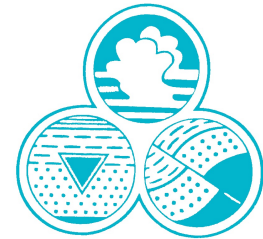


# *Advanced* GeoEnvironmental, Inc.



07 January 2008  
AGE-NC Project No. 03-1101

**RECEIVED**

2:31 pm, Jan 07, 2008

Alameda County  
Environmental Health

Mr. Jerry Wickham  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

**Subject: Additional Subsurface Investigation Report  
RINEHART OIL, INC. - OAKLAND TRUCK STOP  
1107 5<sup>th</sup> Street, Oakland, California**

Dear Mr. Wickham:

At the request of Mr. Reed Rinehart of RinoPacific, Inc., *Advanced GeoEnvironmental, Inc.* has prepared the enclosed *Additional Subsurface Investigation Report* for the above-referenced site. The cone penetrometer test (CPT) and well installation activities were conducted as required by the County Environmental Health Services - Department of Environmental Protection, to assess the lateral and vertical extent of petroleum hydrocarbon impact to ground water resulting from an unauthorized release from underground storage tanks. The scope of work included the advancement of three CPT borings and installation and development of two off-site ground water monitoring wells.

If you have any questions or require further information, please contact our office at (707) 570-1418.

Sincerely,

***Advanced GeoEnvironmental, Inc.***

  
Jeremiah J. Puget  
Staff Scientist

Enclosure

cc: Mr. Reed Rinehart - RinoPacific, Inc.

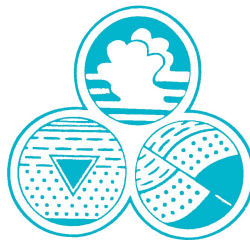
**Additional Subsurface Investigation Report**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**

07 January 2008  
AGE-NC Project No. 03-1101

*PREPARED FOR:*

Mr. Reed Rinehart  
RINEHART OIL, INC.

*PREPARED BY:*



***Advanced GeoEnvironmental, Inc.***

381 Thor Place, Brea, California 92821 • Phone (714) 529-0200 • Fax (714) 529-0203  
837 Shaw Road, Stockton, California 95215 • Phone (209) 467-1006 • Fax (209) 467-1118  
2318 Fourth Street, Santa Rosa, California 95404 • Phone (707) 570-1418 • Fax (707) 570-1461  
395 Del Monte Center, #111, Monterey, California 93940 • Phone (800) 511-9300 • Fax (831) 394-5979

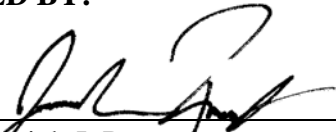
**Additional Subsurface Investigation Report  
RINEHART OIL, INC. - OAKLAND TRUCK STOP  
1107 5<sup>th</sup> Street, Oakland, California**

07 January 2008  
AGE-NC Project No. 03-1101

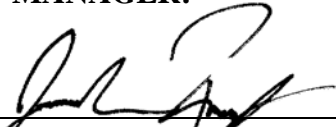


**Advanced GeoEnvironmental, Inc.  
837 Shaw Road, Stockton, California**

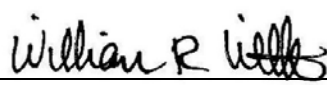
**PREPARED BY:**

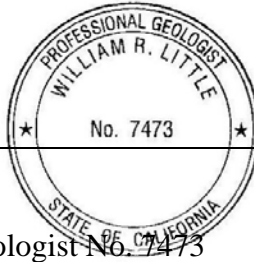
  
\_\_\_\_\_  
Jeremiah J. Puget  
Staff Scientist

**PROJECT MANAGER:**

  
\_\_\_\_\_  
Jeremiah J. Puget  
Staff Scientist

**REVIEWED BY:**

  
\_\_\_\_\_  
William R. Little  
Senior Project Geologist  
California Professional Geologist No. 7473



**Additional Subsurface Investigation Report  
RINEHART OIL, INC. - OAKLAND TRUCK STOP  
1107 5<sup>th</sup> Street, Oakland, California**

**TABLE OF CONTENTS**

<u>SECTION</u>	<u>PAGE</u>
<b>1.0. INTRODUCTION.....</b>	<b>1</b>
<b>2.0. SCOPE OF WORK.....</b>	<b>1</b>
<b>3.0. SITE INVESTIGATION ACTIVITIES.....</b>	<b>2</b>
3.1. SOIL SAMPLE COLLECTION AND ANALYSIS.....	2
3.2. MONITORING WELL INSTALLATION.....	3
3.3. MONITORING WELL DEVELOPMENT AND ELEVATION SURVEY.....	3
3.4. CPT SOIL BORINGS.....	4
3.5. CPT LITHOLOGIC SOUNDINGS.....	4
3.6. IN-SITU GROUND WATER SAMPLING AND ANALYSIS.....	4
<b>4.0. FINDINGS.....</b>	<b>5</b>
4.1. SUBSURFACE SOIL PROFILE.....	6
4.2. SOIL SAMPLE ANALYTICAL RESULTS.....	6
4.3. GROUND WATER ANALYTICAL RESULTS.....	6
4.3.1. Benzene, Toluene, Ethylbenzene, and Total Xylenes.....	6
4.3.2. TPH-Diesel.....	7
4.3.3. TPH-Gasoline.....	7
4.3.4. MTBE.....	7
<b>5.0. SUMMARY AND CONCLUSIONS.....</b>	<b>7</b>
<b>6.0. RECOMMENDATIONS.....</b>	<b>8</b>
<b>7.0. LIMITATIONS.....</b>	<b>9</b>

**Additional Subsurface Investigation Report**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**

**TABLE OF CONTENTS**

**FIGURES**

Figure 1 - *Location Map*

Figure 2 - *Site Plan*

Figure 3 - *Cross-Section A-A' With Dissolved TPH*

**TABLES**

Table 1 - *Ground Water Elevation Data*

Table 2 - *Soil Analytical Results: TPH-G, TPH-D, BTEX, and Fuel Additives*

Table 3 - *Grab Ground Water Analytical Results: TPH-G, TPH-D, BTEX, and Fuel Additives*

**APPENDICES**

Appendix A - *Historical Background*

Appendix B - *Field Procedures and Protocol*

Appendix C - *Cone Penetration Test Data Logs and Soil Boring Logs*

Appendix D - *Laboratory Analytical Report*

Appendix E - *Monitoring Well Development Field Logs*

**Additional Subsurface Investigation Report**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**

## **1.0. INTRODUCTION**

At the request of Mr. Reed Rinehart of RinoPacific, Inc., *Advanced GeoEnvironmental, Inc. (AGE)* has prepared the enclosed *Additional Subsurface Investigation Report* for the site located at 1107 5th Street, Oakland, California. Cone penetrometer test (CPT) borings and monitoring well installation activities were conducted as required by the Alameda County Environmental Health Services - Department of Environmental Protection (ACEHS-DEP) to assess the lateral and vertical extent of petroleum hydrocarbon impact to ground water resulting from an unauthorized release from underground storage tanks. The scope of work included the advancement of three CPT borings and installation and development of two off-site ground water monitoring wells. The location of the site is illustrated in Figure 1; a site plan is shown in Figure 2.

The monitoring well installation work was conducted in accordance with AGE's *Additional Site Assessment Work Plan*, dated 29 September 2005 and approved by the ACEHS-DEP by letter dated 26 October 2005. The CPT work was conducted in accordance with the *Additional Soil Boring Work Plan - Addendum*, dated 08 August 2007, and approved by the ACEHS-DEP by letter dated 31 August 2007. This report provides a description of the scope of work, procedures for CPT borings, in-situ ground water sample collection and analysis, soil boring advancement, soil sample collection and analysis, and ground water monitoring well installation. Additionally, the report presents the findings, conclusions, and recommendations of the investigation.

This report has been prepared in accordance with the Regional Water Quality Control Board's *Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites* guidelines for the investigation of UST sites. Historical site background information documenting an unauthorized release of petroleum hydrocarbon compounds at the site is presented in Appendix A.

## **2.0. SCOPE OF WORK**

Based on the results of the previous site investigations and remedial actions, a vertical assessment was required near the former UST release area and additional site assessment was required down-gradient (north) of the site. The recent site investigation activities were conducted utilizing hollow-stem auger and CPT technology. CPT allows electronic logging of subsurface stratigraphy and the collection of in-situ ground water samples at various depths. The purpose of the CPT investigation was to assess the lateral and vertical extent of petroleum hydrocarbon impacted ground water on and off-site. The purpose of the additional monitoring well installation was to assess the lateral extent of impacts to soil and shallow ground water off-site. The scope of work consisted of the following tasks:

- Advancement of two soil borings and installation of wells MW-15 and MW-16;
- Collection and analysis of soil samples;
- Advancement of three CPT soil borings;
- Collection and analysis of in-situ ground water samples; and
- Preparation of this report presenting AGE's findings, conclusions, and recommendations.

### 3.0. SITE INVESTIGATION ACTIVITIES

On 20 and 21 September 2007, AGE conducted the monitoring well installation activities and the ground water assessment at the site utilizing CPT and hollow-stem auger techniques. Prior to mobilization, the area of investigation was clearly marked and a utility clearance obtained through Underground Service Alert. An update to the health and safety plan presently on-file was prepared in accordance with *Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities* (National Institute for Occupational Safety and Health Administration, U.S. Coast Guard and U.S. Environmental Protection Agency, 1985). In addition, appropriate access and drilling permits were obtained from the City of Oakland and from the Alameda County Public Works Agency (ACPWA), respectively.

#### 3.1. SOIL SAMPLE COLLECTION AND ANALYSIS

A total of two soil borings were advanced off-site in the City of Oakland right-of-way to facilitate the installation of ground water monitoring wells MW-15 and MW-16 (Figure 2). Soil borings MW-15 and MW-16 were advanced approximately 160 feet northeast and 100 feet northwest (down-gradient) of the former UST area, respectively. Soil borings, MW-15 and MW-16, were advanced to total depths of approximately 20.5 feet below surface grade (bsg), to assess the A-zone hydrostatigraphic unit.

Soil borings were advanced by Gregg Drilling and Testing of Matinez, California, using a D-42 track mounted 1.5-ton limited access drill rig equipped with 8-inch diameter hollow-stem auger. Soils encountered in the borings were measured with an organic vapor meter (OVM) and visually logged by AGE personnel in accordance with the Unified Soil Classification System (USCS). A description of the soils encountered in the soil borings is presented in Section 4.1. Soil boring procedures and boring logs are presented in Appendix B and Appendix C, respectively.

A total of six soil samples were selected for laboratory analysis based on depth, changes in lithology and field observations, including petroleum hydrocarbon staining and odor. Following sample collection, each preserved sample sleeve was labeled with the boring location, depth, time, and date.

Appropriately sealed and labeled samples were placed in an ice-chilled container and transported under chain-of-custody procedure to Alpha Analytical Laboratories Inc. (AAL) in Ukiah, California, a State of California Department of Public Health (CDPH)-certified laboratory and analyzed for the following constituents:

- Total petroleum hydrocarbons as gasoline (TPH-g) and as diesel (TPH-d) by EPA Method 8015 Modified, and
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX) and fuel additives compounds including: di-isopropyl ether (DIPE), ethyl tertiary-butyl ether (ETBE), methyl tertiary butyl ether (MTBE), tertiary-amyl methyl ether (TAME), and tertiary butyl alcohol (TBA), 1,2-dibromoethane (EDB), and 1,2-dichloroethane (1,2-DCA) by EPA Method 8260B.

Chain-of-custody protocols were used to document sample custody transfers from the field to the analytical laboratory. The AAL report No. 07I1001 for soil sample analyses, testing methods, laboratory quality assurance/quality control (QA/QC) reports, and sample chain-of-custody documentation is presented in Appendix D. The GeoTracker confirmation number of the submitted laboratory electronic deliverable format (EDF) file is No. 7630642235. Soil sample analytical results are discussed in Section 4.2.

### 3.2. MONITORING WELL INSTALLATION

Following advancement of the soil borings, ground water monitoring wells were installed in the boreholes. The first water-bearing unit (A-zone hydrostratigraphic unit) was encountered at approximate depths of 5 to 10 feet bsg in boring MW-16 and MW-15, respectively. Monitoring wells MW-15 and MW-16 were installed to total depths of approximately 20.5 feet bsg; and completed with 15 feet of well screen section extending from approximately 5 to 20 feet bsg. Copies of the boring logs are presented in Appendix C.

### 3.3. MONITORING WELL DEVELOPMENT AND ELEVATION SURVEY

On 05 October 2007, monitoring wells MW-15 and MW-16 were developed to increase water flow into the well and to minimize the amount of fine-grained sediment drawn into the well during well purging and sampling. During well development, over ten well-casing volumes of ground water (approximately 23-gallons) were purged from wells MW-15 and MW-16. Monitoring well development field logs are presented in Appendix E.

Prior to the development of monitoring wells MW-15 and MW-16, the depths to ground water were measured at approximately 5.85 feet below the top of the well casing and 6.14 feet in wells MW-16 and MW-15, respectively. A summary of depth-to-ground-water and ground water elevation



measurements is presented in Table 1.

The survey was conducted by Morrow Surveying, of West Sacramento, California, a state-licensed land surveyor. The GeoTracker confirmation numbers of the submitted laboratory electronic deliverable data (EDD) for the Geo\_Z and Geo\_XY files are No. 1253065347 and No. 1394637167, respectively. The results of the Morrow Surveying well survey are presented in Appendix E.

### 3.4. CPT SOIL BORINGS

A total of three borings (CPT-1 through CPT-3) were advanced to collect subsurface lithologic data and to collect discrete ground water samples (Figure 2). Two CPT borings were advanced on the eastern portion of the site to assess the vertical extent of petroleum hydrocarbon-impacts to ground water. One CPT boring was advanced off-site, in the northwest parking area of 5<sup>th</sup> Street, to assess the lateral and vertical extent of petroleum hydrocarbon impacts to ground water. Soil boring CPT-1 was advanced approximately 110 feet northwest of the northwest corner of the site. Soil borings CPT-2 and CPT-3 were advanced approximately 100 feet southeast and east of the former USTs located on the central portion of the site, respectively.

Due to refusal the total depths of the lithologic soundings in borings CPT-1, CPT-2, and CPT-3 were 52 feet bsg, 52 feet bsg, and 54 feet bsg, respectively. CPT soil boring procedures are presented in Appendix C.

### 3.5. CPT LITHOLOGIC SOUNDINGS

The ground water assessment was conducted utilizing CPT technology and techniques. A Gregg In-Situ 25-ton CPT rig equipped with hydraulic rams was used to advance an electronically instrumented piezocone attached to 1.5-inch diameter push rods. The electronic piezocone (CPTU) was used to infer hydrogeologic profiling of soil composition, strength, and additional hydrogeologic information. These measurements relate to specific soil properties which can be used to identify soil types. CPT lithology data and boring logs are presented in Appendix C.

### 3.6. IN-SITU GROUND WATER SAMPLING AND ANALYSIS

Based on the results of previous site investigations and the CPT soundings, three depth intervals were selected within boring CPT-1 for the collection of in-situ ground water samples to assess the lateral and vertical extent of petroleum hydrocarbon impact to ground water. For borings CPT-2 and CPT-3, two depth intervals were selected for the collection of in-situ ground water samples to assess the on-site, vertical extent of hydrocarbon impact to ground water. CPT locations are illustrated in Figure 2. Following completion of the initial sounding for the collection of lithologic data, ground

water samples were collected from selected depth intervals (zone) based on previously acquired CPT-lithology data identifying potential hydrostratigraphic units of interest.

In-situ ground water samples were collected from CPT-1 location at the first encountered water-bearing unit (ground water table unit identified as the “A-zone”). Ground water samples were collected from each CPT boring at subsequent, water-bearing hydrogeology units encountered at greater depths (identified as the “B-zone” and “C-zone”). Due to refusal in each of the CPT borings, the maximum depth that a C-zone ground water sample could be collected at ranged from 49 feet to 55 feet bsg. The depths bsg from which the ground water samples were collected from each of the CPT borings are as follows:

- CPT-1 (A-zone 8-12 feet, B-zone 31-35 feet, and C-zone 51-55 feet);
- CPT-2 (B-zone 31-35 feet and C-zone 50-54 feet); and
- CPT-3 (B-zone 31-35 feet and C-zone 49-53 feet).

The collected groundwater samples were analyzed by AAL in Ukiah, California, a CDPH-certified laboratory for the following constituents:

- TPH-g and TPH-d by EPA Method 8015 Modified; and
- BTEX, DIPE, ETBE, MTBE, TAME, and TBA, EDB, and 1,2-DCA by EPA Method 8260B.

The AAL report No. 07I1000 for water sample analyses, testing methods, laboratory quality QA/QC reports, and sample chain-of-custody documentation are presented in Appendix D. Ground water analytical results are presented in Section 4.3. The GeoTracker confirmation number of the submitted laboratory EDF file is #2747637271.

#### **4.0. FINDINGS**

The general subsurface soil profile was modeled based on CPT data and soil samples collected from the soil borings advanced on- and off-site. The impact of the fuel release on ground water was assessed by laboratory analysis of selected ground water samples. Discussion of the subsurface soil profile and ground water analytical results is presented below.

#### 4.1. SUBSURFACE SOIL PROFILE

In general, material consisting of sandy silt, silty sand, clayey sand, and gravelly sand were encountered from ground surface to approximately 20 feet bsg in borings MW-15, CPT-1, CPT-2 and CPT-3. However, a rich organic and muddy layer of soil was encountered at approximately 16 feet bsg in boring MW-16. The logs derived from the CPT borings indicated that the layers of sand and silty sand was encountered in each of the borings from ground surface to the total depth of each boring. The site hydrogeology is dominated by a fine-grained unit from surface to 20 feet bsg, and by continuous, thick, coarse-to-medium-grained sand units from 20 feet bsg to the total depth of the site assessment at 50 feet bsg. Soil boring logs and CPT-generated boring logs are presented in Appendix B.

#### 4.2 SOIL SAMPLE ANALYTICAL RESULTS

There were no reported detections of BTEX compounds in any if the soil samples collected for laboratory analysis. TPH-d was detected in two of the six soil samples collected at a reported concentration of 1.4 milligrams per kilograms (mg/kg; MW-15-6.5 feet) and 3.3 mg/kg (MW-16-6.5 feet). However, the laboratory report indicates that the results in sample MW-15-6.5 feet do not resemble a fuel pattern, and that the TPH-d results in sample MW-16-6.5 feet are primarily due to overlap from a heavy oil range product. TPH-g was detected in soil sample MW-15-6.5 feet at a reported concentration of 1.4 mg/kg. There was no reported detection of DIPE, ETBE, MTBE, TAME, TBA, EDB, or 1,2-DCA in any of the soil samples collected for analysis. The analytical results of soil samples area summarized in Table 2.

#### 4.3. GROUND WATER ANALYTICAL RESULTS

A total of seven ground water samples were collected from borings CPT-1 through CPT-3 and submitted for laboratory analysis. One ground water sample was collected from the A-zone hydrogeologic units in boring CPT-1 to define the lateral extent of impacts to ground water. Three ground water samples were collected from each of the B-zone and C-zone hydrogeologic units to define the vertical extent of impacts to ground water. The analytical results of ground water samples are summarized in Table 3. The laboratory analytical report is presented in Appendix D.

##### 4.3.1. Benzene, Toluene, Ethylbenzene, and Total Xylenes

Benzene was detected at concentrations of 2.0 micrograms per liter ( $\mu\text{g/l}$ ), 8.0  $\mu\text{g/l}$ , 10  $\mu\text{g/l}$ , and 13  $\mu\text{g/l}$  for samples CPT-2C, CPT-2B, CPT-3C, and CPT-3B, respectively. Toluene was detected at concentrations of 0.67  $\mu\text{g/l}$ , 1.1  $\mu\text{g/l}$ , 3.4  $\mu\text{g/l}$ , and 13  $\mu\text{g/l}$  for samples CPT-3C, CPT-3B, CPT-2C, and CPT-2B, respectively. Ethylbenzene was detected at a concentration of 0.57  $\mu\text{g/l}$ , 1.3  $\mu\text{g/l}$ , 1.9

µg/l, and 10 µg/l for samples CPT-2C, CPT-2B, CPT-3C, and CPT-3B, respectively. Total xylenes were detected at concentrations of 2.1 µg/l, 2.7 µg/l, 5.5 µg/l, and 1.3 µg/l for samples CPT-3C, CPT-2C, CPT-2B, and CPT-3B, respectively. There were no reported detections of BTEX compounds in ground water samples collected from boring CPT-1.

#### 4.3.2. TPH-Diesel

TPH-d was detected in three of the seven ground water samples collected; at concentrations of 54 µg/l, 190 µg/l, and 240 µg/l in samples CPT-2C, CPT-3B, and CPT-3C, respectively. There were no reported detections of TPH-d in A-zone ground water samples CPT-2B, CPT-1A, CPT-1B or CPT-1C.

#### 4.3.3. TPH-Gasoline

TPH-g was detected in three of the seven ground water samples collected; at concentrations of 69 µg/l, 270 µg/l, and 410 µg/l in samples CPT-2B, CPT-3C, and CPT-3B, respectively. There were no reported detections of TPH-g in ground water samples CPT-2C, CPT-1A, CPT-1B or CPT-1C.

#### 4.3.4. MTBE

MTBE was detected in three the seven ground water samples collected for analysis. MTBE was detected at concentration of 0.61 µg/l, 0.93 µg/l, and 16 µg/l in ground water samples CPT-2C, CPT-3B, and CPT-3C. There were no reported detections of MTBE in ground water samples CPT-2B, CPT-1A, CPT-1B or CPT-1C.

## 5.0. SUMMARY AND CONCLUSIONS

The following is a summary of the information reviewed and collected during this investigation, AGE presents these implications:

- The site hydrogeology is dominated by an fine-grained unit from surface to 20 feet bsg and continuous, thick, coarse-to-medium-grained sand units from 20 feet bsg to the total depth of the site assessment at 50 feet bsg. A rich organic and muddy layer of soil was encountered at approximately 16 feet bsg in boring MW-16.
- TPH was detected in two of the six soil samples collected. There were no reported detections of BTEX compounds or fuel additives in the soil samples collected.

- There were no reported detections of TPH, BTEX compounds and fuel additives in ground water samples collected from boring CPT-1. TPH were detected in three of the seven ground water samples collected. The vertical extent of TPH-d appears to be delineated west of the site; however, slight detections of TPH-d were detected at approximately 55 feet bsg on the eastern portion of the site.
- Benzene was detected in each of the ground water samples collected on site. The maximum benzene concentrations was 13 µg/l (CPT-3B). The other BTEX compounds were detected in each of the ground water samples collected on site.
- MTBE was detected in three the seven ground water samples collected for analysis; at a maximum concentration of 16 µg/l (CPT-3C). There were no reported detections of MTBE in ground water samples CPT-1A, CPT-1B or CPT-1C and CPT-2B.

On the basis of the information reviewed and collected during this investigation, AGE concludes:

- Based on the ground water samples collected from the CPT investigation, the lateral and vertical extent of petroleum hydrocarbon impacts to ground water appear to be well defined on the western portion of the site and further off-site at the location of CPT1.
- Lower concentrations of petroleum hydrocarbons were detected at 30 and 55 feet bsg, beneath the eastern portion of the site. The samples collected from the C-zone indicate only slight impact to ground water on the eastern portion of the site. Therefore, it appears that the layer of “bay mud”, peat, and sandy clay have prevented the vertical migration of petroleum hydrocarbons on the western portion of the site.

## **6.0. RECOMMENDATIONS**

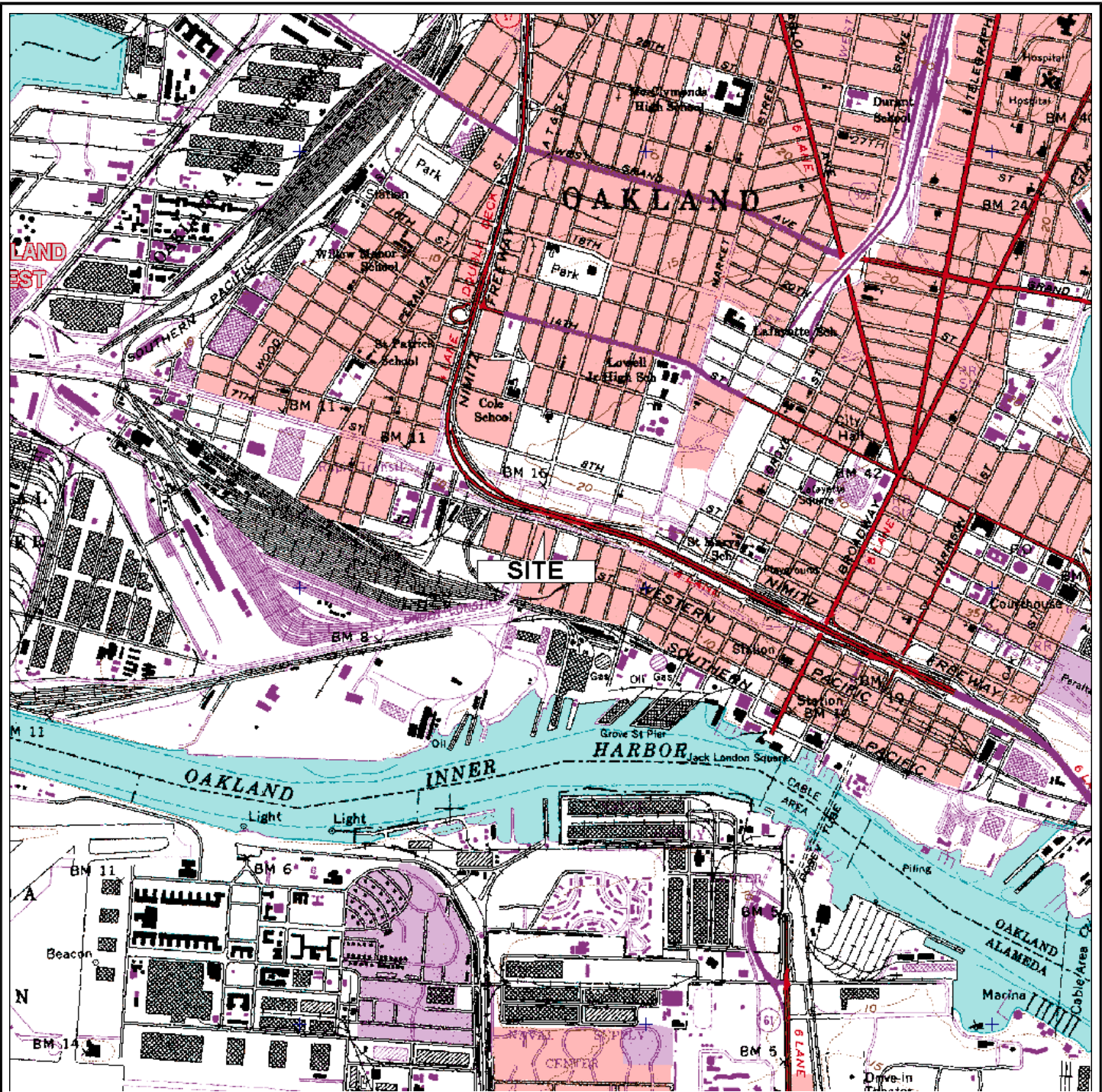
Based upon data reviewed and collected at the site, AGE recommends:

- Preparation of a ground water monitoring report documenting the results from the Fourth Quarter 2007 ground water sampling event; which included the newly installed wells MW-15 and MW-16.
- Additional vertical site assessment on the eastern portion of the site as well as north of the site and, possibly, east of the site. Additional vertical site assessment could be at the location of OZ12 and MW-13.

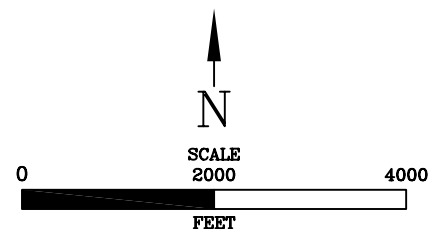
## **7.0. LIMITATIONS**

AGE's professional services were performed using that degree of care and skill ordinarily exercised by environmental consultants practicing in this or similar localities. The findings were based upon analytical results provided by an independent laboratory. Evaluations of the geologic/hydrogeologic conditions at the site for the purpose of this investigation were made from a limited number of available data points (i.e., CPT soundings and ground water samples) and subsurface conditions may vary beyond these data points. No other warranty, expressed or implied, is made as to the professional interpretations, opinions, or recommendations contained in this report.

# FIGURES



OAKLAND WEST QUADRANGLE, CALIFORNIA  
 7.5 MINUTE SERIES (U.S. GEOLOGICAL SURVEY)



LOCATION MAP  
 RINEHART – OAKLAND TRUCK STOP  
 1107 5TH STREET  
 OAKLAND, CALIFORNIA

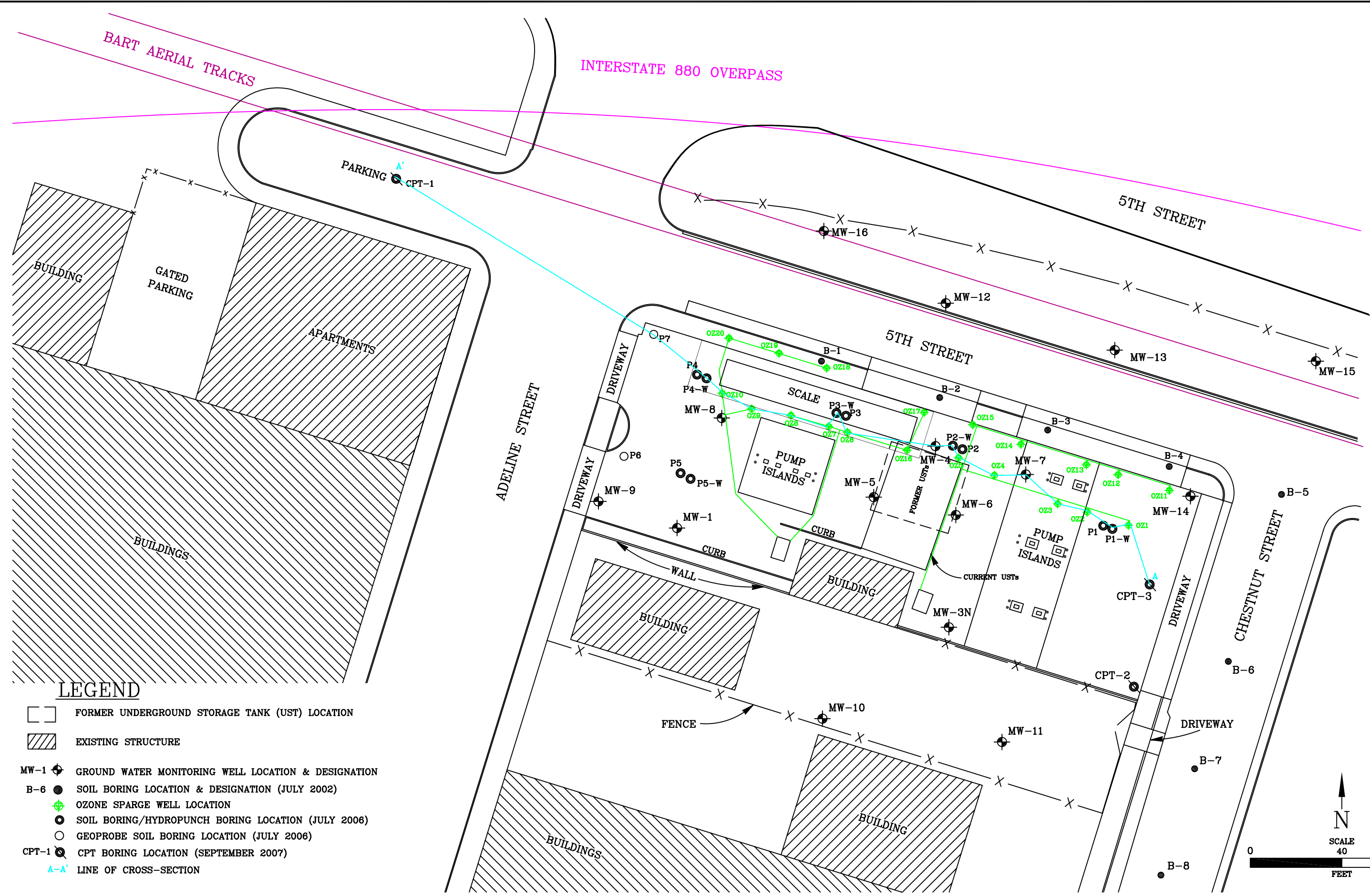


**Advanced**  
 GeoEnvironmental, Inc.  
*of Northern California*

PROJECT NO. AGE-NC-03-1101	FILE: LOCATION	FIGURE:
DATE: 27 SEPTEMBER 2004	DRAWN BY: MAC	1

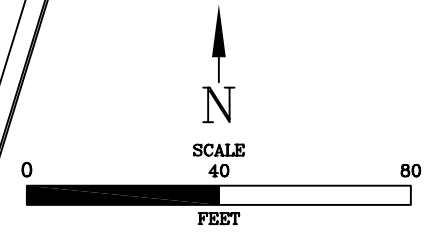


SITE PLAN  
RINEHART - OAKLAND TRUCK STOP  
1107 5TH STREET  
OAKLAND, CALIFORNIA



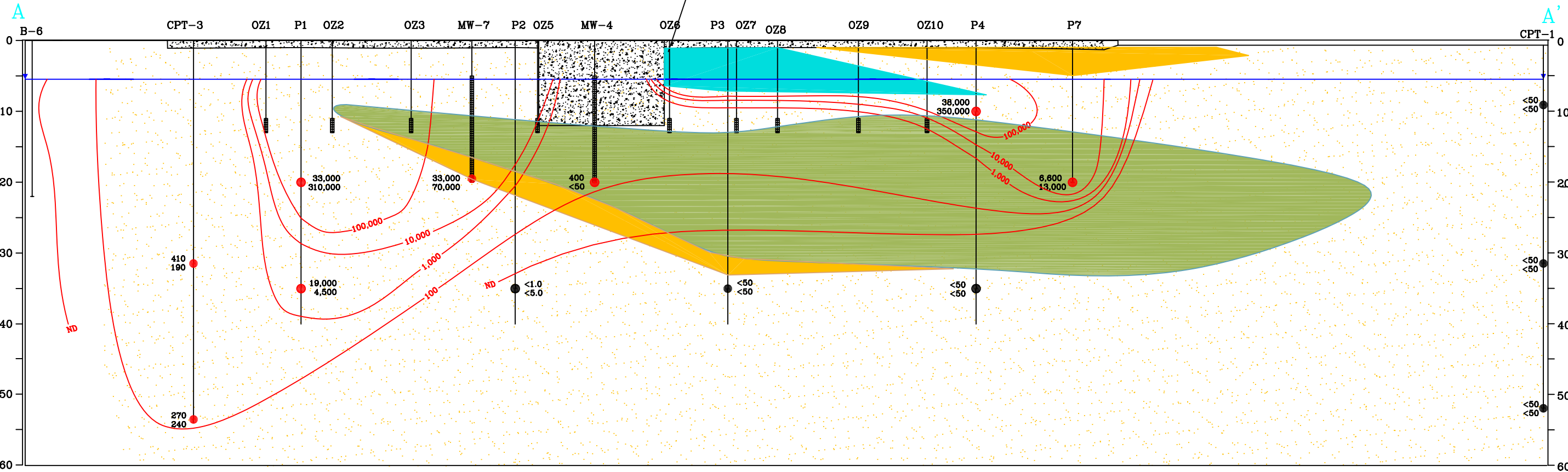
**LEGEND**

- FORMER UNDERGROUND STORAGE TANK (UST) LOCATION
- EXISTING STRUCTURE
- MW-1 GROUND WATER MONITORING WELL LOCATION & DESIGNATION
- B-6 SOIL BORING LOCATION & DESIGNATION (JULY 2002)
- OZONE SPARGE WELL LOCATION
- SOIL BORING/HYDROPUNCH BORING LOCATION (JULY 2006)
- GEOPROBE SOIL BORING LOCATION (JULY 2006)
- CPT-1 CPT BORING LOCATION (SEPTEMBER 2007)
- A-A' LINE OF CROSS-SECTION



EAST

WEST

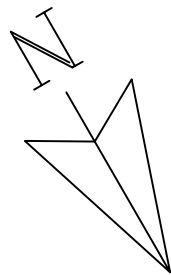


FORMER UST LOCATION (projected ~2' NE)

LEGEND

- TOP SOIL, FILL MATERIAL
- SAND, SILTY SAND
- SILTY CLAY, CLAY
- CLAYEY SAND/SANDY CLAY
- "BAY MUD": PEAT, CLAYEY PEAT, PEATY CLAY, PEAT WITH SAND
- B-6 ● GROUND WATER SAMPLE LOCATION (NON DETECT)
- GROUND WATER SAMPLE LOCATION (DETECTION)
- GROUND WATER MONITORING WELL/OZONE SPARGE POINT SCREEN LOCATION AND LENGTH
- HISTORICAL DEPTH TO GROUND WATER AVERAGE

**Notes**  
 2X VERTICAL EXAGGERATION.  
 MW-4 and MW-7 GROUND WATER SAMPLES COLLECTED ON 20 AUGUST 2007



# **TABLES**

**TABLE 1**  
**GROUND WATER ELEVATION DATA**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**  
**(feet)**

Well I.D. (Screen Interval) <i>Casing Elevation</i>	Date	Depth to Ground Water	Ground Water Elevation
MW-1 (10'-20' bsg) <i>10.34'</i>	10/21/96	5.08	5.26
	11/04/96	3.02	7.32
	03/04/97	2.28	8.06
	06/12/97	4.80	5.54
	07/14/97	2.66	7.68
	09/09/97	2.45	7.89
	09/19/97	2.60	7.74
	02/13/98	2.76	7.58
	07/07/98	2.15	8.19
	10/01/98	3.63	6.71
	12/30/98	4.40	5.94
	03/21/00	2.62	7.72
	08/30/00	3.21	7.13
	11/06/00	3.10	7.24
	02/22/01	3.50	6.84
	05/07/01	2.94	7.40
	08/22/01	3.70	6.64
	11/04/01	3.89	6.45
	02/15/02	2.95	7.39
	05/20/02	3.39	7.05
	08/01/02	3.51	6.83
	11/11/02	4.00	6.34
	02/12/03	3.40	6.94
	05/12/03	3.65	6.69
	08/12/03	3.04	7.30
	01/09/04	4.64	5.70
	04/14/04	6.45	3.89
	07/21/04	3.55	6.79
	10/20/04	4.00	6.34
	03/19/05	2.54	7.80
06/25/05	2.76	7.58	
09/17/05	3.88	6.46	
12/26/05	3.83	6.51	
03/26/06	4.09	6.25	
06/03/06	2.91	7.43	
08/30/06	3.62	6.72	

**TABLE 1**  
**GROUND WATER ELEVATION DATA**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**  
**(feet)**

Well I.D. (Screen Interval) <i>Casing Elevation</i>	Date	Depth to Ground Water	Ground Water Elevation
MW-1/(10'-20' bsg) <i>10.02'</i> *	12/04/06	3.98	6.04
	02/28/07	2.90	7.12
	05/29/07	3.84	6.18
	08/20/07	4.21	5.81
MW-3N (5'-12' bsg) <i>11.67'</i>	05/20/02	3.91	7.76
	08/01/02	4.22	7.45
	11/11/02	4.42	7.25
	02/12/03	3.71	7.96
	05/12/03	3.49	8.18
	08/12/03	4.18	7.49
	01/09/04	3.78	7.89
	04/14/04	4.01	7.66
	07/21/04	4.90	6.77
	10/20/04	5.28	6.39
	03/19/05	3.10	8.57
	06/25/05	3.10	8.57
	06/25/05	3.83	7.84
	09/17/05	4.94	6.73
	12/26/05	3.64	8.03
	03/23/06	2.86	8.81
	06/03/06	3.45	8.22
08/30/06	4.78	6.89	
<i>11.36'</i> *	12/04/06	4.90	6.46
	02/28/07	3.36	8.00
	05/29/07	4.55	6.81
	08/20/07	5.40	5.96
MW-4 (5'-20' bsg) <i>10.46'</i>	08/30/00	3.74	6.72
	11/06/00	3.85	6.61
	02/22/01	4.66	5.80
	05/07/01	2.66	7.80
	08/22/01	4.13	6.33
	11/04/01	4.53	5.93
	02/15/02	3.62	6.84
	05/20/02	3.65	6.81
	08/01/02	4.25	6.21
11/11/02	4.85	5.61	



**TABLE 1**  
**GROUND WATER ELEVATION DATA**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**  
**(feet)**

Well I.D. (Screen Interval) <i>Casing Elevation</i>	Date	Depth to Ground Water	Ground Water Elevation	
MW-5 (5'-20' bsg) <i>10.24'</i>	06/25/05	2.77	7.47	
	09/17/05	3.91	6.33	
	12/26/05	3.46	6.78	
	03/23/06	2.44	7.80	
	06/03/06	2.55	7.69	
	08/30/06	3.85	6.39	
	12/04/06	4.37	5.82	
	<i>10.19*</i>	02/28/07	3.31	6.88
	05/29/07	4.45	5.74	
	08/20/07	4.75	5.44	
MW-6 (5'-20' bsg) <i>10.62'</i>	08/30/00	3.40	7.22	
	11/06/00	3.72	6.90	
	02/22/01	3.34	7.28	
	05/07/01	3.08	7.54	
	08/22/01	3.77	6.85	
	11/04/01	4.33	6.29	
	02/15/02	3.22	7.40	
	05/20/02	3.24	7.38	
	08/01/02	3.60	7.02	
	11/11/02	4.41	6.21	
	02/12/03	3.52	7.10	
	05/12/03	3.34	7.28	
	08/12/03	3.91	6.71	
	01/09/04	3.35	7.27	
	04/14/04	3.40	7.22	
	07/21/04	4.21	6.41	
	10/20/04	4.63	5.99	
	03/19/05	2.54	8.08	
	06/25/05	2.92	7.70	
	09/17/05	4.06	6.56	
12/26/05	3.63	6.99		
03/23/06	2.60	8.02		
06/03/06	2.71	7.91		
08/30/06	4.02	6.60		
12/04/06	4.54	5.79		

**TABLE 1**  
**GROUND WATER ELEVATION DATA**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**  
**(feet)**

Well I.D. (Screen Interval) <i>Casing Elevation</i>	Date	Depth to Ground Water	Ground Water Elevation
MW-6 / (5'-20' bsg)  <i>10.33'*</i>	02/28/07	3.49	6.84
	05/29/07	4.60	5.73
	08/20/07	4.90	5.58
MW-7 (5'-20' bsg)  <i>11.69'</i>	08/30/00	6.72	4.97
	11/06/00	6.85	4.84
	02/22/01	6.00	5.69
	05/07/01	6.35	5.34
	08/22/01	6.86	4.84
	11/04/01	6.66	5.03
	02/15/02	6.45	5.24
	05/20/02	6.59	5.10
	08/01/02	6.72	4.97
	11/11/02	6.61	5.08
	02/12/03	5.64	6.05
	05/12/03	5.68	6.01
	08/12/03	6.24	5.45
	01/09/04	5.65	6.04
	04/14/04	6.40	5.29
	07/21/04	6.31	5.38
	10/20/04	6.42	5.27
	03/19/05	5.48	6.21
	06/25/05	6.00	5.69
	09/17/05	6.55	5.14
12/26/05	5.57	6.12	
03/23/06	5.47	6.22	
06/03/06	5.62	6.07	
08/30/06	6.17	5.52	
12/04/06	6.38	5.03	
<i>11.41'*</i>	02/28/07	6.11	5.30
	05/29/07	6.25	5.16
	08/20/07	6.65	4.76
MW-8 (5'-20' bsg)  <i>10.06'</i>	08/30/00	3.06	7.00
	11/06/00	2.98	7.08
	02/22/01	2.46	7.60
	05/07/01	2.76	7.30
	08/22/01	3.56	6.50



**TABLE 1**  
**GROUND WATER ELEVATION DATA**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**  
**(feet)**

Well I.D. (Screen Interval) <i>Casing Elevation</i>	Date	Depth to Ground Water	Ground Water Elevation
MW-8 (5'-20' bsg) 10.06'	11/04/01	3.76	6.30
	02/15/02	2.72	7.34
	05/20/02	2.82	7.24
	08/01/02	3.06	7.00
	11/11/02	3.54	6.52
	02/12/03	3.07	6.99
	05/12/03	2.69	7.37
	08/12/03	3.10	6.96
	01/09/04	2.85	7.21
	04/14/04	3.45	6.61
	07/21/04	4.56	5.50
	10/20/04	4.72	5.34
	03/19/05	3.31	6.75
	06/25/05	3.05	7.01
	09/17/05	4.22	5.84
	12/26/05	3.24	6.82
	03/23/06	2.67	7.39
	06/03/06	2.63	7.43
	08/30/06	3.56	6.50
	12/04/06*	3.81	5.92
9.73'	02/28/07	3.06	6.67
	05/29/07	3.77	5.96
	08/20/07	4.21	5.52
	08/30/00	2.81	7.22
MW-9 (5'-20' bsg) 10.03'	11/06/00	2.68	7.35
	02/22/01	2.20	7.83
	05/07/01	2.75	7.28
	08/22/01	3.80	6.23
	11/04/01	3.61	6.42
	02/15/02	2.92	7.11
	05/20/02	2.38	7.65
	08/01/02	2.72	7.31
	11/11/02	2.87	7.16
	02/12/03	2.43	7.60
	05/12/03	2.41	7.62
	08/12/03	2.61	7.42

**TABLE 1**  
**GROUND WATER ELEVATION DATA**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**  
**(feet)**

Well I.D. (Screen Interval) <i>Casing Elevation</i>	Date	Depth to Ground Water	Ground Water Elevation	
MW-9 (5'-20' bsg) <i>10.03'</i>	01/09/04	2.87	7.16	
	04/14/04	3.65	6.38	
	07/21/04	3.70	6.33	
	10/20/04	4.20	5.83	
	03/19/05	3.75	6.28	
	06/25/05	3.85	6.18	
	09/17/05	3.38	6.65	
	12/26/05	2.01	8.02	
	03/23/06	2.50	7.53	
	06/03/06	2.63	7.40	
	08/30/06	3.35	6.68	
	12/04/06	3.63	6.10	
	<i>9.73'*</i>	02/28/07	2.61	7.12
		05/29/07	3.34	6.39
		08/20/07	3.82	5.91
MW-10 (5'-12' bsg) <i>11.07'</i>	05/20/02	4.54	6.53	
	06/18/02	4.25	6.82	
	08/01/02	1.80	9.27	
	11/11/02	1.50	9.57	
	02/12/03	1.07	10.00	
	05/12/03	1.01	10.06	
	08/12/03	1.44	9.63	
	01/09/04	0.90	10.17	
	04/14/04	2.05	9.02	
	07/21/04	2.78	8.29	
	10/20/04	1.05	10.02	
	03/19/05	0.75	10.32	
	06/25/05	1.91	9.16	
	09/17/05	2.90	8.17	
	12/26/05	0.32	10.75	
	03/23/06	0.76	10.31	
	06/03/06	1.65	9.42	
08/30/06	2.70	8.37		
12/04/06	2.41	7.01		
<i>9.42'*</i>	02/28/07	0.30	9.12	



**TABLE 1**  
**GROUND WATER ELEVATION DATA**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**  
**(feet)**

Well I.D. (Screen Interval) <i>Casing Elevation</i>	Date	Depth to Ground Water	Ground Water Elevation
MW-13 (5'-20' bsg)          <i>11.29'*</i>	10/20/04	5.67	--
	03/19/05	4.82	--
	06/25/05	5.78	--
	09/17/05	6.21	--
	12/26/05	4.25	--
	03/23/06	4.57	--
	06/03/06	5.60	--
	08/30/06	6.20	--
	12/04/06	6.33	4.96
	02/28/07	4.95	6.34
	05/29/07	6.02	5.27
	08/20/07	6.42	4.87
MW-14 (5'-20' bsg)          <i>11.39'*</i>	10/20/04	6.36	--
	03/19/05	5.20	--
	06/25/05	5.56	--
	09/17/05	6.09	--
	12/26/05	5.50	--
	03/23/06	5.06	--
	06/03/06	5.39	--
	08/30/06	5.92	--
	12/04/06	6.15	5.24
	02/28/07	5.84	5.55
	05/29/07	5.97	5.42
	08/20/07	6.43	4.96
MW-15 (5'-20' bsg) / 11.38*	10/05/07	6.14	5.24
	--	--	--
MW-16 (5'-20' bsg) / 10.36*	10/05/07	5.85	4.51
	--	--	--

*Notes:*

bsg: below surface grade

-: information not available

\*: Casing elevations re-surveyed 02 February 2007. MW-4, MW-15 and MW-16 surveyed on 30 November 2007. Performed by Morrow Surveying, Inc. relative to vertical datum NAVD 88 from GPS observations.

**TABLE 2**  
**SOIL ANALYTICAL RESULTS: TPH-G, TPH-D, BTEX, AND FUEL ADDITIVES**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**  
**(mg/kg)**

Sample I.D.	Date	EPA 8015M		EPA 8260B										
		TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB
P1-6	07-05-06	<b>210</b>	<b>7,600</b>	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<1	<0.05	<0.05
P1-14	07-05-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P1-21	07-05-06	<b>2.6</b>	<5	<b>0.014</b>	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P1-30	07-05-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P1-40	07-05-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P2-8	07-05-06	<b>110</b>	<b>680</b>	<0.05	<b>0.22</b>	<b>0.62</b>	<b>4.2</b>	<0.05	<0.1	<0.1	<0.1	<1	<0.05	<0.05
P2-15	07-05-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P2-20	07-05-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P2-24	07-05-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P2-34	07-05-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P2-40	07-05-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P3-8	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P3-17	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P3-25	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P3-35	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P3-40	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P4-7	07-06-06	<b>10</b>	<b>13,000</b>	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.1	<0.1	<1	<0.05	<0.05
P4-18	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P4-28	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P4-34	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P4-40	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P5-10	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P5-20	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P5-30	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005

**TABLE 2**  
**SOIL ANALYTICAL RESULTS: TPH-G, TPH-D, BTEX, AND FUEL ADDITIVES**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**  
**(mg/kg)**

Sample I.D.	Date	EPA 8015M		EPA 8260B										
		TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB
P5-40	07-06-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P6-8	07-18-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P6-12	07-18-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P6-20	07-18-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P7-8	07-18-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P7-12	07-18-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
P7-20	07-18-06	<1	<5	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.1	<0.005	<0.005
MW-15-6.5'	09-20-07	<b>1.4</b>	<b>1.4<sup>1</sup></b>	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.10	<0.005	<0.005
MW-15-11.5'	09-20-07	<1	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.10	<0.005	<0.005
MW-15-20'	09-20-07	<1	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.10	<0.005	<0.005
MW-16-6.5'	09-20-07	<1	<b>3.3<sup>2</sup></b>	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.10	<0.005	<0.005
MW-16-11.5'	09-20-07	<1	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.10	<0.005	<0.005
MW-16-20'	09-20-07	<1	<1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.10	<0.005	<0.005

*Notes:*

mg/kg: milligrams per kilogram

TPH-g: total petroleum hydrocarbons quantified as gasoline

TPH-d: total petroleum hydrocarbons quantified as diesel

MTBE: methyl tertiary-butyl ether

DIPE: di-isopropyl ether

ETBE: ethyl tertiary-butyl ether

TAME: tertiary-amyl methyl ether

TBA: tertiary-butyl alcohol

1,2-DCA: 1,2-dichloroethane

EDB: 1,2-dibromoethane

1: Sample does not display a normal fuel pattern

2: Sample results appear to be due to an overlap from a heavy oil range product.

**TABLE 3**  
**GRAB GROUND WATER ANALYTICAL RESULTS: TPH-G, TPH-D, BTEX, AND FUEL ADDITIVES**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
 1107 5<sup>th</sup> Street, Oakland, California  
 (µg/l)

Sample I.D.	Date	EPA 8015M		EPA 8260B										
		TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DI PE	ETBE	TAME	TBA	1,2-DCA	EDB
P1-W-20	07-07-06	<b>33,000</b>	<b>310,000</b>	<b>110</b>	<0.5	<b>2.3</b>	<b>17.3</b>	<b>11,000</b>	<1	<1	<b>17</b>	<10	<b>4.7</b>	<0.5
P1-W-35	07-07-06	<b>19,000</b>	<b>4,500</b>	<b>63</b>	<0.5	<b>13</b>	<b>10.5</b>	<b>9,200</b>	<1	<1	<b>16</b>	<10	<b>3.4</b>	<0.5
P2-W-35	07-07-06	<50	<50	<0.5	<0.5	<0.5	<0.6	<1	<1	<1	<1	<10	<0.5	<0.5
P3-W-35	07-07-06	<50	<50	<0.5	<0.5	<0.5	<0.6	<1	<1	<1	<1	<10	<0.5	<0.5
P4-W-10	07-07-06	<b>38,000</b>	<b>350,000</b>	<0.5	<0.5	<0.5	<0.6	<b>4,000</b>	<1	<1	<b>5.3</b>	<10	<0.5	<0.5
P4-W-35	07-07-06	<50	<50	<0.5	<0.5	<0.5	<0.6	<1	<1	<1	<1	<10	<0.5	<0.5
P5-W-10	07-06-06	<b>2,000</b>	<50	<b>32</b>	<b>36</b>	<0.5	<0.6	<b>950</b>	<1	<1	<b>3.4</b>	<10	<0.5	<0.5
P5-W-35	07-06-06	<b>220</b>	<50	<b>3.4</b>	<0.5	<0.5	<0.6	<b>180</b>	<1	<1	<1	<10	<0.5	<0.5
P6-20-W	07-18-06	<b>130</b>	<50	<b>2.3</b>	<b>5.6</b>	<0.5	<0.6	<b>4.1</b>	<1	<1	<1	<10	<0.5	<0.5
P7-20-W	07-18-06	<b>6,600</b>	<b>13,000</b>	<0.5	<0.5	<0.5	<0.6	<b>36</b>	<1	<1	<1	<10	<0.5	<0.5
CPT-1A	09-20-07	<50	<50	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5
CPT-1B	09-20-07	<50	<50	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5
CPT-1C	09-20-07	<50	<50	<0.3	<0.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5
CPT-2B	09-21-07	<b>69</b>	<50	<b>8.0</b>	<b>13</b>	<b>1.3</b>	<b>5.5</b>	<0.5	<0.5	<0.5	<0.5	<10	<0.5	<0.5

**TABLE 3**  
**GRAB GROUND WATER ANALYTICAL RESULTS: TPH-G, TPH-D, BTEX, AND FUEL ADDITIVES**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
**1107 5<sup>th</sup> Street, Oakland, California**  
**(µg/l)**

Sample I.D.	Date	EPA 8015M		EPA 8260B										
		TPH-g	TPH-d	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	DI PE	ETBE	TAME	TBA	1,2-DCA	EDB
T-2C	09-21-07	<50	<b>54</b>	<b>2.0</b>	<b>3.4</b>	<b>0.57</b>	<b>2.7</b>	<b>0.61</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CPT-3B	09-21-07	<b>410</b>	<b>190</b>	<b>13</b>	<b>1.1</b>	<b>10</b>	<b>15</b>	<b>0.93</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
CPT-3C	09-21-07	<b>270</b>	<b>240</b>	<b>10</b>	<b>0.67</b>	<b>1.9</b>	<b>2.1</b>	<b>16</b>	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

*Notes:*

µg/l: micrograms per liter  
 TPH-g: total petroleum hydrocarbons quantified as gasoline  
 TPH-d: total petroleum hydrocarbons quantified as diesel  
 MTBE: methyl tertiary-butyl ether  
 DIPE: di-isopropyl ether  
 ETBE: ethyl tertiary-butyl ether  
 TAME: tertiary-amyl methyl ether  
 TBA: tertiary-butyl alcohol  
 1,2-DCA: 1,2-dichloroethane  
 EDB: 1,2-dibromoethane



# **APPENDIX A**

**Appendix A - Historical Background**  
**Rinehart Oil, Inc - Oakland Truck Stop**  
**1107 5<sup>th</sup> Street, Oakland, California**

A.1. BACKGROUND

The site is located at 1107 5<sup>th</sup> Street in a commercial and industrial area of west Oakland, California (Figure 1). The property contains a service station building, four fuel dispenser islands, a truck scale, scale house, and two underground storage tanks (USTs). The site has been operating as a truck stop for the past 40 years.

A.2. REGIONAL GEOLOGIC/HYDROGEOLOGIC SETTING

The site is situated within the Coast Range Geomorphic Province of California. This geomorphic province contains coastal foothills and mountains and extends from the Tehachapi Mountains in the south to the Klamath Mountains in the north. The western and eastern boundaries of this province are comprised of the Pacific Ocean and the Great Valley Geomorphic Province, respectively.

The site is located in the Franciscan Complex, which is subdivided into four major divisions identified as the Northern Coast Range, the Franciscan Block, the Diablo Range, and the Nacimiento Block. The site is situated within the Franciscan Block, an assemblage of variably deformed and metamorphosed rock units. The surface is composed of Quaternary alluvium; at depth, the site is underlain by rocks of the Franciscan Complex, which are composed predominately of detrital sedimentary rocks with volcanic tuffs and deep ocean marine sediments. The Franciscan lithologies typically have low porosity and permeability.

Based upon the General Soil Map from the *Soil Survey of Alameda County, Western Part*, issued by the United States Department of Agriculture Soil Conservation Service in 1981, the site area is situated within the Urban Land-Danville complex. This complex is located on low terraces and alluvial fans at an elevation of about 20 feet to 300 feet above mean sea level (MSL), and consists of approximately 60% Urban Land, 30% Danville soil, and 10% other soils. Danville soil is a silty clay loam that formed in alluvium originating primarily from sedimentary rock; Urban land consists of areas covered by roads, parking lots, and buildings. The nearest surface water feature in the vicinity of the property is the Oakland Estuary, approximately 2,400 feet to the south of the property.

Beginning in October 1996, ground water monitoring has been conducted at the site to assess the seasonal variation of elevation, gradient, and flow direction, and to define the impact of petroleum hydrocarbon compounds and fuel oxygenating compounds in shallow ground water beneath the site. Based on data from previous monitoring events, ground water at the property varies seasonally between approximately 10 inches to 6 feet below surface grade (bsg). The ground water flow has varied from southwest to north. This may be affected by changing recharge and discharge patterns, as well as leaking pipes.

### A.3. UNDERGROUND STORAGE TANK REMOVAL

In March 1999, two 10,000-gallon diesel USTs, one 10,000-gallon gasoline UST, and one 8,000-gallon gasoline UST were removed from the site. The approximate location of the former USTs is shown on Figure 2.

Interim remedial action was performed during the UST removal to address contaminated soil and ground water. Approximately 2,100 tons of contaminated soil were removed from the excavation. Soil samples were collected from the excavation and stockpiles as directed by the Fire Inspector. Contaminated ground water was removed from the excavation pit; approximately 33,000 gallons of water were pumped into temporary storage tanks, which were then transported and disposed off-site. Approximately 1,700 tons of backfill was placed in the excavation. Results of the soil samples taken during the excavation are not available.

### A.4. PREVIOUS SITE ASSESSMENT ACTIVITIES

In November 1996, ground water monitoring wells MW-1 through MW-3 were installed to a depth of 20 feet bsg to assess contamination from an unauthorized release of fuel, which was repaired as soon as it was discovered. Product recovery sumps equipped with skimmers were installed in the wells and approximately 6 gallons of gasoline were recovered.

Monitoring well MW-2 was destroyed in January 1999. Additional monitoring wells MW-4 through MW-9 were installed to a total depth of 20 feet bsg in August 2000. Contamination was detected in each of the wells, and free product was occasionally evident in well MW-7.

Monitoring wells MW-10 and MW-11 were installed in May 2002 to a total depth of 12 feet bsg. At this time, well MW-3 was abandoned and well MW-3N was installed to a depth of 12 feet bsg.

In July 2002, eight soil borings were advanced on 5<sup>th</sup> Street and Chestnut Street to total depths between 5 feet and 8 feet bsg to determine if contamination was migrating off-site along preferential pathways (i.e. utility trenches). Sample results indicated high methyl tertiary-butyl ether (MTBE) concentrations that ranged from 170,000 micrograms per liter ( $\mu\text{g/l}$ ) to 460,000  $\mu\text{g/l}$  in grab ground water samples from borings drilled directly north of the site, along the 5<sup>th</sup> Street sewer line. Borings east of the site had little to no contamination.

In January 2003, a passive skimmer was placed inside monitoring well MW-7 to remove free product. During monitoring activities in April 2004, free-product was noted in MW-8. The passive skimmer in MW-7 was moved to MW-8 to remove the free product.

On 04 and 05 October 2004, a total of thirteen soil borings were advanced at the site. Boring MW14 and the ten ozone sparge well borings were advanced at the north edge of the property to vertical depths of 20 feet and 15 feet below surface grade (bsg), respectively. Borings MW12 and MW13 were advanced in the 5<sup>th</sup> Street right of way to the north of the property to a vertical depth of 20 feet bsg. Pilot borings MW12 through MW14 were completed as ground water monitoring wells using 2-inch diameter polyvinylchloride (PVC) casing with a 0.020-inch slotted screen installed from 5 feet to 20 feet bsg. The ozone sparge well soil borings were completed with manufacturer-assembled, 2-inch by 24-inch microporous sparge points and blank casing extended to the surface, with a filter pack (No. 2/12 Lonestar sand) installed from 9 feet to 13 feet bsg. A total of three soil samples, taken from the monitoring well pilot borings, were analyzed for petroleum hydrocarbon constituents. In sample MW14-10, 1.8 milligrams per kilogram (mg/kg) TPH-d and 2.0 mg/kg MTBE were detected.

On 05, 06, and 07 July 2006, five soil borings were advanced on-site to a depth of 40 feet below surface grade (bsg) utilizing a CME-75 HT truck-mounted drill rig. On 18 July 2006, two additional soil borings were advanced on-site near the Adeline Street utility corridor to 20 feet bsg utilizing a van-mounted Geoprobe 5400 direct-push probing unit. All borings were continuously cored from surface grade to total depth. Soil and grab ground water samples were collected at selected intervals based on lithology encountered during drilling; grab ground water samples were collected from borings advanced immediately adjacent to P1 through P5, and at total depth in borings P6 and P7. Soil samples were collected between depths of 6 feet and 40 feet bsg from borings P1 through P7 and analyzed for petroleum hydrocarbon constituents. TPH-g was detected in soil samples P1-6, P1-21, P2-8, and P4-7 at concentrations of 210 mg/kg, 2.6 mg/kg, 110 mg/kg, and 10 mg/kg, respectively. TPH-d was detected in samples P1-6, P2-8, and P4-7 at concentrations of 7,600 mg/kg, 680 mg/kg, and 13,000 mg/kg, respectively.

Grab ground water samples were collected from soil borings advanced immediately adjacent to P1 through P5 at selected sandy zones between 10 feet and 35 feet bsg, and from borings P6 and P7 at a depth of 20 feet bsg. TPH-g was detected in boring P1 at 20 feet and 35 feet bsg, in boring P4 at 10 feet bsg, in boring P5 at 10 feet and 35 feet bsg, and in borings P6 and P7 at 20 feet bsg at concentrations ranging from 130 µg/l (P6-20-W) to 38,000 µg/l (P4-W-10). TPH-d was detected in boring P1 at 20 feet and 35 feet bsg, in boring P4 at 10 feet bsg, and in boring P7 at 20 feet bsg at concentrations ranging from 4,500 µg/l (P1-W-35) to 350,000 µg/l (P4-W-10). BTEX constituents were detected in boring P1 at 20 feet and 35 feet bsg, P5 at 10 feet and 35 feet bsg, and P6 at 20 feet bsg at maximum concentrations of 110 µg/l benzene (P1-W-20), 36 µg/l toluene (P5-W-10), 13 µg/l ethylbenzene (P1-W-35), and 17.3 µg/l total xylenes (P1-W-20). MTBE was detected in samples collected from boring P1 at 20 feet and 35 feet bsg, in boring P4 at 10 feet bsg, in boring P5 at 10 feet and 35 feet bsg, and in borings P6 and P7 at 20 feet bsg at concentrations ranging from 4.1 µg/l (P6-20-W) to 11,000 µg/l (P1-W-20). TAME was detected in boring P1 at 20 feet and 35 feet bsg, in boring P4 at 10 feet bsg, and in boring P5 at 10 feet bsg at concentrations ranging from 3.4 µg/l (P5-W-10) to 17 µg/l (P1-W-20). The lead scavenger 1,2-DCA was detected in boring

P1 at 20 feet and 35 feet bsg at concentrations of 4.7 µg/l and 3.4 µg/l, respectively. Benzene was detected in sample P1-21 at a concentration of 0.014 mg/kg. Toluene, ethylbenzene, and xylenes were detected in sample P2-8 at concentrations of 0.22 mg/kg, 0.62 mg/kg, and 4.2 mg/kg, respectively.

On 13 March 2007, AGE personnel directed the destruction of five ozone injection wells (OZ6, OZ7, OZ10, OZ16 and OZ17) in preparation for truck scale upgrade activities to be performed by the property's lessee and CAT Scale. Hydrocarbon-impacted soil surrounding the existing truck scale was excavated as part of truck scale removal and upgrade activities. Soil was removed to a depth of approximately six feet bsg using an excavator. Soil surrounding the existing truck scale was excavated by representatives of CAT Scale. The excavation provided the removal of a significant amount of petroleum hydrocarbon-impacted soil within the present vadose and smear zones. The soil was removed using an excavator to a total depth of approximately 6 feet bsg. While soil was excavated, trucks were immediately loaded for transportation Keller Canyon Landfill in Pittsburg, California. The impacted soil was transported by Intrinsic Transportation, Inc, of Santa Rosa, California and JT & T Enterprises of Cotati, California under non-hazardous waste manifest. According to total sum of truck weight tickets 543.76 tons or approximately 367 cubic yards of soil were disposed. After completion of the truck scale upgrade by CAT Scale, AGE personnel directed the advancement of five pilot soil borings at the site for the re-installation of ozone injection wells OZ6, OZ7, OZ10, OZ16 and OZ17.

#### A.5. OZONE SPARGING REMEDIATION

In-situ chemical oxidation (ozone injection) operation began at the site on 24 September 2005. From September 2005 to July 2007 the systems injected ozone for a ½-hour duration into two ozone injection points at a time.

A total of ten ozone injection wells, in conjunction with the south unit, have been on-line throughout the majority of the Second Quarter 2007. The north unit has been shut down since 13 March 2007 due to the destruction of ozone wells OZ6, OZ7, OZ10, OZ16, and OZ17; however, the north unit was brought back on-line 27 July 2007 subsequent to re-plumbing the recently installed ozone injection points. Both the north and south unit systems currently inject ozone for a 1-hour duration into one ozone injection points at a time.

#### A.6. STRATIGRAPHY

In general, a distinct zone of gray-brown to black, moist to saturated peat and clay with a strong, stale odor was encountered throughout the site west of boring P1. The top of the peat zone was encountered at depths between approximately 7 feet on the western end of the site and 12 feet on the

eastern end in boring P7, with thickness ranging from approximately 7 feet in boring P2 (east) to 20 feet in boring P4 (west). Clay and sandy clay were encountered in borings P3, P4, and P7 at depths above approximately 7 feet bsg, and gray to dark brown, fine-grained and poorly graded sand and silty sand were identified east of boring P1 and throughout the remaining depth intervals in all other borings.

# **APPENDIX B**

**APPENDIX B**  
**FIELD PROCEDURES AND PROTOCOLS**  
**RINEHART OIL, INC. - OAKLAND TRUCK STOP**  
1107 5<sup>th</sup> Street, Oakland, California

All field procedures will be overseen by an AGE representative under the supervision of a California Registered Geologist. Procedures for CPT boring advancement, in-situ ground water sampling, CPT boring abandonment, soil boring advancement, soil sample collected and handling, monitoring well installation, well development, well survey, and equipment decontamination are outlined below.

**B.1. CPT LITHOLOGIC SOUNDINGS**

The ground water assessment was conducted utilizing CPT technology and techniques. A Gregg In-Situ 25-ton CPT rig equipped with hydraulic rams was used to advance an electronically instrumented piezocone attached to 1.5-inch diameter push rods. The electronic piezocone (CPTU) was used to infer hydrogeologic profiling of soil composition, strength, and additional hydrogeologic information. The CPTU measures cone bearing (tip resistance), sleeve friction, and dynamic pore water pressure at 5-cm intervals during penetration to provide a nearly continuous log. The CPTU test was performed in accordance with ASTM Standard D3441. The continuous boring log was generated utilizing the *Hogentogler Co.* CPT computer program. The *Hogentogler Co.* computer program utilized the *CPT Soil Behavior Classification System* (Robertson, P.K., Campanella, R.G, Gillespie, D. and Greig, J., 1986) to generate a general lithology type and display on a CPT boring log. At selected depth intervals, pore water pressure was monitored over time to estimate relative hydraulic conductivity and hydrostatic head. CPT measures during cone penetration include cone bearing (Qc), sleeve friction(Fs), and dynamic pore water pressure (u). These measurements relate to specific soil properties which can be used to identify soil types.

**B.2. IN-SITU GROUND WATER SAMPLING AND ANALYSIS**

Based on the results of previous site investigations and the CPT soundings, three depth intervals were selected within boring CPT-1 for the collection of in-situ ground water samples to assess the lateral and vertical extent of petroleum hydrocarbon impacts to ground water. For borings CPT-2 and CPT-3 two depth intervals were selected for the collection of in-situ ground water samples to assess the vertical extent impacts to ground water. Following completion of the initial sounding for the collection lithologic data, ground water samples were collected from selected depth intervals (zone) based on previously acquired CPT-lithology data identifying potential hydrostratigraphic units of interest. In-situ ground water samples were collected from selected relatively permeable saturated intervals using a Hydropunch-equivalent sampler. A stainless steel Hydropunch sampling tool attached to hollow-stem push rods was advanced in a closed position to the desired sampling interval. The push rod was then be retracted approximately four feet exposing the sampler inlet screen and allowing ground water to flow into the sampler. Ground water samples were collected utilizing a ½-inch diameter stainless steel bailer into the screen area.



In-situ ground water samples were collected from CPT-1 location at the first encountered water-bearing unit (ground water table unit identified as the “A-zone”) and from a subsequent water-bearing units identified at greater depths (identified as the “B-zone” and C-zone) than the ground water table unit. Ground water samples were collected from borings CPT-2 and CPT-3 at depths within the water-bearing units identified as the B-zone and the C-zone.

### B.3. GROUND WATER SAMPLE HANDLING

Ground water samples were collected into laboratory-supplied containers. Ground water samples for BTEX, TPH-g, and fuel additive analyses were collected into 40-ml volatile organic analysis (VOA) vials containing 0.5 ml of hydrochloric acid as preservative. Ground water samples for TPH-d analyses were collected into 1-liter amber bottles without preservative. Following sample collection, the sample containers were appropriately labeled and placed on ice in a cooler until delivered to the laboratory for analysis. Chain-of-custody protocols were used to document sample custody transfer from the field to the analytical laboratory.

### B.4. BORING ABANDONMENT

All CPT borings were permanently sealed to prevent vertical migration of potential contaminants. Probe borings were abandoned by backfilling with cement grout from the total depth to surface grade. Soil probe abandonment procedures were approved by the Alameda County Public Works Agency (ACPWA).

### B.5. SOIL SAMPLING PROCEDURES

Soil borings were advanced by Gregg Drilling of Martinez, California, using a D-42 limited access drill rig equipt with 8-inch diameter hollow-stem auger. Soil samples were collected from soil borings at five-foot intervals. Relatively undisturbed soil samples were collected in each of the borings by drive sampling using a California-modified split-spoon sampler fitted with 2-inch diameter, 6-inch long brass sleeves. The samplers were driven 18-inches or until refusal into the undisturbed soil below the bit on the lead auger. Upon removal from the sampler, the sample sleeves were separated with a clean soil knife. The exposed ends of the first sleeve were covered with Teflon sheets, capped and sealed with tape. Soils encountered in the borings were measured with an OVM and visually logged by an AGE geologist in accordance with the Unified Soil Classification System (USCS).

Following sample collection, each preserved sample sleeve was labeled with the boring location, depth, time, and date. Appropriately sealed and labeled samples were placed in an ice-chilled

container and transported under chain-of-custody procedure to Alpha Analytical Laboratories Inc.(AAL) in Ukiah, California. AAL is a State of California Department of Public Health (CDPH)-certified laboratory.

Soil cuttings generated during drilling of the soil borings were contained in DOT-approved 55-gallon drums which were appropriately labeled for storage. Drums containing soil and decontamination water were stored on-site pending appropriate removal and disposal.

#### B.6. MONITORING WELL INSTALLATION

Following completion advancement of soil borings MW-15 and MW-16, ground water monitoring wells were installed in the borings; and constructed with 2-inch diameter Schedule 40 PVC casing and 0.010-inch slotted well screen. Each of the monitoring wells were completed with 15-foot of well screen section installed within the second encountered water-bearing unit. After installation of the well casings, filter pack material consisting of pre-washed #2/12 Lonestar sand was added from the bottom of each borehole to approximately one foot above the screened interval. Following placement of the filter pack, the well was surged to settle the filter pack sand. Additional sand was added to a level two foot above the screen section, as needed.

A nominal one-foot bentonite seal was placed above the filter pack in all wells to minimize the potential for grout penetration into the screened section of the well. The bentonite seal was formed by pouring bentonite chips into the annulus and allowing them to settle on the filter pack. Bentonite chips were hydrated using five gallons of water. The bentonite chips were allowed to hydrate for a minimum of one-half hour prior to installation of cement grout. The remaining annular space was filled to within one and one-half feet of the ground surface with a cement grout. The grout mixture consisted of type I/II portland neat cement and not more than six gallons of water per 94-pound sack of cement.

The top of the well casings were secured with water-proof, locking caps and were protected with a traffic-rated, water-tight circular vault installed approximately one-half inch above surface grade.

#### B.7. WELL DEVELOPMENT AND SURVEY

Well development procedures consisted of a combination of bailing to remove the major portion of fine-grained sediment from inside the wells, surging to flush out or draw in sediment from the filter pack, and pumping. Development activities were continued until a minimum of three well casing volumes of water were purged from the well and until field parameter (pH, electrical conductivity, temperature, and turbidity) readings had stabilized. Purge water generated during development activities was contained on-site in an appropriately labeled 55-gallon drum.

In accordance with State “Geotracker” requirements, the monitoring wells coordinates were measured utilizing the NAD83; and elevations were measured utilizing the NAVD88. The survey was conducted by Morrow Surveying., of West Sacramento, California, a California-licensed surveyor.

#### B.8. EQUIPMENT DECONTAMINATION

Prior to sample collection, all sampling tools used for sample collection were thoroughly washed with a solution of Alconox and rinsed with clean water. All augers and drill rod were steam cleaned prior to advancement at each soil boring location.

# **APPENDIX C**



**Advanced  
GeoEnvironmental, Inc.**

2318 Fourth Street, Santa Rosa, CA 95404  
(707) 570-1418 FAX: (707) 570-1461

**BORING LOG**

BOREHOLE NO.: **MW-15**

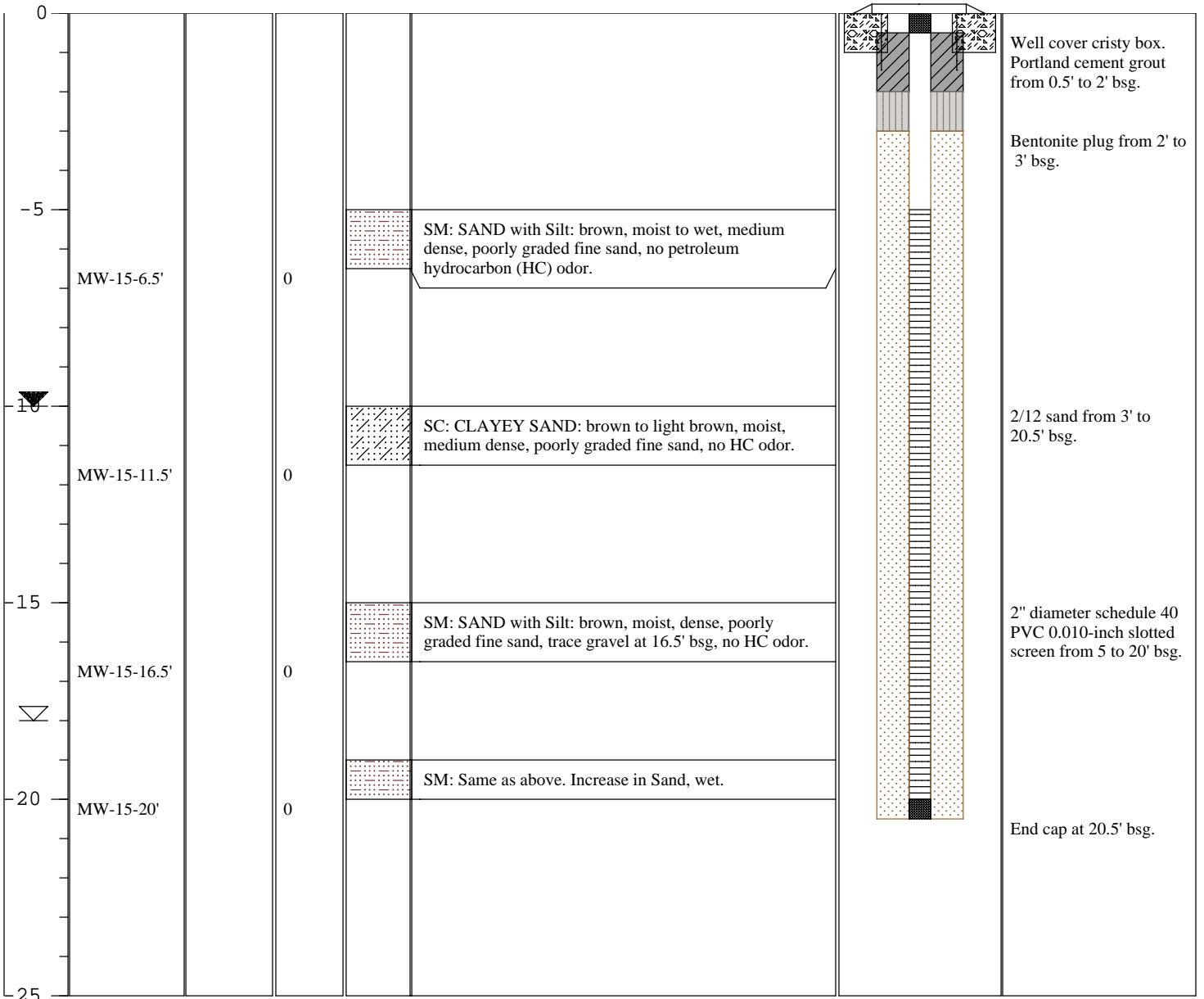
TOTAL DEPTH: **20.5 Feet**

Project: RINEHART OIL, INC.  
Site Location: 1107 5th Street  
Oakland, California  
Project No.: AGE-SR-03-1101

Drilling Co.: GREGG DRILLING AND TESTING  
Rig/Auger Type: D-42 Limited Access Rig / 8"-H.S.A.  
Logged By: Jeremiah Puget  
Reviewed By: William Little  
Date(s) Drilled: 09/20/07

Notes:   
 Water level during drilling  
 Water level in completed well  
Page 1 of 1

Depth	Sample ID	Blows (per 6")	OVM (ppm)	Soil Symbol	USCS Class and Soil Description	Well Completion	Well Description
-------	-----------	----------------	-----------	-------------	---------------------------------	-----------------	------------------





**Advanced  
GeoEnvironmental, Inc.**

2318 Fourth Street, Santa Rosa, CA 95404  
(707) 570-1418 FAX: (707) 570-1461

**BORING LOG**

BOREHOLE NO.: **MW-16**

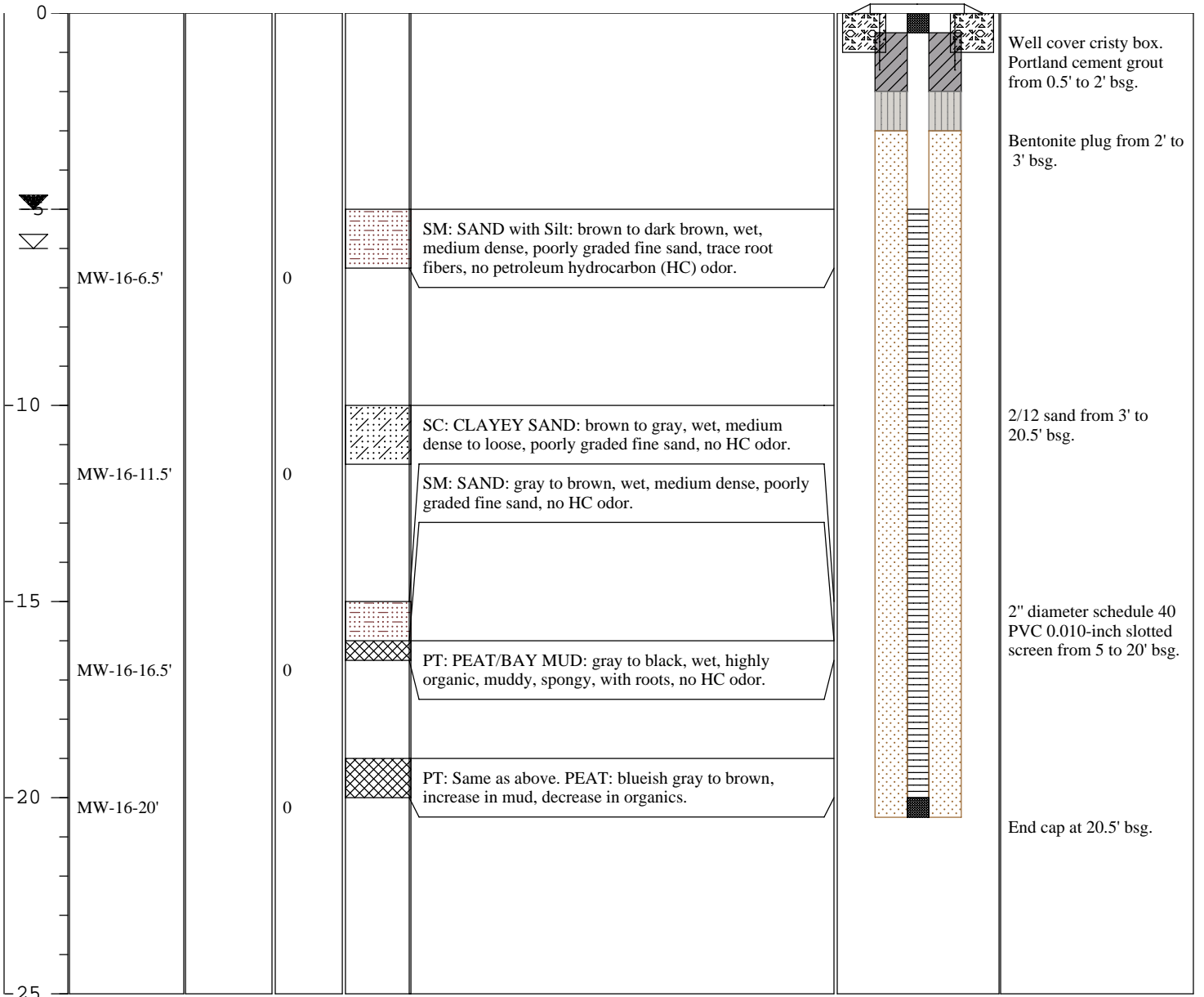
TOTAL DEPTH: **20.5 Feet**

Project: RINEHART OIL, INC.  
Site Location: 1107 5th Street  
Oakland, California  
Project No.: AGE-SR-03-1101

Drilling Co.: GREGG DRILLING AND TESTING  
Rig/Auger Type: D-42 Limited Access Rig / 8"-H.S.A.  
Logged By: Jeremiah Puget  
Reviewed By: William Little  
Date(s) Drilled: 09/20/07

Notes:   
 Water level during drilling  
 Water level in completed well  
Page 1 of 1

Depth	Sample ID	Blows (per 6")	OVM (ppm)	Soil Symbol	USCS Class and Soil Description	Well Completion	Well Description
-------	-----------	----------------	-----------	-------------	---------------------------------	-----------------	------------------





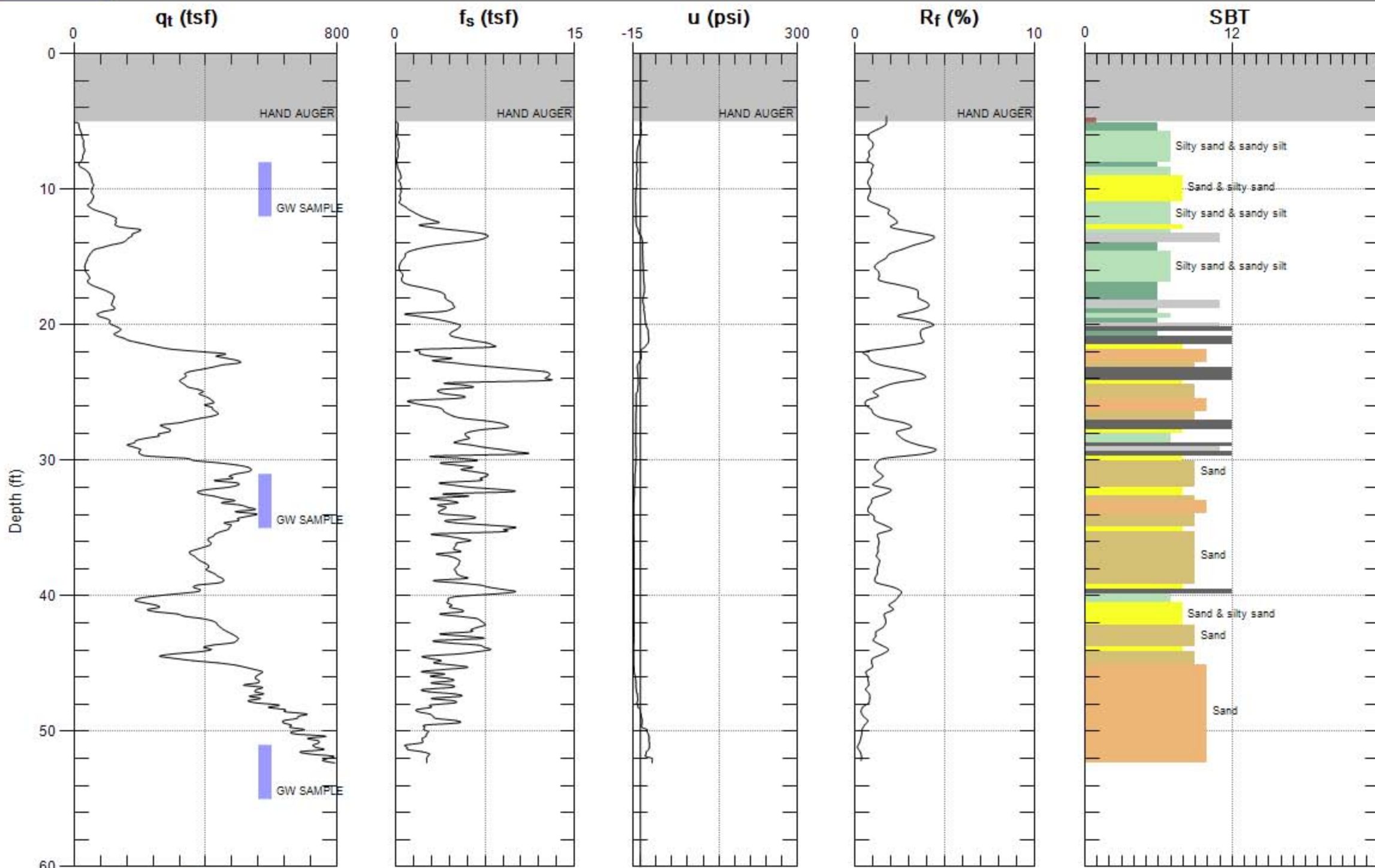
# ADVANCED GEOENVIRONMENTAL

Site: RINHEART OIL

Sounding: CPT-01

Engineer: J.PUGET

Date: 9/20/2007 09:16



Max. Depth: 52.329 (ft)

Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)



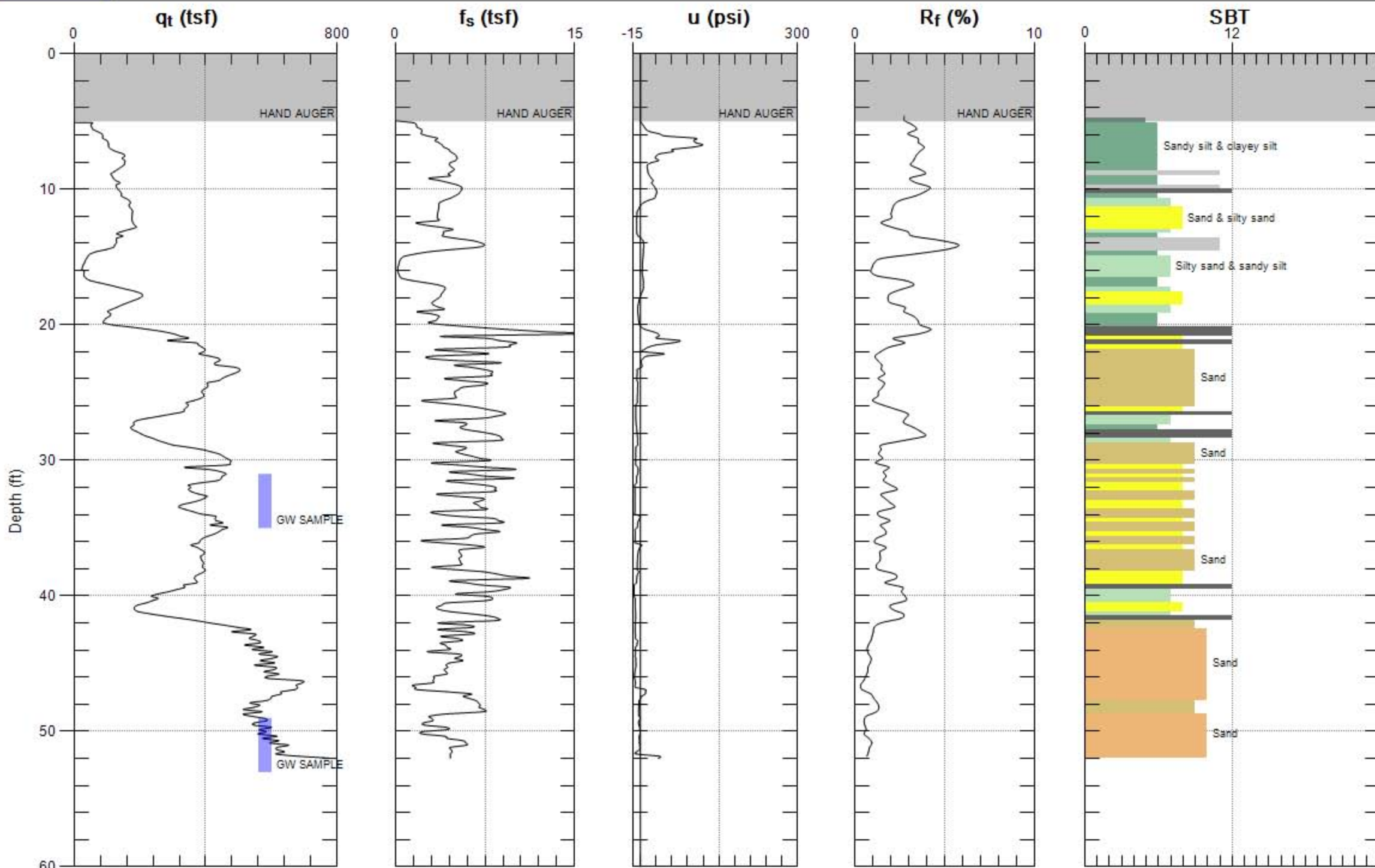
# ADVANCED GEOENVIRONMENTAL

Site: RINHEART OIL

Sounding: CPT-02

Engineer: J.PUGET

Date: 9/20/2007 03:53



Max. Depth: 52.001 (ft)

Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)





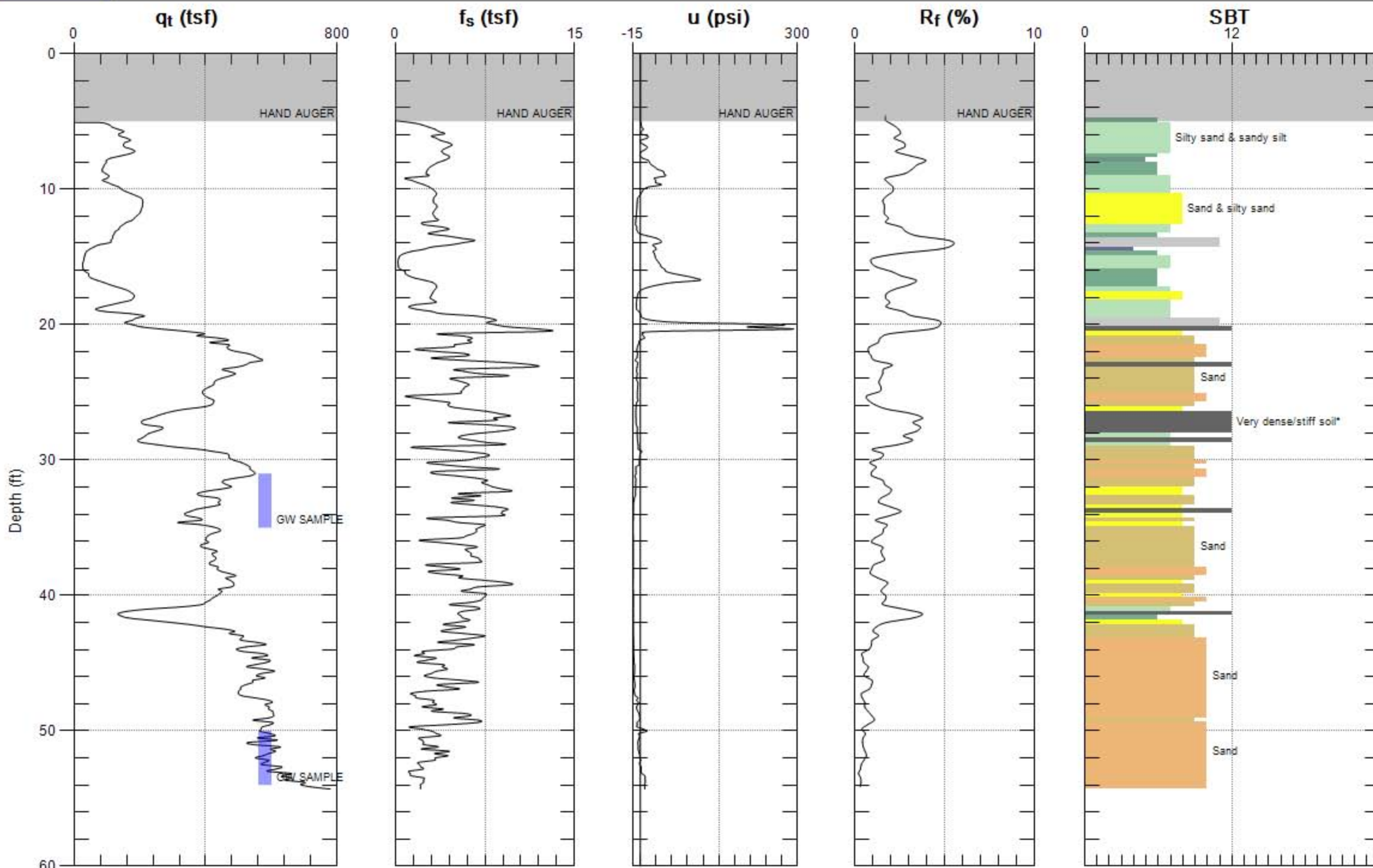
# ADVANCED GEOENVIRONMENTAL

Site: RINHEART OIL

Sounding: CPT-03

Engineer: J.PUGET

Date: 9/21/2007 08:25



Max. Depth: 54.298 (ft)

Avg. Interval: 0.328 (ft)

SBT: Soil Behavior Type (Robertson 1990)

# **APPENDIX D**



Alpha

Alpha Analytical Laboratories Inc.

e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com)

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267  
Service Center: 6398 Dougherty Rd., Suite 3, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

03 October 2007

Advanced Geo Environmental, Inc.

Attn: Jeremiah

2318 Fourth St.

Santa Rosa, CA 95404

RE: Rinehart Oakland Truck Stop

Work Order: 0711000

Enclosed are the results of analyses for samples received by the laboratory on 09/24/07 08:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Sheri L. Speaks  
Project Manager



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 1 of 14

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

<u>Order Number</u> 0711000	<u>Receipt Date/Time</u> 09/24/2007 08:50	<u>Client Code</u> ADVGEOSR	<u>Client PO/Reference</u>
--------------------------------	--	--------------------------------	----------------------------

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CPT-1A	0711000-01	Water	09/20/07 13:30	09/24/07 08:50
CPT-1B	0711000-02	Water	09/20/07 14:05	09/24/07 08:50
CPT-1C	0711000-03	Water	09/20/07 14:47	09/24/07 08:50
CPT-2B	0711000-04	Water	09/21/07 07:24	09/24/07 08:50
CPT-2C	0711000-05	Water	09/21/07 08:10	09/24/07 08:50
CPT-3B	0711000-06	Water	09/21/07 10:45	09/24/07 08:50
CPT-3C	0711000-07	Water	09/21/07 11:30	09/24/07 08:50

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

Bruce Gove  
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 2 of 14

Advanced Geo Enviromental, Inc.
2318 Fourth St.
Santa Rosa, CA 95404
Attn: Jeremiah

Report Date: 10/03/07 12:50
Project No: -
Project ID: Rinehart Oakland Truck Stop

Order Number 0711000 Receipt Date/Time 09/24/2007 08:50 Client Code ADVGEOSR Client PO/Reference

Alpha Analytical Laboratories, Inc.

Table with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE. Includes sections for CPT-1A (TPH by EPA/LUFT GC/GCMS Methods) and Volatile Organic Compounds by EPA Method 8260B.

Table for CPT-1B (TPH by EPA/LUFT GC/GCMS Methods) with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

[Handwritten signature of Bruce Gove]

Bruce Gove
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 3 of 14

Advanced Geo Enviromental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number                      Receipt Date/Time                      Client Code                      Client PO/Reference  
0711000                      09/24/2007 08:50                      ADVGEOSR

**Alpha Analytical Laboratories, Inc.**

METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
<b>CPT-1B (0711000-02)</b>		<b>Sample Type: Water</b>			<b>Sampled: 09/20/07 14:05</b>		
<b>Volatile Organic Compounds by EPA Method 8260B</b>							
Benzene	EPA 8260B	AJ70310	"	10/02/07	1	ND ug/l	0.30
Toluene	"	"	"	"	"	ND "	0.30
Ethylbenzene	"	"	"	"	"	ND "	0.50
Xylenes (total)	"	"	"	"	"	ND "	0.50
Methyl tert-butyl ether	"	"	"	"	"	ND "	0.50
Di-isopropyl ether	"	"	"	"	"	ND "	0.50
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50
Tert-butyl alcohol	"	"	"	"	"	ND "	10
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50
Surrogate: Bromofluorobenzene	"	"	"	"		107 %	75-126
Surrogate: Dibromofluoromethane	"	"	"	"		88.8 %	61-105
Surrogate: Toluene-d8	"	"	"	"		116 %	69-115
<b>CPT-1C (0711000-03)</b>							
<b>TPH by EPA/LUFT GC/GCMS Methods</b>		<b>Sample Type: Water</b>			<b>Sampled: 09/20/07 14:47</b>		
TPH as Diesel	8015DRO	AJ72517	09/25/07	09/26/07	1	ND ug/l	50
TPH as Gasoline	8260GRO	AJ70305	10/02/07	10/02/07	"	ND "	50
Surrogate: Tetratetracontane	8015DRO	AJ72517	09/25/07	09/26/07		82.9 %	20-152
Surrogate: Toluene-d8	8260GRO	AJ70305	10/02/07	10/02/07		117 %	69-118

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 4 of 14

Advanced Geo Enviromental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number                      Receipt Date/Time                      Client Code                      Client PO/Reference  
0711000                      09/24/2007 08:50                      ADVGEOSR

**Alpha Analytical Laboratories, Inc.**

METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
<b>CPT-1C (0711000-03)</b>		<b>Sample Type: Water</b>			<b>Sampled: 09/20/07 14:47</b>		
<b>Volatile Organic Compounds by EPA Method 8260B</b>							
Benzene	EPA 8260B	AJ70310	"	10/02/07	1	ND ug/l	0.30
Toluene	"	"	"	"	"	ND "	0.30
Ethylbenzene	"	"	"	"	"	ND "	0.50
Xylenes (total)	"	"	"	"	"	ND "	0.50
Methyl tert-butyl ether	"	"	"	"	"	ND "	0.50
Di-isopropyl ether	"	"	"	"	"	ND "	0.50
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50
Tert-butyl alcohol	"	"	"	"	"	ND "	10
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50
Surrogate: Bromofluorobenzene	"	"	"	"		106 %	75-126
Surrogate: Dibromofluoromethane	"	"	"	"		88.4 %	61-105
Surrogate: Toluene-d8	"	"	"	"		117 %	69-115
<b>CPT-2B (0711000-04)</b>							
<b>TPH by EPA/LUFT GC/GCMS Methods</b>		<b>Sample Type: Water</b>			<b>Sampled: 09/21/07 07:24</b>		
TPH as Diesel	8015DRO	AJ72517	09/25/07	09/26/07	1	ND ug/l	50
<b>TPH as Gasoline</b>	8260GRO	AJ70305	10/02/07	10/02/07	"	<b>69 "</b>	<b>50</b>
Surrogate: Tetratetracontane	8015DRO	AJ72517	09/25/07	09/26/07		84.4 %	20-152
Surrogate: Toluene-d8	8260GRO	AJ70305	10/02/07	10/02/07		106 %	69-118

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 5 of 14

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number                      Receipt Date/Time                      Client Code                      Client PO/Reference  
0711000                      09/24/2007 08:50                      ADVGEOSR

**Alpha Analytical Laboratories, Inc.**

METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
<b>CPT-2B (0711000-04)</b>		<b>Sample Type: Water</b>			<b>Sampled: 09/21/07 07:24</b>		
<b>Volatile Organic Compounds by EPA Method 8260B</b>							
Benzene	EPA 8260B	AJ70310	"	10/02/07	1	8.0 ug/l	0.30
Toluene	"	"	"	"	"	13 "	0.30
Ethylbenzene	"	"	"	"	"	1.3 "	0.50
Xylenes (total)	"	"	"	"	"	5.5 "	0.50
Methyl tert-butyl ether	"	"	"	"	"	ND "	0.50
Di-isopropyl ether	"	"	"	"	"	ND "	0.50
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50
Tert-butyl alcohol	"	"	"	"	"	ND "	10
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50
Surrogate: Bromofluorobenzene	"	"	"	"		96.8 %	75-126
Surrogate: Dibromofluoromethane	"	"	"	"		84.8 %	61-105
Surrogate: Toluene-d8	"	"	"	"		106 %	69-115

METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
<b>CPT-2C (0711000-05)</b>		<b>Sample Type: Water</b>			<b>Sampled: 09/21/07 08:10</b>		
<b>TPH by EPA/LUFT GC/GCMS Methods</b>							
TPH as Diesel	8015DRO	AJ72517	09/25/07	09/26/07	1	54 ug/l	50
TPH as Gasoline	8260GRO	AJ70305	10/02/07	10/02/07	"	ND "	50
Surrogate: Tetraetracontane	8015DRO	AJ72517	09/25/07	09/26/07		78.2 %	20-152
Surrogate: Toluene-d8	8260GRO	AJ70305	10/02/07	10/02/07		106 %	69-118

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/3/2007





Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 6 of 14

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number                      Receipt Date/Time                      Client Code                      Client PO/Reference  
0711000                      09/24/2007 08:50                      ADVGEOSR

**Alpha Analytical Laboratories, Inc.**

METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
<b>CPT-2C (0711000-05)</b>							
<b>Sample Type: Water</b>				<b>Sampled: 09/21/07 08:10</b>			
<b>Volatile Organic Compounds by EPA Method 8260B</b>							
Benzene	EPA 8260B	AJ70310	"	10/02/07	1	2.0 ug/l	0.30
Toluene	"	"	"	"	"	3.4 "	0.30
Ethylbenzene	"	"	"	"	"	0.57 "	0.50
Xylenes (total)	"	"	"	"	"	2.7 "	0.50
Methyl tert-butyl ether	"	"	"	"	"	0.61 "	0.50
Di-isopropyl ether	"	"	"	"	"	ND "	0.50
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50
Tert-butyl alcohol	"	"	"	"	"	ND "	10
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50
Surrogate: Bromofluorobenzene	"	"	"	"		98.0 %	75-126
Surrogate: Dibromofluoromethane	"	"	"	"		84.0 %	61-105
Surrogate: Toluene-d8	"	"	"	"		106 %	69-115

<b>CPT-3B (0711000-06)</b>							
<b>Sample Type: Water</b>				<b>Sampled: 09/21/07 10:45</b>			
<b>TPH by EPA/LUFT GC/GCMS Methods</b>							
TPH as Diesel	8015DRO	A172517	09/25/07	09/26/07	1	190 ug/l	50
TPH as Gasoline	8260GRO	AJ70305	10/02/07	10/02/07	"	410 "	50
Surrogate: Tetraetracontane	8015DRO	A172517	09/25/07	09/26/07		68.1 %	20-152
Surrogate: Toluene-d8	8260GRO	AJ70305	10/02/07	10/02/07		104 %	69-118

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 7 of 14

Advanced Geo Enviromental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number 0711000      Receipt Date/Time 09/24/2007 08:50      Client Code ADVGEOSR      Client PO/Reference

Alpha Analytical Laboratories, Inc.

Table with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE. Includes sample information for CPT-3B (0711000-06) and a list of Volatile Organic Compounds by EPA Method 8260B.

Table with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE. Includes sample information for CPT-3C (0711000-07) and a list of TPH by EPA/LUFT GC/GCMS Methods.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 8 of 14

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number                      Receipt Date/Time                      Client Code                      Client PO/Reference  
0711000                      09/24/2007 08:50                      ADVGEOSR

**Alpha Analytical Laboratories, Inc.**

METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
<b>CPT-3C (0711000-07)</b>							
<b>Volatile Organic Compounds by EPA Method 8260B</b>				<b>Sample Type: Water</b>	<b>Sampled: 09/21/07 11:30</b>		
Benzene	EPA 8260B	AJ70310	"	10/02/07	1	10 ug/l	0.30
Toluene	"	"	"	"	"	0.67 "	0.30
Ethylbenzene	"	"	"	"	"	1.9 "	0.50
Xylenes (total)	"	"	"	"	"	2.1 "	0.50
Methyl tert-butyl ether	"	"	"	"	"	16 "	0.50
Di-isopropyl ether	"	"	"	"	"	ND "	0.50
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.50
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.50
Tert-butyl alcohol	"	"	"	"	"	ND "	10
1,2-Dichloroethane	"	"	"	"	"	ND "	0.50
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.50
Surrogate: Bromofluorobenzene	"	"	"	"	"	101 %	75-126
Surrogate: Dibromofluoromethane	"	"	"	"	"	87.2 %	61-105
Surrogate: Toluene-d8	"	"	"	"	"	111 %	69-115

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 9 of 14

Advanced Geo Enviromental, Inc.
2318 Fourth St.
Santa Rosa, CA 95404
Attn: Jeremiah

Report Date: 10/03/07 12:50
Project No: -
Project ID: Rinehart Oakland Truck Stop

Order Number 0711000 Receipt Date/Time 09/24/2007 08:50 Client Code ADVGEOSR Client PO/Reference

TPH by EPA/LUFT GC/GCMS Methods - Quality Control

Table with 11 columns: Analyte(s), Result, PQL, Units, Spike Level, Source Result, %REC, %REC Limits, RPD, RPD Limit, Flag. It contains three main sections: Batch AI72517 - SVOAs in Water GC, Batch AJ70305 - VOAs in Water GCMS, and Matrix Spike Dup (AJ70305-MSD1).

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

[Handwritten signature of Bruce Gove]

Bruce Gove
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 10 of 14

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

<u>Order Number</u>	<u>Receipt Date/Time</u>	<u>Client Code</u>	<u>Client PO/Reference</u>
0711000	09/24/2007 08:50	ADVGEOSR	

**TPH by EPA/LUFT GC/GCMS Methods - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AJ70305 - VOAs in Water GCMS</b>										
<b>Matrix Spike Dup (AJ70305-MSD1)</b>		<b>Source: 0711000-02</b>			Prepared & Analyzed: 10/02/07					
Surrogate: Toluene-d8	26.9		"	25.0		108	69-118			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 11 of 14

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number                      Receipt Date/Time                      Client Code                      Client PO/Reference  
0711000                      09/24/2007 08:50                      ADVGEOSR

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AJ70310 - VOAs in Water GCMS</b>										
<b>Blank (AJ70310-BLK1)</b>				Prepared & Analyzed: 10/02/07						
Benzene	ND	0.30	ug/l							
Toluene	ND	0.30	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
Tert-amyl methyl ether	ND	0.50	"							
Tert-butyl alcohol	ND	10	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Surrogate: Bromofluorobenzene	25.9		"	25.0		104	75-126			
Surrogate: Dibromofluoromethane	23.1		"	25.0		92.4	61-105			
Surrogate: Toluene-d8	27.2		"	25.0		109	69-115			
<b>LCS (AJ70310-BS1)</b>				Prepared & Analyzed: 10/02/07						
Benzene	10.8	0.30	ug/l	10.0		108	85-116			
Toluene	10.9	0.30	"	10.0		109	76-137			
Ethylbenzene	10.8	0.50	"	10.0		108	84-122			
Xylenes (total)	32.0	0.50	"	30.0		107	81-126			
Methyl tert-butyl ether	10.2	0.50	"	10.0		102	88-121			
Di-isopropyl ether	10.8	0.50	"	10.1		107	92-132			
Ethyl tert-butyl ether	9.87	0.50	"	10.2		96.8	80-120			
Tert-amyl methyl ether	9.16	0.50	"	10.3		88.9	82-120			
Tert-butyl alcohol	226	10	"	196		115	71-126			
1,2-Dichloroethane	10.4	0.50	"	10.0		104	77-115			
1,2-Dibromoethane (EDB)	11.1	0.50	"	10.0		111	80-118			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 12 of 14

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number                      Receipt Date/Time                      Client Code                      Client PO/Reference  
0711000                      09/24/2007 08:50                      ADVGEOSR

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AJ70310 - VOAs in Water GCMS</b>										
<b>LCS (AJ70310-BS1)</b>				Prepared & Analyzed: 10/02/07						
Surrogate: Bromofluorobenzene	24.5		"	25.0		98.0	75-126			
Surrogate: Dibromofluoromethane	22.0		"	25.0		88.0	61-105			
Surrogate: Toluene-d8	25.9		"	25.0		104	69-115			
<b>LCS Dup (AJ70310-BSD1)</b>				Prepared & Analyzed: 10/02/07						
Benzene	10.9	0.30	ug/l	10.0		109	85-116	0.922	25	
Toluene	10.8	0.30	"	10.0		108	76-137	0.922	25	
Ethylbenzene	10.6	0.50	"	10.0		106	84-122	1.87	25	
Xylenes (total)	31.3	0.50	"	30.0		104	81-126	2.21	25	
Methyl tert-butyl ether	10.3	0.50	"	10.0		103	88-121	0.976	25	
Di-isopropyl ether	10.7	0.50	"	10.1		106	92-132	0.930	25	
Ethyl tert-butyl ether	9.66	0.50	"	10.2		94.7	80-120	2.15	25	
Tert-amyl methyl ether	9.31	0.50	"	10.3		90.4	82-120	1.62	25	
Tert-butyl alcohol	237	10	"	196		121	71-126	4.75	25	
1,2-Dichloroethane	11.0	0.50	"	10.0		110	77-115	5.61	25	
1,2-Dibromoethane (EDB)	10.7	0.50	"	10.0		107	80-118	3.67	25	
Surrogate: Bromofluorobenzene	23.9		"	25.0		95.6	75-126			
Surrogate: Dibromofluoromethane	25.0		"	25.0		100	61-105			
Surrogate: Toluene-d8	25.3		"	25.0		101	69-115			
<b>Matrix Spike (AJ70310-MS1)</b>				<b>Source: 0711000-01</b>		Prepared & Analyzed: 10/02/07				
Benzene	9.47	0.30	ug/l	10.0	ND	94.7	57-141			
Toluene	9.51	0.30	"	10.0	ND	95.1	56-147			
Ethylbenzene	9.42	0.50	"	10.0	ND	94.2	48-153			
Xylenes (total)	29.0	0.50	"	30.0	ND	96.7	49-153			
Methyl tert-butyl ether	8.65	0.50	"	10.0	ND	86.5	55-144			
Di-isopropyl ether	9.00	0.50	"	10.1	ND	89.1	65-151			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/3/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 13 of 14

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

<u>Order Number</u>	<u>Receipt Date/Time</u>	<u>Client Code</u>	<u>Client PO/Reference</u>
0711000	09/24/2007 08:50	ADVGEOSR	

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AJ70310 - VOAs in Water GCMS</b>										
<b>Matrix Spike (AJ70310-MS1)</b>		<b>Source: 0711000-01</b>			Prepared & Analyzed: 10/02/07					
Ethyl tert-butyl ether	8.22	0.50	"	10.2	ND	80.6	55-135			
Tert-amyl methyl ether	7.33	0.50	"	10.3	ND	71.2	53-130			
Tert-butyl alcohol	200	10	"	196	ND	102	51-144			
1,2-Dichloroethane	9.17	0.50	"	10.0	ND	91.7	62-126			
1,2-Dibromoethane (EDB)	9.42	0.50	"	10.0	ND	94.2	40-147			
Surrogate: Bromofluorobenzene	25.6		"	25.0		102	75-126			
Surrogate: Dibromofluoromethane	24.8		"	25.0		99.2	61-105			
Surrogate: Toluene-d8	26.3		"	25.0		105	69-115			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/3/2007





Alpha

Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com) • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 14 of 14

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/03/07 12:50  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

<u>Order Number</u>	<u>Receipt Date/Time</u>	<u>Client Code</u>	<u>Client PO/Reference</u>
0711000	09/24/2007 08:50	ADVGEOSR	

**Notes and Definitions**

- S-GC Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogates.
- QM-08 The RPD was outside acceptance limits for MS/MSD, possibly due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- PQL Practical Quantitation Limit



Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482  
 e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

# Work Order 11-0 e

## Chain of Custody Record

Lab No. 07I1000 Page 1 of 1

Company Name: <b>AGE-</b>		Project Name: <i>Rinchart Oakland Truck Stop</i>		Project Number:		Signature below authorizes work under terms stated on reverse side.																				
Mailing Address:		Project Address: <i>1107 5th Street, Oakland, CA</i>		Quote #		<b>Analysis Request</b>												<b>TAT</b>								
Project Contact (Hardcopy or PDF to): <i>Jeremiah Paget</i>		P.O. #		Bill to: <i>AGE-SR</i>		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">           BTEX TPH-G/TPH-D 5 Fuel Oxy's EDB + 1,2-DCA         </div> <div style="text-align: right;">           24 hr <input type="radio"/>            48 hr <input type="radio"/>            Lab Approval Required            1 wk <input type="radio"/>            2 wk (standard) <input checked="" type="radio"/> </div> </div>												<b>For Lab Use Only</b>								
Phone/Fax:		Bill to:		Quote #																						
Samplers Signature: <i>[Signature]</i>		Sampling		Container			Preservative			Matrix																
Sample Designation		Date Time		40ml VOA	Poly	Amber	Sleeve	HCL	HNO3	H2SO4	None	Water	Soil													
CPT-1A		09-20-07 13:30																								
CPT-1B		09-20-07 14:05																								
CPT-1C		09-20-07 14:47																								
CPT-2B		09-21-07 7:24																								
CPT-2C		09-21-07 8:10																								
CPT-3B		09-21-07 10:45																								
CPT-3C		09-21-07 11:30																								
Relinquished by: <i>[Signature]</i>		Received by: <i>Shen Specks</i>		Date <i>9/24/07</i>		Time <i>8:50</i>		California EDF Report? <input checked="" type="radio"/> Yes <input type="radio"/> No																		
Relinquished by:		Received by:		Date		Time		Global ID: <i>T0600102136</i>																		
Relinquished by:		Received for Laboratory by:		Date		Time		EDF to (Email Address):																		
Sample Condition on Receipt:		Travel and Site Time:		Mileage:		Misc. Supplies:		Drinking Water State System/Source Number:																		



*Alpha*

Alpha Analytical Laboratories Inc.

e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com)

Corporate: 208 Mason St., Ukiah, CA 95482 • Phone: (707) 468-0401 • Fax: (707) 468-5267

Service Center: 6398 Dougherty Rd., Suite 3, Dublin, CA 94568 • Phone: (925) 828-6226 • Fax: (925) 828-6309

02 October 2007

Advanced Geo Environmental, Inc.

Attn: Jeremiah

2318 Fourth St.

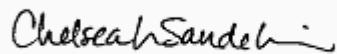
Santa Rosa, CA 95404

RE: Rinehart Oakland Truck Stop

Work Order: 07I1001

Enclosed are the results of analyses for samples received by the laboratory on 09/24/07 08:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Chelsea L. Sandelin For Sheri L. Speaks  
Project Manager



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 1 of 13

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

<u>Order Number</u> 0711001	<u>Receipt Date/Time</u> 09/24/2007 08:50	<u>Client Code</u> ADVGEOSR	<u>Client PO/Reference</u>
--------------------------------	--	--------------------------------	----------------------------

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-15-6.5'	0711001-01	Soil	09/20/07 09:31	09/24/07 08:50
MW-15-11.5'	0711001-02	Soil	09/20/07 09:37	09/24/07 08:50
MW-15-20'	0711001-03	Soil	09/20/07 09:45	09/24/07 08:50
MW-16-6.5'	0711001-04	Soil	09/20/07 13:07	09/24/07 08:50
MW-16-11.5'	0711001-05	Soil	09/20/07 13:11	09/24/07 08:50
MW-16-20'	0711001-06	Soil	09/20/07 13:18	09/24/07 08:50

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 2 of 13

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number                      Receipt Date/Time                      Client Code                      Client PO/Reference  
0711001                      09/24/2007 08:50                      ADVGEOSR

**Alpha Analytical Laboratories, Inc.**

	METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
<b>MW-15-6.5' (0711001-01)</b>			<b>Sample Type: Soil</b>			<b>Sampled: 09/20/07 09:31</b>		
<b>TPH by EPA/LUFT GC/GCMS Methods</b>								
TPH as Diesel	8015DRO	A172612	09/26/07	09/28/07	1	1.4 mg/kg	1.0	D-35
TPH as Gasoline	8015GRO	A172610	09/24/07	09/26/07	"	1.4 "	1.0	
Surrogate: 1,4-Bromofluorobenzene	"	"	"	"		89.2 %	60-156	
Surrogate: Tetratetracontane	8015DRO	A172612	09/26/07	09/28/07		57.9 %	20-152	

**Volatile Organic Compounds by EPA Method 8260B**

Benzene	EPA 8260B	A172704	09/26/07	09/27/07	1	ND mg/kg	0.0050	
Toluene	"	"	"	"	"	ND "	0.0050	
Ethylbenzene	"	"	"	"	"	ND "	0.0050	
Xylenes (total)	"	"	"	"	"	ND "	0.0050	
Methyl tert-butyl ether	"	"	"	"	"	ND "	0.0050	
Di-isopropyl ether	"	"	"	"	"	ND "	0.0050	
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.0050	
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.0050	
Tert-butyl alcohol	"	"	"	"	"	ND "	0.10	
1,2-Dichloroethane	"	"	"	"	"	ND "	0.0050	
Chlorobenzene	"	"	"	"	"	ND "	0.0050	
1,3-Dichlorobenzene	"	"	"	"	"	ND "	0.0050	
1,4-Dichlorobenzene	"	"	"	"	"	ND "	0.0050	
1,2-Dichlorobenzene	"	"	"	"	"	ND "	0.0050	
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.0050	
Surrogate: Bromofluorobenzene	"	"	"	"		102 %	69-134	
Surrogate: Dibromofluoromethane	"	"	"	"		86.8 %	63-124	
Surrogate: Toluene-d8	"	"	"	"		102 %	66-135	

**MW-15-11.5' (0711001-02)**

**Sample Type: Soil**

**Sampled: 09/20/07 09:37**

**TPH by EPA/LUFT GC/GCMS Methods**

TPH as Diesel	8015DRO	A172612	09/26/07	09/28/07	1	ND mg/kg	1.0	
TPH as Gasoline	8015GRO	A172610	09/24/07	09/26/07	"	ND "	1.0	
Surrogate: 1,4-Bromofluorobenzene	"	"	"	"		112 %	60-156	
Surrogate: Tetratetracontane	8015DRO	A172612	09/26/07	09/28/07		49.9 %	20-152	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 3 of 13

Advanced Geo Enviromental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number 0711001      Receipt Date/Time 09/24/2007 08:50      Client Code ADVGEOSR      Client PO/Reference

Alpha Analytical Laboratories, Inc.

Table with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE. Includes sub-section 'Volatile Organic Compounds by EPA Method 8260B' and surrogate data for Bromofluorobenzene, Dibromofluoromethane, and Toluene-d8.

Table with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE. Includes sub-section 'TPH by EPA/LUFT GC/GCMS Methods' and surrogate data for 1,4-Bromofluorobenzene and Tetratetracontane.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 4 of 13

Advanced Geo Enviromental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number 0711001      Receipt Date/Time 09/24/2007 08:50      Client Code ADVGEOSR      Client PO/Reference

Alpha Analytical Laboratories, Inc.

Table with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE. Includes sub-section 'MW-15-20' (0711001-03) and 'Volatile Organic Compounds by EPA Method 8260B'.

Table with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE. Includes sub-section 'MW-16-6.5' (0711001-04) and 'TPH by EPA/LUFT GC/GCMS Methods'.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 5 of 13

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number 0711001      Receipt Date/Time 09/24/2007 08:50      Client Code ADVGEOSR      Client PO/Reference

Alpha Analytical Laboratories, Inc.

Table with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE. Includes sub-section 'MW-16-6.5' (0711001-04)' and 'Volatile Organic Compounds by EPA Method 8260B' listing various chemical compounds and their results.

Table with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE. Includes sub-section 'MW-16-11.5' (0711001-05)' and 'TPH by EPA/LUFT GC/GCMS Methods' listing TPH as Diesel and Gasoline.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007





Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 6 of 13

Advanced Geo Enviromental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

<u>Order Number</u>	<u>Receipt Date/Time</u>	<u>Client Code</u>	<u>Client PO/Reference</u>
0711001	09/24/2007 08:50	ADVGEOSR	

**Alpha Analytical Laboratories, Inc.**

METHOD	BATCH	PREPARED	ANALYZED	DILUTION	RESULT	PQL	NOTE
<b>MW-16-11.5' (0711001-05)</b>							
<b>Sample Type: Soil</b>				<b>Sampled: 09/20/07 13:11</b>			
<b>Volatile Organic Compounds by EPA Method 8260B</b>							
Benzene	EPA 8260B	A172704	09/26/07	09/27/07	1	ND mg/kg	0.0050
Toluene	"	"	"	"	"	ND "	0.0050
Ethylbenzene	"	"	"	"	"	ND "	0.0050
Xylenes (total)	"	"	"	"	"	ND "	0.0050
Methyl tert-butyl ether	"	"	"	"	"	ND "	0.0050
Di-isopropyl ether	"	"	"	"	"	ND "	0.0050
Ethyl tert-butyl ether	"	"	"	"	"	ND "	0.0050
Tert-amyl methyl ether	"	"	"	"	"	ND "	0.0050
Tert-butyl alcohol	"	"	"	"	"	ND "	0.10
1,2-Dichloroethane	"	"	"	"	"	ND "	0.0050
Chlorobenzene	"	"	"	"	"	ND "	0.0050
1,3-Dichlorobenzene	"	"	"	"	"	ND "	0.0050
1,4-Dichlorobenzene	"	"	"	"	"	ND "	0.0050
1,2-Dichlorobenzene	"	"	"	"	"	ND "	0.0050
1,2-Dibromoethane (EDB)	"	"	"	"	"	ND "	0.0050
Surrogate: Bromofluorobenzene	"	"	"	"		102 %	69-134
Surrogate: Dibromofluoromethane	"	"	"	"		81.9 %	63-124
Surrogate: Toluene-d8	"	"	"	"		105 %	66-135

<b>MW-16-20' (0711001-06)</b>							
<b>Sample Type: Soil</b>				<b>Sampled: 09/20/07 13:18</b>			
<b>TPH by EPA/LUFT GC/GCMS Methods</b>							
TPH as Diesel	8015DRO	A172612	09/26/07	09/28/07	1	ND mg/kg	1.0
TPH as Gasoline	8015GRO	A172610	09/24/07	09/26/07	"	ND "	1.0
Surrogate: 1,4-Bromofluorobenzene	"	"	"	"		118 %	60-156
Surrogate: Tetraetracontane	8015DRO	A172612	09/26/07	09/28/07		59.9 %	20-152

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

CHEMICAL EXAMINATION REPORT

Page 7 of 13

Advanced Geo Enviromental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number 0711001      Receipt Date/Time 09/24/2007 08:50      Client Code ADVGEOSR      Client PO/Reference

Alpha Analytical Laboratories, Inc.

Table with columns: METHOD, BATCH, PREPARED, ANALYZED, DILUTION, RESULT, PQL, NOTE. Includes sample information: MW-16-20' (0711001-06), Sample Type: Soil, Sampled: 09/20/07 13:18. Lists Volatile Organic Compounds by EPA Method 8260B such as Benzene, Toluene, Ethylbenzene, etc.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 8 of 13

Advanced Geo Enviromental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

<u>Order Number</u> 0711001	<u>Receipt Date/Time</u> 09/24/2007 08:50	<u>Client Code</u> ADVGEOSR	<u>Client PO/Reference</u>
--------------------------------	--	--------------------------------	----------------------------

**TPH by EPA/LUFT GC/GCMS Methods - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AI72610 - EPA 5030 Soil GC</b>										
<b>Blank (AI72610-BLK1)</b>				Prepared & Analyzed: 09/26/07						
TPH as Gasoline	ND	1.0	mg/kg							
Surrogate: 1,4-Bromofluorobenzene	3.69		"	4.00		92.2	60-156			
<b>LCS (AI72610-BS1)</b>				Prepared & Analyzed: 09/26/07						
TPH as Gasoline	20.8	1.0	mg/kg	21.4		97.2	70-130			
Surrogate: 1,4-Bromofluorobenzene	4.41		"	4.00		110	60-156			
<b>Matrix Spike (AI72610-MS1)</b>				<b>Source: 0710731-01</b>		Prepared & Analyzed: 09/26/07				
TPH as Gasoline	22.1	1.0	mg/kg	20.6	4.9	83.5	65-161			
Surrogate: 1,4-Bromofluorobenzene	4.43		"	3.85		115	60-156			
<b>Matrix Spike Dup (AI72610-MSD1)</b>				<b>Source: 0710731-01</b>		Prepared & Analyzed: 09/26/07				
TPH as Gasoline	26.2	1.0	mg/kg	20.6	4.9	103	65-161	17.0	25	
Surrogate: 1,4-Bromofluorobenzene	4.34		"	3.85		113	60-156			
<b>Batch AI72612 - CA LUFT - orb shaker</b>										
<b>Blank (AI72612-BLK1)</b>				Prepared: 09/26/07 Analyzed: 09/27/07						
TPH as Diesel	ND	1.0	mg/kg							
Surrogate: Tetracontane	0.683		"	1.45		47.1	20-152			
<b>LCS (AI72612-BS1)</b>				Prepared: 09/26/07 Analyzed: 09/27/07						
TPH as Diesel	32.5	1.0	mg/kg	40.3		80.6	63-126			
Surrogate: Tetracontane	0.872		"	1.45		60.1	20-152			
<b>Matrix Spike (AI72612-MS1)</b>				<b>Source: 0711023-01</b>		Prepared: 09/26/07 Analyzed: 09/27/07				
TPH as Diesel	34.3	1.0	mg/kg	40.3	ND	85.1	61-134			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 9 of 13

Advanced Geo Enviromental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

<u>Order Number</u>	<u>Receipt Date/Time</u>	<u>Client Code</u>	<u>Client PO/Reference</u>
0711001	09/24/2007 08:50	ADVGEOSR	

**TPH by EPA/LUFT GC/GCMS Methods - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AI72612 - CA LUFT - orb shaker</b>										
<b>Matrix Spike (AI72612-MS1)</b>				<b>Source: 0711023-01</b>	Prepared: 09/26/07 Analyzed: 09/27/07					
Surrogate: Tetratetracontane	0.861		"	1.45		59.4	20-152			
<b>Matrix Spike Dup (AI72612-MSD1)</b>				<b>Source: 0711023-01</b>	Prepared: 09/26/07 Analyzed: 09/27/07					
TPH as Diesel	35.7	1.0	mg/kg	40.3	ND	88.6	61-134	4.00	20	
Surrogate: Tetratetracontane	0.877		"	1.45		60.5	20-152			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 10 of 13

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number	Receipt Date/Time	Client Code	Client PO/Reference
0711001	09/24/2007 08:50	ADVGEOSR	

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AI72704 - VOAs in Soil GCMS</b>										
<b>Blank (AI72704-BLK1)</b>										
Prepared & Analyzed: 09/26/07										
Benzene	ND	0.0050	mg/kg							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Methyl tert-butyl ether	ND	0.0050	"							
Di-isopropyl ether	ND	0.0050	"							
Ethyl tert-butyl ether	ND	0.0050	"							
Tert-amyl methyl ether	ND	0.0050	"							
Tert-butyl alcohol	ND	0.10	"							
1,2-Dichloroethane	ND	0.0050	"							
Chlorobenzene	ND	0.0050	"							
1,3-Dichlorobenzene	ND	0.0050	"							
1,4-Dichlorobenzene	ND	0.0050	"							
1,2-Dichlorobenzene	ND	0.0050	"							
1,2-Dibromoethane (EDB)	ND	0.0050	"							
Surrogate: Bromofluorobenzene	0.0253		"	0.0250		101	69-134			
Surrogate: Dibromofluoromethane	0.0197		"	0.0250		78.8	63-124			
Surrogate: Toluene-d8	0.0247		"	0.0250		98.8	66-135			
<b>LCS (AI72704-BS1)</b>										
Prepared & Analyzed: 09/26/07										
Benzene	0.0230	0.0050	mg/kg	0.0250		92.0	77-120			
Toluene	0.0231	0.0050	"	0.0250		92.4	78-123			
Ethylbenzene	0.0215	0.0050	"	0.0250		86.0	86-120			
Xylenes (total)	0.0610	0.0050	"	0.0750		81.3	79-129			
Methyl tert-butyl ether	0.0249	0.0050	"	0.0250		99.6	75-140			
Di-isopropyl ether	0.0238	0.0050	"	0.0254		93.7	82-138			
Ethyl tert-butyl ether	0.0239	0.0050	"	0.0254		94.1	75-128			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 11 of 13

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number                      Receipt Date/Time                      Client Code                      Client PO/Reference  
0711001                      09/24/2007 08:50                      ADVGEOSR

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AI72704 - VOAs in Soil GCMS</b>										
<b>LCS (AI72704-BS1)</b>				Prepared & Analyzed: 09/26/07						
Tert-amyl methyl ether	0.0238	0.0050	"	0.0258		92.2	74-117			
Tert-butyl alcohol	0.434	0.10	"	0.491		88.4	64-131			
1,2-Dichloroethane	0.0234	0.0050	"	0.0250		93.6	76-113			
Chlorobenzene	0.0209	0.0050	"	0.0250		83.6	75-122			
1,3-Dichlorobenzene	0.0194	0.0050	"	0.0250		77.6	74-128			
1,4-Dichlorobenzene	0.0221	0.0050	"	0.0250		88.4	77-119			
1,2-Dichlorobenzene	0.0225	0.0050	"	0.0250		90.0	80-117			
1,2-Dibromoethane (EDB)	0.0225	0.0050	"	0.0250		90.0	76-131			
Surrogate: Bromofluorobenzene	0.0212		"	0.0250		84.8	69-134			
Surrogate: Dibromofluoromethane	0.0222		"	0.0250		88.8	63-124			
Surrogate: Toluene-d8	0.0208		"	0.0250		83.2	66-135			
<b>Matrix Spike (AI72704-MS1)</b>				<b>Source: 0710731-01</b>		Prepared & Analyzed: 09/26/07				
Benzene	0.0199	0.0050	mg/kg	0.0233	ND	85.4	29-145			
Toluene	0.0215	0.0050	"	0.0233	ND	92.3	33-148			
Ethylbenzene	0.0172	0.0050	"	0.0233	ND	73.8	23-150			
Xylenes (total)	0.0478	0.0050	"	0.0698	ND	68.5	14-158			
Methyl tert-butyl ether	0.0238	0.0050	"	0.0233	ND	102	60-138			
Di-isopropyl ether	0.0229	0.0050	"	0.0236	ND	97.0	75-132			
Ethyl tert-butyl ether	0.0224	0.0050	"	0.0236	ND	94.9	66-126			
Tert-amyl methyl ether	0.0223	0.0050	"	0.0240	ND	92.9	71-111			
Tert-butyl alcohol	0.427	0.10	"	0.457	ND	93.4	57-134			
1,2-Dichloroethane	0.0203	0.0050	"	0.0233	ND	87.1	61-114			
Chlorobenzene	0.0169	0.0050	"	0.0233	ND	72.5	32-139			
1,3-Dichlorobenzene	0.0103	0.0050	"	0.0233	ND	44.2	11-150			
1,4-Dichlorobenzene	0.0165	0.0050	"	0.0233	ND	70.8	31-135			
1,2-Dichlorobenzene	0.0161	0.0050	"	0.0233	ND	69.1	17-143			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 12 of 13

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

Order Number                      Receipt Date/Time                      Client Code                      Client PO/Reference  
0711001                      09/24/2007 08:50                      ADVGEOSR

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**

Analyte(s)	Result	PQL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
<b>Batch AI72704 - VOAs in Soil GCMS</b>										
<b>Matrix Spike (AI72704-MS1)</b>			<b>Source: 0710731-01</b>			<b>Prepared &amp; Analyzed: 09/26/07</b>				
1,2-Dibromoethane (EDB)	0.0204	0.0050	"	0.0233	ND	87.6	52-129			
Surrogate: Bromofluorobenzene	0.0179		"	0.0233		76.8	69-134			
Surrogate: Dibromofluoromethane	0.0197		"	0.0233		84.5	63-124			
Surrogate: Toluene-d8	0.0214		"	0.0233		91.8	66-135			
<b>Matrix Spike Dup (AI72704-MSD1)</b>			<b>Source: 0710731-01</b>			<b>Prepared &amp; Analyzed: 09/26/07</b>				
Benzene	0.0204	0.0050	mg/kg	0.0238	ND	85.7	29-145	2.48	25	
Toluene	0.0215	0.0050	"	0.0238	ND	90.3	33-148	0.00	25	
Ethylbenzene	0.0177	0.0050	"	0.0238	ND	74.4	23-150	2.87	25	
Xylenes (total)	0.0495	0.0050	"	0.0713	ND	69.4	14-158	3.49	25	
Methyl tert-butyl ether	0.0261	0.0050	"	0.0238	ND	110	60-138	9.22	25	
Di-isopropyl ether	0.0242	0.0050	"	0.0241	ND	100	75-132	5.52	25	
Ethyl tert-butyl ether	0.0242	0.0050	"	0.0241	ND	100	66-126	7.73	25	
Tert-amyl methyl ether	0.0236	0.0050	"	0.0245	ND	96.3	71-111	5.66	25	
Tert-butyl alcohol	0.466	0.10	"	0.467	ND	99.8	57-134	8.73	25	
1,2-Dichloroethane	0.0216	0.0050	"	0.0238	ND	90.8	61-114	6.21	25	
Chlorobenzene	0.0170	0.0050	"	0.0238	ND	71.4	32-139	0.590	25	
1,3-Dichlorobenzene	0.00951	0.0050	"	0.0238	ND	40.0	11-150	7.98	25	
1,4-Dichlorobenzene	0.0144	0.0050	"	0.0238	ND	60.5	31-135	13.6	25	
1,2-Dichlorobenzene	0.0139	0.0050	"	0.0238	ND	58.4	17-143	14.7	25	
1,2-Dibromoethane (EDB)	0.0221	0.0050	"	0.0238	ND	92.9	52-129	8.00	25	
Surrogate: Bromofluorobenzene	0.0190		"	0.0238		79.8	69-134			
Surrogate: Dibromofluoromethane	0.0203		"	0.0238		85.3	63-124			
Surrogate: Toluene-d8	0.0219		"	0.0238		92.0	66-135			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Bruce Gove  
Laboratory Director

10/2/2007



Alpha Analytical Laboratories Inc.

208 Mason Street, Ukiah, California 95482

e-mail: [clientservices@alpha-labs.com](mailto:clientservices@alpha-labs.com) • Phone: (707) 468-0401 • Fax: (707) 468-5267

### CHEMICAL EXAMINATION REPORT

Page 13 of 13

Advanced Geo Environmental, Inc.  
2318 Fourth St.  
Santa Rosa, CA 95404  
Attn: Jeremiah

Report Date: 10/02/07 14:40  
Project No: -  
Project ID: Rinehart Oakland Truck Stop

<u>Order Number</u>	<u>Receipt Date/Time</u>	<u>Client Code</u>	<u>Client PO/Reference</u>
0711001	09/24/2007 08:50	ADVGEOSR	

#### Notes and Definitions

- D-35 Sample does not display a fuel pattern. Sample contains several discreet peaks.
- D-09 Results in the diesel organics range are primarily due to overlap from a heavy oil range product.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference
- PQL Practical Quantitation Limit





Alpha Analytical Laboratories Inc. 208 Mason Street, Ukiah, California 95482  
 e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

# Work Order Chain of Custody Record

10-2

Lab No. 07I1001 Page 1 of 1

Company Name: <b>AGE</b>		Project Name: <b>Rindhart Oakland Truck Stop</b>		Project Number:		Signature below authorizes work under terms stated on reverse side.																											
Mailing Address:		Project Address: <b>1107 5th Street, Oakland, CA</b>		Quote #		<b>Analysis Request</b>												<b>TAT</b>															
Project Contact (Hardcopy or PDF to): <b>Jeremiah Pagant</b>		P.O. #		Bill to: <b>AGE-SR</b>		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">           BTEX TPH-d/TPH-6 5 fuel oils EDB + 1,2-DCA         </div> <div style="text-align: right;"> <input type="radio"/> 24 hr  <input type="radio"/> 48 hr  <input type="radio"/> 1 wk  <input checked="" type="radio"/> 2 wk (standard)         </div> </div>												For Lab Use Only															
Phone/Fax:		Sample Matrix		Date															Time		40ml VOA		Poly		Amber		Sleeve		HCL		HNO3		H2SO4
Samplers Signature: <i>[Signature]</i>		Date		Time		40ml VOA		Poly		Amber		Sleeve		HCL		HNO3		H2SO4		None		Water		Soil		BTEX		TPH-d/TPH-6		5 fuel oils		EDB + 1,2-DCA	
Sample Designation		Date		Time		40ml VOA		Poly		Amber		Sleeve		HCL		HNO3		H2SO4		None		Water		Soil		BTEX		TPH-d/TPH-6		5 fuel oils		EDB + 1,2-DCA	
MN-15-6.5'		09-20-07		9:31								X																					
MN-15-11.5'		}		9:37								X																					
MN-15-20'		}		9:45								X																					
MN-16-6.5'		}		13:07								X																					
MN-16-11.5'		}		13:11								X																					
MN-16-20'		}		13:18								X																					
Relinquished by: <i>[Signature]</i>		Received by: <b>Shen Specks</b>		Date <b>9/24/07</b>		Time <b>8:50</b>		California EDF Report? <input checked="" type="radio"/> Yes <input type="radio"/> No																									
Relinquished by:		Received by:		Date		Time		Sampling Company Log Code:																									
Relinquished by:		Received for Laboratory by:		Date		Time		Global ID: <b>T0660102136</b>																									
Sample Condition on Receipt:		Travel and Site Time:		Misc. Supplies:		EDF to (Email Address):																											
						Drinking Water State System/Source Number:																											

# **APPENDIX E**

# Advanced GeoEnvironmental, Inc.

837 Shaw Road, Stockton, CA 95205 • (209) 467-1006 • Fax (209) 467-1118



## Monitoring Well Field Log

### Well Data

Project Name: RINEHART - OAKLAND TRUCK STOP		Project No.: AGE-NC-03-1101	Date: 10/5/07	
Pre-Purge DTW: 6.14	Time:	Well I.D.: MW- 15		
Post-Purge DTW: 9.11	Time: 0818			
Total Depth of Well: Pre 18.90 Post 19.00 20'	Well Volume: 221	Casing Diameter:	0.5" 2" 4" 6"	
		Gal./Fl.:	0.01074 0.16 0.65 1.47	
Sampler(s): CT		Sample Containers: N/A		
Sample I.D.: MW- 15 /100507		Analysis: N/A		

### Stabilization Data

Time	Volume (gallons)	pH	Temp.	Cond $\mu$ S/cm	Color/ Turbidity	Notes
0751	0	6.35	20.1	1105	Claystone	no odor
0802	3	6.69	19.5	1114	✓	✓
0802	4	6.80	20.3	925	L	✓
0807	12	6.68	20.1	761	✓	✓
0813	18	6.58	20.0	1053	✓	✓
0817	23	6.51	20.0	1030	✓	✓

Purge Method:	STEEL BAILER AND INERTIA PUMP		
Sample Method:	N/A	Well Integrity:	
Sample Time:	N/A	Dissolved O <sub>2</sub> :	C
Oakton		%	mg/L

# Advanced GeoEnvironmental, Inc.

837 Shaw Road, Stockton, CA 95205 • (209) 467-1006 • Fax (209) 467-1118



## Monitoring Well Field Log

### Well Data

Project Name: RINEHART - OAKLAND TRUCK STOP		Project No.: AGE-NC-03-1101		Date: 10/5/07	
Pre-Purge DTW: 5.85 Time:		Well I.D.: MW-16			
Post-Purge DTW: 16.73 Time:					
Total Depth of Well: 19.00 19.80 20'		Well Volume: 2.24		Casing Diameter: 0.5" 2" 4" 6" Gal./Ft.: 0.01074 0.16 0.65 1.47	
Sampler(s): CT		Sample Containers: N/A			
Sample I.D.: MW-16 /100507		Analysis: N/A			

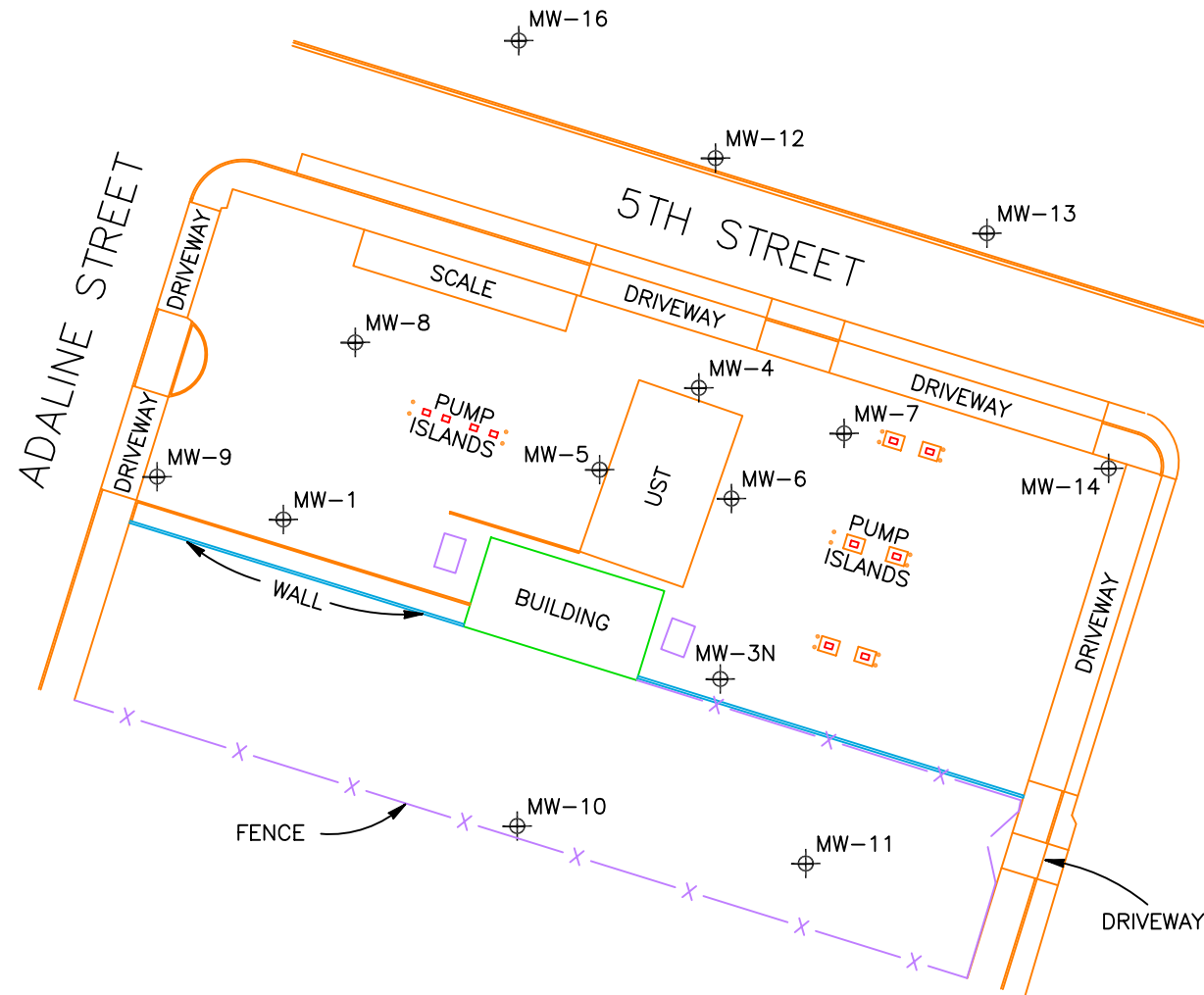
### Stabilization Data

Time	Volume (gallons)	pH	Temp.	Cond $\mu$ S/cm	Color/ Turbidity	Notes
0831	0	6.50	19.5	302 <sup>MS</sup>	Cloudy	no color
0843	3	6.81	20.2	1816	h	h
0845	4	6.78	20.3	1849	h	
0850	12	6.73	20.1	1979	h	h
0853	18	6.72	20.0	1891	no color	h
0857	23	6.71	20.0	1894	h	h
						h

Purge Method:	STEEL BAILER AND INERTIA PUMP		
Sample Method:	N/A	Well Integrity:	
Sample Time:	N/A	Dissolved O <sub>2</sub> :	C
Oakton		%	mg/L

# Monitoring Well Exhibit

Prepared For:  
Advanced GeoEnvironmental



DESCRIPTION	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV (PVC)	ELEV (BOX)
MW-1	2119496.2	6044968.3	37.8021937	-122.2885147	10.02	10.18
MW-3N	2119452.9	6045087.0	37.8020809	-122.2881009	11.36	11.74
MW-4	2119532.0	6045081.2	37.8022979	-122.2881263	9.93	10.42
MW-5	2119509.8	6045054.2	37.8022354	-122.2882182	10.19	10.43
MW-6	2119501.9	6045090.1	37.8022157	-122.2880936	10.33	10.79
MW-7	2119519.7	6045120.7	37.8022659	-122.2879889	11.41	11.67
MW-8	2119544.4	6044987.8	37.8023269	-122.2884503	9.73	10.03
MW-9	2119507.9	6044934.0	37.8022238	-122.2886342	9.73	9.89
MW-10	2119412.9	6045031.8	37.8019682	-122.2882893	9.42	9.77
MW-11	2119402.7	6045110.3	37.8019444	-122.2880172	10.77	11.15
MW-12	2119594.5	6045085.7	37.8024696	-122.2881148	10.59	11.15
MW-13	2119574.1	6045159.5	37.8024174	-122.2878581	11.29	11.82
MW-14	2119510.2	6045192.6	37.8022436	-122.2877395	11.39	11.78
MW-15	2119569.3	6045247.4	38.9681620	-123.8165133	11.38	11.89
MW-16	2119626.4	6045032.3	38.9683070	-123.8172737	10.36	10.98

**BASIS OF COORDINATES AND ELEVATIONS:**

COORDINATES ARE CALIFORNIA STATE PLANE ZONE 2 COORDINATES FROM GPS OBSERVATIONS USING UNIVERSITY OF CALIFORNIA BAY AREA DEFORMATION CORS STATION OBSERVATION FILES AND BASED ON THE CALIFORNIA SPATIAL REFERENCE CENTER DATUM, REFERENCE EPOCH 2000.35.

COORDINATE DATUM IS NAD 83(1986)

DATUM ELLIPSOID IS GRS80

REFERENCE GEOID IS NGS99

VERTICAL DATUM IS NAVD 88 FROM GPS OBSERVATIONS

CORS STATIONS USED WERE LEIC AND HSIB.



Oakland Truck Stop  
1107 5th Street  
Oakland  
Alameda County  
California



1450 Harbor Blvd. Ste. D  
West Sacramento  
California 95691  
(916) 372-8124  
paulg@morrrowsurveying.com

Date: 2-5-07  
Scale: 1" = 50'  
Sheet 1 of 1  
Revised: 11-30-07  
Field Book: MW-30,37  
Dwg. No. 0114-055 ct