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DESERT PETROLEUM CO., INC.

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Alameda County

AUG 04 2005

Environmental Health

Mr. Robert Schultz  
Alameda County Health Care Services  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
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April 18, 2005

RE: The following report "First Quarter 2005 Groundwater Sampling Report/Update Status, Former Desert Petroleum Site DP #793" dated April 18, 2005, documents groundwater monitor well samplings that occurred in March 2005 at DP793, 4035 Park Blvd., Oakland, California 94602.

Dear Mr. Schultz:

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**

FIRST 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

**April 18, 2005**

BY

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

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WESTERN  
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April 18, 2005

Dear Mr. Thompson:

The following report documents the first 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 Oversite STID 1248  
San Francisco Bay Regional Board (Region 2) Case # 01-0170  
Facility/Leak Site ID# T0600100158

## 2.0 SITE INVESTIGATION/REMEDIATION 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, inspect carbon #1, leaking from bottom. Turned system off and removed carbon from system.
October 15, 2004	Take delivery of new water carbon, place #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.

## 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 surrounded 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 March 23, 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 March 23, 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 March 23, 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 March 23, 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. As shown on the groundwater elevation chart generated for each well, 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 0.128 feet/linear foot down gradient of RS6 to RS10. The hydraulic gradient averages 0.107 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 ( $\text{TPHg} > 10 \text{ mg/Kg}$ ) have been shaded yellow.

#### ***5.2 Results of Certified Analysis of Groundwater Samples***

The results of the certified analyses of groundwater samples collected on March 23, 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 7400 ug/L at pumping well RS5, to below laboratory lower detection limits of 50 ug/L in wells MW1, RS2, RS6, RS8, RS10, R1, and R3.

Benzene concentrations were found in only five wells; the pumping well RS5 contained 890 ug/L, trench well T1 contained 220 ug/L, RS7 contained 220 ug/L, RS9 contained 99 ug/L and R2 contained 8.4 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 1.7 ug/L, pumping well RS5 which contained 5.1 ug/L, well RS7 which contained 2.4 ug/L and RS9 contained 3.6 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 (March 23, 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 R2, RS5, RS7, RS9 and T1 ranging from a low of 57 ug/L at R2 to a high of 7400 ug/L at RS5.

#### Benzene - Figure 5

Benzene has a LDL of 0.5 ug/L. The recommended CPHG (California Public Health Goal) for Benzene is 1.5 ug/L. Benzene was detected in wells R2, RS5, RS7, RS9 and T1 ranging from a low of 8.4 ug/L at R2 to a high of 890 ug/L at RS5.

#### Toluene

Toluene has a LDL of 0.5 ug/L. The recommended CPHG for toluene is 150 ug/L. Toluene was detected in wells RS5, RS7, RS9 and T1, ranging from a low of 1.1 ug/L at well RS9 to a high of 280 ug/L at pumping well RS5.

#### Ethylbenzene

Ethylbenzene has a LDL of 0.5 ug/L. The recommended CPHG for Ethylbenzene is 300 ug/L. Ethylbenzene was detected in wells RS5, RS7, RS9 and T1, ranging from a low of 1.1 ug/L at well RS9 to a high of 180ug/L at pumping well RS5.

#### Xylenes

Xylenes have a LDL of 0.5 ug/L. The recommended CPHG for Xylenes is 1800 ug/L. Xylenes were detected in wells RS5, RS7, RS9 and T1, ranging from a low of 4.5 ug/L at well RS9 to a high of 940 ug/L at pumping well RS5.

## 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 1.7 ug/L at trench well T1 to a high of 5.1 ug/L at pumping well RS5, see Table 1 and Appendix C - Laboratory Report.

Appendix D contains charts developed for wells MW1, RS2, RS5, RS6, RS7, RS8, RS9, RS10, R1, R2, R3 and trench well T1 showing TPHg & Benzene concentration with time. All wells display reductions in concentrations with time for both TPHg and Benzene through the March 23, 2005 sampling.

## 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 December 30, 2004, 92,009 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 March 23, 2005, 809,180 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. Currently well RS8 is below laboratory lower detection limits for all analytes tested.

## **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, March 23, 2005 shows continued decrease in hydrocarbons to levels lower than the May 31, 2001 sample results at wells RS6, RS7, RS8, RS9, RS10, R1, R2 and T1. The pumping well RS5 showed moderate increase in hydrocarbon concentrations.

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 Regenesis Inc. to perform a basic model using ORC to determine how to apply, and the amount needed. The Regenesis 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 Regenesis 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**

June 2005	2 <sup>nd</sup> Quarter Monitor well sampling.
July 30, 2005	2 <sup>nd</sup> Quarter Monitoring Report.

## **12.0 LIMITATIONS**

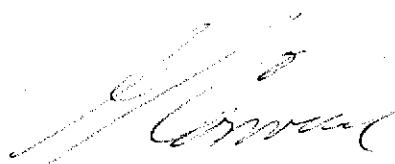
This report is based upon the following:

- 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.

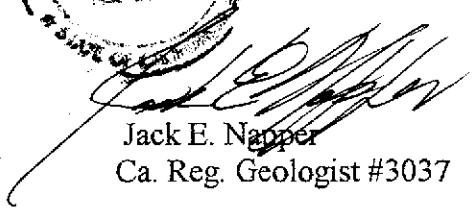
Sincerely,



George Converse  
Geologist



Jack E. Napper  
Ca. Reg. Geologist #3037



cc: Mr. Robert Schultz, 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 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) (CALIFORNIA PUBLIC HEALTH GOAL)	DEPTH TO GROUND WATER (FEET)	GROUND ELEVATION (FEET AMSL)	TPH-G	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE
RS-1	12/14/89	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	11/9/92	228.15	17.05	211.1	1700	730	9.6	16	14	
RS-1	4/7/94	228.15	13	215.15	860	84	12	16	110	
RS-1	6/19/94	228.15	13.37	214.78	1400	150	12	52	87	
RS-1	9/17/94	228.15	16.33	211.82	310	30	1.8	2.8	3.9	
RS-1	3/12/95	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	10/4/95	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	< 5
MW-1	12/11/96	229.5	12.98	216.52	< 50	< 0.5	< 0.5	< 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	9/2/97	229.5	13.00	216.5	< 50	5	< 0.5	< 0.5	< 1	< 0.5
MW-1	11/24/97	229.5	14.12	215.38	< 50	5	< 0.5	< 0.5	< 1	< 0.5
MW-1	2/25/98	229.5	6.41	223.09	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
MW-1	7/8/98	229.5	7.28	222.22	< 50	< 0.5	< 0.5	< 0.5	< 1	< 1
MW-1	9/16/98	229.5	10.96	218.54	< 50	< 0.5	< 0.5	< 0.5	< 1	< 1
MW-1	11/24/98	229.5	12.24	217.26	52	2.3	5.2	< 0.5	5.4	11
MW-1	2/23/99	229.5	7.14	222.36	< 50	< 0.5	5	< 0.5	< 1	< 0.5
MW-1	5/5/99	229.5	7.00	222.5	< 50	2	< 0.5	< 0.5	< 1	8
MW-1***	8/26/99	229.5	11.41	218.09	< 50	4.1	< 0.5	< 0.5	< 1	< 1
MW-1	11/10/99	229.5	13.27	216.23	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
MW-1	2/9/00	229.5	13.76	215.74	< 50	< 0.5	< 0.5	0.5	< 1	0.5
MW-1	6/30/00	229.5	10.63	218.87	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
MW-1	8/8/00	229.5	11.77	217.73	62	1	2	< 0.5	2	< 0.5
MW-1	11/16/00	229.5	13.33	216.17	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
MW-1	3/8/01	229.5	12.30	217.2	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	5/31/01	229.5	11.88	217.62	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	12/18/01	229.5	13.74	215.76	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	2/19/02	229.5	14.42	215.08	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	5/7/02	229.5	10.78	218.72	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	8/6/02	229.5	12.70	216.8	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	11/5/02	229.5	15.00	214.5	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	12/12/02	229.5	15.46	214.04						
MW-1	3/13/03	229.5	14.51	214.99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	5/6/03	229.5	11.06	218.44	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	8/13/03	229.5	13.13	216.37	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	11/20/03	229.5	14.85	214.65	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	1/22/04	229.5	13.65	215.85						
MW-1	3/30/04	229.5	11.68	217.82	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	6/10/04	229.5	13.08	216.42	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	9/28/04	229.5	14.33	215.17	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	12/8/04	229.5	14.67	214.83	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW-1	3/23/05	229.5	9.60	219.9	< 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 AMSL)	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)
<b>(CALIFORNIA PUBLIC HEALTH GOAL)</b>									
RS-2	12/14/89	227.39							
RS-2	6/19/94	227.39	10.89	216.50					
RS-2	3/12/95	227.39	5.26	222.13	ND	ND	ND	ND	ND
RS-2	10/4/95	227.39	15.05	212.34	ND	ND	ND	ND	ND
RS-2	12/21/95	227.39	9.95	217.44	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	03/27/96	227.39	6.28	221.11	< 50	< 0.5	< 0.5	< 0.5	< 2
RS-2	06/11/96	227.39	8.00	219.39	< 50	1.2	2.8	< 0.5	< 2
RS-2	09/04/96	227.39	9.69	217.50	< 50	< 0.5	< 0.5	< 0.5	< 5
RS-2	12/11/96	227.39	8.38	219.01	< 50	< 0.5	< 0.5	< 0.5	< 1
RS-2	2/21/97	227.39	6.96	220.43	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	5/28/97	227.39	10.02	217.37	< 50	3	3	< 0.5	< 1
RS-2	9/2/97	227.39	11.46	215.93	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	11/24/97	227.39	10.43	216.96	< 50	< 0.5	1	< 0.5	3
RS-2	2/25/98	227.39	3.57	223.82	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	7/8/98	227.39	8.83	218.56	< 50	< 0.5	< 0.5	< 0.5	< 1
RS-2	9/16/98	227.39	10.60	216.79	< 50	< 0.5	< 0.5	< 0.5	< 1
RS-2	11/24/98	227.39	13.27	214.12	140	2.8	19	2.6	3.3
RS-2	2/23/99	227.39	4.06	223.33	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	5/5/99	227.39	7.70	219.69	< 50	0.7	< 0.5	< 0.5	< 1
RS-2***	8/26/99	227.39	11.42	215.97	200	15	23	1.7	23
RS-2	11/10/99	227.39	15.94	211.45	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	2/9/00	227.39	8.91	218.48	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	6/30/00	227.39	9.79	217.60	52	2	< 0.5	< 0.5	< 1
RS-2	8/8/00	227.39	10.71	216.68	60	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	11/16/00	227.39	10.39	217.00	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	3/8/01	227.39	6.62	220.77	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	5/31/01	227.39	10.09	217.30	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	12/18/01	227.39	6.99	220.40	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	2/19/02	227.39	8.08	219.31	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	5/7/02	227.39	9.27	218.12	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	8/6/02	227.39	11.38	216.01	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	11/5/02	227.39	17.09	210.30	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	12/12/02	227.39	13.19	214.20					
RS-2	3/13/03	227.39	8.93	218.46	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	5/6/03	227.39	8.05	219.34	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	8/13/03	227.39	11.16	216.23	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	11/20/03	227.39	17.62	209.77	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	1/22/04	227.39	7.40	219.99					
RS-2	3/30/04	227.39	7.95	219.44	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	6/10/04	227.39	10.56	216.83	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	9/28/04	227.39	17.02	210.37	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	12/8/04	227.39	9.80	217.59	< 50	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	3/23/05	227.39	5.05	222.34	< 50	< 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	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES	MTBE	
					(UG/L)	(UG/L) (1.5)	(UG/L) (150)	(UG/L) (300)	(UG/L) (1800)	(UG/L) (13)	
(CALIFORNIA PUBLIC HEALTH GOAL)											
RS-5	12/14/89	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	11/9/92	227.61	20.73	206.88	50000	650	4800	1100	15000		
RS-5	4/7/94	227.61	18.16	209.45	27000	5000	8700	550	2800		
RS-5	6/19/94	227.61	18.11	209.5	20000	2100	5300	470	2500		
RS-5	9/17/94	227.61	19.63	207.98	93000	230	340	110	700		
RS-5	3/12/95	227.61	14.54	213.07	93000	6400	2000	19000	10000		
RS-5	10/4/95	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	7800	21000	1800	8900	570	
RS-5	2/21/97	227.61	13.76	213.85	sh	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	9/2/97	227.61	17.47	210.14	38000	2200	9400	1300	5800	< 0.5	
RS-5	11/24/97	227.61	18.67	208.94	45000	4000	16000	1900	9700	< 0.5	
RS-5	2/25/98	227.61	10.53	217.08	160000	2700	31000	5300	28000	< 0.5	
RS-5	7/8/98	227.61	13.75	213.86	45000	2800	12000	2000	8500	< 10	
RS-5	9/16/98	227.61	15.80	211.81	49000	1400	7500	1700	6600	< 5	
RS-5	11/24/98	227.61	16.64	210.97	89000	5300	15000	2800	13000	< 10	
RS-5	2/23/99	227.61	12.36	215.25	19000	1900	11000	2500	4600	< 25	
RS-5	5/5/99	227.61	12.78	214.83	78000	2000	10000	3000	15000	540	
RS-5***	8/26/99	227.61	16.06	211.55	35000	870	4000	1900	8300	< 1	
RS-5	11/10/99	227.61	17.54	210.07	40000	1000	5600	1800	8100	< 0.5	
RS-5	2/9/00	227.61	16.31	211.3	46000	1400	6900	2700	11000	< 0.5	
RS-5	6/30/00	227.61	15.15	212.46	37000	810	5200	2200	9100	< 2.5	
RS-5	8/8/00	227.61	16.10	211.51	14000	330	500	1400	6500	< 0.5	
RS-5	11/16/00	227.61	17.38	210.23	23000	430	2300	1100	4800	< 0.5	
RS-5	3/8/01	227.61	27.72	199.89	11000	360	260	140	1500	2.6	
RS-5	5/31/01	227.61	22.96	204.65	7500	26	11	38	470	< 5	
RS-5	12/18/01	227.61	15.61	212	12000	610	1200	100	1500	< 5	
RS-5	2/19/02	227.61	14.80	212.81	22000	460	1700	680	4000	< 5	
RS-5	5/7/02	227.61	31.77	195.84	700	150	10	19	67	5.2	
RS-5	8/6/02	227.61	31.77	195.84	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
RS-5	11/5/02	227.61	31.77	195.84	12000	150	360	21	890	< 2	
RS-5	12/12/02	227.61	21.53	206.08							
RS-5	3/13/03	227.61	36.70	190.91	240	5.5	1.9	2.3	9.6	1.4	
RS-5	5/6/03	227.61	14.52	213.09							
RS-5	8/13/03	227.61	31.77	195.84	310	1.4	< 0.5	1	2.9	< 0.5	
RS-5	11/20/03	227.61	32.00	195.61	17000	150	720	240	1800	0.72	
RS-5	1/22/04	227.61	25.30	202.31							
RS-5	3/30/04	227.61	21.90	205.71	4000	370	59	13	380	2.6	
RS-5	6/10/04	227.61	35.00	192.61	120	7	0.88	1.3	4.3	1.3	
RS-5	9/28/04	227.61	19.05	208.56	2600	110	89	75	56	< 0.5	
RS-5	12/8/04	227.61	25.00	202.61	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
RS-5	3/23/05	227.61	26.05	201.56	7400	890	280	180	940	5.1	

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	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	MTBE
						(UG/L) (1.5)	(UG/L) (150)	(UG/L) (300)	(UG/L) (1800)	(UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
RS-6	12/14/89	227.22	22.52	204.7	11000	1400	1700	160	860	
RS-6	2/91	227.22	FLOATING PRODUCT			95000	4200	4200	650	3700
RS-6	6/91	227.22								
RS-6	9/91	227.22	FLOATING PRODUCT							
RS-6	12/91	227.22			64000	3700	2300	730	4100	
RS-6	11/9/92	227.22	19.43	207.79	19000	1600	710	500	1600	
RS-6	4/7/94	227.22	14.42	212.8	16000	1200	1300	290	1100	
RS-6	6/19/94	227.22	14.45	212.77	23000	1300	2200	590	2200	
RS-6	9/17/94	227.22	19.52	207.7	24000	630	790	250	1100	
RS-6	3/12/95	227.22	8.90	218.32	3200	450	13	82	230	
RS-6	10/4/95	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	9/2/97	227.22	16.35	210.87	940	34	71	9	55	< 0.5
RS-6	11/24/97	227.22	15.72	211.5	490	9	6	1	7	< 0.5
RS-6	2/25/98	227.22	6.26	220.96	1400	22	47	5	52	< 0.5
RS-6***	7/8/98	227.22	11.41	215.81	1500	83	9	84	2	<10
RS-6	7/30/98	227.22			<50	<0.5	<0.5	<0.5	<1	
RS-6	9/16/98	227.22	13.42	213.8	990	23	<0.5	<0.5	<1	*1
RS-6	11/24/98	227.22	15.91	211.31	3400	5.3	<0.5	<0.5	14	<0.5
RS-6	2/23/99	227.22	7.00	220.22	1000	3.4	3.2	1.6	7.3	<0.5
RS-6	5/5/99	227.22	10.29	216.93	1100	50	10	80	15	2
RS-6***	8/26/99	227.22	13.72	213.5	690	44	2.5	30	31	<5
RS-6	11/10/99	227.22	13.90	213.32	1800	2	2	0.9	16	< 0.5
RS-6	2/9/00	227.22	12.77	214.45	410	3	3	4	7	< 0.5
RS-6	6/30/00	227.22	12.69	214.53	660	7	2	5	6	< 0.5
RS-6	8/8/00	227.22	14.72	212.5	660	2	3	2	6	< 0.5
RS-6	11/16/00	227.22	15.28	211.94	560	1	2	1	5	< 0.5
RS-6	3/8/01	227.22	10.10	217.12	2200	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	5/31/01	227.22	12.96	214.26	630	<0.5	<0.5	<0.5	<0.5	<5
RS-6	12/18/01	227.22	10.88	216.34	56	0.53	<0.5	<0.5	0.56	<0.5
RS-6	2/19/02	227.22	11.08	216.14	<50	<0.5	<0.5	0.6	<0.5	<0.5
RS-6	5/7/02	227.22	12.31	214.91	240	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	8/6/02	227.22	14.23	212.99	130	<0.5	<0.5	<0.5	<0.5	3
RS-6	11/5/02	227.22	17.99	209.23	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	12/12/02	227.22	17.57	209.65						
RS-6	3/13/03	227.22	11.82	215.4	120	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	5/6/03	227.22	10.10	217.12	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	8/13/03	227.22	13.88	213.34	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	11/20/03	227.22	18.62	208.6	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	1/22/04	227.22	11.24	215.98						
RS-6	3/30/04	227.22	10.72	216.5	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	6/10/04	227.22	13.52	213.7	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	9/28/04	227.22	17.95	209.27	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	12/8/04	227.22	14.80	212.42	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-6	3/23/05	227.22	7.62	219.6	<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 AMSL)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLEMES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
RS-7	12/14/89	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	11/9/92	195.99	4.62	191.37	81000	12000	16000	1900	13000	
RS-7	4/7/94	195.99	4.03	191.96	74000	16000	16000	1400	8500	
RS-7	6/19/94	195.99	4.07	191.92	83000	22000	19000	1500	9500	
RS-7	9/17/94	195.99	4.05	191.94	270000	13000	15000	2100	1100	
RS-7	3/12/95	195.99	3.72	192.27	35000	5100	560	6300	3600	
RS-7	10/4/95	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	9/2/97	195.99	3.96	192.03	28000	6100	2800	950	3800	<50
RS-7	11/24/97	195.99	3.76	192.23	18000	4300	5900	600	2900	<0.5 *
RS-7	2/25/98	195.99	3.70	192.29	13000	4300	7100	1100	5800	<0.5 *
RS-7**	7/8/98	195.99	3.76	192.23	45000	10000	3400	2000	8000	<10 *
RS-7	7/30/98	195.99			72000	12000	2100	2000	9100	
RS-7	9/16/98	195.99	3.83	192.16	5000	6500	160	<2.5	500	<5 *
RS-7	11/24/98	195.99	3.77	192.22	19000	2100	1100	500	2100	<0.5
RS-7	2/23/99	195.99	3.70	192.29	83000	6500	9900	1200	7000	<10
RS-7	5/5/99	195.99	3.88	192.11	47000	7400	4800	1300	7400	540
RS-7***	8/26/99	195.99	4.16	191.83	15000	3400	91	950	970	<5
RS-7	11/10/99	195.99	4.12	191.87	10000	2900	170	630	1200	<0.5
RS-7	2/9/00	195.99	3.98	192.01	9400	1400	120	480	600	<0.5
RS-7	6/30/00	195.99	4.04	191.95	8200	3300	190	430	540	<0.5
RS-7	8/8/00	195.99	4.06	191.93	11000	2300	150	430	520	<0.5
RS-7	11/16/00	195.99	4.04	191.95	5400	1500	40	240	200	<0.5
RS-7	3/8/01	195.99	3.94	192.05	12000	3300	260	480	850	17 ****
RS-7	5/31/01	195.99	4.01	191.98	10000	1900	120	320	620	<100 ****
RS-7	12/18/01	195.99	4.81	191.18	2700	450	21	86	128	2.3 ****
RS-7	2/19/02	195.99	3.91	192.08	20000	2600	360	570	1900	11 ****
RS-7	5/7/02	195.99	3.97	192.02	9200	1400	120	360	780	6.6 ****
RS-7	8/6/02	195.99	4.06	191.93	8300	1300	71	250	480	<10 ****
RS-7	11/5/02	195.99	4.11	191.88	9300	1500	90	330	680	<10 ****
RS-7	12/12/02	195.99	4.13	191.86						
RS-7	3/13/03	195.99	4.02	191.97	5500	990	51	180	330	6.1 ****
RS-7	5/6/03	195.99	3.98	192.01	4800	740	36	160	310	4.7 ****
RS-7	8/13/03	195.99	4.09	191.9	9400	1300	65	310	620	6.1 ****
RS-7	11/20/03	195.99	4.10	191.89	4800	700	13	110	110	<5 ****
RS-7	1/22/04	195.99	4.12	191.87						
RS-7	3/30/04	195.99	4.05	191.94	3800	540	33	140	210	3.4 ****
RS-7	6/10/04	195.99	4.12	191.87	4000	740	22	82	130	2.8 ****
RS-7	9/28/04	195.99	4.18	191.81	5000	640	20	110	130	2.8 ****
RS-7	12/8/04	195.99	3.92	192.07	3700	290	18	130	190	0.56 ****
RS-7	3/23/05	195.99	4.00	191.99	4600	220	17	100	170	2.4 ****

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)	XYLEMES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
RS-8	12/14/89									
RS-8	09/04/96									
RS-8	12/11/96									
RS-8	2/21/97									
RS-8	5/28/97									
RS-8	9/2/97									
RS-8	11/24/97									
RS-8	2/25/98									
RS-8	7/8/98									
RS-8	9/16/98									
RS-8	11/24/98									
RS-8	2/23/99									
RS-8	5/5/99									
RS-8***	8/26/99	214.67	7.25	207.42	160000	24000	35000	4200	24000	<5
RS-8	11/10/99	214.67	8.69	205.98	150000	21000	29000	3000	14000	<0.5
RS-8	2/9/00	214.67	7.23	207.44	14000	1900	3200	270	2300	<0.5
RS-8	6/30/00	214.67	3.99	210.68	6400	570	870	150	770	<0.5
RS-8	8/8/00	214.67	7.52	207.15	100000	24000	40000	2300	9900	<0.5
RS-8	11/16/00	214.67	6.14	208.53	110000	14000	21000	2100	9600	<20
RS-8	3/8/01	214.67	9.40	205.27	10000	740	840	220	990	<2
RS-8	5/31/01	214.67	6.83	207.84	730	11	29	4.2	31	<5
RS-8	12/18/01	214.67	7.14	207.53	4500	230	370	77	750	<0.5
RS-8	2/19/02	214.67	7.69	206.98	780	33	21	5.1	45	<0.5
RS-8	5/7/02	214.67	7.82	206.85	24000	1500	1800	830	2700	<10
RS-8	8/6/02	214.67	13.46	201.21		0.04	feet floating product			
RS-8	11/5/02	214.67	13.96	200.71		0.40	feet floating product			
RS-8	12/12/02	214.67	14.38	200.29		0.08	feet floating product			
RS-8	3/13/03	214.67	10.99	203.68	90000	1100	14000	2500	12000	<50
RS-8	5/6/03	214.67	5.35	209.32	1600	6.7	46	21	170	<0.5
RS-8	8/13/03	214.67	11.96	202.71	100000	1200	10000	2500	13000	<50
RS-8	11/21/03	214.67	12.30	202.37	100000	1700	10000	1700	12000	<25
RS-8	1/22/04	214.67	9.63	205.04						
RS-8	3/30/04	214.67	8.70	205.97	18000	69	110	130	1200	<5
RS-8	6/10/04	214.67	10.65	204.02	33000	210	350	360	2300	<5
RS-8	9/28/04	214.67	9.00	205.67	6000	59	20	100	170	<1
RS-8	12/8/04	214.67	4.50	210.17	1100	<0.5	<0.5	<0.5	0.66	<0.5
RS-8	3/23/05	214.67	3.65	211.02	<50	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 1

GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABORATORY RESULTS FROM WATER SAMPLES  
DESERET 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)	XYLEMES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
RS-9	12/14/89									
RS-9***	09/04/96									
RS-9***	12/11/96									
RS-9***	2/21/97									
RS-9***	5/28/97									
RS-9***	9/2/97									
RS-9***	11/24/97									
RS-9***	2/25/98									
RS-9***	7/8/98									
RS-9***	9/16/98									
RS-9***	11/24/98									
RS-9***	2/23/99									
RS-9***	5/5/99									
RS-9***	8/26/99	195.63	7.46	188.17	17000	3500	1200	360	1600	180
RS-9	11/10/99	195.63	7.91	187.72	2800	520	62	46	130	<0.5
RS-9	2/9/00	195.63	6.09	189.54	3400	650	74	64	130	<0.5
RS-9	6/30/00	195.63	6.77	188.86	3000	600	79	74	120	<0.5
RS-9	8/8/00	195.63	7.32	188.31	4900	500	430	160	530	<0.5
RS-9	11/16/00	195.63	6.33	189.3	3000	350	220	90	220	<0.5
RS-9	3/8/01	195.63	4.93	190.7	<50	3.4	<0.5	<0.5	<0.5	<0.5
RS-9	5/31/01	195.63	4.01	191.62	510	96	6	6.2	9.1	5.5
RS-9	12/18/01	195.63	4.81	190.82	210	11	1.8	3.9	7.6	<0.5
RS-9	2/19/02	195.63	4.99	190.64	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-9	5/7/02	195.63	6.08	189.55	130	7.9	<0.5	1.2	<0.5	0.67
RS-9	8/6/02	195.63	6.93	188.7	380	29	1.2	2.3	2.9	3.1
RS-9	11/5/02	195.63	7.53	188.1	1800	240	9	27	110	8.6
RS-9	12/12/02	195.63	7.23	188.4						
RS-9	3/13/03	195.63	5.73	189.9	410	30	3	6	9.5	3.3
RS-9	5/6/03	195.63	4.83	190.8	910	72	15	9.2	26	5.5
RS-9	8/13/03	195.63	8.24	187.39	810	20	<0.5	2.4	1.6	3.6
RS-9	11/20/03	195.63	6.99	188.64	3600	920	5.3	6.1	20	30
RS-9	1/22/04	195.63	5.43	190.2						
RS-9	3/30/04	195.63	5.07	190.56	1900	360	9.3	19	48	21
RS-9	6/10/04	195.63	6.18	189.45	950	180	3	8.4	14	8.7
RS-9	9/28/04	195.63	6.94	188.69	4900	1800	5.9	5	16	31
RS-9	12/8/04	195.63	4.42	191.21	74	<0.5	<0.5	<0.5	<0.5	<0.5
RS-9	3/23/05	195.63	4.10	191.53	540	99	1.1	1.1	4.5	3.6

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)
<b>(CALIFORNIA PUBLIC HEALTH GOAL)</b>										
RS-10	12/14/89									
RS-10***	09/04/96									
RS-10***	12/11/96									
RS-10***	2/21/97									
RS-10***	5/28/97									
RS-10***	9/2/97									
RS-10***	11/24/97									
RS-10***	2/25/98									
RS-10***	7/8/98									
RS-10***	9/16/98									
RS-10***	11/24/98									
RS-10***	2/23/99									
RS-10***	5/5/99									
RS-10***	8/26/99	208.46	3.76	204.7	5100	160	340	190	1000	32*
RS-10	11/10/99	208.46	3.83	204.63	500	7	2	2	4	<0.5
RS-10	2/9/00	208.46	0.31	208.15	100	4	3	1	6	<0.5
RS-10	6/30/00	208.46	2.22	206.24	640	5	2	4	2	<0.5
RS-10	8/8/00	208.46	2.46	206	460	2	2	2	7	<0.5
RS-10	11/16/00	208.46	2.46	206	360	1	1	2	<1	<0.5
RS-10	3/8/01	208.46	2.82	205.64	53	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	5/31/01	208.46	4.93	203.53	210	<0.5	<0.5	1.5	5	<5
RS-10	12/18/01	208.46	2.10	206.36	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	2/19/02	208.46	2.29	206.17	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	5/7/02	208.46	2.92	205.54	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	8/6/02	208.46	4.11	204.35	<50	<0.5	0.7	<0.5	1.6	<0.5
RS-10	11/5/02	208.46	4.05	204.41	54	<0.5	1.2	<0.5	1.1	<0.5
RS-10	12/12/02	208.46	6.81	201.65						
RS-10	3/13/03	208.46	3.00	205.46	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	5/6/03	208.46	2.55	205.91	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	8/13/03	208.46	3.68	204.78	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	11/20/03	208.46	4.45	204.01	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	1/22/04	208.46								
RS-10	3/30/04	208.46	3.05	205.41	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	6/10/04	208.46	4.85	203.61	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	9/28/04	208.46	6.75	201.71	<50	4.6	<0.5	<0.5	<0.5	<0.5
RS-10	12/8/04	208.46	1.74	206.72	<50	<0.5	<0.5	<0.5	<0.5	<0.5
RS-10	3/23/05	208.46	1.85	206.61	<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)										
R1	12/14/89									
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	9/2/97	227.69	14.98	212.71	4400	320	6	340	72	20
R1	11/24/97	227.69	14.06	213.63	100	39	1	18	10	<0.5
R1	2/25/98	227.69	8.93	218.76	1200	400	8	13	150	<0.5
R1	7/8/98	227.69	11.36	216.33	68	14	<0.5	<0.5	<1	<1
R1	9/16/98	227.69	13.30	214.39	16000	3400	92	<0.5	410	<1
R1	11/24/98	227.69	10.72	216.97	340	19	1.6	35	9.7	<0.5
R1	2/23/99	227.69	9.34	218.35	60	16	0.6	5.6	1.2	<0.5
R1	5/5/99	227.69	11.30	216.39	1300	290	3	150	1	15
R1	8/26/99	227.69	13.97	213.72	6500	630	<0.5	1300	<1	<1
R1	11/10/99	227.69	13.73	213.96	480	12	4	32	9	<0.5
R1	2/9/00	227.69	13.10	214.59	<50	8	<0.5	1	<1	<0.5
R1	6/30/00	227.69	13.42	214.27	2600	350	35	1900	220	<0.5
R1	8/8/00	227.69	14.25	213.44	10000	910	76	2100	390	<0.5
R1	3/8/01	227.69	13.72	213.97	<50	<0.5	<0.5	<0.5	<0.5	<0.5
R1	3/8/01	227.69	13.72	213.97	<50	<0.5	<0.5	<0.5	<0.5	<0.5
R1	5/31/01	227.69	15.77	211.92	3800	400	16	470	67	<5
R1	12/18/01	227.69	9.90	217.79	<50	<0.5	<0.5	1.5	<0.5	<0.5
R1	2/19/02	227.69	10.86	216.83	<50	<0.5	<0.5	<0.5	<0.5	<0.5
R1	5/7/02	227.69	16.17	211.52	53	3.3	<0.5	1	<0.5	<0.5
R1	8/6/02	227.69	16.83	210.86	<50	<0.5	<0.5	<0.5	<0.5	<0.5
R1	11/5/02	227.69	16.92	210.77	dry, groundwater deeper than 210.77 foot elevation					
R1	12/12/02	227.69	16.94	210.75						
R1	3/13/03	227.69	15.69	212	<50	4.5	<0.5	<0.5	<0.5	<0.5
R1	5/6/03	227.69	10.75	216.94	<50	<0.5	<0.5	<0.5	<0.5	<0.5
R1	8/13/03	227.69	16.04	211.65	430	17	<0.5	1.4	1.1	<0.5
R1	11/20/03	227.69	dry							
R1	1/22/04	227.69	14.40	213.29						
R1	3/30/04	227.69	14.05	213.64	<50	2.8	<0.5	<0.5	<0.5	<0.5
R1	6/10/04	227.69	15.85	211.84	3200	85	2.6	38	8.3	<0.5
R1	9/28/04	227.69	15.06	212.63	2000	35	2.2	12	4.4	<0.5
R1	12/8/04	227.69	9.70	217.99	<50	<0.5	<0.5	<0.5	<0.5	<0.5
R1	3/23/05	227.69	8.58	219.11	<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 ELEVATION (FEET AMSL)	TPH-G	BENZENE	TOLUENE	ETHYL- BENZENE	XYLENES	MTBE	
			(UG/L) (1.5)	(UG/L) (150)	(UG/L) (300)	(UG/L) (1800)	(UG/L) (13)			
(CALIFORNIA PUBLIC HEALTH GOAL)										
R2	12/14/89									
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	9/2/97	230.68	14.15	216.52	30000	12000	330	1000	790	47
R2	11/24/97	230.68	14.71	215.97	41000	15000	830	1500	4200	<0.5
R2	2/25/98	230.68	7.39	223.29	800	400	<0.5	<0.5	15	<0.5
R2	7/8/98	230.68	11.27	219.41	290	31	<0.5	1	<1	2
R2	9/16/98	230.68	13.73	216.95	6600	11000	24	<0.5	35	<1
R2	11/24/98	230.68	11.67	219.01	6100	<0.5	36	<0.5	21	<0.5
R2	2/23/99	230.68	7.55	223.13	1100	310	3	2	26	<0.5
R3	5/5/99	230.68	10.89	219.79	11000	5300	7	36	7	8
R2	8/26/99	227.28	13.14	214.14	6700	940	33	190	240	<1
R2	11/10/99	227.28	14.42	212.86	5100	2600	160	1800	8100	<0.5
R2	2/9/00	227.28	12.45	214.83	4700	1400	110	130	340	<0.5
R2	6/30/00	227.28	12.94	214.34	7100	3200	110	300	480	<0.5
R2	8/8/00	227.28	13.58	213.7	30000	13000	250	1000	2700	<0.5
R2	11/16/00	227.28	14.33	212.95	44000	17000	230	790	3600	<0.5
R2	3/8/01	227.28	11.15	216.13	2300	640	8.6	61	170	<2
R2	5/31/01	227.28	13.38	213.9	2200	580	12	72	100	<25
R2	12/18/01	227.28	12.35	214.93	4900	2000	120	44	280	<5
R2	2/19/02	227.28	11.32	215.96	2100	1200	<5	14	<5	<5
R2	5/7/02	227.28	13.15	214.13	2500	660	7.5	170	26	<2.5
R2	8/6/02	227.28	14.51	212.77	6300	1800	150	220	340	<5
R2	11/5/02	227.28	15.46	211.82	11000	3000	140	57	620	<20
R2	12/12/02	227.28	15.70	211.58						
R2	3/13/03	227.28	12.95	214.32	580	200	1.2	5.4	3.8	<1
R2	5/6/03	227.28	11.14	216.14	70	25	<0.5	<0.5	1.3	<0.5
R2	8/13/03	227.28	14.01	213.27	1800	340	8	49	12	<2
R2	11/20/03	227.28	15.35	211.93	8000	1400	46	57	490	<5
R2	1/22/04	227.28	12.10	215.18						
R2	3/30/04	227.28	11.48	215.8	<50	3	<0.5	<0.5	<0.5	<0.5
R2	6/10/04	227.28	13.95	213.33	77	7.7	<0.5	<0.5	<0.5	<0.5
R2	9/28/04	227.28	14.80	212.48	500	120	2	25	2.7	0.71
R2	12/8/04	227.28	12.25	215.03	100	8.5	<0.5	<0.5	5	<0.5
R2	3/23/05	227.28	7.82	219.46	57	8.4	<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)	XYLEMES (UG/L) (1800)	MTBE (UG/L) (13)
(CALIFORNIA PUBLIC HEALTH GOAL)										
R3	12/14/89									
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	9/2/97	230.32	10.86	219.46	<50	4	<0.5	<0.5	<1	<0.5
R3	11/24/97	230.32	11.20	219.12	not enough water to sample. No sample					
R3	2/25/98	230.32	3.42	226.9	<50	<0.5	<0.5	<0.5	<1	<0.5
R3	7/8/98	230.32	8.78	221.54	140	<0.5	<0.5	4	24	<1
R3	9/16/98	230.32	10.38	219.94	<50	<0.5	<0.5	<0.5	<1	<1
R3	11/24/98	230.32	11.12	219.2	not enough water to sample. No sample					
R3	2/23/99	230.32	3.95	226.37	<50	<0.5	<0.5	<0.5	<1	<0.5
R3	5/5/99	230.32	7.58	222.74	80	9	<0.5	<0.5	<1	6
R3	8/26/99	227.25	10.76	216.49	<50	2	<0.5	<0.5	<1	1
R3	11/10/99	227.25	11.09	216.16	140	3	4	1	11	<0.5
R3	2/9/00	227.25	8.76	218.49	<50	2	<0.5	<0.5	<1	<0.5
R3	6/30/00	227.25	9.67	217.58	<50	0.7	<0.5	1	1	<0.5
R3	8/8/00	227.25	10.44	216.81	72	<0.5	<0.5	<0.5	<1	<0.5
R3	11/16/00	227.25	10.26	216.99	110	4	1	<0.5	3	<0.5
R3	3/8/01	227.25	6.54	220.71	<50	<0.5	<0.5	<0.5	<0.5	****
R3	5/31/01	227.25	10.01	217.24	<50	<0.5	<0.5	<0.5	<0.5	****
R3	12/18/01	227.25	6.79	220.46	<50	<0.5	<0.5	<0.5	<0.5	****
R3	2/19/02	227.25	7.86	219.39	<50	<0.5	<0.5	<0.5	<0.5	****
R3	5/7/02	227.25	9.20	218.05	<50	<0.5	<0.5	<0.5	<0.5	****
R3	8/6/02	227.25	10.62	216.63	<50	<0.5	<0.5	<0.5	<0.5	****
R3	11/5/02	227.25	11.07	216.18	<50	<0.5	<0.5	<0.5	<0.5	****
R3	12/12/02	227.25	11.28	215.97						
R3	3/13/03	227.25	8.69	218.56	<50	<0.5	<0.5	<0.5	<0.5	****
R3	5/6/03	227.25	8.02	219.23	<50	<0.5	<0.5	<0.5	<0.5	****
R3	8/13/03	227.25	dry		DRY					
R3	11/20/03	227.25	dry		DRY					
R3	1/22/04	227.25	7.30	219.95						
R3	3/30/04	227.25	7.85	219.4	<50	<0.5	<0.5	<0.5	<0.5	****
R3	6/10/04	227.25	10.30	216.95	<50	<0.5	<0.5	<0.5	<0.5	****
R3	9/28/04	227.25	dry		DRY					
R3	12/8/04	227.25	9.00	218.25	<50	<0.5	<0.5	<0.5	<0.5	****
R3	3/23/05	227.25	4.90	222.35	<50	<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)	
T 1	12/14/89										
T 1	09/04/96										
T 1	12/11/96										
T 1	2/21/97										
T 1	5/28/97										
T 1	9/2/97										
T 1	11/24/97										
T 1	2/25/98										
T 1	7/8/98										
T 1	9/16/98										
T 1	11/24/98										
T 1	3/23/99										
T 1	5/5/99										
T 1***	8/26/99	195.11	2.44	192.67	40000	7200	5000	950	8100	53	*
T 1	11/10/99	195.11	2.23	192.88	46000	5600	3600	910	6500	<0.5	
T 1	2/9/00	195.11	2.22	192.89	35000	2900	5700	720	6600	<0.5	
T 1	6/30/00	195.11	2.22	192.89	30000	3400	3200	950	4600	<5	
T 1	8/8/00	195.11	2.73	192.38	8900	1600	760	260	870	<5	
T 1	11/16/00	195.11	2.72	192.39	4000	1300	92	80	290	<0.5	
T 1	3/8/01	195.11	2.12	192.99	25000	4400	3400	770	3200	26	****
T 1	5/31/01	195.11	2.30	192.81	8900	940	210	340	1500	<50	****
T 1	12/18/01	195.11	2.20	192.91	46000	3700	5500	1200	5300	24	****
T 1	2/19/02	195.11	1.96	193.15	64000	8600	6000	1700	6800	55	****
T 1	5/7/02	195.11	2.22	192.89	41000	9200	910	2000	6200	62	****
T 1	8/6/02	195.11	2.32	192.79	28000	5500	240	1300	2600	32	****
T 1	11/5/02	195.11	2.52	192.59	11000	3000	65	660	610	18	****
T 1	12/12/02	195.11	2.55	192.56							
T 1	3/13/03	195.11	2.23	192.88	930	150	17	23	60	2.6	****
T 1	5/6/03	195.11	2.37	192.74	6800	1000	230	310	820	10	****
T 1	8/13/03	195.11	2.41	192.7	9600	1500	110	440	910	10	****
T 1	11/20/03	195.11	2.50	192.61	10000	1800	120	520	510	11	****
T 1	1/22/04	195.11									
T 1	3/30/04	195.11			15000	1800	660	610	2000	8.6	****
T 1	6/10/04	195.11	2.40	192.71	5500	570	2	240	130	2.7	****
T 1	9/28/04	195.11	2.52	192.59	8700	2600	100	450	15	15	****
T 1	12/8/04	195.11	1.96	193.15	2900	820	32	14	47	6.9	****
T 1	3/23/05	195.11	car		2800	220	3	120	76	1.7	****
T 2	1/22/04	195.3	2.54	192.76							
T 2	3/30/04	195.3	2.50	192.8							
T 2	6/10/04	195.3	2.60	192.?							
T 2	9/23/04	195.3	car								
T 2	12/8/04	195.3	2.04	193.26							
T 2	3/23/05	195.3	car								
T 3	1/22/04	202.38									
T 3	6/10/04	202.38	9.80	192.58							
T 3	9/28/04	202.38	9.90	192.48							
T 3	12/8/04	202.38	9.24	193.14							
T 3	3/23/05	202.38	car								
T4	1/22/04	197.48	4.70	192.78							
T4	3/30/04	197.48	4.66	192.82							
T4	6/10/04	197.48	4.76	192.72							
T4	9/28/04	197.48	4.86	192.62							
T4	12/8/04	197.48	4.21	193.27							
T4	3/23/05	197.48	4.35	193.13	see T1 for sample results						

TABLE 1

GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABORATORY RESULTS FROM WATER SAMPLES  
DESERET 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 ELEVATION (FEET AMSL)	TPH-G	BENZENE (UG/L) (1.5)	TOLUENE (UG/L) (150)	ETHYL- BENZENE (UG/L) (300)	XYLEMES (UG/L) (1800)	MTBE (UG/L) (13)	
<b>(CALIFORNIA PUBLIC HEALTH GOAL)</b>										
LF 1	1/22/04	226.59	29.12	197.47						
LF 1	3/30/04	226.59	26.45	200.14	<50	<0.5	<0.5	<0.5	<0.5	<0.5
LF 1	6/10/04	226.59	27.57	199.02	<50	<0.5	<0.5	<0.5	<0.5	<0.5
LF 1	9/28/04	226.59	28.72	197.87	<50	<0.5	<0.5	<0.5	<0.5	<0.5
LF 1	12/8/04	226.59	car							
LF 1	3/23/05	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  
\*\*\*\* SAMPLES ANALYZED USING EPA METHOD 8260B



FIGURE 1  
**GEOTRACKER**  
 AREA WELL & LUST MAP  
 DP 793  
 4035 PARK BLVD.  
 OAKLAND, CA  
 27

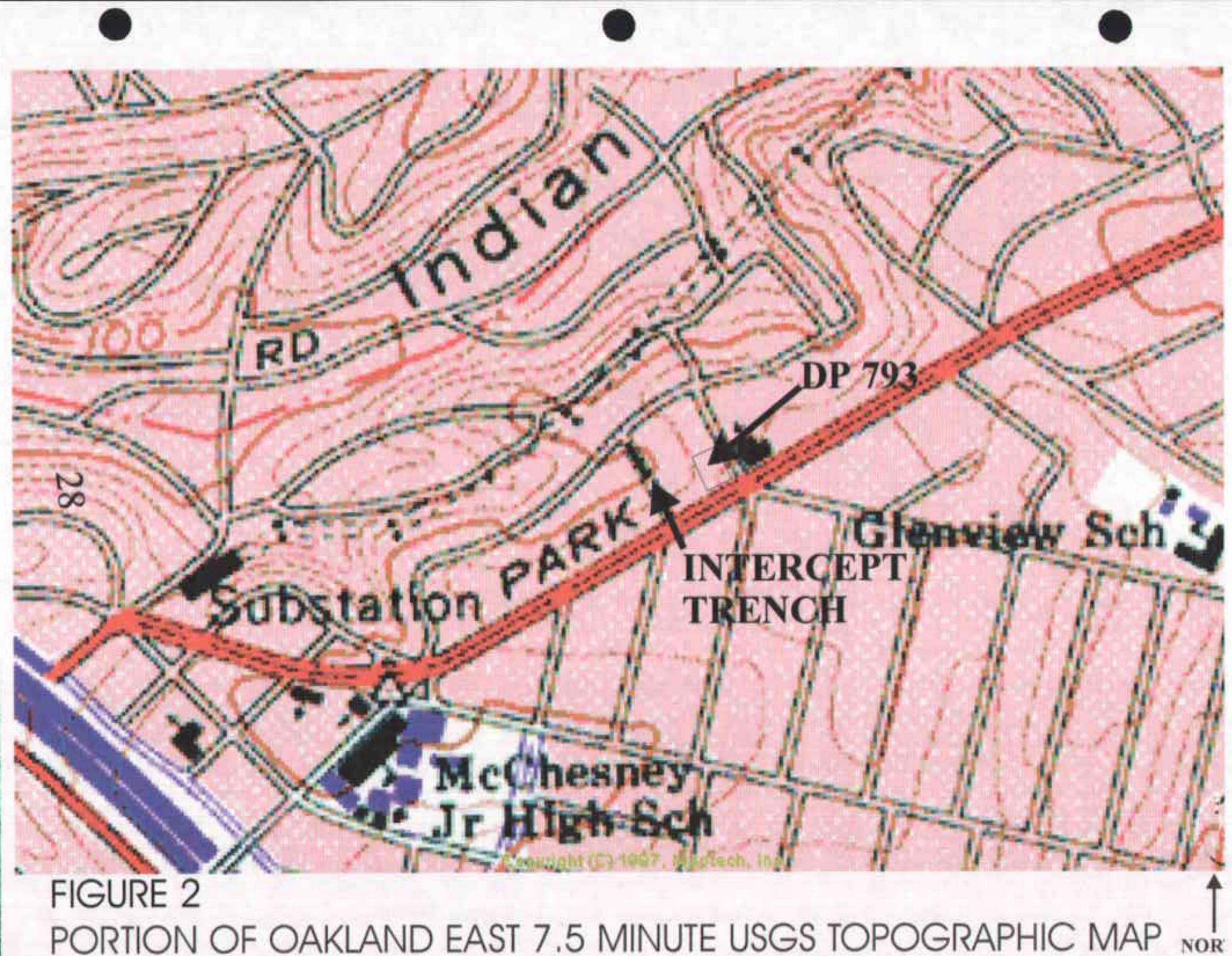
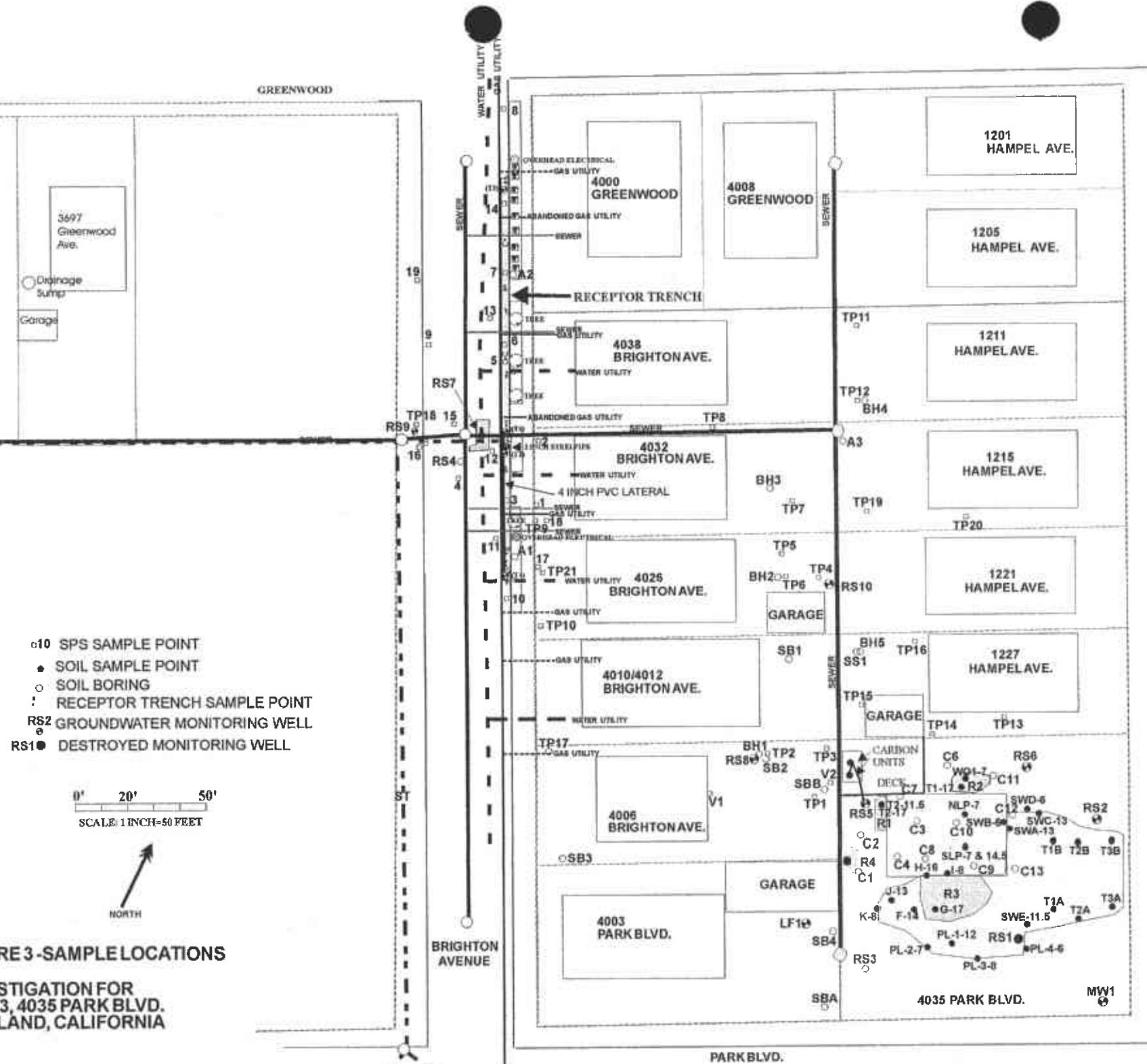


FIGURE 2

PORTION OF OAKLAND EAST 7.5 MINUTE USGS TOPOGRAPHIC MAP

29



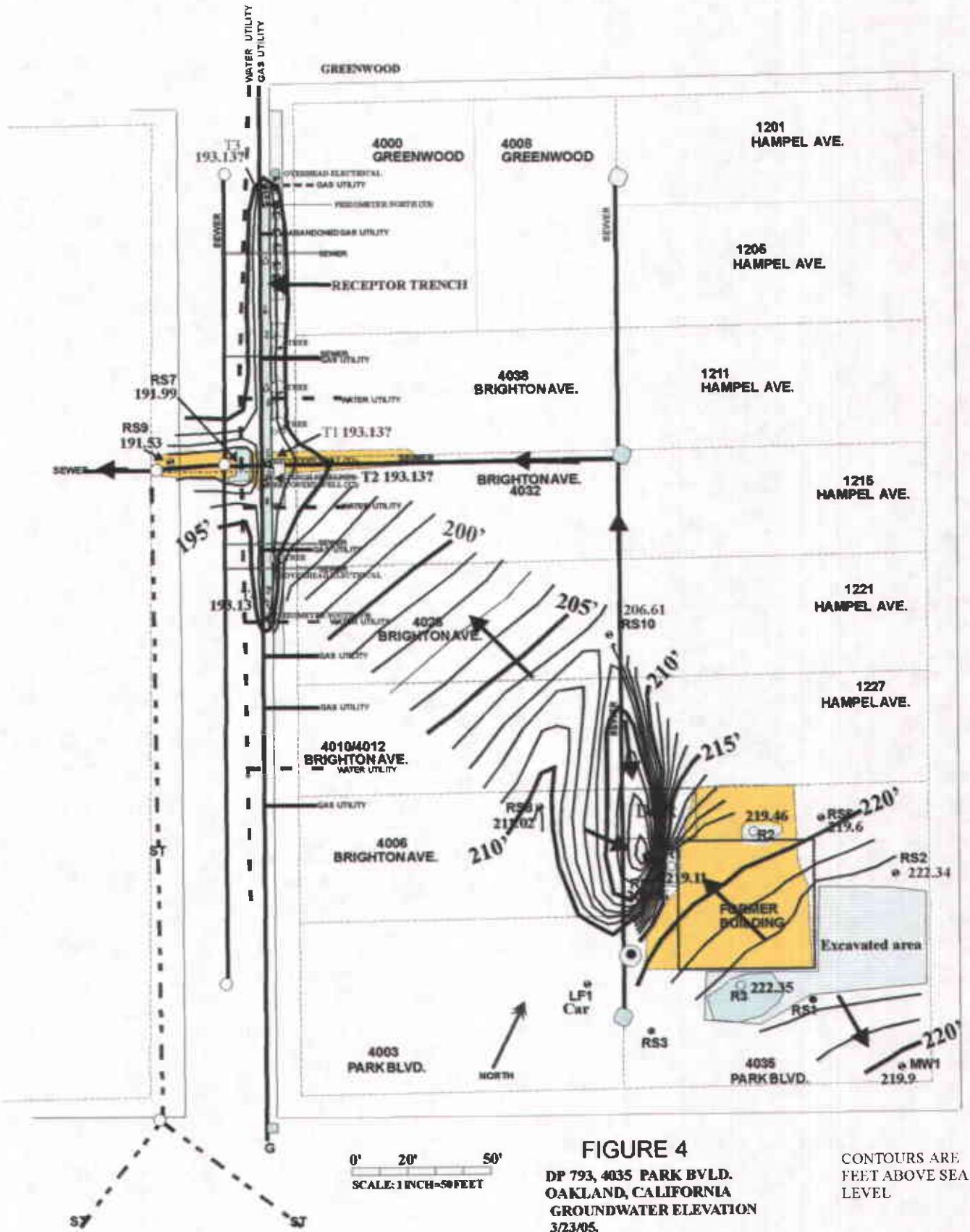
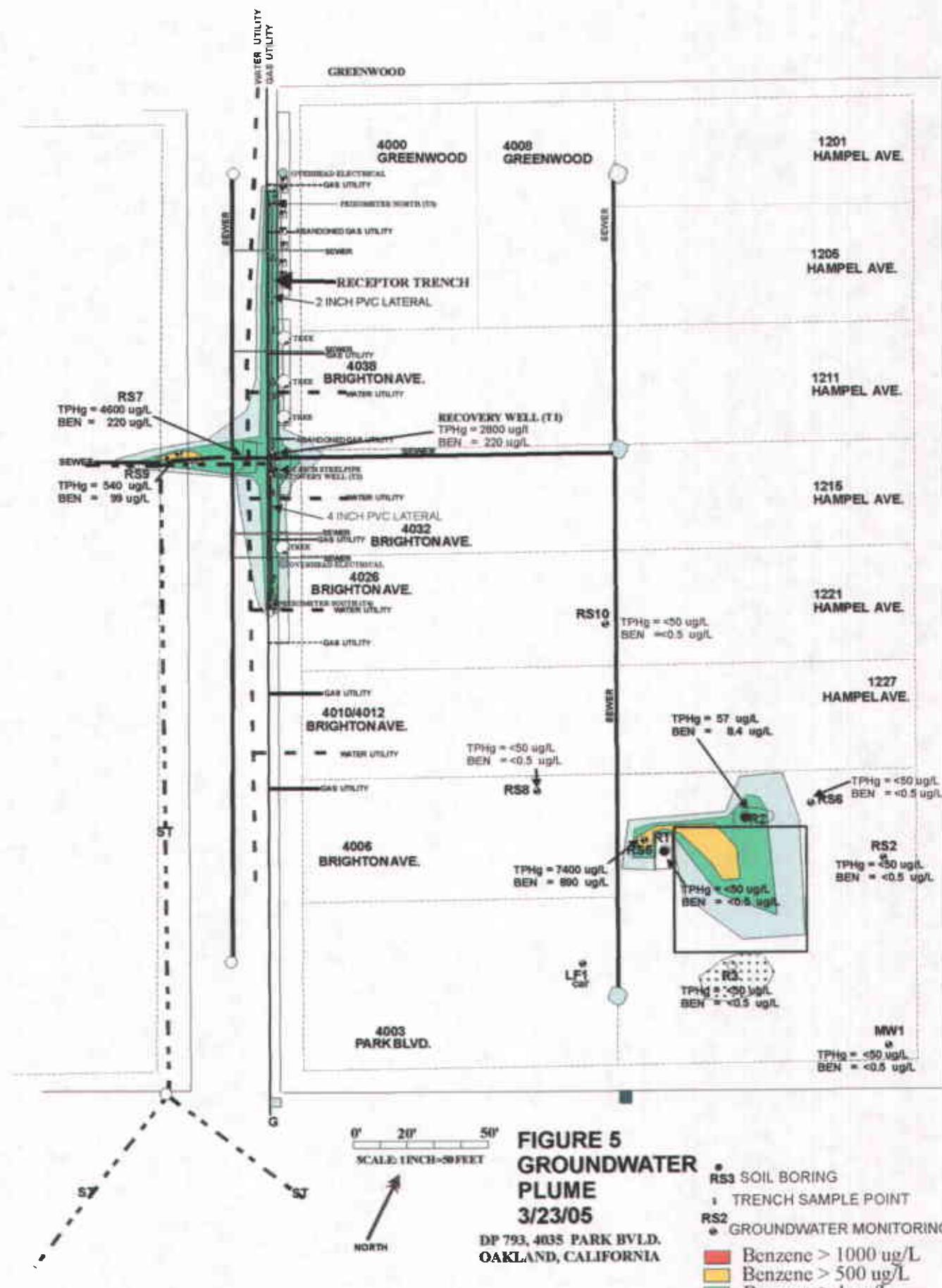


FIGURE 4

DP 793, 4035 PARK BLVD.  
OAKLAND, CALIFORNIA  
GROUNDWATER ELEVATION  
3/23/05.

CONTOURS ARE  
FEET ABOVE SEA  
LEVEL

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



## **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.



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wege@cal.net

WELL SAMPLE DATA SHEET

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

DATE March 23, 2005 START TIME 11:45

WELL ID# MW-01  
CASING ELEVATION, IN FEET 229.5  
CASING TOTAL DEPTH, IN FEET 18.32  
CASING DIAMETER IN INCHES 2"  
DEPTH TO TOP OF FLUID 9.60  
DEPTH TO TOP OF WATER 9.60  
TOP OF WATER ELEVATION \_\_\_\_\_  
PUMP TYPE GRUNDFOS REDIFLOW 2  
DTW METER USED SOLINST MODEL 122

SAMPLE BY CONVERSE

WATER COLUMN, IN FEET 8.72  
G/L PURGE ONE CASING VOLUME 5.46L  
(CASING MULTIPLIERS: 2 INCH = 0.165 g/l FT  
2" = 0.625 L/FT 4 INCH = 0.65 g/l FT  
4" = 2.46 L/FT 6 INCH = 1.47 g/l FT)  
FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)  
FREE PHASE PRODUCT THICKNESS \_\_\_\_\_  
PUMP RATE \_\_\_\_\_

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 (μS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
11:58	17'		1.5	19.1	6.99	390	196		water clear
12:01			3.0	20.2	6.94	391	195		
12:07			9.0	20.8	6.90	387	194		
12:10			12.0	20.9	6.87	392	197		DTW
									13.25

FINAL VOLUME PURGED 13.0

ANALYSIS INCLUDES: 8260B TPHg, BTEX,

MtBE

SAMPLE CONTAINERS 3-HCI PRESERVED

40CC VOA'S

LABORATORY USED KIFF Analytical

SAMPLE ID# MW-01 MW-1

NOTES



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WELL SAMPLE DATA SHEET

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

DATE March 23, 2005 START TIME 10:35:00

WELL ID# RS-02

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 227.39

WATER COLUMN, IN FEET 13.35

CASING TOTAL DEPTH, IN FEET 18.40

G/L PURGE ONE CASING VOLUME 32.84

CASING DIAMETER IN INCHES 4"

(CASING MULTIPLIERS: 2 INCH = 0.165 gal/FT)

DEPTH TO TOP OF FLUID 5.05

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

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

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

DEPTH TO TOP OF WATER 5.05 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.)
10:30	17.0		1.5	18.1	7.07	634	317		water clear
10:38			16.5	19.3	7.06	661	331		water clear
11:03			31.5	19.5	7.06	759	379		
11:10			48.5	19.5	7.07	743	400		
11:14			49.5	19.5	7.07	824	413		
11:18			58.5	19.5	7.07	844	421		
11:21			67.5	19.5	7.07	852	426		
11:24			73.5	19.5	7.07	856	427		

FINAL VOLUME PURGED 75.0 ANALYSIS INCLUDES: 8260B TPHg, BTEX

MtBE

TIME SAMPLED 11:28 SAMPLE CONTAINERS 3-HCI PRESERVED

SAMPLE ID# RS-02 40CC VOA'S LABORATORY USED KIFF Analytical

NOTES \_\_\_\_\_



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WELL SAMPLE DATA SHEET

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

DATE March 23, 2005

START TIME 15:00

WELL ID# RS-05

SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 227.61

WATER COLUMN, IN FEET 7

CASING TOTAL DEPTH, IN FEET 39.20

G/L PURGE ONE CASING VOLUME

CASING DIAMETER IN INCHES 4"

(CASING MULTIPLIERS: 2 INCH = 0.165 gal/ FT)

DEPTH TO TOP OF FLUID 26.05

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 26.05

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

TOP OF WATER ELEVATION

FREE PHASE PRODUCT THICKNESS

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 (μS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
	<i>Flowing</i>								<i>DTW</i>
	<i>Intake rate =</i>		<i>1903025.7</i>						<i>26.05</i>
	<i>6 PSI on 4" 1 Casing</i>								

FINAL VOLUME PURGED *Flowing*

ANALYSIS INCLUDES: 8260B TPHg, BTEX,

MtBE

TIME SAMPLED 15:00

SAMPLE CONTAINERS 3-HCI PRESERVED

SAMPLE ID# RS-05

40CC VOA'S

NOTES

LABORATORY USED KIFF Analytical

*Lab results: TPHg 7400 B 890 T 280 EB 180 X 940 m+BE 5.1*

*Sewer ditchhead 5:15*



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WELL SAMPLE DATA SHEET

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

DATE March 23, 2005 START TIME 9:45

WELL ID# RS-06 SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 227.22 WATER COLUMN, IN FEET 26.44

CASING TOTAL DEPTH, IN FEET 34.06 G/L PURGE ONE CASING VOLUME 65.0

CASING DIAMETER IN INCHES 4" (CASING MULTIPLIERS: 2 INCH = 0.165 g/l FT

DEPTH TO TOP OF FLUID 7.62 2" = 0.625 L/FT 4 INCH = 0.65 g/l FT

DEPTH TO TOP OF WATER 7.62 4" = 2.46 L/FT 6 INCH = 1.47 g/l/FT

TOP OF WATER ELEVATION 7.62 FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

PUMP TYPE GRUNDFOS REDIFLOW 2 FREE PHASE PRODUCT THICKNESS   

DTW METER USED SOLINST MODEL 122 PUMP RATE   

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.)
9:45	330	17	1.7	18.9	7.11	1042	575		clear no odor
10:07			16.7	20.8	7.05	1042	521		
10:16			31.7	20.8	7.02	1042	521		water clear no odor
10:22			40.7	20.6	7.03	1049	524		
									0722
									14.50

FINAL VOLUME PURGED 350 GALLONS ANALYSIS INCLUDES: 8260B TPHg, BTEX,

MtBE

SAMPLE CONTAINERS 3-HCI PRESERVED

40CC VOA'S

LABORATORY USED KIFF Analytical

SAMPLE ID# RS-06

NOTES

*Cetilic pH at 7.0 Selection*



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### WELL SAMPLE DATA SHEET

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

DATE March 23, 2005 START TIME \_\_\_\_\_

WELL ID# RS-07 SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 195.99 WATER COLUMN, IN FEET \_\_\_\_\_

CASING TOTAL DEPTH, IN FEET \_\_\_\_\_ G/L PURGE ONE CASING VOLUME \_\_\_\_\_

CASING DIAMETER IN INCHES 4" (CASING MULTIPLIERS: 2 INCH = 0.165 gal/ FT

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

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

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

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

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

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 (µS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
1435			1.0	15.3	6.95	572	286		clear
1440			3.0	15.4	6.95	462	270		
1445			6.0	15.4	6.95	404	202		cloudy mild odor

FINAL VOLUME PURGED 6 gallons

ANALYSIS INCLUDES: 8260B TPHg, BTEX,

MtBE

SAMPLE CONTAINERS 3-HCI PRESERVED

40CC VOA'S

LABORATORY USED KIFF Analytical

TIME SAMPLED 1445

SAMPLE ID# RS-07

NOTES \_\_\_\_\_



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WELL SAMPLE DATA SHEET

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

DATE March 23, 2005 START TIME 1320

WELL ID# RS-08

CASING ELEVATION, IN FEET 214.67

CASING TOTAL DEPTH, IN FEET 14.5

CASING DIAMETER IN INCHES .2"

DEPTH TO TOP OF FLUID 3.67

DEPTH TO TOP OF WATER 3.67

TOP OF WATER ELEVATION

PUMP TYPE DISPOSABLE BAILER

DTW METER USED SOLINST MODEL 122

SAMPLE BY CONVERSE

WATER COLUMN, IN FEET 10.85

G/L PURGE ONE CASING VOLUME 1.178 g/l

(CASING MULTIPLIERS: 2 INCH = 0.165 g/l/FT

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

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

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

FREE PHASE PRODUCT THICKNESS

PUMP RATE

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.)
1322			1.28	14.1	6.88	395	197		
1326			2.5	13.9	7.10	579	289		
1330			3.5	13.9	7.09	538	269		
1334			4.5	14.0	7.10	560	281		
1340			6.0	14.1	6.97	527	263		Clear no odor

FINAL VOLUME PURGED 6.991

ANALYSIS INCLUDES: 8260B TPHg, BTEX,

MtBE

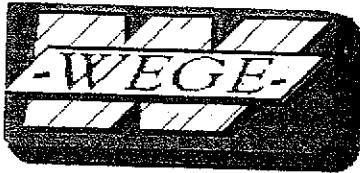
SAMPLE CONTAINERS 3-HCI PRESERVED

40CC VOA'S

LABORATORY USED KIFF Analytical

SAMPLE ID# RS-08

NOTES



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WELL SAMPLE DATA SHEET

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

DATE March 23, 2005

WELL ID# RS-09

CASING ELEVATION, IN FEET 195.63

CASING TOTAL DEPTH, IN FEET 15.50

CASING DIAMETER IN INCHES 2"

DEPTH TO TOP OF FLUID 410

DEPTH TO TOP OF WATER 410

TOP OF WATER ELEVATION

PUMP TYPE GRUNDFOS REDIFLOW 2

DTW METER USED SOLINST MODEL 122

START TIME

SAMPLE BY CONVERSE

WATER COLUMN, IN FEET 11.45

G/L PURGE ONE CASTING VOLUME 1.825

(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)

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

FREE PHASE PRODUCT THICKNESS

PUMP RATE

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 (µS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
14.43			1.0	15.4	6.94	351	17		Clear minerals
14.45			2.5	15.5	6.95	179	88		
14.48			3.5	15.5	6.94	169	84		water muddy
14.50			5.0	15.5	6.93	182	91		
14.55			6.0	15.5	7.02	374	187		

FINAL VOLUME PURGED 62.991

ANALYSIS INCLUDES: 8260B TPH<sub>g</sub>, BTEX,  
MtBE

TIME SAMPLED 14:58

SAMPLE CONTAINERS 3-HCI PRESERVED

SAMPLE ID# RS-09

40CC VOA'S

NOTES

LABORATORY USED KIFF Analytical



**WESTERN**  
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**WELL SAMPLE DATA SHEET**

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

DATE March 23, 2005 START TIME 13:45

WELL ID# RS-10 SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 208.46 WATER COLUMN, IN FEET REMOVED

CASING TOTAL DEPTH, IN FEET  G/L PURGE ONE CASING VOLUME

CASING DIAMETER IN INCHES 2" (CASING MULTIPLIERS: 2 INCH = 0.165 g/l FT

DEPTH TO TOP OF FLUID 1.85 2" = 0.625 L/FT 4 INCH = 0.65 g/l FT

DEPTH TO TOP OF WATER 1.85 4" = 2.46 L/FT 6 INCH = 1.47 g/l FT)

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

PUMP TYPE DISPOSABLE BAILER FREE PHASE PRODUCT THICKNESS

DTW METER USED SOLINST MODEL 122 PUMP RATE

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 (µS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
13:45			1.0	14.8	6.95	350	175		water removed
13:55			5.0	14.8	6.94	309	154		

FINAL VOLUME PURGED 5.21

ANALYSIS INCLUDES: 8260B TPHg, BTEX,

MtBE

TIME SAMPLED 13:56

SAMPLE CONTAINERS 3-HCI PRESERVED

SAMPLE ID# RS-10

40CC VOA'S

NOTES

LABORATORY USED KIFF Analytical



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WELL SAMPLE DATA SHEET

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

DATE March 23, 2005 START TIME \_\_\_\_\_

WELL ID# R-01 SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 227.69 WATER COLUMN, IN FEET \_\_\_\_\_

CASING TOTAL DEPTH, IN FEET 16.80 G/L PURGE ONE CASING VOLUME \_\_\_\_\_

CASING DIAMETER IN INCHES .6" (CASING MULTIPLIERS: 2 INCH = 0.165 g/FT

DEPTH TO TOP OF FLUID 8.55 4" = 2.46 L/FT 4 INCH = 0.65 g/ FT

DEPTH TO TOP OF WATER 8.55 6" = 5.56 L/FT 6 INCH = 1.47 g/FT)

TOP OF WATER ELEVATION \_\_\_\_\_ FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

PUMP TYPE GRUNDFOS REDIFLOW 2 FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

DTW METER USED SOLINST MODEL 122 PUMP RATE \_\_\_\_\_

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.)
16:20			20	16.9	7.10	270			
16:22			5.0	17.8	7.02	271			
16:23			7.5	18.3	7.01	272			
16:24			10	18.5	7.00	270			
16:25			12.5	18.5	7.00	270			
16:26			13.00 Sample						

FINAL VOLUME PURGED 13.00

ANALYSIS INCLUDES: 8260B TPH<sub>g</sub>, BTEX, MtBE

TIME SAMPLED \_\_\_\_\_

SAMPLE CONTAINERS 3-HCI PRESERVED

SAMPLE ID# R-01

40CC VOA'S

NOTES \_\_\_\_\_

LABORATORY USED KIFF Analytical



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### WELL SAMPLE DATA SHEET

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

DATE March 23, 2005 START TIME \_\_\_\_\_  
 WELL ID# R-02 SAMPLE BY CONVERSE  
 CASING ELEVATION, IN FEET 227.28 WATER COLUMN, IN FEET \_\_\_\_\_  
 CASING TOTAL DEPTH, IN FEET 16.92 G/L PURGE ONE CASING VOLUME \_\_\_\_\_  
 CASING DIAMETER IN INCHES .6" (CASING MULTIPLIERS: 2 INCH = 0.165 g/l FT  
 DEPTH TO TOP OF FLUID 7.52 4" = 2.46 L/FT 4 INCH = 0.65 g/l FT  
 DEPTH TO TOP OF WATER 7.82 6" = 5.56 L/FT 6 INCH = 1.47 g/l FT)  
 TOP OF WATER ELEVATION FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)  
 PUMP TYPE GRUNDFOS REDIFLOW 2 FREE PHASE PRODUCT THICKNESS \_\_\_\_\_  
 DTW METER USED SOLINST MODEL 122 PUMP RATE \_\_\_\_\_  
 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 ( $\mu\text{S}/\text{cm}$ )	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
1558		2.5	4	18.6	7.01	786			
1600		2.5	10	18.7	6.99	1438	719		clear
1604				19.0	7.04	6405	701		
1607			27.5	19.1	6.95	1395	699		
1607			32.8	19.0	6.94	1399	700		

FINAL VOLUME PURGED 34L

ANALYSIS INCLUDES: 8260B TPHg, BTEX,  
MtBE

TIME SAMPLED 16:10

SAMPLE CONTAINERS 3-HCI PRESERVED

SAMPLE ID# R-02

40CC YOA'S

NOTES \_\_\_\_\_

LABORATORY USED KIFF Analytical



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WELL SAMPLE DATA SHEET

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

DATE March 23, 2005 START TIME \_\_\_\_\_

WELL ID# R-03

CASING ELEVATION, IN FEET 227.25

CASING TOTAL DEPTH, IN FEET 11.74

CASING DIAMETER IN INCHES .6"

DEPTH TO TOP OF FLUID 4.90

DEPTH TO TOP OF WATER 4.90

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

PUMP TYPE GRUNDFOS REDIFLOW 2

DTW METER USED SOLINST MODEL 122

SAMPLE BY CONVERSE

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

G/L PURGE ONE CASING VOLUME

(CASING MULTIPLIERS: 2 INCH = 0.165 g/l FT

4" = 2.46 L/FT                          4 INCH = 0.65 g/l FT

6" = 5.56 L/FT                          6 INCH = 1.47 g/l FT

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

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

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

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 ( $\mu$ S/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
1530	11.0	2.1	3.0	18.3	6.99	1021	509		
1531			8.0	18.7	7.01	1005	501		
1536			18.0	18.9	7.05	975	486		
1540			28.0	18.9	7.07	949	474		
1543			34.0	19.0	7.07	930	470		

FINAL VOLUME PURGED 36.0

ANALYSIS INCLUDES: 8260B TPHg, BTEX,  
MtBE

TIME SAMPLED 15:45

SAMPLE CONTAINERS 3-HCI PRESERVED

SAMPLE ID# R-03

40CC VOA'S

NOTES \_\_\_\_\_

LABORATORY USED KIFF Analytical



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 March 23, 2005 START TIME \_\_\_\_\_

WELL ID# LF-01 SAMPLE BY CONVERSE

CASING ELEVATION, IN FEET 226.59 WATER COLUMN, IN FEET \_\_\_\_\_

CASING TOTAL DEPTH, IN FEET 38.70 G/L PURGE ONE CASING VOLUME \_\_\_\_\_

CASING DIAMETER IN INCHES 2" (CASING MULTIPLIERS: 2 INCH = 0.165 g/ FT

DEPTH TO TOP OF FLUID \_\_\_\_\_ 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 \_\_\_\_\_ 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.)

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

ANALYSIS INCLUDES: 8260B TPHg, BTEX,

MtBE

TIME SAMPLED \_\_\_\_\_

SAMPLE CONTAINERS 3-HCI PRESERVED

SAMPLE ID# LF-01

40CC VOA'S

NOTES \_\_\_\_\_

LABORATORY USED KIFF Analytical



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 March 23, 2005 START TIME \_\_\_\_\_

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

CASING ELEVATION, IN FEET T2=195.30 WATER COLUMN, IN FEET 5.65

CASING TOTAL DEPTH, IN FEET 10 G/L PURGE ONE CASING VOLUME 3.58

CASING DIAMETER IN INCHES 4" (CASING MULTIPLIERS: 2 INCH = 0.165 gl/ FT

DEPTH TO TOP OF FLUID 4.35 2" = 0.625 L/FT 4 INCH = 0.65 gl/ FT

DEPTH TO TOP OF WATER 4.35 4" = 2.46 L/FT 6 INCH = 1.47 gl/ FT

TOP OF WATER ELEVATION 4.35 FT<sup>3</sup> WATER 7.48 GALLONS (G)/28.3 LITERS(L)

PUMP TYPE GRUNDFOS REDIFLOW 2 FREE PHASE PRODUCT THICKNESS \_\_\_\_\_

DTW METER USED SOLINST MODEL 122 PUMP RATE \_\_\_\_\_

TIME	INTAKE DEPTH	RATE GPM/ LPM	CUM. VOL GAL. LITERS	TEMP (°C)	pH (units)	Specific Electrical Conductance (µS/cm)	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Remarks (color, odor, etc.)
1250	9.0		9.0	17.3	6.97	295	147		pet coke cloudy
1255		2.4	18.0	17.6	6.97	304	150		
1257			23.0	17.4	6.97	304	152		
1302									OTW
									4.40'

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

ANALYSIS INCLUDES: 8260B TPHg, BTEX,

MtBE

SAMPLE CONTAINERS 3-HCI PRESERVED

40CC VOA'S

LABORATORY USED KIFF Analytical

SAMPLE ID# T-01

NOTES

T4 = 4.35      T1 T2 T3 Blasted by Peat (Coco)



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

Lab No. \_\_\_\_\_

Page 1 of 1

Project Contact (Hardcopy or PDF To):

*James Cawley*

California EDF Report?  Yes  No

Company/Address:

*1386 E Beale St  
Sacramento, CA 95814*

Recommended but not mandatory to complete this section:  
Sampling Company Log Code:

Phone No.:

FAX No.:

Global ID:

Project Number:

P.O. No.:

EDF Deliverable To (Email Address):

Project Name:

*DPW - Sacramento*

Sampler Signature:

Project Address:

*Oakland*

### Sampling

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

TAT

For Lab Use Only

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

#### Analysis Request

### Sample Designation

*Session*

7-23-05

1845

3

✓

✓

✓

✓

✓

Relinquished by:

Date

Time

Received by:

Remarks:

Relinquished by:

Date

Time

Received by:

Relinquished by:

Date

Time

Received by Laboratory:

Bill to:



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):

*George Converse*

Company/Address:

*1386 E Beemer St. Woodland*

Phone No.: *530 668 5300*

FAX No.:

Project Number: *DP 793*

P.O. No.:

Project Name: *DP 793 Hwy Rd*

Project Address: *Oakland*

California EDF Report?  Yes  No

Recommended but not mandatory to complete this section:

Sampling Company Log Code:

Global ID:

EDF Deliverable To (Email Address):

Sampler Signature: *George Converse*

## Chain-of-Custody Record and Analysis Request

### Analysis Request

For Lab Use Only

Sample Designation	Sampling		Container		Preservative		Matrix		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. (11,2 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	TAT
	Date	Time	40 ml VOA	SLEEVE	HCl	HNO <sub>3</sub>	ICE	NONE															
MU1	3-23-05	1214	3		/	/	/	/															
RS02		1128	3		/	/	/	/															
RS05		1500	3		/	/	/	/															
RS06		1625	3		/	/	/	/															
RS07		1445	3		/	/	/	/															
RS08		1340	3		/	/	/	/															
RS09		1425	3		/	/	/	/															
RS10		1355	3		/	/	/	/															
71		1302	3		/	/	/	/															
R1		1626	3		/	/	/	/															

Relinquished by:

*George Converse*  
3-23-05 1895

Date

Time

Received by:

Remarks:

Relinquished by:

*George Converse*  
Date

Time

Received by:

Relinquished by:

*George Converse*  
03-23-05 1895

Date

Time

Received by Laboratory:

Bill to:



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

Lab No.

Page 1 of 1

Project Contact (Hardcopy or PDF To):

California EDF Report?  Yes  No

Company/Address:

*George Peacock*  
1380 F. Davis St. Sacramento

Phone No.:

*530.297.4800*

FAX No.:

Project Number:

*DD793*

P.O. No.:

Project Name:

*DD793 W.L.*

Project Address:

*Oakland*

### Sample Designation

R2

7-23-05 16:03

Date

Time

40 ml VOA  
SLEEVE

HCl

HNO<sub>3</sub>

ICE

NONE

WATER

SOIL

R3

7-23-05 17:03

Date

Time

40 ml VOA  
SLEEVE

HCl

HNO<sub>3</sub>

ICE

NONE

WATER

SOIL

QCEB

7-23-05 17:03

Date

Time

40 ml VOA  
SLEEVE

HCl

HNO<sub>3</sub>

ICE

NONE

WATER

SOIL

Relinquished by:

Date

Time

Received by:

Remarks:

Relinquished by:

Date

Time

Received by:

Relinquished by:

Date

Time

Received by Laboratory:

Bill to:

### 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 - B260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/2392) TOTAL (X) W.E.T. (X)	TAT
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For Lab Use Only



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 March 23, 2005 START TIME \_\_\_\_\_

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

CASING ELEVATION, IN FEET T2=195.30 WATER COLUMN, IN FEET \_\_\_\_\_

CASING TOTAL DEPTH, IN FEET 10 G/L PURGE ONE CASING VOLUME \_\_\_\_\_

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)

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

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

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.)

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

ANALYSIS INCLUDES: 8260B TPHg, BTEX,  
MtBE

TIME SAMPLED \_\_\_\_\_

SAMPLE CONTAINERS 3-HCl PRESERVED  
40CC VOA'S

SAMPLE ID# T-01

LABORATORY USED KIFF Analytical

NOTES \_\_\_\_\_

\_\_\_\_\_

FORMER DESERT PETROLEUM SITE DP 793

4035 PARK BLVD.  
OAKLAND, CALIFORNIA 94602  
WASTE WATER DISCHARGE PERMIT NUMBER 5043550 1

WASTE WATER PRETREATMENT, SEDIMENT SETTLING TANK AND 2 IN SERIES CARBON WATER SCRUB UNITS  
PEAK HOURLY DISCHARGE 2 GPM,  
DAILY 2880 GALLONS

DATE 10/16/85

REASON FOR SITE VISIT check up on new pump system

TRENCH WELL T1					
TIME	PID	DTW	pH	TEMP.	COND.

TRENCH WELL T2					
TIME	PID	DTW	pH	TEMP.	COND.

TRENCH WELL T3					
TIME	PID	DTW	pH	TEMP.	COND.

TRENCH WELL T4					
TIME	PID	DTW	pH	TEMP.	COND.

DEPTH TO WATER

TIME	MW1	RS2	RS5	RS6

RS7	RS8	RS9	RS10

R1	R2	R3


COMMENTS Set pump site T1. Set pump carbon well RS-5 pump return to influent tank

ELECTRIC METER 000 111

SAMPLE(S) Rope

SITE MONITORED BY Converte

WATER TREATMENT

T1 FLOW RATE 6 GALLONS/1 MINUTES  
T2 FLOW RATE    GALLONS/   MINUTES

GALLONS PURGED 848 915  
GALLONS PURGED   

PRESSURE WATER CARBONS #1 455 PSI, #2 3.5 PSI

WATER PHASE CARBON UNITS INSPECTION COMMENTS good condition

CONDITION OF COMPOUND COMMENTS good

Acceptance of water phase carbon units only if completely flooded with water yes no - return to carbon manufacturer

Acceptance of water phase carbon units only if pH is less than 8.5 and containers are in good condition yes no - return to carbon manufacturer

WASTEWATER INFLUENT	EFFLUENT

## FORMER DESERT PETROLEUM SITE DP 793

4035 PARK BLVD.  
OAKLAND, CALIFORNIA 94602  
WASTE WATER DISCHARGE PERMIT NUMBER 5043550 1

WASTE WATER PRETREATMENT, SEDIMENT SETTLING TANK AND 2 IN SERIES CARBON WATER SCRUB UNITS  
PEAK HOURLY DISCHARGE 2 GPM, DAILY 2880 GALLONS

DATE 2-15-05REASON FOR SITE VISIT weekly & Oct 11

TRENCH WELL T1				
TIME	PID	DTW	pH	TEMP.

TRENCH WELL T2				
TIME	PID	DTW	pH	TEMP.

TRENCH WELL T3				
TIME	PID	DTW	pH	TEMP.

TRENCH WELL T4				
TIME	PID	DTW	pH	TEMP.

## DEPTH TO WATER

TIME	MW1	RS2	RS5	RS6

TIME	RS7	RS8	RS9	RS10

TIME	R1	R2	R3	

TIME				

## COMMENTS

ELECTRIC METER 00156WATER METER 1872001-8SAMPLE( )SITE MONITORED BY: Ray Bath

WASTEWATER INFLUENT	EFFLUENT

## WATER TREATMENT

T1 FLOW RATE \_\_\_\_ GALLONS/\_\_\_\_ MINUTES  
T2 FLOW RATE \_\_\_\_ GALLONS/\_\_\_\_ MINUTESGALLONS PURGED \_\_\_\_\_  
GALLONS PURGED \_\_\_\_\_

PRESSURE WATER CARBONS #1 \_\_\_\_ PSI, #2 \_\_\_\_ PSI

## WATER PHASE CARBON UNITS INSPECTION COMMENTS \_\_\_\_\_

## CONDITION OF COMPOUND COMMENTS \_\_\_\_\_

Acceptance of water phase carbon units only if completely flooded with water yes no - return to carbon manufacturer  
 Acceptance of water phase carbon units only if pH is less than 8.5 and containers are in good condition yes no - return to carbon manufacturer

## FORMER DESERT PETROLEUM SITE DP 793

4035 PARK BLVD.  
OAKLAND, CALIFORNIA 94602  
WASTE WATER DISCHARGE PERMIT NUMBER 5043550 1

WASTE WATER PRETREATMENT, SEDIMENT SETTLING TANK AND 2 IN SERIES CARBON WATER SCRUB UNITS  
PEAK HOURLY DISCHARGE 2 GPM,  
DAILY 2880 GALLONS

DATE 3/2/05REASON FOR SITE VISIT weekly check

TRENCH WELL T1				
TIME	PID	DTW	pH	TEMP.

TRENCH WELL T2				
TIME	PID	DTW	pH	TEMP.

TRENCH WELL T3				
TIME	PID	DTW	pH	TEMP.

TRENCH WELL T4				
TIME	PID	DTW	pH	TEMP.

## DEPTH TO WATER

TIME	MW1	RS2	RS5	RS6

TIME	RS7	RS8	RS9	RS10

TIME	R1	R2	R3

TIME			

## COMMENTS

ELECTRIC METER 00217WATER METER 1888333.8

SAMPLE(s) \_\_\_\_\_

SITE MONITORED BY: Regulatory

WASTEWATER	INFLUENT	EFFLUENT
TIME		
pH		
Conductivity		
Temperature		
PID		

## WATER TREATMENT

T1 FLOW RATE: \_\_\_\_ GALLONS/\_\_\_\_ MINUTES

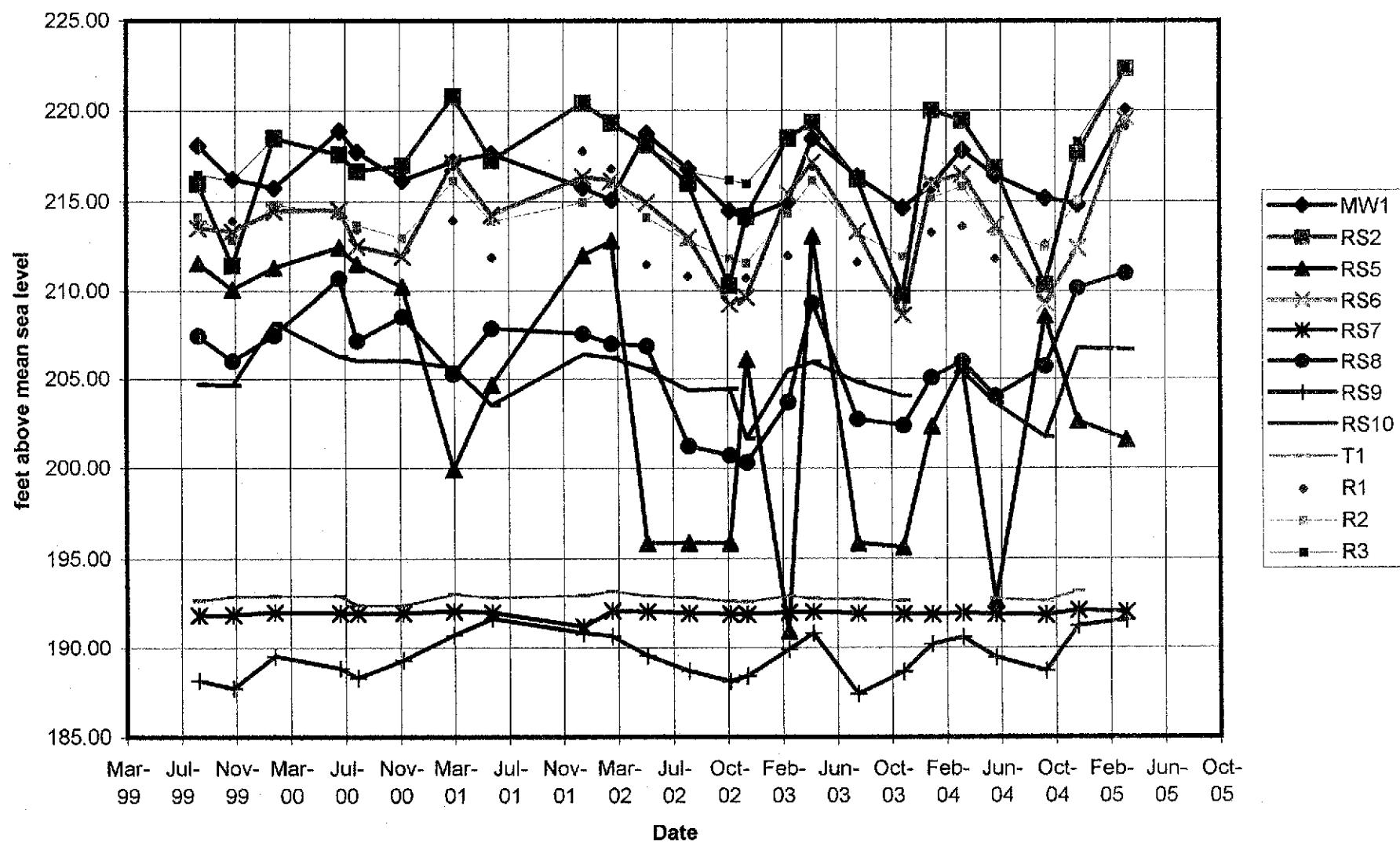
GALLONS PURGED \_\_\_\_\_  
GALLONS PURGED \_\_\_\_\_

PRESSURE WATER CARBONS #1 \_\_\_\_ PSI, #2 \_\_\_\_ PSI,

*no pumping*WATER PHASE CARBON UNITS INSPECTION COMMENTS goodCONDITION OF COMPOUND COMMENTS goodAcceptance of water phase carbon units only if completely flooded with water yes no - return to carbon manufacturerAcceptance of water phase carbon units only if pH is less than 8.5 and containers are in good condition yes no - return to carbon manufacturer

APPENDIX B.  
GROUNDWATER ELEVATION CHART

### Groundwater Elevation





Report Number : 42944

Date : 3/28/2005

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

Subject : 13 Water Samples  
Project Name : DP793 1/4ly  
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 that reads "Joel Kiff".

Joel Kiff



Report Number : 42944

Date : 3/28/2005

Project Name : DP793 1/4ly

Project Number : DP793

Sample : MW1

Matrix : Water

Lab Number : 42944-01

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	95.8		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	89.2		% Recovery	EPA 8260B	3/24/2005

Sample : RS02

Matrix : Water

Lab Number : 42944-02

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	95.9		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	87.1		% Recovery	EPA 8260B	3/24/2005

Approved By:

Joel Kiff



Report Number : 42944

Date : 3/28/2005

Project Name : DP793 1/4ly

Project Number : DP793

Sample : RS05

Matrix : Water

Lab Number : 42944-03

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	890	1.5	ug/L	EPA 8260B	3/26/2005
Toluene	280	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	180	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	940	1.5	ug/L	EPA 8260B	3/26/2005
Methyl-t-butyl ether (MTBE)	5.1	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	7400	150	ug/L	EPA 8260B	3/26/2005
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	3/26/2005
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	3/26/2005

Sample : RS06

Matrix : Water

Lab Number : 42944-04

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	96.5		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	88.6		% Recovery	EPA 8260B	3/24/2005

Approved By:

Joel Kiff



Report Number : 42944

Date : 3/28/2005

Project Name : DP793 1/4ly

Project Number : DP793

Sample : RS07

Matrix : Water

Lab Number : 42944-05

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	220	0.50	ug/L	EPA 8260B	3/25/2005
Toluene	17	0.50	ug/L	EPA 8260B	3/25/2005
Ethylbenzene	100	0.50	ug/L	EPA 8260B	3/25/2005
Total Xylenes	170	0.50	ug/L	EPA 8260B	3/25/2005
Methyl-t-butyl ether (MTBE)	2.4	0.50	ug/L	EPA 8260B	3/25/2005
TPH as Gasoline	4600	50	ug/L	EPA 8260B	3/25/2005
Toluene - d8 (Surr)	91.4		% Recovery	EPA 8260B	3/25/2005
4-Bromofluorobenzene (Surr)	97.3		% Recovery	EPA 8260B	3/25/2005

Sample : RS08

Matrix : Water

Lab Number : 42944-06

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/25/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/25/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/25/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/25/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/25/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/25/2005
Toluene - d8 (Surr)	92.9		% Recovery	EPA 8260B	3/25/2005
4-Bromofluorobenzene (Surr)	95.1		% Recovery	EPA 8260B	3/25/2005

Approved By:

Joel Kiff



Report Number : 42944

Date : 3/28/2005

Project Name : DP793 1/4ly

Project Number : DP793

Sample : RS09

Matrix : Water

Lab Number : 42944-07

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	99	0.50	ug/L	EPA 8260B	3/25/2005
Toluene	1.1	0.50	ug/L	EPA 8260B	3/25/2005
Ethylbenzene	1.1	0.50	ug/L	EPA 8260B	3/25/2005
Total Xylenes	4.5	0.50	ug/L	EPA 8260B	3/25/2005
Methyl-t-butyl ether (MTBE)	3.6	0.50	ug/L	EPA 8260B	3/25/2005
TPH as Gasoline	540	50	ug/L	EPA 8260B	3/25/2005
Toluene - d8 (Surr)	92.4		% Recovery	EPA 8260B	3/25/2005
4-Bromofluorobenzene (Surr)	96.6		% Recovery	EPA 8260B	3/25/2005

Sample : RS10

Matrix : Water

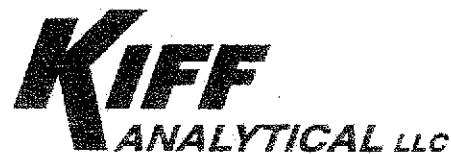
Lab Number : 42944-08

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	3/24/2005

Approved By:   
Joel Kiff

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



Report Number : 42944

Date : 3/28/2005

Project Name : DP793 1/4ly

Project Number : DP793

Sample : T1

Matrix : Water

Lab Number : 42944-09

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	220	0.50	ug/L	EPA 8260B	3/25/2005
Toluene	3.0	0.50	ug/L	EPA 8260B	3/25/2005
Ethylbenzene	120	0.50	ug/L	EPA 8260B	3/25/2005
Total Xylenes	76	0.50	ug/L	EPA 8260B	3/25/2005
Methyl-t-butyl ether (MTBE)	1.7	0.50	ug/L	EPA 8260B	3/25/2005
TPH as Gasoline	2800	50	ug/L	EPA 8260B	3/25/2005
Toluene - d8 (Surr)	92.0		% Recovery	EPA 8260B	3/25/2005
4-Bromofluorobenzene (Surr)	97.0		% Recovery	EPA 8260B	3/25/2005

Sample : R1

Matrix : Water

Lab Number : 42944-10

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	3/24/2005

Approved By:

Joel Kiff



Report Number : 42944

Date : 3/28/2005

Project Name : DP793 1/4ly

Project Number : DP793

Sample : R2

Matrix : Water

Lab Number : 42944-11

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	8.4	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	57	50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	3/24/2005

Sample : R3

Matrix : Water

Lab Number : 42944-12

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	3/24/2005

Approved By:

Joe Kiff



Report Number : 42944

Date : 3/28/2005

Project Name : DP793 1/4ly

Project Number : DP793

Sample : QCEB

Matrix : Water

Lab Number : 42944-13

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	3/24/2005

Approved By:

Joel Kiff

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

Report Number : 42944

Date : 3/28/2005

**QC Report : Method Blank Data****Project Name : DP793 1/4ly****Project Number : DP793**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed	Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005	Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/25/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005	Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/25/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005	Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/25/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005	Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/25/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005	Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/25/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005	TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/25/2005
Toluene - d8 (Surr)	101		%	EPA 8260B	3/24/2005	Toluene - d8 (Surr)	95.4		%	EPA 8260B	3/25/2005
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	3/24/2005	4-Bromofluorobenzene (Surr)	94.1		%	EPA 8260B	3/25/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/26/2005						
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/26/2005						
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/26/2005						
Toluene - d8 (Surr)	99.9		%	EPA 8260B	3/26/2005						
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	3/26/2005						
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005						
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005						
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005						
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005						
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005						
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005						
Toluene - d8 (Surr)	94.1		%	EPA 8260B	3/24/2005						
4-Bromofluorobenzene (Surr)	95.1		%	EPA 8260B	3/24/2005						

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 42944

Date : 3/28/2005

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : DP793 1/4ly

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	42933-01	<0.50	39.8	39.9	38.9	36.6	ug/L	EPA 8260B	3/24/05	98.0	91.8	6.49	70-130	25
Toluene	42933-01	<0.50	39.8	39.9	40.9	38.6	ug/L	EPA 8260B	3/24/05	103	96.6	6.26	70-130	25
Tert-Butanol	42933-01	<5.0	199	200	201	188	ug/L	EPA 8260B	3/24/05	101	94.3	6.94	70-130	25
Methyl-t-Butyl Ether	42933-01	<0.50	39.8	39.9	39.8	35.6	ug/L	EPA 8260B	3/24/05	100	89.1	11.6	70-130	25
Benzene	42950-04	<0.50	39.1	39.4	38.2	37.8	ug/L	EPA 8260B	3/26/05	97.6	96.0	1.63	70-130	25
Toluene	42950-04	2.1	39.1	39.4	41.8	41.0	ug/L	EPA 8260B	3/26/05	101	98.8	2.57	70-130	25
Tert-Butanol	42950-04	7.3	196	197	200	195	ug/L	EPA 8260B	3/26/05	98.6	95.4	3.39	70-130	25
Methyl-t-Butyl Ether	42950-04	3.2	39.1	39.4	38.6	38.9	ug/L	EPA 8260B	3/26/05	90.5	90.7	0.266	70-130	25
Benzene	42945-02	<0.50	40.0	40.0	38.1	36.9	ug/L	EPA 8260B	3/24/05	95.2	92.2	3.16	70-130	25
Toluene	42945-02	<0.50	40.0	40.0	35.3	35.0	ug/L	EPA 8260B	3/24/05	88.3	87.5	0.910	70-130	25
Tert-Butanol	42945-02	<5.0	200	200	186	192	ug/L	EPA 8260B	3/24/05	92.9	96.2	3.45	70-130	25
Methyl-t-Butyl Ether	42945-02	<0.50	40.0	40.0	41.2	40.9	ug/L	EPA 8260B	3/24/05	103	102	0.489	70-130	25
Benzene	42947-04	<0.50	40.0	40.0	37.5	36.4	ug/L	EPA 8260B	3/25/05	93.7	91.0	2.99	70-130	25
Toluene	42947-04	<0.50	40.0	40.0	35.1	34.2	ug/L	EPA 8260B	3/25/05	87.7	85.6	2.41	70-130	25
Tert-Butanol	42947-04	<5.0	200	200	190	186	ug/L	EPA 8260B	3/25/05	95.1	93.2	2.04	70-130	25
Methyl-t-Butyl Ether	42947-04	<0.50	40.0	40.0	38.8	38.4	ug/L	EPA 8260B	3/25/05	96.9	96.1	0.801	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 : 42944

Date : 3/28/2005

Project Name : DP793 1/4ly

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	3/24/05	99.3	70-130
Toluene	40.0	ug/L	EPA 8260B	3/24/05	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/24/05	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/24/05	98.0	70-130
Benzene	40.0	ug/L	EPA 8260B	3/26/05	97.4	70-130
Toluene	40.0	ug/L	EPA 8260B	3/26/05	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/26/05	101	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/26/05	92.2	70-130
Benzene	40.0	ug/L	EPA 8260B	3/24/05	93.7	70-130
Toluene	40.0	ug/L	EPA 8260B	3/24/05	87.2	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/24/05	91.7	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/24/05	97.5	70-130
Benzene	40.0	ug/L	EPA 8260B	3/25/05	96.4	70-130
Toluene	40.0	ug/L	EPA 8260B	3/25/05	89.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/25/05	94.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/25/05	103	70-130

KIFF ANALYTICAL, LLC

Approved By:

Joe Kiff



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 Davis, CA 95616  
 Lab: 530.297.4800  
 Fax: 530.297.4808

Lab No. 472944

Page 1 of 2

Project Contact (Hardcopy or PDF To):

*George Conner*

Company/Address:

*WESE  
1386 E Beamer St. Woodland*

Phone No.:

*530 668 5300*

FAX No.:

Project Number:

*DP 793*

P.O. No.:

Project Name:

*DP 793 1/4ly*

Project Address:

*Oakland*

California EDF Report?  Yes  No

Recommended but not mandatory to complete this section:  
 Sampling Company Log Code:

Global ID:

EDF Deliverable To (Email Address):

Sampler Signature:  
*G Conner*

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

#### Analysis Request

Sample Designation	Sampling		Container	Preservative	Matrix	BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	6 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 (7421/229.2) TOTAL (X) WET (X)	12 hr/24 hr/48 hr/72 hr/1 wk	TAT	For Lab Use Only	
	Date	Time																				
MLW1	3-23-05	1214	3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	164	-01		
RS02		1128	3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		-02		
RS05		1500	3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		-03		
RS06		1025	3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		-04		
RS07		1445	3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		-05		
RS08		1710	3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		-06		
RS09		1425	3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		-07		
RS10		1356	3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		-08		
T1		1302	3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		-09		
R1		1626	3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		-10		
Relinquished by:	Date	Time	Received by:													Remarks:						
<i>G Conner</i>	3-23-05	1855																				
Relinquished by:	Date	Time	Received by:																			
Relinquished by:	Date	Time	Received by Laboratory:													Bill to:						
	032305	1855	<i>Mark C. Pfeifer KIFF ANALYTICAL</i>																			

Distribution: White - Lab, Pink - Originator

Forms/coc 121001.fh9



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

Lab No. 42944

Page 2 of 2

Project Contact (Hardcopy or PDF To):

George Connerie

Company/Address:

1386 E Baume St. Oakland

Phone No.:

530 668 5300

FAX No.:

Project Number:

DP793

P.O. No.:

Project Name:

DP793 14Lg

Project Address:

Oakland

California EDF Report?  Yes  No

Recommended but not mandatory to complete this section:

Sampling Company Log Code: - - - - -

Global ID: - - - - -

EDF Deliverable To (Email Address):

Sampler Signature:  
Connerie

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

#### Analysis Request

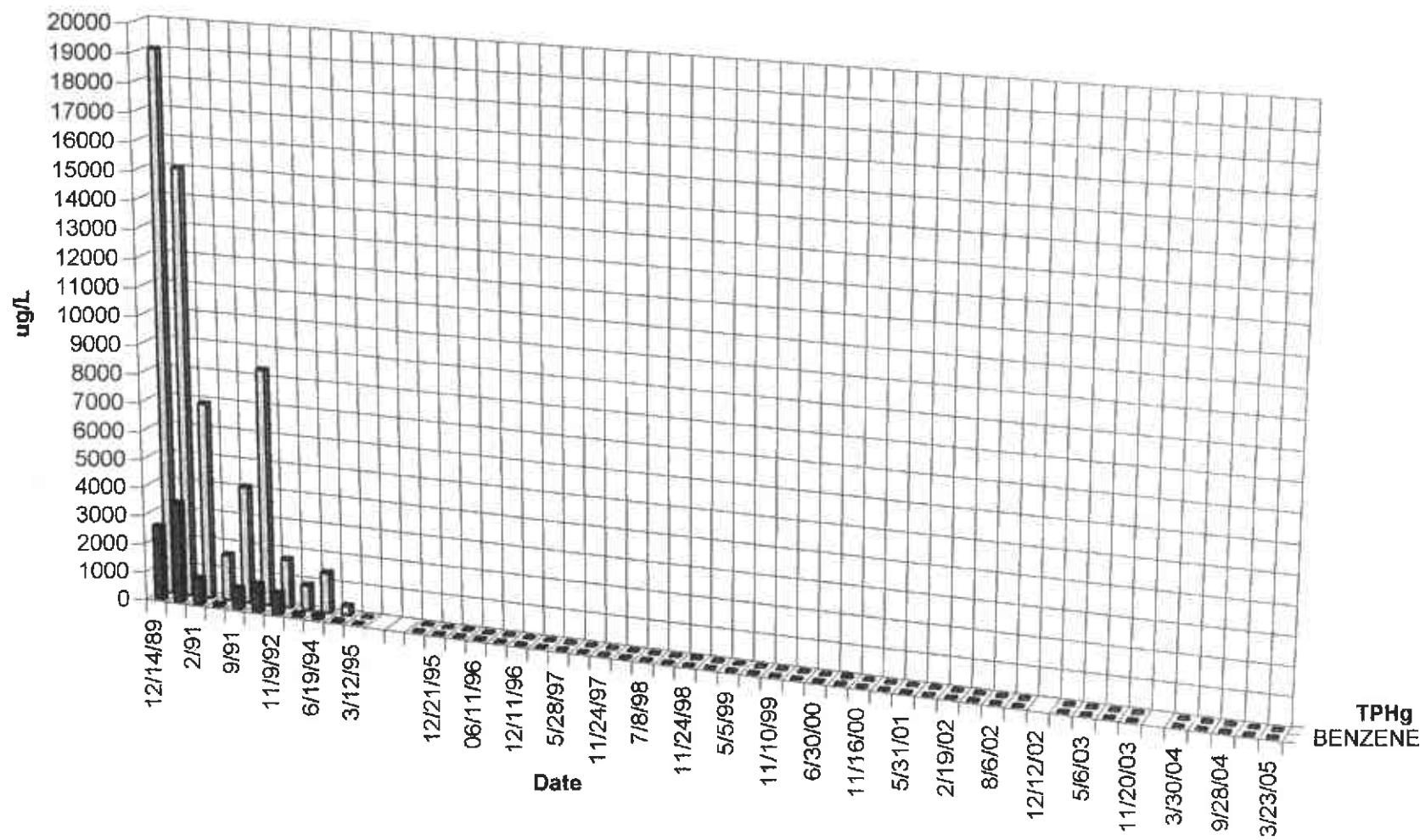
Sampling	Container						Preservative		Matrix		BTEX (8021B)	BTEX/TPH Gas/MTBE (8021B/M8015)	TPH as Diesel (M8015)	TPH as Motor Oil (M8015)	TPH Gas/BTEX/MTBE (8260B)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1/2 DCA & 1/2 EDB - 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	TAT
	Date	Time	40 ml VOA	SLEEVE	HC	HNO <sub>3</sub>	ICE	NONE	WATER	SOIL															
R2	7-23-05	1603			/	/	/	/	/																
R3		1545	3		/	/	/	/	/																
GCE B		1700	3		/	/	/	/	/																

Relinquished by: <u>George</u>	Date: <u>7-23-05</u>	Time: <u>1855</u>	Received by: <u>John Pacholski</u>	Remarks:
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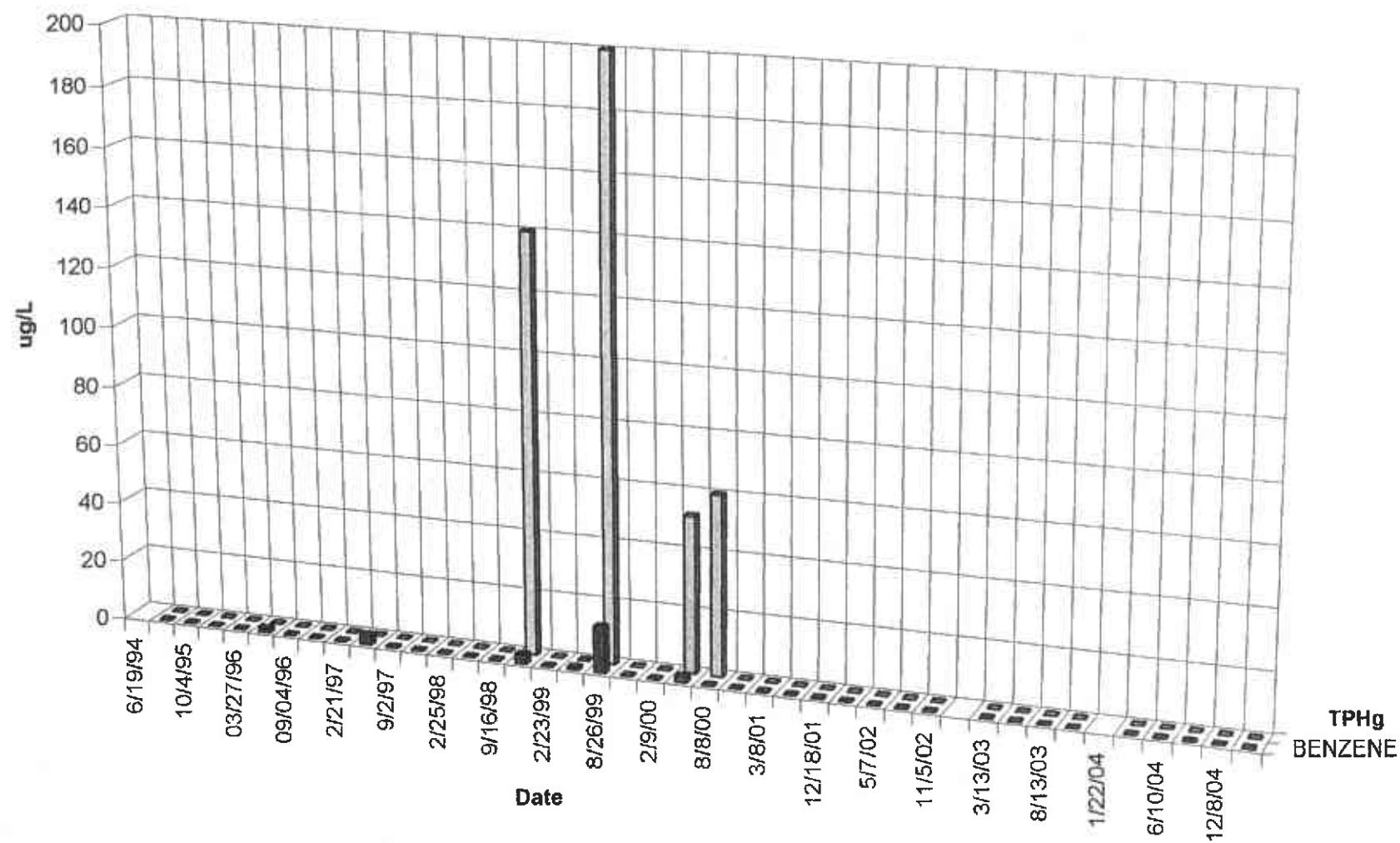
Relinquished by: <u>George</u>	Date: <u></u>	Time: <u></u>	Received by: <u></u>	
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Relinquished by: <u>George</u>	Date: <u>032305</u>	Time: <u>1855</u>	Received by Laboratory: <u>John Pacholski</u>	Bill to: <u>George</u>
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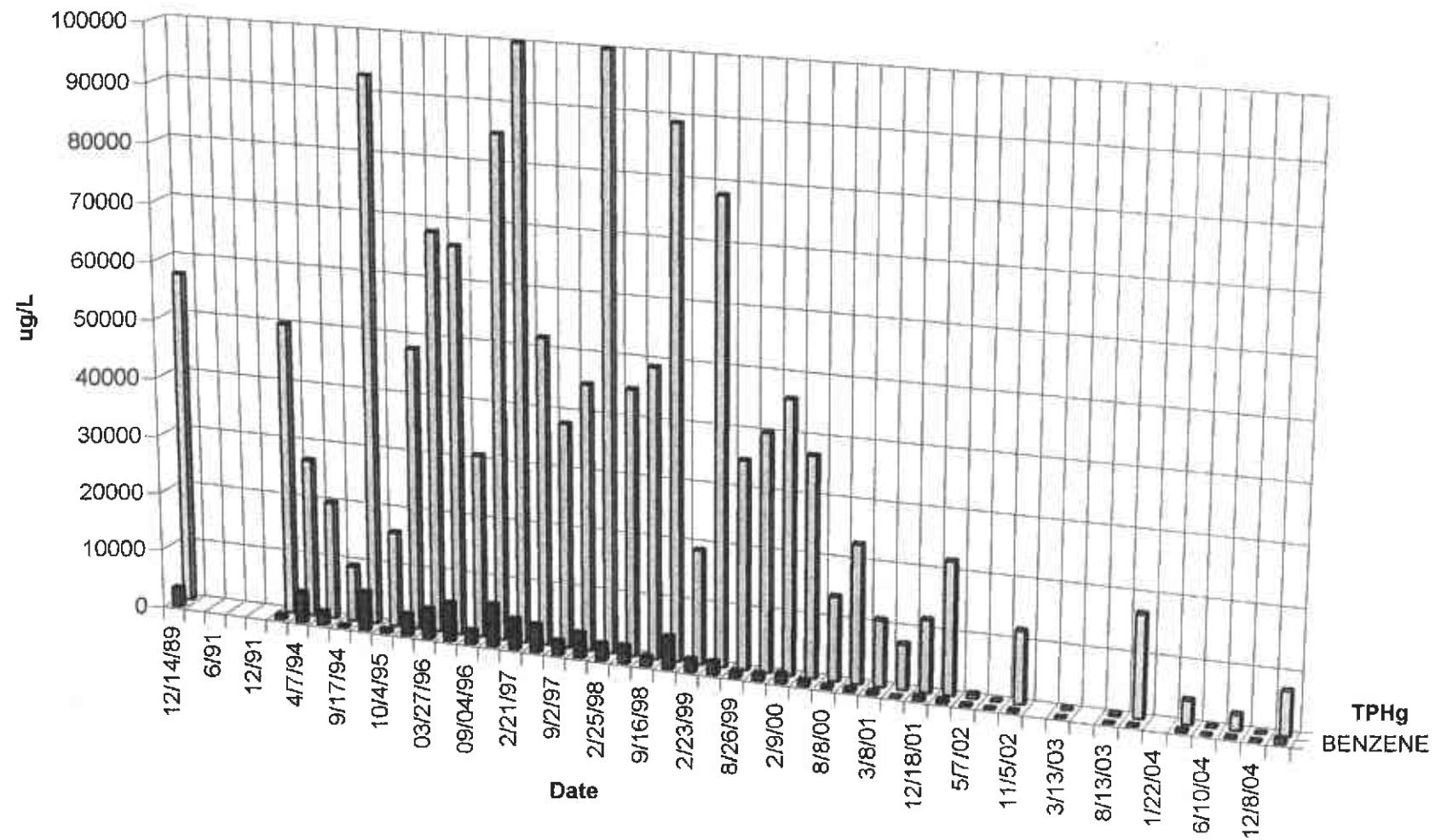
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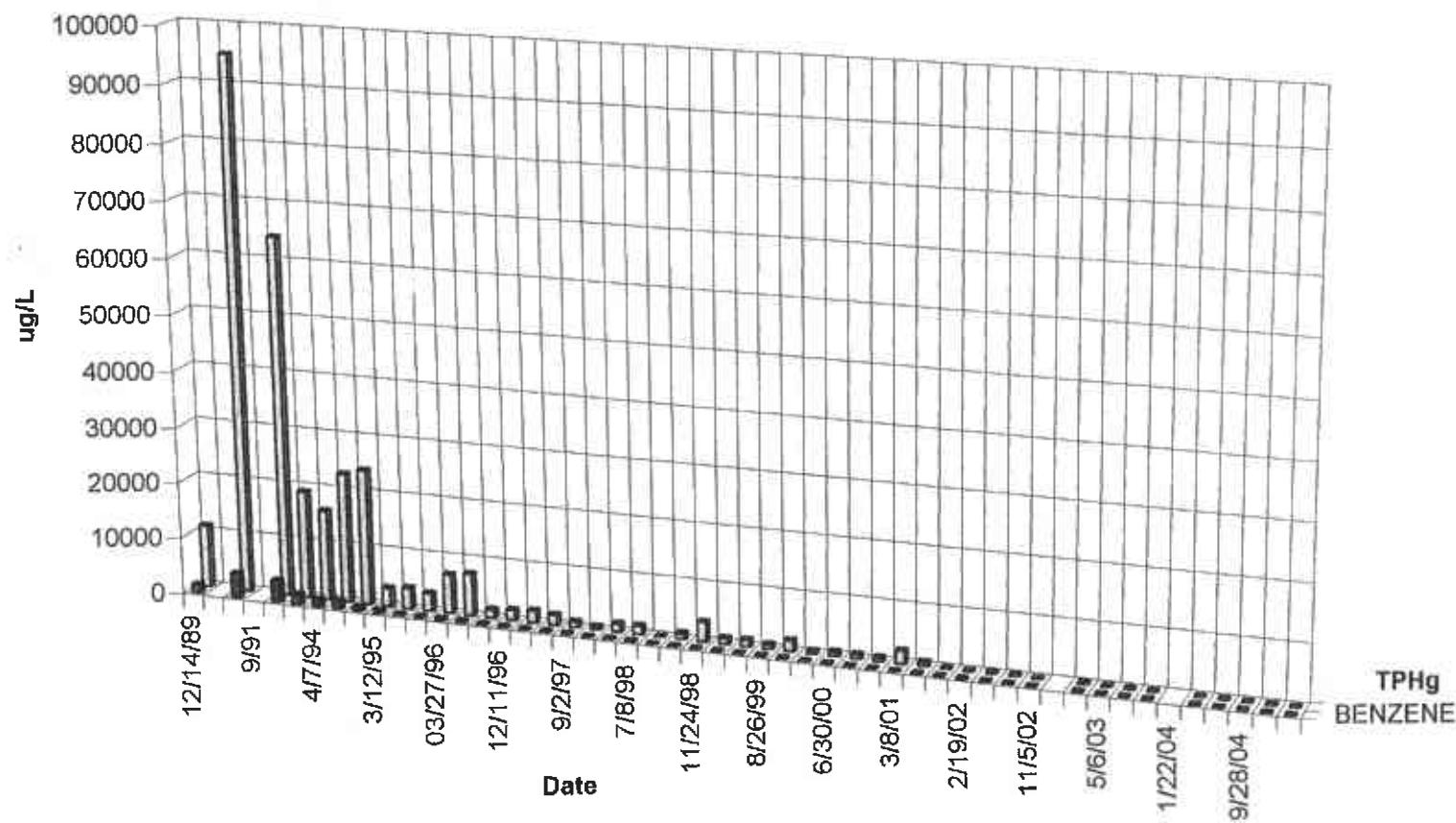
RS-2 TPHg



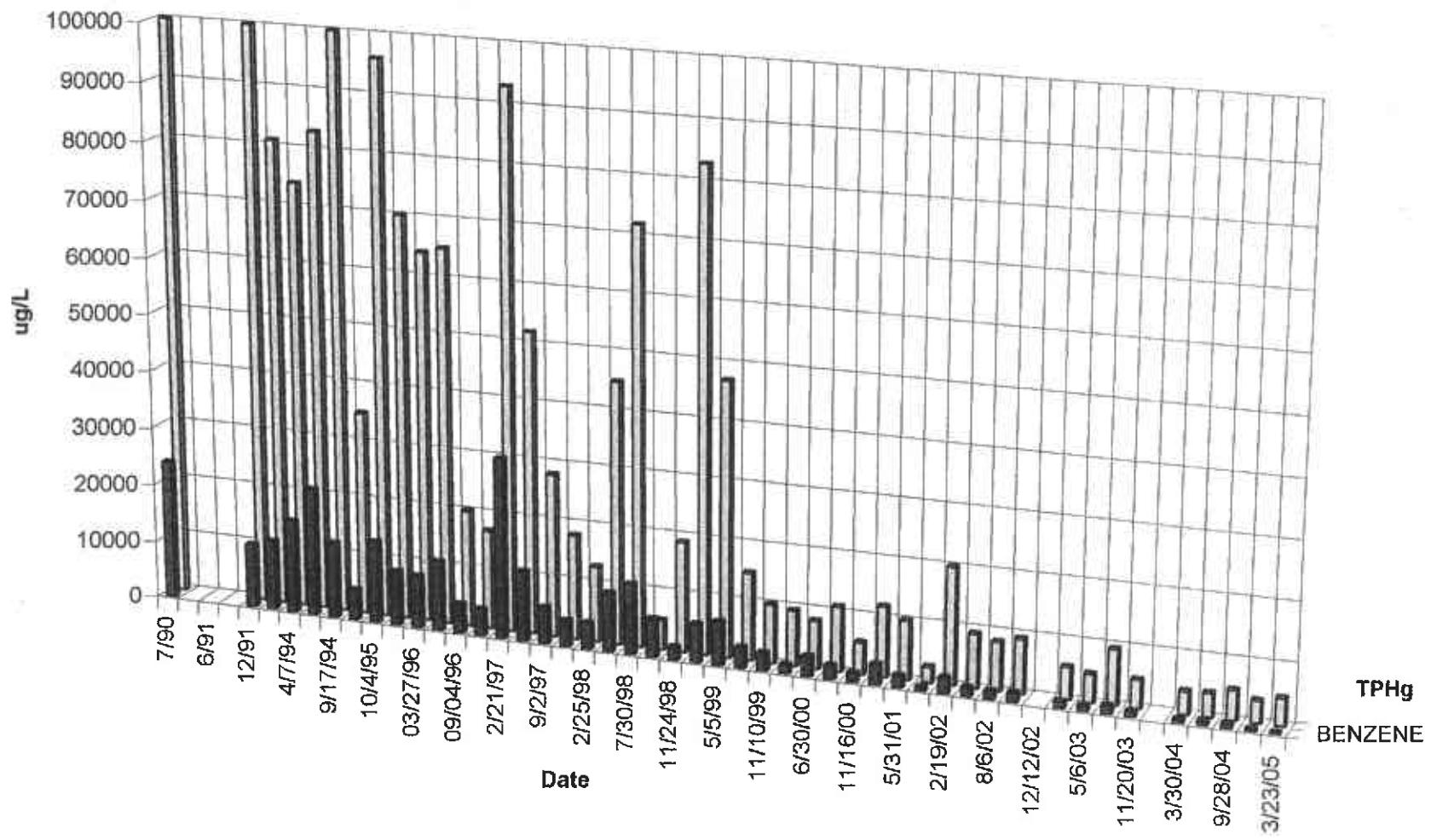
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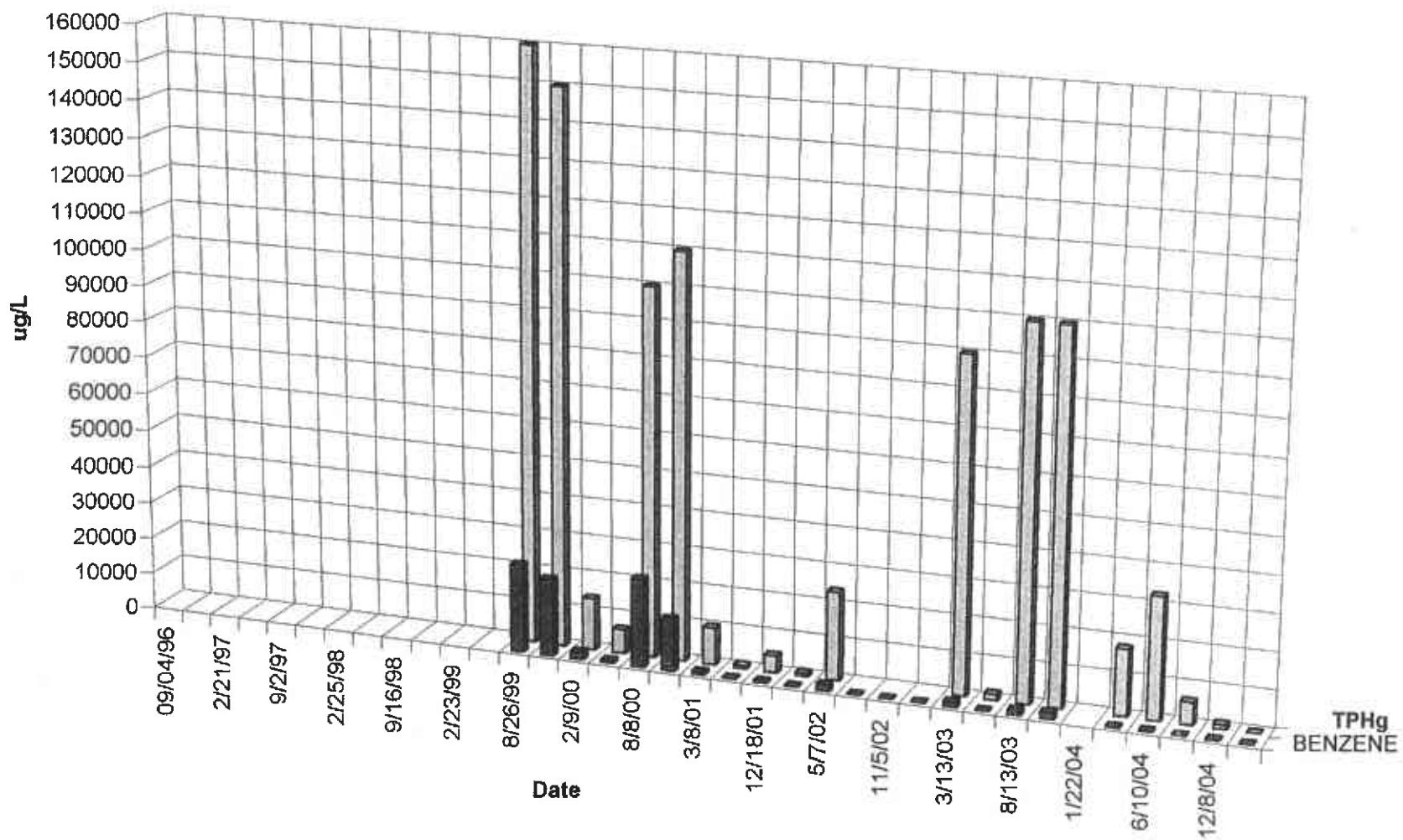
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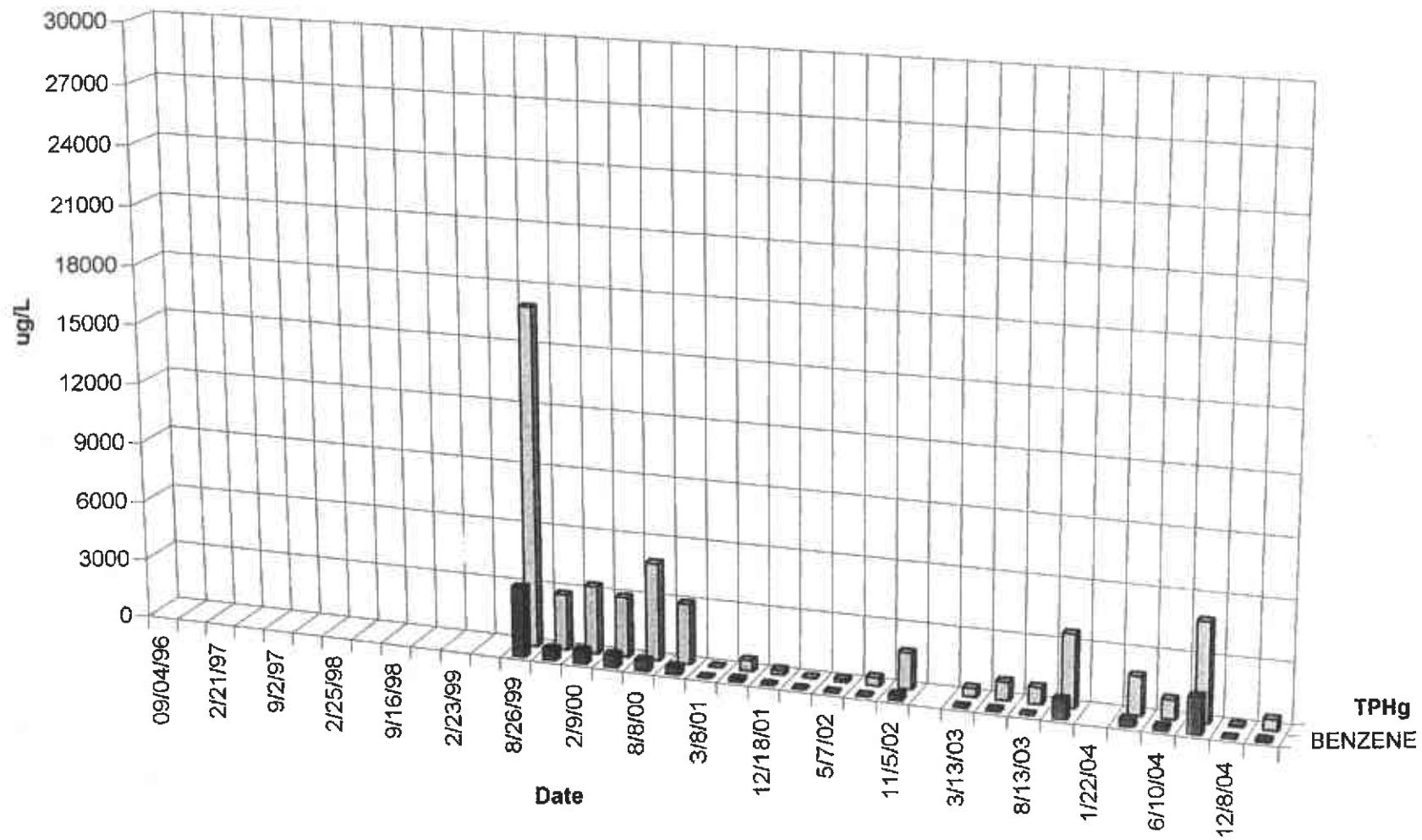
**RS-7**



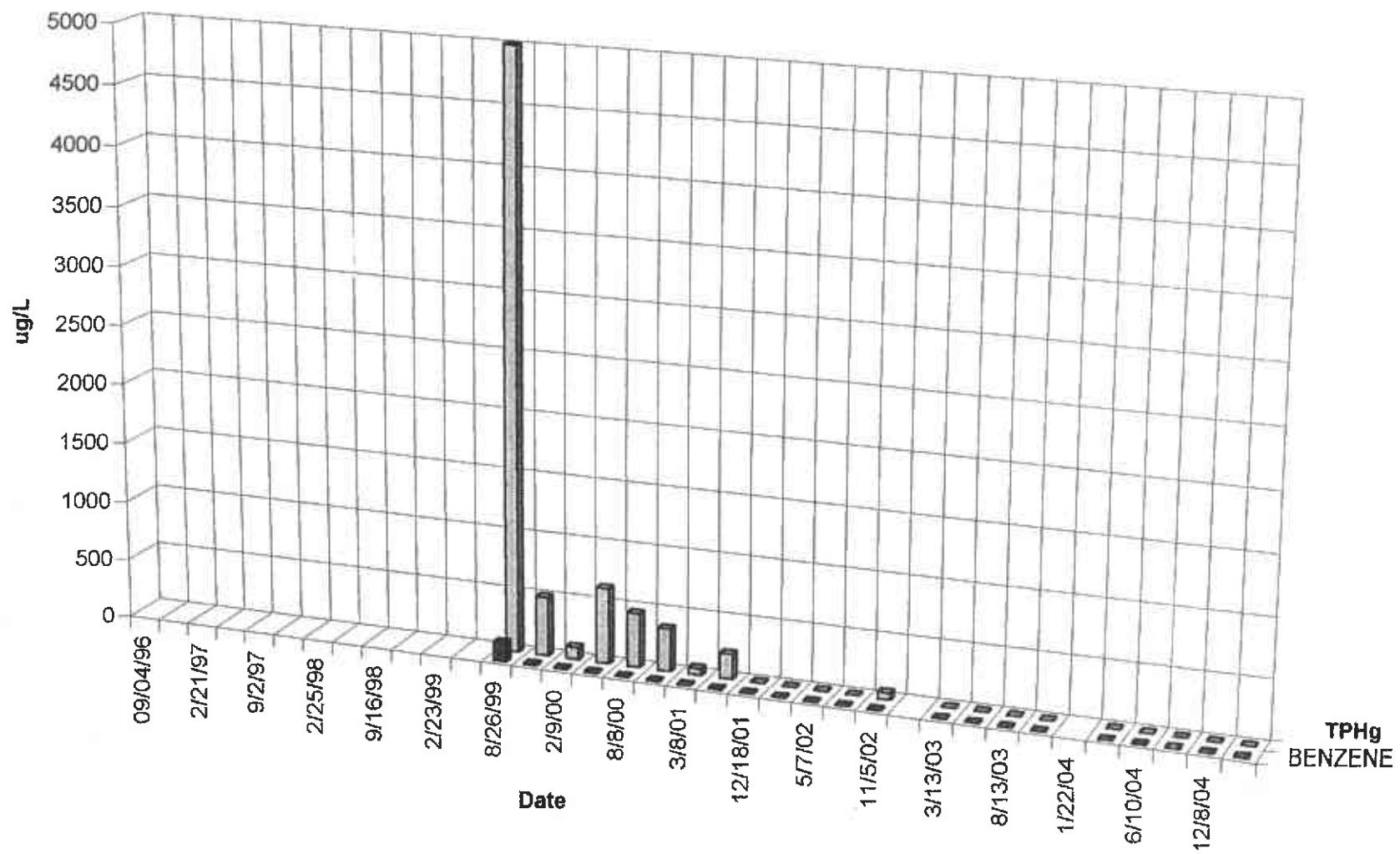
RS-8



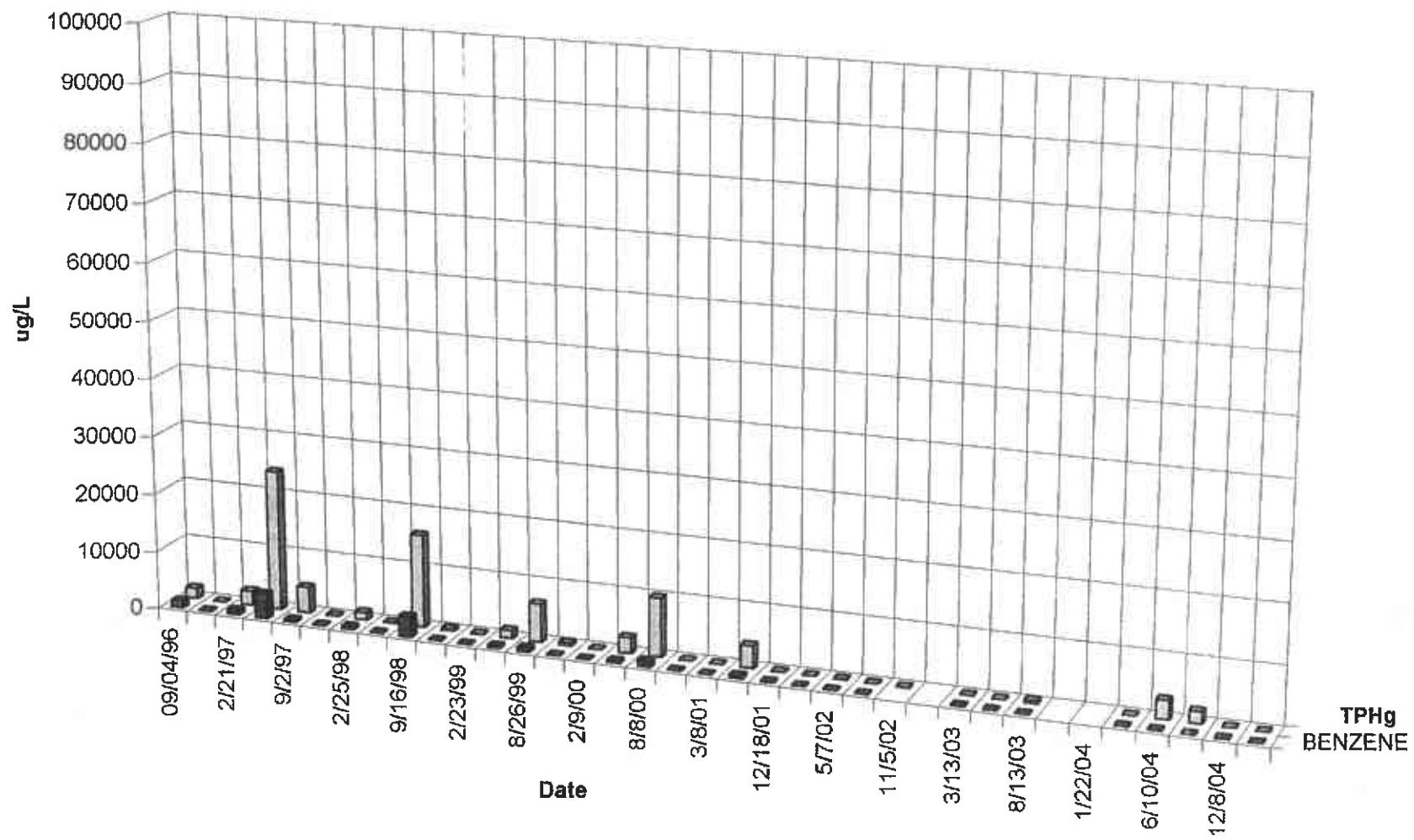
RS-9



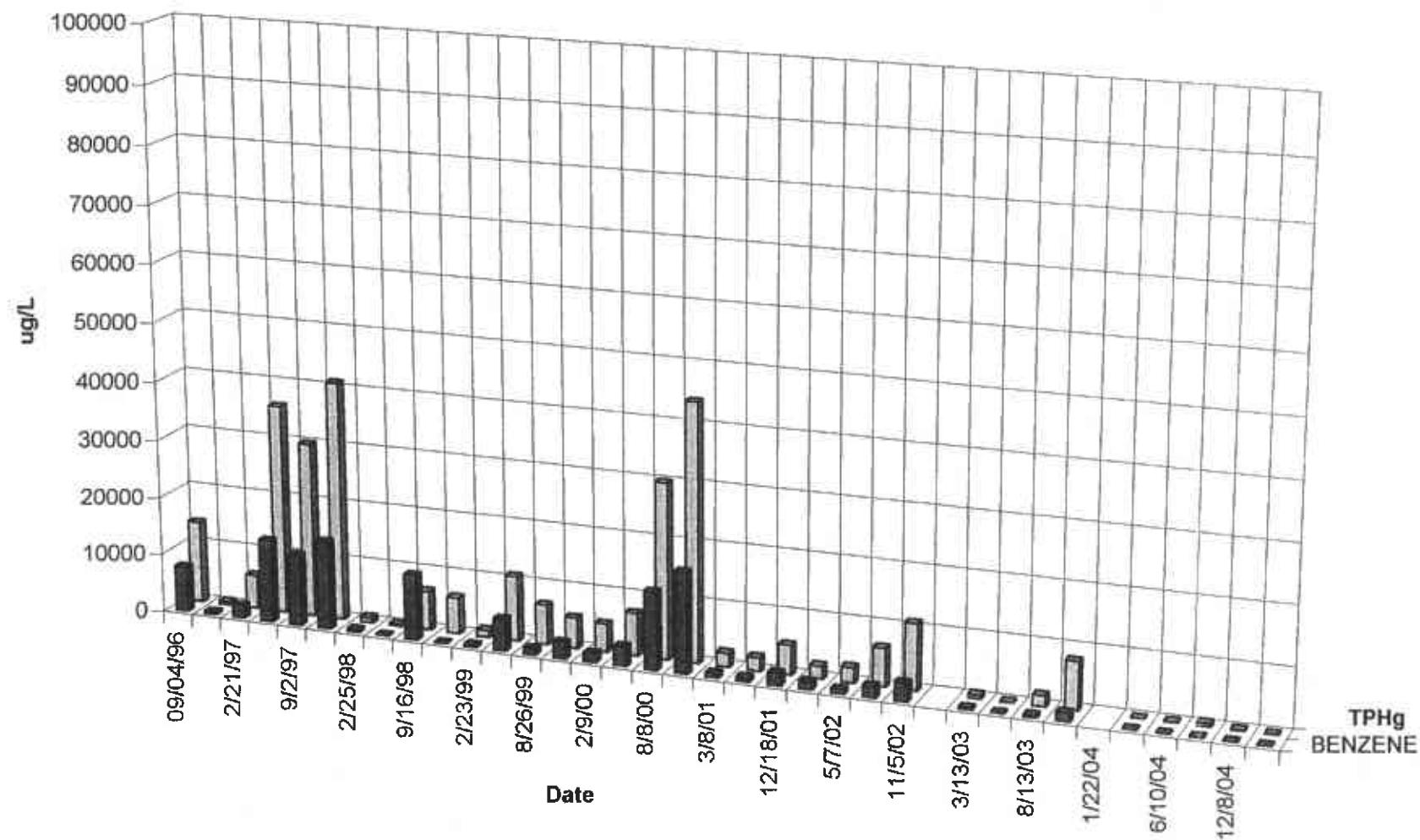
**RS-10**



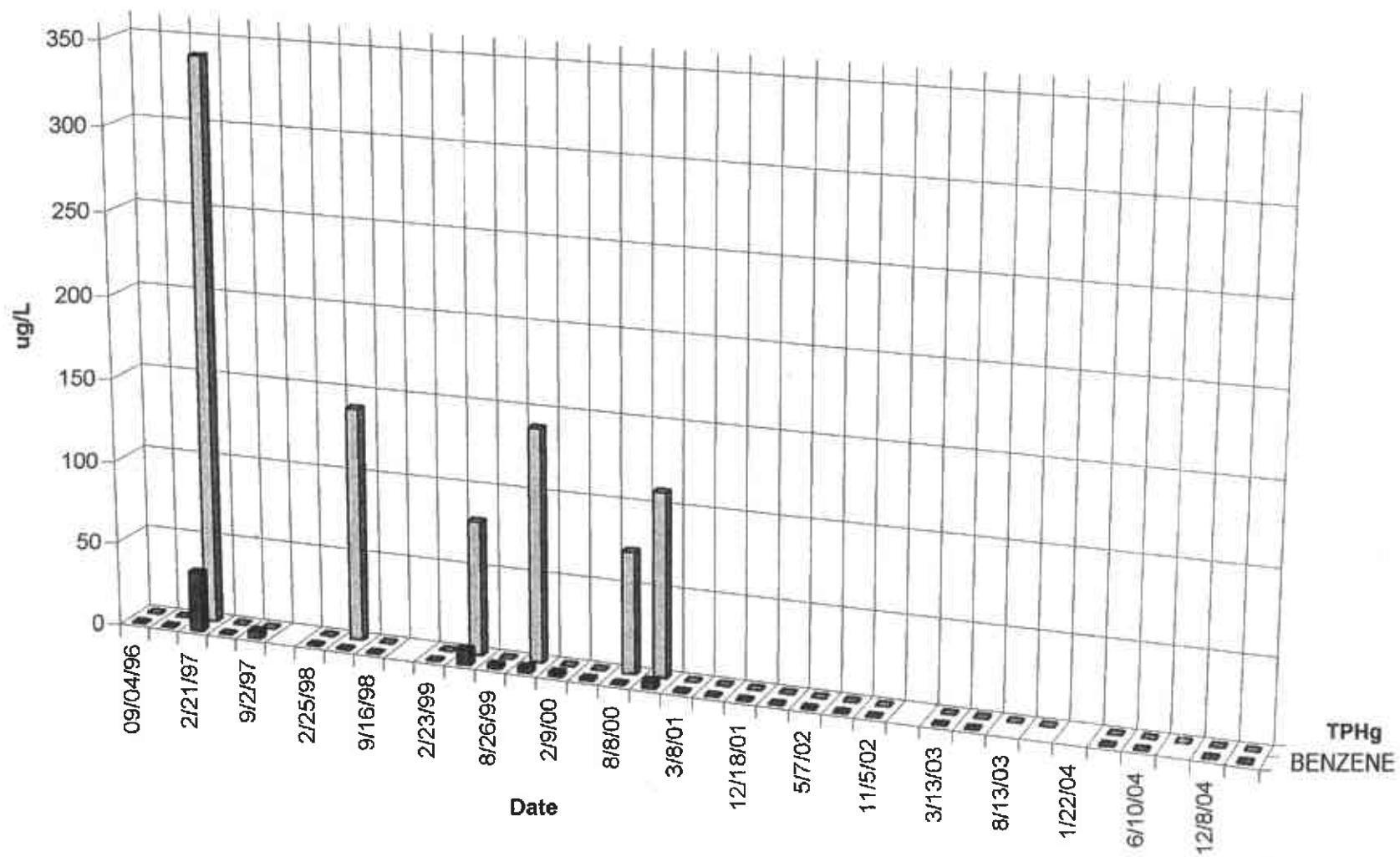
R-1



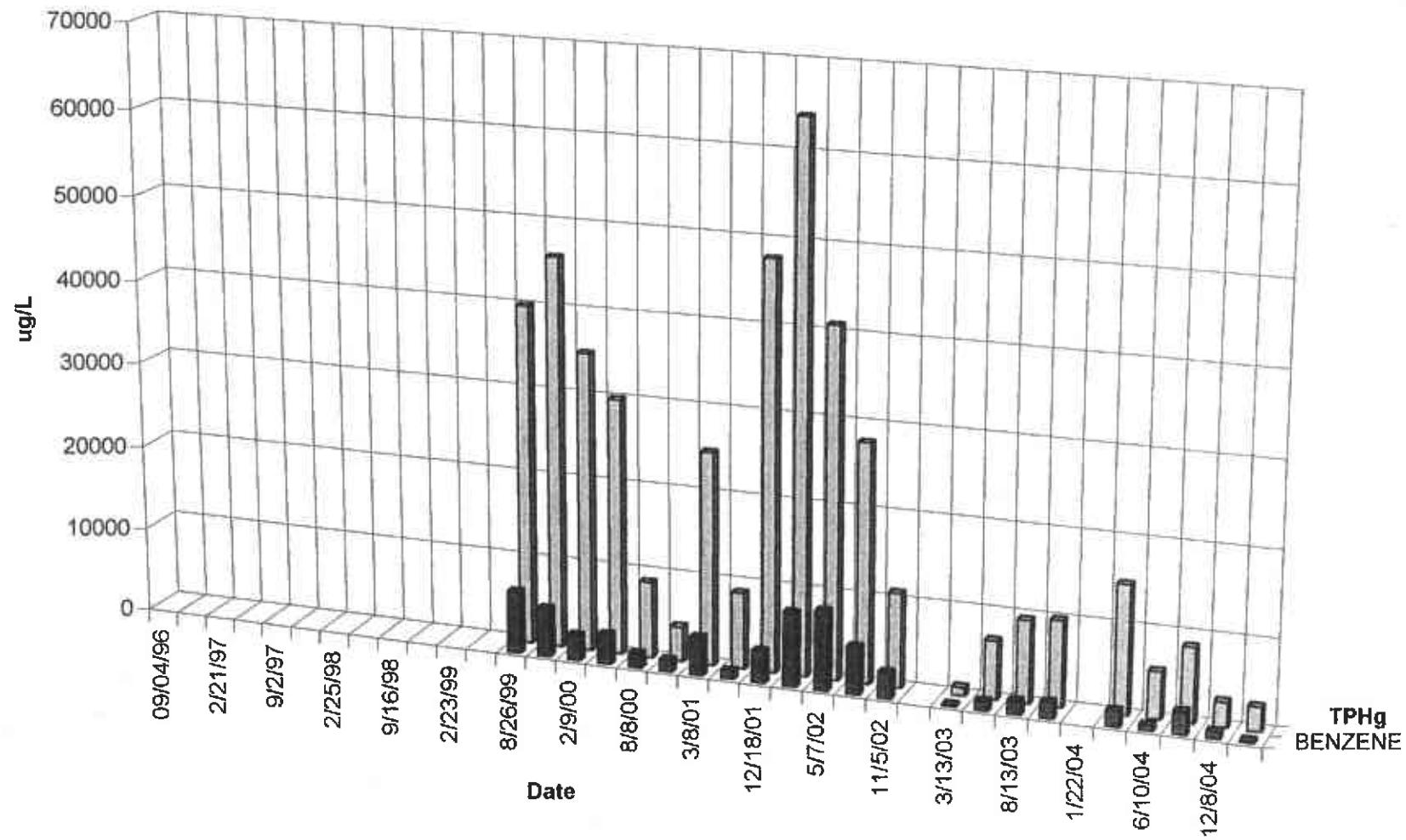
R-2



R-3



T-1



APPENDIX E

WASTEWATER DISCHARGE REPORT

# desert petroleum inc.

Molly Ong.  
Source Control Division  
East Bay Municipal Utility District  
P.O. Box 24055, MS 702  
Oakland, CA 94623  
(510) 287-1618  
Fax (510) 287-0621

April 4, 2005

RE: Wastewater Discharge Quarterly Sampling for Permit #5043550 1, DP 793.

Dear Ms. Ong:

The enclosed table and certified laboratory report represents the sampling for wastewater Discharge Permit #5043550 1 for the period between December 30, 2004 and March 3, 2005. On March 23, 2005 a sample of the water discharged to sewer along with the water being pumped from well RS5 was obtained and analyzed for TPHg, BTEX and MtBE using EPA method 8260B. On October 15, 2004 a new carbon was placed into the #2 carbon position, carbon two was placed into the carbon one position and the old carbon #1 was removed from the system. Pumping was resumed after the new carbon had been placed into the system.

All discharge conditions have been met.

CERTIFICATION East Bay Municipal Utility District, Permit #5043550 1

*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 the 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.*

Signature Bill Thompson

date

TABLE 1  
GROUNDWATER REMOVAL  
FORMER DP #793  
4035 PARK BLVD., OAKLAND, CALIFORNIA

DATE PURGED	METER READING IN GALLONS RS5	METER READING IN GALLONS TRENCH	DEPTH TO TOP OF PURGED WATER IN FEET T1	GALLONS PURGED AND/OR 1/4LY MONITORING & WELLS	ACCUMULATED GALLONS REMOVED FROM TRENCH IN GALLONS	Accumulated gallons removed from RS5 Gallons	INFLUENT CONCENTRATIONS EPA METHOD 8020 - 8260B							
							TOTAL GALLONS REMOVED	TPHg ug/L	BENZENE ug/L	TOLUENE ug/L	ETHYL-BENZENE ug/L	XYLENES ug/L	MTBE ug/L	Sample Location
12/3/03	1649967.4	1649967.4	0	81579	474542.7	556121.6								
12/11/03	1649977.6	1649977.6	0	81579	474552.9	556131.8								
12/18/03	1654385.3	1655688.6	1303	82882	478960.6	561842.8								
12/23/03	1655682.0	1655682.0	0	82882	478954.0	561836.2								
12/30/03	1655682.0	1655682.0	0	82882	478954.0	561836.2								
1/22/04	1672238.9	1673412.0	1175	84057	495508.9	579566.2								
2/26/04	1696276.0	1696378.0	102	84159	518372.9	602532.2								
3/30/04	1722614.0	1723589.0	975	85134	544608.9	628743.2	15000	1800	660	610	2000	8.6	T1	
4/8/04	1729975.5	1729975.5	0	85134	550995.4	636129.7	4000	370	59	13	380	2.6	RS5	
4/14/04	1734113.2	1734113.2	0	85134	555133.1	640267.4								
4/22/04	1739978.0	1739978.0	0	85134	560997.9	648132.2								
4/29/04	1744687.9	1746094.5	1407	86541	565707.8	652248.7								
5/13/04	1754248.1	1754248.1	0	86541	573861.4	660402.3								
5/21/04	1759593.7	1759593.7	0	86541	579207.0	665747.9								
5/27/04	1762418.0	1764065.5	1648	88188	582031.3	670219.7								
6/3/04	1769445.0	1769445.0	0	88188	587410.8	675599.2	5500	570	2	240	130	2.7	T1	
6/10/04	1774349.0	1774349.0	0	88188	592314.8	680503.2	120	7	0.88	1.3	4.3	1.3	RS5	
6/17/04	1778979.0	1778979.0	0	88188	596944.8	685133.2								
6/25/04	1783576.7	1783576.7	0	88188	601542.5	689730.9								
6/30/04	1786027.0	1787786.1	1759	89948	603992.8	693940.3								
7/8/04	1787858.5	1787858.5	0	89948	604065.2	694012.7								
7/22/04	1791170.5	1791170.5	0	89948	607377.2	697324.7								
7/29/04	1791170.5	1791170.5	0	89948	607377.2	697324.7	no electrical power to site (no pumping).							
9/24/04	17911170.0	17911170.0	0	89948	607376.7	697324.2	new electrical power to site (restart pump RS5).							
9/28/04	1791275.2	1793186.5	1911	91859	607481.9	699340.7	2600	110	89	75	56	<0.5	RS5	
9/30/04	1794233.0	1794233.0	0	91859	608528.4	700387.2	8700	2600	100	450	240	15	T1	
10/15/04	1794243.8	1794243.8	0	91859	608539.2	700398.0								
10/28/04	1800669.8	1800669.8	0	91859	614965.2	706824.0								
11/5/04	1805236.0	1805236.0	0	91859	619531.4	711390.2								
11/19/04	1813980.8	1813980.8	0	91859	628276.2	720135.0								
12/8/04	1826103.7	1826253.7	150	92009	840399.1	732407.9	<50	<0.5	<0.5	<0.5	<0.5	<0.5	RS5	
12/30/04	1841818.0	1841818.0	0	92009	655963.4	747972.2								
1/14/05	1854930.0	1855778.0	848	92857	669075.4	761932.2								
2/15/05	1872001.8	1872001.8	0	92857	685299.2	778156.0								
3/23/05	1903025.7	1903025.7	0	92857	716323.1	809179.9	7400	890	280	180	940	5.1	RS5	

< BELOW LABORATORY LOWER DETECTION LIMITS

\* SAMPLED ON AUGUST 26, 1999

T1 Receptor Trench Well

RS5 Monitor Well RS5 (pumping well)

ug/L micrograms per liter (parts per billion)

mg/L milligrams per liter (parts per million)

WESTERN GEO-ENGINEERS

mg/Kg milligrams per kilogram (parts per million)

TPHg TOTAL PETROLEUM HYDROCARBONS GASOLINE RANGE

MTBE METHYL TERTIARY BUTYL ETHER

TABLE 2  
WASTEWATER DISCHARGE PERMIT # 5043550 1  
FORMER DP #793  
4035 PARK BLVD., OAKLAND, CALIFORNIA

WASTEWATER SOURCE ID	DATE	METER READING IN GALLONS #35635668 314110	NEW METER IN GALLONS #47083426	GALLONS DISCHARGED BETWEEN VISITS	ACCUMULATIVE GALLONS DISCHARGED	AVERAGE DISCHARGE PER MINUTE IN GALLONS	EPA METHOD 624 BENZENE ug/L	TOLUENE ug/L	ETHYL-BENZENE ug/L	XYLENES ug/L	7420 LEAD ug/L
F1 (PSP No. 1)	10/30/02		1389884.7	25583	296039	0.37					
F1 (PSP No. 1)	11/5/02		1392931	3046	299086	0.35					
F1 (PSP No. 1)	12/12/02		1410216	17285	316371	0.32	<0.5	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	1/9/03		1431653.1	21437	337808	0.53					
F1 (PSP No. 1)	2/19/03		1462658.4	31005	368813	0.53					
F1 (PSP No. 1)	3/13/03		1478624.6	15966	384779	0.50	<0.5	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	4/15/03		1496745.6	18121	402900	0.38					
F1 (PSP No. 1)	5/6/03		1516728.7	19983	422883	0.66	<0.5	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	6/5/03		1536327.1	19598	442482	0.45					
F1 (PSP No. 1)	7/3/03		1558031.2	21704	464186	0.54					
F1 (PSP No. 1)	8/13/03		1587475.1	29444	493630	0.50	<0.5	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	9/12/03		1607619	20144	513774	0.47					
F1 (PSP No. 1)	10/16/03		1627622	20003	533777	0.41					
F1 (PSP No. 1)	11/20/03		1645991.4	18369	552146	0.36					
F1 (PSP No. 1)	12/18/03		1655688.6	9697	561843	0.24	<0.5	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	1/22/04		1673412	17723	579567	0.35					
F1 (PSP No. 1)	2/26/04		1696378	22966	602533	0.46					
F1 (PSP No. 1)	3/30/04		1723589	27211	629744	0.57	<0.5	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	4/29/04		1746094.5	22506	652249	0.52					
F1 (PSP No. 1)	5/27/04		1764065.5	17971	670220	0.45	<0.5	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	6/30/04		1787786.1	23721	693941	0.48					
F1 (PSP No. 1)	7/29/04		1791170.5	3384	697326	0.08					
F1 (PSP No. 1)	8/31/04		1791170.5	0	697325	0.00					
F1 (PSP No. 1)	9/30/04		1794233	3063	700388	0.07	<0.5	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	10/28/04		1800669.8	6437	706825	0.16					
F1 (PSP No. 1)	11/24/04		1816663.2	15993	722818	0.41					
F1 (PSP No. 1)	12/30/04		1841818	25156	747973	0.49	<0.5	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	1/14/05		1855778	13960	761933	0.65					
F1 (PSP No. 1)	2/15/05		1872001.8	16224	778157	0.35					
F1 (PSP No. 1)	3/23/05		1903025.7	31024	809180	0.60	<0.5	<0.5	<0.5	<0.5	<0.5

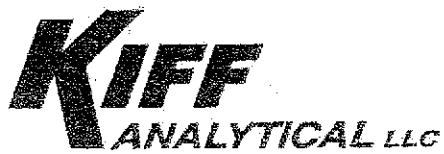
< BELOW LABORATORY LOWER DETECTION LIMITS

ug/L micrograms per liter (parts per billion)

Note: water meter #47083426 did not function during initial test, substitute meter #35635668 used until cleaned and tested. Re-installed January 28, 2000.

Note: water meter difference from 7/19/2001 to 3/21/2002 is from use of meter at other sites to meter discharges when pumping was discontinued on 7/19/2001.

WATER DISCHARGED TO SEWER IS FROM PURGING OF T1, DISCHARGE FROM WELL RS5 AND PURGED WATER FROM 14LY SAMPLING.



Report Number : 42943

Date : 3/28/2005

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

Subject : 1 Water Sample  
Project Name : DP793-Sewer  
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".

Joel Kiff



Report Number : 42943

Date : 3/28/2005

Project Name : DP793-Sewer

Project Number : DP793

Sample : Sewer

Matrix : Water

Lab Number : 42943-01

Sample Date : 3/23/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surrogate)	95.4		% Recovery	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surrogate)	87.8		% Recovery	EPA 8260B	3/24/2005

Approved By:

Joel Kiff

QC Report : Method Blank Data

Project Name : DP793-Sewer

Project Number : DP793

Report Number : 42943

Date : 3/28/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	3/24/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	3/24/2005
Toluene - d8 (Surr)	96.4		%	EPA 8260B	3/24/2005
4-Bromofluorobenzene (Surr)	84.4		%	EPA 8260B	3/24/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

KIFF ANALYTICAL, LLC

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

Approved By: Joel Kiff

## QC Report : Matrix Spike/ Matrix Spike Duplicate

Report Number : 42943

Date : 3/28/2005

Project Name : DP793-Sewer

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.	Relative Percent Diff.
Benzene	42943-01	<0.50	39.7	39.5	38.1	38.3	ug/L	EPA 8260B	3/24/05	96.0	96.9	0.924	70-130	25
Toluene	42943-01	<0.50	39.7	39.5	36.8	36.2	ug/L	EPA 8260B	3/24/05	92.8	91.6	1.29	70-130	25
Tert-Butanol	42943-01	6.5	198	198	189	193	ug/L	EPA 8260B	3/24/05	91.9	94.3	2.59	70-130	25
Methyl-t-Butyl Ether	42943-01	<0.50	39.7	39.5	39.0	38.9	ug/L	EPA 8260B	3/24/05	98.4	98.4	0.0423	70-130	25

KIFF ANALYTICAL, LLC

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

Approved By: Joe Kiff



QC Report : Laboratory Control Sample (LCS)

Report Number : 42943

Date : 3/28/2005

Project Name : DP793-Sewer

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	3/24/05	95.3	70-130
Toluene	40.0	ug/L	EPA 8260B	3/24/05	92.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	3/24/05	91.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	3/24/05	97.5	70-130

KIFF ANALYTICAL, LLC

Approved By:

Joel Kiff



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

Lab No. 42943

Page 1 of 1

Project Contact (Hardcopy or PDF To):

*George Concrete*

Company/Address: *CECE*  
*1386 E Beamer St.*

Phone No.: *530 668 5700* FAX No.:

Project Number: *DP793* P.O. No.:

Project Name: *DP793 - Sewer*

Project Address: *Oakland*

**Sample Designation**

*Sewer*

**Sampling**

Date *3-23-05*

Time *1815*

40 ml VOA  
SLEEVE

HCl

HNO<sub>3</sub>

ICE

UNNONE

WATER

SOIL

BTEX (8021B)

BTEX/TPH Gas/MTBE (8021B/M8015)

TPH as Diesel (M8015)

TPH as Motor Oil (M8015)

TPH Gas/BTEX (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 (7441-239-2) TOTAL (X) W.E.T. (X)

TAT

12 hr/24 hr/48 hr/72 hr/1 wk

*144 - 01*

California EDF Report?  Yes  No

Recommended but not mandatory to complete this section:  
Sampling Company Log Code:

Global ID:

EDF Deliverable To (Email Address):

Sampler Signature:

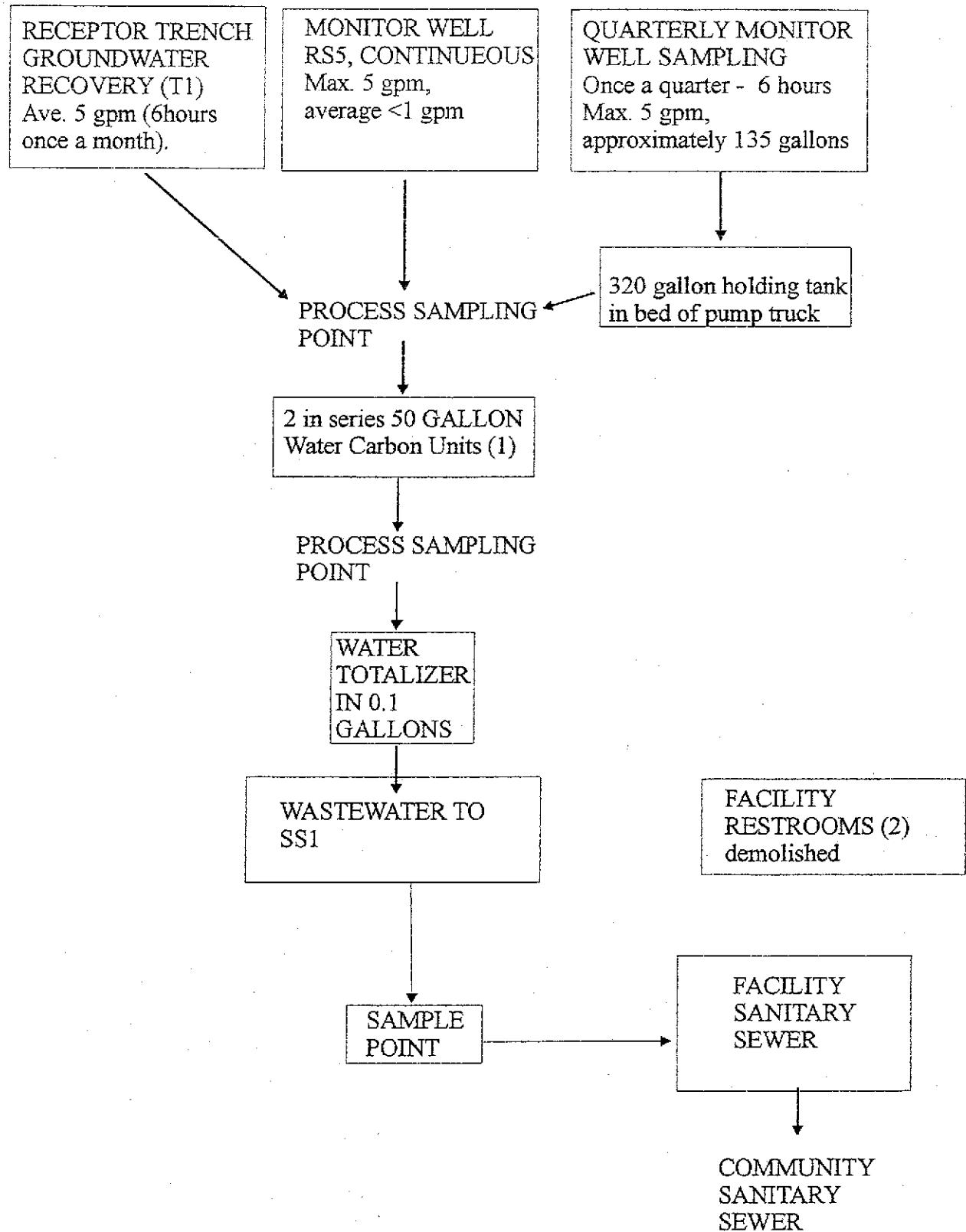
**Chain-of-Custody Record and Analysis Request**

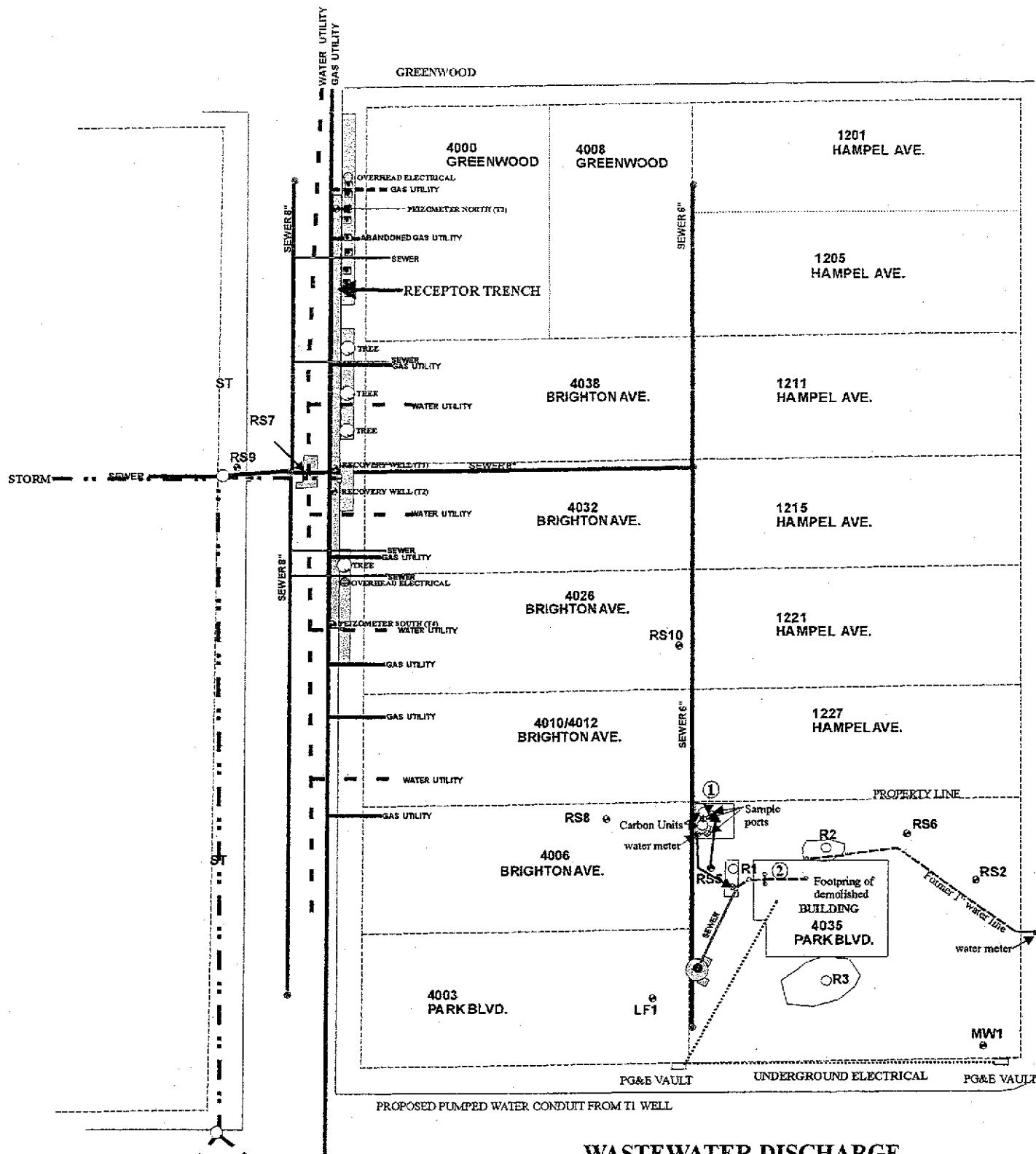
**Analysis Request**

<i>George Concrete</i>	Date <i>3-23-05</i>	Time <i>1845</i>	Received by: _____	Remarks:
<i>George Concrete</i>	Date <i>032305</i>	Time <i>1845</i>	Received by: _____	
<i>George Concrete</i>	Date <i>032305</i>	Time <i>1845</i>	Received by Laboratory: <i>Robert Pachal KIFF ANALYTICAL</i>	Bill to: <i>CECE</i>

Figure 1(Revised July 7, 2004)

Activity: GROUNDWATER RECOVERY AND DISCHARGE SYSTEM  
FORMER DESERT PETROLEUM SITE DP 793.

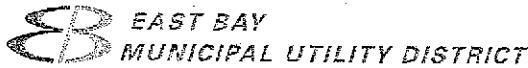




MW1 GROUNDWATER  
MONITORING WELL

① PROCESS NUMBER

• WATER METER



## COMPLIANCE EVENT REMINDER NOTICE

DAVID R. WILLIAMS  
DIRECTOR OF WASTEWATER

March 1, 2005

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

Dear Mr. Converse:

Re: Wastewater Discharge Permit No. 50435501

Desert Petroleum, Inc. Desert Petroleum, Inc. is required to submit periodic compliance reports. This is a reminder that a Self-Monitoring Report for the period January 1, 2005 - March 31, 2005 is due by April 30, 2005.

The Self-Monitoring Report must contain the proper certification statement and shall be signed by an authorized person in accordance with Section B of the permit Standard Terms And Conditions. This report must be completed and mailed to the Environmental Services Division by the due date. A violation follow up fee may be assessed for late, incomplete or failure to submit this report.

Sincerely,

A handwritten signature in black ink that appears to read "Molly Ong".

MOLLY ONG  
Wastewater Control Representative

MKO:mko