

Alameda County

AUG 04 2005

Environmental Health

Ms. Donna Drogos  
Alameda County Health Care Services  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6783  
FACSMILE (510) 337-9335

~~April 18, 2005~~  
7-26-2005

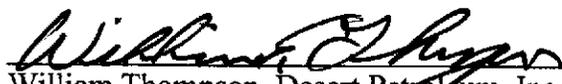
RE: The following report documents the "Second Quarter 2005 Groundwater Sampling Report/Update Status, Former Desert Petroleum Site DP793" dated July 20, 2005, documents groundwater monitor well samplings that occurred in June 2005 at DP 793, 4035 Park Blvd., Oakland, California 94602.

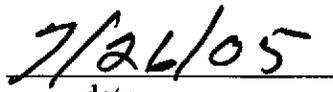
Dear Ms. Drogos:

I have reviewed the enclosed report that I contracted Western Geo-Engineers to prepare.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached report are true and correct to the best of my knowledge.

Sincerely,

  
\_\_\_\_\_  
William Thompson, Desert Petroleum, Inc.

  
\_\_\_\_\_  
date

**Alameda County**

**AUG 04 2005**

**Environmental Health**

SECOND QUARTER 2005  
GROUNDWATER SAMPLING REPORT/UPDATE STATUS  
WITH  
WASTEWATER DISCHARGE REPORT (APPENDIX E)

AT

FORMER DESERT SITE DP 793  
4035 PARK BLVD.  
OAKLAND, CA.

FOR

DESERT PETROLEUM

**JULY 20, 2005**

BY

-WEGE-  
WESTERN GEO-ENGINEERS  
1386 E. BEAMER STREET  
WOODLAND, CALIFORNIA 95776  
(530) 668-5300

## TABLE OF CONTENTS

1.0 SITE LOCATION AND IDENTIFICATION NUMBERS.....	2
2.0 SITE INVESTIGATION/REMEDATION CHRONOLOGY .....	2
3.0 LOCAL GEOLOGY.....	5
3.1 Geomorphology.....	5
3.2 Stratigraphy.....	6
Station Property.....	6
Backyard Sewer Lateral Route.....	6
Brighton Avenue.....	6
4.0 COLLECTION AND ANALYSIS OF GROUNDWATER SAMPLES.....	6
4.1 Depth to Water Measurements.....	6
5.0 RESULTS OF QUARTERLY GROUNDWATER MONITORING.....	7
5.1 Groundwater Gradient and Flow Direction.....	7
5.2 Results of Certified Analysis of Groundwater Samples.....	7
TPHg - Figure 5 .....	8
Benzene - Figure 5 .....	8
Toluene.....	8
Ethylbenzene.....	8
Xylenes.....	8
MtBE.....	8
6.0 PURGING OF RECEPTOR TRENCH.....	9
7.0 PUMPING ON-SITE WELL RS-5.....	9
8.0 FREE PHASE FLOATING PRODUCT REMOVAL.....	9
9.0 SUMMARY.....	10
10.0 RECOMMENDATIONS.....	11
11.0 TIME FRAME.....	12
12.0 LIMITATIONS.....	12

### List of Tables

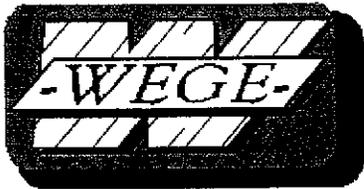
1. Groundwater Elevation and Certified Analytical Results
2. Groundwater Pumped and Treated

### List of Figures

1. Area Base Map "Geotracker"
2. Portion of USGS Oakland East 7.5 Minute Quadrangle
3. Sample Location Figure
4. Groundwater Gradient, June 1, 2005
5. Groundwater Plume, TPHg & Benzene, June 1, 2005

### List of Appendices

- A. METHODS AND PROCEDURES, QA/QC WITH FIELD NOTES
- B. GROUNDWATER ELEVATION CHART
- C. LABORATORY REPORT
- D. WASTEWATER DISCHARGE REPORT



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND, CA 95776-6003  
**(530) 668-5300**  
FAX (530) 662-0273  
wege@cal.net

Mr. Bill Thompson  
Desert Petroleum  
P.O. Box 1601  
Oxnard, California 93032  
(805) 644-6784 FAX (805) 654-0720

July 20, 2005

Dear Mr. Thompson:

The following report documents the second quarter 2005 sampling at DP793, 4035 Park Blvd., Oakland, California.

## **1.0 SITE LOCATION AND IDENTIFICATION NUMBERS**

Former Desert Petroleum #793 is a non-active service station (USTs and associated piping removed June 23, 1994), located on the northwest corner of the intersection of Park Boulevard and Hampel Street at 4035 Park Blvd., Oakland, California (Figure 1). The site is located in projected section 32; T1S; R3W; MDB&M at an approximate elevation of 210 feet above mean sea level (Figure 2).

East Bay Municipal Utility District - Sewer Discharge Permit #50435501  
Alameda County Local Oversight STID 1248  
San Francisco Bay Regional Board (Region 2) Case # 01-0170  
Facility/Leak Site ID# T0600100158

## **2.0 SITE INVESTIGATION/REMEDATION CHRONOLOGY**

- November 30, 1989 Alameda County Health Department (Mr. Ariu Levi) notified Desert Petroleum that gasoline was trickling into a sewer on Brighton Avenue through a crack in the bottom of the sewer access. Desert Petroleum's area manager sent to site to reconstruct and audit tank inventories and sales records. The audit indicated overages on all tanks.
- December 1, 1989 Desert Petroleum contacted the station tenant, Mr. Jason Gopad, and advised him to test the fuel tanks and associated piping.
- December 5, 1989 The retail fueling facility was closed.
- December 6, 1989 Mr. Gopad had the underground storage tanks tested. The test results were inconclusive.
- December 7, 1989 All fuel was removed from the underground storage tanks. The product lines were tested by Walton Engineering. The regular leaded and super unleaded lines passed. The regular unleaded line failed. A 1/2 inch hole in the 2 inch unleaded supply line was located beneath the eastern pump island. An ultrasound investigation was conducted to determine the location of the onsite sewer line. An onsite soil gas survey was conducted and indicated

- contamination associated with the pump islands and the sewer line on the western edge of the property.
- December 8, 1989 Desert Petroleum submitted Unauthorized Release Report, drilling permits for site assessment obtained from Alameda County Flood Control and Water Conservation District, Zone 7, Underground Service Alert was notified.
- December 11, 1989 Onsite drilling/sampling and well installation initiated. Sample borings RS-1, RS-2, RS-3, RS-5 and RS-4. Groundwater monitoring wells installed into borings RS-1, RS-5, and RS-6. Vapor extraction well installed into boring RS-2.
- December 12, 1989 Encroachment permit secured from the City of Oakland for assessment work in Brighton Avenue. Sample boring RS-4 drilled and sampled just east of the sewer access in Brighton Avenue to the 10 foot depth.
- December 13, 1989 The area northeast of the sewer access was excavated with a backhoe. Gasoline appeared to be seeping from the backfill around the sewer line. A water supply line was inadvertently broke (USA markings incorrectly marked the location of this line). A vacuum truck was used to pump out the water/product from the excavation. Approximately 7,200 gallons of water/gasoline was manifested and sent to H & H Shipyard for treatment and disposal. The water line was repaired, perforated 4 inch PVC pipe was placed vertically into the excavation and the excavation backfilled with pea gravel from approximately the 8 foot depth to subgrade, well RS-7. A portable vapor extraction unit connected to the sewer and RS-7 (operated during daylight hours).
- December 15, 1989 RSI S.A.V.E. vapor extraction system installed and connected to onsite wells RS-1, RS-2, RS-5 and RS-6. Operated continuously for one week, then during daylight hours thereafter due to noise disturbance of neighbors. Length of vapor extraction and amounts of hydrocarbons removed not documented.
- July 24, 1990 Soil boring/sampling investigations near the sewer lateral in residential backyard 1227 Hampel Avenue.
- August 21, 1990 Soil boring/sampling investigations near the sewer lateral in residential backyards 4006 Brighton Avenue and 4010/4012 Brighton Avenue.
- December 1990 Commenced quarterly groundwater monitoring.
- September 8, 1993 Levine - Fricke, conducted soil boring/sampling investigation at residences 4003 Park Blvd. and 4006 Brighton Avenue. Constructed monitor well at 4003 Park Blvd for property owner of 4003 Park Blvd (not a part of 4035 Park Blvd. site assessment/investigation).
- June 23, 1994 Removed all USTs and associated piping from 4035 Park Blvd.
- August 14, 1995 Over-excavated UST and dispenser areas at 4035 Park Blvd, 1700 cubic yards of non-hazardous soil transported to and disposed at Forward Landfill, Stockton, California. Installed excavation well R3 (6 inch slotted PVC to 15 feet below surface) south of building, backfill excavation to 5 1/2 feet below surface with 1/4 inch pea gravel. Excavating removed monitor well RS-1.
- August 16, 1995 Excavated and removed hydraulic hoists from station building.

August 31, 1995 Exploratory excavation at waste oil UST area, north of building and exploratory excavation west of building to 17 feet below surface. Installed excavation wells R1 in west excavation and R2 in north excavation.

September 5, 1995 Drill/sampled and installed replacement well for RS-1 (MW-1).

May 2, 1996 Soil Probe Survey and soil sample borings along sewer route from 4035 Park Blvd. through back yards, to Brighton Avenue. Temporary casing set in hand augered borings BH-1, BH-2, BH-3, BH-4 and BH-5. Conducted slug tests on BH-1, BH-2, BH-3 and BH-5. Not enough water entry into BH-4 to conduct test. The following hydraulic conductivities (k) were calculated; BH-1 = 0.15 ft/day, BH-2 = 2.9 ft/day, BH-3 = 0.11 ft/day, and BH-5 = 4.8 ft/day.

January 17, 1997 Soil Probe Survey Brighton Avenue

August 12, 1999 Installed receptor trench, Brighton Avenue. 148 cubic yards non hazardous gasoline contaminated soil transported and disposed of at Vacaville Landfill, Vacaville, California. Installed wells RS-8, RS-9 and RS-10.

October 7, 1999 Pumped 19,451 gallons of gasoline contaminated groundwater from receptor trench, stored in above ground 22,000 gallon Baker tank.

January 24, 2000 Obtained sewer discharge permit from East Bay Municipal Utility District, started discharge of water stored in Baker tank to city sewer.

May 4, 2000 Started weekly purging of receptor trench well T1 (4 hours once per week). Discharged purged water through water carbon and then to sewer.

February 15, 2001 Set submersible pump in RS-5 to pump continuously, continued once a week purging of receptor well T1 (46,121 gallons removed from receptor trench well).

July 19, 2001 Ceased pumping of RS-5 and weekly purging of T1; 62,511 gallons removed from T1 and 78,919 gallons removed from RS-5 (total 141,430 gallons of gasoline contaminated groundwater treated and disposed to sewer).

March 21, 2002 Resumed pumping at RS-5.

August 6, 2002 246,849 gallons of gasoline contaminated groundwater pumped, treated and disposed to sewer.

November 20, 2002 Commenced weekly hand bailing of free phase product from well RS-8.

December 12, 2002 Purged receptor trench of 1432 gallons gasoline tainted groundwater.

January 9, 2003 Purged receptor trench of 1349 gallons gasoline tainted groundwater.

January 30, 2003 Purged receptor trench of 1624 gallons gasoline tainted groundwater.

March 13, 2003 Purged receptor trench of 1413 gallons gasoline tainted groundwater.

April 3, 2003 Purged receptor trench of 1305 gallons gasoline tainted groundwater.

April 9, 2003 Demolished existing service station building.

April 15, 2003 Replaced RS05 groundwater recovery pump with WEGE pump, while RS05 pump is serviced.

May 1, 2003 Reinstalled RS05 groundwater recovery pump.  
Submitted Workplan to Investigate Contaminated Soils Above and Below the Water Table at the Former Area of the Station Building, 4035 Park Blvd., Oakland, CA.

May 6, 2003 Purged receptor trench of 1589 gallons gasoline tainted groundwater.

May 21, 2003 Purged receptor trench of 2544 gallons gasoline tainted groundwater.

June 25, 2003 Purged receptor trench of 1796 gallons gasoline tainted groundwater.

July 17, 2003	Purged receptor trench of 1560 gallons gasoline tainted groundwater.
July 31, 2003	Notice to initiate Workplan submitted May 1, 2003
August 6, 2003	Alameda County Health, Scott Seery, phoned Western Geo-Engineers, notifying them not to proceed with workplan.
August 13, 2003	Purged receptor trench of 1574 gallons gasoline tainted groundwater.
September 4, 2003	Purged receptor trench of 1477 gallons gasoline tainted groundwater.
October 3, 2003	Purged receptor trench of 1285 gallons gasoline tainted groundwater.
October 16, 2003	Removed water carbon unit #1, placed new water carbon in #2 position and moved #2 water carbon into #1 position.
November 20, 2003	Purged receptor trench of 1303 gallons gasoline tainted groundwater.
December 18, 2003	Purged receptor trench of 1303 gallons gasoline tainted groundwater.
January 22, 2004	Purged receptor trench of 1175 gallons gasoline tainted groundwater.
February 26, 2004	Purged receptor trench of 102 gallons gasoline tainted groundwater.
March 30, 2004	Purged receptor trench of 975 gallons gasoline tainted groundwater.
April 29, 2004	Purged receptor trench of 1406 gallons gasoline tainted groundwater.
May 13, 2004	Turned pumping system off, removed lid from #1 carbon and removed scaling from top of carbon, replaced lid and restarted pump.
May 27, 2004	Purged receptor trench of 1647 gallons gasoline tainted groundwater.
June 30, 2004	Purged receptor trench of 1759 gallons gasoline tainted groundwater.
July 29, 2004	No electrical power to treatment compound; has been disconnected.
September 24, 2004	New power panel at site, need 100 feet extension cord to connect pump controller to power for RS-5.
September 28, 2004	Restarted pumping at RS-5. Performed 1/4ly well samplings. Purged receptor trench of 1911 gallons.
September 30, 2004	Containment berm full of water, inspected carbon #1, leaking from bottom. Turned system off and removed carbon from system.
October 15, 2004	Take delivery of new water carbon, placed #2 carbon into #1 position, new carbon into #2 position, restarted pumping system.
December 8, 2004	Performed 1/4ly well samplings.
December 9-16, 2004	Direct push/cored 12 borings to obtain groundwater and soil samples.
March 8, 2005	Published Conceptual Model
March 23, 2005	Performed 1/4ly well samplings.
June 1, 2005	Performed 1/4ly well samplings.

### 3.0 LOCAL GEOLOGY

#### 3.1 Geomorphology

The site is located on the western slope of the Berkeley Hills. The Berkeley Hills are a northwest-southeast trending range within the Coastal Range Province of California. Erosion of the Coastal Ranges has filled the valleys within and bordering the Coastal Range with sequences of gravels, silts, sands, and clays.

### **3.2 Stratigraphy**

#### **Station Property**

The native soil from surface to 13 feet below ground surface (BGS) consists of dark brown silty clay. The dark brown clay is underlain by light brown stiff clay that includes subrounded to rounded metavolcanic gravel. This clay extends to approximately 23 feet BGS at the northwest corner of the site. A fine to medium sand, clayey sand, and silty sand underlies the gravel and clay.

#### **Backyard Sewer Lateral Route**

Assessments performed along the sewer lateral as it leaves the site and routes through the residential area towards Brighton Avenue show the subsurface to consist of fill from a couple of inches thick to two feet thick. Beneath the fill is a sequence of clay formations that vary from light brown to dark gray to approximately the 6 foot depth. Silty clay then extends to approximately the 14-foot depth. Beneath the silty clay is sand with occasional gravel. This sand is 11 feet thick at RS5 and is underlain by silty clay.

#### **Brighton Avenue**

Construction of the receptor trench along the eastern curb area of Brighton Avenue revealed two separate sequences of lithology. North of the storm drain catch basin the sequence consists of; clay to the four foot depth, silty clay to the seven foot depth, fine silty sand to the 9 foot depth, medium sand to the 10 foot depth, silty clay to the 11 ½ foot depth, gravel to the 12 foot depth underlain by clay to the 16 foot depth. South of the storm catch basin is a sequence of silty clays and clays to depth.

Sandier sequence of sediments north of the storm water catch basin at Brighton Avenue compared to the sediments south of the storm water catch basin, indicate a facies change or a fault remnant striking east/west near the storm drain catch basin. A topographic lineation along the 200 foot contour is located in this area, see Figure 2.

## **4.0 COLLECTION AND ANALYSIS OF GROUNDWATER SAMPLES**

Groundwater samples were collected on June 1, 2005. Samples were analyzed for Total Petroleum Hydrocarbons as gasoline, Benzene, Toluene, Ethylbenzene, Xylenes and the fuel oxygenant Methyl tert-Butyl Alcohol (MtBE) using EPA method 8260B, see Table 1. Figure 3 shows the positions of the groundwater monitoring wells, the receptor trench and previous sample locations.

### **4.1 Depth to Water Measurements**

On June 1, 2005 depth to water was measured at each well using a product/water interface probe. Measurements are referenced to the surveyed elevation at the top of casing at each well. Table 1

shows the elevation of groundwater with respect to mean sea level for all wells through June 1, 2005.

## 5.0 RESULTS OF QUARTERLY GROUNDWATER MONITORING

### 5.1 Groundwater Gradient and Flow Direction

Figure 4 shows the groundwater elevation gradients and flow direction that were derived from the depth to water measurements of the monitor wells on June 1, 2005, prior to purging the wells for sampling, see Table 1 and Appendix A. On February 15, 2001 a submersible pump was placed into onsite well RS-5 to try and capture contaminated groundwater beneath the site and adjoining properties. The pump rate was set at approximately 2 gpm. The pump was removed from RS-5 on July 19, 2001. After evaluation of the effects the pumping had on remediating the site the pump was placed back into RS-5 on March 21, 2002. Pumping from RS5 lowers the water levels in RS-6, RS-8, RS-10, R1 and R2, see Appendix B. Table 1 shows the groundwater elevations for the wells during the assessment of this site.

The current flow direction is to the northwest and west with a high mounding on site at the previously excavated/backfilled areas. The hydraulic gradient averages 0.108 feet/linear foot down gradient of RS6 to RS10. The hydraulic gradient averages 0.079 feet/linear foot down gradient of RS8 to well RS9, see Figure 4. The present flow direction and hydraulic gradient are consistent with previous determinations by WEGE. Pumping at RS5 resumed on October 15, 2004. For reference, areas that have been documented to contain contaminated soils (TPHg > 10 mg/Kg) have been shaded yellow.

### 5.2 Results of Certified Analysis of Groundwater Samples

The results of the certified analyses of groundwater samples collected on June 1, 2005 are shown in Table 1.

TPH-G concentrations in water samples from the eight monitor wells, the receptor trench well and two recovery wells ranged from 46000 ug/L at trench well T1, to below laboratory lower detection limits of 50 ug/L in wells MW1, RS2, RS6, RS10 and R3.

Benzene concentrations were found in seven wells; the pumping well RS5 contained 380 ug/L, trench well T1 contained 14000 ug/L, RS7 contained 660 ug/L, RS8 contained 330 ug/L, RS9 contained 170 ug/L, R1 contained 12 ug/L and R2 contained 5.2 ug/L all other wells were below the laboratory lower detection limits (0.5 ug/L), see Appendix C - Laboratory Report.

Analysis results for Oxygenant MtBE was below the laboratory lower detection limit in all wells sampled except trench well T1 which contained 54 ug/L, RS09 contained 12 ug/L, RS07 contained 3.7 ug/L and pumping well RS5 which contained 3 ug/L. T1, RS7 and RS9 are located within Brighton Street, indicating that the MtBE source(s) may be the cars parked along Brighton Street. During the September 16, 1998 well sampling all Fuel Oxygenants; MTBE, Di-isopropyl Ether

(DIPE), tertiary Butyl Alcohol (TBA), Ethyl-t-Butyl Ether (ETBE) and t-Amyl Methyl Ether (TAME) were confirmed with EPA Method 8260. These analytes were below laboratory lower detection limits. The presence of TBA at well RS9 detected during the November 2003 sampling most likely indicates the partial oxygenation of MtBE.

Figure 5 (June 1, 2005) shows the lateral distribution of the hydrocarbon plume with benzene distinction in groundwater.

#### TPHg - Figure 5

Total Petroleum Hydrocarbons, gasoline range has a laboratory lower detection limit (LLDL) of 50 ug/L, was detected in wells R1, R2, RS5, RS7, RS8, RS9 and T1 ranging from a low of 85 ug/L at R2 to a high of 46,000 ug/L at trench well T1.

#### Benzene - Figure 5

Benzene has a LLDL of 0.5 ug/L. The recommended CPHG (California Public Health Goal) for Benzene is 1.5 ug/L. Benzene was detected in wells R1, R2, RS5, RS7, RS8, RS9 and T1 ranging from a low of 5.2 ug/L at R2 to a high of 14,000 ug/L at trench well T1.

#### Toluene

Toluene has a LLDL of 0.5 ug/L. The recommended CPHG for toluene is 150 ug/L. Toluene was detected in wells RS5, RS7, RS8, RS9 and T1, ranging from a low of 14 ug/L at well RS9 to a high of 650 ug/L at trench well T1.

#### Ethylbenzene

Ethylbenzene has a LLDL of 0.5 ug/L. The recommended CPHG for Ethylbenzene is 300 ug/L. Ethylbenzene was detected in wells RS5, RS7, RS8, RS9, R1 and T1, ranging from a low of 1.6 ug/L at well R1 to a high of 1900 ug/L at trench well T1.

#### Xylenes

Xylenes have a LLDL of 0.5 ug/L. The recommended CPHG for Xylenes is 1800 ug/L. Xylenes were detected in wells RS5, RS7, RS8, RS9, R1 and T1, ranging from a low of 1.4 ug/L at well R1 to a high of 2900 ug/L at trench well T1.

#### MtBE

MtBE has a LLDL of 0.5 ug/L. The recommended CPHG for MtBE is 13 ug/L. MtBE was detected in wells RS5, RS7, RS9 and T1, ranging from a low of 3.0 ug/L at pumping well RS5 to a high of 54 ug/L at trench well T1, see Table 1 and Appendix C - Laboratory Report.

## **6.0 PURGING OF RECEPTOR TRENCH**

Commencing on May 4, 2000, weekly pumping of the receptor trench has been performed for approximately 4 hours per week. During purging the depth to water within the trench is lowered an average of one foot. Immediately after purging ceases, the water level in the trench recovers to its original depth. Weekly purging of the receptor trench was suspended on July 19, 2001 at the request of Desert Petroleum. 62,511 gallons of contaminated groundwater had been removed from the trench, processed through two, in series, activated carbon water scrubs and discharged to the sanitary sewer. Due to the increase of gasoline range hydrocarbons in downgradient well RS9 sampled on November 5, 2002, the receptor trench was purged on December 12, 2002, removing 1,432 gallons during 5 hours of pumping. Periodic purging of the trench has occurred since that time. As of June 7, 2005, 92,857 gallons of groundwater has been pumped from the receptor trench and purged from the groundwater monitoring wells, see Table 2.

## **7.0 PUMPING ON-SITE WELL RS-5**

On February 15, 2001 a submersible pump with a pump bypass was placed into RS-5. The pump rate was adjusted to 1.5 gpm and allowed to continuously pump from RS-5 for one week. 3223 gallons were pumped from RS-5 through the two, in series, water carbon units and discharged to the sewer. On February 22, 2001 the pump was inspected and showed a slimy growth covering the pump and discharge line that was below the water level. The pump was cleaned and placed back into RS-5 and continued to discharge from RS-5 through the water carbon units to sewer until July 19, 2001. On July 19, 2001 Desert Petroleum requested suspension of further pumping at the site. The pump was removed and the site secured. From February 15 through July 19, 2001, 78,919 gallons of gasoline contaminated groundwater was recovered from RS-5 and treated through carbon before being discharged to the sewer. Pumping from RS5 was resumed on March 21, 2002. As of June 7, 2005, 776,244 gallons of groundwater have been pumped from RS5 and treated through two, in series, water carbon units prior to being discharge to the sanitary sewer, see Table 2.

The pumping from RS-5 lowered the groundwater at this well by at least 15 feet, when compared to non pumping water measurements, see Figure 4. This creates a cone of influence out to offsite wells RS-8 and RS-10, see Chart - Appendix B.

## **8.0 FREE PHASE FLOATING PRODUCT REMOVAL**

Yellow Free Phase Floating Product was discovered in well RS8, 0.04 feet in thickness on August 6, 2002. Since all product storage and dispensing systems have been removed from the site (June 1994), it is thought that the product found in RS8, is residual from the November 1989 release and groundwater pumping at RS-5 is retrieving this residual product. Weekly bailing of the floating product commenced on November 20, 2002 and as of December 12, 2002, (the last noted detection of free phase product in RS8) 0.014 gallons of degraded gasoline have been removed and are stored on site in a 55 gallon 17H drum.

## 9.0 SUMMARY

Until the November 2002 sampling weekly purging of the receptor trench (T1) facilitated the decrease in the TPHg concentrations in down gradient wells RS-7 and RS-9, see Table 1 with charts RS-7. The weekly purging of the receptor trench was limited to a maximum daily discharge of 5 gpm, thus removing approximately 1200 to 2000 gallons per week. Although this does lower the water level in the trench, after pumping has ceased the water level rebounds to its original depth allowing for the gradient migration of TPHg contaminated groundwater to continue.

Pumping from RS-5 has shown to create a cone of influence off-site downgradient out to RS-8 and RS-10. Pumping has increased the dissolved oxygen in RS-5 and hydrocarbon concentrations have declined in R1, R2, R3, RS7, RS8, RS9, RS-10 and the Receptor Trench (T1). 0.04 feet of floating product (yellow gasoline) discovered during the August 6, 2002 sampling round could indicate that the pumping at RS-5 is capturing residual free phase product in that area.

The lowest hydrocarbon concentrations were observed while the weekly pumping of the trench well and the continuous pumping of RS5 was occurring, May 31, 2001. The most recent sampling, June 1, 2005 shows continued decrease in hydrocarbons to levels lower than the May 31, 2001 sample results at wells RS5, RS6, RS7, RS10, R1 and R2.

Previous sampling, September 2, 1999, showed that aerobic bacteria (hydrocarbon degraders) exist in the groundwater associated with the hydrocarbon plume. A workplan to augment the groundwater with oxygen (air sparging) and nutrients (phosphate and ammonium sulfate) dated August 29, 2000 was presented with the August 29, 2000, Third Quarter 2000 report. This workplan along with the May 31, 2001 conditions were discussed during a meeting at Alameda County Health that involved Mr. Thompson, Desert Petroleum, Mr. Seery, Alameda County Health and Mr. Converse, Western Geo-Engineers, on November 13, 2001. The meeting concluded that nutrient augmentation was not necessary at this time, but enhanced dissolved oxygen was needed. Due to neighborhood concerns, i.e. residential homes and apartments, air sparging and/or using a mechanical delivery device would create too much noise and a more passive oxygen delivery system was warranted, i.e. hydrogen peroxide or Oxygen Release Compound (ORC). An amended workplan was presented in Appendix G of the 4<sup>th</sup> Quarter 2001 report, dated January 7, 2002 and suggested that ORC would be the most beneficial means of enhancing dissolved oxygen in the groundwater plume. Western Geo-Engineers then requested Regensis Inc. to perform a basic model using ORC to determine how to apply, and the amount needed. The Regensis model indicated that a one-time application (would last approximately one year) of approximately 9,690 pounds of ORC would be needed, at a cost of \$77,520.00 for materials, which does not include installation costs. Upon receipt of the Regensis model, WEGE projected how much hydrogen peroxide would be necessary to increase the dissolved oxygen in the plume from 2 mg/L to 8 mg/L. This simple model indicated that 18 gallons of 35% solution hydrogen peroxide would be necessary per application, at a cost of \$1,160.00 per monthly application or \$13,920.00 for one year.

Further communications from Mr. Scott Seery with Mr. Converse occurred during the week of February 25 - March 1, 2002. Mr. Seery suggested another meeting to discuss remediation options prior to approving the amended workplan presented with the January 7, 2002 report. In a phone conversation between Mr. Converse and Mr. Seery on August 12, 2002, Mr. Seery requested that

the peroxide treatment not be performed until further review of the site by Alameda County Health. On January 15, 2003 the station property was resold by Mr. Toni Razzi to Mr. Kin Man Li (P.O. Box 348, Oakland, CA 94604). The new owner demolished the existing service station building. Western Geo-Engineers has performed additional soil and groundwater sampling of areas previously beneath the station building. A workplan outlining further assessment/risk, dated May 1, 2003 was submitted to Alameda County Health. This workplan was later revised after discussions with Mr. Scott Seery and was approved, June 8, 2004. Fieldwork associated with the workplan was completed on December 16, 2004. A conceptual model was developed that incorporated data obtained from the December 16, 2004 fieldwork. Modeling of the exposure pathways for the site (RBCA Tier 2 and Johnson and Ettinger Vapor Intrusion Models) indicate that subsurface soils and groundwater contamination needs to be reduced to prevent indoor air exposure of Benzene. Other than excavation practices no other exposure pathway exists to the site or surrounding residential area. There are no other sensitive receptors within 2000 feet of the soil/groundwater plume. The most recent soil and groundwater samples obtained from drilling activities (December 2004) at 4035 Park Blvd showed high concentrations of TPHg and BTEX exist in the soils and shallow groundwater (8 ft to 32 ft below ground surface) beneath the area that was previously occupied by the station building. Water sampling of the December 2004 borings showed slow drainage, indicating low hydraulic conductivity in the silty clay and the clayey conglomerate formations. Previous slug test on temporary piezometers installed downgradient of the site, in the backyard of the surrounding residences, showed groundwater velocities ranging between 4 and 385 feet per year. Pumping of RS5 produces approximately 700 gallons per day (>0.5 gpm). To further slow the migration of the contaminants of concern, organic carbon analysis showed total organic carbon in the water bearing formations to range between 340 and 5700 mg/Kg. Along with the organic carbon, natural attenuation is occurring as evident from analysis for the electron acceptors (dissolved oxygen, nitrate, sulfate and ferric iron) along with the presence of biological indicators (carbon dioxide, methane, aerobic hydrocarbon degrading bacteria, and reduced nutrients ortho phosphate and ammonia as nitrogen).

## 10.0 RECOMMENDATIONS

With a new property owner intending to build residential buildings on 4035 Park Blvd., the following recommendations are made by Western Geo-Engineers.

- Determine which wells located at 4035 Park Blvd., are necessary for the assessment and remediation objectives and destroy the unnecessary wells as per Alameda County Health guidelines.
- Remove the onsite source of hydrocarbon contamination found in the soils and shallow groundwater at 4035 Park Blvd (between 8 and 32 feet below the surface).
- Continue pumping RS5
- Install service laterals to the intercept trench well (T1) to perform continuous groundwater pumping from the trench.
- Define the downgradient extent of the hydrocarbon plume along the storm drain/sewer lateral.

## 11.0 TIME FRAME

September 2005      3<sup>rd</sup> Quarter Monitor well sampling.  
October 31, 2005    3<sup>rd</sup> Quarter Monitoring Report.

## 12.0 LIMITATIONS

This report is based upon the following:

- A. The observations of field personnel.
- B. The results of laboratory analyses performed by a state certified laboratory.
- C. Referenced documents.
- D. Our understanding of the regulations of the State of California, Alameda County and the City of Oakland.
- E. Changes in groundwater conditions can occur due to variations in rainfall, temperature, local and regional water use, and local construction practices.
- F. In addition, variations in the soil and groundwater conditions could exist beyond the points explored in this investigation.

State Certified Laboratory analytical results are included in this report. This laboratory follows EPA and State of California approved procedures; however, WEGE is not responsible for errors in these laboratory results. Western Geo-Engineers is a corporation under California Registered Geologist #3037 and/or Contractors License #513857. The services performed by Western Geo-Engineers have been conducted in a manner consistent with the level of care and skill ordinarily exercised by members of our profession currently practicing under similar conditions in the State of California and the Oakland area. Our work and/or supervision of remediation and/or abatement operations, active or preliminary, at this site is in no way meant to imply that we are owners or

operators of this site. Known or suspected contamination of soil and/or groundwater must be reported to the appropriate agencies in a timely manner. No other warranty, expressed or implied, is made.

Sincerely,



George Converse  
Geologist



Jack E. Napper  
Ca. Reg. Geologist #3037

cc: Ms. Donna Degros, Alameda County Health (510) 567-6719  
Mr. Leroy Griffin, Oakland Fire Dept.  
Mr. Kin Man Li, property owner (510) 599-7000

TABLE 1  
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABAORATAORY RESULTS FROM WATER SAMPLES  
DESERT PETROLEUM, INC. SITE #793  
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	(All concentrations in parts per billion [ug/L, ppb]) (AMSL = Above mean sea level)					
					TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
RS-1	12/14/1989	228.15	24.25	203.9	19000	2600	2700	200	1200	
RS-1	12/90				15000	3500	330	170	760	
RS-1	2/91				6900	910	200	39	540	
RS-1	6/91				1600	56	180	12	26	
RS-1	9/91				4100	730	7.6	5.1	24	
RS-1	12/91				8300	950	160	71	190	
RS-1	11/9/1992	228.15	17.05	211.1	1700	730	9.6	16	14	
RS-1	4/7/1994	228.15	13	215.15	860	84	12	16	110	
RS-1	6/19/1994	228.15	13.37	214.78	1400	150	12	52	87	
RS-1	9/17/1994	228.15	16.33	211.82	310	30	1.8	2.8	3.9	
RS-1	3/12/1995	228.15	4.66	223.49	ND	ND	ND	ND	ND	
DESTROYED BY OVER-EXCAVATION OF UST-DISPENSER AREAS ( 8/14/95										
REPLACED WITH MW-1 9/5/95.										
MW-1	10/4/1995	229.5	12.38	217.12	ND	ND	ND	ND	ND	
MW-1	12/21/95	229.5	13.40	216.1	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	03/27/96	229.5	5.53	223.97	< 50	< 0.5	< 0.5	< 0.5	< 2	< 50
MW-1	06/11/96	229.5	9.02	220.48	< 50	< 0.5	< 0.5	< 0.5	< 2	< 50
MW-1	09/04/96	229.5	11.84	217.66	< 50	< 0.5	< 0.5	< 0.5	< 2	< 50
MW-1	12/11/96	229.5	12.98	216.52	< 50	< 0.5	0.9	< 0.5	< 1	< 0.5
MW-1	2/21/97	229.5	9.50	220	< 50	< 0.5	0.9	< 0.5	< 1	< 0.5
MW-1	5/28/97	229.5	11.18	218.32	< 50	3	3	< 0.5	< 1	< 0.5
MW-1	9/2/1997	229.5	13.00	216.5	< 50	5	< 0.5	< 0.5	< 1	< 0.5
MW-1	11/24/1997	229.5	14.12	215.38	< 50	5	< 0.5	< 0.5	< 1	< 0.5
MW-1	2/25/1998	229.5	6.41	223.09	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
MW-1	7/8/1998	229.5	7.28	222.22	< 50	< 0.5	< 0.5	< 0.5	< 1	< 1
MW-1	9/16/1998	229.5	10.96	218.54	< 50	< 0.5	< 0.5	< 0.5	< 1	< 1
MW-1	11/24/1998	229.5	12.24	217.26	52	2.3	5.2	< 0.5	5.4	11
MW-1	2/23/1999	229.5	7.14	222.36	< 50	< 0.5	5	< 0.5	< 1	< 0.5
MW-1	5/5/1999	229.5	7.00	222.5	< 50	2	< 0.5	< 0.5	< 1	8
MW-1***	8/26/1999	229.5	11.41	218.09	< 50	4.1	< 0.5	< 0.5	< 1	< 1
MW-1	11/10/1999	229.5	13.27	216.23	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
MW-1	2/9/2000	229.5	13.76	215.74	< 50	< 0.5	< 0.5	0.5	< 1	0.5
MW-1	6/30/2000	229.5	10.63	218.87	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
MW-1	8/8/2000	229.5	11.77	217.73	62	1	2	< 0.5	2	< 0.5
MW-1	11/16/2000	229.5	13.33	216.17	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
MW-1	3/8/2001	229.5	12.30	217.2	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	5/31/2001	229.5	11.88	217.62	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	12/18/2001	229.5	13.74	215.76	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	2/19/2002	229.5	14.42	215.08	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	5/7/2002	229.5	10.78	218.72	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	8/6/2002	229.5	12.70	216.8	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	11/5/2002	229.5	15.00	214.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	12/12/2002	229.5	15.46	214.04						
MW-1	3/13/2003	229.5	14.51	214.99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	5/6/2003	229.5	11.06	218.44	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	8/13/2003	229.5	13.13	216.37	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	11/20/2003	229.5	14.85	214.65	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	1/22/2004	229.5	13.65	215.85						
MW-1	3/30/2004	229.5	11.68	217.82	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	6/10/2004	229.5	13.08	216.42	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	9/28/2004	229.5	14.33	215.17	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	12/8/2004	229.5	14.67	214.83	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	3/23/2005	229.5	9.60	219.9	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	6/1/2005	229.5	8.64	220.86	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5



TABLE 1  
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABAORATAOY RESULTS FROM WATER SAMPLES  
DESERT PETROLEUM, INC. SITE #793  
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	(All concentrations in parts per billion [ug/L, ppb]) (AMSL = Above mean sea level)									
	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
RS-5	12/14/1989	227.61	25.97	201.64	57000	3100	4300	670	3400	
RS-5	2/91	227.61	FLOATING PRODUCT							
RS-5	6/91	227.61	FLOATING PRODUCT							
RS-5	9/91	227.61	FLOATING PRODUCT							
RS-5	12/91	227.61	FLOATING PRODUCT							
RS-5	11/9/1992	227.61	20.73	206.88	50000	650	4800	1100	15000	
RS-5	4/7/1994	227.61	18.16	209.45	27000	5000	8700	550	2800	
RS-5	6/19/1994	227.61	18.11	209.5	20000	2100	5300	470	2500	
RS-5	9/17/1994	227.61	19.63	207.98	9300	230	340	110	700	
RS-5	3/12/1995	227.61	14.54	213.07	93000	6400	2000	19000	10000	
RS-5	10/4/1995	227.61	17.53	210.08	16000	420	2100	320	1800	
RS-5	12/21/95	227.61	17.47	210.14	48000	3500	9200	840	4800	56
RS-5	03/27/96	227.61	13.51	214.1	68000	4900	18000	1700	11000	< 3000
RS-5	06/11/96	227.61	14.25	213.36	66000	6300	20000	2100	12000	< 3000
RS-5	09/04/96	227.61	16.50	211.11	31000	2100	11000	1100	6800	400
RS-5	12/11/96	227.61	15.88	211.73	85000	7000	21000	1800	8900	570
RS-5	2/21/97	227.61	13.76	213.85	100000	5000	22000	1700	7300	<0.5
RS-5	5/28/97	227.61	15.77	211.84	52000	4500	19000	2100	10000	<0.5
RS-5	9/2/1997	227.61	17.47	210.14	38000	2200	9400	1300	5800	<0.5
RS-5	11/24/1997	227.61	18.67	208.94	45000	4000	16000	1900	9700	<0.5
RS-5	2/25/1998	227.61	10.53	217.08	160000	2700	31000	5300	28000	<0.5
RS-5	7/8/1998	227.61	13.75	213.86	45000	2800	12000	2000	8500	<10
RS-5	9/16/1998	227.61	15.80	211.81	49000	1400	7500	1700	8600	<5
RS-5	11/24/1998	227.61	16.64	210.97	89000	5300	15000	2800	13000	<10
RS-5	2/23/1999	227.61	12.36	215.25	19000	1900	11000	2500	4800	<25
RS-5	5/5/1999	227.61	12.78	214.83	78000	2000	10000	3000	15000	540
RS-5***	8/26/1999	227.61	16.06	211.55	35000	870	4000	1900	8300	<1
RS-5	11/10/1999	227.61	17.54	210.07	40000	1000	5600	1800	8100	<0.5
RS-5	2/9/2000	227.61	16.31	211.3	46000	1400	6900	2700	11000	<0.5
RS-5	6/30/2000	227.61	15.15	212.46	37000	810	5200	2200	9100	<2.5
RS-5	8/8/2000	227.61	16.10	211.51	14000	330	500	1400	6500	<0.5
RS-5	11/16/2000	227.61	17.38	210.23	23000	430	2300	1100	4800	<0.5
RS-5	3/8/2001	227.61	27.72	199.89	11000	360	260	140	1500	2.6
RS-5	5/31/2001	227.61	22.96	204.65	7500	26	11	38	470	<5
RS-5	12/18/2001	227.61	15.61	212	12000	610	1200	100	1500	<5
RS-5	2/19/2002	227.61	14.80	212.81	22000	460	1700	680	4000	<5
RS-5	5/7/2002	227.61	31.77	195.84	700	150	10	19	67	5.2
RS-5	8/6/2002	227.61	31.77	195.84	< 50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-5	11/5/2002	227.61	31.77	195.84	12000	150	360	21	890	<2
RS-5	12/12/2002	227.61	21.53	206.08						
RS-5	3/13/2003	227.61	36.70	190.91	240	5.5	1.9	2.3	9.6	1.4
RS-5	5/6/2003	227.61	14.52	213.09						
RS-5	8/13/2003	227.61	31.77	195.84	310	1.4	<0.5	1	2.9	<0.5
RS-5	11/20/2003	227.61	32.00	195.61	17000	150	720	240	1800	0.72
RS-5	1/22/2004	227.61	25.30	202.31						
RS-5	3/30/2004	227.61	21.90	205.71	4000	370	59	13	380	2.6
RS-5	6/10/2004	227.61	35.00	192.61	120	7	0.88	1.3	4.3	1.3
RS-5	9/28/2004	227.61	19.05	208.56	2600	110	89	75	56	<0.5
RS-5	12/8/2004	227.61	25.00	202.61	< 50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-5	3/23/2005	227.61	26.05	201.56	7400	890	280	180	940	5.1
RS-5	6/1/2005	227.61	25.40	202.21	3500	380	85	59	360	3

TABLE 1  
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABACRATAORY RESULTS FROM WATER SAMPLES  
DESERT PETROLEUM, INC. SITE #793  
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	(All concentrations in parts per billion (ug/L, ppb)) (AMSL = Above mean sea level)									
	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
RS-6	12/14/1989	227.22	22.52	204.7	11000	1400	1700	160	860	
RS-6	2/91	227.22	FLOATING PRODUCT							
RS-6	6/91	227.22			95000	4200	4200	650	3700	
RS-6	9/91	227.22	FLOATING PRODUCT							
RS-6	12/91	227.22			64000	3700	2300	730	4100	
RS-6	11/9/1992	227.22	19.43	207.79	19000	1600	710	500	1600	
RS-6	4/7/1994	227.22	14.42	212.8	16000	1200	1300	290	1100	
RS-6	6/19/1994	227.22	14.45	212.77	23000	1300	2200	590	2200	
RS-6	9/17/1994	227.22	19.52	207.7	24000	630	790	250	1100	
RS-6	3/12/1995	227.22	8.90	218.32	3200	450	13	82	230	
RS-6	10/4/1995	227.22	17.78	209.44	3700	170	250	38	290	
RS-6	12/21/95	227.22	14.98	212.24	3100	120	30	16	150	58
RS-6	03/27/96	227.22	10.00	217.22	6900	180	440	79	360	< 300
RS-6	06/11/96	227.22	12.00	215.22	7400	220	150	30	100	<1000
RS-6	09/04/96	227.22	15.00	212.22	1400	68	2.6	7.7	9.2	14
RS-6	12/11/96	227.22	12.36	214.86	1800	39	16	10	18	< 0.5
RS-6	2/21/97	227.22	10.00	217.22	2100	71	85	25	40	< 0.5
RS-6	5/28/97	227.22	13.56	213.66	1700	34	12	11	16	< 0.5
RS-6	9/2/1997	227.22	16.35	210.87	940	34	71	9	55	< 0.5
RS-6	11/24/1997	227.22	15.72	211.5	490	9	6	1	7	< 0.5
RS-6	2/25/1998	227.22	6.26	220.96	1400	22	47	5	52	< 0.5
RS-6**	7/8/1998	227.22	11.41	215.81	1500	83	9	84	2	<10
RS-6	7/30/1998	227.22			<50	<0.5	<0.5	<0.5	<1	
RS-6	9/16/1998	227.22	13.42	213.8	990	23	<0.5	<0.5	<1	<1
RS-6	11/24/1998	227.22	15.91	211.31	3400	5.3	<0.5	<0.5	14	<0.5
RS-6	2/23/1999	227.22	7.00	220.22	1000	3.4	3.2	1.6	7.3	<0.5
RS-6	5/5/1999	227.22	10.29	216.93	1100	50	10	80	15	2
RS-6***	8/26/1999	227.22	13.72	213.5	690	44	2.5	30	31	<5
RS-6	11/10/1999	227.22	13.90	213.32	1800	2	2	0.9	16	< 0.5
RS-6	2/9/2000	227.22	12.77	214.45	410	3	3	4	7	< 0.5
RS-6	6/30/2000	227.22	12.69	214.53	660	7	2	5	6	< 0.5
RS-6	8/8/2000	227.22	14.72	212.5	660	2	3	2	6	< 0.5
RS-6	11/16/2000	227.22	15.28	211.94	560	1	2	1	5	< 0.5
RS-6	3/8/2001	227.22	10.10	217.12	2200	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	5/31/2001	227.22	12.96	214.26	630	<0.5	<0.5	<0.5	<0.5	<5
RS-6	12/18/2001	227.22	10.88	216.34	56	0.53	<0.5	<0.5	0.56	<0.5
RS-6	2/19/2002	227.22	11.08	216.14	<50	<0.5	<0.5	0.6	<0.5	<0.5
RS-6	5/7/2002	227.22	12.31	214.91	240	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	8/6/2002	227.22	14.23	212.99	130	<0.5	<0.5	<0.5	<0.5	3
RS-6	11/5/2002	227.22	17.99	209.23	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	12/12/2002	227.22	17.57	209.65						
RS-6	3/13/2003	227.22	11.82	215.4	120	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	5/6/2003	227.22	10.10	217.12	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	8/13/2003	227.22	13.88	213.34	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	11/20/2003	227.22	18.62	208.6	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	1/22/2004	227.22	11.24	215.98						
RS-6	3/30/2004	227.22	10.72	216.5	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	6/10/2004	227.22	13.52	213.7	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	9/28/2004	227.22	17.95	209.27	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	12/8/2004	227.22	14.80	212.42	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	3/23/2005	227.22	7.62	219.6	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	6/1/2005	227.22	10.72	216.5	<50	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 1  
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABORATORY RESULTS FROM WATER SAMPLES  
DESERT PETROLEUM, INC. SITE #793  
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	(All concentrations in parts per billion (ug/L, ppb) (AMSL = Above mean sea level))									
	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
RS-7	12/14/1989	195.99								
RS-7	7/90	195.99			5600000	24000	210000	50000	740000	
RS-7	2/91	195.99	FLOATING PRODUCT							
RS-7	6/91	195.99	FLOATING PRODUCT							
RS-7	9/91	195.99	FLOATING PRODUCT							
RS-7	12/91	195.99			270000	11000	22000	2000	13000	
RS-7	11/9/1992	195.99	4.62	191.37	81000	12000	16000	1900	13000	
RS-7	4/7/1994	195.99	4.03	191.96	74000	16000	16000	1400	8500	
RS-7	6/19/1994	195.99	4.07	191.92	83000	22000	19000	1500	9500	
RS-7	9/17/1994	195.99	4.05	191.94	270000	13000	15000	2100	1100	
RS-7	3/12/1995	195.99	3.72	192.27	35000	5100	560	6300	3600	
RS-7	10/4/1995	195.99	4.03	191.96	96000	14000	14000	1300	7000	
RS-7	12/21/95	195.99	3.95	192.04	70000	9300	12000	860	5600	210
RS-7	03/27/96	195.99	3.80	192.19	64000	8900	14000	1100	8300	< 3000
RS-7	06/11/96	195.99	3.79	192.2	65000	12000	17000	1600	9700	<5000
RS-7	09/04/96	195.99	3.99	192	20000	4900	2100	670	4400	100
RS-7	12/11/96	195.99	3.78	192.21	17000	4400	7500	570	4600	180
RS-7	2/21/97	195.99	3.82	192.17	93000	31000	47000	3800	23000	<0.5
RS-7	5/28/97	195.99	3.82	192.17	52000	12000	8200	2000	11000	<0.5
RS-7	9/2/1997	195.99	3.96	192.03	28000	6100	2800	950	3800	<0.5
RS-7	11/24/1997	195.99	3.76	192.23	18000	4300	5900	600	2900	<0.5
RS-7	2/25/1998	195.99	3.70	192.29	13000	4300	7100	1100	5800	<0.5
RS-7**	7/8/1998	195.99	3.76	192.23	45000	10000	3400	2000	8000	<10
RS-7	7/30/1998	195.99			72000	12000	2100	2000	9100	
RS-7	9/16/1998	195.99	3.83	192.16	5000	6500	160	<2.5	500	<5
RS-7	11/24/1998	195.99	3.77	192.22	19000	2100	1100	500	2100	<0.5
RS-7	2/23/1999	195.99	3.70	192.29	83000	6500	9900	1200	7000	<10
RS-7	5/5/1999	195.99	3.88	192.11	47000	7400	4800	1300	7400	540
RS-7***	8/26/1999	195.99	4.16	191.83	15000	3400	91	950	970	<5
RS-7	11/10/1999	195.99	4.12	191.87	10000	2900	170	630	1200	<0.5
RS-7	2/9/2000	195.99	3.98	192.01	9400	1400	120	480	600	<0.5
RS-7	6/30/2000	195.99	4.04	191.95	8200	3300	190	430	540	<0.5
RS-7	8/8/2000	195.99	4.06	191.93	11000	2300	150	430	520	<0.5
RS-7	11/16/2000	195.99	4.04	191.95	5400	1500	40	240	200	<0.5
RS-7	3/8/2001	195.99	3.94	192.05	12000	3300	260	480	850	17
RS-7	5/31/2001	195.99	4.01	191.98	10000	1900	120	320	620	<100
RS-7	12/18/2001	195.99	4.81	191.18	2700	450	21	86	120	2.3
RS-7	2/19/2002	195.99	3.91	192.08	20000	2600	360	570	1900	11
RS-7	5/7/2002	195.99	3.97	192.02	9200	1400	120	360	780	6.6
RS-7	8/6/2002	195.99	4.06	191.93	8300	1300	71	250	480	<10
RS-7	11/5/2002	195.99	4.11	191.88	9300	1500	90	330	680	<10
RS-7	12/12/2002	195.99	4.13	191.86						
RS-7	3/13/2003	195.99	4.02	191.97	5500	990	51	180	330	6.1
RS-7	5/6/2003	195.99	3.98	192.01	4800	740	36	160	310	4.7
RS-7	8/13/2003	195.99	4.09	191.9	9400	1300	65	310	620	6.1
RS-7	11/20/2003	195.99	4.10	191.89	4800	700	13	110	110	<5
RS-7	1/22/2004	195.99	4.12	191.87						
RS-7	3/30/2004	195.99	4.05	191.94	3800	540	33	140	210	3.4
RS-7	6/10/2004	195.99	4.12	191.87	4000	740	22	82	130	2.8
RS-7	9/28/2004	195.99	4.18	191.81	5000	640	20	110	130	2.8
RS-7	12/8/2004	195.99	3.92	192.07	3700	290	18	130	190	0.56
RS-7	3/23/2005	195.99	4.00	191.99	4600	220	17	100	170	2.4
RS-7	6/1/2005	195.99	4.11	191.88	4700	660	41	140	290	3.7

TABLE 1

GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABORATORY RESULTS FROM WATER SAMPLES  
 DESERT PETROLEUM, INC. SITE #793  
 4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	DATE SAMPLED	(All concentrations in parts per billion (ug/L, ppb)) (AMSL = Above mean sea level)								
		WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
RS-8	12/14/1989									
RS-8	09/04/96									
RS-8	12/11/96									
RS-8	2/21/97									
RS-8	5/28/97									
RS-8	9/2/1997									
RS-8	11/24/1997									
RS-8	2/25/1998									
RS-8	7/8/1998									
RS-8	9/16/1998									
RS-8	11/24/1998									
RS-8	2/23/1999									
RS-8	5/5/1999									
RS-8***	8/26/1999	214.67	7.25	207.42	160000	24000	35000	4200	24000	<5
RS-8	11/10/1999	214.67	8.69	205.98	150000	21000	29000	3000	14000	<0.5
RS-8	2/9/2000	214.67	7.23	207.44	14000	1900	3200	270	2300	<0.5
RS-8	6/30/2000	214.67	3.99	210.68	6400	570	870	150	770	<0.5
RS-8	8/8/2000	214.67	7.52	207.15	100000	24000	40000	2300	9900	<0.5
RS-8	11/16/2000	214.67	6.14	208.53	110000	14000	21000	2100	9600	<20
RS-8	3/8/2001	214.67	9.40	205.27	10000	740	840	220	990	<2
RS-8	5/31/2001	214.67	6.83	207.84	730	11	29	4.2	31	<5
RS-8	12/18/2001	214.67	7.14	207.53	4500	230	370	77	750	<0.5
RS-8	2/19/2002	214.67	7.69	206.98	780	33	21	5.1	45	<0.5
RS-8	5/7/2002	214.67	7.82	206.85	24000	1500	1800	830	2700	<10
RS-8	8/6/2002	214.67	13.46	201.21		0.04	feet floating product			
RS-8	11/5/2002	214.67	13.96	200.71		0.40	feet floating product			
RS-8	12/12/2002	214.67	14.38	200.29		0.08	feet floating product			
RS-8	3/13/2003	214.67	10.99	203.68	90000	1100	14000	2500	12000	<50
RS-8	5/6/2003	214.67	5.35	209.32	1600	6.7	46	21	170	<0.5
RS-8	8/13/2003	214.67	11.96	202.71	100000	1200	10000	2500	13000	<50
RS-8	11/21/2003	214.67	12.30	202.37	100000	1700	10000	1700	12000	<25
RS-8	1/22/2004	214.67	9.63	205.04						
RS-8	3/30/2004	214.67	8.70	205.97	18000	69	110	130	1200	<5
RS-8	6/10/2004	214.67	10.65	204.02	33000	210	350	360	2300	<5
RS-8	9/28/2004	214.67	9.00	205.67	6000	59	20	100	170	<1
RS-8	12/8/2004	214.67	4.50	210.17	1100	<0.5	<0.5	<0.5	0.66	<0.5
RS-8	3/23/2005	214.67	3.65	211.02	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-8	6/1/2005	214.67	9.70	204.97	4700	330	210	250	330	<0.5

TABLE 1  
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABORATORY RESULTS FROM WATER SAMPLES  
DESERT PETROLEUM, INC. SITE #793  
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	(All concentrations in parts per billion (ug/L, ppb)) (AMSL = Above mean sea level)									
	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
RS-9	12/14/1989									
RS-9***	09/04/96									
RS-9***	12/11/96									
RS-9***	2/21/97									
RS-9***	5/28/97									
RS-9***	9/2/1997									
RS-9***	11/24/1997									
RS-9***	2/25/1998									
RS-9***	7/8/1998									
RS-9***	9/16/1998									
RS-9***	11/24/1998									
RS-9***	2/23/1999									
RS-9***	5/5/1999									
RS-9***	8/26/1999	195.63	7.46	188.17	17000	3500	1200	360	1600	180
RS-9	11/10/1999	195.63	7.91	187.72	2800	520	62	46	130	<0.5
RS-9	2/9/2000	195.63	6.09	189.54	3400	650	74	64	130	<0.5
RS-9	6/30/2000	195.63	6.77	188.86	3000	600	79	74	120	<0.5
RS-9	8/8/2000	195.63	7.32	188.31	4900	500	430	160	530	<0.5
RS-9	11/16/2000	195.63	6.33	189.3	3000	350	220	90	220	<0.5
RS-9	3/8/2001	195.63	4.93	190.7	<50	3.4	<0.5	<0.5	<0.5	<0.5
RS-9	5/31/2001	195.63	4.01	191.62	510	96	6	6.2	9.1	5.5
RS-9	12/18/2001	195.63	4.81	190.82	210	11	1.8	3.9	7.6	<0.5
RS-9	2/19/2002	195.63	4.99	190.64	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-9	5/7/2002	195.63	6.08	189.55	130	7.9	<0.5	1.2	<0.5	0.67
RS-9	8/6/2002	195.63	6.93	188.7	380	29	1.2	2.3	2.9	3.1
RS-9	11/5/2002	195.63	7.53	188.1	1800	240	9	27	110	8.6
RS-9	12/12/2002	195.63	7.23	188.4						
RS-9	3/13/2003	195.63	5.73	189.9	410	30	3	6	9.5	3.3
RS-9	5/6/2003	195.63	4.83	190.8	910	72	15	9.2	26	5.5
RS-9	8/13/2003	195.63	8.24	187.39	810	20	<0.5	2.4	1.6	3.6
RS-9	11/20/2003	195.63	6.99	188.64	3600	920	5.3	6.1	20	30
RS-9	1/22/2004	195.63	5.43	190.2						
RS-9	3/30/2004	195.63	5.07	190.56	1900	360	9.3	19	48	21
RS-9	6/10/2004	195.63	6.18	189.45	950	180	3	8.4	14	8.7
RS-9	9/28/2004	195.63	6.94	188.69	4900	1800	5.9	5	16	31
RS-9	12/8/2004	195.63	4.42	191.21	74	<0.5	<0.5	<0.5	<0.5	<0.5
RS-9	3/23/2005	195.63	4.10	191.53	540	99	1.1	1.1	4.5	3.6
RS-9	6/1/2005	195.63	5.12	190.51	3300	170	14	77	87	12



TABLE 1  
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABACORATACRY RESULTS FROM WATER SAMPLES  
DESERT PETROLEUM, INC. SITE #793  
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	(All concentrations in parts per billion (ug/L, ppb)) (AMSL = Above mean sea level)											
	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)		
R1	12/14/1989											
R1	09/04/96	227.69	15.00	212.69	1800	1100	3	29	< 10	< 30		
R1	12/11/96	227.69	10.30	217.39	<50	<0.5	< 0.5	< 0.5	< 1	4		
R1	2/21/97	227.69	11.88	215.81	2500	670	9	3	13	<0.5		
R1	5/28/97	227.69	14.03	213.66	24000	4300	36	2000	370	<0.5		
R1	9/2/1997	227.69	14.98	212.71	4400	320	6	340	72	20		
R1	11/24/1997	227.69	14.06	213.63	100	39	1	18	10	<0.5		
R1	2/25/1998	227.69	8.93	218.76	1200	400	8	13	150	<0.5		
R1	7/8/1998	227.69	11.36	216.33	68	14	< 0.5	< 0.5	< 1	<1		
R1	9/16/1998	227.69	13.30	214.39	16000	3400	92	< 0.5	410	<1		
R1	11/24/1998	227.69	10.72	216.97	340	19	1.6	35	9.7	<0.5		
R1	2/23/1999	227.69	9.34	218.35	60	16	0.6	5.6	1.2	<0.5		
R1	5/5/1999	227.69	11.30	216.39	1300	290	3	150	1	15		
R1	8/26/1999	227.69	13.97	213.72	6500	630	<0.5	1300	<1	<1		
R1	11/10/1999	227.69	13.73	213.96	480	12	4	22	9	<0.5		
R1	2/9/2000	227.69	13.10	214.59	<50	8	<0.5	1	<1	<0.5		
R1	6/30/2000	227.69	13.42	214.27	2600	350	35	1900	220	<0.5		
R1	8/8/2000	227.69	14.25	213.44	10000	910	76	2100	390	<0.5		
R1	3/8/2001	227.69	13.72	213.97	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R1	3/8/2001	227.69	13.72	213.97	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R1	5/31/2001	227.69	15.77	211.92	3800	400	16	470	67	<5		
R1	12/18/2001	227.69	9.90	217.79	<50	<0.5	<0.5	1.5	<0.5	<0.5		
R1	2/19/2002	227.69	10.86	216.83	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R1	5/7/2002	227.69	16.17	211.52	53	3.3	<0.5	1	<0.5	<0.5		
R1	8/6/2002	227.69	16.83	210.86	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R1	11/5/2002	227.69	16.92	210.77	dry, groundwater deeper than 210.77 foot elevation							
R1	12/12/2002	227.69	16.94	210.75								
R1	3/13/2003	227.69	15.69	212	<50	4.5	<0.5	<0.5	<0.5	<0.5		
R1	5/6/2003	227.69	10.75	216.94	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R1	8/13/2003	227.69	16.04	211.65	430	17	<0.5	1.4	1.1	<0.5		
R1	11/20/2003	227.69	dry									
R1	1/22/2004	227.69	14.40	213.29								
R1	3/30/2004	227.69	14.05	213.64	<50	2.8	<0.5	<0.5	<0.5	<0.5		
R1	6/10/2004	227.69	15.85	211.84	3200	85	2.6	38	8.3	<0.5		
R1	9/28/2004	227.69	15.06	212.63	2000	35	2.2	12	4.4	<0.5		
R1	12/8/2004	227.69	9.70	217.99	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R1	3/23/2005	227.69	8.58	219.11	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R1	6/1/2005	227.69	13.30	214.39	330	12	<0.5	1.6	1.4	<0.5		

TABLE 1  
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABORATORY RESULTS FROM WATER SAMPLES  
DESERT PETROLEUM, INC. SITE #793  
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	(All concentrations in parts per billion [ug/L, ppb]) (AMSL = Above mean sea level)									
	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
R2	12/14/1989									
R2	09/04/96	230.68	13.44	217.24	14000	7600	<10	170	190	<100
R2	12/11/96	230.68	12.42	218.26	488	300	1	< 0.5	30	16
R2	2/21/97	230.68	10.50	220.18	5700	2100	5	2	10	3
R2	5/28/97	230.68	13.10	217.58	36000	14000	63	260	220	<0.5
R2	9/2/1997	230.68	14.16	216.52	30000	12000	330	1000	790	47
R2	11/24/1997	230.68	14.71	215.97	41000	15000	830	1500	4200	<0.5
R2	2/25/1998	230.68	7.39	223.29	800	400	<0.5	<0.5	15	<0.5
R2	7/8/1998	230.68	11.27	219.41	290	31	< 0.5	1	< 1	2
R2	9/16/1998	230.68	13.73	216.95	6600	11000	24	<0.5	35	<1
R2	11/24/1998	230.68	11.67	219.01	6100	<0.5	36	<0.5	21	<0.5
R2	2/23/1999	230.68	7.55	223.13	1100	310	3	2	26	<0.5
R2	5/5/1999	230.68	10.89	219.79	11000	5300	7	36	7	8
R2	8/26/1999	227.28	13.14	214.14	6700	940	33	190	240	<1
R2	11/10/1999	227.28	14.42	212.86	5100	2600	160	1800	8100	<0.5
R2	2/9/2000	227.28	12.45	214.83	4700	1400	110	130	340	<0.5
R2	6/30/2000	227.28	12.94	214.34	7100	3200	110	300	480	<0.5
R2	8/8/2000	227.28	13.58	213.7	30000	13000	250	1000	2700	<0.5
R2	11/16/2000	227.28	14.33	212.95	44000	17000	230	790	3600	<0.5
R2	3/8/2001	227.28	11.15	216.13	2300	640	8.6	61	170	<2
R2	5/31/2001	227.28	13.38	213.9	2200	580	12	72	100	<25
R2	12/18/2001	227.28	12.35	214.93	4900	2000	120	44	280	<5
R2	2/19/2002	227.28	11.32	215.96	2100	1200	<5	14	<5	<5
R2	5/7/2002	227.28	13.15	214.13	2500	660	7.5	170	26	<2.5
R2	8/6/2002	227.28	14.51	212.77	6300	1800	150	220	340	<5
R2	11/5/2002	227.28	15.46	211.82	11000	3000	140	57	620	<20
R2	12/12/2002	227.28	15.70	211.58						
R2	3/13/2003	227.28	12.96	214.32	580	200	1.2	5.4	3.8	<1
R2	5/6/2003	227.28	11.14	216.14	70	25	<0.5	<0.5	1.3	<0.5
R2	8/13/2003	227.28	14.01	213.27	1800	340	8	49	12	<2
R2	11/20/2003	227.28	15.35	211.93	8000	1400	46	57	490	<5
R2	1/22/2004	227.28	12.10	215.18						
R2	3/30/2004	227.28	11.48	215.8	<50	3	<0.5	<0.5	<0.5	<0.5
R2	6/10/2004	227.28	13.95	213.33	77	7.7	<0.5	<0.5	<0.5	<0.5
R2	9/28/2004	227.28	14.80	212.48	500	120	2	25	2.7	0.71
R2	12/8/2004	227.28	12.25	215.03	100	8.5	<0.5	<0.5	5	<0.5
R2	3/23/2005	227.28	7.82	219.46	57	8.4	<0.5	<0.5	<0.5	<0.5
R2	6/1/2005	227.28	12.14	215.14	85	5.2	<0.5	<0.5	<0.5	<0.5

TABLE 1  
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABORATORY RESULTS FROM WATER SAMPLES  
DESERT PETROLEUM, INC S.W.F #793  
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	(All concentrations in parts per billion [ug/L, ppb]) (AMSL = Above mean sea level)											
	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)		
R3	12/14/1989											
R3	09/04/96	230.32	9.90	220.42	<50	<0.5	<0.5	<0.5	<2	<5		
R3	12/11/96	230.32	8.18	222.14	<50	<0.5	<0.5	<0.5	<1	5		
R3	2/21/97	230.32	6.76	223.56	340	35	59	8	54	<0.5		
R3	5/28/97	230.32	9.98	220.34	<50	<0.5	<0.5	<0.5	<1	<0.5		
R3	9/2/1997	230.32	10.86	219.46	<50	4	<0.5	<0.5	<1	<0.5		
R3	11/24/1997	230.32	11.20	219.12	not enough water to sample. No sample							
R3	2/25/1998	230.32	3.42	226.9	<50	<0.5	<0.5	<0.5	<1	<0.5		
R3	7/8/1998	230.32	8.78	221.54	140	<0.5	<0.5	4	24	<1		
R3	9/16/1998	230.32	10.38	219.94	<50	<0.5	<0.5	<0.5	<1	<1		
R3	11/24/1998	230.32	11.12	219.2	not enough water to sample. No sample							
R3	2/23/1999	230.32	3.95	226.37	<50	<0.5	<0.5	<0.5	<1	<0.5		
R3	5/5/1999	230.32	7.58	222.74	80	9	<0.5	<0.5	<1	6		
R3	8/26/1999	227.25	10.76	216.49	<50	2	<0.5	<0.5	<1	1		
R3	11/10/1999	227.25	11.09	216.16	140	3	4	1	11	<0.5		
R3	2/9/2000	227.25	8.76	218.49	<50	2	<0.5	<0.5	<1	<0.5		
R3	6/30/2000	227.25	9.67	217.58	<50	0.7	<0.5	1	1	<0.5		
R3	8/8/2000	227.25	10.44	216.81	72	<0.5	<0.5	<0.5	<1	<0.5		
R3	11/16/2000	227.25	10.26	216.99	110	4	1	<0.5	3	<0.5		
R3	3/8/2001	227.25	6.54	220.71	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	5/31/2001	227.25	10.01	217.24	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	12/18/2001	227.25	6.79	220.46	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	2/19/2002	227.25	7.86	219.39	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	5/7/2002	227.25	9.20	218.05	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	8/6/2002	227.25	10.62	216.63	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	11/5/2002	227.25	11.07	216.18	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	12/12/2002	227.25	11.28	215.97								
R3	3/13/2003	227.25	8.69	218.56	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	5/6/2003	227.25	8.02	219.23	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	8/13/2003	227.25	dry		DRY							
R3	11/20/2003	227.25	dry		DRY							
R3	1/22/2004	227.25	7.30	219.95								
R3	3/30/2004	227.25	7.85	219.4	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	6/10/2004	227.25	10.30	216.95	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	9/28/2004	227.25	dry		DRY							
R3	12/8/2004	227.25	9.00	218.25	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	3/23/2005	227.25	4.90	222.35	<50	<0.5	<0.5	<0.5	<0.5	<0.5		
R3	6/1/2005	227.25	8.60	218.65	<50	<0.5	<0.5	<0.5	<0.5	<0.5		

TABLE 1

GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABORATORY RESULTS FROM WATER SAMPLES  
 DESERT PETROLEUM, INC. SITE #793  
 4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	(All concentrations in parts per billion (ug/L, ppb)) (AMSL = Above mean sea level)									
	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL- BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
T 1	12/14/1989									
T 1	09/04/96									
T 1	12/11/96									
T 1	2/21/97									
T 1	5/28/97									
T 1	9/2/1997									
T 1	11/24/1997									
T 1	2/25/1998									
T 1	7/8/1998									
T 1	9/16/1998									
T 1	11/24/1998									
T 1	2/23/1999									
T 1	5/5/1999									
T 1***	8/26/1999	195.11	2.44	192.67	40000	7200	5000	950	8100	53
T 1	11/10/1999	195.11	2.23	192.88	46000	5600	3600	910	6500	<0.5
T 1	2/9/2000	195.11	2.22	192.89	35000	2900	5700	720	6600	<0.5
T 1	6/30/2000	195.11	2.22	192.89	30000	3400	3200	950	4600	<5
T 1	8/8/2000	195.11	2.73	192.38	8900	1600	760	260	870	<5
T 1	11/16/2000	195.11	2.72	192.39	4000	1300	92	80	290	<0.5
T 1	3/8/2001	195.11	2.12	192.99	25000	4400	3400	770	3200	26
T 1	5/31/2001	195.11	2.30	192.81	8900	940	210	340	1500	<50
T 1	12/18/2001	195.11	2.20	192.91	48000	3700	5500	1200	5300	24
T 1	2/19/2002	195.11	1.96	193.15	64000	8600	6000	1700	6800	55
T 1	5/7/2002	195.11	2.22	192.89	41000	9200	910	2000	6200	62
T 1	8/6/2002	195.11	2.32	192.79	28000	5500	240	1300	2600	32
T 1	11/5/2002	195.11	2.52	192.59	11000	3000	65	660	610	18
T 1	12/12/2002	195.11	2.55	192.56						
T 1	3/13/2003	195.11	2.23	192.88	930	150	17	23	60	2.6
T 1	5/6/2003	195.11	2.37	192.74	6800	1000	230	310	820	10
T 1	8/13/2003	195.11	2.41	192.7	9600	1500	110	440	910	10
T 1	11/20/2003	195.11	2.50	192.61	10000	1800	120	520	510	11
T 1	1/22/2004	195.11								
T 1	3/30/2004	195.11			15000	1800	660	610	2000	8.6
T 1	6/10/2004	195.11	2.40	192.71	5500	570	2	240	130	2.7
T 1	9/28/2004	195.11	2.52	192.59	8700	2600	100	450	15	15
T 1	12/8/2004	195.11	1.96	193.15	2900	820	32	14	47	6.9
T 1	3/23/2005	195.11	car		2800	220	3	120	76	1.7
T 1	6/1/2005	195.11	2.25	192.86	46000	14000	650	1900	2900	54
T 2	1/22/2004	195.3	2.54	192.76						
T 2	3/30/2004	195.3	2.50	192.8						
T 2	6/10/2004	195.3	2.60	192.7						
T 2	9/28/2004	195.3	car							
T 2	12/8/2004	195.3	2.04	193.26						
T 2	3/23/2005	195.3	car							
T 2	6/1/2005	195.3	car							
T 3	1/22/2004	202.38								
T 3	6/10/2004	202.38	9.80	192.58						
T 3	9/28/2004	202.38	9.90	192.48						
T 3	12/8/2004	202.38	9.24	193.14						
T 3	3/23/2005	202.38	car							
T 3	6/1/2005	202.38	car							

TABLE 1  
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABACRATAORY RESULTS FROM WATER SAMPLES  
DESERT PETROLEUM, INC. SITE #793  
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
T4	1/22/2004	197.48	4.70	192.78						
T4	3/30/2004	197.48	4.66	192.82						
T4	6/10/2004	197.48	4.76	192.72						
T4	9/28/2004	197.48	4.86	192.62						
T4	12/8/2004	197.48	4.21	193.27						
T4	3/23/2005	197.48	4.35	193.13	see T1 for sample results					
T4	6/1/2005	197.48	car							
LF 1	1/22/2004	226.59	29.12	197.47						
LF 1	3/30/2004	226.59	26.45	200.14	<50	<0.5	<0.5	<0.5	<0.5	<0.5
LF 1	6/10/2004	226.59	27.57	199.02	<50	<0.5	<0.5	<0.5	<0.5	<0.5
LF 1	9/28/2004	226.59	28.72	197.87	<50	<0.5	<0.5	<0.5	<0.5	<0.5
LF 1	12/8/2004	226.59	car							
LF 1	3/23/2005	226.59	car							
LF 1	6/1/2005	226.59	car							

ND BELOW LABORATORY DETECTION LIMITS  
TPH-G TOTAL PETROLEUM HYDROCARBONS AS GASOLINE  
\* MTBE results confirmed by EPA Method 8260 (GC/MS)  
\*\* LAB REPORT HAD RS-6 AND RS-7 MISLABELED, RESAMPLE ON 7/30/98 CONFIRMED.  
\*\*\* WELL CASING ELEVATION SURVEY 8-27-99, WADE HAMMOND No.6163, BENCH MARK CITY OF OAKLAND #2814  
\*\*\*\* SAMPLES ANALYZED USING EPA METHOD 8260B

TABLE 2  
GROUNDWATER REMOVAL  
FORMER DP #793  
4035 PARK BLVD., OAKLAND, CALIFORNIA

DATE PURGED	METER READING IN GALLONS RSS	METER READING IN GALLONS TRENCH	DEPTH TO TOP OF WATER IN FEET T1	GALLONS PURGED T1 and/or 1/4ly monitoring in GALLONS	ACCUMULATED GALLONS REMOVED FROM TRENCH & WELLS in GALLONS	Accumulated gallons removed from RSS Gallons	TOTAL GALLONS REMOVED	INFLUENT CONCENTRATIONS EPA METHOD 8020 - 8260B					Sample Location	
								TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES		MTBE
								ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
1/22/2004	1672236.9	1673412.0		1175	84057	495508.9	579566.2							
2/28/2004	1696276.0	1696378.0		102	84159	518372.9	602532.2							
3/30/2004	1722614.0	1723589.0		975	85134	544608.9	629743.2	15000	1800	660	610	2000	8.6	T1
4/8/2004	1729975.5	1729975.5		0	85134	550995.4	636129.7	4000	370	59	13	380	2.6	RSS
4/14/2004	1734113.2	1734113.2		0	85134	555133.1	640267.4							
4/22/2004	1739978.0	1739978.0		0	85134	560997.9	646132.2							
4/29/2004	1744687.9	1746094.5		1407	86541	565707.8	652248.7							
5/13/2004	1754248.1	1754248.1		0	86541	573861.4	660402.3							
5/21/2004	1759593.7	1759593.7		0	86541	579207.0	665747.9							
5/27/2004	1762418.0	1764065.5		1648	88188	582031.3	670219.7							
6/3/2004	1769445.0	1769445.0		0	88188	587410.8	675599.2	5500	570	2	240	130	2.7	T1
6/10/2004	1774349.0	1774349.0		0	88188	592314.8	680503.2	120	7	0.88	1.3	4.3	1.3	RSS
6/17/2004	1778979.0	1778979.0		0	88188	596944.8	685133.2							
6/25/2004	1783576.7	1783576.7		0	88188	601542.5	689730.9							
6/30/2004	1786027.0	1787786.1		1759	89948	603992.8	693940.3							
7/8/2004	1787858.5	1787858.5		0	89948	604065.2	694012.7							
7/22/2004	1791170.5	1791170.5		0	89948	607377.2	697324.7							
7/29/2004	1791170.5	1791170.5		0	89948	607377.2	697324.7	no electrical power to site (no pumping).						
9/24/2004	1791170.0	1791170.0		0	89948	607376.7	697324.2	new electrical power to site (restart pump RSS).						
9/28/2004	1791275.2	1793186.5		1911	91859	607481.9	699340.7	2600	110	89	75	56	<0.5	RSS
9/30/2004	1794233.0	1794233.0		0	91859	608528.4	700387.2	8700	2600	100	450	240	15	T1
10/15/2004	1794243.8	1794243.8		0	91859	608539.2	700398.0							
10/28/2004	1800669.8	1800669.8		0	91859	614965.2	706824.0							
11/5/2004	1805236.0	1805236.0		0	91859	619531.4	711390.2							
11/19/2004	1813980.8	1813980.8		0	91859	628276.2	720135.0							
12/8/2004	1826103.7	1826253.7		150	92009	640399.1	732407.9	<50	<0.5	<0.5	<0.5	<0.5	<0.5	RSS
12/30/2004	1841818.0	1841818.0		0	92009	655963.4	747972.2							
1/14/2005	1854930.0	1855778.0		848	92857	669075.4	761932.2							
2/15/2005	1872001.8	1872001.8		0	92857	685299.2	778156.0							
3/23/2005	1903025.7	1903025.7		0	92857	716323.1	809179.9	7400	890	280	180	940	5.1	RSS
4/13/2005	1947663.2	1947663.2		0	92857	760960.6	853817.4							
5/12/2005	1941964.2	1941964.2		0	92857	755261.6	848118.4							
6/7/2005	1962946.5	1962946.5		0	92857	776243.9	869100.7	3500	380	85	59	360	3	RSS

27

ug/L micrograms per liter (parts per billion)  
mg/L milligrams per liter (parts per million)  
WESTERN GEO-ENGINEERS

< BELOW LABORATORY LOWER DETECTION LIMITS  
mg/Kg milligrams per kilogram (parts per million)  
TPHg TOTAL PETROLEUM HYDROCARBONS GASOLINE RANGE  
MTBE METHYL TERTIARY BUTYL ETHER

\* SAMPLED ON AUGUST 26, 1999  
T1 Receptor Trench Well  
RSS Monitor Well RSS (pumping well)

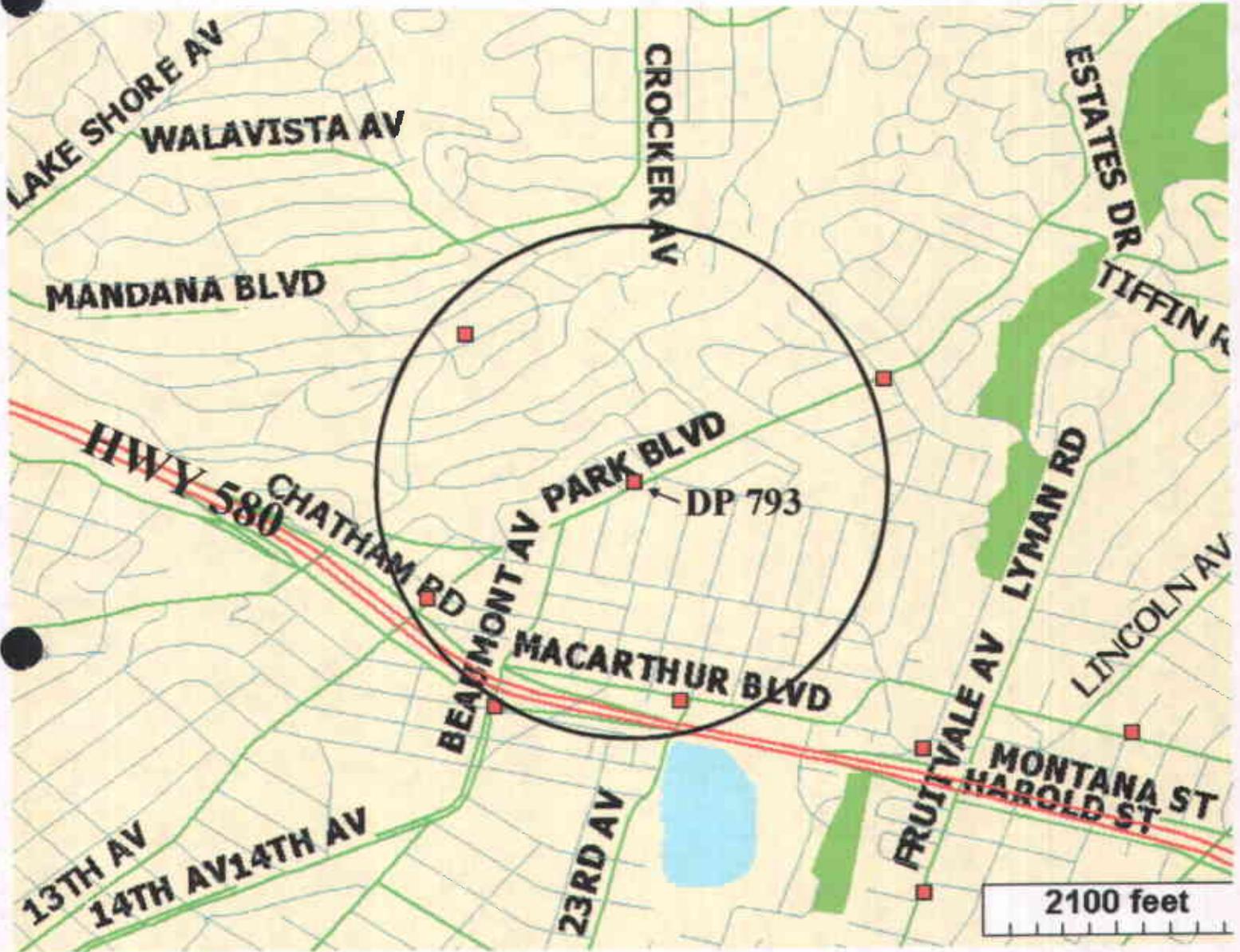


FIGURE 1  
 GEOTRACKER  
 AREA WELL & LUST MAP  
 DP 793  
 4035 PARK BLVD.  
 OAKLAND, CA

- LUST SITES
- WELLS

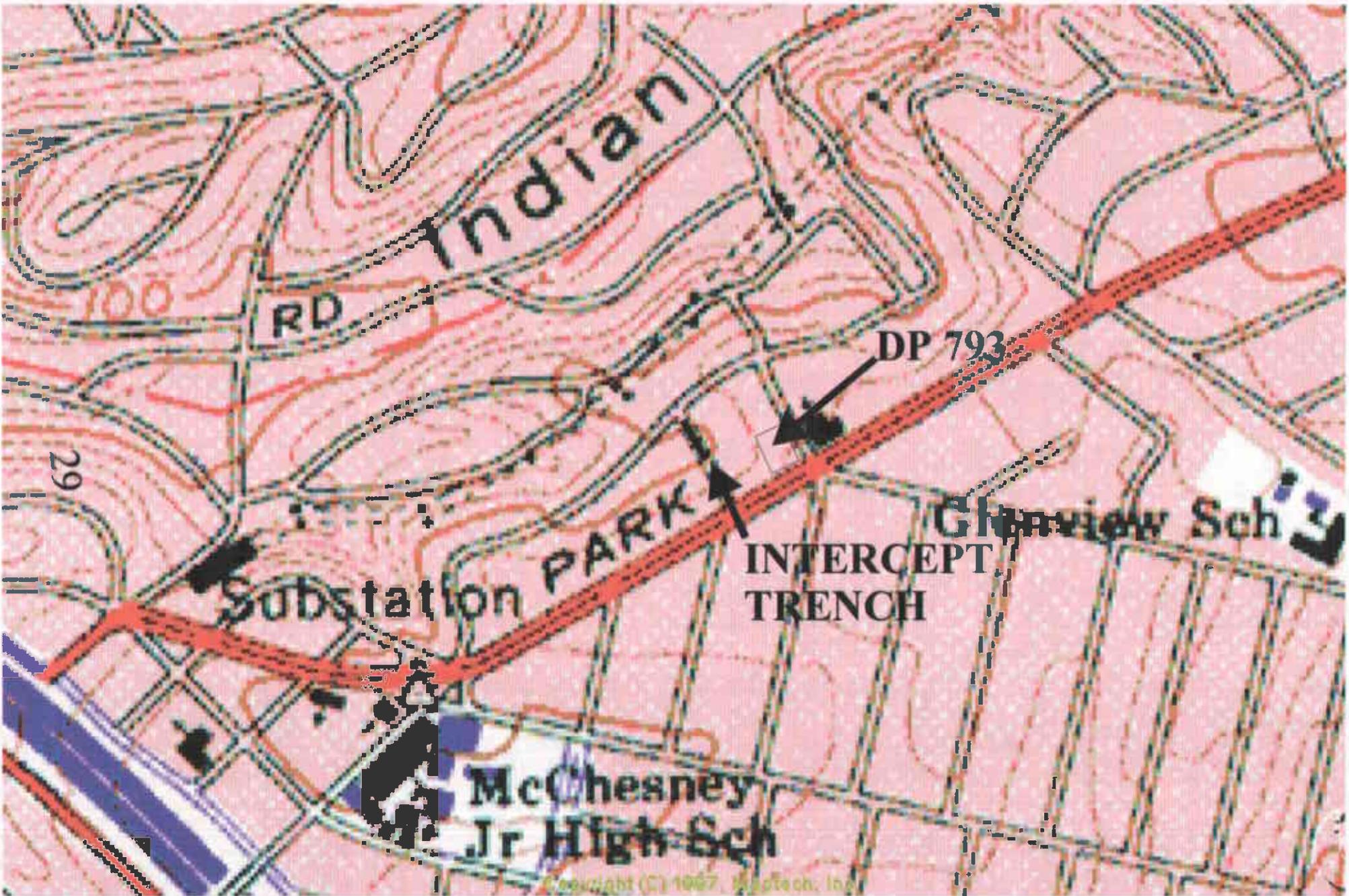
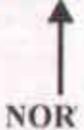
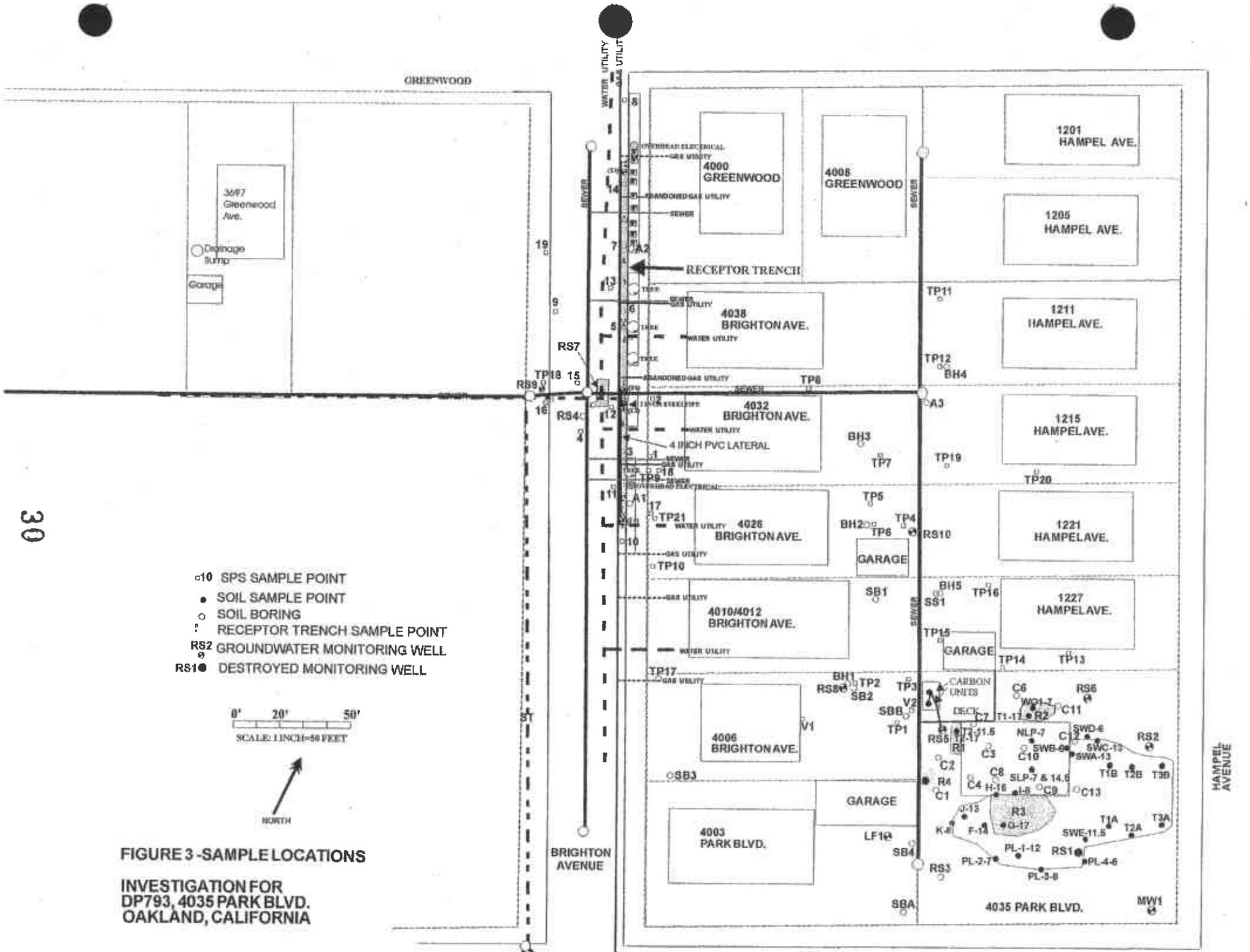


FIGURE 2  
PORTION OF OAKLAND EAST 7.5 MINUTE USGS TOPOGRAPHIC MAP



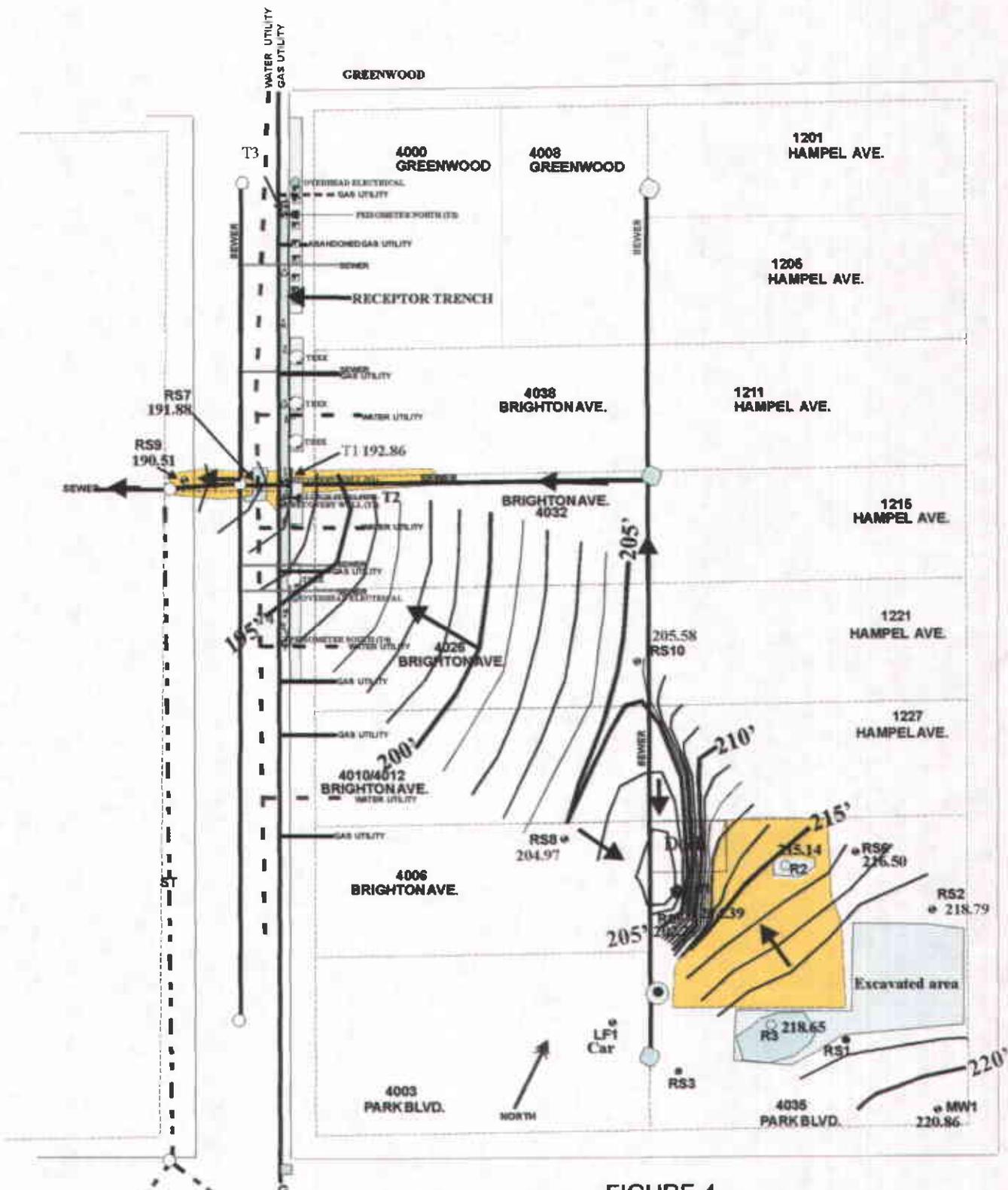


- SPS SAMPLE POINT
- SOIL SAMPLE POINT
- SOIL BORING
- ⋮ RECEPTOR TRENCH SAMPLE POINT
- RS2 GROUNDWATER MONITORING WELL
- RS1 DESTROYED MONITORING WELL

0' 20' 50'  
SCALE: 1 INCH=50 FEET



**FIGURE 3 - SAMPLE LOCATIONS**  
**INVESTIGATION FOR**  
**DP793, 4035 PARK BLVD.**  
**OAKLAND, CALIFORNIA**

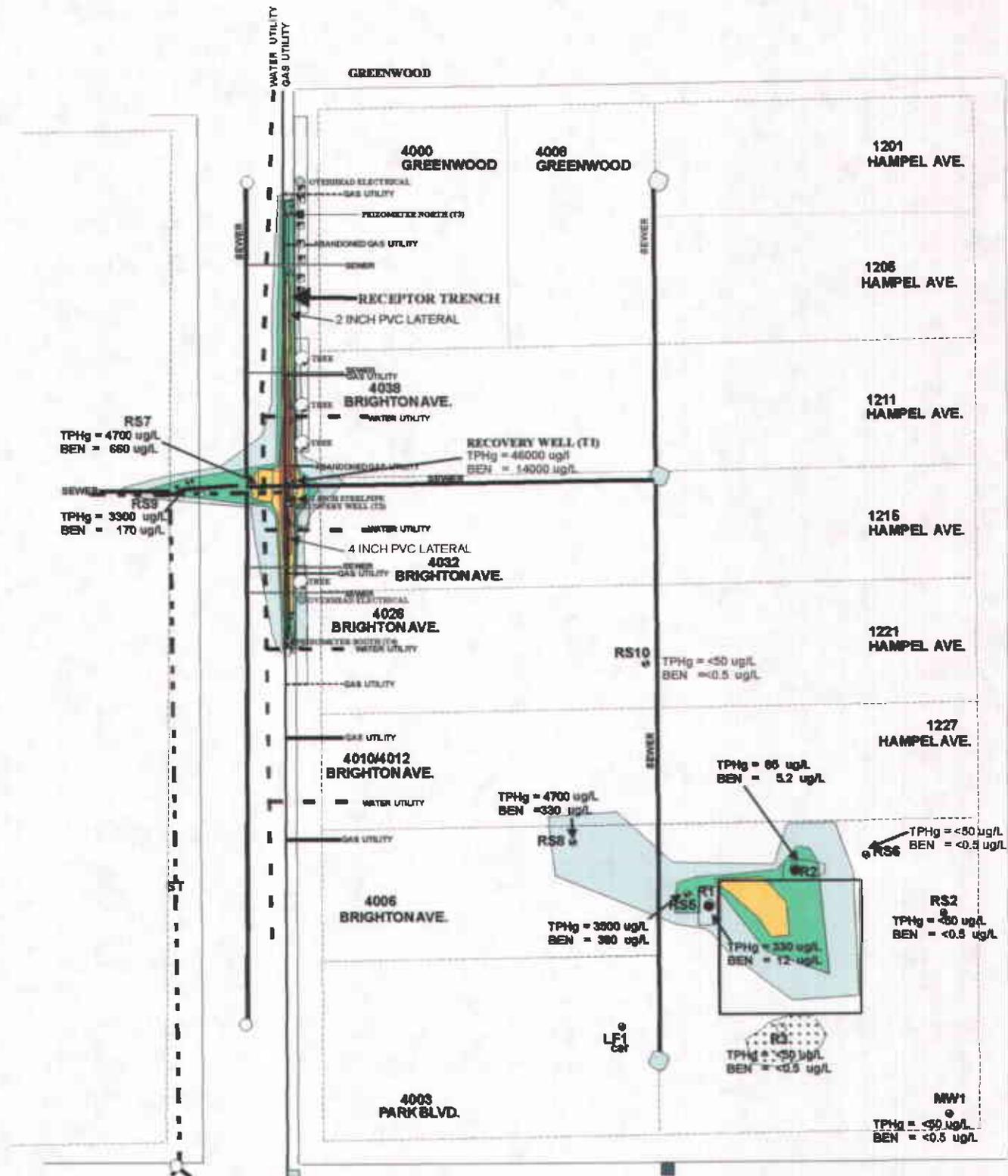


0' 20' 50'  
SCALE: 1 INCH = 50 FEET

**FIGURE 4**  
 DP 793, 4035 PARK BLVD.  
 OAKLAND, CALIFORNIA  
 GROUNDWATER ELEVATION  
 6/1/05.

CONTOURS ARE FEET ABOVE SEA LEVEL

Areas that in the past contained soil contamination, TPHg > 10 mg/Kg



0' 20' 50'  
SCALE: 1 INCH = 50 FEET



**FIGURE 5  
GROUNDWATER  
PLUME  
6/1/05**

DP 793, 4035 PARK BLVD.  
OAKLAND, CALIFORNIA

- RS3 SOIL BORING
- ┆ TRENCH SAMPLE POINT
- RS2
- ⊕ GROUNDWATER MONITORING WELL
- Benzene > 1000 ug/L
- Benzene > 500 ug/L
- Benzene > 1 ug/L
- TPHg Groundwater Plume

**APPENDIX A**

**METHODS AND PROCEDURES, QA/QC  
WITH FIELD NOTES**

## APPENDIX A.

### METHODS AND PROCEDURES, QA/QC

This Appendix documents the specific methods, procedures, and materials used to collect and analyze ground water samples.

#### Gauging and Measuring Monitor Wells.

Prior to sampling a well, WEGE personnel obtain two measurements: the depth to ground water and the product thickness using a battery powered depth to water-product interface probe and or by using a specially designed bailer. The probe is lowered into the well casing until the instrument signals that the top of water has been reached. The distance from the top of water to the top of casing is read from the tape calibrated in 0.01 foot intervals for accuracy to 0.01 foot, that is attached to the probe. The measured distance is subtracted from the established elevation at the top of casing to determine the elevation of ground water with respect to mean sea level.

The probe is washed with TSP and rinsed in distilled water before each measurement. WEGE has designed and built bailers that will collect a sample of the contents of a well to show the exact thickness of any floating product.

#### Purging Standing Water from Monitor Wells

If no product is present, WEGE personnel purge the well. This is accomplished by removing ground water from the well until the water quality parameters (temperature, pH, and conductivity) stabilize, or until the well is emptied of water. Periodic measurements of ground water temperature, pH, and conductivity were taken with a Hydac Monitor or other meter and recorded along with the volume of ground water removed from the well. Purging is done by one or more methods singularly or in combination. Bailers, pneumatic or electric sample pumps, or vacuum pump tanks or trucks may be used. The usual amount of water removed is three well volumes. The water collected during purging is either safely stored onsite for later disposition, transported to an approved onsite or offsite sewer discharge system, or an approved onsite or offsite treatment system.

#### Collection of Water Sample for Analysis

The well is allowed to recover after purging and a ground water sample is collected. A fresh bailer is used to collect enough water for the requirements of the laboratory for the analyses needed or required. The water samples are decanted from the bailer into the appropriate number and size containers. These containers are furnished pre-cleaned to exact EPA protocols, with and without preservatives added, by the analytical laboratory or a chemical supply company. The bottles are filled, with no headspace, and then capped with plastic caps with teflon liners.

The vials or bottles containing the ground water samples are labeled with site name, station, date, time, sampler, and analyses to be performed, and documented on a chain of custody form. They were placed in ziplock bags and stored in a chest cooled to 4°C with ice. The preserved samples are chain of custody delivered to the chosen laboratory.

## Analytical Results

TPH is the abbreviations used for Total Petroleum Hydrocarbons used by the laboratories for water and soil analyses. The letter following TPH indicates a particular distinction or grouping for the results. The letters "g", "d", "k", or "o" indicates gasoline, diesel, kerosene, or oil, respectively, ie. TPH-d for diesel range TPH.

BTEX or MTBE are acronyms or abbreviations used for Benzene, Toluene, Ethylbenzene and all of the Xylenes (BTEX) and Methyl Tertiary Butyl Ether (MTBE), respectively.

MBTEX is the designation for the combination of the above five compounds.

The less than symbol, <, used with a "parts per value" indicates the lower detection limit for a given analytical result and the level, if present, of that particular analyte is below or less than that lower detection limit.

Other abbreviations commonly used are ppm, ppb, mg/Kg, ug/Kg, ml/l and ul/l are parts per million, parts per billion, milligrams per kilogram, micrograms per kilogram, milliliters per liter, microliters per liter, respectively.

## Chain of Custody Documentation

All water samples that are collected by WEGE and transported to a certified analytical laboratory are accompanied by chain-of-custody (COC) documentation. This documentation is used to record the movement and custody of a sample from collection in the field to final analysis and storage. Samples to be analyzed at the certified laboratory were logged on the COC sheet provided by the laboratory. The same information provided on the sample labels (site name, sample location, date, time, and analysis to be performed) is also noted on the COC form. Each person relinquishing custody of the sample set signs the COC form indicating the date and time of the transfer to the recipient. A copy of the COC follows the samples or their extracts throughout the laboratory to aid the analyst in identifying the samples and to assure analysis within holding times.

Copies of the COC documentation are included with the laboratory results in Appendix B of this report.



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300,  
FAX (530) 662-0273  
wege@cal.net

GROUNDWATER ELEVATION DATA  
AND PRODUCT THICKNESS MEASUREMENTS

SITE DP 793, 4035 Park Blvd., Oakland, CA.

DATE June 1, 2005

START TIME 9:00

MEASURED BY George Converse

DTW METER USED Solinst Model 122

WELL ID	TIME	DEPTH OF WELL feet below top of casing (fbtc)	DEPTH TO WATER (fbtc)	DEPTH TO TOP OF FLUID (fbtc)	PRODUCT THICKNESS (feet)	WATER COLUMN IN FEET
MW01		18.32	8.64	8.64	-0-	9.68
RS02		18.40	8.60	8.60	-0-	9.80
RS05		39.20	84 mm	21.5-25.4	-0-	23.94
RS06		34.06	10.72	10.72	-0-	23.34
RS07		7.25	4.11	4.11	-0-	3.14
RS08		14.50	9.70	9.70	-0-	4.80
RS09		15.50	5.12	5.12	-0-	10.38
RS10		9.80	2.88	2.88	-0-	6.92
RO1		16.8	13.30	13.30	-0-	3.50
RO2		16.92	12.14	12.14	-0-	4.78
RO3		11.74	8.6	8.6	-0-	3.14
LF1		38.70	COL			
T01		10	2.25	2.25	-0-	7.75
T02		10	COL			
T03		10	COL			
T04		10	COL			

etc  
220.86  
218.79  
207.21  
216.50  
191.88  
204.97  
190.51  
205.58  
214.39  
215.14  
218.65  
192.86

NOTES Global ID# T0600100158 Sampling Co. Log Code: WGEW



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300,  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE DP 793, 4035 PARK BLVD., OAKLAND, CA.

DATE June 1, 2005

START TIME 1245

WELL ID# MW1

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 229.5

WATER COLUMN, IN FEET 9-68

CASING TOTAL DEPTH, IN FEET 18.32

G/L PURGE ONE CASING VOLUME 1.59 g/l

CASING DIAMETER IN INCHES 2"

(CASING MULTIPLIERS: 2 INCH = 0.165 gl/ FT

DEPTH TO TOP OF FLUID 8.64

2" = 0.625 L/FT

4 INCH = 0.65 gl/ FT

4" = 2.46 L/FT

6 INCH = 1.47 gl/FT)

DEPTH TO TOP OF WATER 8.64

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

TOP OF WATER ELEVATION \_\_\_\_\_

FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

PUMP TYPE GRUNDFOS REDIFLOW 2

PUMP RATE \_\_\_\_\_

DTW METER USED SOLINST MODEL 122

pH, Cond, Temp meter used HANNA HI 99130

TIME	INTAKE DEPTH	RATE GPM/LPM	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
13:01		1.0	1.5	22.6	6.74	340	167	—	Clear no color
13:05		<del>1.0</del>	3.0	23.6	6.70	383	192		
13:07			5.0	23.6	6.67	390	195		
13:09			7.0	23.7	6.68	406	203		
									DTW 15:40

FINAL VOLUME PURGED 7.0 gallons

ANALYSIS INCLUDES: 8260B TPHg, BTEX, MIBE

TIME SAMPLED 13:11

SAMPLE CONTAINERS 3-HCl PRESERVED

SAMPLE ID# MW1

40CC VOA'S

NOTES \_\_\_\_\_

LABORATORY USED KIFF Analytical

9.68  
165  
4790  
5808  
968  
159670

276  
Hz



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300,  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE DP 793, 4035 PARK BLVD., OAKLAND, CA.

DATE June 1, 2005

START TIME 1725

WELL ID# RS02

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 227.39

WATER COLUMN, IN FEET 9.8

CASING TOTAL DEPTH, IN FEET 18.40

G/L PURGE ONE CASING VOLUME 6.3791

CASING DIAMETER IN INCHES 4"

(CASING MULTIPLIERS: 2 INCH = 0.165 gl/ FT

DEPTH TO TOP OF FLUID 8.60

2" = 0.625 L/FT 4 INCH = 0.65 gl/ FT

4" = 2.46 L/FT 6 INCH = 1.47 gl/FT

DEPTH TO TOP OF WATER 8.60

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

TOP OF WATER ELEVATION \_\_\_\_\_

FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

PUMP TYPE GRUNDFOS REDIFLOW 2

PUMP RATE \_\_\_\_\_

DTW METER USED SOLINST MODEL 122

pH, Cond, Temp meter used HANNA HI 99130

TIME	INTAKE DEPTH	RATE GPM/ EPM	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
1330	18		1.0	22.2	6.9	1125	564	—	clear no color
1335			2.5	21.7	6.94	1145	572	—	
1337			3.5	21.8	6.94	1125	562	—	
1340			6.0	21.8	6.96	1085	542		
1344			8.0	21.9	6.94	1082	541		
									DTW
									9.75

FINAL VOLUME PURGED 8.5915

ANALYSIS INCLUDES: 8260B TPHg. BTEX, MtBE

TIME SAMPLED 1345

SAMPLE CONTAINERS 3-HCl PRESERVED 40CC VOA'S

SAMPLE ID# RS02

LABORATORY USED KIFF Analytical

NOTES \_\_\_\_\_

4  
9.8  
-65  
490  
588  
6370

230 Hz



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE DP 793, 4035 PARK BLVD., OAKLAND, CA.

DATE June 1, 2005

START TIME 1540

WELL ID# RS05

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 227.61

WATER COLUMN, IN FEET \_\_\_\_\_

CASING TOTAL DEPTH, IN FEET 39.20

G/L PURGE ONE CASING VOLUME \_\_\_\_\_

CASING DIAMETER IN INCHES 4"

(CASING MULTIPLIERS: 2 INCH = 0.165 gl/ FT

2" = 0.625 L/FT 4 INCH = 0.65 gl/ FT

4" = 2.46 L/FT 6 INCH = 1.47 gl/FT)

DEPTH TO TOP OF FLUID \_\_\_\_\_

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

DEPTH TO TOP OF WATER \_\_\_\_\_

FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

TOP OF WATER ELEVATION \_\_\_\_\_

PUMP TYPE GRUNDFOS 4 INCH

PUMP RATE \_\_\_\_\_

DTW METER USED SOLINST MODEL 122

pH, Cond, Temp meter used HANNA HI 99130

TIME	INTAKE DEPTH	RATE GPM/LPM	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
1540	25.4	21.5		21.6	6.97	691	346		orange tip color water no odor
				19.58	12.2	2.5			

FINAL VOLUME PURGED \_\_\_\_\_

ANALYSIS INCLUDES: 8260B TPHg, BTEX, MtBE

TIME SAMPLED 1540

SAMPLE CONTAINERS 3-HCl PRESERVED 40CC VOA'S

SAMPLE ID# RS05

LABORATORY USED KIFF Analytical

NOTES

alcat meter 477  
water meter 1958122.5

Equipment Blank QCEB @ 1615



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300,  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE DP 793, 4035 PARK BLVD., OAKLAND, CA.

DATE June 1, 2005

START TIME \_\_\_\_\_

WELL ID# RS06

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 227.22

WATER COLUMN, IN FEET 23.34

CASING TOTAL DEPTH, IN FEET 34.06

G/L PURGE ONE CASING VOLUME 15,295

CASING DIAMETER IN INCHES 4"

(CASING MULTIPLIERS: 2 INCH = 0.165 g/ FT

2" = 0.625 L/FT 4 INCH = 0.65 g/ FT

4" = 2.46 L/FT 6 INCH = 1.47 g/FT)

DEPTH TO TOP OF FLUID 10.72

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

DEPTH TO TOP OF WATER 10.72

FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

TOP OF WATER ELEVATION \_\_\_\_\_

PUMP TYPE GRUNDFOS REDIFLOW 2

PUMP RATE \_\_\_\_\_

DTW METER USED SOLINST MODEL 122

pH, Cond, Temp meter used HANNA HI 99130

TIME	INTAKE DEPTH	RATE GPM/LPM	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
14:04	32.0		1.0	23.4	6.91	1045	524	—	Water clear No color
14:11			5.0	22.9	6.74	1079	539	—	Water clear No color
14:16	32'		8.0	23.0	6.74	1084	541	—	Clear No color
14:20			10.0	23.0	6.72	1085	541		
									DTW
									16.3'

FINAL VOLUME PURGED 10.895

ANALYSIS INCLUDES: 8260B TPHg, BTEX, MtBE

TIME SAMPLED 1422

SAMPLE CONTAINERS 3-HCl PRESERVED 40CC VOA'S

SAMPLE ID# RS06

LABORATORY USED KIFF Analytical

NOTES \_\_\_\_\_

23.34  
16.5  
11670  
14004  
151710

297 1/2



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE DP 793, 4035 PARK BLVD., OAKLAND, CA.

DATE June 1, 2005

START TIME 10:55

WELL ID# RS07

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 195.99

WATER COLUMN, IN FEET 3.14

CASING TOTAL DEPTH, IN FEET \_\_\_\_\_

G/L PURGE ONE CASING VOLUME 2.09

CASING DIAMETER IN INCHES 4"

(CASING MULTIPLIERS: 2 INCH = 0.165 g/ FT

DEPTH TO TOP OF FLUID 4.11

2" = 0.625 L/FT 4 INCH = 0.65 g/ FT

4" = 2.46 L/FT 6 INCH = 1.47 g/FT)

DEPTH TO TOP OF WATER 4.11

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

TOP OF WATER ELEVATION \_\_\_\_\_

FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

PUMP TYPE GRUNDFOS REDIFLOW-2

PUMP RATE \_\_\_\_\_

DTW METER USED SOLINST MODEL 122

pH, Cond, Temp meter used HANNA HI 99130

3.14  
+ .65  
15.70  
1884  
10410  
Hand  
Basil

TIME	INTAKE DEPTH	RATE GPM/LPM	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
10:40			0.5	19.9	6.95	813	407		white clear to bottom
10:43			2.5	19.5	6.94	732	366		
10:46			4.5	19.3	6.93	728	363		
10:49			5.5	19.4	6.93	709	354		
10:52			6.5	19.4	6.94	700	349		

FINAL VOLUME PURGED 6.5

ANALYSIS INCLUDES: 8260B TPHg, BTEX, MtBE

TIME SAMPLED 10:53

SAMPLE CONTAINERS 3-HCl PRESERVED 40CC VOA'S

SAMPLE ID# RS07

LABORATORY USED KIFF Analytical

NOTES \_\_\_\_\_





**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300,  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE **DP 793, 4035 PARK BLVD., OAKLAND, CA.**

DATE **June 1, 2005**

START TIME

WELL ID# **RS09**

SAMPLE BY **CONVERSE**

CASING ELEVATION, IN FEET **195.63**

WATER COLUMN, IN FEET **10.38**

CASING TOTAL DEPTH, IN FEET **15.50**

G/L PURGE ONE CASING VOLUME **1.7 gal**

CASING DIAMETER IN INCHES **2"**

(CASING MULTIPLIERS: 2 INCH = 0.165 gal/ FT

DEPTH TO TOP OF FLUID **5.12**

2" = 0.625 L/FT 4 INCH = 0.65 gal/ FT

4" = 2.46 L/FT 6 INCH = 1.47 gal/FT

DEPTH TO TOP OF WATER **5.12**

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

TOP OF WATER ELEVATION

FREE PHASE PRODUCT THICKNESS

PUMP TYPE **GRUNDFOS REDIFLOW 2**

PUMP RATE

DTW METER USED **SOLINST MODEL 122**

pH, Cond, Temp meter used **HANNA HI 99130**

TIME	INTAKE DEPTH	RATE GPM/ LPM	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
11:07			1.0	19.0	6.88	573	284		water turbid
11:10			2.5	18.3	6.88	681	336		to sewer odor
11:14			4.0	18.0	6.87	781	390		
11:16			5.5	18.0	6.87	834	417		
11:20			6.0	18.1	6.90	816	406		
11:23			7.0	18.0	6.86	823	412		

FINAL VOLUME PURGED **7 gal**

ANALYSIS INCLUDES: **8260B TPHg, BTEX, MtBE**

TIME SAMPLED **11:25**

SAMPLE CONTAINERS **3-HCl PRESERVED 40CC VOA'S**

SAMPLE ID# **RS09**

LABORATORY USED **KIFF Analytical**

NOTES

4  
10.38  
165  
5190  
6228  
1098  
171270



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE **DP 793, 4035 PARK BLVD., OAKLAND, CA.**

DATE June 1, 2005

START TIME 12:10

WELL ID# RS10

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 208.46

WATER COLUMN, IN FEET 6.92

CASING TOTAL DEPTH, IN FEET 218.0

G/L PURGE ONE CASING VOLUME 1.1891

CASING DIAMETER IN INCHES 2"

(CASING MULTIPLIERS: 2 INCH = 0.165 gl/ FT

DEPTH TO TOP OF FLUID 218.8

2" = 0.625 L/FT

4 INCH = 0.65 gl/ FT

DEPTH TO TOP OF WATER 2.88

4" = 2.46 L/FT

6 INCH = 1.47 gl/FT

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

TOP OF WATER ELEVATION \_\_\_\_\_

FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

PUMP TYPE DISPOSABLE BAILER

PUMP RATE \_\_\_\_\_

DTW METER USED SOLINST MODEL 122

pH, Cond, Temp meter used HANNA HI 99130

TIME	INTAKE DEPTH	RATE GPM/LPM	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
1215			1.0	17.4	6.95	250	125		up to 100 level no color
1217			2.0	16.9	6.10	230	115		
1220			3.0	16.6	6.65	228	114		

FINAL VOLUME PURGED 3.091

ANALYSIS INCLUDES: 8260B TPHg, BTEX, MtBE

TIME SAMPLED 1220

SAMPLE CONTAINERS 3-HCl PRESERVED 40CC VOA'S

SAMPLE ID# RS10

LABORATORY USED KIFF Analytical

NOTES \_\_\_\_\_

5  
6.92  
165  
39 60  
415 2  
692  
1146 80



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300,  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE DP 793, 4035 PARK BLVD., OAKLAND, CA.

DATE June 1, 2005

START TIME \_\_\_\_\_

WELL ID# R1

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 227.69

WATER COLUMN, IN FEET 3.50

CASING TOTAL DEPTH, IN FEET 16.80

G/L PURGE ONE CASING VOLUME 5.15 gal

CASING DIAMETER IN INCHES 6"

(CASING MULTIPLIERS: 2 INCH = 0.165 gal/ FT

4" = 2.46 L/FT

4 INCH = 0.65 gal/ FT

6" = 5.56 L/FT

6 INCH = 1.47 gal/FT)

DEPTH TO TOP OF FLUID 13.30

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

DEPTH TO TOP OF WATER 12.30

FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

TOP OF WATER ELEVATION \_\_\_\_\_

PUMP RATE \_\_\_\_\_

PUMP TYPE GRUNDFOS REDIFLOW 2

DTW METER USED SOLINST MODEL 122

pH, Cond, Temp meter used HANNA HI 99130

TIME	INTAKE DEPTH	RATE GPM/ LPM	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
1530	16.0'		1.0	22.8	7.07	623	313		water clear no cap
1537			5.0	21.2	6.83	531	267		
1543			10.0	21.6	6.85	503	250		
1550			15.0	21.4	6.87	499	247		

FINAL VOLUME PURGED 15.5 gal

ANALYSIS INCLUDES: 8260B TPHg, BTEX, MtBE

TIME SAMPLED 1550

SAMPLE CONTAINERS 3-HCl PRESERVED 40CC VOA'S

SAMPLE ID# R1

LABORATORY USED KIFF Analytical

NOTES \_\_\_\_\_

4  
1.47  
3.5  
7.35  
4.41  
5.145

310 Hz



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE DP 793, 4035 PARK BLVD., OAKLAND, CA.

DATE June 1, 2005

START TIME \_\_\_\_\_

WELL ID# R2

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 227.28

WATER COLUMN, IN FEET 478

CASING TOTAL DEPTH, IN FEET 16.92

G/L PURGE ONE CASING VOLUME 7.975

CASING DIAMETER IN INCHES 6"

(CASING MULTIPLIERS: 2 INCH = 0.165 gal/ FT

DEPTH TO TOP OF FLUID 12.14

4" = 2.46 L/FT 4 INCH = 0.65 gal/ FT

6" = 5.56 L/FT 6 INCH = 1.47 gal/FT

DEPTH TO TOP OF WATER 12.14

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

TOP OF WATER ELEVATION \_\_\_\_\_

FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

PUMP TYPE GRUNDFOS REDIFLOW 2

PUMP RATE \_\_\_\_\_

DTW METER USED SOLINST MODEL 122

pH, Cond, Temp meter used HANNA HI 99130

TIME	INTAKE DEPTH	RATE GPM/LPM	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
15:01	16.0'		<del>1</del>	<del>20.5</del>	6.9	1360	681	—	Clear No odor
15:07			5	21.3	6.85	1357	678		
15:10			7	21.3	6.83	1350	675		
15:14			10	21.4	6.83	1347	673		
									DTW
									12.30'

FINAL VOLUME PURGED 10.5 gal

ANALYSIS INCLUDES: 8260B TPHg, BTEX, M&BE

TIME SAMPLED 1515

SAMPLE CONTAINERS 3-HCl PRESERVED 40CC VOA'S

SAMPLE ID# R2

LABORATORY USED KIFF Analytical

NOTES \_\_\_\_\_

3.5  
4.8  
1.47  
32.46  
19.2  
478  
7.0166

29516



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE DP 793, 4035 PARK BLVD., OAKLAND, CA.

DATE June 1, 2005

START TIME 1435

WELL ID# R3

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 227.25

WATER COLUMN, IN FEET 3.14

CASING TOTAL DEPTH, IN FEET 11.74

G/L PURGE ONE CASING VOLUME 4.6 gals

CASING DIAMETER IN INCHES 6"

(CASING MULTIPLIERS: 2 INCH = 0.165 gl/ FT

DEPTH TO TOP OF FLUID 8.6

4" = 2.46 L/FT

4 INCH = 0.65 gl/ FT

6" = 5.56 L/FT

6 INCH = 1.47 gl/FT)

DEPTH TO TOP OF WATER 8.6

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

TOP OF WATER ELEVATION \_\_\_\_\_

FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

PUMP TYPE GRUNDFOS REDIFLOW 2

PUMP RATE \_\_\_\_\_

DTW METER USED SOLINST MODEL 122

pH, Cond, Temp meter used HANNA HI 99130

TIME	INTAKE DEPTH	RATE GPM/ <del>LPM</del>	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
1437	11.5		1.0	21.4	6.99	945	474		color like to color
1442			5.0	21.3	7.00	907	454		
1445			7.0	21.3	7.02	900	452		
1447			9.0	21.5	7.02	901	450		
									DTW
									8.6

FINAL VOLUME PURGED 9.5 gals

ANALYSIS INCLUDES: 8260B TPHg, BTEX, MtBE

TIME SAMPLED 1448

SAMPLE CONTAINERS 3-HCI PRESERVED

SAMPLE ID# R3

40CC VOA'S

LABORATORY USED KIFF Analytical

NOTES \_\_\_\_\_

3.14  
1.47  
2198  
1256  
314  
46158

294H



**WESTERN  
GEO-ENGINEERS**  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND CA 95776-6003  
(530) 668-5300,  
FAX (530) 662-0273  
wege@cal.net

WELL SAMPLE DATA SHEET

SITE DP 793, 4035 PARK BLVD., OAKLAND, CA.

DATE June 1, 2005

START TIME 10AM

WELL ID# RECEPTOR TRENCH T1, T2, T3, T4 SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET T2=195.30

WATER COLUMN, IN FEET 7.75

CASING TOTAL DEPTH, IN FEET 10

G/L PURGE ONE CASING VOLUME 5.151

CASING DIAMETER IN INCHES 4"

(CASING MULTIPLIERS: 2 INCH = 0.165 gl/ FT

DEPTH TO TOP OF FLUID 2.25

2" = 0.625 L/FT

4 INCH = 0.65 gl/ FT

4" = 2.46 L/FT

6 INCH = 1.47 gl/FT)

DEPTH TO TOP OF WATER 2.25

FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

TOP OF WATER ELEVATION \_\_\_\_\_

FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

PUMP TYPE GRUNDFOS REDIFLOW 2

PUMP RATE \_\_\_\_\_

DTW METER USED SOLINST MODEL 122

pH, Cond, Temp meter used HANNA HI 99130

TIME	INTAKE DEPTH	RATE GPM/ <del>LPM</del>	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (uS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
10:21		<del>1.0</del> 0.5	1.0	<del>20.8</del> 21.4	6.94	1065	534	—	water clear to 10 ft water
10:08			4.5	21.4	6.88	1138	564		
10:12			6.5	21.4	6.88	1143	570		
10:20			10.5	21.4	6.88	1143	572		

FINAL VOLUME PURGED 11.0

ANALYSIS INCLUDES: 8260B TPHg, BTEX, MtBE

TIME SAMPLED 10:21

SAMPLE CONTAINERS 3-HCl PRESERVED

SAMPLE ID# T1

40CC VOA'S

LABORATORY USED KIFF Analytical

NOTES \_\_\_\_\_

4 3  
7.75  
0.65  
38.75  
475.0  
5775

2344



APPENDIX B.  
GROUNDWATER ELEVATION CHART



Report Number : 44095

Date : 6/8/2005

George Converse  
Western Geo-Engineers  
1386 East Beamer Street  
Woodland, CA 95776

Subject : 13 Water Samples  
Project Name : DP793 2nd 1/4 2005  
Project Number : DP793

Dear Mr. Converse,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff", is written over a light gray rectangular background.

Joel Kiff



Report Number : 44095

Date : 6/8/2005

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Sample : MW1

Matrix : Water

Lab Number : 44095-01

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/2/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/2/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/2/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/2/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/2/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/2/2005
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/2/2005
4-Bromofluorobenzene (Surr)	96.4		% Recovery	EPA 8260B	6/2/2005

Sample : RS02

Matrix : Water

Lab Number : 44095-02

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	6/3/2005

Approved By:

  
Joel Kiff



Report Number : 44095

Date : 6/8/2005

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Sample : RS05

Matrix : Water

Lab Number : 44095-03

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	380	2.5	ug/L	EPA 8260B	6/3/2005
Toluene	85	2.5	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	59	2.5	ug/L	EPA 8260B	6/3/2005
Total Xylenes	360	2.5	ug/L	EPA 8260B	6/3/2005
Methyl-t-butyl ether (MTBE)	3.0	2.5	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	3500	250	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	95.5		% Recovery	EPA 8260B	6/3/2005

Sample : RS06

Matrix : Water

Lab Number : 44095-04

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	99.6		% Recovery	EPA 8260B	6/3/2005

Approved By:

Joe Kiff



Report Number : 44095

Date : 6/8/2005

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Sample : RS07

Matrix : Water

Lab Number : 44095-05

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	660	1.5	ug/L	EPA 8260B	6/4/2005
Toluene	41	0.50	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	140	0.50	ug/L	EPA 8260B	6/3/2005
Total Xylenes	290	1.5	ug/L	EPA 8260B	6/4/2005
Methyl-t-butyl ether (MTBE)	3.7	0.50	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	4700	50	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	99.3		% Recovery	EPA 8260B	6/3/2005

Sample : RS08

Matrix : Water

Lab Number : 44095-06

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	330	0.50	ug/L	EPA 8260B	6/7/2005
Toluene	210	0.50	ug/L	EPA 8260B	6/7/2005
Ethylbenzene	250	0.50	ug/L	EPA 8260B	6/7/2005
Total Xylenes	330	0.50	ug/L	EPA 8260B	6/7/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/7/2005
TPH as Gasoline	4700	500	ug/L	EPA 8260B	6/4/2005
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	6/7/2005
4-Bromofluorobenzene (Surr)	107		% Recovery	EPA 8260B	6/7/2005

Approved By:

Joel Kiff



Report Number : 44095

Date : 6/8/2005

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Sample : RS09

Matrix : Water

Lab Number : 44095-07

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	170	2.5	ug/L	EPA 8260B	6/3/2005
Toluene	14	2.5	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	77	2.5	ug/L	EPA 8260B	6/3/2005
Total Xylenes	87	2.5	ug/L	EPA 8260B	6/3/2005
Methyl-t-butyl ether (MTBE)	12	2.5	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	3300	250	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	6/3/2005

Sample : RS10

Matrix : Water

Lab Number : 44095-08

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	95.8		% Recovery	EPA 8260B	6/3/2005

Approved By:

  
Joel Kiff



Report Number : 44095

Date : 6/8/2005

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Sample : R1

Matrix : Water

Lab Number : 44095-09

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	12	0.50	ug/L	EPA 8260B	6/3/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	1.6	0.50	ug/L	EPA 8260B	6/3/2005
Total Xylenes	1.4	0.50	ug/L	EPA 8260B	6/3/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	330	50	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	97.2		% Recovery	EPA 8260B	6/3/2005

Sample : R2

Matrix : Water

Lab Number : 44095-10

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	5.2	0.50	ug/L	EPA 8260B	6/3/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	85	50	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	95.5		% Recovery	EPA 8260B	6/3/2005

Approved By:

Jed Kiff



Report Number : 44095

Date : 6/8/2005

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Sample : R3

Matrix : Water

Lab Number : 44095-11

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	96.1		% Recovery	EPA 8260B	6/3/2005

Sample : T1

Matrix : Water

Lab Number : 44095-12

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	14000	25	ug/L	EPA 8260B	6/7/2005
Toluene	650	1.5	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	1900	25	ug/L	EPA 8260B	6/7/2005
Total Xylenes	2900	25	ug/L	EPA 8260B	6/7/2005
Methyl-t-butyl ether (MTBE)	54	1.5	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	46000	2500	ug/L	EPA 8260B	6/7/2005
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	6/7/2005
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	6/7/2005

Approved By:

Joel Kiff



Report Number : 44095

Date : 6/8/2005

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Sample : QCEB

Matrix : Water

Lab Number : 44095-13

Sample Date :6/1/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	92.2		% Recovery	EPA 8260B	6/3/2005

Approved By:

  
Joel Kiff

Report Number : 44095

Date : 6/8/2005

QC Report : Method Blank Data

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/2/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/2/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/2/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/2/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/2/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/2/2005
Toluene - d8 (Surr)	101		%	EPA 8260B	6/2/2005
4-Bromofluorobenzene (Surr)	98.3		%	EPA 8260B	6/2/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/4/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/4/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/4/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/4/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/4/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/4/2005
Toluene - d8 (Surr)	104		%	EPA 8260B	6/4/2005
4-Bromofluorobenzene (Surr)	99.6		%	EPA 8260B	6/4/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/7/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/7/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/7/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/7/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/7/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/7/2005
Toluene - d8 (Surr)	96.6		%	EPA 8260B	6/7/2005
4-Bromofluorobenzene (Surr)	97.1		%	EPA 8260B	6/7/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/6/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/6/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/6/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/6/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/6/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/6/2005
Toluene - d8 (Surr)	101		%	EPA 8260B	6/6/2005
4-Bromofluorobenzene (Surr)	107		%	EPA 8260B	6/6/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	6/3/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	6/3/2005
Toluene - d8 (Surr)	102		%	EPA 8260B	6/3/2005
4-Bromofluorobenzene (Surr)	94.1		%	EPA 8260B	6/3/2005

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 44095

Date : 6/8/2005

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	44095-01	<0.50	37.2	37.5	39.1	38.8	ug/L	EPA 8260B	6/2/05	105	104	1.66	70-130	25
Toluene	44095-01	<0.50	37.2	37.5	38.3	38.2	ug/L	EPA 8260B	6/2/05	103	102	1.41	70-130	25
Tert-Butanol	44095-01	<5.0	186	188	187	190	ug/L	EPA 8260B	6/2/05	101	101	0.539	70-130	25
Methyl-t-Butyl Ether	44095-01	<0.50	37.2	37.5	39.8	38.4	ug/L	EPA 8260B	6/2/05	107	102	4.33	70-130	25
Benzene	44086-03	<0.50	38.5	39.4	38.0	38.8	ug/L	EPA 8260B	6/4/05	98.6	98.7	0.0627	70-130	25
Toluene	44086-03	<0.50	38.5	39.4	37.8	38.9	ug/L	EPA 8260B	6/4/05	98.1	98.8	0.674	70-130	25
Tert-Butanol	44086-03	6.2	193	197	198	207	ug/L	EPA 8260B	6/4/05	99.5	102	2.39	70-130	25
Methyl-t-Butyl Ether	44086-03	18	38.5	39.4	54.2	55.0	ug/L	EPA 8260B	6/4/05	95.0	95.0	0.00952	70-130	25
Benzene	44125-01	0.77	39.6	39.7	39.7	39.8	ug/L	EPA 8260B	6/7/05	98.2	98.4	0.203	70-130	25
Toluene	44125-01	<0.50	39.6	39.7	37.7	38.2	ug/L	EPA 8260B	6/7/05	95.2	96.3	1.19	70-130	25
Tert-Butanol	44125-01	<5.0	198	198	200	189	ug/L	EPA 8260B	6/7/05	101	95.2	6.17	70-130	25
Methyl-t-Butyl Ether	44125-01	1.8	39.6	39.7	37.6	39.2	ug/L	EPA 8260B	6/7/05	90.4	94.1	4.00	70-130	25
Benzene	44122-02	<0.50	40.0	40.0	41.2	40.2	ug/L	EPA 8260B	6/6/05	103	100	2.57	70-130	25
Toluene	44122-02	<0.50	40.0	40.0	41.9	40.4	ug/L	EPA 8260B	6/6/05	105	101	3.55	70-130	25
Tert-Butanol	44122-02	<5.0	200	200	213	209	ug/L	EPA 8260B	6/6/05	106	104	1.86	70-130	25
Methyl-t-Butyl Ether	44122-02	<0.50	40.0	40.0	37.6	37.5	ug/L	EPA 8260B	6/6/05	93.9	93.8	0.117	70-130	25
Benzene	44089-03	<0.50	40.0	40.0	40.1	38.6	ug/L	EPA 8260B	6/3/05	100	96.6	3.58	70-130	25
Toluene	44089-03	<0.50	40.0	40.0	40.9	39.2	ug/L	EPA 8260B	6/3/05	102	98.1	4.24	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 44095

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 6/8/2005

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Tert-Butanol	44089-03	<5.0	200	200	193	186	ug/L	EPA 8260B	6/3/05	96.4	93.2	3.48	70-130	25
Methyl-t-Butyl Ether	44089-03	<0.50	40.0	40.0	35.8	35.4	ug/L	EPA 8260B	6/3/05	89.4	88.5	0.988	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:  \_\_\_\_\_  
Joel Kiff

QC Report : Laboratory Control Sample (LCS)

Report Number : 44095

Date : 6/8/2005

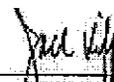
Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	6/2/05	106	70-130
Toluene	40.0	ug/L	EPA 8260B	6/2/05	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/2/05	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/2/05	107	70-130
Benzene	40.0	ug/L	EPA 8260B	6/4/05	98.6	70-130
Toluene	40.0	ug/L	EPA 8260B	6/4/05	98.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/4/05	99.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/4/05	100	70-130
Benzene	40.0	ug/L	EPA 8260B	6/7/05	97.9	70-130
Toluene	40.0	ug/L	EPA 8260B	6/7/05	95.3	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/7/05	90.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/7/05	95.7	70-130
Benzene	40.0	ug/L	EPA 8260B	6/6/05	106	70-130
Toluene	40.0	ug/L	EPA 8260B	6/6/05	91.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/6/05	107	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/6/05	100	70-130
Benzene	40.0	ug/L	EPA 8260B	6/3/05	98.2	70-130

KIFF ANALYTICAL, LLC

Approved By:

  
 Joe Kiff

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 44095

Date : 6/8/2005

QC Report : Laboratory Control Sample (LCS)

Project Name : DP793 2nd 1/4 2005

Project Number : DP793

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Toluene	40.0	ug/L	EPA 8260B	6/3/05	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	6/3/05	96.8	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	6/3/05	92.9	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joe Kiff

Joe Kiff







2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. \_\_\_\_\_ Page 1 of 2

Project Contact (Hardcopy or PDF To): Gregory Combs  
 Company/Address: WEGE  
1306 E. Panama St. Woodland, CA  
 Phone No.: 530-668-5700 FAX No.: \_\_\_\_\_  
 Project Number: DP-793 P.O. No.: \_\_\_\_\_  
 Project Name: DP-793 2nd 1/4 2005  
 Project Address: Oakland

California EDF Report?  Yes  No

Recommended but not mandatory to complete this section:  
 Sampling Company Log Code: W E G E  
 Global ID: T 0 6 0 0 1 0 0 1 5 8  
 EDF Deliverable To (Email Address): weged@net  
 Sampler Signature: [Signature]

### Chain-of-Custody Record and Analysis Request

Sample Designation	Sampling		Container		Preservative				Matrix		Analysis Request										TAT	For Lab Use Only					
	Date	Time	40 ml VOA	SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)		Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)	12 hr/24 hr/48 hr/72 hr/1 wk		
MW1	6-1-05	1311	3		✓	✓	✓		✓						✓												
RS02		1315	3		✓	✓	✓		✓						✓												
RS05		1540	3		✓	✓	✓		✓						✓												
RS06		1422	3		✓	✓	✓		✓						✓												
RS07		1053	3		✓	✓	✓		✓						✓												
RS08		1158	3		✓	✓	✓		✓						✓												
RS09		1125	3		✓	✓	✓		✓						✓												
RS10		1220	7		✓	✓	✓		✓						✓												
R1		1550	3		✓	✓	✓		✓						✓												
R2		1515	3		✓	✓	✓		✓						✓												

Relinquished by: [Signature] Date: 6-1-05 Time: 1422 Received by: \_\_\_\_\_ Remarks: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 06/10/05 Time: 1422 Received by Laboratory: [Signature] Bill to: WEGE



2795 2nd Street, Suite 300  
 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. \_\_\_\_\_ Page 2 of 2

Project Contact (Hardcopy or PDF To): Gene Comera  
 California EDF Report?  Yes  No

Company/Address: Weg  
 Recommended but not mandatory to complete this section:  
 Sampling Company Log Code: WG F W

Phone No.: \_\_\_\_\_ FAX No.: \_\_\_\_\_  
 Global ID: T0600100158

Project Number: DP793 P.O. No.: \_\_\_\_\_  
 EDF Deliverable To (Email Address): \_\_\_\_\_

Project Name: DP793 2nd 4/2009  
 Sampler Signature: [Signature]

Project Address: Oakland

Sample Designation	Sampling		Container				Preservative				Matrix	
	Date	Time	40 ml VOA	SLEEVE			HCl	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL
R3	6-1-09	1448	3				✓	✓		✓		
T1	}	1631	3				✓	✓		✓		
GCEB		1615	3				✓	✓		✓		

**Chain-of-Custody Record and Analysis Request**

**Analysis Request**

BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)	TAT	For Lab Use Only
				✓	✓								12 hr/24 hr/48 hr/72 hr/1 wk	

Relinquished by: [Signature] Date: 6-1-09 Time: 1422 Received by: \_\_\_\_\_

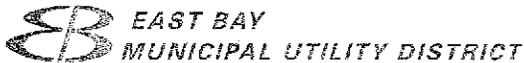
Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: 06/05 Time: 1922 Received by Laboratory: [Signature]

Remarks: \_\_\_\_\_  
 Bill to: Weg

APPENDIX D.

WASTEWATER DISCHARGE REPORT



**NOTIFICATION OF EBMUD TEST RESULTS**

DAVID R. WILLIAMS  
DIRECTOR OF WASTEWATER

May 13, 2005

Mr. George Converse  
Desert Petroleum, Inc.  
1386 E. Beamer Street  
Woodland, CA 95776

Dear Mr. Converse:

Re: Wastewater Discharge Permit No. 50435501

Discharge Location - 4035 Park Boulevard, Oakland

East Bay Municipal Utility District (EBMUD) inspected the subject facility and sampled the wastewater discharge on April 21, 2005. The measured parameters are in compliance with your Wastewater Discharge Permit. The test results of the samples and corresponding discharge Permit limitations are shown in the table below. A copy of the EBMUD Laboratory Analytical Report is attached.

Date	Location	Sample No.	Type	Parameter	Result	Daily Limit
04/21/05	PSP 1	L119783-1	grab	Benzene	< 0.00005	.005
04/21/05	PSP 1	L119783-1	grab	Ethyl Benzene	< 0.00008	.005
04/21/05	PSP 1	L119783-1	grab	Toluene	< 0.00007	.005
04/21/05	PSP 1	L119783-1	grab	Total Xylenes	0.00033	.005

*Note: All units are mg/L.*

Please call me at (510) 287-1618 if you have any questions.

Sincerely,

MOLLY ONG  
Wastewater Control Representative

MKO:mko

# EBMUD Laboratory

## Analytical Report

EAST BAY MUNICIPAL UTILITY DISTRICT  
Laboratory Services Division  
PO Box 24055, MS 59, Oakland, CA 94623  
Phone (510)287-1432 Fax (510)465-5462

California Environmental Laboratory Accreditation Program Certificate Number 1060

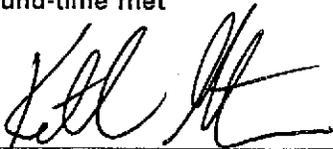
Laboratory Report - L119783

LSR # - B941-0001-1 Project Title: Desert Petroleum - DP793 GW 1 gw-lo

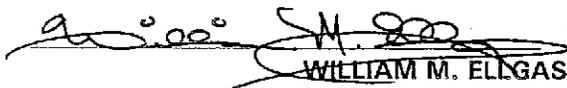
Report generated on: May 04, 2005 10:19 pm

2 - Samples received by the lab on: Apr 21 2005, 09:04 am  
0 - Lost Analyses  
0 - Hold Time Exceedences  
Turn-around-time met

RECEIVED  
MAY 05 2005  
ENVIRONMENTAL SERVICES DIV



KENNETH GERSTMAN



05/05/05  
WILLIAM M. ELLGAS

Please route this report to:

Client PM: MOLLY ONG

Samples included in this report:

Sample	Type Collected	Site	Locator	ClientID
L119783-1	GRAB 21-Apr-2005 08:35	IW S	DP793 GW 1	-
L119783-2	QCFB 21-Apr-2005 08:35	IW S	DP793 GW 1	-

Legend to the laboratory qualifiers used in this report:

U - Analyte not detected

Qualifiers for subcontract work - See textvalue for description

THIS REPORT MAY ONLY BE REPRODUCED IN ITS ENTIRETY. RESULTS CONTAINED IN THIS REPORT ARE REFLECTIVE ONLY OF THE ITEMS REQUESTED TO BE ANALYZED AND REPORTED. UNUSED PORTIONS OF SAMPLE WILL BE DISCARDED WITHIN THIRTY DAYS OF RECEIPT UNLESS OTHER ARRANGEMENTS ARE MADE BY THE CLIENT.

EAST BAY MUNICIPAL UTILITY DISTRICT  
 Laboratory Services Division  
 PO Box 24055, MS 59, Oakland, CA 94623  
 Phone (510)287-1432 Fax (510)465-5462  
 Analytical Results Report

LSR#: B941-0001-1 Desert Petroleum - DP793 GW 1 gw-10  
 Site: IW S Industrial Waste - South Interceptor  
 Locator: DP793 GW 1 Desert Petroleum, Inc., #5043550 1 located at 4035 Park Boulevard, Oakland. Side Sewer 1  
 Groundwater discharge  
 Lab ID: L119783-1  
 Sample Type: GRAB (Instantaneous Grab)  
 Date Collected: Apr 21 2005, 08:35am Sample collector: K BIBER  
 Date Received: Apr 21 2005, 09:04am Sample receiver: VCESPEDE  
 Sample Comments:

Method Reference	Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag
Method: EPA 824 - Volatile Organics - GC/MS							WasteH2O	
TARGET ANALYTES								
	DICHLORODIFLUOROMETHANE	U	0.090	ug/L	1	0.09		
	CHLOROMETHANE	U	0.10	ug/L	1	0.1		
	VINYL CHLORIDE	U	0.070	ug/L	1	0.07		
	1,3-BUTADIENE	U	0.20	ug/L	1	0.2		
	BROMOMETHANE	U	0.21	ug/L	1	0.21		
	CHLOROETHANE	U	0.19	ug/L	1	0.19		
	FLUOROTRICHLOROMETHANE	U	0.15	ug/L	1	0.15		
	ETHYL ETHER	U	0.50	ug/L	1	0.5		
	ACROLEIN	U	20	ug/L	1	20		
	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	U	0.10	ug/L	1	0.1		
	1,1-DICHLOROETHENE	U	0.050	ug/L	1	0.05		
	ACETONE	U	6.0	ug/L	1	6		
	IODOMETHANE	U	0.50	ug/L	1	0.5		
	CARBON DISULFIDE	U	0.18	ug/L	1	0.1		
	ALLYL CHLORIDE	U	0.50	ug/L	1	0.5		
	METHYLENE CHLORIDE	U	0.070	ug/L	1	0.07		
	TERT-BUTYL ALCOHOL	U	25	ug/L	1	25		
	ACRYLONITRILE	U	1.0	ug/L	1	1		
	ETHYL-T-BUTYL ETHER	U	0.50	ug/L	1	0.5		
	TRANS-1,2-DICHLOROETHENE	U	0.14	ug/L	1	0.14		
	DIISOPROPYL ETHER	U	0.50	ug/L	1	0.5		
	VINYL ACETATE	U	0.20	ug/L	1	0.2		
	1,1-DICHLOROETHANE	U	0.070	ug/L	1	0.07		
	ETHYL-T-BUTYL ETHER	U	0.50	ug/L	1	0.5		
	2-BUTANONE	U	3.0	ug/L	1	3		
	ETHYL ACETATE	U	0.10	ug/L	1	0.1		
	SEC-DICHLOROPROPANE	U	0.17	ug/L	1	0.17		
	CIS-1,2-DICHLOROETHENE	U	0.050	ug/L	1	0.05		
	METHYLACRYLATE	U	0.50	ug/L	1	0.5		
	METHYLACRYLONITRILE	U	0.50	ug/L	1	0.5		
	BROMOCHLOROMETHANE	U	0.14	ug/L	1	0.14		
	TETRAHYDROFURAN	U	10	ug/L	1	10		
	CHLOROFORM	U	0.070	ug/L	1	0.07		
	1,1,1-TRICHLOROETHANE	U	0.080	ug/L	1	0.08		
	1-CHLOROBUTANE	U	0.50	ug/L	1	0.5		
	1,1-DICHLOROPROPENE	U	0.070	ug/L	1	0.07		
	CARBON TETRACHLORIDE	U	0.14	ug/L	1	0.14		
	BENZENE	U	0.050	ug/L	1	0.05		
	1,2-DICHLOROETHANE	U	0.060	ug/L	1	0.06		
	TERT-AMYL METHYL ETHER	U	0.50	ug/L	1	0.5		
	TRICHLOROETHENE	U	0.050	ug/L	1	0.05		
	1,2-DICHLOROPROPANE	U	0.12	ug/L	1	0.12		
	METHYLMETHACRYLATE	U	0.50	ug/L	1	0.5		
	DIBROMOMETHANE	U	0.090	ug/L	1	0.09		
	BROMODICHLOROMETHANE	U	0.040	ug/L	1	0.04		
	2-CHLOROETHYL VINYL ETHER	U	0.10	ug/L	1	0.1		
	2-NITROPROPANE	U	0.50	ug/L	1	0.5		
	CHLOROACETONITRILE	U	10	ug/L	1	10		
	CIS-1,3-DICHLOROPROPENE	U	0.070	ug/L	1	0.07		
	4-METHYL-2-PENTANONE	U	0.40	ug/L	1	0.4		
	1,1-DICHLORO-2-PROPANONE	U	1.0	ug/L	1	1		

is either the client requested or regulatory mandated Reporting Limit. MDL is the regulatory mandated Minimum Level.

EAST BAY MUNICIPAL UTILITY DISTRICT  
 Laboratory Services Division  
 PO Box 24055, MS 59, Oakland, CA 94623  
 Phone (510)287-1432 Fax (510)465-5462  
**Analytical Results Report**

#: B941-0001-1 Desert Petroleum - DP793 GW 1 gw-10  
 Location: IW S Industrial Waste - South Interceptor  
 Locator: DP793 GW 1 Desert Petroleum, Inc., #5043550 1 located at 4035 Park Boulevard, Oakland. Side Sewer 1  
 Groundwater discharge

Lab ID: L119783-1  
 Sample Type: GRAB (Instantaneous Grab)  
 Date Collected: Apr 21 2005, 08:35am Sample collector: K BIBER  
 Date Received: Apr 21 2005, 09:04am Sample receiver: VCESPEDE  
 Sample Comments:

Method Reference	Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag	
							RL/ML		
	TOLUENE	U	0.070	ug/L	1	0.07			
	TRANS-1,3-DICHLOROPROPENE	U	0.020	ug/L	1	0.02			
	ETHYLMETHACRYLATE	U	0.50	ug/L	1	0.5			
	1,1,2-TRICHLOROETHANE	U	0.030	ug/L	1	0.03			
	TETRACHLOROETHENE	U	0.11	ug/L	1	0.11			
	1,3-DICHLOROPROPANE	U	0.070	ug/L	1	0.07			
	2-HEXANONE	U	0.10	ug/L	1	0.1			
	DIBROMOCHLOROMETHANE	U	0.060	ug/L	1	0.06			
	ETHYLENE DIBROMIDE	U	0.10	ug/L	1	0.1			
	CHLOROBENZENE	U	0.050	ug/L	1	0.05			
	1,1,1,2-TETRACHLOROETHANE	U	0.030	ug/L	1	0.03			
	ETHYL BENZENE	U	0.080	ug/L	1	0.08			
	M+P XYLENES	U	0.22	ug/L	1	0.22			
	O-XYLENE	U	0.11	ug/L	1	0.11			
	STYRENE	U	0.080	ug/L	1	0.08			
	BROMOFORM	U	0.10	ug/L	1	0.1			
	ISOPROPYLBENZENE	U	0.11	ug/L	1	0.11			
	BROMOBENZENE	U	0.080	ug/L	1	0.08			
	TRANS-1,4-DICHLORO-2-BUTENE	U	0.50	ug/L	1	0.5			
	1,2,2-TETRACHLOROETHANE	U	0.11	ug/L	1	0.11			
	1,1,1-TRICHLOROPROPANE	U	0.080	ug/L	1	0.08			
	N-PROPYLBENZENE	U	0.090	ug/L	1	0.09			
	O-CHLOROTOLUENE	U	0.12	ug/L	1	0.12			
	P-CHLOROTOLUENE	U	0.080	ug/L	1	0.08			
	1,3,5-TRIMETHYLBENZENE	U	0.18	ug/L	1	0.18			
	TERT-BUTYLBENZENE	U	0.080	ug/L	1	0.08			
	PENTACHLOROETHANE	U	0.20	ug/L	1	0.2			
	1,2,4-TRIMETHYLBENZENE	U	0.35	ug/L	1	0.35			
	SEC-BUTYLBENZENE	U	0.10	ug/L	1	0.1			
	1,3-DICHLOROBENZENE	U	0.060	ug/L	1	0.06			
	P-ISOPROPYLTOLUENE	U	0.080	ug/L	1	0.08			
	1,4-DICHLOROBENZENE	U	0.040	ug/L	1	0.04			
	1,2-DICHLOROBENZENE	U	0.050	ug/L	1	0.05			
	N-BUTYLBENZENE	U	0.10	ug/L	1	0.1			
	BIS(2-CHLOROISOPROPYL)ETHER	U	0.60	ug/L	1	0.6			
	HEXACHLOROETHANE	U	1.0	ug/L	1	1			
	DIBROMOCHLOROPROPANE	U	0.47	ug/L	1	0.47			
	NITROBENZENE	U	20	ug/L	1	20			
	1,2,4-TRICHLOROBENZENE	U	0.11	ug/L	1	0.11			
	HEXACHLOROBUTADIENE	U	0.12	ug/L	1	0.12			
	NAPHTHALENE	U	0.10	ug/L	1	0.1			
	1,2,3-TRICHLOROBENZENE	U	0.11	ug/L	1	0.11			
	<i>INTERNAL STANDARD</i>								
	FLUOROBENZENE		87.0	% recovery	1				
	D5-CHLOROBENZENE		85.4	% recovery	1				
	D4-1,4-DICHLOROBENZENE		76.4	% recovery	1				
	<i>SURROGATE</i>								
	DIBROMOFLUOROMETHANE		103	% recovery	1				
	D4-DICHLOROETHANE		110	% recovery	1				
	D8-TOLUENE		101	% recovery	1				
	4-BROMOFLUOROBENZENE		98.0	% recovery	1				

Run ID: R131245 / Work Group No.: WGI20679  
 Prep Date: 29-APR-05 Analyzed 29-APR-05

ML is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level

EAST BAY MUNICIPAL UTILITY DISTRICT  
 Laboratory Services Division  
 PO Box 24055, MS 59, Oakland, CA 94623  
 Phone (510)287-1432 Fax (510)465-5462  
 Analytical Results Report

LSR#: B941-0001-1 Desert Petroleum - DP793 GW 1 gw-10  
 Site: IW S Industrial Waste - South Interceptor  
 Locator: DP793 GW 1 Desert Petroleum, Inc., #50435501 located at 4035 Park Boulevard, Oakland. Side Sewer 1  
 Groundwater discharge  
 Lab ID: L119783-2 (P119197-9)  
 Sample Type: QCFB (Field Blank Grab)  
 Date Collected: Apr 21 2005, 08:35am Sample collector: K BIBER  
 Date Received: Apr 21 2005, 09:04am Sample receiver: VCESPEDE  
 Sample Comments: QCFB for L119783-1 Prep'd on 04/13/05 by TCB Acid lot #030205/L118774-1  
 QA on 03/04/05

Method Reference	Parameter	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag
Method: EPA 624	Volatile Organics	GC/MS					WasteH2O	
<b>TARGET ANALYTES</b>								
	DICHLORODIFLUOROMETHANE	U	0.090	ug/L	1	0.09		
	CHLOROMETHANE	U	0.10	ug/L	1	0.1		
	VINYL CHLORIDE	U	0.070	ug/L	1	0.07		
	1,3-BUTADIENE	U	0.20	ug/L	1	0.2		
	BROMOMETHANE	U	0.21	ug/L	1	0.21		
	CHLOROETHANE	U	0.19	ug/L	1	0.19		
	FLUOROTRICHLOROMETHANE	U	0.15	ug/L	1	0.15		
	ETHYL ETHER	U	0.50	ug/L	1	0.5		
	ACROLEIN	U	20	ug/L	1	20		
	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	U	0.10	ug/L	1	0.1		
	1,1-DICHLOROETHENE	U	0.050	ug/L	1	0.05		
	ACETONE	U	6.0	ug/L	1	6		
	IODOMETHANE	U	0.50	ug/L	1	0.5		
	CARBON DISULFIDE	U	0.22	ug/L	1	0.1		
	ALLYL CHLORIDE	U	0.50	ug/L	1	0.5		
	METHYLENE CHLORIDE	U	0.070	ug/L	1	0.07		
	TERT-BUTYL ALCOHOL	U	25	ug/L	1	25		
	ACRYLONITRILE	U	1.0	ug/L	1	1		
	METHYL-T-BUTYL ETHER	U	0.50	ug/L	1	0.5		
	TRANS-1,2-DICHLOROETHENE	U	0.14	ug/L	1	0.14		
	DIISOPROPYL ETHER	U	0.50	ug/L	1	0.5		
	VINYL ACETATE	U	0.20	ug/L	1	0.2		
	1,1-DICHLOROETHANE	U	0.070	ug/L	1	0.07		
	ETHYL-T-BUTYL ETHER	U	0.50	ug/L	1	0.5		
	2-BUTANONE	U	3.0	ug/L	1	3		
	ETHYL ACETATE	U	0.10	ug/L	1	0.1		
	SEC-DICHLOROPROPANE	U	0.17	ug/L	1	0.17		
	CIS-1,2-DICHLOROETHENE	U	0.050	ug/L	1	0.05		
	METHYLACRYLATE	U	0.50	ug/L	1	0.5		
	METHYLACRYLONITRILE	U	0.50	ug/L	1	0.5		
	BROMOCHLOROMETHANE	U	0.14	ug/L	1	0.14		
	TETRAHYDROFURAN	U	10	ug/L	1	10		
	CHLOROFORM	U	0.070	ug/L	1	0.07		
	1,1,1-TRICHLOROETHANE	U	0.080	ug/L	1	0.08		
	1-CHLOROBUTANE	U	0.50	ug/L	1	0.5		
	1,1-DICHLOROPROPENE	U	0.070	ug/L	1	0.07		
	CARBON TETRACHLORIDE	U	0.14	ug/L	1	0.14		
	BENZENE	U	0.050	ug/L	1	0.05		
	1,2-DICHLOROETHANE	U	0.050	ug/L	1	0.05		
	TERT-AMYL METHYL ETHER	U	0.50	ug/L	1	0.5		
	TRICHLOROETHENE	U	0.050	ug/L	1	0.05		
	1,2-DICHLOROPROPANE	U	0.12	ug/L	1	0.12		
	METHYLMETHACRYLATE	U	0.50	ug/L	1	0.5		
	DIBROMOMETHANE	U	0.090	ug/L	1	0.09		
	BROMODICHLOROMETHANE	U	0.040	ug/L	1	0.04		
	2-CHLOROETHYL VINYL ETHER	U	0.10	ug/L	1	0.1		
	2-NITROPROPANE	U	0.50	ug/L	1	0.5		
	CHLOROACETONITRILE	U	10	ug/L	1	10		
	CIS-1,3-DICHLOROPROPENE	U	0.070	ug/L	1	0.07		
	4-METHYL-2-PENTANONE	U	0.40	ug/L	1	0.4		

is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level



EAST BAY MUNICIPAL UTILITY DISTRICT  
Laboratory Services Division  
PO Box 24055, MS 59, Oakland, CA 94623  
Phone (510)287-1432 Fax (510)465-5462  
Analytical Results Report

SR#: B941-0001-1 Desert Petroleum - DP793 GW 1 gw-10  
Site: IW S Industrial Waste - South Interceptor  
Locator: DP793 GW 1 Desert Petroleum, Inc., #5043550 1 located at 4035 Park Boulevard, Oakland. Side Sewer 1  
Groundwater discharge  
Lab ID: L119783-2 (P119197-9)  
Sample Type: QCFB (Field Blank Grab)  
Date Collected: Apr 21 2005, 08:35am Sample collector: K BIBER  
Date Received: Apr 21 2005, 09:04am Sample receiver: VCESPEDE  
Sample Comments: QCFB for L119783-1 Prep'd on 04/13/05 by TCB Acid lot #030205/L118774-1  
QA on 03/04/05

Method Reference	Qualifier	Result	Units	Dilution	MDL	Matrix	Tag
Parameter						RI/ML	

ML is either the client requested or regulatory mandated Reporting Limit. ML is the regulatory mandated Minimum Level

East Bay Municipal Utility District  
Laboratory Services Chain of Custody Record

Prelog or Login No.: L119783      Project Title: Desert Petroleum - DP793 GW 1 gw-1o  
Account or Project: B941-0001-1      Client EM: MOLLY ONG      Sampled by: K BIBER  
Tel No.: 1618      Rcvd: 21-APR-05 09:04  
Lab EM: KENNETH GERSTMAN      Sample Date: 21-APR-05

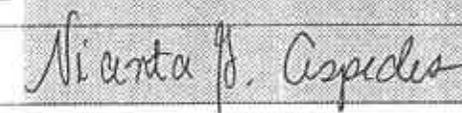
Lab No.	Sample Type	Time	Site	Locator	Sample Matrix	Container ID Barcode	Tests Required	Date	DueDate
L119783-1	GRAB	08:35	IN S	DP793 GW 1	WasteH2O	600492 VOA4A 624			12-MAY-05
					WasteH2O	600493 VOA4A 624			
					WasteH2O	600494 VOA4A 624			
					WasteH2O	REPORT			

ClientID: Sample Comments: Pricing: STD

L119783-2	QCFB	08:35	IN S	DP793 GW 1	WasteH2O	599491 VOA4A 624			12-MAY-05
					WasteH2O	599492 VOA4A 624			

ClientID: Sample Comments: QCFB for L119783-1 Prep'd on 04/12/05 by TCB Acid lot #030205/L119774-1 QA on 03/04/05 Pricing: STD

Total containers received: 5

	Signature	Print Name	Time	Date
Relinquished by		KASEEN BIBER	904	4/21/05
Received by				
Relinquished by				
Received by				
Relinquished by				
Received by		Vicenta G. Cespedes	09:04	21-APR-05

Type Codes: CF01,CF02,CF03,CFV,COMP,CT01,CT02,CT03,CT04,CT05,CT06,CT07,CT08,CTV,GRAB



WESTERN  
GEO-ENGINEERS  
CALIF. CONTRACTOR #513857  
REGISTERED GEOLOGISTS

1386 EAST BEAMER STREET  
WOODLAND, CA 95776-6003  
(530) 668-5300  
FAX (530) 662-0273  
wege@cal.net

Ms Molly Ong  
Wastewater Control Representative  
Environmental Services Division MS702  
East Bay Municipal Utility District  
P.O. Box 24055, MS 702  
Oakland, CA 94623  
(510) 287-1618

May 17, 2005

RE: Groundwater Discharge Renewal Permit Application for Desert Petroleum DP 793, 4035 Park Blvd., Oakland, California (permit # 50435501).

Dear Ms Ong:

Western Geo-Engineers at the request of Desert Petroleum, Inc. is renewing the sewer discharge permit # 504355.1. Currently groundwater is continuously pumped from the onsite monitor well RS5 and periodically from the receptor trench along the eastern curb area of Brighton Avenue, north of Park Boulevard, Oakland, California. The trench and well RS5 are designed to capture and remove gasoline tainted groundwater and help in the remediation of 4035 Park Boulevard and the private backyards along the sewer lateral that exits between 4035 Park Boulevard and Brighton Avenue.

The recovered groundwater, is from RS5 well, or quarterly from a truck mounted 350 gallon capacity holding tank or the once per month 6 hour receptor trench (T1) pumping to **2 in series aqua scrub activated carbon units (containing 180 lbs of virgin coconut carbon)** prior to the sewer discharge drain (SS1) located at 4035 Park Boulevard, see Figure 1 with permit application. Discharge to the sewer is currently at 2 gpm.

At some later date a pumping system is to be installed to pump continuously from the receptor trench and RS5 at a combined rate of 5 gpm, not to exceed 7200 gallons per day through the **2 in series aqua scrub activated carbon units (containing 180 lbs of virgin coconut carbon)** to sewer discharge drain SS1. All discharge water will pass through a water-totalling meter that will record total water discharged to the sewer in 0.1 gallons increments.

Documentation sampling of the water discharged to SS1 drain along with required reports will be produced as directed under the sewer discharge permit conditions.

**Included please find:**

Permit Application

Sincerely yours,



George L. Converse  
Project Geologist

Cc: Mr. William Thompson, Desert Petroleum Inc.

April 14, 2005

**CERTIFIED MAIL**  
**(Return Receipt Requested)**  
**Certified Mail No. 7000 1670 0005 9616 8664**

Mr. George Converse  
Western Geo Engineers  
Desert Petroleum, Inc.  
1386 E. Beamer Street  
Woodland, CA 95776

Dear Mr. Converse:

Re: Wastewater Discharge Permit No. 5043550 1 Desert Petroleum Renewal

The Permit for Desert Petroleum, Inc. will expire on July 5, 2005. Enclosed are the appropriate worksheets and forms to apply for renewal. Please complete the following forms and documentation by **May 31, 2005**:

- Wastewater Discharge Permit Applicant Information
- Wastewater Discharge Permit Process Description
- Wastewater Discharge Permit Water Balance/Strength Summary – two pages
- Schematic Flow Diagram
- Groundwater Treatment System Site Layout Plan
- Description of the Treatment System
- A list of all environmental permits

The engineering calculations that establish the values used in the Water Balance/Strength Summary sheets are required with the submittal. Both the method of calculation and the database used must be clearly documented.

If you have any questions, please contact me at (510) 287-1618.

Sincerely,



MOLLY ONG  
Wastewater Control Representative  
Environmental Services Division MS702

MKO:mko

Enclosures

W:\NAB\IDS\Permits\Groundwater\Desert Petroleum\DP Permit Applic delivery.doc



# WASTEWATER DISCHARGE PERMIT

## Terms and Conditions

### APPLICANT INFORMATION

APPLICANT BUSINESS NAME Desert Petroleum #793	PERMIT NUMBER 50435501
--	---------------------------

ADDRESS OF SITE DISCHARGING WASTEWATER 4035 Park Blvd.			Oakland	94602
STREET ADDRESS	CITY	ZIP CODE		

PERSON TO BE CONTACTED REGARDING THIS APPLICATION George Converse			
wege@cal.net	(530) 668-5300	530 662-0273	
NAME	ELECTRONIC MAIL ADDRESS	TELEPHONE NUMBER	FACSIMILE NUMBER

PERSON(S) TO RECEIVE PERMIT AND CORRESPONDENCE IF DIFFERENT THAN PERSON SIGNING APPLICATION George Converse		1386 E. Beamer Street, Woodland, CA 95776
NAME	MAILING ADDRESS	
NAME	MAILING ADDRESS	

PERSON TO BE CONTACTED IN THE EVENT OF AN EMERGENCY George Converse		
530 668-5300	530 668-5300	
NAME	DAYTIME TELEPHONE NUMBER	NIGHTTIME TELEPHONE NUMBER

AUTHORIZATION George Converse		<i>is authorized to sign reports, documents, and other correspondence required by this Permit.</i>
NAME & TITLE		

### CERTIFICATION

*I understand that I am legally responsible for discharge of wastewater from the facility and for complying with the Terms and Conditions of this Wastewater Discharge Permit.*

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

William Thompson	President
NAME	TITLE

SIGNATURE	5/23/05
(TO BE SIGNED BY CHIEF EXECUTIVE OFFICER OR DULY AUTHORIZED REPRESENTATIVE. SEE CERTIFICATION REQUIREMENTS ON REVERSE)	DATE

3781 Telegraph Road, Ventura, CA 93003	(805) 654-8084
MAILING ADDRESS	PHONE NUMBER



# WASTEWATER DISCHARGE PERMIT

## Terms and Conditions PROCESS DESCRIPTION

APPLICANT BUSINESS NAME Desert Petroleum #793

The information on this form provides a description of wastewater generating processes, characteristics of the wastewater, and waste management activities. Instructions are on the back of this form.

Permit Number  
5043501

BUSINESS ACTIVITY Groundwater Remediation	Standard Industrial Classification	Business Classification Code 4940
--	------------------------------------	--------------------------------------

### PROCESSES

Process Description	Wastewater Characteristics	Schematic Process Number
Pumped Groundwater	Benzene, Toulene, EthyBenzene	1
	Xylenes, TPHgasoline, MtBE	

### POLLUTION PREVENTION TECHNIQUES / BEST MANAGEMENT PRACTICES (BMPs)

Two, inseries, activate carbon units, with 180 lbs. of carbon per unit

### PRETREATMENT

Pretreatment System	Design Capacity	Loading Rate	Size	Side Sewer Number
<input type="checkbox"/> filtration				
<input type="checkbox"/> grease trap/oil and water separator				
<input checked="" type="checkbox"/> granular activated carbon	15 gpm	5 gpm	2 inch	1
<input type="checkbox"/> sedimentation				
<input type="checkbox"/> pH adjustment				
<input type="checkbox"/> chlorination				
<input type="checkbox"/> chemical precipitation				
<input type="checkbox"/> other (describe)				
<input type="checkbox"/> none				

### PROCESS GENERATED WASTE

Waste / Disposal Method	Annual Waste Generation	
	Quantity	Unit
N/A		



The information on this form describes the volume, source, and strength of wastewater discharged to the community sewer. Instructions are on the back of this form.

Permit Number  
50435501

**WATER USE AND WASTEWATER DISCHARGE BALANCE**

Units expressed in:  gallons per calendar day or  gallons per working day (Number of working days per year \_\_\_\_\_)

Water Use	Source			Wastewater Discharge to each Side Sewer					Water Diverted	Code <sup>2</sup>
	EBMUD	Other	Code <sup>1</sup>	No. <sup>4</sup>	No.	No.	No.	No.		
Sanitary										
Processes										
Product										
Boiler										
Cooling										
Washing										
Irrigation										
Remediation		2800	A	2800						
Sub-total										
<b>Total</b>	<b>All Sources</b>	<u>2800</u>		<b>All Side Sewer</b>		<u>2800</u>	<b>All Side Sewers + Water Diverted</b>			<u>2800</u>
Maximum Daily Discharge (gallons)										

**METERED WATER**

Water Meter Number	Code <sup>3</sup>	Percent Discharge to each Side Sewer				Total % Discharge
<u>47083426</u>	<u>P</u>	100				100

<sup>1</sup>Other / Code: Compute the average gallon per day water use from non-EBMUD sources and enter the value in the Other "Sub-total" box. Do not include sources that discharge only to the stormdrain. Allocate the subtotal value to each type of water use. Enter the code(s) that identifies the source water.

A = Well Water / Groundwater    B = Stormwater    C = Reclaimed Water    D = Other (describe)

<sup>2</sup>Water Diverted/Code: Enter the diverted volume for each type of water use. Enter the code(s) that identifies the diversion:

A = Product    B = Evaporation    C = Irrigation    D = Creek/Bay    E = Rail, Truck, Vessel    F = Other (describe)

<sup>3</sup>Metered Water Code(s): E = EBMUD Meter    P = Private Meter



**WASTEWATER DISCHARGE PERMIT**  
**Terms and Conditions**

APPLICANT BUSINESS NAME Desert Petroleum #793

**WATER BALANCE/STRENGTH SUMMARY**

WASTEWATER STRENGTH ESTIMATES		Wastewater Discharge to each Side Sewer				
		No. 1	No.	No.	No.	No.
Total Suspended Solids mg/L (TSS) (Molly Ong-EBMUD)	Average	3 mg/L				
	Maximum					
Filtered Chemical Oxygen Demand mg/L (CODF) (Molly Ong-EBMUD)	Average	15 mg/L				
	Maximum					

Molly Ong  
EBMUD

**DISCHARGE FREQUENCY**

Days of Week	7				
Time of Day (Start & Stop Time)	Continuous				
Volume, if Batch Discharge					

**SIDE SEWER LOCATION**

No. 1 West side of lot
No.
No.
No.
No.

**STORMWATER AREA**

Total square-foot area exposed to stormwater that drains to the sanitary sewer: 0 sq. ft.

May 10, 2005

Mr. George Converse  
Desert Petroleum, Inc.  
1386 E. Beamer Street  
Woodland, CA 95776

Dear Mr. George Converse:

An informational meeting will be held by EBMUD staff on Monday, May 23, 2005, for wastewater system customers of the District's Wastewater Department (Special District No. 1). The purpose of this meeting is to review proposed changes to wastewater rates, fees, and charges that will be effective this summer (July 2005) through the following summer (July 2006). The meeting will from 1:00 p.m. to 3:00 p.m. in the Large Training Room at the EBMUD Administration Building, 375 - 11th Street, in Oakland.

At this meeting, staff will provide an update on wastewater rates, fees, and charges being proposed to EBMUD's Board of Directors. The current schedule for proposed rate changes includes a Board of Director's workshop at 8:30 a.m. on Tuesday, May 24, 2005 followed by a public hearing at 2:00 p.m. and adoption of the revised rates and fees. Pending Board approval, the revised rates and fees would become effective July 1, 2005.

This meeting is part of the District's biennial budget process, and provides the opportunity for Environmental Services staff to present and discuss rate information with you, our largest and most significant dischargers. We understand and appreciate the value of your time and thank you in advance for your attendance at this meeting. If you have any questions, please contact your Wastewater Control Representative or the Environmental Services Division at 287-1651.

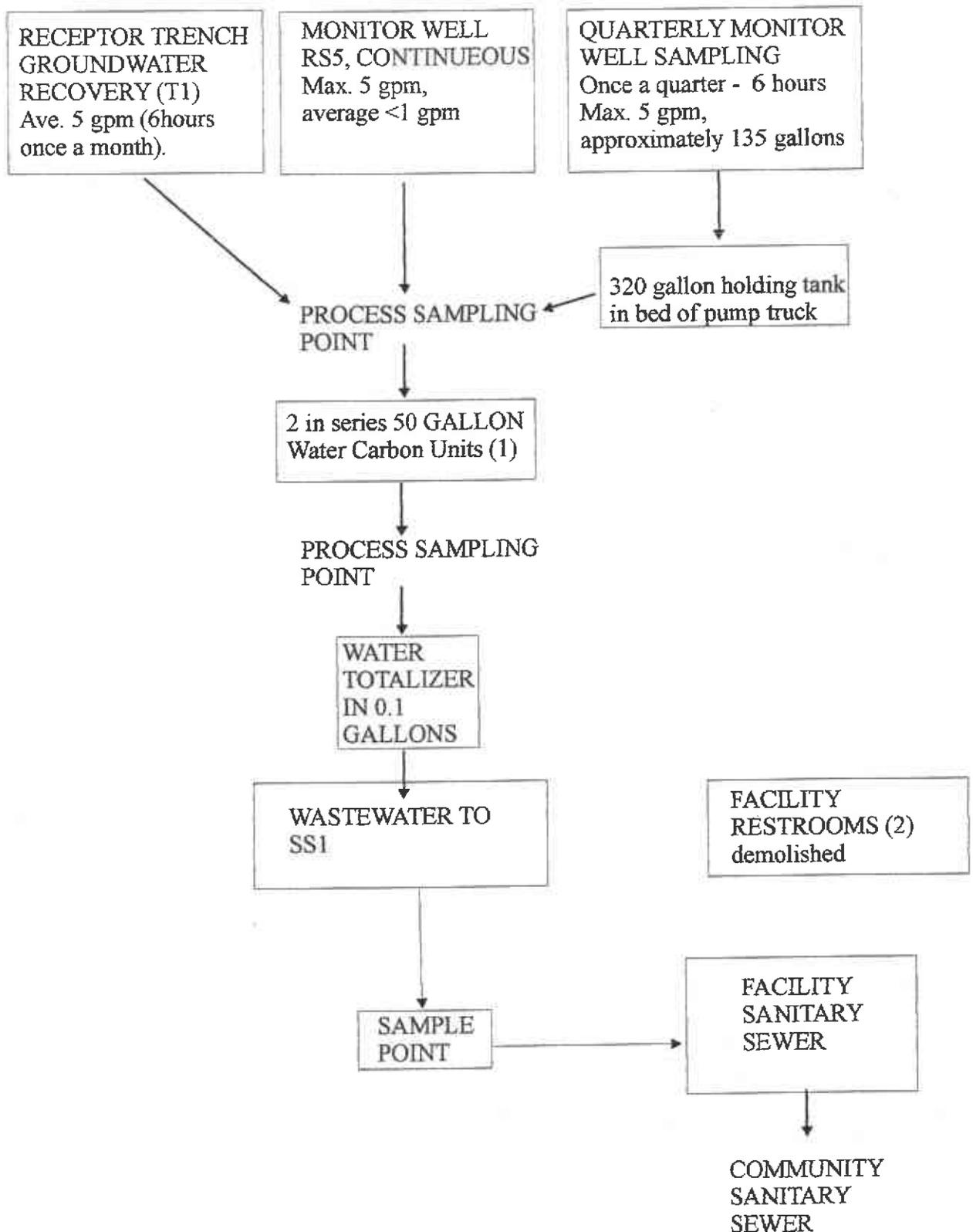
Sincerely,

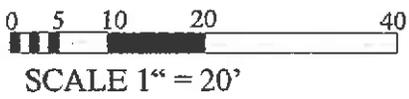
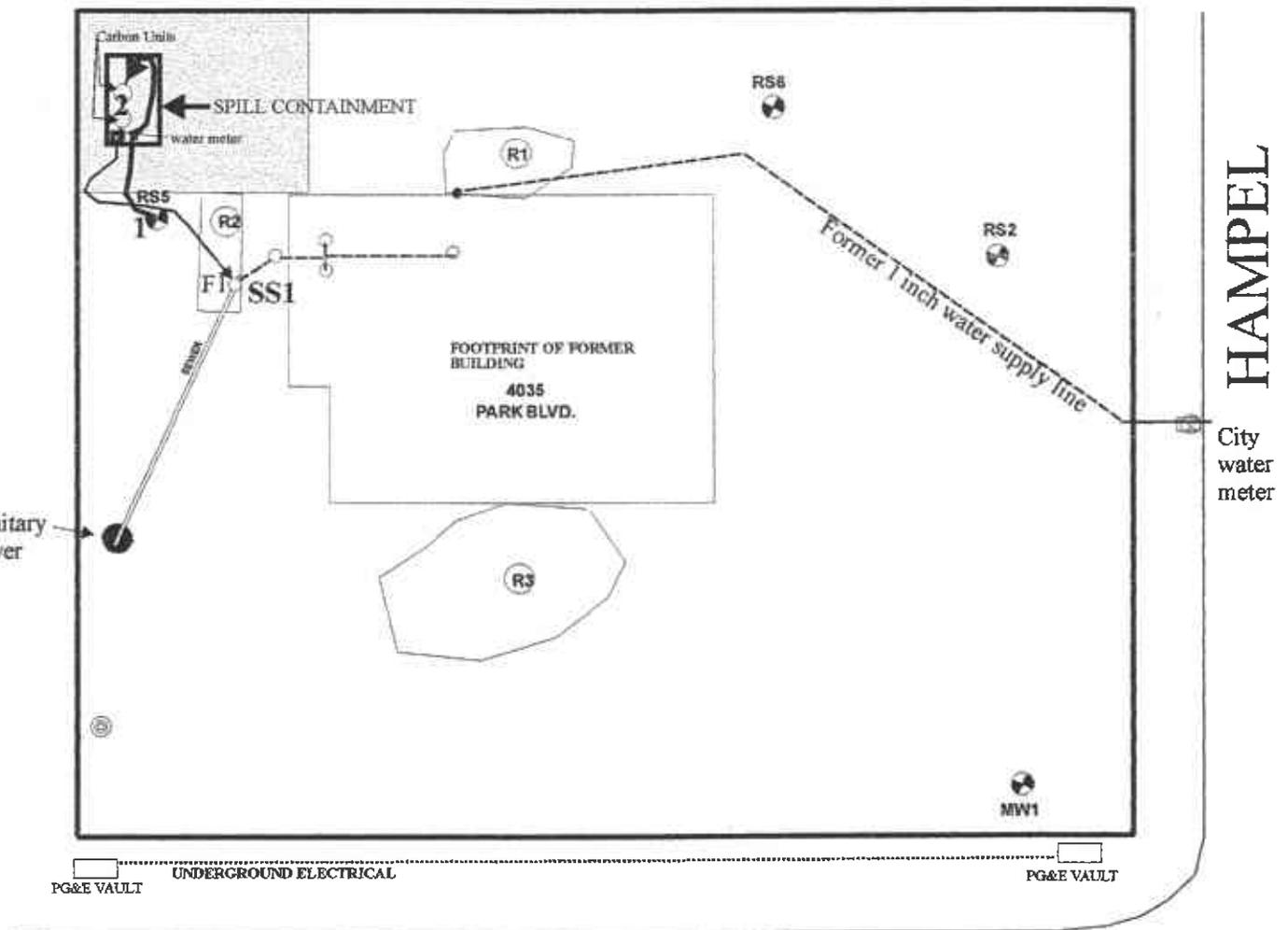


THOMAS F. FOX  
Customer Service Manager

TFF:GT

Figure 1 (Revised July 7, 2001)  
 Activity: GROUNDWATER RECOVERY AND DISCHARGE SYSTEM  
 FORMER DESERT PETROLEUM SITE DP 793.





PARK BLVD.

-  MW1 MONITOR WELL
- 1 Groundwater recovery well RS5
- 2 2 in series 55 gallon carbon filters.

**FIGURE 2**  
**SEWER DISCHARGE**  
**TREATMENT COMPOUND**  
**WASTEWATER DISCHARGE**  
**PERMIT # 5043550 1**