated DRO AND MRO results will be qualified 'J/UJ' due to a possible low bias. In sample B9-2', the surrogates 4-terphenyl-d14 (27.6%; acceptable range 34.6-151%) and phenol-d5 (36.6%; acceptable range 37.6-118%) were recovered outside of the control limits. No qualification is necessary since all other surrogate recoveries were acceptable.                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |
| 19. Were equipment blanks and field blanks collected on a 10% basis?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Yes |
| Comments: One trip, and two equipment blanks were collected during this sampling event.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |
| 20. Were detections found in trip blanks, equipment blanks, or field blanks?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No  |
| Comments: There were no detections in the trip, equipment, or field blanks.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |
| 21. Were field duplicates collected on a 10% basis?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Yes |
| Comments: One field duplicate was collected in this sampling event. BD101806 is a duplicate of B3-2' (0610228-11).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |
| 22. Were field duplicate RPD values less than 30%?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Yes |
| Comments: All field duplicate RPD values were less than the acceptable value of 30% (Table 2).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |
| 23. General Comments: All data were presented in a clear and complete manner. Because the cyanide samples were received by Energy Laboratories, Inc., at a temperature of 14°C, all cyanide results will be "J" or "UJ" flagged as estimated values. Because of the large dilution factor applied to sample B9-2' (0610228-005), which was caused by the presence of high levels of target hydrocarbons, and the loss due to dilution of the surrogate recovery for that sample, the DRO and MRO results will be assigned "J" and "UJ" data flags. Due to the consistent low spike recoveries for selenium in MS/MSD samples prepared from this sample set, it is apparent that there is a low bias in the selenium results due to sample matrix interferences, and all selenium results will be "UJ" or "J" flagged as estimated values in this sample matrix. No data points were rejected; therefore these data sets are 100% complete. |     |



Table 1. Data Qualification, Giant Refining Company, Ciniza. Hall Environmental Laboratory data set 0610228.

| Analyte                                                         | Sample ID | Laboratory Assigned ID | Laboratory Result | Flag | Reason                                        |
|-----------------------------------------------------------------|-----------|------------------------|-------------------|------|-----------------------------------------------|
| Cyanide                                                         | B7-2'     | 0610228-01             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B7-5'     | 0610228-02             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B8-2'     | 0610228-03             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B8-5'     | 0610228-04             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B9-2'     | 0610228-05             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B9-5'     | 0610228-06             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B10-2'    | 0610228-07             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B10-5'    | 0610228-08             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | BD101806  | 0610228-11             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B1-2'     | 0610228-13             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B1-5'     | 0610228-14             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B2-2'     | 0610228-15             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B2-5'     | 0610228-16             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B3-2'     | 0610228-17             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B3-5'     | 0610228-18             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B4-2'     | 0610228-19             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B4-5'     | 0610228-20             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B5-2'     | 0610228-21             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B5-5'     | 0610228-22             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B6-2'     | 0610228-23             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| Cyanide                                                         | B6-5'     | 0610228-24             | ND                | UJ   | Samples were received by laboratory at 14°C   |
| DRO                                                             | B9-2'     | 0610228-05             | 15,000 mg/kg      | J    | High dilution and loss of surrogate recovery. |
| MRO                                                             | B9-2'     | 0610228-05             | ND                | UJ   | High dilution and loss of surrogate recovery. |
| Selenium                                                        | B7-2'     | 0610228-01             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B7-5'     | 0610228-02             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B8-2'     | 0610228-03             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B8-5'     | 0610228-04             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B9-2'     | 0610228-05             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B9-5'     | 0610228-06             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B10-2'    | 0610228-07             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B10-5'    | 0610228-08             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | BD101806  | 0610228-11             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B1-2'     | 0610228-13             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B1-5'     | 0610228-14             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B2-2'     | 0610228-15             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B2-5'     | 0610228-16             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B3-2'     | 0610228-17             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B3-5'     | 0610228-18             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B4-2'     | 0610228-19             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B4-5'     | 0610228-20             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B5-2'     | 0610228-21             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B5-5'     | 0610228-22             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B6-2'     | 0610228-23             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| Selenium                                                        | B6-5'     | 0610228-24             | ND                | UJ   | MS/MSD spike failed to recover – low bias.    |
| J – Indicates estimated detection value.                        |           |                        |                   |      |                                               |
| UJ – Indicates estimated reporting limit in this sample matrix. |           |                        |                   |      |                                               |

**Table 2.** Field Duplicate Summary, Giant Refining Company, Ciniza. Hall Environmental Laboratory data set 0610228.

| Sample ID: Parent sample B3-2' (0610228-17)<br>Duplicate sample: BD101806                                                                                                                                                                                          |                          |                         |                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------|-----------------------------------|
| Analyte                                                                                                                                                                                                                                                            | Laboratory Result (mg/L) | Duplicate Result (mg/L) | Relative Percent Difference (RPD) |
| Barium                                                                                                                                                                                                                                                             | 260                      | 290                     | 10.9                              |
| Chromium                                                                                                                                                                                                                                                           | 9.0                      | 9.4                     | 4.35                              |
| Lead                                                                                                                                                                                                                                                               | 11.0                     | 10.0                    | 9.5                               |
| Field duplicate RPD control limits should not exceed 30% as established by USEPA Region 1 Laboratory Data Validation Function Guidelines for Evaluation of Organic Analysis, February 1988. No qualification is necessary since all RPD values were less than 30%. |                          |                         |                                   |











Hall Environmental Analysis Laboratory, Inc.

Sample Receipt Checklist

Client Name GIANTREFIN

Date and Time Received:

10/20/2006

Work Order Number 0610228

Received by AT

Checklist completed by

*[Signature]*

10/20/06

Signature

Date

Matrix

Carrier name Client drop-off

|                                                         |                                                 |                                         |                                                                                      |
|---------------------------------------------------------|-------------------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             | Not Present <input type="checkbox"/>                                                 |
| Custody seals intact on shipping container/cooler?      | Yes <input type="checkbox"/>                    | No <input type="checkbox"/>             | Not Present <input type="checkbox"/> Not Shipped <input checked="" type="checkbox"/> |
| Custody seals intact on sample bottles?                 | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             | N/A <input type="checkbox"/>                                                         |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                                      |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                                      |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                                      |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                                      |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                                      |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                                      |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             |                                                                                      |
| Water - VOA vials have zero headspace?                  | No VOA vials submitted <input type="checkbox"/> | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>                                                          |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/>         | No <input type="checkbox"/>             | N/A <input type="checkbox"/>                                                         |
| Container/Temp Blank temperature?                       | 1°                                              | 4° C ± 2 Acceptable                     | If given sufficient time to cool.                                                    |

COMMENTS:

Client contacted

Date contacted:

Person contacted

Contacted by:

Regarding

Comments:

*for Sam B3-5' & 10SD 10/15/06 should be  
B3-2' AT 10/20/06*

Corrective Action

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

|            |                       |                   |                       |
|------------|-----------------------|-------------------|-----------------------|
| CLIENT:    | Giant Refining Co     | Client Sample ID: | B7-2'                 |
| Lab Order: | 0610228               | Collection Date:  | 10/17/2006 3:45:00 PM |
| Project:   | Fan Out Area Sampling | Date Received:    | 10/20/2006            |
| Lab ID:    | 0610228-01            | Matrix:           | SOIL                  |

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed                         |
|------------------------------------------------|--------|----------|------|-------|----|---------------------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    |                                       |
| Diesel Range Organics (DRO)                    | 360    | 10       |      | mg/Kg | 1  | Analyst: SCC<br>10/24/2006 3:03:47 PM |
| Motor Oil Range Organics (MRO)                 | ND     | 50       |      | mg/Kg | 1  | 10/24/2006 3:03:47 PM                 |
| Surr: DNOP                                     | 85.2   | 61.7-135 |      | %REC  | 1  | 10/24/2006 3:03:47 PM                 |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    |                                       |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | Analyst: MAP<br>10/31/2006            |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    |                                       |
| Arsenic                                        | ND     | 13       |      | mg/Kg | 5  | Analyst: CMS<br>11/6/2006 4:18:57 PM  |
| Barium                                         | 230    | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:18:57 PM                  |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:18:57 PM                  |
| Chromium                                       | 11     | 1.5      |      | mg/Kg | 5  | 11/6/2006 4:18:57 PM                  |
| Lead                                           | 8.6    | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:18:57 PM                  |
| Selenium                                       | ND     | 13       |      | mg/Kg | 5  | 11/7/2006 9:20:17 AM                  |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:18:57 PM                  |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    |                                       |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | Analyst: LMM<br>10/23/2006            |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                            |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006                            |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006                            |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006                            |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Bromoform                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                            |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006                            |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006                            |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                            |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                            |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 1 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-01

Client Sample ID: B7-2'  
 Collection Date: 10/17/2006 3:45:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2,2-Tetrachloroethane | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 2 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-01

Client Sample ID: B7-2'  
Collection Date: 10/17/2006 3:45:00 PM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 79.0   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 103    | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 76.5   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 94.6   | 74-119   |      | %REC  | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 3 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

|            |                       |                   |                       |
|------------|-----------------------|-------------------|-----------------------|
| CLIENT:    | Giant Refining Co     | Client Sample ID: | B7-5'                 |
| Lab Order: | 0610228               | Collection Date:  | 10/18/2006 9:50:00 AM |
| Project:   | Fan Out Area Sampling | Date Received:    | 10/20/2006            |
| Lab ID:    | 0610228-02            | Matrix:           | SOIL                  |

| Analyses                                | Result | PQL      | Qual | Units | DF | Date Analyzed         |
|-----------------------------------------|--------|----------|------|-------|----|-----------------------|
| EPA METHOD 8015B: DIESEL RANGE ORGANICS |        |          |      |       |    |                       |
|                                         |        |          |      |       |    | Analyst: SCC          |
| Diesel Range Organics (DRO)             | ND     | 10       |      | mg/Kg | 1  | 10/24/2006 3:38:34 PM |
| Motor Oil Range Organics (MRO)          | ND     | 50       |      | mg/Kg | 1  | 10/24/2006 3:38:34 PM |
| Surr: DNOP                              | 81.6   | 61.7-135 |      | %REC  | 1  | 10/24/2006 3:38:34 PM |
| EPA METHOD 7471: MERCURY                |        |          |      |       |    |                       |
|                                         |        |          |      |       |    | Analyst: MAP          |
| Mercury                                 | ND     | 0.033    |      | mg/Kg | 1  | 10/31/2006            |
| EPA METHOD 6010B: SOIL METALS           |        |          |      |       |    |                       |
|                                         |        |          |      |       |    | Analyst: CMS          |
| Arsenic                                 | ND     | 12       |      | mg/Kg | 5  | 11/6/2006 4:22:03 PM  |
| Barium                                  | 280    | 1.0      |      | mg/Kg | 10 | 11/6/2006 5:29:11 PM  |
| Cadmium                                 | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:22:03 PM  |
| Chromium                                | 10     | 1.5      |      | mg/Kg | 5  | 11/6/2006 4:22:03 PM  |
| Lead                                    | 6.3    | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:22:03 PM  |
| Selenium                                | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 9:22:57 AM  |
| Silver                                  | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:22:03 PM  |
| EPA METHOD 8260B: VOLATILES             |        |          |      |       |    |                       |
|                                         |        |          |      |       |    | Analyst: LMM          |
| Benzene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Toluene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Ethylbenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Methyl tert-butyl ether (MTBE)          | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2,4-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,3,5-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2-Dichloroethane (EDC)                | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2-Dibromoethane (EDB)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Naphthalene                             | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| 1-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006            |
| 2-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006            |
| Acetone                                 | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006            |
| Bromobenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromochloromethane                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromodichloromethane                    | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromoform                               | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromomethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| 2-Butanone                              | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006            |
| Carbon disulfide                        | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006            |
| Carbon tetrachloride                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| Chlorobenzene                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Chloroethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Page 4 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-02

Client Sample ID: B7-5'  
 Collection Date: 10/18/2006 9:50:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers:  
 \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-02

Client Sample ID: B7-5'  
Collection Date: 10/18/2006 9:50:00 AM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 84.0   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 98.1   | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 83.2   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 91.1   | 74-119   |      | %REC  | 1  | 10/23/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

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

Page 6 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-03

Client Sample ID: B8-2'  
 Collection Date: 10/17/2006 2:15:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed                          |
|------------------------------------------------|--------|----------|------|-------|----|----------------------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    |                                        |
| Diesel Range Organics (DRO)                    | 2400   | 100      |      | mg/Kg | 10 | Analyst: SCC<br>10/24/2006 11:46:51 PM |
| Motor Oil Range Organics (MRO)                 | ND     | 500      |      | mg/Kg | 10 | 10/24/2006 11:46:51 PM                 |
| Surr: DNOP                                     | 129    | 61.7-135 |      | %REC  | 10 | 10/24/2006 11:46:51 PM                 |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    |                                        |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | Analyst: MAP<br>10/31/2006             |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    |                                        |
| Arsenic                                        | ND     | 12       |      | mg/Kg | 5  | Analyst: CMS<br>11/6/2006 4:26:01 PM   |
| Barium                                         | 270    | 1.0      |      | mg/Kg | 10 | 11/6/2006 5:39:33 PM                   |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:26:01 PM                   |
| Chromium                                       | 9.6    | 1.5      |      | mg/Kg | 5  | 11/6/2006 4:26:01 PM                   |
| Lead                                           | 8.5    | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:26:01 PM                   |
| Selenium                                       | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 9:25:24 AM                   |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:26:01 PM                   |
| <b>EPA METHOD 8270C: SEMIVOLATILES</b>         |        |          |      |       |    |                                        |
| Acenaphthene                                   | ND     | 1.0      |      | mg/Kg | 5  | Analyst: BL<br>11/1/2006               |
| Acenaphthylene                                 | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| Aniline                                        | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| Anthracene                                     | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| Azobenzene                                     | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| Benz(a)anthracene                              | ND     | 1.2      |      | mg/Kg | 5  | 11/1/2006                              |
| Benzo(a)pyrene                                 | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| Benzo(b)fluoranthene                           | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| Benzo(g,h,i)perylene                           | ND     | 1.5      |      | mg/Kg | 5  | 11/1/2006                              |
| Benzo(k)fluoranthene                           | ND     | 2.5      |      | mg/Kg | 5  | 11/1/2006                              |
| Benzoic acid                                   | ND     | 2.5      |      | mg/Kg | 5  | 11/1/2006                              |
| Benzyl alcohol                                 | ND     | 5.0      |      | mg/Kg | 5  | 11/1/2006                              |
| Bis(2-chloroethoxy)methane                     | ND     | 2.5      |      | mg/Kg | 5  | 11/1/2006                              |
| Bis(2-chloroethyl)ether                        | ND     | 1.2      |      | mg/Kg | 5  | 11/1/2006                              |
| Bis(2-chloroisopropyl)ether                    | ND     | 2.5      |      | mg/Kg | 5  | 11/1/2006                              |
| Bis(2-ethylhexyl)phthalate                     | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| 4-Bromophenyl phenyl ether                     | ND     | 1.2      |      | mg/Kg | 5  | 11/1/2006                              |
| Butyl benzyl phthalate                         | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| Carbazole                                      | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| 4-Chloro-3-methylphenol                        | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| 4-Chloroaniline                                | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |
| 2-Chloronaphthalene                            | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                              |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 7 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-03

Client Sample ID: B8-2'  
 Collection Date: 10/17/2006 2:15:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                        | Result | PQL | Qual | Units | DF | Date Analyzed |
|---------------------------------|--------|-----|------|-------|----|---------------|
| EPA METHOD 8270C: SEMIVOLATILES |        |     |      |       |    | Analyst: BL   |
| 2-Chlorophenol                  | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 4-Chlorophenyl phenyl ether     | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Chrysene                        | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Di-n-butyl phthalate            | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| Di-n-octyl phthalate            | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| Dibenz(a,h)anthracene           | ND     | 1.2 |      | mg/Kg | 5  | 11/1/2006     |
| Dibenzofuran                    | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| 1,2-Dichlorobenzene             | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 1,3-Dichlorobenzene             | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 1,4-Dichlorobenzene             | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 3,3'-Dichlorobenzidine          | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Diethyl phthalate               | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Dimethyl phthalate              | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2,4-Dichlorophenol              | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2,4-Dimethylphenol              | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 4,6-Dinitro-2-methylphenol      | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| 2,4-Dinitrophenol               | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| 2,4-Dinitrotoluene              | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2,6-Dinitrotoluene              | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Fluoranthene                    | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Fluorene                        | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Hexachlorobenzene               | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Hexachlorobutadiene             | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Hexachlorocyclopentadiene       | ND     | 1.2 |      | mg/Kg | 5  | 11/1/2006     |
| Hexachloroethane                | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| Indeno(1,2,3-cd)pyrene          | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Isophorone                      | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2-Methylnaphthalene             | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2-Methylphenol                  | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 3+4-Methylphenol                | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| N-Nitrosodi-n-propylamine       | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| N-Nitrosodiphenylamine          | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Naphthalene                     | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2-Nitroaniline                  | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| 3-Nitroaniline                  | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| 4-Nitroaniline                  | ND     | 1.2 |      | mg/Kg | 5  | 11/1/2006     |
| Nitrobenzene                    | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2-Nitrophenol                   | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 4-Nitrophenol                   | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Pentachlorophenol               | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 8 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-03

Client Sample ID: B8-2  
 Collection Date: 10/17/2006 2:15:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                        | Result | PQL      | Qual | Units | DF | Date Analyzed |
|---------------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8270C: SEMIVOLATILES |        |          |      |       |    | Analyst: BL   |
| Phenanthrene                    | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| Phenol                          | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| Pyrene                          | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| Pyridine                        | ND     | 2.5      |      | mg/Kg | 5  | 11/1/2006     |
| 1,2,4-Trichlorobenzene          | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| 2,4,5-Trichlorophenol           | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| 2,4,6-Trichlorophenol           | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| Surr: 2,4,6-Tribromophenol      | 53.9   | 35.5-141 |      | %REC  | 5  | 11/1/2006     |
| Surr: 2-Fluorobiphenyl          | 54.7   | 30.4-128 |      | %REC  | 5  | 11/1/2006     |
| Surr: 2-Fluorophenol            | 48.4   | 28.1-129 |      | %REC  | 5  | 11/1/2006     |
| Surr: 4-Terphenyl-d14           | 42.3   | 34.6-151 |      | %REC  | 5  | 11/1/2006     |
| Surr: Nitrobenzene-d5           | 38.3   | 26.5-122 |      | %REC  | 5  | 11/1/2006     |
| Surr: Phenol-d5                 | 47.9   | 37.6-118 |      | %REC  | 5  | 11/1/2006     |
| EPA METHOD 8260B: VOLATILES     |        |          |      |       |    | Analyst: LMM  |
| Benzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Toluene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Ethylbenzene                    | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Methyl tert-butyl ether (MTBE)  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trimethylbenzene          | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,3,5-Trimethylbenzene          | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloroethane (EDC)        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromoethane (EDB)         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Naphthalene                     | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| 1-Methylnaphthalene             | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006    |
| 2-Methylnaphthalene             | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006    |
| Acetone                         | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006    |
| Bromobenzene                    | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Bromochloromethane              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Bromodichloromethane            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Bromoform                       | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Bromomethane                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| 2-Butanone                      | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006    |
| Carbon disulfide                | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006    |
| Carbon tetrachloride            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Chlorobenzene                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Chloroethane                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Chloroform                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-03

Client Sample ID: B8-2'  
 Collection Date: 10/17/2006 2:15:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichlorofluoromethane      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

|            |                       |                   |                       |
|------------|-----------------------|-------------------|-----------------------|
| CLIENT:    | Giant Refining Co     | Client Sample ID: | B8-2'                 |
| Lab Order: | 0610228               | Collection Date:  | 10/17/2006 2:15:00 PM |
| Project:   | Fan Out Area Sampling | Date Received:    | 10/20/2006            |
| Lab ID:    | 0610228-03            | Matrix:           | SOIL                  |

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    |               |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 81.6   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 92.5   | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 80.0   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 100    | 74-119   |      | %REC  | 1  | 10/23/2006    |

Analyst: LMM

Qualifiers:

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

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Page 11 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-04

Client Sample ID: B8-5'  
 Collection Date: 10/17/2006 4:50:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                | Result | PQL      | Qual | Units | DF | Date Analyzed         |
|-----------------------------------------|--------|----------|------|-------|----|-----------------------|
| EPA METHOD 8015B: DIESEL RANGE ORGANICS |        |          |      |       |    |                       |
| Diesel Range Organics (DRO)             | 43     | 10       |      | mg/Kg | 1  | 10/25/2006 1:31:13 AM |
| Motor Oil Range Organics (MRO)          | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 1:31:13 AM |
| Surr. DNOP                              | 88.2   | 61.7-135 |      | %REC  | 1  | 10/25/2006 1:31:13 AM |
| EPA METHOD 7471: MERCURY                |        |          |      |       |    |                       |
| Mercury                                 | ND     | 0.033    |      | mg/Kg | 1  | 10/31/2006            |
| EPA METHOD 6010B: SOIL METALS           |        |          |      |       |    |                       |
| Arsenic                                 | ND     | 13       |      | mg/Kg | 5  | 11/6/2006 4:29:04 PM  |
| Barium                                  | 260    | 1.0      |      | mg/Kg | 10 | 11/6/2006 5:42:29 PM  |
| Cadmium                                 | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:29:04 PM  |
| Chromium                                | 8.2    | 1.5      |      | mg/Kg | 5  | 11/6/2006 4:29:04 PM  |
| Lead                                    | 8.9    | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:29:04 PM  |
| Selenium                                | ND     | 13       |      | mg/Kg | 5  | 11/7/2006 9:27:54 AM  |
| Silver                                  | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:29:04 PM  |
| EPA METHOD 8260B: VOLATILES             |        |          |      |       |    |                       |
| Benzene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Toluene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Ethylbenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Methyl tert-butyl ether (MTBE)          | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2,4-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,3,5-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2-Dichloroethane (EDC)                | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2-Dibromoethane (EDB)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Naphthalene                             | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| 1-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006            |
| 2-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006            |
| Acetone                                 | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006            |
| Bromobenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromochloromethane                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromodichloromethane                    | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromoform                               | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromomethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| 2-Butanone                              | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006            |
| Carbon disulfide                        | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006            |
| Carbon tetrachloride                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| Chlorobenzene                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Chloroethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |

Qualifiers:

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

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

Page 12 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-04

Client Sample ID: B8-5'  
 Collection Date: 10/17/2006 4:50:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

|            |                       |                   |                       |
|------------|-----------------------|-------------------|-----------------------|
| CLIENT:    | Giant Refining Co     | Client Sample ID: | B8-5'                 |
| Lab Order: | 0610228               | Collection Date:  | 10/17/2006 4:50:00 PM |
| Project:   | Fan Out Area Sampling | Date Received:    | 10/20/2006            |
| Lab ID:    | 0610228-04            | Matrix:           | SOIL                  |

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 81.8   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 92.8   | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 80.7   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 100    | 74-119   |      | %REC  | 1  | 10/23/2006    |

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-05

Client Sample ID: B9-2'  
 Collection Date: 10/17/2006 1:45:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed                         |
|------------------------------------------------|--------|----------|------|-------|----|---------------------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    |                                       |
| Diesel Range Organics (DRO)                    | 15000  | 200      |      | mg/Kg | 20 | Analyst: SCC<br>10/25/2006 2:06:04 AM |
| Motor Oil Range Organics (MRO)                 | ND     | 1000     |      | mg/Kg | 20 | 10/25/2006 2:06:04 AM                 |
| Surr: DNOP                                     | 0      | 61.7-135 | S    | %REC  | 20 | 10/25/2006 2:06:04 AM                 |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    |                                       |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | Analyst: MAP<br>10/31/2006            |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    |                                       |
| Arsenic                                        | ND     | 12       |      | mg/Kg | 5  | Analyst: CMS<br>11/6/2006 4:32:10 PM  |
| Barium                                         | 220    | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:32:10 PM                  |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:32:10 PM                  |
| Chromium                                       | 8.5    | 1.5      |      | mg/Kg | 5  | 11/6/2006 4:32:10 PM                  |
| Lead                                           | 8.3    | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:32:10 PM                  |
| Selenium                                       | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 9:30:22 AM                  |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:32:10 PM                  |
| <b>EPA METHOD 8270C: SEMIVOLATILES</b>         |        |          |      |       |    |                                       |
| Acenaphthene                                   | ND     | 1.0      |      | mg/Kg | 5  | Analyst: BL<br>11/1/2006              |
| Acenaphthylene                                 | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| Aniline                                        | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| Anthracene                                     | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| Azobenzene                                     | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| Benz(a)anthracene                              | ND     | 1.2      |      | mg/Kg | 5  | 11/1/2006                             |
| Benzo(a)pyrene                                 | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| Benzo(b)fluoranthene                           | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| Benzo(g,h,i)perylene                           | ND     | 1.5      |      | mg/Kg | 5  | 11/1/2006                             |
| Benzo(k)fluoranthene                           | ND     | 2.5      |      | mg/Kg | 5  | 11/1/2006                             |
| Benzoic acid                                   | ND     | 2.5      |      | mg/Kg | 5  | 11/1/2006                             |
| Benzyl alcohol                                 | ND     | 5.0      |      | mg/Kg | 5  | 11/1/2008                             |
| Bis(2-chloroethoxy)methane                     | ND     | 2.5      |      | mg/Kg | 5  | 11/1/2006                             |
| Bis(2-chloroethyl)ether                        | ND     | 1.2      |      | mg/Kg | 5  | 11/1/2006                             |
| Bis(2-chloroisopropyl)ether                    | ND     | 2.5      |      | mg/Kg | 5  | 11/1/2008                             |
| Bis(2-ethylhexyl)phthalate                     | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| 4-Bromophenyl phenyl ether                     | ND     | 1.2      |      | mg/Kg | 5  | 11/1/2006                             |
| Butyl benzyl phthalate                         | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| Carbazole                                      | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| 4-Chloro-3-methylphenol                        | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| 4-Chloroaniline                                | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |
| 2-Chloronaphthalene                            | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006                             |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 15 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-05

Client Sample ID: B9-2'  
 Collection Date: 10/17/2006 1:45:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                        | Result | PQL | Qual | Units | DF | Date Analyzed |
|---------------------------------|--------|-----|------|-------|----|---------------|
| EPA METHOD 8270C: SEMIVOLATILES |        |     |      |       |    | Analyst: BL   |
| 2-Chlorophenol                  | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 4-Chlorophenyl phenyl ether     | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Chrysene                        | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Di-n-butyl phthalate            | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| Di-n-octyl phthalate            | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| Dibenz(a,h)anthracene           | ND     | 1.2 |      | mg/Kg | 5  | 11/1/2006     |
| Dibenzofuran                    | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| 1,2-Dichlorobenzene             | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 1,3-Dichlorobenzene             | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 1,4-Dichlorobenzene             | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 3,3'-Dichlorobenzidine          | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Diethyl phthalate               | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Dimethyl phthalate              | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2,4-Dichlorophenol              | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2,4-Dimethylphenol              | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 4,6-Dinitro-2-methylphenol      | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| 2,4-Dinitrophenol               | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| 2,4-Dinitrotoluene              | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2,6-Dinitrotoluene              | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Fluoranthene                    | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Fluorene                        | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Hexachlorobenzene               | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Hexachlorobutadiene             | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Hexachlorocyclopentadiene       | ND     | 1.2 |      | mg/Kg | 5  | 11/1/2006     |
| Hexachloroethane                | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| Indeno(1,2,3-cd)pyrene          | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Isophorone                      | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2-Methylnaphthalene             | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2-Methylphenol                  | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 3+4-Methylphenol                | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| N-Nitrosodi-n-propylamine       | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| N-Nitrosodiphenylamine          | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Naphthalene                     | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2-Nitroaniline                  | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| 3-Nitroaniline                  | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |
| 4-Nitroaniline                  | ND     | 1.2 |      | mg/Kg | 5  | 11/1/2006     |
| Nitrobenzene                    | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 2-Nitrophenol                   | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| 4-Nitrophenol                   | ND     | 1.0 |      | mg/Kg | 5  | 11/1/2006     |
| Pentachlorophenol               | ND     | 2.5 |      | mg/Kg | 5  | 11/1/2006     |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-05

Client Sample ID: B9-2'  
 Collection Date: 10/17/2006 1:45:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                        | Result | PQL      | Qual | Units | DF | Date Analyzed |
|---------------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8270C: SEMIVOLATILES |        |          |      |       |    | Analyst: BL   |
| Phenanthrene                    | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| Phenol                          | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| Pyrene                          | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| Pyridine                        | ND     | 2.5      |      | mg/Kg | 5  | 11/1/2006     |
| 1,2,4-Trichlorobenzene          | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| 2,4,5-Trichlorophenol           | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| 2,4,6-Trichlorophenol           | ND     | 1.0      |      | mg/Kg | 5  | 11/1/2006     |
| Surr: 2,4,6-Tribromophenol      | 59.2   | 35.5-141 |      | %REC  | 5  | 11/1/2006     |
| Surr: 2-Fluorobiphenyl          | 43.6   | 30.4-128 |      | %REC  | 5  | 11/1/2006     |
| Surr: 2-Fluorophenol            | 39.7   | 28.1-129 |      | %REC  | 5  | 11/1/2006     |
| Surr: 4-Terphenyl-d14           | 27.6   | 34.6-151 | S    | %REC  | 5  | 11/1/2006     |
| Surr: Nitrobenzene-d5           | 47.2   | 28.5-122 |      | %REC  | 5  | 11/1/2006     |
| Surr: Phenol-d5                 | 36.6   | 37.6-118 | S    | %REC  | 5  | 11/1/2006     |
| EPA METHOD 8260B: VOLATILES     |        |          |      |       |    | Analyst: LMM  |
| Benzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Toluene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Ethylbenzene                    | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Methyl tert-butyl ether (MTBE)  | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,4-Trimethylbenzene          | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 1,3,5-Trimethylbenzene          | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichloroethane (EDC)        | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dibromoethane (EDB)         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Naphthalene                     | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| 1-Methylnaphthalene             | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006    |
| 2-Methylnaphthalene             | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006    |
| Acetone                         | ND     | 0.75     |      | mg/Kg | 1  | 10/24/2006    |
| Bromobenzene                    | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Bromochloromethane              | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Bromodichloromethane            | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Bromoform                       | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Bromomethane                    | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| 2-Butanone                      | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006    |
| Carbon disulfide                | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006    |
| Carbon tetrachloride            | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Chlorobenzene                   | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Chloroethane                    | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Chloroform                      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Chloromethane                   | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 2-Chlorotoluene                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |

Qualifiers:

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

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

Page 17 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-05

Client Sample ID: B9-2'  
 Collection Date: 10/17/2006 1:45:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/24/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Trichlorofluoromethane      | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| Vinyl chloride              | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 18 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

|            |                       |                   |                       |
|------------|-----------------------|-------------------|-----------------------|
| CLIENT:    | Giant Refining Co     | Client Sample ID: | B9-2'                 |
| Lab Order: | 0610228               | Collection Date:  | 10/17/2006 1:45:00 PM |
| Project:   | Fan Out Area Sampling | Date Received:    | 10/20/2006            |
| Lab ID:    | 0610228-05            | Matrix:           | SOIL                  |

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Surr. 1,2-Dichloroethane-d4 | 77.2   | 62-127   |      | %REC  | 1  | 10/24/2006    |
| Surr. 4-Bromofluorobenzene  | 97.8   | 75.2-127 |      | %REC  | 1  | 10/24/2006    |
| Surr. Dibromofluoromethane  | 76.9   | 68.1-120 |      | %REC  | 1  | 10/24/2006    |
| Surr. Toluene-d8            | 104    | 74-119   |      | %REC  | 1  | 10/24/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Page 19 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-06

Client Sample ID: B9-5'  
 Collection Date: 10/17/2006 4:05:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                | Result | PQL      | Qual | Units | DF | Date Analyzed         |
|-----------------------------------------|--------|----------|------|-------|----|-----------------------|
| EPA METHOD 8015B: DIESEL RANGE ORGANICS |        |          |      |       |    | Analyst: SCC          |
| Diesel Range Organics (DRO)             | ND     | 10       |      | mg/Kg | 1  | 10/25/2006 2:40:50 AM |
| Motor Oil Range Organics (MRO)          | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 2:40:50 AM |
| Surr: DNOP                              | 87.0   | 61.7-135 |      | %REC  | 1  | 10/25/2006 2:40:50 AM |
| EPA METHOD 7471: MERCURY                |        |          |      |       |    | Analyst: MAP          |
| Mercury                                 | ND     | 0.033    |      | mg/Kg | 1  | 10/31/2006            |
| EPA METHOD 6010B: SOIL METALS           |        |          |      |       |    | Analyst: CMS          |
| Arsenic                                 | ND     | 12       |      | mg/Kg | 5  | 11/6/2006 4:38:16 PM  |
| Barium                                  | 310    | 1.0      |      | mg/Kg | 10 | 11/6/2006 5:45:25 PM  |
| Cadmium                                 | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:38:16 PM  |
| Chromium                                | 9.1    | 1.5      |      | mg/Kg | 5  | 11/6/2006 4:38:16 PM  |
| Lead                                    | 7.1    | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:38:16 PM  |
| Selenium                                | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 9:32:49 AM  |
| Silver                                  | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:38:16 PM  |
| EPA METHOD 8260B: VOLATILES             |        |          |      |       |    | Analyst: LMM          |
| Benzene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Toluene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Ethylbenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Methyl tert-butyl ether (MTBE)          | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2,4-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,3,5-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2-Dichloroethane (EDC)                | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2-Dibromoethane (EDB)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Naphthalene                             | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| 1-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006            |
| 2-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006            |
| Acetone                                 | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006            |
| Bromobenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromochloromethane                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromodichloromethane                    | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromoform                               | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromomethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| 2-Butanone                              | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006            |
| Carbon disulfide                        | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006            |
| Carbon tetrachloride                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| Chlorobenzene                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Chloroethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |

Qualifiers:

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

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

Page 20 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-06

Client Sample ID: B9-5'  
 Collection Date: 10/17/2006 4:05:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2,2-Tetrachloroethane | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

# Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-06

Client Sample ID: B9-5'  
Collection Date: 10/17/2006 4:05:00 PM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 77.0   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 98.8   | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 77.1   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 97.2   | 74-119   |      | %REC  | 1  | 10/23/2006    |

Qualifiers:

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

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



# Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-07

Client Sample ID: B10-2'  
Collection Date: 10/17/2006 3:05:00 PM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed                         |
|------------------------------------------------|--------|----------|------|-------|----|---------------------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    |                                       |
| Diesel Range Organics (DRO)                    | 63     | 10       |      | mg/Kg | 1  | Analyst: SCC<br>10/25/2006 3:15:36 AM |
| Motor Oil Range Organics (MRO)                 | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 3:15:36 AM                 |
| Surr: DNOP                                     | 87.8   | 61.7-135 |      | %REC  | 1  | 10/25/2006 3:15:36 AM                 |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    |                                       |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | Analyst: MAP<br>10/31/2006            |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    |                                       |
| Arsenic                                        | ND     | 12       |      | mg/Kg | 5  | Analyst: CMS<br>11/6/2006 4:41:15 PM  |
| Barium                                         | 280    | 1.0      |      | mg/Kg | 10 | 11/6/2006 5:51:19 PM                  |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:41:15 PM                  |
| Chromium                                       | 9.5    | 1.5      |      | mg/Kg | 5  | 11/6/2006 4:41:15 PM                  |
| Lead                                           | 8.4    | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:41:15 PM                  |
| Selenium                                       | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 9:35:35 AM                  |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:41:15 PM                  |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    |                                       |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | Analyst: LMM<br>10/23/2006            |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                            |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006                            |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006                            |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006                            |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Bromoform                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                            |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006                            |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006                            |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                            |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                            |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                            |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-07

Client Sample ID: B10-2'  
 Collection Date: 10/17/2006 3:05:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 24 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-07

Client Sample ID: B10-2'  
Collection Date: 10/17/2006 3:05:00 PM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 81.9   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 102    | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 82.8   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 92.8   | 74-119   |      | %REC  | 1  | 10/23/2006    |

## Qualifiers:

\* Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

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



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-08

Client Sample ID: B10-5'  
 Collection Date: 10/18/2006 9:15:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed         |
|------------------------------------------------|--------|----------|------|-------|----|-----------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    | Analyst: SCC          |
| Diesel Range Organics (DRO)                    | ND     | 10       |      | mg/Kg | 1  | 10/25/2006 6:09:35 AM |
| Motor Oil Range Organics (MRO)                 | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 6:09:35 AM |
| Surr: DNOP                                     | 88.0   | 61.7-135 |      | %REC  | 1  | 10/25/2006 6:09:35 AM |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    | Analyst: MAP          |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | 10/31/2006            |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    | Analyst: CMS          |
| Arsenic                                        | ND     | 12       |      | mg/Kg | 5  | 11/6/2006 4:54:20 PM  |
| Barium                                         | 230    | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:54:20 PM  |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 4:54:20 PM  |
| Chromium                                       | 9.3    | 1.5      |      | mg/Kg | 5  | 11/6/2006 4:54:20 PM  |
| Lead                                           | 6.3    | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:54:20 PM  |
| Selenium                                       | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 9:47:10 AM  |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 4:54:20 PM  |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    | Analyst: LMM          |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006            |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006            |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006            |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromoform                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006            |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006            |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 26 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-08

Client Sample ID: B10-5'  
 Collection Date: 10/18/2006 9:15:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-08

Client Sample ID: B10-5'  
Collection Date: 10/18/2006 9:15:00 AM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 83.8   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 99.6   | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 81.9   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 97.1   | 74-119   |      | %REC  | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-11

Client Sample ID: BD101806  
 Collection Date: 10/18/2006  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-11

Client Sample ID: BD101806  
Collection Date: 10/18/2006  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 84.8   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 98.5   | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 84.4   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 99.9   | 74-118   |      | %REC  | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-12

Client Sample ID: Trip Blank  
 Collection Date:  
 Date Received: 10/20/2006  
 Matrix: TRIP BLANK

| Analyses                       | Result | PQL | Qual | Units | DF | Date Analyzed |
|--------------------------------|--------|-----|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES    |        |     |      |       |    | Analyst: LMM  |
| Benzene                        | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Toluene                        | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Ethylbenzene                   | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Methyl tert-butyl ether (MTBE) | ND     | 1.5 |      | µg/L  | 1  | 10/20/2006    |
| 1,2,4-Trimethylbenzene         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,3,5-Trimethylbenzene         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dichloroethane (EDC)       | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dibromoethane (EDB)        | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Naphthalene                    | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 1-Methylnaphthalene            | ND     | 4.0 |      | µg/L  | 1  | 10/20/2006    |
| 2-Methylnaphthalene            | ND     | 4.0 |      | µg/L  | 1  | 10/20/2006    |
| Acetone                        | ND     | 10  |      | µg/L  | 1  | 10/20/2006    |
| Bromobenzene                   | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Bromochloromethane             | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Bromodichloromethane           | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Bromoform                      | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Bromomethane                   | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 2-Butanone                     | ND     | 10  |      | µg/L  | 1  | 10/20/2006    |
| Carbon disulfide               | ND     | 10  |      | µg/L  | 1  | 10/20/2006    |
| Carbon Tetrachloride           | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| Chlorobenzene                  | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Chloroethane                   | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| Chloroform                     | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Chloromethane                  | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 2-Chlorotoluene                | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 4-Chlorotoluene                | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| cis-1,2-DCE                    | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| dis-1,3-Dichloropropene        | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dibromo-3-chloropropane    | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| Dibromochloromethane           | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Dibromomethane                 | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dichlorobenzene            | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,3-Dichlorobenzene            | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,4-Dichlorobenzene            | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Dichlorodifluoromethane        | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1-Dichloroethane             | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1-Dichloroethene             | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dichloropropane            | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,3-Dichloropropane            | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 2,2-Dichloropropane            | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 32 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-12

Client Sample ID: Trip Blank  
 Collection Date:  
 Date Received: 10/20/2006  
 Matrix: TRIP BLANK

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| 1,1-Dichloropropene         | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| Hexachlorobutadiene         | ND     | 2.0      |      | µg/L  | 1  | 10/20/2006    |
| 2-Hexanone                  | ND     | 10       |      | µg/L  | 1  | 10/20/2006    |
| Isopropylbenzene            | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 4-Isopropyltoluene          | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 4-Methyl-2-pentanone        | ND     | 10       |      | µg/L  | 1  | 10/20/2006    |
| Methylene Chloride          | ND     | 3.0      |      | µg/L  | 1  | 10/20/2006    |
| n-Butylbenzene              | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| n-Propylbenzene             | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| sec-Butylbenzene            | ND     | 2.0      |      | µg/L  | 1  | 10/20/2006    |
| Styrene                     | ND     | 1.5      |      | µg/L  | 1  | 10/20/2006    |
| tert-Butylbenzene           | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| Tetrachloroethene (PCE)     | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| trans-1,2-DCE               | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| trans-1,3-Dichloropropene   | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 1,1,1-Trichloroethane       | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 1,1,2-Trichloroethane       | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| Trichloroethene (TCE)       | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| Trichlorofluoromethane      | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 1,2,3-Trichloropropane      | ND     | 2.0      |      | µg/L  | 1  | 10/20/2006    |
| Vinyl chloride              | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| Xylenes, Total              | ND     | 3.0      |      | µg/L  | 1  | 10/20/2006    |
| Surr: 1,2-Dichloroethane-d4 | 88.4   | 69.9-130 |      | %REC  | 1  | 10/20/2006    |
| Surr: 4-Bromofluorobenzene  | 113    | 75-139   |      | %REC  | 1  | 10/20/2006    |
| Surr: Dibromofluoromethane  | 89.7   | 57.3-135 |      | %REC  | 1  | 10/20/2006    |
| Surr: Toluene-d8            | 101    | 81.9-122 |      | %REC  | 1  | 10/20/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 33 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-13

Client Sample ID: B1-2'  
 Collection Date: 10/18/2006 8:55:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed                          |
|------------------------------------------------|--------|----------|------|-------|----|----------------------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    |                                        |
| Diesel Range Organics (DRO)                    | 470    | 100      |      | mg/Kg | 10 | Analyst: SCC<br>10/25/2006 10:05:08 AM |
| Motor Oil Range Organics (MRO)                 | 720    | 500      |      | mg/Kg | 10 | 10/25/2006 10:05:08 AM                 |
| Surr: DNOP                                     | 130    | 61.7-135 |      | %REC  | 10 | 10/25/2006 10:05:08 AM                 |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    |                                        |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | Analyst: MAP<br>10/31/2006             |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    |                                        |
| Arsenic                                        | ND     | 13       |      | mg/Kg | 5  | Analyst: CMS<br>11/6/2006 5:16:38 PM   |
| Barium                                         | 280    | 1.0      |      | mg/Kg | 10 | 11/6/2006 6:04:49 PM                   |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 5:16:38 PM                   |
| Chromium                                       | 11     | 1.5      |      | mg/Kg | 5  | 11/6/2006 5:16:38 PM                   |
| Lead                                           | 7.9    | 1.2      |      | mg/Kg | 5  | 11/6/2006 5:16:38 PM                   |
| Selenium                                       | ND     | 13       |      | mg/Kg | 5  | 11/7/2006 9:57:07 AM                   |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 5:16:38 PM                   |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    |                                        |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | Analyst: LMM<br>10/23/2006             |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                             |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006                             |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006                             |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006                             |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| Bromoform                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                             |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006                             |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006                             |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                             |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006                             |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006                             |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-13

Client Sample ID: B1-2'  
 Collection Date: 10/18/2006 8:55:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 35 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-13

Client Sample ID: B1-2'  
Collection Date: 10/18/2006 8:55:00 AM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 79.8   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 95.3   | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 77.4   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 92.4   | 74-119   |      | %REC  | 1  | 10/23/2006    |

Qualifiers:

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

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-14

Client Sample ID: B1-5'  
 Collection Date: 10/18/2006 11:40:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed          |
|------------------------------------------------|--------|----------|------|-------|----|------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    | Analyst: SCC           |
| Diesel Range Organics (DRO)                    | ND     | 10       |      | mg/Kg | 1  | 10/25/2006 10:39:54 AM |
| Motor Oil Range Organics (MRO)                 | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 10:39:54 AM |
| Surr: DNOP                                     | 84.9   | 61.7-135 |      | %REC  | 1  | 10/25/2006 10:39:54 AM |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    | Analyst: MAP           |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | 11/1/2006              |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    | Analyst: CMS           |
| Arsenic                                        | ND     | 12       |      | mg/Kg | 5  | 11/6/2006 1:14:42 PM   |
| Barium                                         | 300    | 1.0      |      | mg/Kg | 10 | 11/6/2006 2:36:55 PM   |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:14:42 PM   |
| Chromium                                       | 8.8    | 1.5      |      | mg/Kg | 5  | 11/6/2006 1:14:42 PM   |
| Lead                                           | 5.0    | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:14:42 PM   |
| Selenium                                       | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 10:52:08 AM  |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:14:42 PM   |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    | Analyst: LMM           |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006             |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006             |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006             |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromoform                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006             |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006             |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-14

Client Sample ID: B1-5'  
 Collection Date: 10/18/2006 11:40:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 38 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co

Client Sample ID: B1-5'

Lab Order: 0610228

Collection Date: 10/18/2006 11:40:00 AM

Project: Fan Out Area Sampling

Date Received: 10/20/2006

Lab ID: 0610228-14

Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 80.5   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 105    | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 79.9   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 101    | 74-119   |      | %REC  | 1  | 10/23/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

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

Page 39 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-15

Client Sample ID: B2-2'  
 Collection Date: 10/18/2006 2:00:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed          |
|------------------------------------------------|--------|----------|------|-------|----|------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    | Analyst: SCC           |
| Diesel Range Organics (DRO)                    | ND     | 10       |      | mg/Kg | 1  | 10/25/2006 11:49:24 AM |
| Motor Oil Range Organics (MRO)                 | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 11:49:24 AM |
| Surr. DNOP                                     | 86.8   | 61.7-135 |      | %REC  | 1  | 10/25/2006 11:49:24 AM |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    | Analyst: MAP           |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | 11/1/2006              |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    | Analyst: CMS           |
| Arsenic                                        | ND     | 13       |      | mg/Kg | 5  | 11/6/2006 1:17:38 PM   |
| Barium                                         | 260    | 1.0      |      | mg/Kg | 10 | 11/6/2006 2:39:56 PM   |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:17:38 PM   |
| Chromium                                       | 10     | 1.5      |      | mg/Kg | 5  | 11/6/2006 1:17:38 PM   |
| Lead                                           | 7.0    | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:17:38 PM   |
| Selenium                                       | ND     | 13       |      | mg/Kg | 5  | 11/7/2006 10:54:37 AM  |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:17:38 PM   |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    | Analyst: LMM           |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006             |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006             |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006             |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromolorm                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006             |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006             |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-15

Client Sample ID: B2-2'  
 Collection Date: 10/18/2006 2:00:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-15

Client Sample ID: B2-2'  
Collection Date: 10/18/2006 2:00:00 PM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 81.2   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 95.9   | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 81.7   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 88.9   | 74-119   |      | %REC  | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 42 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-16

Client Sample ID: B2-5'  
 Collection Date: 10/18/2006 3:10:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                | Result | PQL      | Qual | Units | DF | Date Analyzed          |
|-----------------------------------------|--------|----------|------|-------|----|------------------------|
| EPA METHOD 8015B: DIESEL RANGE ORGANICS |        |          |      |       |    | Analyst: SCC           |
| Diesel Range Organics (DRO)             | ND     | 10       |      | mg/Kg | 1  | 10/25/2006 12:24:12 PM |
| Motor Oil Range Organics (MRO)          | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 12:24:12 PM |
| Surr: DNOP                              | 86.6   | 61.7-135 |      | %REC  | 1  | 10/25/2006 12:24:12 PM |
| EPA METHOD 7471: MERCURY                |        |          |      |       |    | Analyst: MAP           |
| Mercury                                 | ND     | 0.033    |      | mg/Kg | 1  | 11/1/2006              |
| EPA METHOD 6010B: SOIL METALS           |        |          |      |       |    | Analyst: CMS           |
| Arsenic                                 | ND     | 12       |      | mg/Kg | 5  | 11/6/2006 1:24:42 PM   |
| Barium                                  | 290    | 1.0      |      | mg/Kg | 10 | 11/6/2006 2:42:52 PM   |
| Cadmium                                 | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:24:42 PM   |
| Chromium                                | 9.3    | 1.5      |      | mg/Kg | 5  | 11/6/2006 1:24:42 PM   |
| Lead                                    | 5.9    | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:24:42 PM   |
| Selenium                                | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 10:57:04 AM  |
| Silver                                  | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:24:42 PM   |
| EPA METHOD 8260B: VOLATILES             |        |          |      |       |    | Analyst: LMM           |
| Benzene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Toluene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Ethylbenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Methyl tert-butyl ether (MTBE)          | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2,4-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,3,5-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2-Dichloroethane (EDC)                | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2-Dibromoethane (EDB)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Naphthalene                             | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| 1-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006             |
| 2-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006             |
| Acetone                                 | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006             |
| Bromobenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromochloromethane                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromodichloromethane                    | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromoform                               | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromomethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| 2-Butanone                              | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006             |
| Carbon disulfide                        | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006             |
| Carbon tetrachloride                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| Chlorobenzene                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Chloroethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 43 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-16

Client Sample ID: B2-5'  
 Collection Date: 10/18/2006 3:10:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 44 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-16

Client Sample ID: B2-5'  
Collection Date: 10/18/2006 3:10:00 PM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses | Result | PQL | Qual | Units | DF | Date Analyzed |
|----------|--------|-----|------|-------|----|---------------|
|----------|--------|-----|------|-------|----|---------------|

## EPA METHOD 8260B: VOLATILES

Analyst: LMM

|                             |      |          |  |       |   |            |
|-----------------------------|------|----------|--|-------|---|------------|
| Trichlorofluoromethane      | ND   | 0.050    |  | mg/Kg | 1 | 10/23/2006 |
| 1,2,3-Trichloropropane      | ND   | 0.10     |  | mg/Kg | 1 | 10/23/2006 |
| Vinyl chloride              | ND   | 0.050    |  | mg/Kg | 1 | 10/23/2006 |
| Xylenes, Total              | ND   | 0.10     |  | mg/Kg | 1 | 10/23/2006 |
| Surr: 1,2-Dichloroethane-d4 | 80.9 | 62-127   |  | %REC  | 1 | 10/23/2006 |
| Surr: 4-Bromofluorobenzene  | 97.1 | 75.2-127 |  | %REC  | 1 | 10/23/2006 |
| Surr: Dibromofluoromethane  | 79.1 | 68.1-120 |  | %REC  | 1 | 10/23/2006 |
| Surr: Toluene-d8            | 99.5 | 74-119   |  | %REC  | 1 | 10/23/2006 |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 45 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-17

Client Sample ID: B3-2'  
 Collection Date: 10/18/2006 10:50:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed          |
|------------------------------------------------|--------|----------|------|-------|----|------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    | Analyst: SCC           |
| Diesel Range Organics (DRO)                    | ND     | 10       |      | mg/Kg | 1  | 10/25/2006 12:59:04 PM |
| Motor Oil Range Organics (MRO)                 | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 12:59:04 PM |
| Surr: DNOP                                     | 85.3   | 61.7-135 |      | %REC  | 1  | 10/25/2006 12:59:04 PM |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    | Analyst: MAP           |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | 11/1/2006              |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    | Analyst: CMS           |
| Arsenic                                        | ND     | 12       |      | mg/Kg | 5  | 11/6/2006 1:30:21 PM   |
| Barium                                         | 260    | 1.0      |      | mg/Kg | 10 | 11/6/2006 2:45:50 PM   |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:30:21 PM   |
| Chromium                                       | 9.0    | 1.5      |      | mg/Kg | 5  | 11/6/2006 1:30:21 PM   |
| Lead                                           | 11     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:30:21 PM   |
| Selenium                                       | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 10:59:30 AM  |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:30:21 PM   |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    | Analyst: LMM           |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006             |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006             |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006             |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromoform                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006             |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006             |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006             |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006             |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 46 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-17

Client Sample ID: B3-2'  
 Collection Date: 10/18/2006 10:50:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 47 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-17

Client Sample ID: B3-2'  
Collection Date: 10/18/2006 10:50:00 AM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 81.6   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 96.0   | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 80.9   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 90.4   | 74-119   |      | %REC  | 1  | 10/23/2006    |

Qualifiers:

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

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

Page 48 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-18

Client Sample ID: B3-5'  
 Collection Date: 10/18/2006 12:15:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                | Result | PQL      | Qual | Units | DF | Date Analyzed         |
|-----------------------------------------|--------|----------|------|-------|----|-----------------------|
| EPA METHOD 8015B: DIESEL RANGE ORGANICS |        |          |      |       |    | Analyst: SCC          |
| Diesel Range Organics (DRO)             | ND     | 10       |      | mg/Kg | 1  | 10/25/2006 1:34:07 PM |
| Motor Oil Range Organics (MRO)          | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 1:34:07 PM |
| Surr: DNOP                              | 89.1   | 61.7-135 |      | %REC  | 1  | 10/25/2006 1:34:07 PM |
| EPA METHOD 7471: MERCURY                |        |          |      |       |    | Analyst: MAP          |
| Mercury                                 | ND     | 0.033    |      | mg/Kg | 1  | 11/1/2006             |
| EPA METHOD 6010B: SOIL METALS           |        |          |      |       |    | Analyst: CMS          |
| Arsenic                                 | ND     | 12       |      | mg/Kg | 5  | 11/8/2006 1:33:18 PM  |
| Barium                                  | 290    | 1.0      |      | mg/Kg | 10 | 11/6/2006 2:48:47 PM  |
| Cadmium                                 | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:33:18 PM  |
| Chromium                                | 9.4    | 1.5      |      | mg/Kg | 5  | 11/6/2006 1:33:18 PM  |
| Lead                                    | 8.3    | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:33:18 PM  |
| Selenium                                | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 11:01:58 AM |
| Silver                                  | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:33:18 PM  |
| EPA METHOD 8260B: VOLATILES             |        |          |      |       |    | Analyst: LMM          |
| Benzene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Toluene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Ethylbenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Methyl tert-butyl ether (MTBE)          | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2,4-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,3,5-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2-Dichloroethane (EDC)                | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| 1,2-Dibromoethane (EDB)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Naphthalene                             | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| 1-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006            |
| 2-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/23/2006            |
| Acetone                                 | ND     | 0.75     |      | mg/Kg | 1  | 10/23/2006            |
| Bromobenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromochloromethane                      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromodichloromethane                    | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromoform                               | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Bromomethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| 2-Butanone                              | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006            |
| Carbon disulfide                        | ND     | 0.50     |      | mg/Kg | 1  | 10/23/2006            |
| Carbon tetrachloride                    | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |
| Chlorobenzene                           | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006            |
| Chloroethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006            |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-18

Client Sample ID: B3-5'  
 Collection Date: 10/18/2006 12:15:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/23/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/23/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/23/2006    |

Qualifiers:

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

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

Page 50 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-18

Client Sample ID: B3-5'  
Collection Date: 10/18/2006 12:15:00 PM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/23/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/23/2006    |
| Surr: 1,2-Dichloroethane-d4 | 82.8   | 62-127   |      | %REC  | 1  | 10/23/2006    |
| Surr: 4-Bromofluorobenzene  | 104    | 75.2-127 |      | %REC  | 1  | 10/23/2006    |
| Surr: Dibromofluoromethane  | 80.5   | 68.1-120 |      | %REC  | 1  | 10/23/2006    |
| Surr: Toluene-d8            | 92.9   | 74-119   |      | %REC  | 1  | 10/23/2006    |

## Qualifiers:

\* Value exceeds Maximum Contaminant Level  
E Value above quantitation range  
J Analyte detected below quantitation limits  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

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

Page 51 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-19

Client Sample ID: B4-2'  
 Collection Date: 10/18/2006 8:40:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed                         |
|------------------------------------------------|--------|----------|------|-------|----|---------------------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    |                                       |
| Diesel Range Organics (DRO)                    | ND     | 10       |      | mg/Kg | 1  | Analyst: SCC<br>10/25/2006 2:09:15 PM |
| Motor Oil Range Organics (MRO)                 | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 2:09:15 PM                 |
| Sum: DNOP                                      | 85.6   | 61.7-135 |      | %REC  | 1  | 10/25/2006 2:09:15 PM                 |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    |                                       |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | Analyst: MAP<br>11/1/2006             |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    |                                       |
| Arsenic                                        | ND     | 12       |      | mg/Kg | 5  | Analyst: CMS<br>11/6/2006 1:37:13 PM  |
| Barium                                         | 250    | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:37:13 PM                  |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:37:13 PM                  |
| Chromium                                       | 11     | 1.5      |      | mg/Kg | 5  | 11/6/2006 1:37:13 PM                  |
| Lead                                           | 8.1    | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:37:13 PM                  |
| Selenium                                       | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 11:04:25 AM                 |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:37:13 PM                  |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    |                                       |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | Analyst: LMM<br>10/24/2006            |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006                            |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006                            |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/24/2006                            |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromoform                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006                            |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006                            |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |

Qualifiers:

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

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



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-19

Client Sample ID: B4-2'  
 Collection Date: 10/18/2006 8:40:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/24/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

# Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

|            |                       |                   |                       |
|------------|-----------------------|-------------------|-----------------------|
| CLIENT:    | Giant Refining Co     | Client Sample ID: | B4-2'                 |
| Lab Order: | 0610228               | Collection Date:  | 10/18/2006 8:40:00 AM |
| Project:   | Fan Out Area Sampling | Date Received:    | 10/20/2006            |
| Lab ID:    | 0610228-19            | Matrix:           | SOIL                  |

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Surr: 1,2-Dichloroethane-d4 | 80.2   | 62-127   |      | %REC  | 1  | 10/24/2006    |
| Surr: 4-Bromofluorobenzene  | 93.0   | 75.2-127 |      | %REC  | 1  | 10/24/2006    |
| Surr: Dibromofluoromethane  | 79.3   | 68.1-120 |      | %REC  | 1  | 10/24/2006    |
| Surr: Toluene-d8            | 100    | 74-119   |      | %REC  | 1  | 10/24/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-20

Client Sample ID: B4-5'  
 Collection Date: 10/18/2006 11:15:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                | Result | PQL      | Qual | Units | DF | Date Analyzed         |
|-----------------------------------------|--------|----------|------|-------|----|-----------------------|
| EPA METHOD 8015B: DIESEL RANGE ORGANICS |        |          |      |       |    | Analyst: SCC          |
| Diesel Range Organics (DRO)             | ND     | 10       |      | mg/Kg | 1  | 10/25/2006 2:44:22 PM |
| Motor Oil Range Organics (MRO)          | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 2:44:22 PM |
| Surr: DNOP                              | 86.7   | 61.7-135 |      | %REC  | 1  | 10/25/2006 2:44:22 PM |
| EPA METHOD 7471: MERCURY                |        |          |      |       |    | Analyst: MAP          |
| Mercury                                 | ND     | 0.033    |      | mg/Kg | 1  | 11/1/2006             |
| EPA METHOD 6010B: SOIL METALS           |        |          |      |       |    | Analyst: CMS          |
| Arsenic                                 | ND     | 12       |      | mg/Kg | 5  | 11/6/2006 1:48:41 PM  |
| Barium                                  | 230    | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:48:41 PM  |
| Cadmium                                 | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:48:41 PM  |
| Chromium                                | 11     | 1.5      |      | mg/Kg | 5  | 11/6/2006 1:48:41 PM  |
| Lead                                    | 7.6    | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:48:41 PM  |
| Selenium                                | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 11:14:14 AM |
| Silver                                  | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:48:41 PM  |
| EPA METHOD 8260B: VOLATILES             |        |          |      |       |    | Analyst: LMM          |
| Benzene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Toluene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Ethylbenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Methyl tert-butyl ether (MTBE)          | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,2,4-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,3,5-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,2-Dichloroethane (EDC)                | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,2-Dibromoethane (EDB)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Naphthalene                             | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |
| 1-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006            |
| 2-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006            |
| Acetone                                 | ND     | 0.75     |      | mg/Kg | 1  | 10/24/2006            |
| Bromobenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromochloromethane                      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromodichloromethane                    | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromoform                               | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromomethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |
| 2-Butanone                              | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006            |
| Carbon disulfide                        | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006            |
| Carbon tetrachloride                    | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |
| Chlorobenzene                           | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Chloroethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-20

Client Sample ID: B4-5'  
 Collection Date: 10/18/2006 11:15:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/24/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-20

Client Sample ID: B4-5'  
Collection Date: 10/18/2006 11:15:00 AM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Surr: 1,2-Dichloroethane-d4 | 76.1   | 62-127   |      | %REC  | 1  | 10/24/2006    |
| Surr: 4-Bromofluorobenzene  | 99.4   | 75.2-127 |      | %REC  | 1  | 10/24/2006    |
| Surr: Dibromofluoromethane  | 74.4   | 68.1-120 |      | %REC  | 1  | 10/24/2006    |
| Surr: Toluene-d8            | 98.2   | 74-119   |      | %REC  | 1  | 10/24/2006    |

## Qualifiers:

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

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-21

Client Sample ID: B5-2'  
 Collection Date: 10/17/2006 3:35:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed         |
|------------------------------------------------|--------|----------|------|-------|----|-----------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    |                       |
|                                                |        |          |      |       |    | Analyst: SCC          |
| Diesel Range Organics (DRO)                    | 130    | 10       |      | mg/Kg | 1  | 10/25/2006 3:19:25 PM |
| Motor Oil Range Organics (MRO)                 | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 3:19:25 PM |
| Surr: DNOP                                     | 86.2   | 61.7-135 |      | %REC  | 1  | 10/25/2006 3:19:25 PM |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    |                       |
|                                                |        |          |      |       |    | Analyst: MAP          |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | 11/1/2006             |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    |                       |
|                                                |        |          |      |       |    | Analyst: CMS          |
| Arsenic                                        | ND     | 12       |      | mg/Kg | 5  | 11/6/2006 1:52:37 PM  |
| Barium                                         | 250    | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:52:37 PM  |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:52:37 PM  |
| Chromium                                       | 10     | 1.5      |      | mg/Kg | 5  | 11/6/2006 1:52:37 PM  |
| Lead                                           | 7.3    | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:52:37 PM  |
| Selenium                                       | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 11:16:41 AM |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:52:37 PM  |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    |                       |
|                                                |        |          |      |       |    | Analyst: LMM          |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006            |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006            |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/24/2006            |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromoform                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006            |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006            |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 58 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-21

Client Sample ID: B5-2'  
 Collection Date: 10/17/2006 3:35:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/24/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-21

Client Sample ID: B5-2'  
Collection Date: 10/17/2006 3:35:00 PM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Surr: 1,2-Dichloroethane-d4 | 76.7   | 62-127   |      | %REC  | 1  | 10/24/2006    |
| Surr: 4-Bromofluorobenzene  | 97.0   | 75.2-127 |      | %REC  | 1  | 10/24/2006    |
| Surr: Dibromofluoromethane  | 77.8   | 68.1-120 |      | %REC  | 1  | 10/24/2006    |
| Surr: Toluene-d8            | 96.3   | 74-119   |      | %REC  | 1  | 10/24/2006    |

Qualifiers:

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

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

Page 60 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-22

Client Sample ID: B5-5'  
 Collection Date: 10/18/2006 10:25:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                | Result | PQL      | Qual | Units | DF | Date Analyzed         |
|-----------------------------------------|--------|----------|------|-------|----|-----------------------|
| EPA METHOD 8015B: DIESEL RANGE ORGANICS |        |          |      |       |    | Analyst: SCC          |
| Diesel Range Organics (DRO)             | ND     | 10       |      | mg/Kg | 1  | 10/25/2006 3:54:35 PM |
| Motor Oil Range Organics (MRO)          | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 3:54:35 PM |
| Surr: DNOP                              | 85.1   | 61.7-135 |      | %REC  | 1  | 10/25/2006 3:54:35 PM |
| EPA METHOD 7471: MERCURY                |        |          |      |       |    | Analyst: MAP          |
| Mercury                                 | ND     | 0.033    |      | mg/Kg | 1  | 11/1/2006             |
| EPA METHOD 6010B: SOIL METALS           |        |          |      |       |    | Analyst: CMS          |
| Arsenic                                 | ND     | 12       |      | mg/Kg | 5  | 11/6/2006 1:55:40 PM  |
| Barium                                  | 290    | 1.0      |      | mg/Kg | 10 | 11/6/2006 2:51:43 PM  |
| Cadmium                                 | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:55:40 PM  |
| Chromium                                | 10     | 1.5      |      | mg/Kg | 5  | 11/6/2006 1:55:40 PM  |
| Lead                                    | 7.1    | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:55:40 PM  |
| Selenium                                | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 11:19:12 AM |
| Silver                                  | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:55:40 PM  |
| EPA METHOD 8260B: VOLATILES             |        |          |      |       |    | Analyst: LMM          |
| Benzene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Toluene                                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Ethylbenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Methyl tert-butyl ether (MTBE)          | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,2,4-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,3,5-Trimethylbenzene                  | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,2-Dichloroethane (EDC)                | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| 1,2-Dibromoethane (EDB)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Naphthalene                             | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |
| 1-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006            |
| 2-Methylnaphthalene                     | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006            |
| Acetone                                 | ND     | 0.75     |      | mg/Kg | 1  | 10/24/2006            |
| Bromobenzene                            | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromochloromethane                      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromodichloromethane                    | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromoform                               | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Bromomethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |
| 2-Butanone                              | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006            |
| Carbon disulfide                        | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006            |
| Carbon tetrachloride                    | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |
| Chlorobenzene                           | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006            |
| Chloroethane                            | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006            |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 61 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-22

Client Sample ID: B5-5'  
 Collection Date: 10/18/2006 10:25:00 AM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/24/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 62 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-22

Client Sample ID: B5-5'  
Collection Date: 10/18/2006 10:25:00 AM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Surr: 1,2-Dichloroethane-d4 | 83.3   | 62-127   |      | %REC  | 1  | 10/24/2006    |
| Surr: 4-Bromofluorobenzene  | 102    | 75.2-127 |      | %REC  | 1  | 10/24/2006    |
| Surr: Dibromofluoromethane  | 82.4   | 68.1-120 |      | %REC  | 1  | 10/24/2006    |
| Surr: Toluene-d8            | 97.4   | 74-119   |      | %REC  | 1  | 10/24/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 63 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-23

Client Sample ID: B6-2'  
 Collection Date: 10/18/2006 2:45:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed                         |
|------------------------------------------------|--------|----------|------|-------|----|---------------------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    |                                       |
| Diesel Range Organics (DRO)                    | ND     | 10       |      | mg/Kg | 1  | Analyst: SCC<br>10/25/2006 4:29:37 PM |
| Motor Oil Range Organics (MRO)                 | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 4:29:37 PM                 |
| Surr: DNOP                                     | 87.2   | 61.7-135 |      | %REC  | 1  | 10/25/2006 4:29:37 PM                 |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    |                                       |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | Analyst: MAP<br>11/1/2006             |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    |                                       |
| Arsenic                                        | ND     | 12       |      | mg/Kg | 5  | Analyst: CMS<br>11/6/2006 1:59:38 PM  |
| Barium                                         | 230    | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:59:38 PM                  |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 1:59:38 PM                  |
| Chromium                                       | 13     | 1.5      |      | mg/Kg | 5  | 11/6/2006 1:59:38 PM                  |
| Lead                                           | 6.8    | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:59:38 PM                  |
| Selenium                                       | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 11:21:44 AM                 |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 1:59:38 PM                  |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    |                                       |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | Analyst: LMM<br>10/24/2006            |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006                            |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006                            |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/24/2006                            |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromoform                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006                            |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006                            |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 64 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-23

Client Sample ID: B6-2'  
 Collection Date: 10/18/2006 2:45:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/24/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 65 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-23

Client Sample ID: B6-2'  
Collection Date: 10/18/2006 2:45:00 PM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Surr: 1,2-Dichloroethane-d4 | 75.8   | 62-127   |      | %REC  | 1  | 10/24/2006    |
| Surr: 4-Bromofluorobenzene  | 95.9   | 75.2-127 |      | %REC  | 1  | 10/24/2006    |
| Surr: Dibromofluoromethane  | 74.5   | 68.1-120 |      | %REC  | 1  | 10/24/2006    |
| Surr: Toluene-d8            | 97.0   | 74-119   |      | %REC  | 1  | 10/24/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 66 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-24

Client Sample ID: B6-5'  
 Collection Date: 10/18/2006 4:05:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                                       | Result | PQL      | Qual | Units | DF | Date Analyzed                         |
|------------------------------------------------|--------|----------|------|-------|----|---------------------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE ORGANICS</b> |        |          |      |       |    |                                       |
| Diesel Range Organics (DRO)                    | ND     | 10       |      | mg/Kg | 1  | Analyst: SCC<br>10/25/2006 5:04:44 PM |
| Motor Oil Range Organics (MRO)                 | ND     | 50       |      | mg/Kg | 1  | 10/25/2006 5:04:44 PM                 |
| Surr: DNOP                                     | 86.0   | 61.7-135 |      | %REC  | 1  | 10/25/2006 5:04:44 PM                 |
| <b>EPA METHOD 7471: MERCURY</b>                |        |          |      |       |    |                                       |
| Mercury                                        | ND     | 0.033    |      | mg/Kg | 1  | Analyst: MAP<br>11/1/2006             |
| <b>EPA METHOD 6010B: SOIL METALS</b>           |        |          |      |       |    |                                       |
| Arsenic                                        | ND     | 12       |      | mg/Kg | 5  | Analyst: CMS<br>11/6/2006 2:03:42 PM  |
| Barium                                         | 260    | 1.0      |      | mg/Kg | 10 | 11/6/2006 2:54:39 PM                  |
| Cadmium                                        | ND     | 0.50     |      | mg/Kg | 5  | 11/6/2006 2:03:42 PM                  |
| Chromium                                       | 9.6    | 1.5      |      | mg/Kg | 5  | 11/6/2006 2:03:42 PM                  |
| Lead                                           | 5.8    | 1.2      |      | mg/Kg | 5  | 11/6/2006 2:03:42 PM                  |
| Selenium                                       | ND     | 12       |      | mg/Kg | 5  | 11/7/2006 11:24:12 AM                 |
| Silver                                         | ND     | 1.2      |      | mg/Kg | 5  | 11/6/2006 2:03:42 PM                  |
| <b>EPA METHOD 8260B: VOLATILES</b>             |        |          |      |       |    |                                       |
| Benzene                                        | ND     | 0.050    |      | mg/Kg | 1  | Analyst: LMM<br>10/24/2006            |
| Toluene                                        | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Ethylbenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Methyl tert-butyl ether (MTBE)                 | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,2,4-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,3,5-Trimethylbenzene                         | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,2-Dichloroethane (EDC)                       | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| 1,2-Dibromoethane (EDB)                        | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Naphthalene                                    | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |
| 1-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006                            |
| 2-Methylnaphthalene                            | ND     | 0.20     |      | mg/Kg | 1  | 10/24/2006                            |
| Acetone                                        | ND     | 0.75     |      | mg/Kg | 1  | 10/24/2006                            |
| Bromobenzene                                   | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromochloromethane                             | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromodichloromethane                           | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromoform                                      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Bromomethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |
| 2-Butanone                                     | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006                            |
| Carbon disulfide                               | ND     | 0.50     |      | mg/Kg | 1  | 10/24/2006                            |
| Carbon tetrachloride                           | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |
| Chlorobenzene                                  | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006                            |
| Chloroethane                                   | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006                            |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-24

Client Sample ID: B6-5'  
 Collection Date: 10/18/2006 4:05:00 PM  
 Date Received: 10/20/2006  
 Matrix: SOIL

| Analyses                    | Result | PQL   | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |       |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Chloromethane               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Chlorotoluene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,2-DCE                 | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| cis-1,3-Dichloropropene     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| Dibromochloromethane        | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dibromomethane              | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,4-Dichlorobenzene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Dichlorodifluoromethane     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethane          | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloroethene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,3-Dichloropropane         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 2,2-Dichloropropane         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,1-Dichloropropene         | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Hexachlorobutadiene         | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 2-Hexanone                  | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Isopropylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Isopropyltoluene          | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 4-Methyl-2-pentanone        | ND     | 0.50  |      | mg/Kg | 1  | 10/24/2006    |
| Methylene chloride          | ND     | 0.15  |      | mg/Kg | 1  | 10/24/2006    |
| n-Butylbenzene              | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| n-Propylbenzene             | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| sec-Butylbenzene            | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Styrene                     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| tert-Butylbenzene           | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Tetrachloroethene (PCE)     | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,2-DCE               | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| trans-1,3-Dichloropropene   | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 0.10  |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,1-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| 1,1,2-Trichloroethane       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |
| Trichloroethene (TCE)       | ND     | 0.050 |      | mg/Kg | 1  | 10/24/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-24

Client Sample ID: B6-5'  
Collection Date: 10/18/2006 4:05:00 PM  
Date Received: 10/20/2006  
Matrix: SOIL

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| 1,2,3-Trichloropropane      | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Vinyl chloride              | ND     | 0.050    |      | mg/Kg | 1  | 10/24/2006    |
| Xylenes, Total              | ND     | 0.10     |      | mg/Kg | 1  | 10/24/2006    |
| Surr: 1,2-Dichloroethane-d4 | 75.4   | 62-127   |      | %REC  | 1  | 10/24/2006    |
| Surr: 4-Bromofluorobenzene  | 96.9   | 75.2-127 |      | %REC  | 1  | 10/24/2006    |
| Surr: Dibromofluoromethane  | 74.7   | 68.1-120 |      | %REC  | 1  | 10/24/2006    |
| Surr: Toluene-d8            | 94.3   | 74-119   |      | %REC  | 1  | 10/24/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 69 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-25

Client Sample ID: EB101806  
 Collection Date: 10/18/2006 4:30:00 PM  
 Date Received: 10/20/2006  
 Matrix: AQUEOUS

| Analyses                            | Result | PQL     | Qual | Units | DF | Date Analyzed          |
|-------------------------------------|--------|---------|------|-------|----|------------------------|
| EPA METHOD 8015B: DIESEL RANGE      |        |         |      |       |    | Analyst: SCC           |
| Diesel Range Organics (DRO)         | ND     | 1.0     |      | mg/L  | 1  | 10/25/2006 12:21:37 AM |
| Motor Oil Range Organics (MRO)      | ND     | 5.0     |      | mg/L  | 1  | 10/25/2006 12:21:37 AM |
| Sum: DNOP                           | 113    | 58-140  |      | %REC  | 1  | 10/25/2006 12:21:37 AM |
| EPA METHOD 7470: MERCURY            |        |         |      |       |    | Analyst: CMS           |
| Mercury                             | ND     | 0.00020 |      | mg/L  | 1  | 11/1/2006              |
| EPA 6010B: TOTAL RECOVERABLE METALS |        |         |      |       |    | Analyst: NMO           |
| Arsenic                             | ND     | 0.020   |      | mg/L  | 1  | 10/24/2006 11:00:03 AM |
| Barium                              | ND     | 0.020   |      | mg/L  | 1  | 10/24/2006 11:00:03 AM |
| Cadmium                             | ND     | 0.0020  |      | mg/L  | 1  | 10/24/2006 11:00:03 AM |
| Chromium                            | ND     | 0.0060  |      | mg/L  | 1  | 10/24/2006 11:00:03 AM |
| Lead                                | ND     | 0.0050  |      | mg/L  | 1  | 10/24/2006 11:00:03 AM |
| Selenium                            | ND     | 0.050   |      | mg/L  | 1  | 10/24/2006 11:00:03 AM |
| Silver                              | ND     | 0.0050  |      | mg/L  | 1  | 10/24/2006 11:00:03 AM |
| EPA METHOD 8260B: VOLATILES         |        |         |      |       |    | Analyst: LMM           |
| Benzene                             | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Toluene                             | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Ethylbenzene                        | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Methyl tert-butyl ether (MTBE)      | ND     | 1.5     |      | µg/L  | 1  | 10/20/2006             |
| 1,2,4-Trimethylbenzene              | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| 1,3,5-Trimethylbenzene              | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| 1,2-Dichloroethane (EDC)            | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| 1,2-Dibromoethane (EDB)             | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Naphthalene                         | ND     | 2.0     |      | µg/L  | 1  | 10/20/2006             |
| 1-Methylnaphthalene                 | ND     | 4.0     |      | µg/L  | 1  | 10/20/2006             |
| 2-Methylnaphthalene                 | ND     | 4.0     |      | µg/L  | 1  | 10/20/2006             |
| Acetone                             | ND     | 10      |      | µg/L  | 1  | 10/20/2006             |
| Bromobenzene                        | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Bromochloromethane                  | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Bromodichloromethane                | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Bromoform                           | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Bromomethane                        | ND     | 2.0     |      | µg/L  | 1  | 10/20/2006             |
| 2-Butanone                          | ND     | 10      |      | µg/L  | 1  | 10/20/2006             |
| Carbon disulfide                    | ND     | 10      |      | µg/L  | 1  | 10/20/2006             |
| Carbon Tetrachloride                | ND     | 2.0     |      | µg/L  | 1  | 10/20/2006             |
| Chlorobenzene                       | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Chloroethane                        | ND     | 2.0     |      | µg/L  | 1  | 10/20/2006             |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 70 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-25

Client Sample ID: EB101806  
 Collection Date: 10/18/2006 4:30:00 PM  
 Date Received: 10/20/2006  
 Matrix: AQUEOUS

| Analyses                    | Result | PQL | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-----|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |     |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Chloromethane               | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 2-Chlorotoluene             | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 4-Chlorotoluene             | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| cis-1,2-DCE                 | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| cis-1,3-Dichloropropene     | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| Dibromochloromethane        | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Dibromomethane              | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dichlorobenzene         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,3-Dichlorobenzene         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,4-Dichlorobenzene         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Dichlorodifluoromethane     | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1-Dichloroethane          | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1-Dichloroethene          | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dichloropropane         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,3-Dichloropropane         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 2,2-Dichloropropane         | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1-Dichloropropene         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Hexachlorobutadiene         | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 2-Hexanone                  | ND     | 10  |      | µg/L  | 1  | 10/20/2006    |
| Isopropylbenzene            | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 4-Isopropyltoluene          | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 4-Methyl-2-pentanone        | ND     | 10  |      | µg/L  | 1  | 10/20/2006    |
| Methylene Chloride          | ND     | 3.0 |      | µg/L  | 1  | 10/20/2006    |
| n-Butylbenzene              | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| n-Propylbenzene             | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| sec-Butylbenzene            | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| Styrene                     | ND     | 1.5 |      | µg/L  | 1  | 10/20/2006    |
| tert-Butylbenzene           | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Tetrachloroethene (PCE)     | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| trans-1,2-DCE               | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| trans-1,3-Dichloropropene   | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1,1-Trichloroethane       | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1,2-Trichloroethane       | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Trichloroethene (TCE)       | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value above quantitation range  
 J Analyte detected below quantitation limits  
 ND Not Detected at the Reporting Limit  
 S Spike recovery outside accepted recovery limits

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

Page 71 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co

Client Sample ID: EB101806

Lab Order: 0610228

Collection Date: 10/18/2006 4:30:00 PM

Project: Fan Out Area Sampling

Date Received: 10/20/2006

Lab ID: 0610228-25

Matrix: AQUEOUS

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 1,2,3-Trichloropropane      | ND     | 2.0      |      | µg/L  | 1  | 10/20/2006    |
| Vinyl chloride              | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| Xylenes, Total              | ND     | 3.0      |      | µg/L  | 1  | 10/20/2006    |
| Surr: 1,2-Dichloroethane-d4 | 87.9   | 69.9-130 |      | %REC  | 1  | 10/20/2006    |
| Surr: 4-Bromofluorobenzene  | 102    | 75-139   |      | %REC  | 1  | 10/20/2006    |
| Surr: Dibromofluoromethane  | 88.3   | 57.3-135 |      | %REC  | 1  | 10/20/2006    |
| Surr: Toluene-d8            | 105    | 81.9-122 |      | %REC  | 1  | 10/20/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 72 of 75



## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
 Lab Order: 0610228  
 Project: Fan Out Area Sampling  
 Lab ID: 0610228-26

Client Sample ID: EB101706  
 Collection Date: 10/17/2006 5:20:00 PM  
 Date Received: 10/20/2006  
 Matrix: AQUEOUS

| Analyses                                   | Result | PQL     | Qual | Units | DF | Date Analyzed          |
|--------------------------------------------|--------|---------|------|-------|----|------------------------|
| <b>EPA METHOD 8015B: DIESEL RANGE</b>      |        |         |      |       |    | Analyst: SCC           |
| Diesel Range Organics (DRO)                | ND     | 1.0     |      | mg/L  | 1  | 10/25/2006 12:56:23 AM |
| Motor Oil Range Organics (MRO)             | ND     | 5.0     |      | mg/L  | 1  | 10/25/2006 12:56:23 AM |
| Sum: DNOP                                  | 112    | 58-140  |      | %REC  | 1  | 10/25/2006 12:56:23 AM |
| <b>EPA METHOD 7470: MERCURY</b>            |        |         |      |       |    | Analyst: CMS           |
| Mercury                                    | ND     | 0.00020 |      | mg/L  | 1  | 11/1/2006              |
| <b>EPA 6010B: TOTAL RECOVERABLE METALS</b> |        |         |      |       |    | Analyst: NMO           |
| Arsenic                                    | ND     | 0.020   |      | mg/L  | 1  | 10/24/2006 11:03:04 AM |
| Barium                                     | ND     | 0.020   |      | mg/L  | 1  | 10/24/2006 11:03:04 AM |
| Cadmium                                    | ND     | 0.0020  |      | mg/L  | 1  | 10/24/2006 11:03:04 AM |
| Chromium                                   | ND     | 0.0060  |      | mg/L  | 1  | 10/24/2006 11:03:04 AM |
| Lead                                       | ND     | 0.0050  |      | mg/L  | 1  | 10/24/2006 11:03:04 AM |
| Selenium                                   | ND     | 0.050   |      | mg/L  | 1  | 10/24/2006 11:03:04 AM |
| Silver                                     | ND     | 0.0050  |      | mg/L  | 1  | 10/24/2006 11:03:04 AM |
| <b>EPA METHOD 8260B: VOLATILES</b>         |        |         |      |       |    | Analyst: LMM           |
| Benzene                                    | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Toluene                                    | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Ethylbenzene                               | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Methyl tert-butyl ether (MTBE)             | ND     | 1.5     |      | µg/L  | 1  | 10/20/2006             |
| 1,2,4-Trimethylbenzene                     | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| 1,3,5-Trimethylbenzene                     | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| 1,2-Dichloroethane (EDC)                   | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| 1,2-Dibromoethane (EDB)                    | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Naphthalene                                | ND     | 2.0     |      | µg/L  | 1  | 10/20/2006             |
| 1-Methylnaphthalene                        | ND     | 4.0     |      | µg/L  | 1  | 10/20/2006             |
| 2-Methylnaphthalene                        | ND     | 4.0     |      | µg/L  | 1  | 10/20/2006             |
| Acetone                                    | ND     | 10      |      | µg/L  | 1  | 10/20/2006             |
| Bromobenzene                               | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Bromochloromethane                         | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Bromodichloromethane                       | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Bromoform                                  | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Bromomethane                               | ND     | 2.0     |      | µg/L  | 1  | 10/20/2006             |
| 2-Butanone                                 | ND     | 10      |      | µg/L  | 1  | 10/20/2006             |
| Carbon disulfide                           | ND     | 10      |      | µg/L  | 1  | 10/20/2006             |
| Carbon Tetrachloride                       | ND     | 2.0     |      | µg/L  | 1  | 10/20/2006             |
| Chlorobenzene                              | ND     | 1.0     |      | µg/L  | 1  | 10/20/2006             |
| Chloroethane                               | ND     | 2.0     |      | µg/L  | 1  | 10/20/2006             |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 73 of 75

# Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Lab Order: 0610228  
Project: Fan Out Area Sampling  
Lab ID: 0610228-26

Client Sample ID: EB101706  
Collection Date: 10/17/2006 5:20:00 PM  
Date Received: 10/20/2006  
Matrix: AQUEOUS

| Analyses                    | Result | PQL | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|-----|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |     |      |       |    | Analyst: LMM  |
| Chloroform                  | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Chloromethane               | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 2-Chlorotoluene             | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 4-Chlorotoluene             | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| cis-1,2-DCE                 | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| cis-1,3-Dichloropropene     | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dibromo-3-chloropropane | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| Dibromochloromethane        | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Dibromomethane              | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dichlorobenzene         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,3-Dichlorobenzene         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,4-Dichlorobenzene         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Dichlorodifluoromethane     | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1-Dichloroethane          | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1-Dichloroethene          | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2-Dichloropropane         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,3-Dichloropropane         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 2,2-Dichloropropane         | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1-Dichloropropene         | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Hexachlorobutadiene         | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| 2-Hexanone                  | ND     | 10  |      | µg/L  | 1  | 10/20/2006    |
| Isopropylbenzene            | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 4-Isopropyltoluene          | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 4-Methyl-2-pentanone        | ND     | 10  |      | µg/L  | 1  | 10/20/2006    |
| Methylene Chloride          | ND     | 3.0 |      | µg/L  | 1  | 10/20/2006    |
| n-Butylbenzene              | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| n-Propylbenzene             | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| sec-Butylbenzene            | ND     | 2.0 |      | µg/L  | 1  | 10/20/2006    |
| Styrene                     | ND     | 1.5 |      | µg/L  | 1  | 10/20/2006    |
| tert-Butylbenzene           | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1,1,2-Tetrachloroethane   | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1,2,2-Tetrachloroethane   | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Tetrachloroethene (PCE)     | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| trans-1,2-DCE               | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| trans-1,3-Dichloropropene   | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2,3-Trichlorobenzene      | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,2,4-Trichlorobenzene      | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1,1-Trichloroethane       | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| 1,1,2-Trichloroethane       | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |
| Trichloroethene (TCE)       | ND     | 1.0 |      | µg/L  | 1  | 10/20/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

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

Page 74 of 75

## Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co

Client Sample ID: EB101706

Lab Order: 0610228

Collection Date: 10/17/2006 5:20:00 PM

Project: Fan Out Area Sampling

Date Received: 10/20/2006

Lab ID: 0610228-26

Matrix: AQUEOUS

| Analyses                    | Result | PQL      | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|---------------|
| EPA METHOD 8260B: VOLATILES |        |          |      |       |    | Analyst: LMM  |
| Trichlorofluoromethane      | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| 1,2,3-Trichloropropane      | ND     | 2.0      |      | µg/L  | 1  | 10/20/2006    |
| Vinyl chloride              | ND     | 1.0      |      | µg/L  | 1  | 10/20/2006    |
| Xylenes, Total              | ND     | 3.0      |      | µg/L  | 1  | 10/20/2006    |
| Surr: 1,2-Dichloroethane-d4 | 84.1   | 69.9-130 |      | %REC  | 1  | 10/20/2006    |
| Surr: 4-Bromofluorobenzene  | 110    | 75-139   |      | %REC  | 1  | 10/20/2006    |
| Surr: Dibromofluoromethane  | 84.9   | 57.3-135 |      | %REC  | 1  | 10/20/2006    |
| Surr: Toluene-d8            | 101    | 81.9-122 |      | %REC  | 1  | 10/20/2006    |

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

B Analyte detected in the associated Method Blank

H Holding times for preparation or analysis exceeded

MCL Maximum Contaminant Level

RL Reporting Limit

Page 75 of 75



## Energy Laboratories Inc

### Sample Receipt Checklist

Client Name Hall Environmental-Albuquerque

Date and Time Received: 10/24/2006

Work Order Number B06101716

Received by klm

Login completed by: Krystal McDonald

10/24/2006

Reviewed by Denise Ruby

10/25/2006

Signature

Date

Initials

Date

Carrier name FedEx

|                                                         |                                         |                                        |                                                            |
|---------------------------------------------------------|-----------------------------------------|----------------------------------------|------------------------------------------------------------|
| Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | Not Present <input type="checkbox"/>                       |
| Custody seals intact on shipping container/cooler?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | Not Present <input type="checkbox"/>                       |
| Custody seals intact on sample bottles?                 | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | Not Present <input type="checkbox"/>                       |
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                            |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                            |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                            |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                            |
| Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                            |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                            |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            |                                                            |
| Container/Temp Blank temperature in compliance?         | Yes <input type="checkbox"/>            | No <input checked="" type="checkbox"/> | 14 °C                                                      |
| Water - VOA vials have zero headspace?                  | Yes <input type="checkbox"/>            | No <input type="checkbox"/>            | No VOA vials submitted <input checked="" type="checkbox"/> |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/>            | Not Applicable <input type="checkbox"/>                    |

Adjusted? \_\_\_\_\_

Checked by \_\_\_\_\_

Contact and Corrective Action Comments:

None



# CHAIN-OF-CUSTODY RECORD

Hall Environmental Analysis Laboratory, Inc

4901 Hawkins NE, Suite D

Albuquerque, New Mexico 87109-4372

TEL: 5053453975

FAX: 5053454107

**Subcontractor:**

Energy Labs

2393 Sall Creek Highway

Casper, WY 82601

TEL: (888) 235-0515

FAX: (307) 234-1639

Acct #:

Project Name 0610228

23-Oct-06

| Lab ID      | Client Sample ID | Matrix | Collection Date       | Bottle Type | Requested Tests |
|-------------|------------------|--------|-----------------------|-------------|-----------------|
| 0610228-01C | B7-2'            | Soil   | 10/17/2006 3:45:00 PM | 4OZGU       | SEE BELOW       |
| 0610228-02C | B7-5'            | Soil   | 10/18/2006 9:50:00 AM | 4OZGU       | SEE BELOW       |
| 0610228-03C | B8-2'            | Soil   | 10/17/2006 2:15:00 PM | 4OZGU       | SEE BELOW       |
| 0610228-04C | B8-5'            | Soil   | 10/17/2006 4:50:00 PM | 4OZGU       | SEE BELOW       |
| 0610228-05C | B9-2'            | Soil   | 10/17/2006 1:45:00 PM | 4OZGU       | SEE BELOW       |
| 0610228-06C | B9-5'            | Soil   | 10/17/2006 4:05:00 PM | 4OZGU       | SEE BELOW       |
| 0610228-07C | B10-2'           | Soil   | 10/17/2006 3:05:00 PM | 4OZGU       | SEE BELOW       |
| 0610228-08C | B10-5'           | Soil   | 10/18/2006 9:15:00 AM | 4OZGU       | SEE BELOW       |

1306101716-1  
2  
3  
4  
5  
6  
7

**ANALYTICAL COMMENTS:**  
TOTAL CYANIDE

Comments: Standard TAT. Please fax (505) 345-4107 results when completed, or email to lab@hallenvironmental.com. Thank you.

*Christina Samuel*

Relinquished by:

Relinquished by:

Date/Time 10/23/06

Received by:

Received by:

10/24/06  
042

140 Fed Ex AYS OVERNIGHT

# CHAIN-OF-CUSTODY RECORD

Full Environmental Analysis Laboratory, Inc.

4901 Hawkins NE, Suite D  
Albuquerque, New Mexico 87109-4372

TEL: 5053453975 FAX: 5053454107

## Subcontractor:

Energy Labs  
2393 Salt Creek Highway  
Casper, WY 82601

TEL: (888) 235-0515  
FAX: (307) 234-1639  
Acct #:

Project Name 0610228

23-Oct-06

| Lab ID      | Client Sample ID | Matrix | Collection Date        | Bottle Type | Requested Tests         |
|-------------|------------------|--------|------------------------|-------------|-------------------------|
| 0610228-09C | MS               | Soil   | 10/18/2006             | 4OZGU       | SEE BELOW 12ULL101714-9 |
| 0610228-10C | MSD              | Soil   | 10/18/2006             | 4OZGU       | SEE BELOW 10            |
| 0610228-11C | BD101806         | Soil   | 10/18/2006             | 4OZGU       | SEE BELOW 11            |
| 0610228-13C | B1-2'            | Soil   | 10/18/2006 8:55:00 AM  | 4OZGU       | SEE BELOW 12            |
| 0610228-14C | B1-5'            | Soil   | 10/18/2006 11:40:00 AM | 4OZGU       | SEE BELOW 13            |
| 0610228-15C | B2-2'            | Soil   | 10/18/2006 2:00:00 PM  | 4OZGU       | SEE BELOW 14            |
| 0610228-16C | B2-5'            | Soil   | 10/18/2006 3:10:00 PM  | 4OZGU       | SEE BELOW 15            |
| 0610228-17C | B3-2'            | Soil   | 10/18/2006 10:50:00 AM | 4OZGU       | SEE BELOW 17            |

ANALYTICAL TOTAL CYANIDE  
COMMENTS:

Comments: Standard TAT. Please fax (505) 345-4107 results when completed, or email to [lab@hallenenvironmental.com](mailto:lab@hallenenvironmental.com). Thank you.

Relinquished by: *[Signature]* Date/Time: 10/23/06 16:50  
Received by: *[Signature]* Date/Time: 10/24/06 09:00  
Relinquished by:

# Hall Environmental Analysis Laboratory, Inc

4901 Hawkins NE, Suite D  
Albuquerque, New Mexico 87109-4372

TEL: 5053453975

FAX: 5053454107

# CHAIN-OF-CUSTODY RECORD

Page 3 of 4

## Subcontractor:

Energy Labs  
2393 Sall Creek Highway  
Casper, WY 82601

TEL: (888) 235-0515

FAX: (307) 234-1639

Acct #:

Project Name 0610228

23-Oct-06

| Lab ID      | Client Sample ID | Matrix  | Collection Date        | Bottle Type  | Requested Tests              |
|-------------|------------------|---------|------------------------|--------------|------------------------------|
| 0610228-18C | B3-5"            | Soil    | 10/18/2006 12:15:00 PM | 4OZGU        | SEE BELOW 10/20/06 1716-1817 |
| 0610228-19C | B4-2"            | Soil    | 10/18/2006 8:40:00 AM  | 4OZGU        | SEE BELOW 1718               |
| 0610228-20C | B4-5"            | Soil    | 10/18/2006 11:15:00 AM | 4OZGU        | SEE BELOW 2019               |
| 0610228-21C | B5-2"            | Soil    | 10/17/2006 3:35:00 PM  | 4OZGU        | SEE BELOW 2126               |
| 0610228-22C | B5-5"            | Soil    | 10/18/2006 10:25:00 AM | 4OZGU        | SEE BELOW 2521               |
| 0610228-23C | B6-2"            | Soil    | 10/18/2006 2:45:00 PM  | 4OZGU        | SEE BELOW 2312               |
| 0610228-24C | B6-5"            | Soil    | 10/18/2006 4:05:00 PM  | 4OZGU        | SEE BELOW 2423               |
| 0610228-25C | EB101806         | Aqueous | 10/18/2006 4:30:00 PM  | 250HDPE-NAOH | SEE BELOW 2524               |

## ANALYTICAL COMMENTS: TOTAL CYANIDE

Comments: Standard TAT. Please fax (505) 345-4107 results when completed, or email to lab@hallenvironmental.com. Thank you.



Relinquished by:

Relinquished by:

Date/Time  
10/23/06

Received by:

Received by: (Signature) 10/24/06

Date/Time

Hall Environmental Analysis Laboratory, Inc.  
4901 Hawkins NE, Suite D  
Albuquerque, New Mexico 87109-4372

TEL: 5053453975

FAX: 5053454107

## CHAIN-OF-CUSTODY RECORD

Page 4 of 4

**Subcontractor:**

Energy Labs  
2393 Sall Creek Highway  
Casper, WY 82601

TEL: (888) 235-0515  
FAX: (307) 234-1639  
Acct #:

Project Name 0610228

23-Oct-06

| Lab ID      | Client Sample ID | Matrix  | Collection Date       | Bottle Type  | Requested Tests          |
|-------------|------------------|---------|-----------------------|--------------|--------------------------|
| 0610228-26C | EB101706         | Aqueous | 10/17/2006 5:20:00 PM | 250HDPE-NAOH | SEE BELOW 30LID1716-2625 |

**ANALYTICAL  
COMMENTS:**

TOTAL CYANIDE

Comments: Standard TAT. Please fax (505) 345-4107 results when completed, or email to [lab@hallenvironmental.com](mailto:lab@hallenvironmental.com). Thank you.

Relinquished by:

Relinquished by:

Date/Time 10/23/06

Date/Time 10/30

Received by: [Signature]

Received by: [Signature]

Date/Time

10/24/06 [Signature]





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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-001  
Client Sample ID: 0610228-01C-B7-2 ft

Report Date: 11/08/06  
Collection Date: 10/17/06 15:45  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:05 / kjp |

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-002  
Client Sample ID: 0610228-02C-B7-5 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 09:50  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06-15:12 / ljp |

Report: RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-003  
Client Sample ID: 0610228-03C-B8-2 ft

Report Date: 11/08/06  
Collection Date: 10/17/06 14:15  
Date Received: 10/24/06  
Matrix: Soil

| Analyses                  | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|---------------------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE<br>Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06-15:14 / ljp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-004  
Client Sample ID: 0610228-04C-B8-5 ft

Report Date: 11/08/06  
Collection Date: 10/17/06 16:50  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By  |
|----------------|--------|-------|------------|-----|-------------|--------|---------------------|
| CYANIDE        |        |       |            |     |             |        |                     |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:16 /kjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-005  
Client Sample ID: 0610228-05C-B9-2 ft

Report Date: 11/08/06  
Collection Date: 10/17/06 13:45  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:18 / hjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



## LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-006  
Client Sample ID: 0610228-06C-B9-5 ft

Report Date: 11/08/06  
Collection Date: 10/17/06 16:05  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:19 / kjp |

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-007  
Client Sample ID: 0610228-07C-B10-2 ft

Report Date: 11/08/06  
Collection Date: 10/17/06 15:05  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:21 / kjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-008  
Client Sample ID: 0610228-08C-B10-5 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 09:15  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:23 / kjp |

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-009  
Client Sample ID: 0610228-09C-MS

Report Date: 11/08/06  
Collection Date: 10/18/06  
Date Received: 10/24/06  
Matrix: Soil

| Analyses                  | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|---------------------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE<br>Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06-15:25 / ljp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-010  
Client Sample ID: 0610228-10C-MSD

Report Date: 11/08/06  
Collection Date: 10/18/06  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/26/06 15:42 / kjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-011  
Client Sample ID: 0610228-11C-BD101806

Report Date: 11/08/06  
Collection Date: 10/18/06  
Date Received: 10/24/06  
Matrix: Soil

| Analyses                  | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|---------------------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE<br>Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/26/06 15:43 / kjp |

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

## LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-012  
Client Sample ID: 0610228-13C-B1-2 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 08:55  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/26/06 15:45 / krp |

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-013  
Client Sample ID: 0610228-14C-B1-5 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 11:40  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:38 / kjp |

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-014  
Client Sample ID: 0610228-15C-B2-2 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 14:00  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date /By    |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:40 / kip |

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-015  
Client Sample ID: 0610228-16C-B2-5 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 15:10  
Date Received: 10/24/06  
Matrix: Soil

| Analyses                  | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|---------------------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE<br>Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:41 / kjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-016  
Client Sample ID: 0610228-17C-B3-2 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 10:50  
Date Received: 10/24/06  
Matrix: Soil

| Analyses                  | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|---------------------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE<br>Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:43 / ljp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



# LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-017  
Client Sample ID: 0610228-18C-B3-5 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 12:15  
Date Received: 10/24/06  
Matrix: Soil

| Analyses                  | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|---------------------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE<br>Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:45 / kjp |

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-018  
Client Sample ID: 0610228-19C-B4-2 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 08:40  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 15:47 / tjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

## LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-019  
Client Sample ID: 0610228-20C-B4-5 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 11:15  
Date Received: 10/24/06  
Matrix: Soil

| Analyses                  | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date /By    |
|---------------------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE<br>Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 16:01 / kip |

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-020  
Client Sample ID: 0610228-21C-B5-2 ft

Report Date: 11/08/06  
Collection Date: 10/17/06 15:35  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 16:03 / kjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-021  
Client Sample ID: 0610228-22C-B5-5 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 10:25  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 16:10 / kjp |

Report Definitions: RL - Analyte reporting limit.  
QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-022  
Client Sample ID: 0610228-23C-B6-2 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 14:45  
Date Received: 10/24/06  
Matrix: Soil

| Analyses       | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|----------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE        |        |       |            |     |             |        |                      |
| Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 16:12 / kjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.





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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-023  
Client Sample ID: 0610228-24C-B6-5 ft

Report Date: 11/08/06  
Collection Date: 10/18/06 16:05  
Date Received: 10/24/06  
Matrix: Soil

| Analyses                  | Result | Units | Qualifiers | RL  | MCL/<br>QCL | Method | Analysis Date / By   |
|---------------------------|--------|-------|------------|-----|-------------|--------|----------------------|
| CYANIDE<br>Cyanide, Total | ND     | mg/kg |            | 0.5 |             | SW9012 | 10/25/06 16:14 / kjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-024  
Client Sample ID: 0610228-25C-EB101806

Report Date: 11/08/06  
Collection Date: 10/18/06 16:30  
Date Received: 10/24/06  
Matrix: Aqueous

| Analyses                           | Result | Units | Qualifiers | RL    | MCL/<br>QCL | Method | Analysis Date / By   |
|------------------------------------|--------|-------|------------|-------|-------------|--------|----------------------|
| <b>INORGANICS</b>                  |        |       |            |       |             |        |                      |
| Cyanide, Total Manual Distillation | ND     | mg/L  |            | 0.005 |             | E335.4 | 10/26/06 11:29 / kjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



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

### LABORATORY ANALYTICAL REPORT

Client: Hall Environmental-Albuquerque  
Project: 0610228  
Lab ID: B06101716-025  
Client Sample ID: 0610228-026C EB101706

Report Date: 11/08/06  
Collection Date: 10/17/06 17:20  
Date Received: 10/24/06  
Matrix: Aqueous

| Analyses                           | Result | Units | Qualifiers | RL    | MCL/<br>QCL | Method | Analysis Date / By   |
|------------------------------------|--------|-------|------------|-------|-------------|--------|----------------------|
| <b>INORGANICS</b>                  |        |       |            |       |             |        |                      |
| Cyanide, Total Manual Distillation | ND     | mg/L  |            | 0.005 |             | E335.4 | 10/26/06 11:31 / kjp |

Report RL - Analyte reporting limit.  
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.  
ND - Not detected at the reporting limit.



## QA/QC Summary Report

Client: Hall Environmental-Albuquerque

Project: 0610228

Report Date: 11/02/06

Work Order: B06101716

| Analyte                            | Result                        | Units                      | RL     | %REC | Low Limit | High Limit               | RPD | RPDLimit | Qual           |
|------------------------------------|-------------------------------|----------------------------|--------|------|-----------|--------------------------|-----|----------|----------------|
| Method: E335.4                     |                               | Batch: A2006-10-26_4_CN_01 |        |      |           |                          |     |          |                |
| Sample ID: LFB-4                   | Laboratory Fortified Blank    |                            |        |      |           | Run: AUTOAN201-B_061026A |     |          | 10/26/06 11:13 |
| Cyanide, Total Manual Distillation | 0.101                         | mg/L                       | 0.0050 | 99   | 90        | 110                      |     |          |                |
| Sample ID: MBLK-5                  | Method Blank                  |                            |        |      |           | Run: AUTOAN201-B_061026A |     |          | 10/26/06 11:14 |
| Cyanide, Total Manual Distillation | 0.002                         | mg/L                       | 0.001  |      |           |                          |     |          |                |
| Sample ID: B06101716-025AMS        | Sample Matrix Spike           |                            |        |      |           | Run: AUTOAN201-B_061026A |     |          | 10/26/06 11:33 |
| Cyanide, Total Manual Distillation | 0.108                         | mg/L                       | 0.0050 | 108  | 90        | 110                      |     |          |                |
| Sample ID: B06101716-025AMSD       | Sample Matrix Spike Duplicate |                            |        |      |           | Run: AUTOAN201-B_061026A |     |          | 10/26/06 11:35 |
| Cyanide, Total Manual Distillation | 0.108                         | mg/L                       | 0.0050 | 108  | 90        | 110                      | 0.5 | 10       |                |
| Method: SW9012                     |                               | Batch: 23907               |        |      |           |                          |     |          |                |
| Sample ID: B06101716-001AMS        | Sample Matrix Spike           |                            |        |      |           | Run: AUTOAN201-B_061025A |     |          | 10/25/06 15:07 |
| Cyanide, Total                     | 4.75                          | mg/kg                      | 0.50   | 95   | 50        | 150                      |     |          |                |
| Sample ID: B06101716-001AMSD       | Sample Matrix Spike Duplicate |                            |        |      |           | Run: AUTOAN201-B_061025A |     |          | 10/25/06 15:09 |
| Cyanide, Total                     | 4.73                          | mg/kg                      | 0.50   | 95   | 50        | 150                      | 0.5 | 30       |                |
| Sample ID: B06101716-018AMS        | Sample Matrix Spike           |                            |        |      |           | Run: AUTOAN201-B_061025A |     |          | 10/25/06 15:49 |
| Cyanide, Total                     | 4.50                          | mg/kg                      | 0.50   | 90   | 50        | 150                      |     |          |                |
| Sample ID: B06101716-018AMSD       | Sample Matrix Spike Duplicate |                            |        |      |           | Run: AUTOAN201-B_061025A |     |          | 10/25/06 15:57 |
| Cyanide, Total                     | 3.60                          | mg/kg                      | 0.50   | 72   | 50        | 150                      | 22  | 30       |                |
| Method: SW9012                     |                               | Batch: 23932               |        |      |           |                          |     |          |                |
| Sample ID: B06101716-012AMS        | Sample Matrix Spike           |                            |        |      |           | Run: AUTOAN201-B_061026B |     |          | 10/26/06 15:47 |
| Cyanide, Total                     | 4.60                          | mg/kg                      | 0.50   | 92   | 50        | 150                      |     |          |                |
| Sample ID: B06101716-012AMSD       | Sample Matrix Spike Duplicate |                            |        |      |           | Run: AUTOAN201-B_061026B |     |          | 10/26/06 15:49 |
| Cyanide, Total                     | 4.72                          | mg/kg                      | 0.50   | 94   | 50        | 150                      | 2.5 | 30       |                |
| Sample ID: MBLK-35                 | Method Blank                  |                            |        |      |           | Run: AUTOAN201-B_061026B |     |          | 10/26/06 16:33 |
| Cyanide, Total                     | ND                            | mg/kg                      | 0.1    |      |           |                          |     |          |                |
| Sample ID: LCS-36                  | Laboratory Control Sample     |                            |        |      |           | Run: AUTOAN201-B_061026B |     |          | 10/26/06 16:35 |
| Cyanide, Total                     | 8.05                          | mg/kg                      | 0.50   | 107  | 90        | 110                      |     |          |                |

### Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

| Analyte                        | Result | Units | PQL | %Rec | LowLimit        | HighLimit                            | %RPD   | RPDLimit | Qual |
|--------------------------------|--------|-------|-----|------|-----------------|--------------------------------------|--------|----------|------|
| Method: SW8015                 |        |       |     |      |                 |                                      |        |          |      |
| Sample ID: 0610228-08BMSD      |        | MSD   |     |      | Batch ID: 11545 | Analysis Date: 10/25/2006 7:19:14 AM |        |          |      |
| Diesel Range Organics (DRO)    | 57.02  | mg/Kg | 10  | 114  | 67.4            | 117                                  | 0.0666 | 17.4     |      |
| Sample ID: MB-11532            |        | MBLK  |     |      | Batch ID: 11532 | Analysis Date: 10/20/2006 7:33:32 AM |        |          |      |
| Diesel Range Organics (DRO)    | ND     | mg/Kg | 10  |      |                 |                                      |        |          |      |
| Motor Oil Range Organics (MRO) | ND     | mg/Kg | 50  |      |                 |                                      |        |          |      |
| Sample ID: MB-11545            |        | MBLK  |     |      | Batch ID: 11545 | Analysis Date: 10/25/2006 3:50:23 AM |        |          |      |
| Diesel Range Organics (DRO)    | ND     | mg/Kg | 10  |      |                 |                                      |        |          |      |
| Motor Oil Range Organics (MRO) | ND     | mg/Kg | 50  |      |                 |                                      |        |          |      |
| Sample ID: LCS-11532           |        | LCS   |     |      | Batch ID: 11532 | Analysis Date: 10/20/2006 8:08:19 AM |        |          |      |
| Diesel Range Organics (DRO)    | 36.76  | mg/Kg | 10  | 73.5 | 64.6            | 116                                  |        |          |      |
| Sample ID: LCS-11545           |        | LCS   |     |      | Batch ID: 11545 | Analysis Date: 10/25/2006 5:00:02 AM |        |          |      |
| Diesel Range Organics (DRO)    | 47.19  | mg/Kg | 10  | 94.4 | 64.6            | 116                                  |        |          |      |
| Sample ID: LCSD-11532          |        | LCSD  |     |      | Batch ID: 11532 | Analysis Date: 10/20/2006 8:43:09 AM |        |          |      |
| Diesel Range Organics (DRO)    | 42.42  | mg/Kg | 10  | 84.8 | 64.6            | 116                                  | 14.3   | 17.4     |      |
| Sample ID: LCSD-11545          |        | LCSD  |     |      | Batch ID: 11545 | Analysis Date: 10/25/2006 5:34:48 AM |        |          |      |
| Diesel Range Organics (DRO)    | 47.58  | mg/Kg | 10  | 95.2 | 64.6            | 116                                  | 0.827  | 17.4     |      |
| Sample ID: 0610228-08BMS       |        | MS    |     |      | Batch ID: 11545 | Analysis Date: 10/25/2006 6:44:22 AM |        |          |      |
| Diesel Range Organics (DRO)    | 57.06  | mg/Kg | 10  | 114  | 67.4            | 117                                  |        |          |      |
| Method: SW8015                 |        |       |     |      |                 |                                      |        |          |      |
| Sample ID: MB-11551            |        | MBLK  |     |      | Batch ID: 11551 | Analysis Date: 10/24/2006 8:06:50 AM |        |          |      |
| Diesel Range Organics (DRO)    | ND     | mg/L  | 1.0 |      |                 |                                      |        |          |      |
| Motor Oil Range Organics (MRO) | ND     | mg/L  | 5.0 |      |                 |                                      |        |          |      |
| Sample ID: LCS-11551           |        | LCS   |     |      | Batch ID: 11551 | Analysis Date: 10/24/2006 8:41:42 AM |        |          |      |
| Diesel Range Organics (DRO)    | 6.261  | mg/L  | 1.0 | 125  | 74              | 157                                  |        |          |      |
| Sample ID: LCSD-11551          |        | LCSD  |     |      | Batch ID: 11551 | Analysis Date: 10/24/2006 9:16:44 AM |        |          |      |
| Diesel Range Organics (DRO)    | 6.521  | mg/L  | 1.0 | 130  | 74              | 157                                  | 4.07   | 23       |      |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

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

Method: SW8270C

Sample ID: MB-11608

MBLK

Batch ID: 11608

Analysis Date:

11/1/2006

|                             |    |       |      |
|-----------------------------|----|-------|------|
| Acenaphthene                | ND | mg/Kg | 0.20 |
| Acenaphthylene              | ND | mg/Kg | 0.20 |
| Aniline                     | ND | mg/Kg | 0.20 |
| Anthracene                  | ND | mg/Kg | 0.20 |
| Azobenzene                  | ND | mg/Kg | 0.20 |
| Benz(a)anthracene           | ND | mg/Kg | 0.25 |
| Benzo(a)pyrene              | ND | mg/Kg | 0.20 |
| Benzo(b)fluoranthene        | ND | mg/Kg | 0.20 |
| Benzo(g,h,i)perylene        | ND | mg/Kg | 0.30 |
| Benzo(k)fluoranthene        | ND | mg/Kg | 0.50 |
| Benzoic acid                | ND | mg/Kg | 0.50 |
| Benzyl alcohol              | ND | mg/Kg | 1.0  |
| Bis(2-chloroethoxy)methane  | ND | mg/Kg | 0.50 |
| Bis(2-chloroethyl)ether     | ND | mg/Kg | 0.25 |
| Bis(2-chloroisopropyl)ether | ND | mg/Kg | 0.50 |
| Bis(2-ethylhexyl)phthalate  | ND | mg/Kg | 0.20 |
| 4-Bromophenyl phenyl ether  | ND | mg/Kg | 0.25 |
| Butyl benzyl phthalate      | ND | mg/Kg | 0.20 |
| Carbazole                   | ND | mg/Kg | 0.20 |
| 4-Chloro-3-methylphenol     | ND | mg/Kg | 0.20 |
| 4-Chloroaniline             | ND | mg/Kg | 0.20 |
| 2-Chloronaphthalene         | ND | mg/Kg | 0.20 |
| 2-Chlorophenol              | ND | mg/Kg | 0.20 |
| 4-Chlorophenyl phenyl ether | ND | mg/Kg | 0.20 |
| Chrysene                    | ND | mg/Kg | 0.20 |
| Di-n-butyl phthalate        | ND | mg/Kg | 0.50 |
| Di-n-octyl phthalate        | ND | mg/Kg | 0.50 |
| Dibenz(a,h)anthracene       | ND | mg/Kg | 0.25 |
| Dibenzofuran                | ND | mg/Kg | 0.50 |
| 1,2-Dichlorobenzene         | ND | mg/Kg | 0.20 |
| 1,3-Dichlorobenzene         | ND | mg/Kg | 0.20 |
| 1,4-Dichlorobenzene         | ND | mg/Kg | 0.20 |
| 3,3'-Dichlorobenzidine      | ND | mg/Kg | 0.20 |
| Diethyl phthalate           | ND | mg/Kg | 0.20 |
| Dimethyl phthalate          | ND | mg/Kg | 0.20 |
| 2,4-Dichlorophenol          | ND | mg/Kg | 0.20 |
| 2,4-Dimethylphenol          | ND | mg/Kg | 0.20 |
| 4,6-Dinitro-2-methylphenol  | ND | mg/Kg | 0.50 |
| 2,4-Dinitrophenol           | ND | mg/Kg | 0.50 |
| 2,4-Dinitrotoluene          | ND | mg/Kg | 0.20 |
| 2,6-Dinitrotoluene          | ND | mg/Kg | 0.20 |
| Fluoranthene                | ND | mg/Kg | 0.20 |
| Fluorene                    | ND | mg/Kg | 0.20 |
| Hexachlorobenzene           | ND | mg/Kg | 0.20 |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

| Analyte                   | Result | Units | PQL  | %Rec | LowLimit        | HighLimit | %RPD           | RPDLimit | Qual      |
|---------------------------|--------|-------|------|------|-----------------|-----------|----------------|----------|-----------|
| Method: SW8270C           |        |       |      |      |                 |           |                |          |           |
| Sample ID: MB-11608       |        | MBLK  |      |      | Batch ID: 11608 |           | Analysis Date: |          | 11/1/2006 |
| Hexachlorobutadiene       | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| Hexachlorocyclopentadiene | ND     | mg/Kg | 0.25 |      |                 |           |                |          |           |
| Hexachloroethane          | ND     | mg/Kg | 0.50 |      |                 |           |                |          |           |
| Indeno(1,2,3-cd)pyrene    | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| Isophorone                | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| 2-Methylnaphthalene       | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| 2-Methylphenol            | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| 3+4-Methylphenol          | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| N-Nitrosodi-n-propylamine | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| N-Nitrosodiphenylamine    | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| Naphthalene               | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| 2-Nitroaniline            | ND     | mg/Kg | 0.50 |      |                 |           |                |          |           |
| 3-Nitroaniline            | ND     | mg/Kg | 0.50 |      |                 |           |                |          |           |
| 4-Nitroaniline            | ND     | mg/Kg | 0.25 |      |                 |           |                |          |           |
| Nitrobenzene              | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| 2-Nitrophenol             | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| 4-Nitrophenol             | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| Pentachlorophenol         | ND     | mg/Kg | 0.50 |      |                 |           |                |          |           |
| Phenanthrene              | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| Phenol                    | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| Pyrene                    | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| Pyridine                  | ND     | mg/Kg | 0.50 |      |                 |           |                |          |           |
| 1,2,4-Trichlorobenzene    | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| 2,4,5-Trichlorophenol     | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| 2,4,6-Trichlorophenol     | ND     | mg/Kg | 0.20 |      |                 |           |                |          |           |
| Sample ID: LCS-11608      |        | LCS   |      |      | Batch ID: 11608 |           | Analysis Date: |          | 11/1/2006 |
| Acenaphthene              | 1.894  | mg/Kg | 0.20 | 75.7 | 24              | 125       |                |          |           |
| 4-Chloro-3-methylphenol   | 3.338  | mg/Kg | 0.20 | 66.8 | 14.6            | 154       |                |          |           |
| 2-Chlorophenol            | 3.186  | mg/Kg | 0.20 | 63.7 | 13.3            | 149       |                |          |           |
| 1,4-Dichlorobenzene       | 1.513  | mg/Kg | 0.20 | 60.5 | 23.6            | 118       |                |          |           |
| 2,4-Dinitrotoluene        | 2.034  | mg/Kg | 0.20 | 81.4 | 28              | 136       |                |          |           |
| N-Nitrosodi-n-propylamine | 1.538  | mg/Kg | 0.20 | 61.5 | 28              | 114       |                |          |           |
| 4-Nitrophenol             | 2.665  | mg/Kg | 0.20 | 53.3 | 13.1            | 150       |                |          |           |
| Pentachlorophenol         | 2.810  | mg/Kg | 0.50 | 56.2 | 20.1            | 139       |                |          |           |
| Phenol                    | 3.240  | mg/Kg | 0.20 | 64.8 | 17.3            | 141       |                |          |           |
| Pyrene                    | 2.322  | mg/Kg | 0.20 | 92.9 | 29              | 131       |                |          |           |
| 1,2,4-Trichlorobenzene    | 1.712  | mg/Kg | 0.20 | 68.5 | 17.9            | 126       |                |          |           |
| Sample ID: LCSD-11608     |        | LCSD  |      |      | Batch ID: 11608 |           | Analysis Date: |          | 11/1/2006 |
| Acenaphthene              | 1.638  | mg/Kg | 0.20 | 65.5 | 24              | 125       | 14.5           | 25       |           |
| 4-Chloro-3-methylphenol   | 2.924  | mg/Kg | 0.20 | 58.5 | 14.6            | 154       | 13.2           | 25       |           |
| 2-Chlorophenol            | 2.571  | mg/Kg | 0.20 | 51.4 | 13.3            | 149       | 21.3           | 25       |           |
| 1,4-Dichlorobenzene       | 1.241  | mg/Kg | 0.20 | 49.6 | 23.6            | 118       | 19.8           | 25       |           |
| 2,4-Dinitrotoluene        | 1.908  | mg/Kg | 0.20 | 76.3 | 28              | 136       | 6.42           | 25       |           |
| N-Nitrosodi-n-propylamine | 1.368  | mg/Kg | 0.20 | 54.7 | 28              | 114       | 11.7           | 25       |           |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

| Analyte                | Result | Units | PQL  | %Rec | LowLimit        | HighLimit | %RPD           | RPDLimit | Qual      |
|------------------------|--------|-------|------|------|-----------------|-----------|----------------|----------|-----------|
| Method: SW8270C        |        |       |      |      |                 |           |                |          |           |
| Sample ID: LCSD-11608  |        | LCSD  |      |      | Batch ID: 11608 |           | Analysis Date: |          | 11/1/2006 |
| 4-Nitrophenol          | 2.754  | mg/Kg | 0.20 | 55.1 | 13.1            | 150       | 3.27           | 25       |           |
| Pentachlorophenol      | 2.592  | mg/Kg | 0.50 | 51.8 | 20.1            | 139       | 8.11           | 25       |           |
| Phenol                 | 2.702  | mg/Kg | 0.20 | 54.0 | 17.3            | 141       | 18.1           | 25       |           |
| Pyrene                 | 2.350  | mg/Kg | 0.20 | 94.0 | 29              | 131       | 1.22           | 25       |           |
| 1,2,4-Trichlorobenzene | 1.398  | mg/Kg | 0.20 | 55.9 | 17.9            | 126       | 20.2           | 25       |           |

|                            |        |       |       |      |                 |     |                |    |            |
|----------------------------|--------|-------|-------|------|-----------------|-----|----------------|----|------------|
| Method: SW7471             |        |       |       |      |                 |     |                |    |            |
| Sample ID: 0610228-15B     |        | MSD   |       |      | Batch ID: 11630 |     | Analysis Date: |    | 10/31/2006 |
| Mercury                    | 0.1517 | mg/Kg | 0.033 | 90.0 | 75              | 125 | 0              | 20 |            |
| Sample ID: 0610228-24B msd |        | MSD   |       |      | Batch ID: 11630 |     | Analysis Date: |    | 11/1/2006  |
| Mercury                    | 0.1476 | mg/Kg | 0.033 | 89.2 | 75              | 125 | 0.126          | 20 |            |
| Sample ID: MB-11618        |        | MBLK  |       |      | Batch ID: 11618 |     | Analysis Date: |    | 10/31/2006 |
| Mercury                    | ND     | mg/Kg | 0.033 |      |                 |     |                |    |            |
| Sample ID: MB-11630        |        | MBLK  |       |      | Batch ID: 11630 |     | Analysis Date: |    | 11/1/2006  |
| Mercury                    | ND     | mg/Kg | 0.033 |      |                 |     |                |    |            |
| Sample ID: LCS-11618       |        | LCS   |       |      | Batch ID: 11618 |     | Analysis Date: |    | 10/31/2006 |
| Mercury                    | 0.1600 | mg/Kg | 0.033 | 96.0 | 80              | 120 |                |    |            |
| Sample ID: LCS-11630       |        | LCS   |       |      | Batch ID: 11630 |     | Analysis Date: |    | 11/1/2006  |
| Mercury                    | 0.1580 | mg/Kg | 0.033 | 94.8 | 80              | 120 |                |    |            |
| Sample ID: 0610228-15B     |        | MS    |       |      | Batch ID: 11630 |     | Analysis Date: |    | 10/31/2006 |
| Mercury                    | 0.1524 | mg/Kg | 0.033 | 90.4 | 75              | 125 |                |    |            |
| Sample ID: 0610228-24B ms  |        | MS    |       |      | Batch ID: 11630 |     | Analysis Date: |    | 11/1/2006  |
| Mercury                    | 0.1478 | mg/Kg | 0.033 | 86.8 | 75              | 125 |                |    |            |

|                      |          |      |         |      |                 |     |                |  |           |
|----------------------|----------|------|---------|------|-----------------|-----|----------------|--|-----------|
| Method: SW7470       |          |      |         |      |                 |     |                |  |           |
| Sample ID: MB-11634  |          | MBLK |         |      | Batch ID: 11634 |     | Analysis Date: |  | 11/1/2006 |
| Mercury              | ND       | mg/L | 0.00020 |      |                 |     |                |  |           |
| Sample ID: LCS-11634 |          | LCS  |         |      | Batch ID: 11634 |     | Analysis Date: |  | 11/1/2006 |
| Mercury              | 0.004830 | mg/L | 0.00020 | 96.6 | 80              | 120 |                |  |           |

## Qualifiers:

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

## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

| Analyte                    | Result | Units | PQL             | %Rec | LowLimit                             | HighLimit | %RPD  | RPDLimit | Qual |
|----------------------------|--------|-------|-----------------|------|--------------------------------------|-----------|-------|----------|------|
| Method: SW6010A            |        |       |                 |      |                                      |           |       |          |      |
| Sample ID: 0610228-24B MSD | MSD    |       | Batch ID: 11656 |      | Analysis Date: 11/6/2006 2:10:58 PM  |           |       |          |      |
| Arsenic                    | 24.34  | mg/Kg | 12              | 97.8 | 75                                   | 125       | 3.78  | 30       |      |
| Cadmium                    | 23.44  | mg/Kg | 0.50            | 94.2 | 75                                   | 125       | 3.22  | 30       |      |
| Chromium                   | 33.81  | mg/Kg | 1.5             | 97.3 | 75                                   | 125       | 0.416 | 30       |      |
| Lead                       | 30.93  | mg/Kg | 1.2             | 101  | 75                                   | 125       | 4.42  | 30       |      |
| Silver                     | 23.48  | mg/Kg | 1.2             | 94.3 | 75                                   | 125       | 2.15  | 30       |      |
| Sample ID: 0610228-11B MSD | MSD    |       | Batch ID: 11642 |      | Analysis Date: 11/6/2006 5:25:10 PM  |           |       |          |      |
| Arsenic                    | 21.06  | mg/Kg | 12              | 84.4 | 75                                   | 125       | 21.7  | 30       |      |
| Cadmium                    | 23.08  | mg/Kg | 0.50            | 92.5 | 75                                   | 125       | 3.47  | 30       |      |
| Chromium                   | 31.90  | mg/Kg | 1.5             | 90.3 | 75                                   | 125       | 5.62  | 30       |      |
| Lead                       | 31.88  | mg/Kg | 1.2             | 86.6 | 75                                   | 125       | 4.91  | 30       |      |
| Silver                     | 22.93  | mg/Kg | 1.2             | 91.9 | 75                                   | 125       | 4.34  | 30       |      |
| Sample ID: 0610228-11B MSD | MSD    |       | Batch ID: 11642 |      | Analysis Date: 11/7/2006 10:05:10 AM |           |       |          |      |
| Selenium                   | 13.56  | mg/Kg | 12              | 54.4 | 75                                   | 125       | 200   | 30       | SR   |
| Sample ID: 0610228-24B MSD | MSD    |       | Batch ID: 11656 |      | Analysis Date: 11/7/2006 11:30:52 AM |           |       |          |      |
| Selenium                   | ND     | mg/Kg | 12              | 37.8 | 75                                   | 125       | 0     | 30       | S    |
| Sample ID: MB-11656        | MBLK   |       | Batch ID: 11656 |      | Analysis Date: 11/6/2006 11:20:13 AM |           |       |          |      |
| Arsenic                    | ND     | mg/Kg | 2.5             |      |                                      |           |       |          |      |
| Barium                     | ND     | mg/Kg | 0.10            |      |                                      |           |       |          |      |
| Cadmium                    | ND     | mg/Kg | 0.10            |      |                                      |           |       |          |      |
| Chromium                   | ND     | mg/Kg | 0.30            |      |                                      |           |       |          |      |
| Lead                       | ND     | mg/Kg | 0.25            |      |                                      |           |       |          |      |
| Selenium                   | ND     | mg/Kg | 2.5             |      |                                      |           |       |          |      |
| Silver                     | ND     | mg/Kg | 0.25            |      |                                      |           |       |          |      |
| Sample ID: MBLK-11642      | MBLK   |       | Batch ID: 11642 |      | Analysis Date: 11/6/2006 4:09:43 PM  |           |       |          |      |
| Arsenic                    | ND     | mg/Kg | 2.5             |      |                                      |           |       |          |      |
| Barium                     | ND     | mg/Kg | 0.10            |      |                                      |           |       |          |      |
| Cadmium                    | ND     | mg/Kg | 0.10            |      |                                      |           |       |          |      |
| Chromium                   | ND     | mg/Kg | 0.30            |      |                                      |           |       |          |      |
| Lead                       | ND     | mg/Kg | 0.25            |      |                                      |           |       |          |      |
| Silver                     | ND     | mg/Kg | 0.25            |      |                                      |           |       |          |      |
| Sample ID: MBLK-11642      | MBLK   |       | Batch ID: 11642 |      | Analysis Date: 11/7/2006 9:12:50 AM  |           |       |          |      |
| Selenium                   | ND     | mg/Kg | 2.5             |      |                                      |           |       |          |      |
| Sample ID: MB-11656        | MBLK   |       | Batch ID: 11656 |      | Analysis Date: 11/7/2006 10:42:14 AM |           |       |          |      |
| Selenium                   | ND     | mg/Kg | 2.5             |      |                                      |           |       |          |      |
| Sample ID: LCS-11656       | LCS    |       | Batch ID: 11656 |      | Analysis Date: 11/6/2006 11:23:19 AM |           |       |          |      |
| Arsenic                    | 24.36  | mg/Kg | 2.5             | 97.5 | 80                                   | 120       |       |          |      |
| Barium                     | 22.98  | mg/Kg | 0.10            | 91.9 | 80                                   | 120       |       |          |      |
| Cadmium                    | 23.44  | mg/Kg | 0.10            | 93.8 | 80                                   | 120       |       |          |      |
| Chromium                   | 23.97  | mg/Kg | 0.30            | 95.9 | 80                                   | 120       |       |          |      |
| Lead                       | 23.06  | mg/Kg | 0.25            | 92.2 | 80                                   | 120       |       |          |      |
| Selenium                   | 20.47  | mg/Kg | 2.5             | 81.9 | 80                                   | 120       |       |          |      |
| Silver                     | 23.18  | mg/Kg | 0.25            | 92.7 | 80                                   | 120       |       |          |      |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

| Analyte                   | Result | Units | PQL  | %Rec | LowLimit        | HighLimit | %RPD                                 | RPDLimit | Qual |
|---------------------------|--------|-------|------|------|-----------------|-----------|--------------------------------------|----------|------|
| Method: SW6010A           |        |       |      |      |                 |           |                                      |          |      |
| Sample ID: LCS1-11642     |        | LCS   |      |      | Batch ID: 11642 |           | Analysis Date: 11/6/2006 4:12:50 PM  |          |      |
| Arsenic                   | 25.50  | mg/Kg | 2.5  | 102  | 80              | 120       |                                      |          |      |
| Barium                    | 24.07  | mg/Kg | 0.10 | 96.3 | 80              | 120       |                                      |          |      |
| Cadmium                   | 24.44  | mg/Kg | 0.10 | 97.5 | 80              | 120       |                                      |          |      |
| Chromium                  | 24.52  | mg/Kg | 0.30 | 98.1 | 80              | 120       |                                      |          |      |
| Lead                      | 25.19  | mg/Kg | 0.25 | 101  | 80              | 120       |                                      |          |      |
| Silver                    | 24.22  | mg/Kg | 0.25 | 96.9 | 80              | 120       |                                      |          |      |
| Sample ID: LCS1-11642     |        | LCS   |      |      | Batch ID: 11642 |           | Analysis Date: 11/7/2006 9:15:22 AM  |          |      |
| Selenium                  | 27.65  | mg/Kg | 2.5  | 111  | 80              | 120       |                                      |          |      |
| Sample ID: LCS-11656      |        | LCS   |      |      | Batch ID: 11656 |           | Analysis Date: 11/7/2006 10:44:43 AM |          |      |
| Selenium                  | 23.19  | mg/Kg | 2.5  | 92.8 | 80              | 120       |                                      |          |      |
| Sample ID: 0610228-24B MS |        | MS    |      |      | Batch ID: 11656 |           | Analysis Date: 11/6/2006 2:06:42 PM  |          |      |
| Arsenic                   | 23.43  | mg/Kg | 12   | 93.6 | 75              | 125       |                                      |          |      |
| Cadmium                   | 24.21  | mg/Kg | 0.50 | 96.7 | 75              | 125       |                                      |          |      |
| Chromium                  | 33.95  | mg/Kg | 1.5  | 97.3 | 75              | 125       |                                      |          |      |
| Lead                      | 32.32  | mg/Kg | 1.2  | 106  | 75              | 125       |                                      |          |      |
| Silver                    | 23.99  | mg/Kg | 1.2  | 95.8 | 75              | 125       |                                      |          |      |
| Sample ID: 0610228-11B MS |        | MS    |      |      | Batch ID: 11642 |           | Analysis Date: 11/6/2006 5:20:52 PM  |          |      |
| Arsenic                   | 26.18  | mg/Kg | 12   | 105  | 75              | 125       |                                      |          |      |
| Cadmium                   | 23.89  | mg/Kg | 0.50 | 96.0 | 75              | 125       |                                      |          |      |
| Chromium                  | 33.74  | mg/Kg | 1.5  | 98.0 | 75              | 125       |                                      |          |      |
| Lead                      | 33.49  | mg/Kg | 1.2  | 93.3 | 75              | 125       |                                      |          |      |
| Silver                    | 23.95  | mg/Kg | 1.2  | 96.3 | 75              | 125       |                                      |          |      |
| Sample ID: 0610228-11B MS |        | MS    |      |      | Batch ID: 11642 |           | Analysis Date: 11/7/2006 10:03:32 AM |          |      |
| Selenium                  | ND     | mg/Kg | 12   | 0    | 75              | 125       |                                      |          | S    |
| Sample ID: 0610228-24B MS |        | MS    |      |      | Batch ID: 11656 |           | Analysis Date: 11/7/2006 11:26:40 AM |          |      |
| Selenium                  | ND     | mg/Kg | 12   | 34.2 | 75              | 125       |                                      |          | S    |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

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

Method: SW6010A

Sample ID: 0610228-26B MSD

MSD

Batch ID: 11548 Analysis Date: 10/24/2006 11:09:09 AM

|          |        |      |        |      |    |     |       |    |
|----------|--------|------|--------|------|----|-----|-------|----|
| Arsenic  | 0.5064 | mg/L | 0.020  | 101  | 75 | 125 | 5.00  | 20 |
| Barium   | 0.4955 | mg/L | 0.020  | 98.5 | 75 | 125 | 0.463 | 20 |
| Cadmium  | 0.4920 | mg/L | 0.0020 | 98.4 | 75 | 125 | 1.11  | 20 |
| Chromium | 0.5015 | mg/L | 0.0060 | 100  | 75 | 125 | 0.774 | 20 |
| Lead     | 0.4987 | mg/L | 0.0050 | 99.7 | 75 | 125 | 1.47  | 20 |
| Selenium | 0.4319 | mg/L | 0.050  | 86.4 | 75 | 125 | 3.93  | 20 |

Sample ID: MB-11548

MBLK

Batch ID: 11548 Analysis Date: 10/24/2006 10:15:22 AM

|          |    |      |        |  |  |  |  |  |
|----------|----|------|--------|--|--|--|--|--|
| Arsenic  | ND | mg/L | 0.020  |  |  |  |  |  |
| Barium   | ND | mg/L | 0.020  |  |  |  |  |  |
| Cadmium  | ND | mg/L | 0.0020 |  |  |  |  |  |
| Chromium | ND | mg/L | 0.0060 |  |  |  |  |  |
| Lead     | ND | mg/L | 0.0050 |  |  |  |  |  |
| Selenium | ND | mg/L | 0.050  |  |  |  |  |  |

Sample ID: LCS-11548

LCS

Batch ID: 11548 Analysis Date: 10/24/2006 10:18:27 AM

|          |        |      |        |      |    |     |  |  |
|----------|--------|------|--------|------|----|-----|--|--|
| Arsenic  | 0.5298 | mg/L | 0.020  | 106  | 80 | 120 |  |  |
| Barium   | 0.4892 | mg/L | 0.020  | 97.8 | 80 | 120 |  |  |
| Cadmium  | 0.4925 | mg/L | 0.0020 | 98.5 | 80 | 120 |  |  |
| Chromium | 0.4995 | mg/L | 0.0060 | 99.5 | 80 | 120 |  |  |
| Lead     | 0.5035 | mg/L | 0.0050 | 101  | 80 | 120 |  |  |
| Selenium | 0.4234 | mg/L | 0.050  | 84.7 | 80 | 120 |  |  |

Sample ID: 0610228-26B MS

MS

Batch ID: 11548 Analysis Date: 10/24/2006 11:06:06 AM

|          |        |      |        |      |    |     |  |  |
|----------|--------|------|--------|------|----|-----|--|--|
| Arsenic  | 0.5324 | mg/L | 0.020  | 106  | 75 | 125 |  |  |
| Barium   | 0.4933 | mg/L | 0.020  | 98.1 | 75 | 125 |  |  |
| Cadmium  | 0.4975 | mg/L | 0.0020 | 99.5 | 75 | 125 |  |  |
| Chromium | 0.5054 | mg/L | 0.0060 | 101  | 75 | 125 |  |  |
| Lead     | 0.5061 | mg/L | 0.0050 | 101  | 75 | 125 |  |  |
| Selenium | 0.4153 | mg/L | 0.050  | 83.1 | 75 | 125 |  |  |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

Page 7

## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

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

Method: SW8260B

Sample ID: 0610228-04a msd

MSD

Batch ID: 11543

Analysis Date:

10/23/2006

|                       |        |       |       |      |      |     |      |    |
|-----------------------|--------|-------|-------|------|------|-----|------|----|
| Benzene               | 1.007  | mg/Kg | 0.050 | 101  | 80.8 | 132 | 2.95 | 20 |
| Toluene               | 1.000  | mg/Kg | 0.050 | 100  | 72.1 | 126 | 2.26 | 20 |
| Chlorobenzene         | 1.068  | mg/Kg | 0.050 | 107  | 75.4 | 140 | 6.58 | 20 |
| 1,1-Dichloroethene    | 1.066  | mg/Kg | 0.050 | 107  | 59   | 147 | 5.07 | 20 |
| Trichloroethene (TCE) | 0.9812 | mg/Kg | 0.050 | 98.1 | 63.5 | 123 | 4.68 | 20 |

Sample ID: 0610228-21a msd

MSD

Batch ID: 11544

Analysis Date:

10/24/2006

|                       |        |       |       |      |      |     |      |    |
|-----------------------|--------|-------|-------|------|------|-----|------|----|
| Benzene               | 1.019  | mg/Kg | 0.050 | 102  | 80.8 | 132 | 1.10 | 20 |
| Toluene               | 0.9758 | mg/Kg | 0.050 | 97.6 | 72.1 | 126 | 2.39 | 20 |
| Chlorobenzene         | 0.9927 | mg/Kg | 0.050 | 99.3 | 75.4 | 140 | 1.01 | 20 |
| 1,1-Dichloroethene    | 1.006  | mg/Kg | 0.050 | 101  | 59   | 147 | 4.35 | 20 |
| Trichloroethene (TCE) | 0.9555 | mg/Kg | 0.050 | 95.6 | 63.5 | 123 | 3.81 | 20 |

Sample ID: MB-11543

MBLK

Batch ID: 11543

Analysis Date:

10/23/2006

|                                |    |       |       |
|--------------------------------|----|-------|-------|
| Benzene                        | ND | mg/Kg | 0.050 |
| Toluene                        | ND | mg/Kg | 0.050 |
| Ethylbenzene                   | ND | mg/Kg | 0.050 |
| Methyl tert-butyl ether (MTBE) | ND | mg/Kg | 0.050 |
| 1,2,4-Trimethylbenzene         | ND | mg/Kg | 0.050 |
| 1,3,5-Trimethylbenzene         | ND | mg/Kg | 0.050 |
| 1,2-Dichloroethane (EDC)       | ND | mg/Kg | 0.050 |
| 1,2-Dibromoethane (EDB)        | ND | mg/Kg | 0.050 |
| Naphthalene                    | ND | mg/Kg | 0.10  |
| 1-Methylnaphthalene            | ND | mg/Kg | 0.20  |
| 2-Methylnaphthalene            | ND | mg/Kg | 0.20  |
| Acetone                        | ND | mg/Kg | 0.75  |
| Bromobenzene                   | ND | mg/Kg | 0.050 |
| Bromochloromethane             | ND | mg/Kg | 0.050 |
| Bromodichloromethane           | ND | mg/Kg | 0.050 |
| Bromoform                      | ND | mg/Kg | 0.050 |
| Bromomethane                   | ND | mg/Kg | 0.10  |
| 2-Butanone                     | ND | mg/Kg | 0.50  |
| Carbon disulfide               | ND | mg/Kg | 0.50  |
| Carbon tetrachloride           | ND | mg/Kg | 0.10  |
| Chlorobenzene                  | ND | mg/Kg | 0.050 |
| Chloroethane                   | ND | mg/Kg | 0.10  |
| Chloroform                     | ND | mg/Kg | 0.050 |
| Chloromethane                  | ND | mg/Kg | 0.050 |
| 2-Chlorotoluene                | ND | mg/Kg | 0.050 |
| 4-Chlorotoluene                | ND | mg/Kg | 0.050 |
| cis-1,2-DCE                    | ND | mg/Kg | 0.050 |
| cis-1,3-Dichloropropene        | ND | mg/Kg | 0.050 |
| 1,2-Dibromo-3-chloropropane    | ND | mg/Kg | 0.10  |
| Dibromochloromethane           | ND | mg/Kg | 0.050 |
| Dibromomethane                 | ND | mg/Kg | 0.10  |
| 1,2-Dichlorobenzene            | ND | mg/Kg | 0.050 |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

Page 1

## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

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

Method: SW8260B

Sample ID: MB-11543

MBLK

Batch ID: 11543 Analysis Date: 10/23/2006

|                             |    |       |       |
|-----------------------------|----|-------|-------|
| 1,3-Dichlorobenzene         | ND | mg/Kg | 0.050 |
| 1,4-Dichlorobenzene         | ND | mg/Kg | 0.050 |
| Dichlorodifluoromethane     | ND | mg/Kg | 0.050 |
| 1,1-Dichloroethane          | ND | mg/Kg | 0.10  |
| 1,1-Dichloroethene          | ND | mg/Kg | 0.050 |
| 1,2-Dichloropropane         | ND | mg/Kg | 0.050 |
| 1,3-Dichloropropane         | ND | mg/Kg | 0.050 |
| 2,2-Dichloropropane         | ND | mg/Kg | 0.10  |
| 1,1-Dichloropropene         | ND | mg/Kg | 0.050 |
| Hexachlorobutadiene         | ND | mg/Kg | 0.10  |
| 2-Hexanone                  | ND | mg/Kg | 0.50  |
| Isopropylbenzene            | ND | mg/Kg | 0.050 |
| 4-Isopropyltoluene          | ND | mg/Kg | 0.050 |
| 4-Methyl-2-pentanone        | ND | mg/Kg | 0.50  |
| Methylene chloride          | ND | mg/Kg | 0.15  |
| n-Butylbenzene              | ND | mg/Kg | 0.050 |
| n-Propylbenzene             | ND | mg/Kg | 0.050 |
| sec-Butylbenzene            | ND | mg/Kg | 0.050 |
| Styrene                     | ND | mg/Kg | 0.050 |
| tert-Butylbenzene           | ND | mg/Kg | 0.050 |
| 1,1,1,2-Tetrachloroethane   | ND | mg/Kg | 0.050 |
| 1,1,1,2,2-Tetrachloroethane | ND | mg/Kg | 0.050 |
| Tetrachloroethene (PCE)     | ND | mg/Kg | 0.050 |
| trans-1,2-DCE               | ND | mg/Kg | 0.050 |
| trans-1,3-Dichloropropene   | ND | mg/Kg | 0.050 |
| 1,2,3-Trichlorobenzene      | ND | mg/Kg | 0.10  |
| 1,2,4-Trichlorobenzene      | ND | mg/Kg | 0.050 |
| 1,1,1-Trichloroethane       | ND | mg/Kg | 0.050 |
| 1,1,2-Trichloroethane       | ND | mg/Kg | 0.050 |
| Trichloroethene (TCE)       | ND | mg/Kg | 0.050 |
| Trichlorofluoromethane      | ND | mg/Kg | 0.050 |
| 1,2,3-Trichloropropane      | ND | mg/Kg | 0.10  |
| Vinyl chloride              | ND | mg/Kg | 0.050 |
| Xylenes, Total              | ND | mg/Kg | 0.10  |

Sample ID: MB-11544

MBLK

Batch ID: 11544 Analysis Date: 10/24/2006

|                                |    |       |       |
|--------------------------------|----|-------|-------|
| Benzene                        | ND | mg/Kg | 0.050 |
| Toluene                        | ND | mg/Kg | 0.050 |
| Ethylbenzene                   | ND | mg/Kg | 0.050 |
| Methyl tert-butyl ether (MTBE) | ND | mg/Kg | 0.050 |
| 1,2,4-Trimethylbenzene         | ND | mg/Kg | 0.050 |
| 1,3,5-Trimethylbenzene         | ND | mg/Kg | 0.050 |
| 1,2-Dichloroethane (EDC)       | ND | mg/Kg | 0.050 |
| 1,2-Dibromoethane (EDB)        | ND | mg/Kg | 0.050 |
| Naphthalene                    | ND | mg/Kg | 0.10  |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

Page 2

## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

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

Method: SW8260B

Sample ID: MB-11544

MBLK

Batch ID:

11544

Analysis Date:

10/24/2006

|                             |    |       |       |
|-----------------------------|----|-------|-------|
| 1-Methylnaphthalene         | ND | mg/Kg | 0.20  |
| 2-Methylnaphthalene         | ND | mg/Kg | 0.20  |
| Acetone                     | ND | mg/Kg | 0.75  |
| Bromobenzene                | ND | mg/Kg | 0.050 |
| Bromochloromethane          | ND | mg/Kg | 0.050 |
| Bromodichloromethane        | ND | mg/Kg | 0.050 |
| Bromoform                   | ND | mg/Kg | 0.050 |
| Bromomethane                | ND | mg/Kg | 0.10  |
| 2-Butanone                  | ND | mg/Kg | 0.50  |
| Carbon disulfide            | ND | mg/Kg | 0.50  |
| Carbon tetrachloride        | ND | mg/Kg | 0.10  |
| Chlorobenzene               | ND | mg/Kg | 0.050 |
| Chloroethane                | ND | mg/Kg | 0.10  |
| Chloroform                  | ND | mg/Kg | 0.050 |
| Chloromethane               | ND | mg/Kg | 0.050 |
| 2-Chlorotoluene             | ND | mg/Kg | 0.050 |
| 4-Chlorotoluene             | ND | mg/Kg | 0.050 |
| cis-1,2-DCE                 | ND | mg/Kg | 0.050 |
| cis-1,3-Dichloropropene     | ND | mg/Kg | 0.050 |
| 1,2-Dibromo-3-chloropropane | ND | mg/Kg | 0.10  |
| Dibromochloromethane        | ND | mg/Kg | 0.050 |
| Dibromomethane              | ND | mg/Kg | 0.10  |
| 1,2-Dichlorobenzene         | ND | mg/Kg | 0.050 |
| 1,3-Dichlorobenzene         | ND | mg/Kg | 0.050 |
| 1,4-Dichlorobenzene         | ND | mg/Kg | 0.050 |
| Dichlorodifluoromethane     | ND | mg/Kg | 0.050 |
| 1,1-Dichloroethane          | ND | mg/Kg | 0.10  |
| 1,1-Dichloroethene          | ND | mg/Kg | 0.050 |
| 1,2-Dichloropropane         | ND | mg/Kg | 0.050 |
| 1,3-Dichloropropane         | ND | mg/Kg | 0.050 |
| 2,2-Dichloropropane         | ND | mg/Kg | 0.10  |
| 1,1-Dichloropropene         | ND | mg/Kg | 0.050 |
| Hexachlorobutadiene         | ND | mg/Kg | 0.10  |
| 2-Hexanone                  | ND | mg/Kg | 0.50  |
| Isopropylbenzene            | ND | mg/Kg | 0.050 |
| 4-Isopropyltoluene          | ND | mg/Kg | 0.050 |
| 4-Methyl-2-pentanone        | ND | mg/Kg | 0.50  |
| Methylene chloride          | ND | mg/Kg | 0.15  |
| n-Butylbenzene              | ND | mg/Kg | 0.050 |
| n-Propylbenzene             | ND | mg/Kg | 0.050 |
| sec-Butylbenzene            | ND | mg/Kg | 0.050 |
| Styrene                     | ND | mg/Kg | 0.050 |
| tert-Butylbenzene           | ND | mg/Kg | 0.050 |
| 1,1,1,2-Tetrachloroethane   | ND | mg/Kg | 0.050 |

## Qualifiers:

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

Page 3

## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

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

Method: SW8260B

Sample ID: MB-11544

MBLK

Batch ID: 11544

Analysis Date:

10/24/2006

|                           |    |       |       |
|---------------------------|----|-------|-------|
| 1,1,2,2-Tetrachloroethane | ND | mg/Kg | 0.050 |
| Tetrachloroethene (PCE)   | ND | mg/Kg | 0.050 |
| trans-1,2-DCE             | ND | mg/Kg | 0.050 |
| trans-1,3-Dichloropropene | ND | mg/Kg | 0.050 |
| 1,2,3-Trichlorobenzene    | ND | mg/Kg | 0.10  |
| 1,2,4-Trichlorobenzene    | ND | mg/Kg | 0.050 |
| 1,1,1-Trichloroethane     | ND | mg/Kg | 0.050 |
| 1,1,2-Trichloroethane     | ND | mg/Kg | 0.050 |
| Trichloroethene (TCE)     | ND | mg/Kg | 0.050 |
| Trichlorofluoromethane    | ND | mg/Kg | 0.050 |
| 1,2,3-Trichloropropane    | ND | mg/Kg | 0.10  |
| Vinyl chloride            | ND | mg/Kg | 0.050 |
| Xylenes, Total            | ND | mg/Kg | 0.10  |

Batch ID: 11543

Analysis Date:

10/23/2006

Sample ID: LCS-11543

LCS

|                       |        |       |       |      |      |     |
|-----------------------|--------|-------|-------|------|------|-----|
| Benzene               | 0.9974 | mg/Kg | 0.050 | 99.7 | 80.8 | 132 |
| Toluene               | 0.9484 | mg/Kg | 0.050 | 94.8 | 72.1 | 126 |
| Chlorobenzene         | 1.024  | mg/Kg | 0.050 | 102  | 75.4 | 140 |
| 1,1-Dichloroethene    | 1.119  | mg/Kg | 0.050 | 112  | 59   | 147 |
| Trichloroethene (TCE) | 0.9363 | mg/Kg | 0.050 | 93.6 | 63.5 | 123 |

Batch ID: 11544

Analysis Date:

10/24/2006

Sample ID: LCS-11544

LCS

|                       |        |       |       |      |      |     |
|-----------------------|--------|-------|-------|------|------|-----|
| Benzene               | 0.9940 | mg/Kg | 0.050 | 99.4 | 80.8 | 132 |
| Toluene               | 0.9972 | mg/Kg | 0.050 | 99.7 | 72.1 | 126 |
| Chlorobenzene         | 0.9679 | mg/Kg | 0.050 | 96.8 | 75.4 | 140 |
| 1,1-Dichloroethene    | 0.9513 | mg/Kg | 0.050 | 95.1 | 59   | 147 |
| Trichloroethene (TCE) | 0.9522 | mg/Kg | 0.050 | 95.2 | 63.5 | 123 |

Batch ID: 11543

Analysis Date:

10/23/2006

Sample ID: 0610228-04a ms

MS

|                       |        |       |       |      |      |     |
|-----------------------|--------|-------|-------|------|------|-----|
| Benzene               | 0.9775 | mg/Kg | 0.050 | 97.8 | 80.8 | 132 |
| Toluene               | 0.9778 | mg/Kg | 0.050 | 97.8 | 72.1 | 126 |
| Chlorobenzene         | 0.9996 | mg/Kg | 0.050 | 100  | 75.4 | 140 |
| 1,1-Dichloroethene    | 1.013  | mg/Kg | 0.050 | 101  | 59   | 147 |
| Trichloroethene (TCE) | 0.9363 | mg/Kg | 0.050 | 93.6 | 63.5 | 123 |

Batch ID: 11544

Analysis Date:

10/24/2006

Sample ID: 0610228-21a ms

MS

|                       |        |       |       |      |      |     |
|-----------------------|--------|-------|-------|------|------|-----|
| Benzene               | 1.008  | mg/Kg | 0.050 | 101  | 80.8 | 132 |
| Toluene               | 0.9994 | mg/Kg | 0.050 | 99.9 | 72.1 | 126 |
| Chlorobenzene         | 1.003  | mg/Kg | 0.050 | 100  | 75.4 | 140 |
| 1,1-Dichloroethene    | 0.9632 | mg/Kg | 0.050 | 96.3 | 59   | 147 |
| Trichloroethene (TCE) | 0.9198 | mg/Kg | 0.050 | 92.0 | 63.5 | 123 |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

Page 4



## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

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

Method: SW8260B

Sample ID: b6

MBLK

Batch ID: R21125

Analysis Date:

10/20/2006

|                                |    |      |     |
|--------------------------------|----|------|-----|
| Benzene                        | ND | µg/L | 1.0 |
| Toluene                        | ND | µg/L | 1.0 |
| Ethylbenzene                   | ND | µg/L | 1.0 |
| Methyl tert-butyl ether (MTBE) | ND | µg/L | 1.5 |
| 1,2,4-Trimethylbenzene         | ND | µg/L | 1.0 |
| 1,3,5-Trimethylbenzene         | ND | µg/L | 1.0 |
| 1,2-Dichloroethane (EDC)       | ND | µg/L | 1.0 |
| 1,2-Dibromoethane (EDB)        | ND | µg/L | 1.0 |
| Naphthalene                    | ND | µg/L | 2.0 |
| 1-Methylnaphthalene            | ND | µg/L | 4.0 |
| 2-Methylnaphthalene            | ND | µg/L | 4.0 |
| Acetone                        | ND | µg/L | 10  |
| Bromobenzene                   | ND | µg/L | 1.0 |
| Bromochloromethane             | ND | µg/L | 1.0 |
| Bromodichloromethane           | ND | µg/L | 1.0 |
| Bromoform                      | ND | µg/L | 1.0 |
| Bromomethane                   | ND | µg/L | 2.0 |
| 2-Butanone                     | ND | µg/L | 10  |
| Carbon disulfide               | ND | µg/L | 10  |
| Carbon Tetrachloride           | ND | µg/L | 2.0 |
| Chlorobenzene                  | ND | µg/L | 1.0 |
| Chloroethane                   | ND | µg/L | 2.0 |
| Chloroform                     | ND | µg/L | 1.0 |
| Chloromethane                  | ND | µg/L | 1.0 |
| 2-Chlorotoluene                | ND | µg/L | 1.0 |
| 4-Chlorotoluene                | ND | µg/L | 1.0 |
| cis-1,2-DCE                    | ND | µg/L | 1.0 |
| cis-1,3-Dichloropropene        | ND | µg/L | 1.0 |
| 1,2-Dibromo-3-chloropropane    | ND | µg/L | 2.0 |
| Dibromochloromethane           | ND | µg/L | 1.0 |
| Dibromomethane                 | ND | µg/L | 2.0 |
| 1,2-Dichlorobenzene            | ND | µg/L | 1.0 |
| 1,3-Dichlorobenzene            | ND | µg/L | 1.0 |
| 1,4-Dichlorobenzene            | ND | µg/L | 1.0 |
| Dichlorodifluoromethane        | ND | µg/L | 1.0 |
| 1,1-Dichloroethane             | ND | µg/L | 2.0 |
| 1,1-Dichloroethene             | ND | µg/L | 1.0 |
| 1,2-Dichloropropane            | ND | µg/L | 1.0 |
| 1,3-Dichloropropane            | ND | µg/L | 1.0 |
| 2,2-Dichloropropane            | ND | µg/L | 2.0 |
| 1,1-Dichloropropene            | ND | µg/L | 1.0 |
| Hexachlorobutadiene            | ND | µg/L | 2.0 |
| 2-Hexanone                     | ND | µg/L | 10  |
| Isopropylbenzene               | ND | µg/L | 1.0 |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits

Page 5

## QA/QC SUMMARY REPORT

Client: Giant Refining Co  
Project: Fan Out Area Sampling

Work Order: 0610228

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

Method: SW8260B

Sample ID: b6

MBLK

Batch ID: R21125

Analysis Date:

10/20/2006

|                           |    |      |     |
|---------------------------|----|------|-----|
| 4-Isopropyltoluene        | ND | µg/L | 1.0 |
| 4-Methyl-2-pentanone      | ND | µg/L | 10  |
| Methylene Chloride        | ND | µg/L | 3.0 |
| n-Butylbenzene            | ND | µg/L | 1.0 |
| n-Propylbenzene           | ND | µg/L | 1.0 |
| sec-Butylbenzene          | ND | µg/L | 2.0 |
| Styrene                   | ND | µg/L | 1.5 |
| tert-Butylbenzene         | ND | µg/L | 1.0 |
| 1,1,1,2-Tetrachloroethane | ND | µg/L | 1.0 |
| 1,1,2,2-Tetrachloroethane | ND | µg/L | 1.0 |
| Tetrachloroethene (PCE)   | ND | µg/L | 1.0 |
| trans-1,2-DCE             | ND | µg/L | 1.0 |
| trans-1,3-Dichloropropene | ND | µg/L | 1.0 |
| 1,2,3-Trichlorobenzene    | ND | µg/L | 1.0 |
| 1,2,4-Trichlorobenzene    | ND | µg/L | 1.0 |
| 1,1,1-Trichloroethane     | ND | µg/L | 1.0 |
| 1,1,2-Trichloroethane     | ND | µg/L | 1.0 |
| Trichloroethene (TCE)     | ND | µg/L | 1.0 |
| Trichlorofluoromethane    | ND | µg/L | 1.0 |
| 1,2,3-Trichloropropane    | ND | µg/L | 2.0 |
| Vinyl chloride            | ND | µg/L | 1.0 |
| Xylenes, Total            | ND | µg/L | 3.0 |

Sample ID: 100ng lcs-b

LCS

Batch ID: R21125

Analysis Date:

10/20/2006

|                       |       |      |     |      |      |     |
|-----------------------|-------|------|-----|------|------|-----|
| Benzene               | 17.97 | µg/L | 1.0 | 89.8 | 74.9 | 113 |
| Toluene               | 20.28 | µg/L | 1.0 | 101  | 80.4 | 111 |
| Chlorobenzene         | 19.55 | µg/L | 1.0 | 97.7 | 83.2 | 120 |
| 1,1-Dichloroethene    | 16.75 | µg/L | 1.0 | 83.8 | 72   | 127 |
| Trichloroethene (TCE) | 18.31 | µg/L | 1.0 | 91.6 | 58.2 | 131 |

## Qualifiers:

E Value above quantitation range  
J Analyte detected below quantitation limits  
R RPD outside accepted recovery limits

H Holding times for preparation or analysis exceeded  
ND Not Detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



## COVER LETTER

Tuesday, November 14, 2006

Regina Allen  
Giant Refining Co  
Rt. 3 Box 7  
Gallup, NM 87301

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

RE: Fan Out Area Sampling

Order No.: 0610228

Dear Regina Allen:

Hall Environmental Analysis Laboratory, Inc. received 26 sample(s) on 10/20/2006 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent.

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

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

Sincerely,

Andy Freeman, Business Manager  
Nancy McDuffie, Laboratory Manager

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



Hall Environmental Analysis Laboratory, Inc.

Date: 14-Nov-06

CLIENT: Giant Refining Co  
Project: Fan Out Area Sampling  
Lab Order: 0610228

## CASE NARRATIVE

Analytical Comments for METHOD 8015DRO\_S, SAMPLE 0610228-05B: DNOP not recovered due to dilution. See Corrective Action: [391] Low recovery & RPD problems for Se in 10228-11 MS/MSD & 10228-24 MS/MSD.



## ANALYTICAL SUMMARY REPORT

November 08, 2006

Anne Thome

Hall Environmental-Albuquerque

4901 Hawkins NE

Albuquerque, NM 87109

Workorder No.: B06101716

Project Name: 0610228

Energy Laboratories Inc received the following 25 samples from Hall Environmental-Albuquerque on 10/24/2006 for analysis.

| Sample ID     | Client Sample ID      | Collect Date   | Receive Date | Matrix  | Test                                  |
|---------------|-----------------------|----------------|--------------|---------|---------------------------------------|
| B06101716-001 | 0610228-01C-B7-2 ft   | 10/17/06 15:45 | 10/24/06     | Soil    | Total Cyanide<br>Cyanide Distillation |
| B06101716-002 | 0610228-02C-B7-5 ft   | 10/18/06 9:50  | 10/24/06     | Soil    | Same As Above                         |
| B06101716-003 | 0610228-03C-B8-2 ft   | 10/17/06 14:15 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-004 | 0610228-04C-B8-5 ft   | 10/17/06 16:50 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-005 | 0610228-05C-B9-2 ft   | 10/17/06 13:45 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-006 | 0610228-06C-B9-5 ft   | 10/17/06 16:05 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-007 | 0610228-07C-B10-2 ft  | 10/17/06 15:05 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-008 | 0610228-08C-B10-5 ft  | 10/18/06 9:15  | 10/24/06     | Soil    | Same As Above                         |
| B06101716-009 | 0610228-09C-MS        | 10/18/06 0:00  | 10/24/06     | Soil    | Same As Above                         |
| B06101716-010 | 0610228-10C-MSD       | 10/18/06 0:00  | 10/24/06     | Soil    | Same As Above                         |
| B06101716-011 | 0610228-11C-BD101806  | 10/18/06 0:00  | 10/24/06     | Soil    | Same As Above                         |
| B06101716-012 | 0610228-13C-B1-2 ft   | 10/18/06 8:55  | 10/24/06     | Soil    | Same As Above                         |
| B06101716-013 | 0610228-14C-B1-5 ft   | 10/18/06 11:40 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-014 | 0610228-15C-B2-2 ft   | 10/18/06 14:00 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-015 | 0610228-16C-B2-5 ft   | 10/18/06 15:10 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-016 | 0610228-17C-B3-2 ft   | 10/18/06 10:50 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-017 | 0610228-18C-B3-5 ft   | 10/18/06 12:15 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-018 | 0610228-19C-B4-2 ft   | 10/18/06 8:40  | 10/24/06     | Soil    | Same As Above                         |
| B06101716-019 | 0610228-20C-B4-5 ft   | 10/18/06 11:15 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-020 | 0610228-21C-B5-2 ft   | 10/17/06 15:35 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-021 | 0610228-22C-B5-5 ft   | 10/18/06 10:25 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-022 | 0610228-23C-B6-2 ft   | 10/18/06 14:45 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-023 | 0610228-24C-B6-5 ft   | 10/18/06 16:05 | 10/24/06     | Soil    | Same As Above                         |
| B06101716-024 | 0610228-25C-EB101806  | 10/18/06 16:30 | 10/24/06     | Aqueous | Cyanide, Total Manual Distillation    |
| B06101716-025 | 0610228-026C EB101706 | 10/17/06 17:20 | 10/24/06     | Aqueous | Same As Above                         |





There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except if noted in report comments or the Case Narrative.

If you have any questions regarding these tests results, please call.

Report Approved By:

A handwritten signature in black ink, appearing to be "D. Shady", written over a horizontal line.

**APPENDIX F**

**NMED CLEANUP STANDARDS**



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

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

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

| TPH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                     |                                    | Concentration in Groundwater (mg/L) |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|
| Petroleum Product                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Residential Direct Exposure (mg/kg) | Industrial Direct Exposure (mg/kg) |                                     |
| Diesel #2/crankcase oil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 520                                 | 1120                               | 1.72                                |
| #3 and #6 Fuel Oil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 440                                 | 890                                | 1.34                                |
| Kerosene and jet fuel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 760                                 | 1810                               | 2.86                                |
| Mineral oil dielectric fluid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1440                                | 3040                               | 3.64                                |
| Unknown oil <sup>a</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 200                                 | 200                                | 0.2                                 |
| Waste Oil <sup>b</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 2500                                | 5000                               | Petroleum-Related Contaminants      |
| Gasoline                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Not applicable                      | Not applicable                     | Petroleum-Related Contaminants      |
| <sup>a</sup> Sites with oil from unknown sources must be tested for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, and polychlorinated biphenyls (PCBs) to determine if other potentially toxic constituents are present. The TPH guidelines in Table 2 are not designed to be protective of exposure to these constituents therefore they must be tested for, and compared to, their individual NMED soil screening guidelines.<br><sup>b</sup> Compositional assumption for waste oil developed by NMED is based on review of chromatographs of several types of waste oil. Sites with waste oil must be tested for VOCs, SVOCs, metals, and PCBs to determine if other potentially toxic constituents are present. The TPH guidelines in Table 2 are not designed to be protective of exposure to these constituents therefore they must be tested for, and compared to, their individual NMED soil screening guidelines. |                                     |                                    |                                     |

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

Table A-1: NMED Soil Screening Levels

| Chemical                     | Residential<br>Soil (mg/kg) | End-<br>point | Industrial/<br>Occupational<br>Soil (mg/kg) | End-<br>point | Construction<br>Worker Soil<br>(mg/kg) | End-<br>point | VOC | Tap<br>Water<br>(ug/L) | End-<br>point | DAF 1<br>(mg/kg) | DAF 20<br>(mg/kg) |
|------------------------------|-----------------------------|---------------|---------------------------------------------|---------------|----------------------------------------|---------------|-----|------------------------|---------------|------------------|-------------------|
| Acenaphthene                 | 3.73E+03                    | nc            | 3.35E+04                                    | nc            | 1.41E+04                               | nc            | x   | 3.65E+02               | nc            | 2.75E+00         | 5.49E+01          |
| Acetaldehyde                 | 1.06E+02                    | nc            | 3.84E+02                                    | nc            | 3.45E+02                               | nc            | x   | 1.72E+01               | ca            |                  |                   |
| Acetone                      | 2.81E+04                    | nc            | 1.00E+05                                    | max           | 9.85E+04                               | nc            | x   | 5.48E+03               | nc            | 9.55E-01         | 1.91E+01          |
| Acrylonitrile                | 4.27E+00                    | ca            | 1.26E+01                                    | ca            | 5.75E+01                               | nc            | x   | 3.81E-01               | ca            | 6.68E-05         | 1.34E-03          |
| Acetophenone                 | 1.48E+03                    | sat           | 1.48E+03                                    | sat           | 1.48E+03                               | sat           | x   | 6.08E+02               | nc            | 1.48E-01         | 2.95E+00          |
| Acrolein                     | 2.06E-01                    | nc            | 7.52E-01                                    | nc            | 6.75E-01                               | nc            | x   | 4.16E-02               | nc            | 8.55E-06         | 1.71E-04          |
| Aldrin                       | 2.84E-01                    | ca            | 1.12E+00                                    | ca            | 6.99E+00                               | nc            |     | 3.87E-02               | ca            | 1.42E-01         | 2.84E+00          |
| Aluminum                     | 7.78E+04                    | nc            | 1.00E+05                                    | max           | 1.44E+04                               | nc            |     | 3.65E+04               | nc            | 5.48E+04         | 1.10E+06          |
| Anthracene                   | 2.20E+04                    | nc            | 1.00E+05                                    | max           | 8.60E+04                               | nc            | x   | 1.83E+03               | nc            | 8.11E+01         | 1.62E+03          |
| Antimony                     | 3.13E+01                    | nc            | 4.54E+02                                    | nc            | 1.24E+02                               | nc            |     | 1.46E+01               | nc            | 6.61E-01         | 1.32E+01          |
| Arsenic                      | 3.90E+00                    | ca            | 1.77E+01                                    | ca            | 8.52E+01                               | nc            |     | 4.42E-01               | ca            | 1.45E-02         | 2.90E-01          |
| Barium                       | 1.56E+04                    | nc            | 1.00E+05                                    | max           | 6.02E+04                               | nc            |     | 7.30E+03               | nc            | 3.01E+02         | 6.03E+03          |
| Benzene                      | 1.03E+01                    | ca            | 2.58E+01                                    | ca            | 1.74E+02                               | nc            | x   | 3.49E+00               | ca            | 1.00E-03         | 2.01E-02          |
| Benzidine                    | 2.11E-02                    | ca            | 8.33E-02                                    | ca            | 7.09E-01                               | ca            |     | 2.89E-03               | ca            | 1.24E-05         | 2.47E-04          |
| Benzo(a)anthracene           | 6.21E+00                    | ca            | 2.34E+01                                    | ca            | 2.12E+02                               | ca            |     | 9.09E-01               | ca            | 5.43E-01         | 1.09E+01          |
| Benzo(a)pyrene               | 6.21E-01                    | ca            | 2.34E+00                                    | ca            | 2.12E+01                               | ca            |     | 9.09E-02               | ca            | 1.39E-01         | 2.78E+00          |
| Benzo(b)fluoranthene         | 6.21E+00                    | ca            | 2.34E+01                                    | ca            | 2.12E+02                               | ca            |     | 9.09E-01               | ca            | 1.68E+00         | 3.35E+01          |
| Benzo(k)fluoranthene         | 6.21E+01                    | ca            | 2.34E+02                                    | ca            | 2.12E+03                               | ca            |     | 9.09E+00               | ca            | 1.68E+01         | 3.35E+02          |
| Beryllium                    | 1.56E+02                    | nc            | 2.25E+03                                    | nc            | 5.62E+01                               | nc            |     | 7.30E+01               | nc            | 5.77E+01         | 1.15E+03          |
| a-BHC (HCH)                  | 9.02E-01                    | ca            | 3.99E+00                                    | ca            | 3.00E+01                               | ca            |     | 1.05E-01               | ca            | 2.13E-04         | 4.29E-03          |
| b-BHC (HCH)                  | 3.16E+00                    | ca            | 1.40E+01                                    | ca            | 5.39E+01                               | nc            |     | 3.69E-01               | ca            | 7.61E-04         | 1.52E-02          |
| g-BHC                        | 4.37E+00                    | ca            | 1.93E+01                                    | ca            | 8.09E+01                               | nc            |     | 5.10E-01               | ca            | 9.08E-04         | 1.82E-02          |
| 1,1-Biphenyl                 | 3.08E+03                    | nc            | 2.73E+04                                    | nc            | 1.17E+04                               | nc            | x   | 3.04E+02               | nc            | 3.61E+00         | 7.22E+01          |
| Bis(2-chloroethyl) ether     | 2.44E+00                    | ca            | 7.45E+00                                    | ca            | 1.05E+02                               | ca            | x   | 9.65E-02               | ca            | 2.77E-05         | 5.55E-04          |
| Bis(2-chloroisopropyl) ether | 3.87E+01                    | ca            | 1.19E+02                                    | ca            | 4.53E+02                               | sat           | x   | 2.71E+00               | ca            | 7.21E-04         | 1.44E-02          |
| Bis(2-ethylhexyl) phthalate  | 3.47E+02                    | ca            | 1.37E+03                                    | ca            | 4.66E+03                               | nc            |     | 4.74E+01               | ca            | 1.07E+03         | 2.15E+04          |
| Bis(chloromethyl) ether      | 4.72E-03                    | ca            | 1.23E-02                                    | ca            | 2.32E-01                               | ca            | x   | 5.09E-04               | ca            | 8.95E-08         | 1.79E-06          |
| Boron                        | 1.56E+04                    | nc            | 1.00E+05                                    | max           | 3.09E+04                               | nc            |     | 7.30E+03               | nc            | 2.40E+01         | 4.80E+02          |
| Bromobenzene                 | 3.70E+01                    | nc            | 1.37E+02                                    | nc            | 1.21E+02                               | nc            | x   | 2.06E+01               | nc            | 1.07E-02         | 2.14E-01          |
| Bromodichloromethane         | 1.44E+01                    | ca            | 3.72E+01                                    | ca            | 7.17E+02                               | ca            | x   | 1.78E+00               | ca            | 5.90E-04         | 1.18E-02          |

*NMED Soil Screening Levels  
June 2006  
Revision 4.0*

| Chemical                       | Residential<br>Soil (mg/kg) | End-<br>point | Industrial/<br>Occupational<br>Soil (mg/kg) | End-<br>point | Construction<br>Worker Soil<br>(mg/kg) | End-<br>point | VOC | Tap<br>Water<br>(ug/L) | End-<br>point | DAF 1<br>(mg/kg) | DAF 20<br>(mg/kg) |
|--------------------------------|-----------------------------|---------------|---------------------------------------------|---------------|----------------------------------------|---------------|-----|------------------------|---------------|------------------|-------------------|
| Bromomethane                   | 8.51E+00                    | nc            | 3.28E+01                                    | nc            | 2.82E+01                               | nc            | x   | 8.66E+00               | nc            | 1.87E-03         | 3.74E-02          |
| 1,3-Butadiene                  | 9.93E-01                    | ca            | 2.38E+00                                    | ca            | 4.59E+00                               | nc            | x   | 1.26E+00               | ca            |                  |                   |
| 2-Butanone (MEK)               | 3.18E+04                    | nc            | 4.87E+04                                    | sat           | 4.87E+04                               | nc            | x   | 7.08E+03               | nc            | 1.27E+00         | 2.55E+01          |
| tert-Butyl methyl ether (MTBE) | 3.88E+02                    | ca            | 9.84E+02                                    | ca            | 1.98E+04                               | ca            | x   | 6.14E+01               | ca            |                  |                   |
| n-Butylbenzene                 | 6.21E+01                    | sat           | 6.21E+01                                    | sat           | 6.21E+01                               | sat           | x   | 6.08E+01               | nc            | 2.70E-01         | 5.40E+00          |
| sec-Butylbenzene               | 6.06E+01                    | sat           | 6.06E+01                                    | sat           | 6.06E+01                               | sat           | x   | 6.08E+01               | nc            | 2.17E-01         | 4.33E+00          |
| tert-Butylbenzene              | 1.06E+02                    | sat           | 1.06E+02                                    | sat           | 1.06E+02                               | sat           | x   | 6.08E+01               | nc            | 2.15E-01         | 4.30E+00          |
| Cadmium                        | 3.90E+01                    | nc            | 5.64E+02                                    | nc            | 1.54E+02                               | nc            |     | 1.83E+01               | nc            | 1.37E+00         | 2.75E+01          |
| Carbon disulfide               | 4.60E+02                    | sat           | 4.60E+02                                    | sat           | 4.60E+02                               | sat           | x   | 1.04E+03               | nc            | 3.95E-01         | 7.89E+00          |
| Carbon tetrachloride           | 3.47E+00                    | ca            | 8.64E+00                                    | ca            | 1.80E+02                               | ca            | x   | 1.69E+00               | ca            | 9.74E-04         | 1.95E-02          |
| Chlordane                      | 1.62E+01                    | ca            | 7.19E+01                                    | ca            | 1.30E+02                               | nc            |     | 1.90E+00               | ca            | 3.42E-01         | 6.83E+00          |
| 2-Chloroacetophenone           | 4.25E-02                    | nc            | 1.62E-01                                    | nc            | 1.41E-01                               | nc            | x   | 5.22E-02               | nc            | 4.37E-05         | 8.75E-04          |
| 2-Chloro-1,3-butadiene         | 6.32E+00                    | nc            | 2.30E+01                                    | nc            | 2.08E+01                               | nc            | x   | 1.43E+01               | nc            | 5.66E-03         | 1.13E-01          |
| 1-Chloro-1,1-difluoroethane    | 2.11E+02                    | sat           | 2.11E+02                                    | sat           | 2.11E+02                               | sat           | x   | 8.66E+04               | nc            | 6.28E+01         | 1.26E+03          |
| Chlorobenzene                  | 1.94E+02                    | nc            | 2.45E+02                                    | sat           | 2.45E+02                               | sat           | x   | 1.06E+02               | nc            | 5.50E-02         | 1.10E+00          |
| 1-Chlorobutane                 | 1.22E+02                    | nc            | 2.99E+02                                    | sat           | 2.99E+02                               | sat           | x   | 2.43E+02               | nc            | 9.63E-02         | 1.93E+00          |
| Chlorodifluoromethane          | 2.11E+02                    | sat           | 2.11E+02                                    | sat           | 2.11E+02                               | sat           | x   | 9.76E+04               | nc            | 7.07E+01         | 1.41E+03          |
| Chloroethane                   | 6.33E+01                    | ca            | 1.54E+02                                    | ca            | 1.42E+03                               | sat           | x   | 3.81E+01               | ca            | 9.41E-03         | 1.88E-01          |
| Chloroform                     | 4.00E+00                    | ca            | 9.59E+00                                    | ca            | 2.16E+02                               | ca            | x   | 1.65E+00               | ca            | 4.12E-04         | 8.25E-03          |
| Chloromethane                  | 2.18E+01                    | ca            | 5.34E+01                                    | ca            | 2.84E+02                               | nc            | x   | 1.49E+01               | ca            | 5.02E-03         | 1.00E-01          |
| b-Chloronaphthalene            | 3.99E+03                    | nc            | 2.78E+04                                    | nc            | 1.47E+04                               | nc            | x   | 4.87E+02               | nc            | 1.25E+00         | 2.51E+01          |
| o-Chloronitrobenzene           | 1.49E+00                    | nc            | 5.48E+00                                    | nc            | 4.89E+00                               | nc            | x   | 1.45E-01               | nc            | 3.94E-05         | 7.88E-04          |
| p-Chloronitrobenzene           | 1.05E+01                    | nc            | 4.23E+01                                    | nc            | 3.51E+01                               | nc            | x   | 1.20E+00               | nc            | 3.25E-04         | 6.51E-03          |
| 2-Chlorophenol                 | 1.66E+02                    | nc            | 8.85E+02                                    | nc            | 5.86E+02                               | nc            | x   | 3.04E+01               | nc            | 2.36E-02         | 4.72E-01          |
| 2-Chloropropane                | 2.83E+02                    | nc            | 7.05E+02                                    | sat           | 7.05E+02                               | sat           | x   | 1.76E+02               | nc            | 4.60E-02         | 9.19E-01          |
| o-Chlorotoluene                | 2.02E+02                    | sat           | 2.02E+02                                    | sat           | 2.02E+02                               | sat           | x   | 1.22E+02               | nc            | 5.22E-02         | 1.04E+00          |
| Chromium III                   | 1.00E+05                    | max           | 1.00E+05                                    | max           | 1.00E+05                               | max           |     | 5.48E+04               | nc            | 9.86E+07         | 1.97E+09          |
| Chromium VI                    | 2.34E+02                    | nc            | 3.40E+03                                    | nc            | 2.61E+01                               | ca            |     | 1.10E+02               | nc            | 2.10E+00         | 4.20E+01          |
| Chrysene                       | 6.15E+02                    | ca            | 2.31E+03                                    | ca            | 2.12E+04                               | ca            | x   | 2.91E+01               | ca            | 1.74E+01         | 3.48E+02          |
| Cobalt                         | 1.52E+03                    | nc            | 2.05E+04                                    | nc            | 6.10E+01                               | nc            |     | 7.30E+02               | nc            | 3.31E+01         | 6.61E+02          |
| Copper                         | 3.13E+03                    | nc            | 4.54E+04                                    | nc            | 1.24E+04                               | nc            |     | 1.46E+03               | nc            | 5.15E-01         | 1.03E+03          |
| Crotonaldehyde                 | 7.01E-02                    | ca            | 1.70E-01                                    | ca            | 3.73E+00                               | ca            | x   | 5.82E-02               | ca            | 1.49E-04         | 2.99E-03          |



*NMED Soil Screening Levels  
June 2006  
Revision 4.0*

| Chemical                    | Residential<br>Soil (mg/kg) | End-<br>point | Industrial/<br>Occupational<br>Soil (mg/kg) | End-<br>point | Construction<br>Worker Soil<br>(mg/kg) | End-<br>point | VOC | Tap<br>Water<br>(ug/L) | End-<br>point | DAF 1<br>(mg/kg) | DAF 20<br>(mg/kg) |
|-----------------------------|-----------------------------|---------------|---------------------------------------------|---------------|----------------------------------------|---------------|-----|------------------------|---------------|------------------|-------------------|
| Cumene (isopropylbenzene)   | 2.71E+02                    | nc            | 3.89E+02                                    | sat           | 3.89E+02                               | sat           | x   | 6.78E+02               | nc            | 4.10E+00         | 8.21E+01          |
| Cyanide                     | 1.22E+03                    | nc            | 1.37E+04                                    | nc            | 7.76E+03                               | nc            |     | 7.30E+02               | nc            | 7.35E+00         | 1.47E+02          |
| Cyanogen                    | 1.71E+03                    | sat           | 1.71E+03                                    | sat           | 1.71E+03                               | sat           | x   | 1.46E+03               | nc            | 2.91E+01         | 5.82E+00          |
| Cyanogen bromide            | 2.02E+03                    | sat           | 2.02E+03                                    | sat           | 2.02E+03                               | sat           | x   | 3.29E+03               | nc            | 7.76E+01         | 1.55E+01          |
| Cyanogen chloride           | 2.02E+03                    | sat           | 2.02E+03                                    | sat           | 2.02E+03                               | sat           | x   | 1.83E+03               | nc            | 4.31E+01         | 8.62E+00          |
| DDD                         | 2.44E+01                    | ca            | 1.11E+02                                    | ca            | 8.07E+02                               | ca            |     | 2.77E+00               | ca            | 4.15E+00         | 8.30E+01          |
| DDE                         | 1.72E+01                    | ca            | 7.81E+01                                    | ca            | 5.70E+02                               | ca            |     | 1.95E+00               | ca            | 1.31E+01         | 2.62E+02          |
| DDT                         | 1.72E+01                    | ca            | 7.81E+01                                    | ca            | 1.38E+02                               | nc            |     | 1.95E+00               | ca            | 7.70E+00         | 1.54E+02          |
| Dibenz(a,h)anthracene       | 6.21E-01                    | ca            | 2.34E+00                                    | ca            | 2.12E+01                               | ca            |     | 9.09E-02               | ca            | 5.18E-01         | 1.04E+01          |
| Dibenzofuran                | 1.42E+02                    | nc            | 1.62E+03                                    | nc            | 5.52E+02                               | nc            | x   | 1.22E+01               | nc            | 1.44E-01         | 2.87E+00          |
| 1,2-Dibromo-3-chloropropane | 1.84E+00                    | nc            | 9.68E+00                                    | nc            | 6.48E+00                               | nc            | x   | 3.47E-01               | nc            | 1.49E-04         | 2.98E-03          |
| Dibromochloromethane        | 1.48E+01                    | ca            | 3.95E+01                                    | ca            | 7.16E+02                               | ca            | x   | 1.32E+00               | ca            | 3.58E-04         | 7.16E-03          |
| 1,2-Dibromoethane           | 5.04E-01                    | ca            | 1.31E+00                                    | ca            | 2.48E+01                               | ca            | x   | 5.53E-02               | ca            | 1.20E-05         | 2.40E-04          |
| 1,4-Dichloro-2-butene       | 1.22E-01                    | ca            | 3.23E-01                                    | ca            | 5.97E+00                               | ca            | x   | 1.19E-02               | ca            | 2.93E-06         | 5.87E-05          |
| 1,2-Dichlorobenzene         | 3.74E+01                    | sat           | 3.74E+01                                    | sat           | 3.74E+01                               | sat           | x   | 4.96E+01               | nc            | 1.19E-02         | 2.37E-01          |
| 1,3-Dichlorobenzene         | 3.26E+01                    | nc            | 3.74E+01                                    | sat           | 3.74E+01                               | sat           | x   | 1.83E+01               | nc            | 4.36E-03         | 8.73E-02          |
| 1,4-Dichlorobenzene         | 3.95E+01                    | ca            | 1.03E+02                                    | ca            | 1.96E+03                               | ca            | x   | 4.95E+00               | ca            | 5.49E-03         | 1.10E-01          |
| 3,3-Dichlorobenzidine       | 1.08E+01                    | ca            | 4.26E+01                                    | ca            | 3.63E+02                               | ca            |     | 1.47E+00               | ca            | 1.86E-03         | 3.71E-02          |
| Dichlorodifluoromethane     | 1.61E+02                    | nc            | 2.11E+02                                    | sat           | 2.11E+02                               | sat           | x   | 3.95E+02               | nc            | 2.86E-01         | 5.72E+00          |
| 1,1-Dichloroethane          | 1.40E+03                    | nc            | 1.42E+03                                    | sat           | 1.42E+03                               | sat           | x   | 1.22E+03               | nc            | 3.39E-01         | 6.79E+00          |
| 1,2-Dichloroethane          | 6.04E+00                    | ca            | 1.52E+01                                    | ca            | 6.42E+01                               | nc            | x   | 1.22E+00               | ca            | 2.85E-04         | 5.71E-03          |
| cis-1,2-Dichloroethene      | 7.65E+01                    | nc            | 3.00E+02                                    | nc            | 2.54E+02                               | nc            | x   | 6.08E+01               | nc            | 1.49E-02         | 2.98E-01          |
| trans-1,2-Dichloroethene    | 1.12E+02                    | nc            | 4.29E+02                                    | nc            | 3.70E+02                               | nc            | x   | 1.22E+02               | nc            | 3.33E-02         | 6.87E-01          |
| 1,1-Dichloroethene          | 2.06E+02                    | nc            | 7.77E+02                                    | nc            | 6.78E+02                               | nc            | x   | 3.99E+02               | nc            | 1.34E-01         | 2.68E+00          |
| 2,4-Dichlorophenol          | 1.83E+02                    | nc            | 2.05E+03                                    | nc            | 8.99E+02                               | nc            |     | 1.10E+02               | nc            | 4.31E-02         | 8.63E-01          |
| 1,2-Dichloropropane         | 6.00E+00                    | ca            | 1.49E+01                                    | ca            | 3.33E+01                               | nc            | x   | 1.63E+00               | ca            | 4.10E-04         | 8.19E-03          |
| 1,3-Dichloropropane         | 1.20E+01                    | ca            | 3.17E+01                                    | ca            | 8.98E+01                               | nc            | x   | 3.90E+00               | ca            | 1.16E-03         | 2.31E-02          |
| Dicyclopentadiene           | 2.21E+01                    | nc            | 8.26E+01                                    | nc            | 7.28E+01                               | nc            | x   | 1.39E+01               | nc            | 1.50E-02         | 3.00E-01          |
| Dieldrin                    | 3.04E-01                    | ca            | 1.20E+00                                    | ca            | 1.02E+01                               | ca            |     | 4.15E-02               | ca            | 1.34E-03         | 2.68E-02          |
| Diethyl phthalate           | 4.89E+04                    | nc            | 1.00E+05                                    | max           | 1.00E+05                               | max           |     | 2.92E+04               | nc            | 1.77E+01         | 3.54E+02          |
| Dimethyl phthalate          | 1.00E+05                    | max           | 1.00E+05                                    | max           | 1.00E+05                               | max           |     | 3.65E+05               | nc            | 8.36E+01         | 1.67E+03          |
| Di-n-butyl phthalate        | 6.11E+03                    | nc            | 6.84E+04                                    | nc            | 2.33E+04                               | nc            |     | 3.65E+03               | nc            | 1.86E+02         | 3.72E+03          |

NMED Soil Screening Levels  
June 2006  
Revision 4.0

| Chemical                  | Residential<br>Soil (mg/kg) | End-<br>point | Industrial/<br>Occupational<br>Soil (mg/kg) | End-<br>point | Construction<br>Worker Soil<br>(mg/kg) | End-<br>point | VOC | Tap<br>Water<br>(ug/L) | End-<br>point | DAF 1<br>(mg/kg) | DAF 20<br>(mg/kg) |
|---------------------------|-----------------------------|---------------|---------------------------------------------|---------------|----------------------------------------|---------------|-----|------------------------|---------------|------------------|-------------------|
| 2,4-Dimethylphenol        | 1.22E+03                    | nc            | 1.37E+04                                    | nc            | 4.66E+03                               | nc            |     | 7.30E+02               | nc            | 3.55E-01         | 7.11E+00          |
| 4,6-Dinitro-o-cresol      | 6.11E+00                    | nc            | 6.84E+01                                    | nc            | 2.33E+01                               | nc            |     | 3.69E+00               | nc            | 3.93E-03         | 7.85E-02          |
| 2,4-Dinitrophenol         | 1.22E+02                    | nc            | 1.37E+03                                    | nc            | 4.66E+02                               | nc            |     | 7.30E+01               | nc            | 5.25E-02         | 1.09E+00          |
| 2,4-Dinitrotoluene        | 1.22E+02                    | nc            | 1.37E+03                                    | nc            | 4.66E+02                               | nc            |     | 7.30E+01               | nc            | 2.31E-02         | 4.62E-01          |
| 1,2-Diphenylhydrazine     | 6.08E+00                    | ca            | 2.39E+01                                    | ca            | 2.04E+02                               | ca            |     | 8.30E-01               | ca            | 4.48E-03         | 8.95E-02          |
| Endosulfan                | 3.67E+02                    | nc            | 4.10E+03                                    | nc            | 1.40E+03                               | nc            |     | 2.19E+02               | nc            | 7.41E-01         | 1.48E+01          |
| Endrin                    | 1.83E+01                    | nc            | 2.05E+02                                    | nc            | 6.99E+01                               | nc            |     | 1.10E+01               | nc            | 2.04E-01         | 4.08E+00          |
| Epichlorohydrin           | 1.66E+01                    | nc            | 6.56E+01                                    | nc            | 5.54E+01                               | nc            | x   | 2.03E+00               | nc            | 3.62E-04         | 7.25E-03          |
| Ethyl acetate             | 2.10E+04                    | sat           | 2.10E+04                                    | sat           | 2.10E+04                               | sat           | x   | 5.48E+03               | nc            | 1.44E+00         | 2.87E+01          |
| Ethyl acrylate            | 2.79E+00                    | ca            | 6.75E+00                                    | ca            | 5.22E+01                               | sat           | x   | 2.30E+00               | ca            | 5.86E-03         | 1.17E-01          |
| Ethyl chloride            | 6.33E+01                    | ca            | 1.54E+02                                    | ca            | 1.42E+03                               | sat           | x   | 3.81E+01               | ca            | 9.41E-03         | 1.88E-01          |
| Ethyl ether               | 1.94E+03                    | sat           | 1.94E+03                                    | sat           | 1.94E+03                               | sat           | x   | 1.22E+03               | nc            | 2.37E-01         | 4.73E+00          |
| Ethyl methacrylate        | 5.27E+01                    | sat           | 5.27E+01                                    | sat           | 5.27E+01                               | sat           | x   | 5.48E+02               | nc            | 1.41E+00         | 2.81E+01          |
| Ethylbenzene              | 1.28E+02                    | sat           | 1.28E+02                                    | sat           | 1.28E+02                               | sat           | x   | 1.34E+03               | nc            | 1.01E+00         | 2.02E+01          |
| Ethylene oxide            | 2.65E+00                    | ca            | 8.07E+00                                    | ca            | 1.15E+02                               | ca            | x   | 2.41E-01               | ca            | 4.27E-05         | 8.54E-04          |
| Fluoranthene              | 2.29E+03                    | nc            | 2.44E+04                                    | nc            | 8.73E+03                               | nc            |     | 1.46E+03               | nc            | 2.35E+02         | 4.69E+03          |
| Fluorene                  | 2.66E+03                    | nc            | 2.65E+04                                    | nc            | 1.02E+04                               | nc            | x   | 2.43E+02               | nc            | 2.93E+00         | 5.85E+01          |
| Fluoride                  | 3.67E+03                    | nc            | 4.10E+04                                    | nc            | 1.43E+04                               | nc            |     | 2.19E+03               | nc            | 3.29E+02         | 6.58E+03          |
| Furan                     | 5.53E+00                    | nc            | 2.12E+01                                    | nc            | 1.83E+01                               | nc            | x   | 6.08E+00               | nc            | 1.32E-03         | 2.63E-02          |
| Heptachlor                | 1.08E+00                    | ca            | 4.26E+00                                    | ca            | 3.63E+01                               | ca            |     | 1.47E-01               | ca            | 3.12E-01         | 6.24E+00          |
| Hexachlorobenzene         | 3.04E+00                    | ca            | 1.20E+01                                    | ca            | 1.02E+02                               | ca            |     | 4.15E-01               | ca            | 3.43E-02         | 6.86E-01          |
| Hexachloro-1,3-butadiene  | 1.22E+01                    | nc            | 1.37E+02                                    | nc            | 4.66E+01                               | nc            |     | 7.30E+00               | nc            | 5.90E-01         | 1.18E+01          |
| Hexachlorocyclopentadiene | 3.66E+02                    | nc            | 4.10E+03                                    | nc            | 4.31E+02                               | nc            |     | 2.19E+02               | nc            | 6.58E+01         | 1.32E+03          |
| Hexachloroethane          | 6.11E+01                    | nc            | 6.84E+02                                    | nc            | 2.33E+02                               | nc            |     | 3.69E+01               | nc            | 1.04E-01         | 2.09E+00          |
| n-Hexane                  | 3.80E+01                    | sat           | 3.80E+01                                    | sat           | 3.80E+01                               | sat           | x   | 4.16E+02               | nc            | 8.64E-01         | 1.73E+01          |
| HMX                       | 3.06E+03                    | nc            | 3.42E+04                                    | nc            | 1.17E+04                               | nc            |     | 1.83E+03               | nc            | 5.39E+00         | 1.08E+02          |
| Hydrogen cyanide          | 2.24E+01                    | nc            | 8.22E+01                                    | nc            | 7.33E+01                               | nc            | x   | 6.20E+00               | nc            | 1.24E-03         | 2.47E-02          |
| Indeno(1,2,3-c,d)pyrene   | 6.21E+00                    | ca            | 2.34E+01                                    | ca            | 2.12E+02                               | ca            |     | 9.09E-01               | ca            | 4.73E+00         | 9.46E+01          |
| Iron                      | 2.35E+04                    | nc            | 1.00E+05                                    | max           | 9.29E+04                               | nc            |     | 1.10E+04               | nc            | 2.77E+02         | 5.54E+03          |
| Isobutanol                | 1.38E+04                    | nc            | 2.26E+04                                    | sat           | 2.26E+04                               | sat           | x   | 1.83E+03               | nc            | 4.86E-01         | 9.72E+00          |
| Isophorone                | 5.12E+03                    | ca            | 2.02E+04                                    | ca            | 4.66E+04                               | nc            |     | 6.99E+02               | ca            | 1.70E-01         | 3.40E+00          |
| Lead                      | 4.00E+02                    | IEUBK         | 8.00E+02                                    | IEUBK         | 8.00E+02                               | IEUBK         |     |                        |               |                  |                   |

*NMED Soil Screening Levels  
June 2006  
Revision 4.0*

| Chemical                 | Residential<br>Soil (mg/kg) | End-<br>point | Industrial/<br>Occupational<br>Soil (mg/kg) | End-<br>point | Construction<br>Worker Soil<br>(mg/kg) | End-<br>point | VOC | Tap<br>Water<br>(ug/L) | End-<br>point | DAF 1<br>(mg/kg) | DAF 20<br>(mg/kg) |
|--------------------------|-----------------------------|---------------|---------------------------------------------|---------------|----------------------------------------|---------------|-----|------------------------|---------------|------------------|-------------------|
| Lead (tetraethyl-)       | 6.11E+03                    | nc            | 6.84E+02                                    | nc            | 2.38E+02                               | nc            |     | 3.65E+03               | nc            | 6.33E+07         | 1.27E+05          |
| Maleic hydrazide         | 1.61E+03                    | sat           | 1.61E+03                                    | sat           | 1.61E+03                               | sat           | x   | 3.04E+03               | nc            | 8.12E+01         | 1.62E+01          |
| Manganese                | 3.59E+03                    | nc            | 4.84E+04                                    | nc            | 1.50E+02                               | nc            |     | 1.72E+03               | nc            | 1.12E+02         | 2.24E+03          |
| Mercury (elemental)      | 1.00E+05                    | max           | 1.00E+05                                    | max           | 9.27E+02                               | nc            |     |                        |               | 1.05E+01         | 2.09E+03          |
| Mercury (methyl)         | 6.11E+00                    | nc            | 6.84E+01                                    | nc            | 2.38E+01                               | nc            |     | 3.65E+00               | nc            | 8.26E+04         | 1.65E+02          |
| Methacrylonitrile        | 3.84E+00                    | nc            | 2.20E+01                                    | nc            | 1.37E+01                               | nc            | x   | 1.04E+00               | nc            | 1.83E+04         | 3.65E+03          |
| Methomyl                 | 8.44E+01                    | nc            | 3.17E+02                                    | nc            | 2.78E+02                               | nc            | x   | 1.52E+02               | nc            | 5.74E+02         | 1.15E+00          |
| Methyl acetate           | 3.76E+04                    | nc            | 1.00E+05                                    | max           | 1.00E+05                               | max           | x   | 6.08E+03               | nc            | 1.08E+00         | 2.15E+01          |
| Methyl acrylate          | 9.28E+01                    | nc            | 1.57E+02                                    | sat           | 1.57E+02                               | sat           | x   | 1.83E+02               | nc            | 4.64E+01         | 9.29E+00          |
| Methyl isobutyl ketone   | 5.51E+03                    | nc            | 7.01E+03                                    | sat           | 7.01E+03                               | sat           | x   | 1.99E+03               | nc            | 7.35E+01         | 1.47E+01          |
| Methyl methacrylate      | 2.92E+03                    | sat           | 2.92E+03                                    | sat           | 2.92E+03                               | sat           | x   | 1.42E+03               | nc            | 2.76E+01         | 5.52E+00          |
| Methyl styrene (alpha)   | 2.17E+02                    | sat           | 2.17E+02                                    | sat           | 2.17E+02                               | sat           | x   | 4.26E+02               | nc            | 3.08E+01         | 6.17E+00          |
| Methyl styrene (mixture) | 1.39E+02                    | nc            | 2.17E+02                                    | sat           | 2.17E+02                               | sat           | x   | 5.49E+01               | nc            | 3.96E+02         | 7.93E+01          |
| Methylcyclohexane        | 7.89E+01                    | sat           | 7.89E+01                                    | sat           | 7.89E+01                               | sat           | x   | 5.23E+03               | nc            | 2.88E+01         | 5.77E+02          |
| Methylene bromide        | 1.79E+02                    | nc            | 7.85E+02                                    | nc            | 6.09E+02                               | nc            | x   | 6.08E+01               | nc            | 2.72E+02         | 5.44E+01          |
| Methylene chloride       | 1.82E+02                    | ca            | 4.90E+02                                    | ca            | 2.63E+03                               | sat           | x   | 4.22E+01               | ca            | 8.51E+03         | 1.70E+01          |
| Molybdenum               | 3.91E+02                    | nc            | 5.68E+03                                    | nc            | 1.55E+03                               | nc            |     | 1.83E+02               | nc            | 3.70E+00         | 7.40E+01          |
| Naphthalene              | 7.95E+01                    | nc            | 3.00E+02                                    | nc            | 2.62E+02                               | nc            | x   | 6.20E+00               | nc            | 1.97E+02         | 3.94E+01          |
| Nickel                   | 1.56E+03                    | nc            | 2.27E+04                                    | nc            | 6.19E+03                               | nc            |     | 7.30E+02               | nc            | 4.77E+01         | 9.53E+02          |
| Nitrate                  | 1.00E+05                    | max           | 1.00E+05                                    | max           | 1.00E+05                               | max           |     | 5.84E+04               | nc            | 1.67E+01         | 3.35E+02          |
| Nitrile                  | 7.82E+03                    | nc            | 1.00E+05                                    | max           | 3.10E+04                               | nc            |     | 3.65E+03               | nc            | 7.63E+01         | 1.53E+01          |
| Nitrobenzene             | 2.28E+01                    | nc            | 1.47E+02                                    | nc            | 8.28E+01                               | nc            | x   | 3.40E+00               | nc            | 9.18E+04         | 1.84E+02          |
| Nitroglycerin            | 3.47E+02                    | ca            | 1.37E+03                                    | ca            | 1.17E+04                               | ca            |     | 4.74E+01               | ca            | 2.80E+02         | 5.61E+01          |
| N-Nitrosodiethylamine    | 3.24E+02                    | ca            | 1.28E+01                                    | ca            | 1.09E+00                               | ca            |     | 4.42E+03               | ca            | 8.73E+06         | 1.75E+04          |
| N-Nitrosodimethylamine   | 9.54E+02                    | ca            | 3.76E+01                                    | ca            | 1.86E+00                               | nc            |     | 1.30E+02               | ca            | 1.17E+05         | 2.34E+04          |
| N-Nitrosodi-n-butylamine | 2.69E+01                    | ca            | 7.28E+01                                    | ca            | 1.24E+01                               | ca            | x   | 1.99E+02               | ca            | 1.12E+05         | 2.24E+04          |
| N-Nitrosodiphenylamine   | 9.93E+02                    | ca            | 3.91E+03                                    | ca            | 4.66E+03                               | nc            |     | 1.35E+02               | ca            | 2.86E+01         | 5.71E+00          |
| N-Nitrosopyrrolidine     | 2.32E+00                    | ca            | 9.12E+00                                    | ca            | 7.77E+01                               | ca            |     | 3.16E+01               | ca            | 1.30E+04         | 2.60E+03          |
| m-Nitrotoluene           | 5.69E+02                    | sat           | 5.69E+02                                    | sat           | 5.69E+02                               | sat           | x   | 1.22E+02               | nc            | 3.30E+02         | 6.59E+01          |
| o-Nitrotoluene           | 1.08E+01                    | ca            | 3.23E+01                                    | ca            | 4.73E+02                               | ca            | x   | 4.81E+01               | ca            | 1.30E+04         | 2.61E+03          |
| p-Nitrotoluene           | 1.46E+02                    | ca            | 4.37E+02                                    | ca            | 1.55E+03                               | nc            | x   | 6.51E+00               | ca            | 1.76E+03         | 3.53E+02          |
| Pentachlorobenzene       | 4.89E+01                    | nc            | 5.47E+02                                    | nc            | 1.86E+02                               | nc            |     | 2.92E+01               | nc            | 9.37E+02         | 1.87E+00          |

*NMED Soil Screening Levels*  
June 2006  
Revision 4.0

| Chemical                              | Residential<br>Soil (mg/kg) | End-<br>point | Industrial/<br>Occupational<br>Soil (mg/kg) | End-<br>point | Construction<br>Worker Soil<br>(mg/kg) | End-<br>point | VOC | Tap<br>Water<br>(ug/L) | End-<br>point | DAF 1<br>(mg/kg) | DAF 20<br>(mg/kg) |
|---------------------------------------|-----------------------------|---------------|---------------------------------------------|---------------|----------------------------------------|---------------|-----|------------------------|---------------|------------------|-------------------|
| Pentachlorophenol                     | 2.98E+01                    | ca            | 1.00E+02                                    | ca            | 1.02E+03                               | ca            |     | 5.53E+00               | ca            | 5.87E-03         | 1.17E-01          |
| Phenanthrene                          | 1.83E+03                    | nc            | 2.05E+04                                    | nc            | 6.99E+03                               | nc            |     | 1.10E+03               | nc            | 2.32E+01         | 4.64E+02          |
| Phenol                                | 1.83E+04                    | nc            | 1.00E+05                                    | max           | 6.99E+04                               | nc            |     | 1.10E+04               | nc            | 2.37E+00         | 4.74E+01          |
| Polychlorinatedbiphenyls              |                             |               |                                             |               |                                        |               |     |                        |               |                  |                   |
| Aroclor 1016                          | 3.93E+00                    | nc            | 4.13E+01                                    | nc            | 1.50E+01                               | nc            |     | 2.56E+00               | nc            | 1.73E-01         | 3.45E+00          |
| Aroclor 1221                          | 1.12E+00                    | nc            | 8.26E+00                                    | ca            | 4.28E+00                               | nc            |     | 3.32E-01               | ca            | 2.24E-02         | 4.47E-01          |
| Aroclor 1232                          | 1.12E+00                    | nc            | 8.26E+00                                    | ca            | 4.28E+00                               | nc            |     | 3.32E-01               | ca            | 2.24E-02         | 4.47E-01          |
| Aroclor 1242                          | 1.12E+00                    | nc            | 8.26E+00                                    | ca            | 4.28E+00                               | nc            |     | 3.32E-01               | ca            | 2.24E-02         | 4.47E-01          |
| Aroclor 1248                          | 1.12E+00                    | nc            | 8.26E+00                                    | ca            | 4.28E+00                               | nc            |     | 3.32E-01               | ca            | 2.64E-01         | 5.28E+00          |
| Aroclor 1254                          | 1.12E+00                    | nc            | 8.26E+00                                    | ca            | 4.28E+00                               | nc            |     | 3.32E-01               | ca            | 2.64E-01         | 5.28E+00          |
| Aroclor 1260                          | 1.12E+00                    | nc            | 8.26E+00                                    | ca            | 4.28E+00                               | nc            |     | 3.32E-01               | ca            | 2.64E-01         | 5.28E+00          |
| n-Propylbenzene                       | 6.21E+01                    | sat           | 6.21E+01                                    | sat           | 6.21E+01                               | sat           | x   | 6.08E+01               | nc            | 2.70E-01         | 5.40E+00          |
| Propylene oxide                       | 2.22E+01                    | ca            | 9.33E+01                                    | ca            | 7.92E+02                               | nc            | x   | 2.18E+00               | ca            | 4.60E-04         | 9.20E-03          |
| Pyrene                                | 2.29E+03                    | nc            | 3.09E+04                                    | nc            | 9.01E+03                               | nc            | x   | 1.83E+02               | nc            | 1.86E+01         | 3.73E+02          |
| RDX                                   | 4.42E+01                    | ca            | 1.74E+02                                    | ca            | 6.99E+02                               | nc            |     | 6.03E+00               | ca            | 1.68E-03         | 3.36E-02          |
| Selenium                              | 3.91E+02                    | nc            | 5.68E+03                                    | nc            | 1.55E+03                               | nc            |     | 1.83E+02               | nc            | 9.52E-01         | 1.90E+01          |
| Silver                                | 3.91E+02                    | nc            | 5.68E+03                                    | nc            | 1.55E+03                               | nc            |     | 1.83E+02               | nc            | 1.57E+00         | 3.13E+01          |
| Strontium                             | 4.69E+04                    | nc            | 1.00E+05                                    | max           | 1.00E+05                               | max           |     | 2.19E+04               | nc            | 7.73E+02         | 1.55E+04          |
| Styrene                               | 1.00E+02                    | sat           | 1.00E+02                                    | sat           | 1.00E+02                               | sat           | x   | 1.62E+03               | nc            | 5.23E-01         | 1.05E+01          |
| 1,2,4,5-Tetrachlorobenzene            | 1.83E+01                    | nc            | 2.05E+02                                    | nc            | 6.99E+01                               | nc            |     | 1.10E+01               | nc            | 2.14E-02         | 4.29E-01          |
| 1,1,1,2-Tetrachloroethane             | 4.32E+01                    | ca            | 1.14E+02                                    | ca            | 2.11E+03                               | ca            | x   | 4.27E+00               | ca            | 1.25E-03         | 2.50E-02          |
| 1,1,2,2-Tetrachloroethane             | 5.55E+00                    | ca            | 1.46E+01                                    | ca            | 2.71E+02                               | ca            | x   | 5.46E-01               | ca            | 1.60E-04         | 3.21E-03          |
| Tetrachloroethene                     | 1.29E+01                    | ca            | 3.16E+01                                    | ca            | 1.34E+02                               | sat           | x   | 4.32E+00               | ca            | 2.87E-03         | 5.74E-02          |
| Thallium                              | 5.16E+00                    | nc            | 7.49E+01                                    | nc            | 2.04E+01                               | nc            |     | 2.41E+00               | nc            | 1.72E-01         | 3.43E+00          |
| Toluene                               | 2.52E+02                    | sat           | 2.52E+02                                    | sat           | 2.52E+02                               | sat           | x   | 2.27E+03               | nc            | 1.08E+00         | 2.17E+01          |
| Toxaphene                             | 4.42E+00                    | ca            | 1.74E+01                                    | ca            | 1.48E+02                               | ca            |     | 6.03E-01               | ca            | 2.33E-01         | 4.65E+00          |
| Tribromomethane                       | 6.21E+02                    | ca            | 2.46E+03                                    | ca            | 4.44E+03                               | nc            |     | 2.44E+01               | ca            | 1.73E-01         | 3.47E+00          |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 3.28E+03                    | sat           | 3.28E+03                                    | sat           | 3.28E+03                               | sat           | x   | 5.92E+04               | nc            | 1.68E+02         | 3.36E+03          |
| 1,2,4-Trichlorobenzene                | 6.93E+01                    | nc            | 2.69E+02                                    | nc            | 2.30E+02                               | nc            | x   | 7.16E+00               | nc            | 2.04E-02         | 4.08E-01          |
| 1,1,1-Trichloroethane                 | 5.63E+02                    | sat           | 5.63E+02                                    | sat           | 5.63E+02                               | sat           | x   | 3.17E+03               | nc            | 1.33E+00         | 2.65E+01          |
| 1,1,2-Trichloroethane                 | 1.19E+01                    | ca            | 3.02E+01                                    | ca            | 1.94E+02                               | nc            | x   | 1.97E+00               | ca            | 4.98E-04         | 9.95E-03          |
| Trichloroethylene                     | 6.38E-01                    | ca            | 1.56E+00                                    | ca            | 3.36E+01                               | ca            | x   | 2.77E-01               | ca            | 1.00E-04         | 2.00E-03          |

NMED Soil Screening Levels  
June 2006  
Revision 4.0

| Chemical               | Residential<br>Soil (mg/kg) | End-<br>point | Industrial/<br>Occupational<br>Soil (mg/kg) | End-<br>point | Construction<br>Worker Soil<br>(mg/kg) | End-<br>point | VOC | Tap<br>Water<br>(ug/L) | End-<br>point | DAF 1<br>(mg/kg) | DAF 20<br>(mg/kg) |
|------------------------|-----------------------------|---------------|---------------------------------------------|---------------|----------------------------------------|---------------|-----|------------------------|---------------|------------------|-------------------|
| Trichlorofluoromethane | 5.88E+02                    | nc            | 9.83E+02                                    | sat           | 9.83E+02                               | sat           | x   | 1.29E+03               | nc            | 1.12E+00         | 2.23E+01          |
| 2,4,5-Trichlorophenol  | 6.11E+03                    | nc            | 6.84E+04                                    | nc            | 2.33E+04                               | nc            |     | 3.65E+03               | nc            | 7.13E+00         | 1.43E+02          |
| 2,4,6-Trichlorophenol  | 6.11E+00                    | nc            | 6.84E+01                                    | nc            | 2.33E+01                               | nc            |     | 3.65E+00               | nc            | 7.13E-03         | 1.43E-01          |
| 1,1,2-Trichloropropane | 2.53E+01                    | nc            | 9.84E+01                                    | nc            | 8.35E+01                               | nc            | x   | 3.04E+01               | nc            | 1.17E-02         | 2.35E-01          |
| 1,2,3-Trichloropropane | 8.61E-02                    | ca            | 2.09E-01                                    | ca            | 4.57E+00                               | ca            | x   | 5.53E-02               | ca            | 2.07E-05         | 4.14E-04          |
| 1,2,3-Trichloropropene | 1.21E+00                    | nc            | 4.39E+00                                    | nc            | 3.95E+00                               | nc            | x   | 2.10E+00               | nc            | 7.88E-04         | 1.58E-02          |
| Triethylamine          | 4.90E+01                    | nc            | 2.33E+02                                    | nc            | 1.69E+02                               | nc            | x   | 1.21E+01               | nc            | 2.14E-03         | 4.29E-02          |
| 1,2,4-Trimethylbenzene | 5.80E+01                    | nc            | 2.13E+02                                    | nc            | 1.90E+02                               | nc            | x   | 1.23E+01               | nc            | 7.09E-02         | 1.42E+00          |
| 1,3,5-Trimethylbenzene | 2.48E+01                    | nc            | 6.92E+01                                    | sat           | 6.92E+01                               | sat           | x   | 1.23E+01               | nc            | 1.77E-02         | 3.55E-01          |
| 2,4,6-Trinitrotoluene  | 3.06E+01                    | nc            | 3.42E+02                                    | nc            | 1.17E+02                               | nc            |     | 1.83E+01               | nc            | 5.34E-02         | 1.07E+00          |
| Vanadium               | 7.82E+01                    | nc            | 1.14E+03                                    | nc            | 3.10E+02                               | nc            |     | 3.65E+01               | nc            | 3.65E+01         | 7.30E+02          |
| Vinyl acetate          | 1.07E+03                    | nc            | 3.68E+03                                    | sat           | 3.52E+03                               | nc            | x   | 4.12E+02               | nc            | 7.57E-02         | 1.51E+00          |
| Vinyl bromide          | 2.85E+00                    | ca            | 6.84E+00                                    | ca            | 1.93E+01                               | nc            | x   | 1.18E+00               | ca            | 4.71E-04         | 9.41E-03          |
| Vinyl chloride (Child) | 2.25E+00                    | ca            |                                             |               |                                        |               | x   | 4.28E-01               | ca            | 1.40E-04         | 2.80E-03          |
| Vinyl chloride (adult) | 4.37E+00                    | ca            | 1.40E+01                                    | ca            | 1.82E+02                               | ca            | x   | 8.33E-01               | ca            | 2.72E-04         | 5.45E-03          |
| m-Xylene               | 8.20E+01                    | sat           | 8.20E+01                                    | sat           | 8.20E+01                               | sat           | x   | 2.03E+02               | nc            | 1.03E-01         | 2.06E+00          |
| o-Xylene               | 9.95E+01                    | sat           | 9.95E+01                                    | sat           | 9.95E+01                               | sat           | x   | 7.30E+03               | nc            | 4.07E+00         | 8.14E+01          |
| Xylenes                | 8.20E+01                    | sat           | 8.20E+01                                    | sat           | 8.20E+01                               | sat           | x   | 2.03E+02               | nc            | 1.03E-01         | 2.06E+00          |
| Zinc                   | 2.35E+04                    | nc            | 1.00E+05                                    | max           | 9.29E+04                               | nc            |     | 1.10E+04               | nc            | 6.82E+02         | 1.36E+04          |