

FOURTH QUARTER 2002
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

December 20, 2002

BY

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

TABLE OF CONTENTS

1.0 SITE LOCATION AND NUMBERS.....	3
2.0 SITE INVESTIGATION/REMEDATION CHRONOLOGY	3
3.0 LOCAL GEOLOGY	5
3.1 Geomorphology	5
3.2 Stratigraphy.....	6
Station Property	6
Backyard Sewer Lateral Route.....	6
Brighton Avenue.....	6
4.0 COLLECTION AND ANALYSIS OF GROUNDWATER SAMPLES.....	6
4.1 Depth to Water Measurements.....	6
5.0 RESULTS OF QUARTERLY GROUNDWATER MONITORING.....	7
5.1 Groundwater Gradient and Flow Direction.....	7
5.2 Results of Certified Analysis of Groundwater Samples.....	7
TPHg - Figure 5.....	8
Benzene - Figure 5.....	8
Toluene.....	8
Ethylbenzene.....	8
Xylenes.....	8
MtBE.....	8
6.0 WEEKLY PURGING OF RECEPTOR TRENCH	9
7.0 PUMPING ON-SITE WELL RS-5.....	9
8.0 FREE PHASE FLOATING PRODUCT REMOVAL.....	9
9.0 BIODEGRADATION OF HYDROCARBONS	10
9.1 Dissolved Oxygen.....	10
9.2 Sulfate.....	10
9.3 Nitrate.....	10
9.4 Ferrous Iron	11
10.0 SUMMARY.....	11
11.0 LIMITATIONS.....	12

List of Tables

1. Groundwater Elevation and Certified Analytical Results
2. Groundwater Removal
3. Free Product Recovery
4. Groundwater Elevations and Electron Acceptor Results

List of Figures

1. Area Base Map "Geotracker"
2. Portion of USGS Oakland East 7.5 Minute Quadrangle
3. Sample Location Figure
4. Groundwater Gradient, November 5, 2002
5. Groundwater Plume, TPHg & Benzene, November 5, 2002
6. Cross Section From 4035 Park Blvd Along Sewer Route Backyards with Soil Plume
7. Cross Section of Receptor Trench, Brighton Avenue
8. Cross Section From 4035 Park Blvd, to RS8 to Trench to RS9 with Soil Plume

Table of Contents Continued

List of Appendices

- A. METHODS AND PROCEDURES, QA/QC WITH FIELD NOTES
- B. GROUNDWATER ELEVATION CHART
- C. LABORATORY REPORT
- D. MIBE GRAPH, TPHg AND BENZENE CHARTS - WELLS
- E. WASTEWATER DISCHARGE REPORT



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

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

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

December 20, 2002

Dear Mr. Thompson:

The following report documents the fourth quarter 2002 sampling at DP793, 4035 Park Blvd., Oakland, California.

1.0 SITE LOCATION AND NUMBERS

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

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

2.0 SITE INVESTIGATION/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 continuous 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 investigation 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 Commence quarterly groundwater monitoring.
- September 8, 1993 Levine - Fricke, conduct soil boring/sampling investigation at residences 4003 Park Blvd. and 4006 Brighton Avenue. Construct 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 Removal of all USTs and associated piping from 4035 Park Blvd.
- August 14, 1995 Over-excavate 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. Excavation removed monitor well RS-1.
- August 16, 1995 Excavate and removed hydraulic hoists from station building.
- August 31, 1995 Exploratory excavation at waste oil UST area, north of building and are west of building to 17 feet below surface. Installed excavation wells R1 in west excavation and R2 in north excavation.

September 5, 1995	Drill/sample 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 purgeing 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 continuous, continued once a week purgeing of receptor well T1 (46,121 gallons removed from receptor trench well).
July 19, 2001	Cease pumping of RS-5 and weekly purgeing 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	Commence weekly hand bailing of free phase product from well RS-8.
December 12, 2002	Purge receptor trench of 1432 gallons gasoline tainted groundwater.

3.0 LOCAL GEOLOGY

3.1 Geomorphology

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

3.2 Stratigraphy

Station Property

The native soil from surface to 13 feet below ground surface (BGS) consists of dark brown silty clay. The dark brown clay is underlain by light brown stiff clay that includes subrounded to rounded metavolcanic gravel. This clay extends to approximately 23 feet BGS at the northwest corner of the site. A fine to medium sand, clayey sand, and silty sand underlies the gravel and clay, see Figure 7.

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, see Figure 6.

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, see Figure 7.

Figure 8 is a cross sectional view from the Station to downgradient well RS-9 at Brighton Avenue. Figure 6 and Figure 8 show a sandier sequence of sediments north of the storm water catch basin at Brighton Avenue, indicating 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 November 5, 2002. Samples were analyzed for Total Petroleum Hydrocarbons as gasoline, Benzene, Toluene, Ethylbenzene, Xylenes and Methyl tert-Butyl Alcohol 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 November 5, 2002 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 December 12, 2002.

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 November 5, 2002, prior to purging the wells for sampling, see Table 1 and Appendix A. On February 15, 2001 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 lowered the water levels in RS-6, RS-8, RS-10, R2, and R3, 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. The hydraulic gradient averages 0.087 feet/linear foot downgradient of RS-10 to the receptor trench well T1, see Figure 4. The present flow direction and hydraulic gradient are consistent with previous determinations by WEGE. Also evident on Figure 4 is the cone of influence out to RS8, generating at RS5 as pumping from this well has resumed. For reference areas that have been documented to contain contaminated soils (TPHg > 10 mg/Kg) have been shaded yellow.

5.2 Results of Certified Analysis of Groundwater Samples

The results of the certified analyses of groundwater samples collected on November 5, 2002 are shown in Table 1.

TPH-G concentrations in water samples from the eight monitor wells, the receptor trench well and three recovery wells ranged from 12000 ug/L at the pumping well (RS5), to below laboratory lower detection limits of 50 ug/L in wells MW1, RS2, RS6, and R3 respectively. Well RS8 contained free phase floating product and well R1 was dry.

Benzene concentrations ranged from a maximum of 3000 ug/L in wells R2 and T1 to below the laboratory lower detection limits (0.5 ug/L) at wells MW1, RS2, RS6, RS10, and R3, see Appendix C - Laboratory Report.

Analysis results for Oxygenant Methyl-t-Butyl Ether (MtBE) was below the laboratory lower detection limit in wells MW1, RS2, RS5, RS7, RS10, R2, and R3. The wells located within or near Brighton Street, RS9 and the trench well T1, contained 8.6 and 18 ug/L MtBE respectively, indicating that the MtBE source(s) maybe the cars parked along Brighton Street. During the September 16, 1998 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.

Figure 5 (May 7, 2002) shows the lateral distribution of the hydrocarbon plume with benzene distinction in groundwater during pumping from RS-5.

TPHg - Figure 5

Total Petroleum Hydrocarbons, gasoline range has a laboratory lower detection limit (LLDL) of 50 ug/L, was detected in wells R2, RS6, RS7, RS8 (floating product), RS9, and T1 ranging from a low of 130 ug/L at RS6 to a high of 28000 ug/L at T1 and floating product at RS8.

Benzene - Figure 5

Benzene has a LLDL of 0.5 ug/L. The recommended CPHG (California Public Health Goal) for Benzene is 1 ug/L. Benzene was detected in wells R2, RS7, RS8 (floating product), RS9 and T1 ranging from a low of 29 ug/L at RS9 to a high of 5500 ug/L at T1 and floating product at RS8.

Toluene

Toluene has a LLDL of 0.5 ug/L. The recommended CPHG for toluene is 150 ug/L. Toluene was detected in wells R2, RS7, RS8 (floating product), RS9, RS10 and T1, ranging from a low of 0.7 ug/L at well RS10 to a high of 240 ug/L at well T1 and floating product at well RS8.

Ethylbenzene

Ethylbenzene has a LLDL of 0.5 ug/L. The recommended CPHG for Ethylbenzene is 300 ug/L. Ethylbenzene was detected in wells R2, RS7, RS8 (floating product), RS9 and T1, ranging from a low of 2.3 ug/L at well RS9 to a high of 1300 ug/L at well T1 and floating product at RS8.

Xylenes

Xylenes have a LLDL of 0.5 ug/L. The recommended CPHG for Xylenes is 1800 ug/L. Xylenes were detected in wells R2, RS7, RS8 (floating product), RS9, RS10 and T1, ranging from a low of 1.6 ug/L at well R10 to a high of 2600 ug/L at well T1 and floating product at RS8.

MtBE

MtBE has a LLDL of 0.5 ug/L. The recommended PHG for MTBE is 13 ug/L. MtBE was detected in wells RS6, RS9 and T1, ranging from a low of 3 ug/L at well RS6 to a high of 32 ug/L at well T1, see Table 1 and Appendix C - Laboratory Report.

Appendix D contains charts developed for wells MW1, RS2, RS5, RS6, RS7, RS8, RS9, RS10 and trench well T1 showing TPHg & Benzene concentration with time, with the exception of RS8 and T1 all wells display a reduction in concentrations with time for both TPHg and Benzene through May 7, 2002 sampling.

6.0 WEEKLY PURGING OF RECEPTOR TRENCH

Commencing on May 4, 2000, weekly pumping of the receptor trench has been performed for approximately 4 hours per week, see Table 3. 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. Twice a month purging of the trench will occur until concentrations in RS9 lower, 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 December 12, 2002 251,811 gallons of groundwater have been pumped from RS5 and treated through two in series water carbon units prior to being discharge to sanitary sewer, see Table 2.

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

8.0 FREE PHASE FLOATING PRODUCT REMOVAL

Free Phase Floating Product was discovered in well RS8, 0.04 feet in thickness, yellow in color 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, 0.014 gallons of degraded gasoline has been removed and is stored on site in a 55 gallon 17H drum, see Table 3.

9.0 BIODEGRADATION OF HYDROCARBONS

During the December 18, 2001 sampling of wells, field measurements were obtained to determine the availability of electron receptors to aid in the natural attenuation of the hydrocarbon plume. Along with pH, temperature and electrical conductivity, dissolved oxygen, nitrate, sulfate and ferrous iron were also measured. Water samples were obtained after the wells were purged and allowed to recovery and analyzed in the field using a Hach DR/2000 Spectrophotometer. The following methods were used:

Dissolved Oxygen, high range (0 to 13 mg/L O₂) - Method 8166 for water and wastewater.

Nitrate, high range (0 to 30 mg/L NO₃) - Method 8039 for water, wastewater and seawater.

Sulfate, (0 to 70 mg/L SO₄) - Method 8051 for water and wastewater.

Ferrous Iron, (0 to 3.00 mg/L Fe₂) - Method 8146 for water, wastewater and seawater.

Table 4 represents the results of electron acceptor field analysis obtained December 18, 2001 compared to results obtained August 26, 1999.

9.1 Dissolved Oxygen

Readings for dissolved oxygen obtained on August 26, 1999, prior to pumping the receptor trench and RS5, indicated two areas of oxygen depletion (<1 mg/L), the entire north half of the site (4035 Park Avenue) at wells RS2, RS5, RS6, R1 and R2 and the area excavated for the receptor trench along the eastern curb of Brighton Avenue, well RS-7 and T1. Readings obtained during the December 18, 2001 monitoring round show that dissolved oxygen has increased substantially and even exceeds 5 mg/L in the over-excavated area on site. The lowest Dissolved Oxygen level encountered is associated with well RS5 at 1.4 mg/L, compared to 0.7 mg/L at RS5 in August 1999. All other dissolved oxygen measurements were at 2.5 mg/L or greater, see Table 4.

9.2 Sulfate

Comparing sulfate measurements obtained in August 1999 to the December 2001 measurements, the sulfate has been depleted at the receptor trench and beneath Brighton Avenue, but is being replenished at well location RS8.

9.3 Nitrate

Comparing nitrate measurements obtained in August 1999 to the December 2001 measurements, the nitrate is being replenished all along the petroleum plume area.

9.4 Ferrous Iron

The measurements obtained in August 1999 compared to the December 2001 measurements indicate that ferrous iron is oxidized, as the site becomes more aerobic.

10.0 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, R3, RS-5, and RS-10. 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, November 5, 2002 shows continue decrease in hydrocarbons upgradient, at the site, but an increase in hydrocarbon concentrations downgradient of the site at wells RS8, RS9 and RS10. The most down gradient well, RS9 contains low levels of gasoline range hydrocarbons; 1800 ug/L TPHg, 240 ug/L Benzene, 9.0 ug/L Toluene, 27 ug/L Ethylbenzene, 110 ug/L Xylenes and 8.6 ug/L MtBE.

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 4th 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 Regenis Inc. to perform a basic model using ORC to determine how to apply and the amount needed. The Regenis 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 Regenis 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.

11.0 LIMITATIONS

This report is based upon the following:

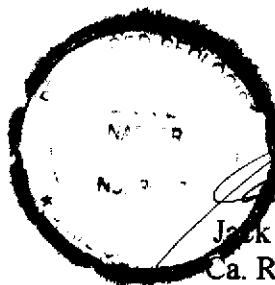
- A. The observations of field personnel.
- B. The results of laboratory analyses performed by a state certified laboratory.
- C. Referenced documents.
- D. Our understanding of the regulations of the State of California, Alameda County and the City of Oakland.
- E. Changes in groundwater conditions 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. Scott O. Seery, Alameda County Health (510) 567-6783
Mr. Leroy Griffin, Oakland Fire Dept.

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

ID#	DATE SAMPLED	(All concentrations in parts per billion [ug/L. ppb]) (AMSL = Above mean sea level)								
		WELL CASING ELEVATION (FEET AMSL) (CALIFORNIA PUBLIC HEALTH GOAL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
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				1500	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	0.9	< 0.5	< 1	< 0.5
MW-1	2/21/97	229.5	9.50	220	< 50	< 0.5	0.9	< 0.5	< 1	< 0.5
MW-1	5/28/97	229.5	11.18	218.32	< 50	3	3	< 0.5	< 1	< 0.5
MW-1	9/2/97	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						

TABLE 1
 GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABAORATAORY 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)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)

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	< 0.5
RS-2	03/27/96	227.39	6.28	221.11	< 50	< 0.5	< 0.5	< 0.5	< 2	< 50
RS-2	06/11/96	227.39	8.00	219.39	< 50	1.2	2.8	< 0.5	< 2	< 50
RS-2	09/04/96	227.39	9.89	217.50	< 50	< 0.5	< 0.5	< 0.5	< 2	< 5
RS-2	12/11/96	227.39	8.38	219.01	< 50	< 0.5	< 0.5	< 0.5	< 1	6
RS-2	2/21/97	227.39	6.96	220.43	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
RS-2	5/28/97	227.39	10.02	217.37	< 50	3	3	< 0.5	< 1	< 0.5
RS-2	9/2/97	227.39	11.46	215.93	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
RS-2	11/24/97	227.39	10.43	216.96	< 50	< 0.5	1	< 0.5	3	< 0.5
RS-2	2/25/98	227.39	3.57	223.82	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
RS-2	7/8/98	227.39	8.83	218.56	< 50	< 0.5	< 0.5	< 0.5	< 1	< 1
RS-2	9/16/98	227.39	10.60	216.79	< 50	< 0.5	< 0.5	< 0.5	< 1	< 1
RS-2	11/24/98	227.39	13.27	214.12	140	2.8	19	2.6	3.3	15
RS-2	2/23/99	227.39	4.06	223.33	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
RS-2	5/5/99	227.39	7.70	219.69	< 50	0.7	< 0.5	< 0.5	< 1	6
RS-2***	8/26/99	227.39	11.42	215.97	200	15	23	1.7	23	9
RS-2	11/10/99	227.39	15.94	211.45	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
RS-2	2/9/00	227.39	8.91	218.48	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
RS-2	6/30/00	227.39	9.79	217.60	52	2	< 0.5	< 0.5	< 1	< 0.5
RS-2	8/8/00	227.39	10.71	216.68	60	< 0.5	< 0.5	< 0.5	< 1	< 0.5
RS-2	11/16/00	227.39	10.39	217.00	< 50	< 0.5	< 0.5	< 0.5	< 1	< 0.5
RS-2	3/8/01	227.39	6.62	220.77	< 50	< 0.5	< 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	< 0.5
RS-2	12/18/01	227.39	6.99	220.40	< 50	< 0.5	< 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	< 0.5
RS-2	5/7/02	227.39	9.27	218.12	< 50	< 0.5	< 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	< 0.5
RS-2	11/5/02	227.39	17.09	210.30	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
RS-2	12/12/02	227.39	13.19	214.20						

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)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
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	9300	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	7000	21000	1800	8900	570
RS-5	2/21/97	227.61	13.76	213.85	100000	5000	22000	1700	7300	< 0.5
RS-5	5/28/97	227.61	15.77	211.84	52000	4500	19000	2100	10000	< 0.5
RS-5	9/2/97	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	8600	< 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	4800	< 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						

TABLE 1
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABAORATAORY 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)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
RS-6	12/14/89	227.22	22.52	204.7	11000	1400	1700	160	860	
RS-6	2/91	227.22	FLOATING PRODUCT							
RS-6	6/91	227.22			95000	4200	4200	650	3700	
RS-6	9/91	227.22	FLOATING PRODUCT							
RS-6	12/91	227.22			64000	3700	2300	730	4100	
RS-6	11/9/92	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						

TABLE 1
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABAORATAORY 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 WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
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	8280	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	2800	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	120	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						

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

ID#	DATE SAMPLED	(All concentrations in parts per billion [ug/L, ppb]) (AMSL = Above mean sea level)								
		WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L) (1)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
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			

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

ID#	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	TPH-G (UG/L)	BENZENE (UG/L)	TOLUENE (UG/L)	ETHYL-BENZENE (UG/L)	XYLENES (UG/L)	MTBE (UG/L)	(All concentrations in parts per billion [ug/L, ppb]) (AMSL = Above mean sea level)	
											(CALIFORNIA PUBLIC HEALTH GOAL)	(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								

TABLE 1
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABAORATAORY 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)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
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						

TABLE 1
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABAORATAORY 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)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)		
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	22	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								

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)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)
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	14.16	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
R2	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						

TABLE 1
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABAORATAORY 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)	TOLUENE (UG/L) (150)	ETHYL-BENZENE (UG/L) (300)	XYLENES (UG/L) (1800)	MTBE (UG/L) (13)	
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	<0.5	
R3	5/31/01	227.25	10.01	217.24	<50	<0.5	<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	<0.5	
R3	2/19/02	227.25	7.86	219.39	<50	<0.5	<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	<0.5	
R3	8/6/02	227.25	10.62	216.63	<50	<0.5	<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	<0.5	
R3	12/12/02	227.25	11.28	215.97							

TABLE 1
GROUNDWATER ELEVATIONS AND CERTIFIED ANALYTICAL LABAORATAORY 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)	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	2/23/99									
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	48000	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						

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

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

PURGING BY	DATE PURGED	METER READING IN GALLONS R55	METER READING IN GALLONS TRENCH	DEPTH TO TOP OF WATER IN FEET T1	GALLONS PURGED T1 and/or 1/4ly monitoring	ACCUMULATED GALLONS REMOVED FROM TRENCH & WELLS In GALLONS	Accumulated gallons removed from RS5 GALLONS	TOTAL GALLONS REMOVED	INFLUENT CONCENTRATIONS EPA METHOD 8020					Sample Location	
									TPH _g	BENZENE	TOLUENE	ETHYL-BENZENE	XYLENES		MTBE
									ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
WEGE	2/19/02	purged water from 1/4ly			248	62995	78919.3	141914.2	64000	8600	6000	1700	8800	55	T1
WEGE	3/21/02	1235760.0	1235760.0		0	62995	78919.3	141914.2	set pump into RS5, restart pumping from RS-5						
WEGE	3/27/02	1243817.8	1243817.8		0	62995	86977.1	149972.0							
WEGE	4/11/02	1259678.6	1259678.6		0	62995	102837.9	165832.8							
WEGE	5/7/02	1283903.1	1283903.1	2.22	132	63127	128930.4	180057.3	41000	9200	910	2000	6200	62	T1
WEGE	6/6/02	1308480.0	1308480.0		0	63127	151507.3	214634.2							
WEGE	7/18/02	1330934.8	1330934.8		0	63127	173962.1	237089.0							
WEGE	8/6/02	1340894.7	1340894.7		0	63127	183722.0	246848.9	28000	5500	240	1300	2800	32	T1
WEGE	9/12/02	1364301.5	1364301.5		0	63127	207328.8	270455.7	12000	270	330	130	1100	2	RS5
WEGE	10/30/02	1389884.7	1389884.7		0	63127	232912.0	296038.9							
WEGE	11/5/02	1392931.0	1392931.0		0	63127	235958.3	299085.2	12000	150	360	21	890	<2	RS5
WEGE	12/12/02	1408784.2	1410216.0		1432	64559	251811.5	316370.2							

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

< BELOW LABORATORY LOWER DETECTION LIMITS
mg/Kg milligrams per kilogram (parts per million)
TPH_g TOTAL PETROLEUM HYDROCARBONS GASOLINE RANGE
MTBE METHYL TERTIARY BUTYL ETHER
* SAMPLED ON AUGUST 26, 1999

T1 Receptor Trench Well
RS5 Monitor Well RS5

Free Product Recovery
 Desert Petroleum Station DP793
 4035 Park Blvd., Oakland, California

TABLE 3

WELL #	DATE	DTW FEET	BAILED INCHES	BAILED GALLONS	WATER INCHES	WATER RECOVER	TOTAL		ACCUMULATIVE	
							GALLONS GASOLINE	GALLONS WATER	GALLONS GASOLINE	GALLONS WATER
RS 8	11/20/02	14.73	6.9	0.053	0.8	0.006	0.083	0.008	0.083	0.008
			2.5	0.019	0.3	0.002				
			1.2	0.009	0	0.000				
			0.3	0.002	0	0.000				
RS 8	11/27/02	nm	1.4	0.011	1.5	0.011	0.027	0.015	0.110	0.023
			1.2	0.009	0.4	0.003				
			0.9	0.007	0	0.000				
			0	0.000	0	0.000				
RS 8	12/5/02	14.76	1.3	0.010	0.6	0.005	0.020	0.005	0.130	0.028
			1	0.008	0	0.000				
			0.3	0.002	0	0.000				
			0	0.000	0	0.000				
RS 8	12/12/02	14.38	0.9	0.007	7.1	0.054	0.014	0.070	0.144	0.098
			0.5	0.004	1.8	0.014				
			0.4	0.003	0.3	0.002				
			0	0.000	0	0.000				

nm not measured

internal diameter of product bailer = 1.5 inches

26

TABLE 4
GROUNDWATER ELEVATIONS AND ELECTRON ACCEPTOR RESULTS FROM WATER SAMPLES
DESEKI PETROLEUM, INC. SITE #793
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	FIELD MEASUREMENTS					CERTIFIED LABORATORY RESULTS DISSOLVED IN WATER						
					DISSOLVED OXYGEN O2 (MG/L)	SULFATE SO4 (MG/L)	NITRATE NO3 (MG/L)	FERROUS IRON FE2 (MG/L)	TEMPERATURE (F)	pH	TOTAL PETROLEUM HYDROCARBONS GASOLINE (MG/L)	CARBON DI OXIDE CO2 (MG/L)	METHANE CH4 (MG/L)	AEROBIC HYDROCARBON DEGRADING BACTERIA CFU/ML	ORTHO-PHOSPHATE PO4 (MG/L)	AMMONIA as NITROGEN N (MG/L)
MW-1	8/26/99	229.57	11.41	218.16	4.9	35	0	0.25	75.4	6.55	<0.05					
	9/2/99	229.57	11.65	217.92					72.9	8.16						
	3/8/01	229.57	12.30	217.27	4.9				67.6	7.33	<0.05	0.13	<0.00001	10	<1	<0.5
	12/18/01	229.57	13.74	215.83	4.4	61	7.6	0	67.1	7.63	<0.05					
RS-2	8/26/99	227.39	11.42	215.97	0.7	46	2.7	0.65	80.9	6.97	0.2					
	9/2/99	227.39	12.00	215.39												
	12/18/01	227.39	6.99	220.4	4.6	>77	11.4	0.07	67.6	7.75	<0.05	nm	nm	nm	nm	nm
RS-5	8/26/99	227.61	16.06	211.55	0.7	31	1.3	0.92	71.7	7.08	35					
	9/2/99	227.61	16.26	211.35					68.4	7.15		0.16	0.00021	3000	<1	<0.5
	3/8/01	227.61	27.72	199.89	3.1				59.7	7.46	11					
	12/18/01	227.61	15.61	212	1.4	37	8.2	>3.3	66.6	6.83	12					
RS-6	8/26/99	227.22	13.72	213.5	1.2	76	0.3	>3.3	77.8	6.66	0.69					
	9/2/99	227.22	14.14	213.08					69	6.69						
	12/18/01	227.22	10.88	216.34	4.3	>77	0	0	66.7	6.84	0.056	0.36	<0.00001	400	<1	<0.5
RS-7	8/26/99	195.99	4.16	191.83	0.3	>77	0.8	1.27	73.4	6.99	15					
	9/2/99	195.99	4.14	191.85												
	12/18/01	195.99	4.81	191.18	2.5	1	6	0.87	68.1	6.82	2.7	nm	nm	nm	nm	nm
RS-8	8/26/99	214.67	7.25	207.42	2.6	0	0	0.54	69.2	6.7	160					
	9/2/99	214.67	7.38	207.29					71.7	5.74						
	3/8/01	214.67	9.40	205.27	2.2				63.3	6.97	10	0.058	0.000018	6600	<1	<0.5
	12/18/01	214.67	7.14	207.53	4.2	49	9.2	0.08	67.3	6.98	0.23					
RS-9	8/26/99	195.63	7.46	188.17	2.1	7	0	0.59	73.5	6.95	17					
	9/2/99	195.63	7.61	188.02					70.9	6.98						
	3/8/01	195.63	4.93	190.7	8.1				62.7	6.89	<0.05	0.25	0.0021	10000	<1	<0.5
	12/18/01	195.63	4.81	190.82	WATER TO CLOUDY, LIGHT GREY				68.3	6.8	0.21					
RS-10	8/26/99	208.46	3.76	204.7	4.2	nm	nm	nm	70.9	8.03	5.1					
	9/2/99	208.46	3.96	204.5					73.3	7.24						
	3/8/01	208.46	2.82	205.64	3.5				61.5	6.16	0.053	0.1	0.000037	8800	<1	<0.5
	12/18/01	208.46	2.10	206.36	4.3	46	4.1	0	66.9	6.54	<0.05					
R1	8/26/99	227.69	13.97	213.72	0.4	9	0	>3.3	70.6	6.38	6.5					
	9/2/99	227.69	14.18	213.51												
	12/18/01	227.69	9.90	217.79	5.2	14	4.2	0	66.4	7.24	<0.05	nm	nm	nm	nm	nm
R2	8/26/99	227.28	13.14	214.14	0.4	>77	0.8	0.3	72.7	6.65	6.7					
	9/2/99	227.28	13.23	214.05												
	12/18/01	227.28	12.95	214.93	2.8	>77	1.3	0.07	66.5	6.69	4.9	nm	nm	nm	nm	nm
R3	8/26/99	230.32	10.76	219.56	2.5	>77	0.7	0.05	75	6.95	<0.05					
	9/2/99	230.32	10.87	219.45												
	12/18/01	230.32	6.79	223.53	5.5	>77	6.2	0	67.1	6.91	<0.05	nm	nm	nm	nm	nm
T 1	8/26/99	195.11	2.44	192.67	0.8	32	0.5	0.03	75.3	7.29	40					
	9/2/99	195.11	2.20	192.91					78.1	7.57						
	3/8/01	195.11	2.18	192.93	3.1						25	0.11	0.00019	1300	<1	<0.5
	12/18/01	195.11	2.20	192.91	2.8	0	4.3	0.6	66.9	6.52	48					

27

TABLE 4
GROUNDWATER ELEVATIONS AND ELECTRON ACCEPTOR RESULTS FROM WATER SAMPLES
DESERT PETROLEUM, INC. SITE #793
4035 PARK BOULEVARD, OAKLAND, CALIFORNIA

ID#	DATE SAMPLED	WELL CASING ELEVATION (FEET AMSL)	DEPTH TO GROUND WATER (FEET)	GROUND WATER ELEVATION (FEET AMSL)	FIELD MEASUREMENTS						CERTIFIED LABORATORY RESULTS DISSOLVED IN WATER					
					DISSOLVED OXYGEN O ₂ (MG/L)	SULFATE SO ₄ (MG/L)	NITRATE NO ₃ (MG/L)	FERROUS IRON FE ₂ (MG/L)	TEMP-ERATURE (F)	pH	TOTAL PETROLEUM HYDROCARBONS GASOLINE (MG/L)	CARBON DI OXIDE CO ₂ (MG/L)	METHANE CH ₄ (MG/L)	AEROBIC HYDROCARBON DEGRADING BACTERIA CFU/ML	ORTHO-PHOSPHATE PO ₄ (MG/L)	AMMONIA as NITROGEN N (MG/L)
T 2	8/26/99	195.3	CAR		nm	nm	nm	nm	nm	nm	NA					
	9/2/99	195.3	CAR									nm	nm	nm	nm	nm
T 3	8/26/99	202.38	CAR		nm	nm	nm	nm	nm	nm	NA					
	9/2/99	202.38	CAR									nm	nm	nm	nm	nm
T 4	8/26/99	197.48	CAR		nm	nm	nm	nm	nm	nm	NA					
	9/2/99	197.48	CAR									nm	nm	nm	nm	nm
LP-1	8/26/99	226.59	CAR		nm	nm	nm	nm	nm	nm	NA					
	9/2/99	226.59	CAR									nm	nm	nm	nm	nm

NA NOT ANALYZED
nm NOT MEASURED
CAR CAR PARKED OVER WELL, NO ACCESS

MG/L milligrams per liter (ppm)
F degrees Fahrenheit
CFU/ML colony forming units per milliliter

< below laboratory lower detection limits.

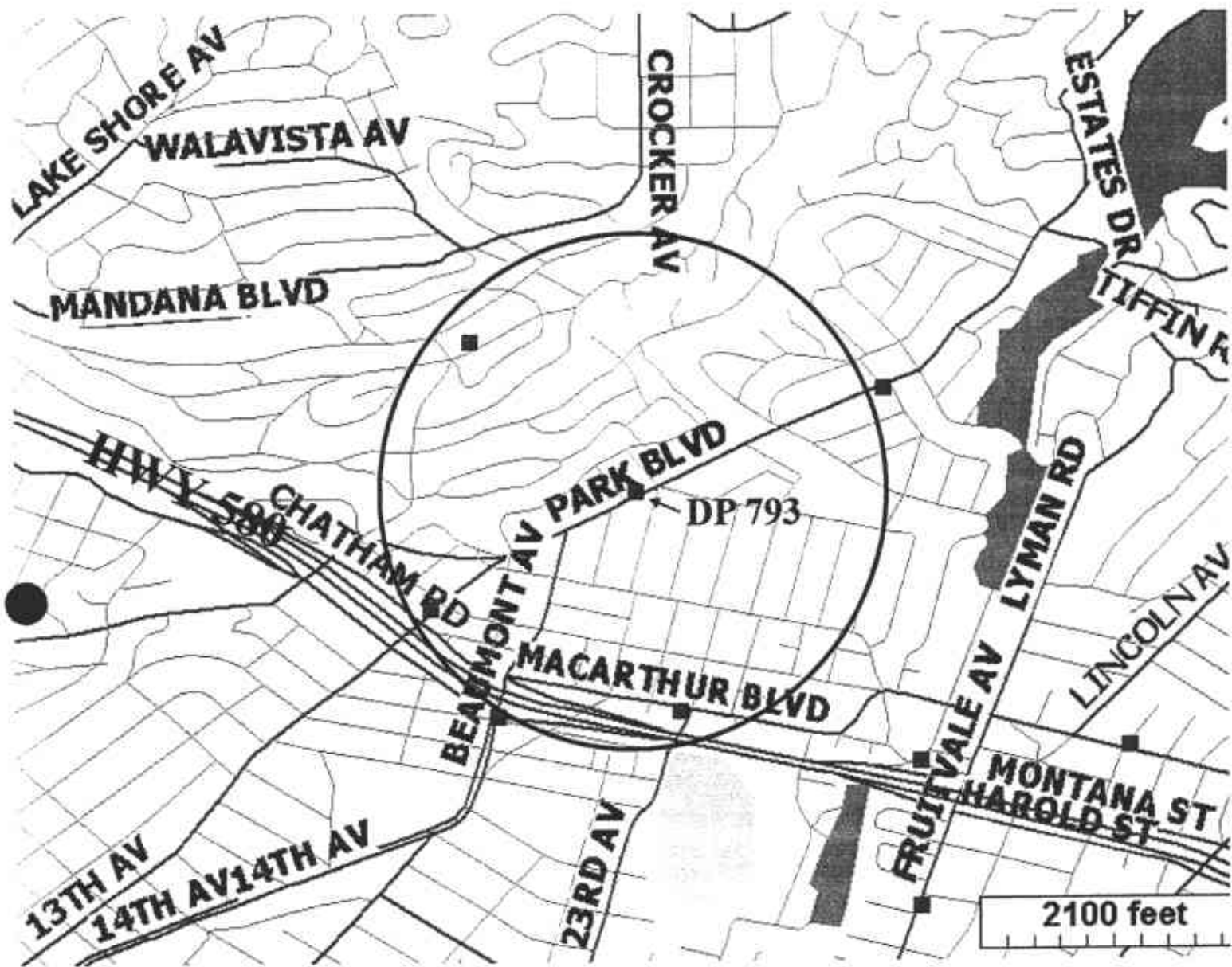


FIGURE 1
 GEOTRACKER
 AREA WELL & LUST MAP
 DP 793
 4035 PARK BLVD.
 OAKLAND, CA

- LUST SITES
- WELLS

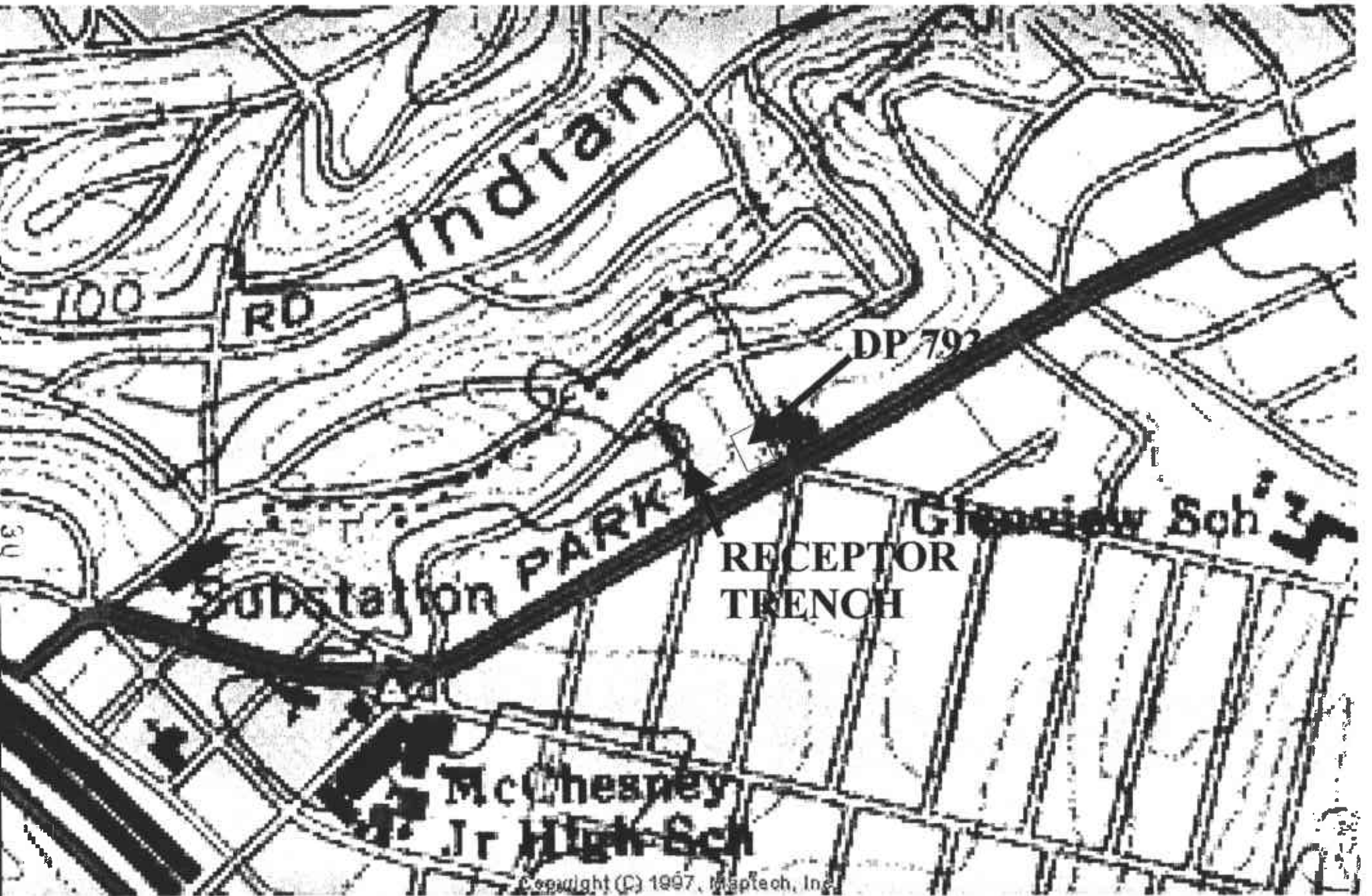
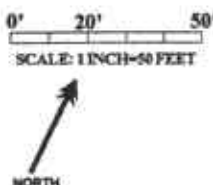
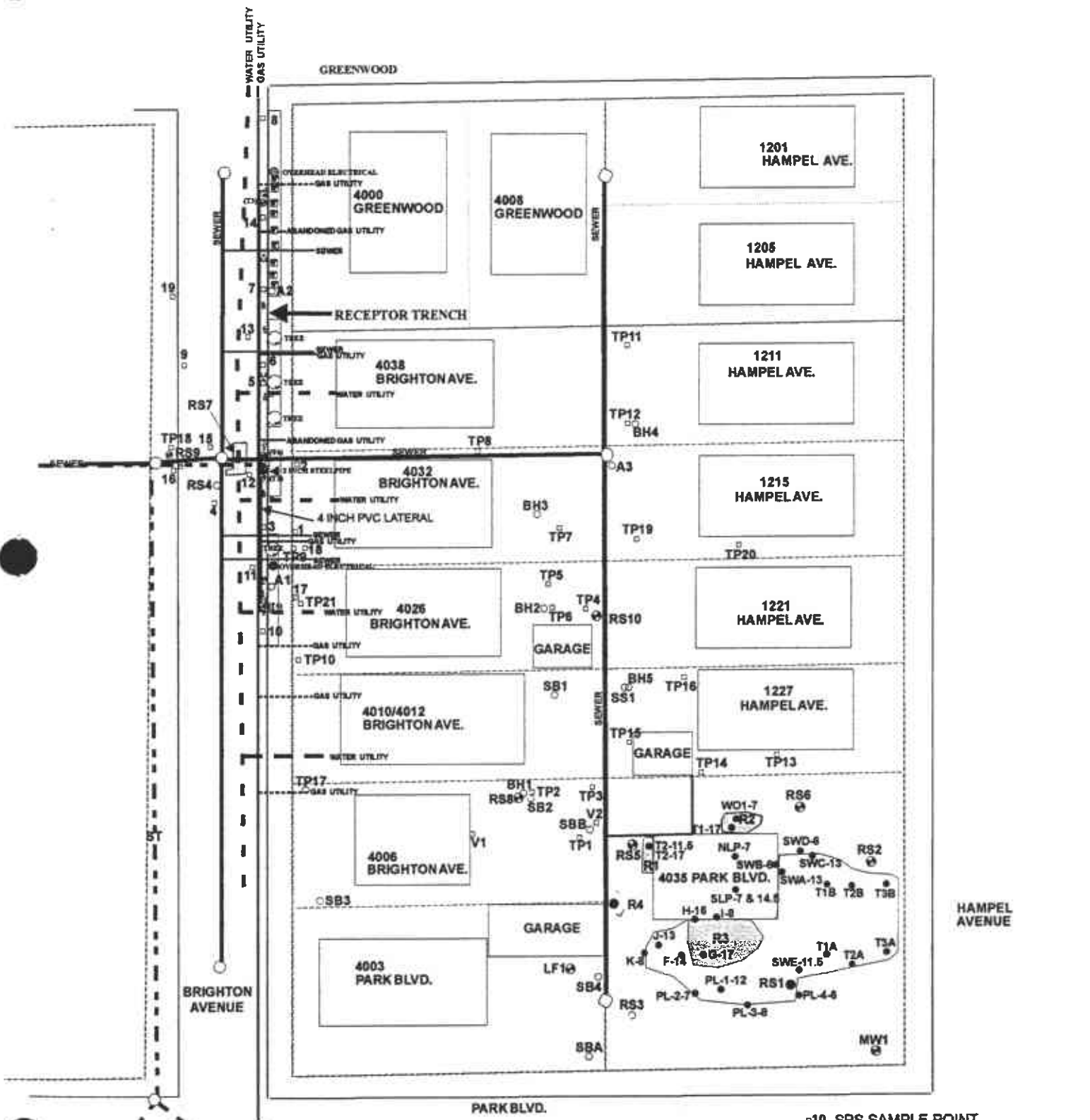


FIGURE 2
PORTION OF OAKLAND EAST 7.5 MINUTE USGS TOPOGRAPHIC MAP





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

- 10 SPS SAMPLE POINT
- SOIL SAMPLE POINT
- SOIL BORING
- ⋮ RECEPTOR TRENCH SAMPLE POIN
- RS2 ● GROUNDWATER MONITORING WEL
- RS1 ● DESTROYED MONITORING WELL

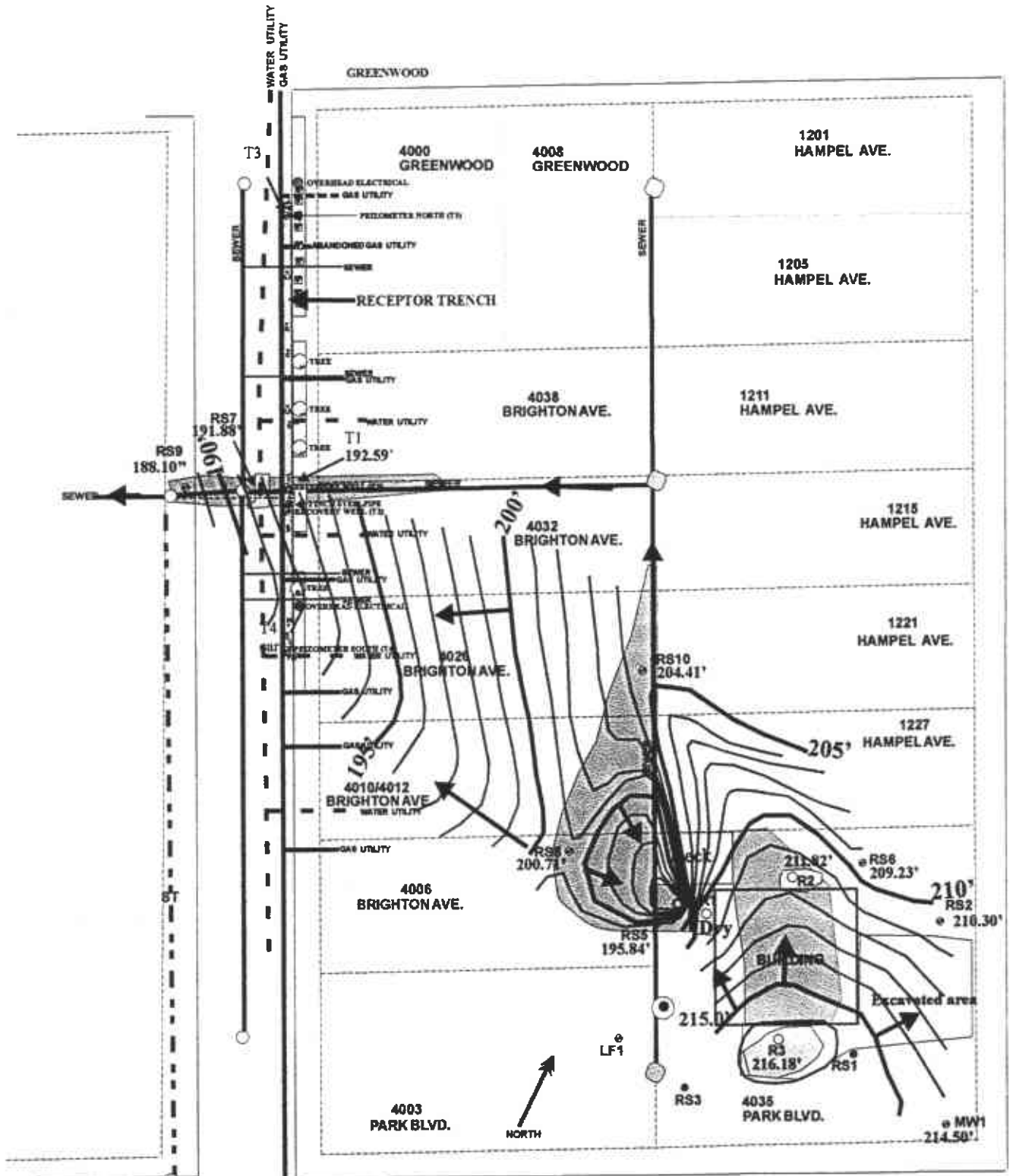
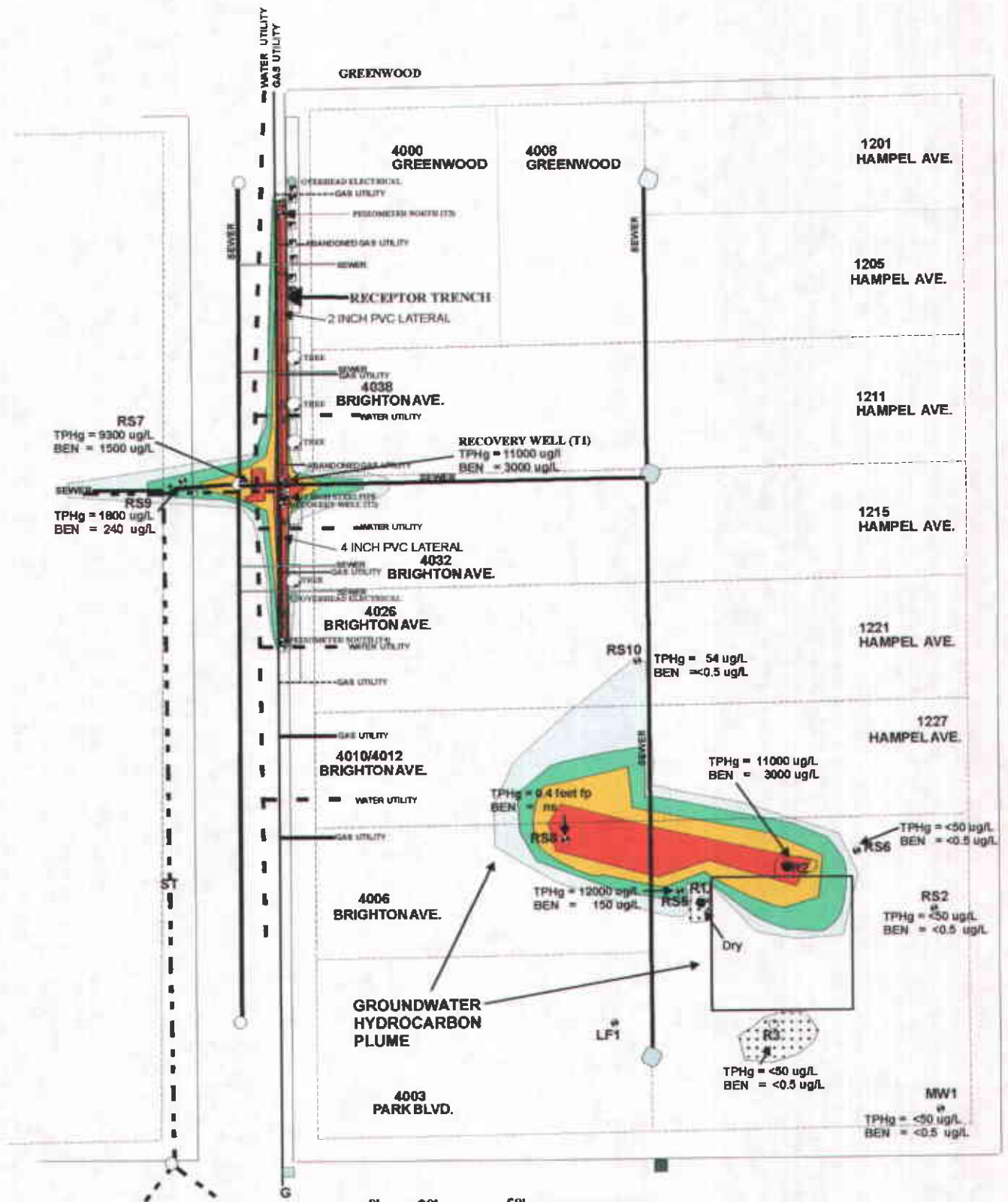


FIGURE 4
 DP 793, 4035 PARK BLVD.
 OAKLAND, CALIFORNIA
 GROUNDWATER ELEVATION
 11/05/02.

CONTOURS ARE
 FEET ABOVE SEA
 LEVEL

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

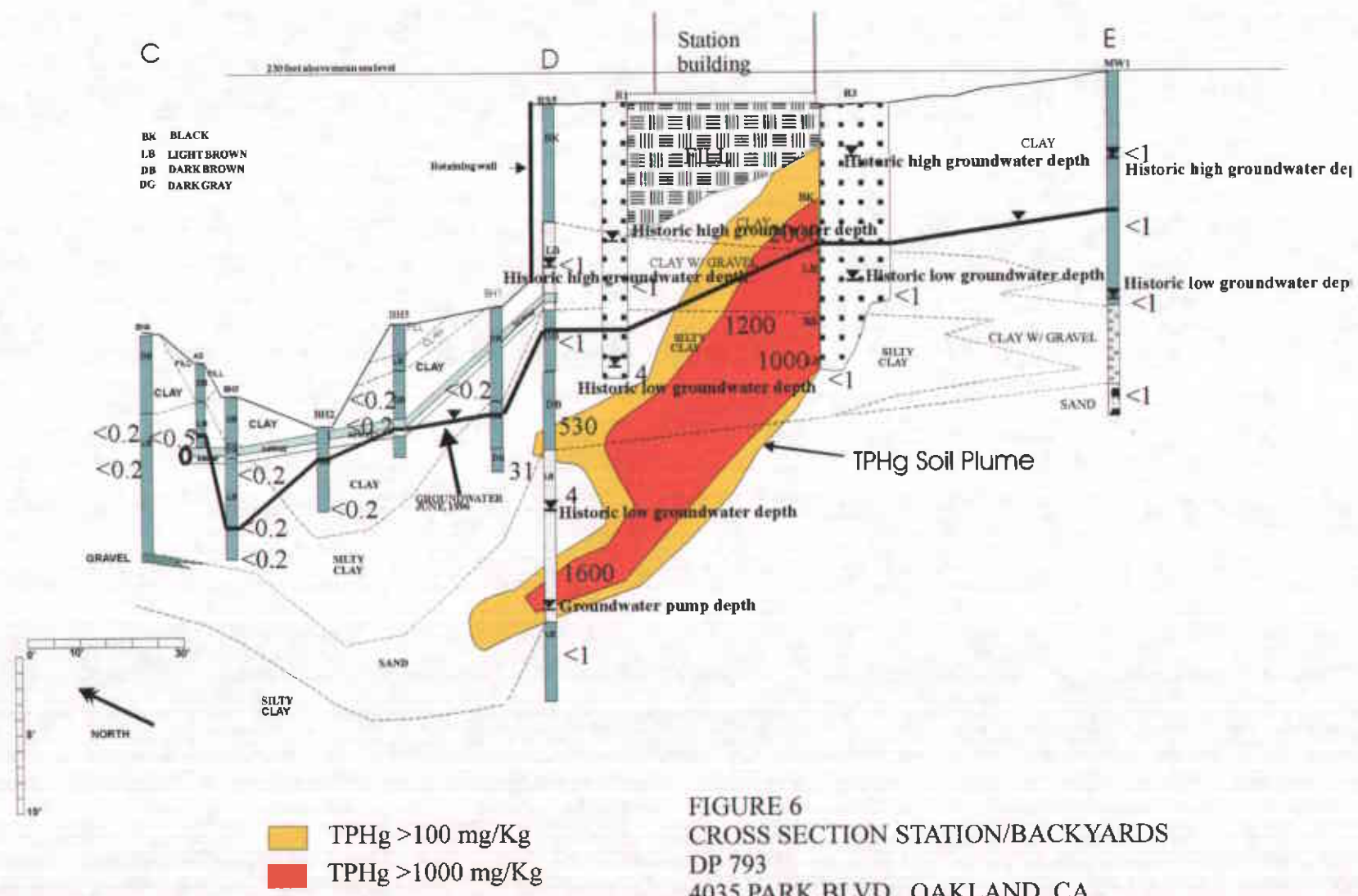


**FIGURE 5
GROUNDWATER
PLUME
11/05/02**

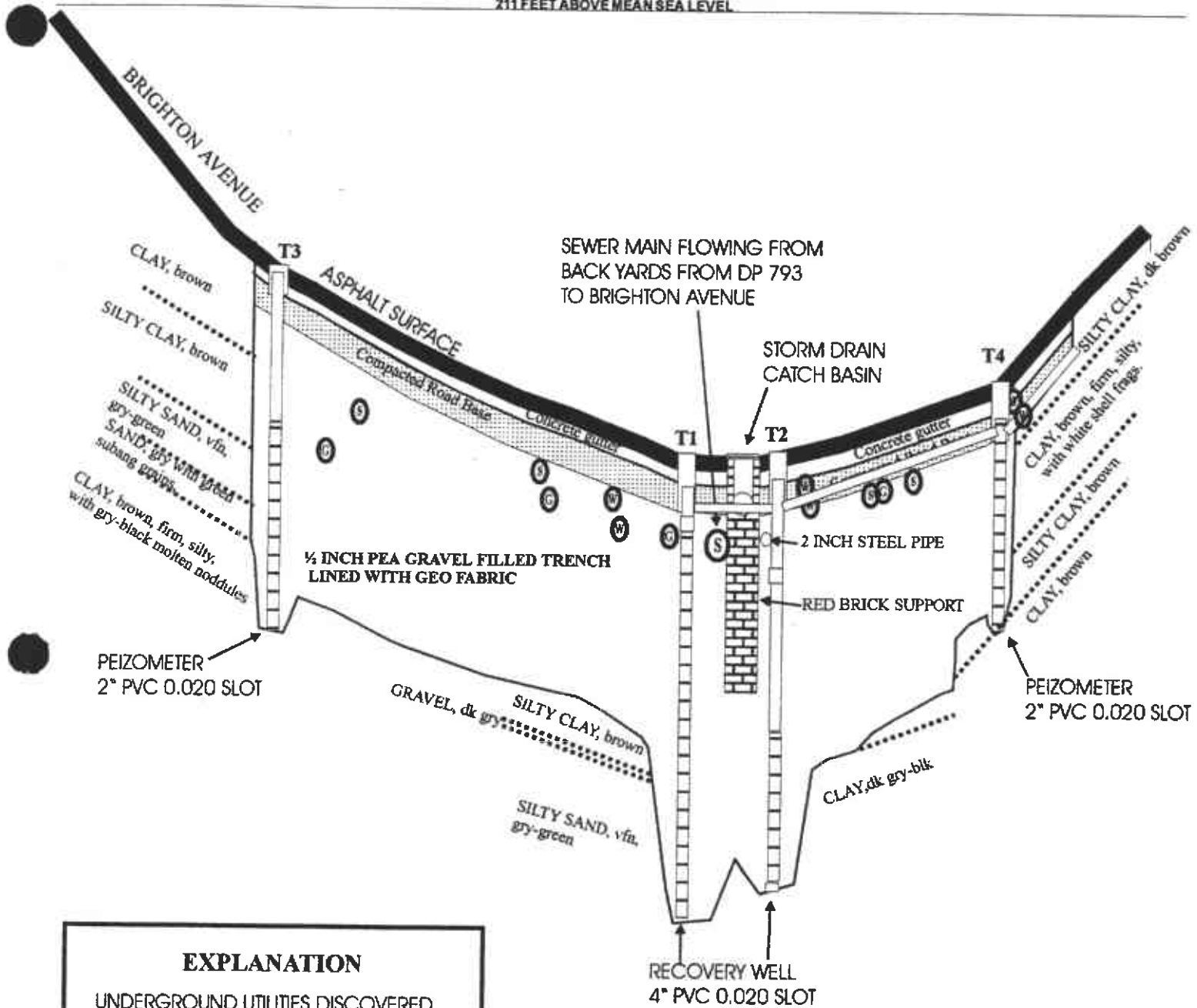
DP 793, 4035 PARK BLVD.
OAKLAND, CALIFORNIA

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

34



211 FEET ABOVE MEAN SEA LEVEL



EXPLANATION

UNDERGROUND UTILITIES DISCOVERED

- SEWER UTILITY HOUSE LATERAL
- GAS UTILITY HOUSE LATERAL
- WATER UTILITY HOUSE LATERAL

0' 10' 30' 60'
SCALE: 1 INCH = 30 FEET

5' 10'
SCALE: 1 INCH = 5 FEET

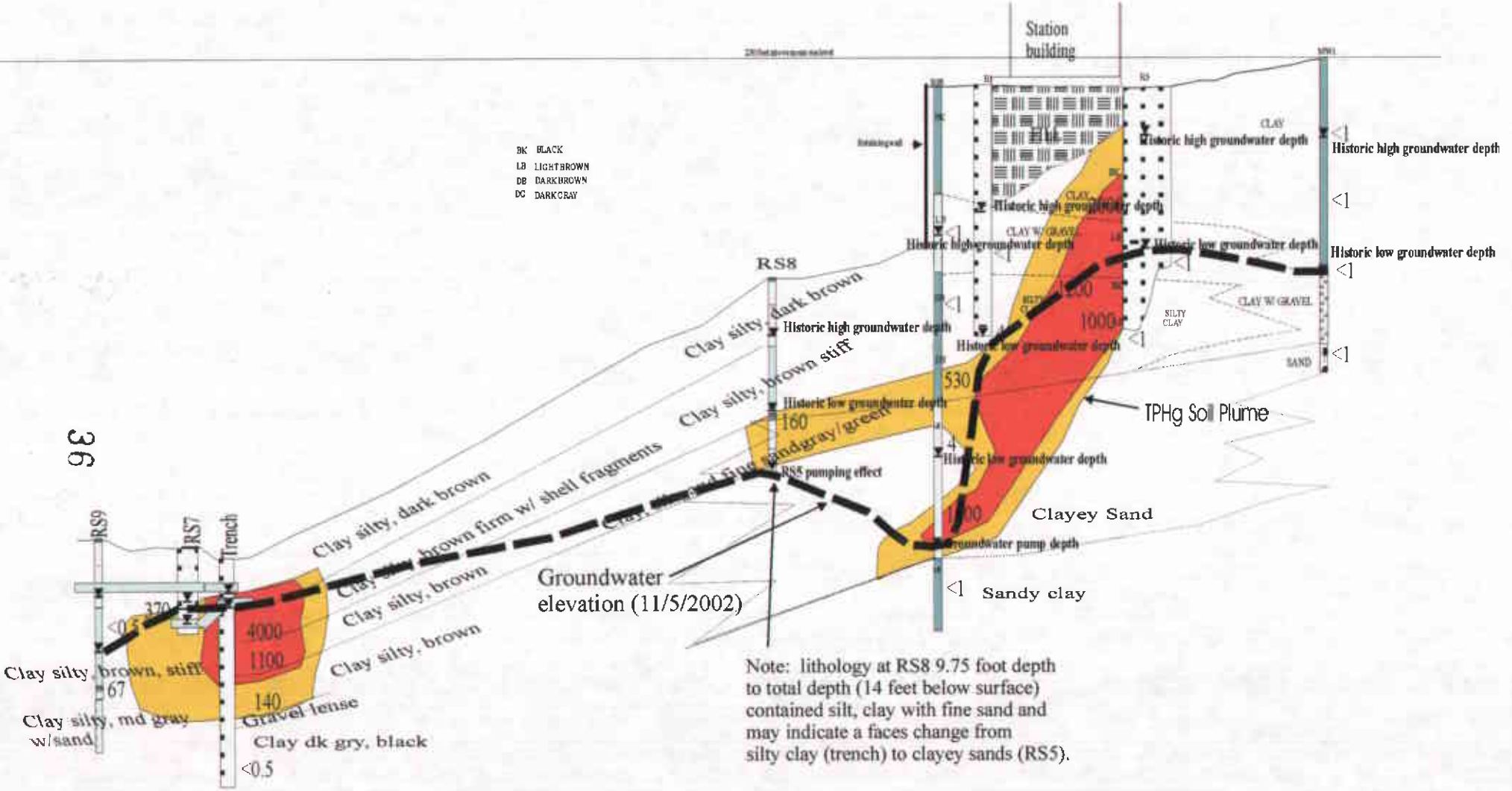


FIGURE 7
CROSS SECTION
AS BUILT RECEPTOR TRENCH
FOR FREE PRODUCT AND GROUNDWATER RECOVERY
DP793, 4035 PARK BLVD.
OAKLAND, CALIFORNIA
SEPTEMBER 9, 1999

2010/05/05/06/07/08/09/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31/32/33/34/35/36/37/38/39/40/41/42/43/44/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100

BK BLACK
LB LIGHT BROWN
DB DARK BROWN
DC DARK GRAY

93



Note: lithology at RS8 9.75 foot depth to total depth (14 feet below surface) contained silt, clay with fine sand and may indicate a faces change from silty clay (trench) to clayey sands (RS5).

TPHg > 100 mg/Kg
TPHg > 1000 mg/Kg

FIGURE 8 (Revised 11/21/2002)
CROSS SECTION STATION TO RS9
DP 793
4035 PARK BLVD., OAKLAND, CA.

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.

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 9-12-02

REASON FOR SITE VISIT monitor

TRENCH WELL T1					
TIME	PID	DTW	pH	TEMP.	COND.

TRENCH WELL T2				
PID	DTW	pH	TEMP.	COND.

TRENCH WELL T3				
PID	DTW	pH	TEMP.	COND.

TRENCH WELL T4				
PID	DTW	pH	TEMP.	COND.

DEPTH TO WATER

TIME	MW1	RS2	RS5	RS6

RS7	RS8	RS9	RS10

R1	R2	R3

COMMENTS

ELECTRIC METER 1619.5

WATER METER 1364501.5

SAMPLE # RS-05 & Carbon Discharge

SITE MONITORED BY: Broadway

TIME
pH
Conductivity
Temperature
PID

WASTEWATER	
INFLUENT	EFFLUENT

WATER TREATMENT

T1 FLOW RATE GALLONS/ MINUTES
T2 FLOW RATE GALLONS/ MINUTES

GALLONS PURGED
GALLONS PURGED

PRESSURE WATER CARBONS #1 6.1 PSI #2 0 PSI

WATER PHASE CARBON UNITS INSPECTION COMMENTS OK

CONDITION OF COMPOUND COMMENTS May rail's showing deterioration

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

9-12-02

MW-1 13.44
RS-2 13.37
RS-6 10.65
R3 10.83
R2 14.92
R1 17.20

RS8 13.99 (41)
9 7.23
7 4.02
10 3.62

RS-5 .25 67.8 7.60
Discharge .21 64.2 7.26

948A
1000

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

REASON FOR SITE VISIT monitor

DATE 10-30-02

TRENCH WELL T1					
TIME	PID	DTW	pH	TEMP.	COND.

TRENCH WELL T2					
PID	DTW	pH	TEMP.	COND.	

TRENCH WELL T3					
PID	DTW	pH	TEMP.	COND.	

TRENCH WELL T4					
PID	DTW	pH	TEMP.	COND.	

DEPTH TO WATER				
TIME	MW1	RS2	RS5	RS8

RS7	RS8	RS9	RS10

R1	R2	R3

COMMENTS _____
 ELECTRIC METER 16325

WATER METER 3 589884.7

SAMPLE:

SITE MONITORED BY: BROADWAY

TIME	WASTEWATER	
	INFLUENT	EFFLUENT
pH		
Conductivity		
Temperature		
PID		

WATER TREATMENT
 T1 FLOW RATE GALLONS/ MINUTES
 T2 FLOW RATE GALLONS/ MINUTES

GALLONS PURGED
 GALLONS PURGED

PRESSURE WATER CARBONS #1 9.3 PSI, #2 0 PSI.

WATER PHASE CARBON UNITS INSPECTION COMMENTS OK
 CONDITION OF COMPOUND COMMENTS OK

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

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 11-5-02

REASON FOR SITE VISIT 1/4/02

TRENCH WELL T1					
TIME	PID	DTW	pH	TEMP.	COND.

TRENCH WELL T2				
PID	DTW	pH	TEMP.	COND.

TRENCH WELL T3				
PID	DTW	pH	TEMP.	COND.

TRENCH WELL T4				
PID	DTW	pH	TEMP.	COND.

DEPTH TO WATER

TIME	MW1	RS2	RS5	RS8

RS7	RS8	RS9	RS10

R1	R2	R3

COMMENTS

ELECTRIC METER 16341

WATER METER 1392931.0

SAMPLE: _____

SITE MONITORED BY _____

TIME
 pH
 Conductivity
 Temperature
 PID

WASTEWATER	
INFLUENT	EFFLUENT

WATER TREATMENT

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

GALLONS PURGED
 GALLONS PURGED

PRESSURE WATER CARBONS #1 8.3 PSI, #2 .4 PSI

WATER PHASE CARBON UNITS INSPECTION COMMENTS OK # Lid Rusty

CONDITION OF COMPOUND COMMENTS OK

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

WELL SAMPLING DATA SHEET

SITE <i>OP 793</i>	DATE <i>11-5-02</i>	TIME <i>1030</i>
WELL <i>MW1</i>	SAMPLED BY. <i>BROADWAY</i>	
WELL ELEVATION		
PRODUCT THICKNESS		
DEPTH TO WATER	<i>15</i> DTB	<i>1832</i>
FLUID ELEVATION	<i>214.5</i>	
BAILER TYPE	<i>Disposable Bailer</i>	
PUMP	<i>David Pittman</i>	

WELL PURGING RECORD				
TIME	VOLUME REMOVED	TEMP. F°	pH	COND. X1000
<i>1032</i>	<i>1 Bailer</i>	<i>73.2</i>	<i>7.72</i>	<i>.27</i>
<i>1035</i>	<i>2 gal</i>	<i>72.5</i>	<i>7.43</i>	<i>.28</i>
<i>1036</i>	<i>1</i>	<i>72.0</i>	<i>7.21</i>	<i>.27</i>
<i>1037</i>	<i>1</i>	<i>71.6</i>	<i>6.97</i>	<i>.28</i>
<i>1038</i>	<i>1</i>	<i>71.2</i>	<i>6.89</i>	<i>.28</i>
<i>1039</i>	<i>1</i>	<i>71.0</i>	<i>6.86</i>	<i>.28</i>

FINAL VOLUME PURGED	<i>6 gal</i>
TIME SAMPLED	<i>1040</i>
SAMPLE ID.	<i>MW01</i>
SAMPLE CONTAINERS	<i>40cc VOA's</i>
ANALYSIS TO BE RUN	<i>TP11g BTEX / MTBE</i>
LABORATORY	<i>NSI</i>
NOTES:	<i>1st Bailer CLEAR No Odor</i>

WELL SAMPLING DATA SHEET

SITE <i>DP 793</i>	DATE <i>11-5-02</i>	TIME <i>1106</i>	
WELL <i>RS06</i>	SAMPLED BY. <i>BROADWAY</i>		
WELL ELEVATION			
PRODUCT THICKNESS			
DEPTH TO WATER	<i>17.99 DTB</i>	<i>34.02</i>	
FLUID ELEVATION	<i>209.23</i>		
BAILER TYPE	<i>Disposable Bailer</i>		
PUMP	<i>David Pittman</i>		

WELL PURGING RECORD

TIME	VOLUME REMOVED	TEMP. F°	pH	COND. X1000
<i>1104</i>	<i>1 Bailer</i>	<i>65.6</i>	<i>7.12</i>	<i>.57</i>
<i>1110</i>	<i>30 gal</i>	<i>66.2</i>	<i>6.89</i>	<i>.60</i>
<i>1113</i>		<i>65.0</i>	<i>6.87</i>	<i>.60</i>
<i>1115</i>		<i>65.8</i>	<i>6.80</i>	<i>.59</i>

FINAL VOLUME PURGED	<i>gal</i>
TIME SAMPLED	<i>1116</i>
SAMPLE ID.	<i>RS06</i>
SAMPLE CONTAINERS	<i>3/40cc VOA's</i>
ANALYSIS TO BE RUN	<i>TP11g BTEX / MTBE</i>
LABORATORY	<i>ASC Kiff</i>
NOTES:	<i>1st Bailer CLEAR No Odor</i>

*GLWS 775 5
19584*

WELL SAMPLING DATA SHEET

SITE <i>DP 793</i>	DATE <i>11-5-02</i>	TIME <i>759</i>
WELL <i>RS07</i>	SAMPLED BY. <i>BROADWAY</i>	
WELL ELEVATION		
PRODUCT THICKNESS		
DEPTH TO WATER	<i>4.11</i>	DTB <i>7.0</i>
FLUID ELEVATION	<i>191.88</i>	
BAILER TYPE	<i>Disposable Bailer</i>	
PUMP	<i>David Pittman</i>	

WELL PURGING RECORD				
TIME	VOLUME REMOVED	TEMP. F°	pH	COND. X1000
<i>1003</i>	<i>1 Bailer</i>	<i>62.6</i>	<i>6.75</i>	<i>.41</i>
<i>1005</i>	<i>gal</i>	<i>63.5</i>	<i>6.85</i>	<i>.40</i>
<i>1007</i>	<i>1</i>	<i>63.6</i>	<i>6.89</i>	<i>.40</i>

FINAL VOLUME PURGED	<i>gal</i>
TIME SAMPLED	<i>1008</i>
SAMPLE ID.	<i>RS07</i>
SAMPLE CONTAINERS	<i>3/40cc VOA's</i>
ANALYSIS TO BE RUN	<i>TP11g BTEX /MTRF</i>
LABORATORY	<i>AST Kiff</i>
NOTES:	<i>1st Bailer Clear Slight odor</i>

WELL SAMPLING DATA SHEET

SITE <i>DP 793</i>	DATE <i>11-5-02</i>	TIME <i>0900</i>
WELL <i>R58</i>	SAMPLED BY. <i>BROADWAY</i>	
WELL ELEVATION		
PRODUCT THICKNESS		
DEPTH TO WATER	<i>13.96</i>	DTB <i>14.4</i>
FLUID ELEVATION	<i>200.71</i>	
BAILER TYPE	<i>Disposable Bailer</i>	
PUMP	<i>David Pittman</i>	

WELL PURGING RECORD				
TIME	VOLUME REMOVED	TEMP. F°	pH	COND. X1000
<i>0910</i>	<i>1 Bailer</i>			
<i>0912</i>	<i>1 gal</i>			

FINAL VOLUME PURGED	<i>gal</i>
TIME SAMPLED	<i>912</i>
SAMPLE ID.	<i>Rep Sample R58</i>
SAMPLE CONTAINERS	<i>140cc VOA's</i>
ANALYSIS TO BE RUN	<i>TP11g BTEX/MTBE</i>
LABORATORY	<i>AST</i>
NOTES:	<i>1st Bailer Floating Product</i>

WELL SAMPLING DATA SHEET

SITE <i>DP 793</i>	DATE <i>11-5-02</i>	TIME <i>1236</i>
WELL <i>R3</i>	SAMPLED BY. <i>BROADWAY</i>	
WELL ELEVATION		
PRODUCT THICKNESS		
DEPTH TO WATER	<i>11.07 DTB</i>	
FLUID ELEVATION	<i>216.18</i>	
BAILER TYPE	<i>Disposable Bailer</i>	
PUMP	<i>David Pittman</i>	

WELL PURGING RECORD				
TIME	VOLUME REMOVED	TEMP. F°	pH	COND. X1000
<i>1238</i>	<i>1 Bailer</i>	<i>69.3</i>	<i>7.23</i>	<i>.83</i>
<i>1240</i>	<i>gal</i>	<i>70.0</i>	<i>7.35</i>	<i>.85</i>
<i>1242</i>		<i>70.7</i>	<i>7.47</i>	<i>.86</i>
<i>1245</i>		<i>71.0</i>	<i>7.53</i>	<i>.87</i>
<i>1245</i>		<i>71.0</i>	<i>7.55</i>	<i>.87</i>

FINAL VOLUME PURGED	<i>gal</i>
TIME SAMPLED	<i>1245</i>
SAMPLE ID.	<i>R3</i>
SAMPLE CONTAINERS	<i>3/40cc VORs</i>
ANALYSIS TO BE RUN	<i>TP11g BTEX /MTBE</i>
LABORATORY	<i>NSC</i>
NOTES:	<i>1st Bailer Turbid No Odor</i>

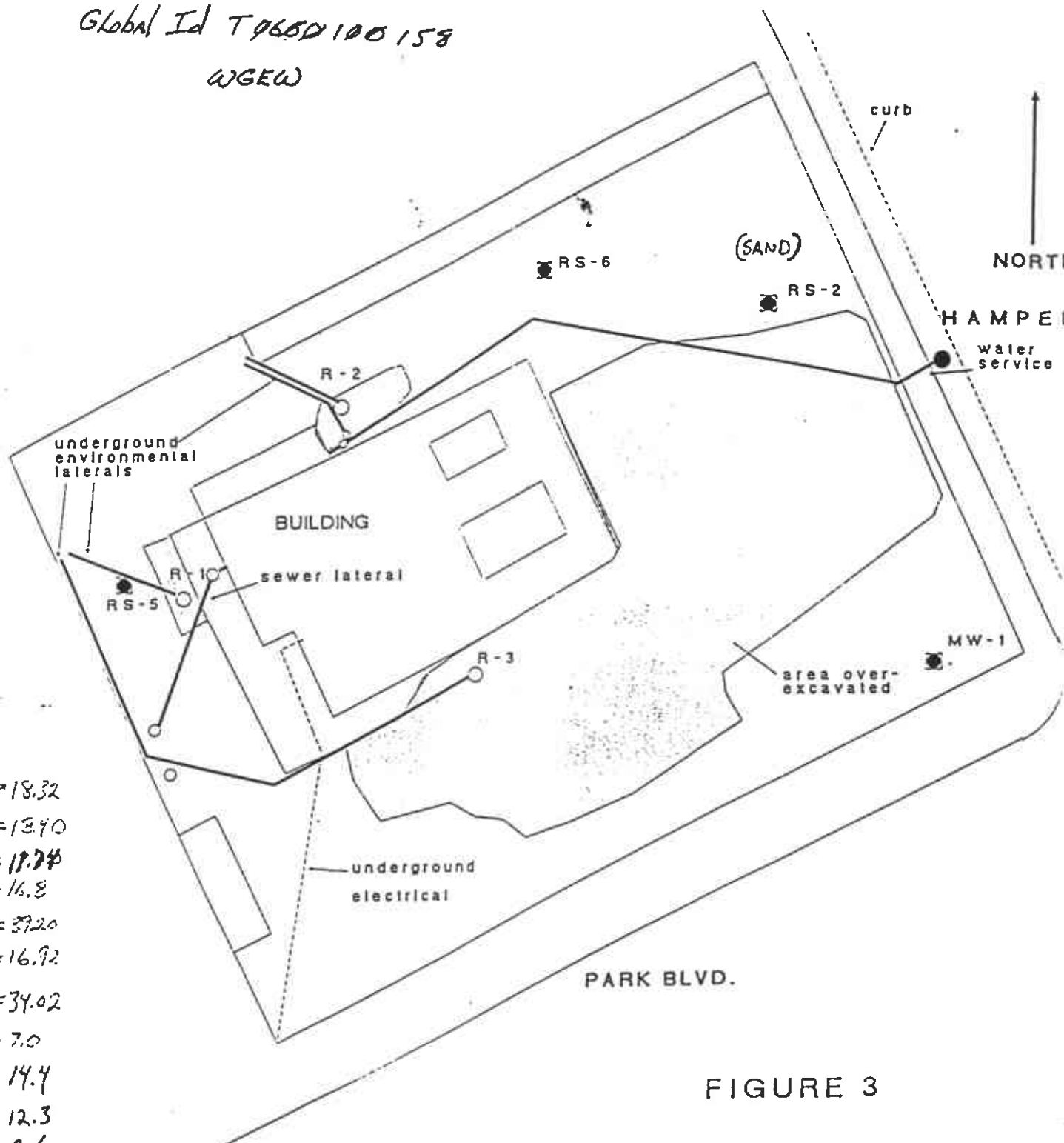
WELL SAMPLING DATA SHEET

SITE <i>OP 793</i>	DATE <i>11-5-02</i>	TIME <i>1009</i>	
WELL <i>T1</i>	SAMPLED BY. <i>BROADWAY</i>		
WELL ELEVATION			
PRODUCT THICKNESS			
DEPTH TO WATER	<i>2.52</i>	<i>DTB</i>	
FLUID ELEVATION	<i>192.59</i>		
BAILER TYPE	<i>Disposable Bailer</i>		
PUMP	<i>DAVID PITTMAN</i>		

WELL PURGING RECORD				
TIME	VOLUME REMOVED	TEMP. F°	pH	COND. X1000
<i>1010</i>	<i>1 Bailer</i>	<i>63.8</i>	<i>6.86</i>	<i>.47</i>
<i>1012</i>	<i>25 gal</i>	<i>64.9</i>	<i>6.86</i>	<i>.47</i>
<i>1013</i>	<i>1</i>	<i>65.3</i>	<i>6.91</i>	<i>.46</i>
<i>1014</i>	<i>1</i>	<i>66.2</i>	<i>6.91</i>	<i>.45</i>
<i>1015</i>	<i>1</i>	<i>66.4</i>	<i>6.92</i>	<i>.45</i>

FINAL VOLUME PURGED	<i>28 gal</i>
TIME SAMPLED	<i>1016</i>
SAMPLE ID.	<i>T1</i>
SAMPLE CONTAINERS	<i>3/40cc VORs</i>
ANALYSIS TO BE RUN	<i>TP11g BTEX /MTRF</i>
LABORATORY	<i>NSE KAPP</i>
NOTES:	<i>1st Bailer CLEAR STRONG ODR</i>

4 drums
 Global Id T965D100158
 WGEW

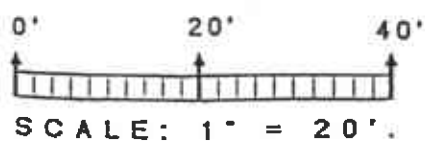


257

- MW1 = 18.32
- RS2 = 13.40
- R.3 = 11.74
- R2 = 16.8
- RS5 = 37.20
- R1 = 16.92
- RS6 = 34.02
- RS7 = 7.0
- RS8 = 14.4
- RS9 = 12.3
- RS10 = 9.6

FIGURE 3

SITE BASE MAP

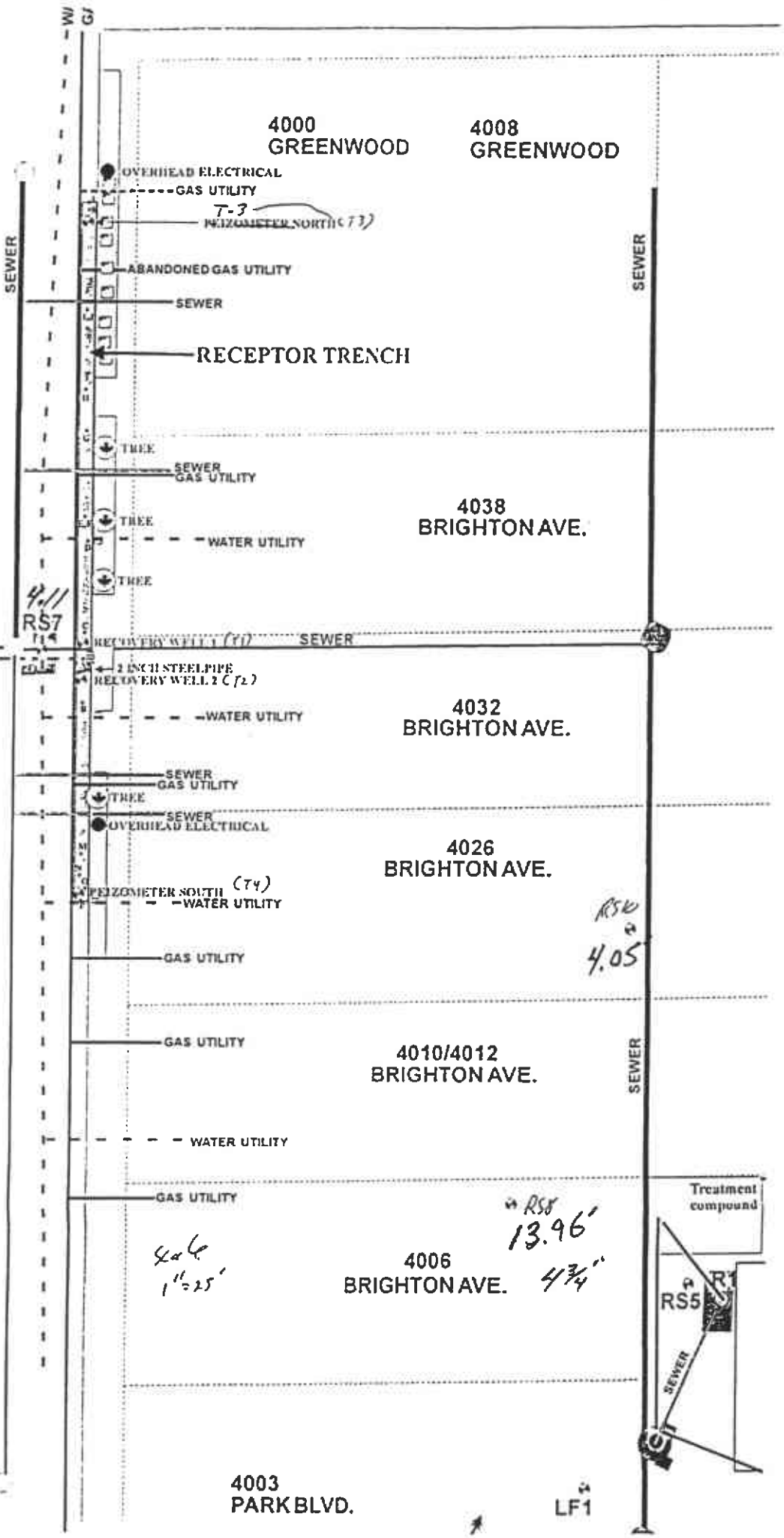


DESERT PETROLEUM STATION #793
 4035 PARK BLVD..
 OAKLAND, CALIFORNIA 94602

RS 7 = 7.0
 RS 8 = 14
 RS 9 = 12
 RS 10 = 9
 T1 = 14.6
 T2 = 13.9

ST

7.53
109



4.11
RS7
11.9

RS6
4.05

Scale
1" = 25'

RS8
13.96'
4 3/4"

ST

4003 PARK BLVD.



720 Olive Drive, Suite D
 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
GEVAH - CONDENSE

Company/Address: **Recommended but not mandatory to complete this section:**
WOODLAND
Sampling Company Log Code: *WIGLIN*
WEGE 1386 E. BEANCK CP

Phone No.: *530-688-5300* FAX No.: *530-682-0027* **Global ID:** *T-0-6-6-0-1-0-0-1-5-9*

Project Number: *DP793* P.O. No.: _____ **EDF Deliverable To (Email Address):**
wega@labca.net

Project Name: *DP793 QA* **Sampler Signature:**
[Signature]

Chain-of-Custody Record and 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)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1,2 DCA & 1,2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2) TOTAL (X) W.E.T. (X)	TAT	For Lab Use Only	
	Date	Time	40 ml VOA	SLEEVE	HCl	HNO ₃	ICE	NONE	WATER	SOIL																		
<i>Carbon Discharge</i>	<i>11/4/02</i>	<i>1253</i>	<i>3</i>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>						<input checked="" type="checkbox"/>											<i>12 hr / 24 hr / 48 hr / 72 hr / 96 hr</i>	

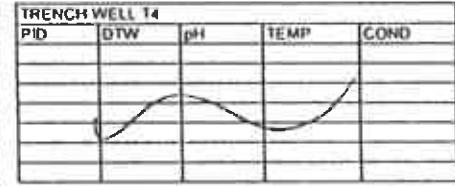
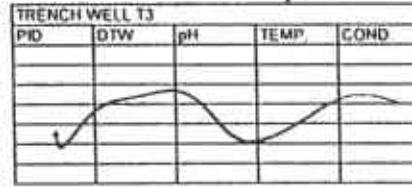
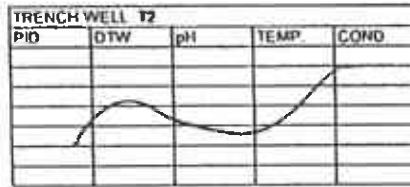
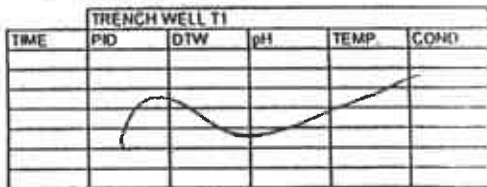
Relinquished by: <i>[Signature]</i>	Date <i>11/7/02</i>	Time <i>1105</i>	Received by:	Remarks:
Relinquished by:	Date	Time	Received by:	
Relinquished by:	Date	Time	Received by Laboratory: <i>Andrew Ponce / KIFF Analytical</i>	
Bill to:				

FORMER DESERT PETROLEUM SITE DP 793
 4035 PARK BLVD
 OAKLAND, CALIFORNIA 94602
 WASTE WATER DISCHARGE PERMIT NUMBER 5043550 1

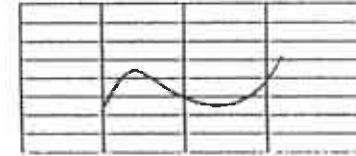
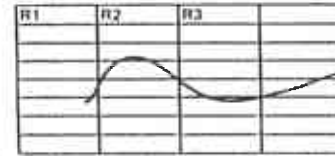
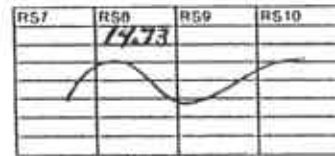
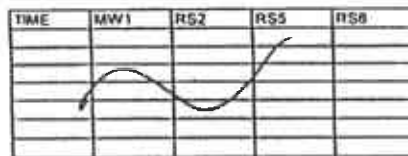
WASTE WATER PRETREATMENT, SEDIMENT SETTLING TANK AND 2 IN SERIES CARBON WATER SCRUB UNITS
 PEAK HOURLY DISCHARGE 2 GPM, DAILY 2800 GALLONS

DATE 11-20-02

REASON FOR SITE VISIT containment repair



DEPTH TO WATER



COMMENTS Ruptured Lin on 1st Carbon - Tower and old containment liner removed - new liner installed

ELECTRIC METER 16382

WATER METER 1398572.2

SAMPLE(r) [Signature]

SITE MONITORED BY BROADWAY

TIME	WASTEWATER	
	INFLUENT	EFFLUENT

WATER TREATMENT

T1 FLOW RATE GALLONS/ MINUTES
 T2 FLOW RATE GALLONS/ MINUTES

GALLONS PURGED
 GALLONS PURGED

PRESSURE WATER CARBONS #1 4.3 PSI, #2 PSI

WATER PHASE CARBON UNITS INSPECTION COMMENTS 1st Carbon taken out of service - Labeled spent

CONDITION OF COMPOUND COMMENTS OK

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

RS-8 product Bailed from well stored in barrel on site
 Bailer 1.5 inch ID 1ft³ = 7.4891

}	1st Bailer	= 6.9	.8
	2nd	= 2.5	.3
	3rd	= 1.2	0
	4th	= .3	0
		<u>10.9</u>	inches of product

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 2800 GALLONS

DATE 11-27-02

REASON FOR SITE VISIT Carbon Exchange

TRENCH WELL T1					
TIME	PID	DTW	pH	TEMP.	COND.

TRENCH WELL T2				
PID	DTW	pH	TEMP.	COND.

TRENCH WELL T3				
PID	DTW	pH	TEMP.	COND.

TRENCH WELL T4				
PID	DTW	pH	TEMP.	COND.

DEPTH TO WATER

TIME	MW1	RS2	RS5	RS8

RS7	RS8	RS9	RS10

R1	R2	R3

COMMENTS S/NO 33549 going back to We State

ELECTRIC METER 26491

WATER METER 1401830.2

SAMPLE: New Carbon

SITE MONITORED BY: BROADWAY

TIME
pH
Conductivity
Temperature
PID

WASTEWATER	
INFLUENT	EFFLUENT

WATER TREATMENT

T1 FLOW RATE GALLONS/ MINUTES
 T2 FLOW RATE GALLONS/ MINUTES

GALLONS PURGED
 GALLONS PURGED

PRESSURE WATER CARBONS #1 PSI #2 PSI

WATER PHASE CARBON UNITS INSPECTION COMMENTS: OK

CONDITION OF COMPOUND COMMENTS: Good

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

Bailed product from RS 8 stored on site

RS-8		
	H ₂ O	Prod
1 ST Bailor	1.5	1.4
2 ND "	1.5	1.2
3 RD "	0	.9
1.9		3.5
inches		

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 12-5-02

REASON FOR SITE VISIT Bail RS 8

TRENCH WELL T1					
TIME	PID	DTW	pH	TEMP.	COND.

TRENCH WELL T2				
PID	DTW	pH	TEMP.	COND.

TRENCH WELL T3				
PID	DTW	pH	TEMP.	COND.

TRENCH WELL T4				
PID	DTW	pH	TEMP.	COND.

DEPTH TO WATER

TIME	MW1	RS2	RS5	RS6
0745				

RS7	RS8	RS9	RS10
	14.26		

R1	R2	R3

COMMENTS

ELECTRIC METER 16422

WATER METER 1405545.4

SAMPLE# ~

SITE MONITORED BY BROADWAY

TIME	WASTEWATER	
	INFLUENT	EFFLUENT
pH		
Conductivity		
Temperature		
PID		

WATER TREATMENT

T1 FLOW RATE GALLONS/ MINUTES
 T2 FLOW RATE GALLONS/ MINUTES

GALLONS PURGED
 GALLONS PURGED

PRESSURE WATER CARBONS #1 3.2 PSI, #2 1.0 PSI.

WATER PHASE CARBON UNITS INSPECTION COMMENTS OK

CONDITION OF COMPOUND COMMENTS OK

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

Product bailed from RS 8 stored on site

1 st Bailor =	H ₂ O	Prod
	.6	1.3
2 nd	Ø	1.0
3 rd	Ø	.3
	<u>.6</u>	<u>2.6</u>
		Inchs

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 12-12-02

REASON FOR SITE VISIT EB-Mud Inspect/Pump Trench

TRENCH WELL T1					
TIME	PID	DTW	pH	TEMP.	COND.
13:00					
14:00					
15:00					

TRENCH WELL T2					
PID	DTW	pH	TEMP.	COND.	
1	2.85				
	2.97				
	3.30				
	3.58				
	3.86				
	4.22				

TRENCH WELL T3					
PID	DTW	pH	TEMP.	COND.	

TRENCH WELL T4					
PID	DTW	pH	TEMP.	COND.	

DEPTH TO WATER

TIME	MW1	RS2	RS5	RS8
	15.46	13.19	21.53	12.57

RS7	RS9	RS10	
4.13	14.38	9.23	6.81

R1	R2	R3
16.99	15.70	11.28

COMMENTS Built new drum connections for trench hose & fit hose for water transfer - Pump Trench

ELECTRIC METER 16447

WATER METER 1410216.0
1408784.2

SAMPLE(S) discharge

SITE MONITORED BY: BROADWAY

TIME	PH	Conductivity	Temperature	PID

WATER TREATMENT

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

GALLONS PURGED _____
GALLONS PURGED 1432.

PRESSURE WATER CARBONS #1 3.4 PSI, #2 3.7 PSI.

WATER PHASE CARBON UNITS INSPECTION COMMENTS OK

CONDITION OF COMPOUND COMMENTS OK

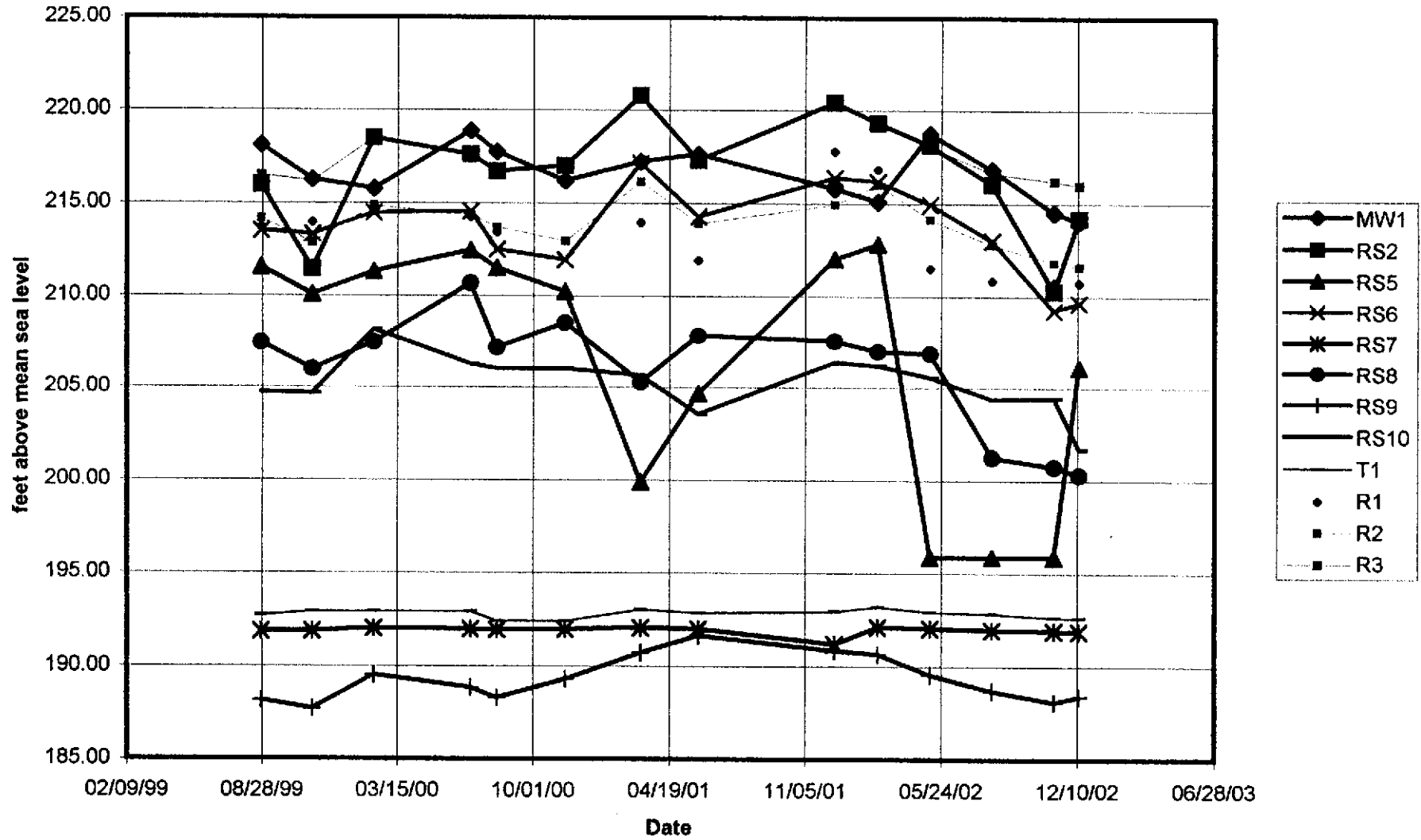
Acceptance of water phase carbon units only if completely flooded with water yes no - return to carbon manufacturer
Acceptance of water phase carbon units only if pH is less than 8.5 and containers are in good condition yes no - return to carbon manufacturer

Product from RS-8 stored on site

RS-8'
Prod H₂O
1st Bailer - .9" - 7.1"
2nd - .5" - 1.8"
3rd - .4" - .3"
1.8 inches 9.2"

APPENDIX B.
GROUNDWATER ELEVATION CHART

Groundwater Elevation



APPENDIX C.
LABORATORY REPORTS



Report Number : 29599

Date : 11/14/02

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

Subject : 10 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,



Joel Kiff



Report Number : 29599

Date : 11/14/02

Project Name : DP793 1/4ly

Project Number : DP793

Sample : MW1

Matrix : Water

Lab Number : 29599-01

Sample Date : 11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/8/02
4-Bromofluorobenzene (Surr)	98.6		% Recovery	EPA 8260B	11/8/02

Sample : RS-02

Matrix : Water

Lab Number : 29599-02

Sample Date : 11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/8/02
4-Bromofluorobenzene (Surr)	99.0		% Recovery	EPA 8260B	11/8/02

Approved By:  Joel Kiff



Report Number : 29599

Date : 11/14/02

Project Name : DP793 1/4ly

Project Number : DP793

Sample : RS-05

Matrix : Water

Lab Number : 29599-03

Sample Date : 11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	150	2.0	ug/L	EPA 8260B	11/14/02
Toluene	360	2.0	ug/L	EPA 8260B	11/14/02
Ethylbenzene	21	2.0	ug/L	EPA 8260B	11/14/02
Total Xylenes	890	2.0	ug/L	EPA 8260B	11/14/02
Methyl-t-butyl ether (MTBE)	< 2.0	2.0	ug/L	EPA 8260B	11/14/02
TPH as Gasoline	12000	200	ug/L	EPA 8260B	11/14/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/14/02
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	11/14/02

Sample : RS-06

Matrix : Water

Lab Number : 29599-04

Sample Date : 11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/8/02
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	11/8/02

Approved By:  Joel Kiff



Report Number : 29599

Date : 11/14/02

Project Name : DP793 1/4ly

Project Number : DP793

Sample : RS-07

Matrix : Water

Lab Number : 29599-05

Sample Date :11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	1500	10	ug/L	EPA 8260B	11/11/02
Toluene	90	10	ug/L	EPA 8260B	11/11/02
Ethylbenzene	330	10	ug/L	EPA 8260B	11/11/02
Total Xylenes	680	10	ug/L	EPA 8260B	11/11/02
Methyl-t-butyl ether (MTBE)	< 10	10	ug/L	EPA 8260B	11/11/02
TPH as Gasoline	9300	1000	ug/L	EPA 8260B	11/11/02
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	11/11/02
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	11/11/02

Sample : RS-09

Matrix : Water

Lab Number : 29599-06

Sample Date :11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	240	2.0	ug/L	EPA 8260B	11/14/02
Toluene	9.0	0.50	ug/L	EPA 8260B	11/8/02
Ethylbenzene	27	0.50	ug/L	EPA 8260B	11/8/02
Total Xylenes	110	0.50	ug/L	EPA 8260B	11/8/02
Methyl-t-butyl ether (MTBE)	8.6	0.50	ug/L	EPA 8260B	11/8/02
TPH as Gasoline	1800	50	ug/L	EPA 8260B	11/8/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/8/02
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	11/8/02

Approved By:  Joel Kiff



Report Number : 29599

Date : 11/14/02

Project Name : DP793 1/4ly

Project Number : DP793

Sample : RS-10

Matrix : Water

Lab Number : 29599-07

Sample Date :11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/12/02
Toluene	1.2	0.50	ug/L	EPA 8260B	11/12/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/12/02
Total Xylenes	1.1	0.50	ug/L	EPA 8260B	11/12/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/12/02
TPH as Gasoline	54	50	ug/L	EPA 8260B	11/12/02
Toluene - d8 (Surr)	99.0		% Recovery	EPA 8260B	11/12/02
4-Bromofluorobenzene (Surr)	98.6		% Recovery	EPA 8260B	11/12/02

Sample : R-2

Matrix : Water

Lab Number : 29599-08

Sample Date :11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	3000	20	ug/L	EPA 8260B	11/11/02
Toluene	140	20	ug/L	EPA 8260B	11/11/02
Ethylbenzene	57	20	ug/L	EPA 8260B	11/11/02
Total Xylenes	620	20	ug/L	EPA 8260B	11/11/02
Methyl-t-butyl ether (MTBE)	< 20	20	ug/L	EPA 8260B	11/11/02
TPH as Gasoline	11000	2000	ug/L	EPA 8260B	11/11/02
Toluene - d8 (Surr)	97.1		% Recovery	EPA 8260B	11/11/02
4-Bromofluorobenzene (Surr)	93.6		% Recovery	EPA 8260B	11/11/02

Approved By:  Joel Kiff



Report Number : 29599

Date : 11/14/02

Project Name : DP793 1/4ly

Project Number : DP793

Sample : R-3

Matrix : Water

Lab Number : 29599-09

Sample Date :11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/02
Toluene - d8 (Surr)	99.2		% Recovery	EPA 8260B	11/8/02
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	11/8/02

Sample : T-1

Matrix : Water

Lab Number : 29599-10

Sample Date :11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	3000	10	ug/L	EPA 8260B	11/14/02
Toluene	65	10	ug/L	EPA 8260B	11/14/02
Ethylbenzene	660	10	ug/L	EPA 8260B	11/14/02
Total Xylenes	610	10	ug/L	EPA 8260B	11/14/02
Methyl-t-butyl ether (MTBE)	18	10	ug/L	EPA 8260B	11/14/02
TPH as Gasoline	11000	1000	ug/L	EPA 8260B	11/14/02
Toluene - d8 (Surr)	98.5		% Recovery	EPA 8260B	11/14/02
4-Bromofluorobenzene (Surr)	96.3		% Recovery	EPA 8260B	11/14/02

Approved By:  Joel Kiff

Report Number : 29599

Date : 11/14/02

QC Report : Method Blank Data

Project Name : DP793 1/4ly

Project Number : DP793

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/02
Toluene - d8 (Surr)	100		%	EPA 8260B	11/8/02
4-Bromofluorobenzene (Surr)	99.6		%	EPA 8260B	11/8/02
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/11/02
Toluene - d8 (Surr)	94.8		%	EPA 8260B	11/11/02
4-Bromofluorobenzene (Surr)	93.2		%	EPA 8260B	11/11/02
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/02
Toluene - d8 (Surr)	101		%	EPA 8260B	11/8/02
4-Bromofluorobenzene (Surr)	103		%	EPA 8260B	11/8/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/10/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/10/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/10/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/10/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/10/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/10/02
Toluene - d8 (Surr)	99.2		%	EPA 8260B	11/10/02
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	11/10/02

Approved By: Joel Kiff


Report Number : 29599

Date : 11/14/02

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	29610-02	<0.50	40.0	40.0	42.3	40.5	ug/L	EPA 8260B	11/8/02	106	101	4.45	70-130	25
Toluene	29610-02	<0.50	40.0	40.0	42.8	41.6	ug/L	EPA 8260B	11/8/02	107	104	2.82	70-130	25
Tert-Butanol	29610-02	<5.0	200	200	207	204	ug/L	EPA 8260B	11/8/02	103	102	1.65	70-130	25
Methyl-t-Butyl Ether	29610-02	<0.50	40.0	40.0	43.5	43.8	ug/L	EPA 8260B	11/8/02	109	110	0.755	70-130	25
Benzene	29597-11	<0.50	40.0	40.0	39.6	38.6	ug/L	EPA 8260B	11/11/02	98.9	96.6	2.38	70-130	25
Toluene	29597-11	<0.50	40.0	40.0	34.8	34.0	ug/L	EPA 8260B	11/11/02	87.0	84.9	2.53	70-130	25
Tert-Butanol	29597-11	<5.0	200	200	170	171	ug/L	EPA 8260B	11/11/02	84.8	85.4	0.764	70-130	25
Methyl-t-Butyl Ether	29597-11	0.77	40.0	40.0	40.0	39.4	ug/L	EPA 8260B	11/11/02	98.1	96.7	1.46	70-130	25
Benzene	29517-06	<0.50	40.0	40.0	42.5	41.2	ug/L	EPA 8260B	11/8/02	106	103	2.96	70-130	25
Toluene	29517-06	<0.50	40.0	40.0	41.4	40.4	ug/L	EPA 8260B	11/8/02	103	101	2.54	70-130	25
Tert-Butanol	29517-06	<5.0	200	200	200	208	ug/L	EPA 8260B	11/8/02	100	104	3.71	70-130	25
Methyl-t-Butyl Ether	29517-06	<0.50	40.0	40.0	43.2	42.3	ug/L	EPA 8260B	11/8/02	108	106	2.08	70-130	25
Benzene	29676-04	<0.50	40.0	40.0	42.1	42.2	ug/L	EPA 8260B	11/10/02	105	105	0.190	70-130	25
Toluene	29676-04	<0.50	40.0	40.0	40.5	40.8	ug/L	EPA 8260B	11/10/02	101	102	0.811	70-130	25
Tert-Butanol	29676-04	<5.0	200	200	201	215	ug/L	EPA 8260B	11/10/02	100	107	6.82	70-130	25
Methyl-t-Butyl Ether	29676-04	<0.50	40.0	40.0	39.6	39.6	ug/L	EPA 8260B	11/10/02	99.0	99.0	0.101	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 29599

Date : 11/14/02

QC Report : Laboratory Control Sample (LCS)

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	11/8/02	101	70-130
Toluene	40.0	ug/L	EPA 8260B	11/8/02	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/8/02	99.3	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/8/02	108	70-130
Benzene	40.0	ug/L	EPA 8260B	11/11/02	96.2	70-130
Toluene	40.0	ug/L	EPA 8260B	11/11/02	81.7	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/11/02	91.0	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/11/02	96.2	70-130
Benzene	40.0	ug/L	EPA 8260B	11/8/02	107	70-130
Toluene	40.0	ug/L	EPA 8260B	11/8/02	105	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/8/02	106	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/8/02	107	70-130
Benzene	40.0	ug/L	EPA 8260B	11/10/02	105	70-130
Toluene	40.0	ug/L	EPA 8260B	11/10/02	100	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/10/02	102	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/10/02	97.7	70-130

KIFF ANALYTICAL, LLC

Approved By:  Joel Kiff

Project Contact (Hardcopy or PDF To): George Converse
 California EDF Report? Yes No

Company Address: WEGE 1386 E. BEAVER Woodland 95776
 Recommended but not mandatory to complete this section:
 Sampling Company Log Code: WIGEW

Phone No.: 530-668-5300 FAX No.: 530-662-0273
 Global ID: T-D-6-6-D-1-D-D-1-5-8

Project Number: DP 793 P.O. No.:
 EDF Deliverable To (Email Address): wegelab@CALINET

Project Name: DP 793 Y41N
 Sampler Signature: [Signature]

Project Address: 4835 PARK BLVD OAKLAND

Chain-of-Custody Record and 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)	5 Oxygenates/TPH Gas/BTEX (8260B)	7 Oxygenates/TPH Gas/BTEX (8260B)	5 Oxygenates (8260B)	7 Oxygenates (8260B)	Lead Scav. (1.2 DCA & 1.2 EDB - 8260B)	EPA 8260B (Full List)	Volatile Halocarbons (EPA 8260B)	Lead (7421/239.2)	TOTAL (X) W.E.T. (X)	TAT	For Lab Use Only					
	Date	Time	40 ml VOA	SLEEVE	HCl	HNO ₃	ICE	NONE	WATER	SOIL																							
MW1	11/5/02	1040	3																														
RS-02		1052																															01
RS-05		1205																															02
RS-06		1116																															03
RS-07		1058																															04
RS-09		950																															05
RS-10		932																															06
R-2		1223																															07
R-3		1245																															08
T-1		1016																															09

Relinquished by: <u>[Signature]</u>	Date: <u>11/7/02</u>	Time: <u>1110</u>	Received by: _____
Relinquished by: _____	Date: _____	Time: _____	Received by: _____
Relinquished by: _____	Date: <u>110702</u>	Time: <u>1110</u>	Received by Laboratory: <u>Andrew Ponceo / KIFF Analytical</u>

Remarks: _____

Bill to: _____



Report Number : 29598

Date : 11/12/02

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

Subject : 1 Water Sample
Project Name : DP793 QA
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". The signature is written in a cursive style with a large initial "J".

Joel Kiff



Report Number : 29598

Date : 11/12/02

Project Name : DP793 QA

Project Number : DP793

Sample : CARBON DISCHARGE

Matrix : Water

Lab Number : 29598-01

Sample Date : 11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/11/02
Toluene - d8 (Surr)	104		% Recovery	EPA 8260B	11/11/02
4-Bromofluorobenzene (Surr)	96.6		% Recovery	EPA 8260B	11/11/02

Approved By:  Joel Kiff

Report Number : 29598

Date : 11/12/02

QC Report : Method Blank Data

Project Name : **DP793 QA**

Project Number : **DP793**

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/11/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/11/02
Toluene - d8 (Sum)	102		%	EPA 8260B	11/11/02
4-Bromofluorobenzene (Sum)	93.3		%	EPA 8260B	11/11/02

<u>Parameter</u>	<u>Measured Value</u>	<u>Method Reporting Limit</u>	<u>Units</u>	<u>Analysis Method</u>	<u>Date Analyzed</u>
------------------	-----------------------	-------------------------------	--------------	------------------------	----------------------

Approved By: Joel Kiff
Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 29598

Date : 11/12/02

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : DP793 QA

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	29517-13	<0.50	40.0	40.0	39.3	38.8	ug/L	EPA 8260B	11/11/02	98.2	97.1	1.10	70-130	25
Toluene	29517-13	<0.50	40.0	40.0	40.3	38.9	ug/L	EPA 8260B	11/11/02	101	97.3	3.53	70-130	25
Tert-Butanol	29517-13	<5.0	200	200	198	198	ug/L	EPA 8260B	11/11/02	99.2	98.8	0.495	70-130	25
Methyl-t-Butyl Ether	29517-13	<0.50	40.0	40.0	43.4	43.0	ug/L	EPA 8260B	11/11/02	108	108	0.810	70-130	25

KIFF ANALYTICAL, LLC

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

Approved By:  Joel Kiff

Report Number : 29598

Date : 11/12/02

QC Report : Laboratory Control Sample (LCS)

Project Name : DP793 QA

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	11/11/02	99.0	70-130
Toluene	40.0	ug/L	EPA 8260B	11/11/02	103	70-130
Tert-Butanol	200	ug/L	EPA 8260B	11/11/02	109	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	11/11/02	101	70-130

KIFF ANALYTICAL, LLC

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

Approved By:  Joel Kiff



Report Number : 30060

Date : 12/6/2002

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

Subject : 1 Water Sample
Project Name : New Carbon DP793
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". The signature is written in a cursive style with a large initial "J".

Joel Kiff



Report Number : 30060

Date : 12/6/2002

Project Name : **New Carbon DP793**

Project Number : **DP793**

Sample : **New Carbon**

Matrix : Water

Lab Number : 30060-01

Sample Date : 11/27/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/4/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/4/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/4/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/4/2002
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/4/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/4/2002
Toluene - d8 (Surr)	99.6		% Recovery	EPA 8260B	12/4/2002
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	12/4/2002

Approved By: Joel Kiff

Report Number : 30060

Date : 12/6/2002

QC Report : Method Blank Data

Project Name : **New Carbon DP793**

Project Number : **DP793**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/3/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/3/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/3/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/3/2002
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/3/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/3/2002
Toluene - d8 (Surr)	102		%	EPA 8260B	12/3/2002
4-Bromofluorobenzene (Surr)	101		%	EPA 8260B	12/3/2002

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

Report Number : 30060

Date : 12/6/2002

Report : Matrix Spike/ Matrix Spike Duplicate

Sample Name : New Carbon DP793

Sample 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
Gasoline	30060-01	<0.50	39.9	40.0	40.3	40.1	ug/L	EPA 8260B	12/3/02	101	100	0.720	70-130	25
Benzene	30060-01	<0.50	39.9	40.0	42.0	41.7	ug/L	EPA 8260B	12/3/02	105	104	0.954	70-130	25
Toluene	30060-01	<5.0	200	200	196	196	ug/L	EPA 8260B	12/3/02	98.2	98.2	0.0102	70-130	25
n-Butanol	30060-01	<0.50	39.9	40.0	39.7	38.9	ug/L	EPA 8260B	12/3/02	99.4	97.2	2.19	70-130	25
Diethyl-t-Butyl Ether	30060-01	<0.50	39.9	40.0	39.7	38.9	ug/L	EPA 8260B	12/3/02	99.4	97.2	2.19	70-130	25

Approved By: Joel Kiff
Joel Kiff

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

QC Report : Laboratory Control Sample (LCS)

Report Number : 30060

Date : 12/6/2002

Project Name : **New Carbon DP793**

Project Number : **DP793**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	20.0	ug/L	EPA 8260B	12/3/02	98.1	70-130
Toluene	20.0	ug/L	EPA 8260B	12/3/02	104	70-130
Tert-Butanol	100	ug/L	EPA 8260B	12/3/02	99.8	70-130
Methyl-t-Butyl Ether	20.0	ug/L	EPA 8260B	12/3/02	96.7	70-130

KIFF ANALYTICAL, LLC

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

Approved By:  _____
Joel Kiff



720 Olive Drive, Suite D
 Davis, CA 95616
 Lab: 530.297.4800
 Fax: 530.297.4808

Lab No. 30060

Page 1 of 1

Project Contact (Hardcopy or PDF To):
George Converse

California EDF Report? Yes No

Chain-of-Custody Record and Analysis Request

Company Address:
WEGE Woodland
1386 E. Beamer CA 95776

Recommended but not mandatory to complete this section:
 Sampling Company Log Code: *W.G.E.W*

Phone No.: *530-688-5302* FAX No.: *530 662-0273*

Global ID:

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

EDF Deliverable To (Email Address):
wega.lab@cal.wet

Project Name:
New Carbon DP793

Sampler Signature:
L.S. Boudry

Project Address:
4055 PARK BLVD

Sample Designation

Date	Time	40 ml VOA	SLEEVE	Container				Preservative				Matrix	
				HCl	HNO ₃	ICE	NONE	WATER	SOIL				

New Carbon *11/27/02* *830* *3*

Analysis Request												TAT	
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 (7421239.2) TOTAL (X) W.E.T. (X)	12 hr/24 hr/48 hr/72 hr/1 wk
				<input checked="" type="checkbox"/>									<input checked="" type="checkbox"/>

Relinquished by:
L.S. Boudry

Date: *11/27/02* Time: *1700*

Received by:

Remarks:

Relinquished by:

Date: Time:

Received by:

Relinquished by:

Date: Time:

Received by Laboratory:

Bill to:

112702 1700

112702 1700

Andrew Romero / K.I.F.F. Analytical



Report Number : 29599

Date : 11/14/02

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

Subject : 10 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,



Joel Kiff



Report Number : 29599

Date : 11/14/02

Project Name : DP793 1/4ly

Project Number : DP793

Sample : MW1

Matrix : Water

Lab Number : 29599-01

Sample Date :11/5/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/8/02
4-Bromofluorobenzene (Surr)	98.6		% Recovery	EPA 8260B	11/8/02

Sample : RS-02

Matrix : Water

Lab Number : 29599-02

Sample Date :11/5/02

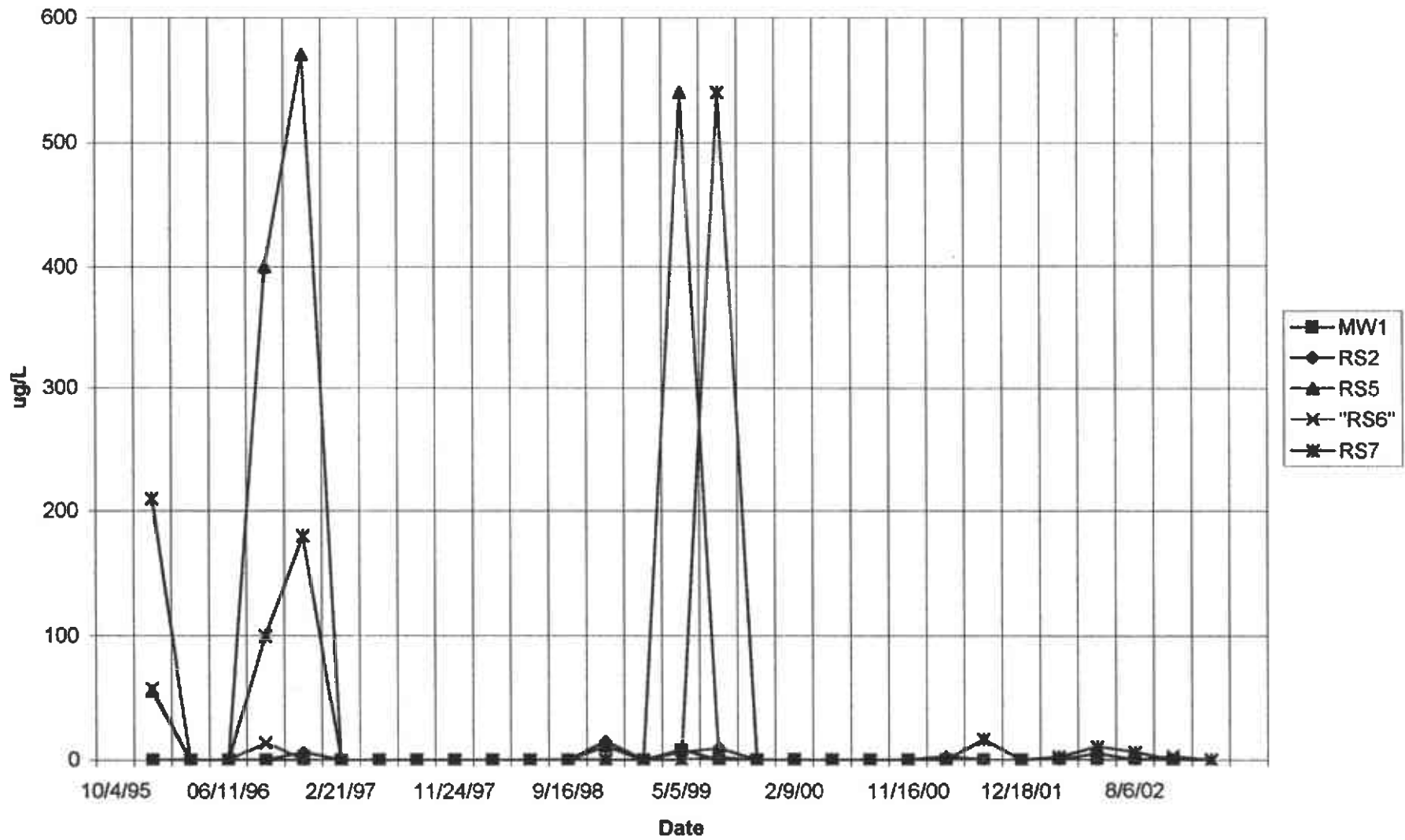
Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/8/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/8/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/8/02
4-Bromofluorobenzene (Surr)	99.0		% Recovery	EPA 8260B	11/8/02

Approved By:  Joel Kiff

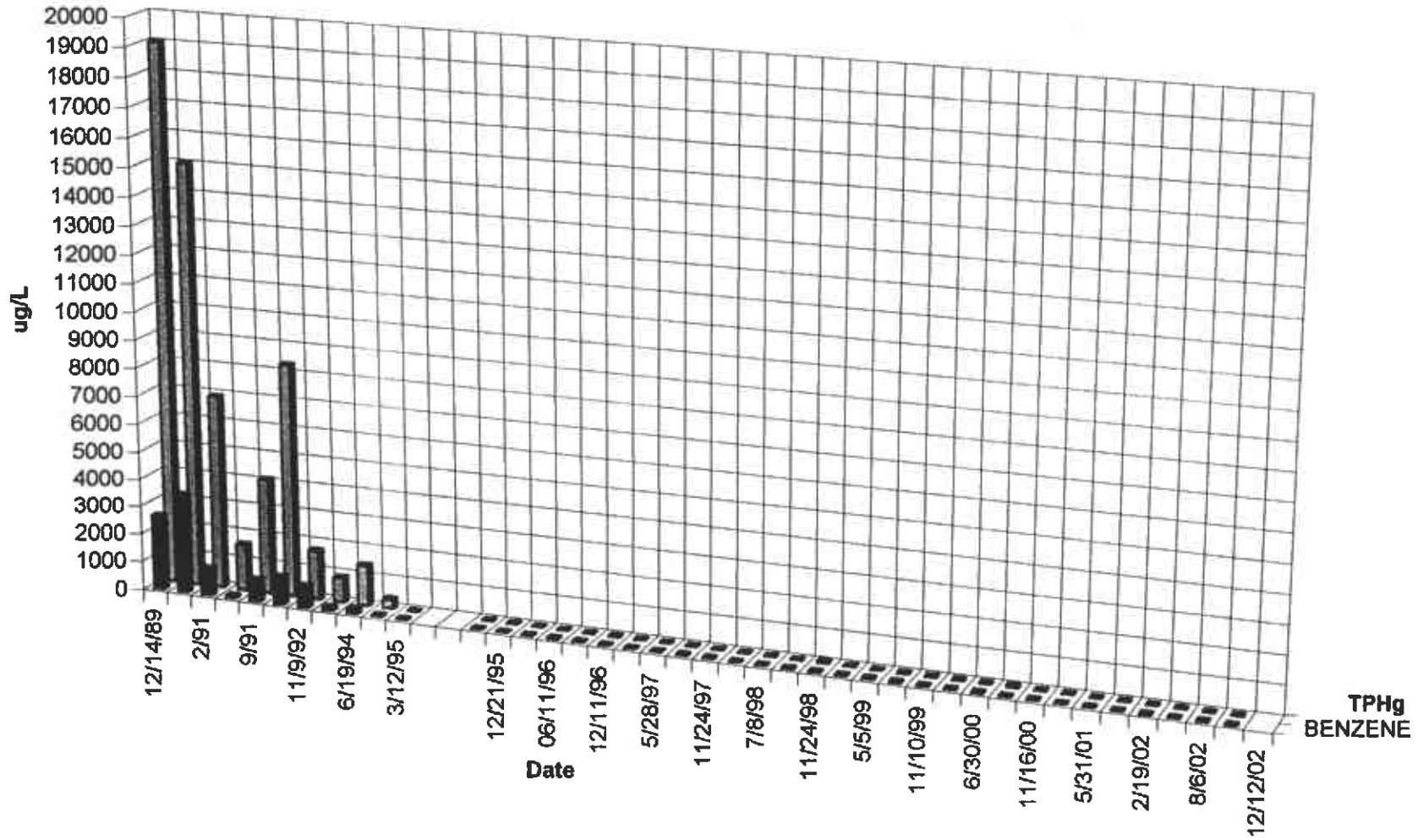
APPENDIX D.

MtBE, TPHg AND BENZENE CHARTS

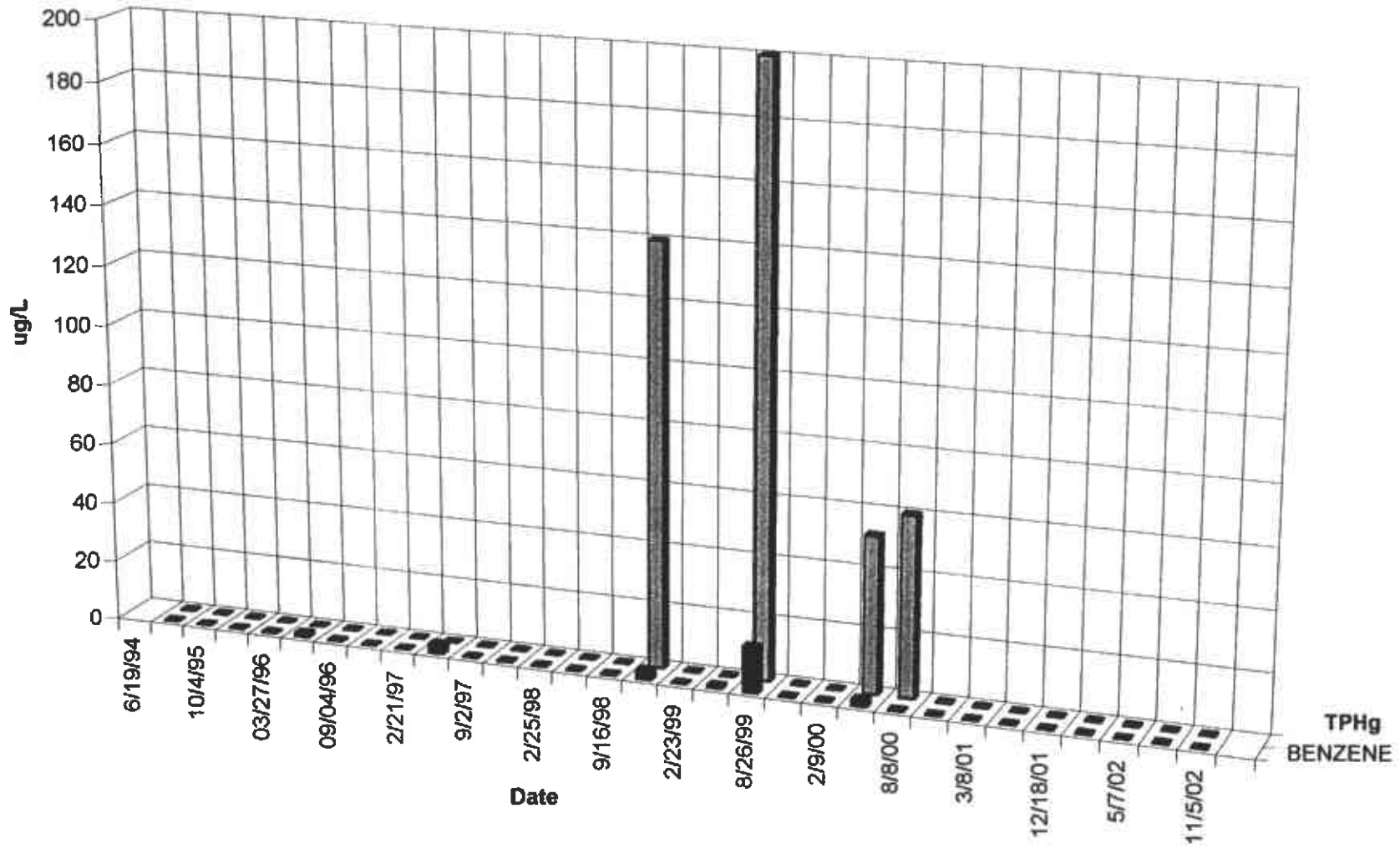
MTBE IN WELLS



RS-1/MW-1 TPHg

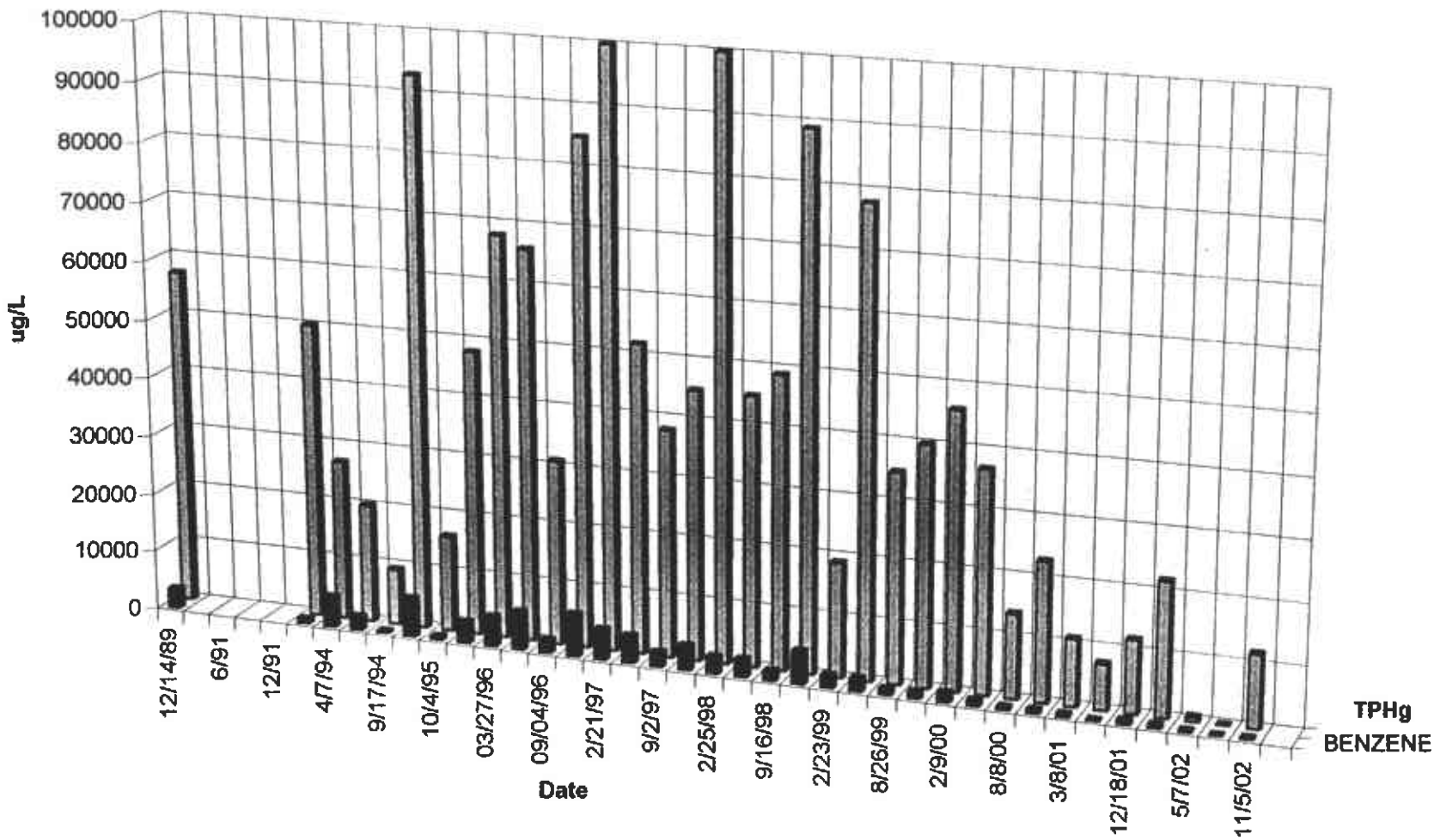


RS-2 TPHg

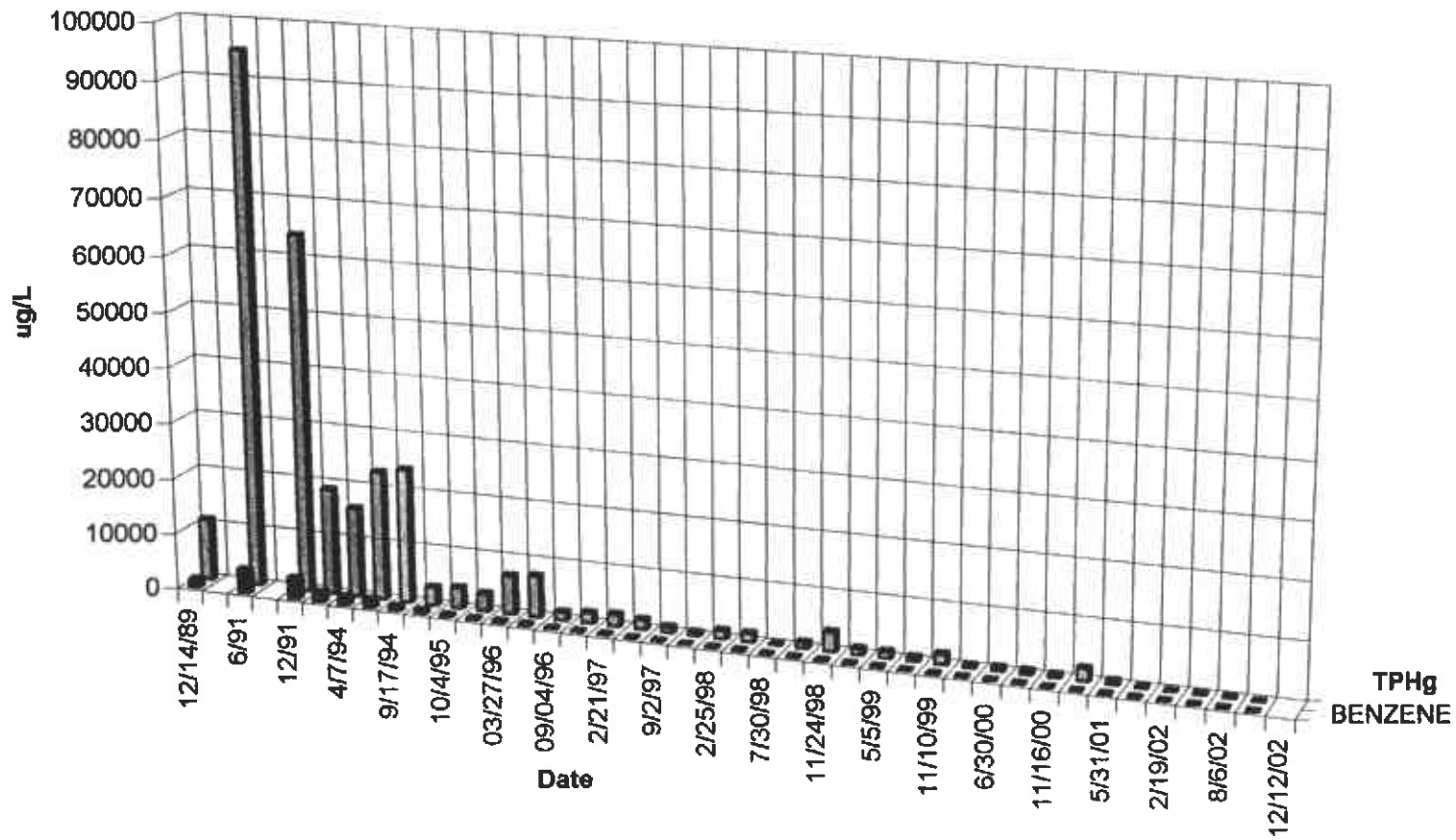


TPHg
BENZENE

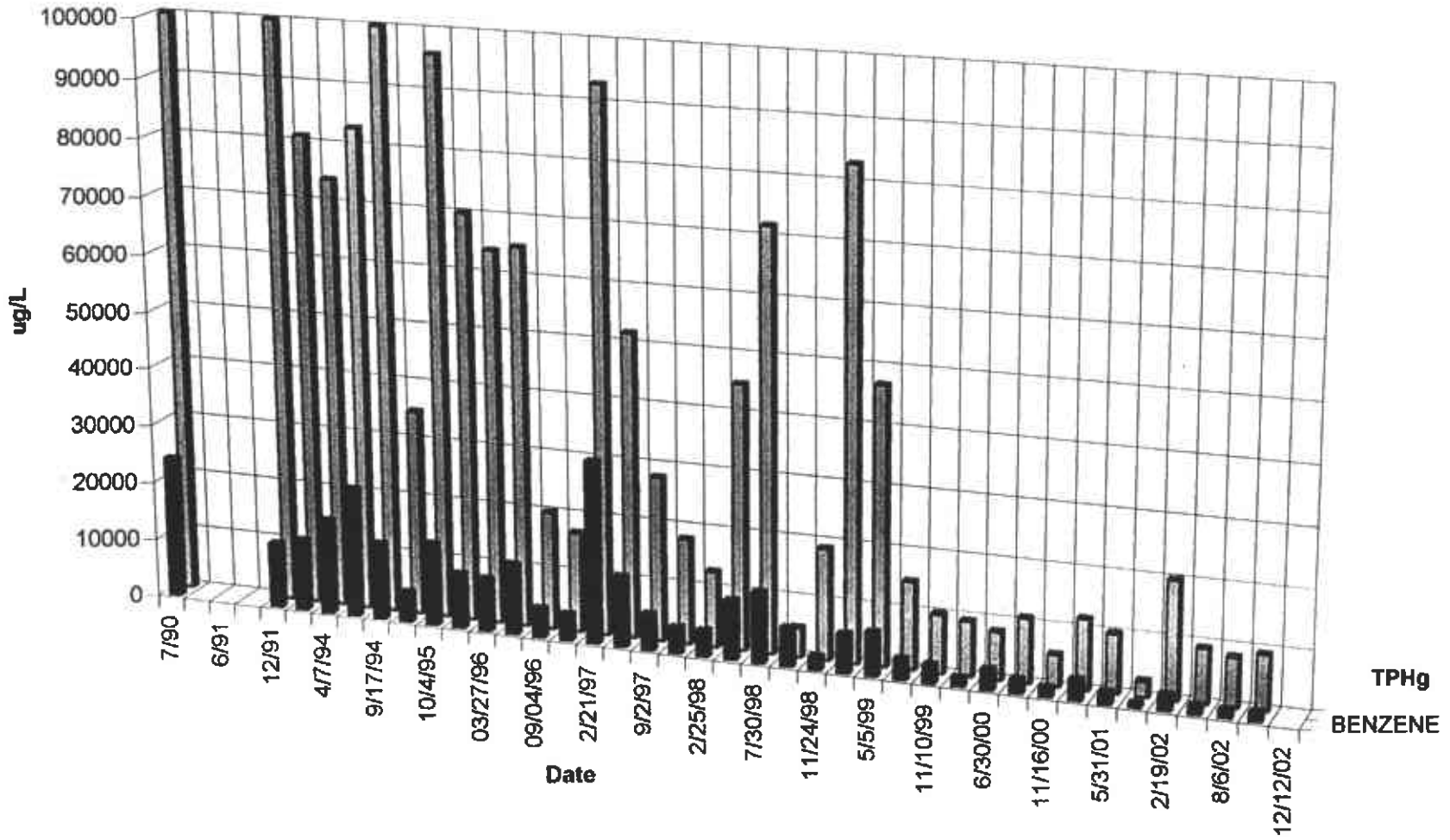
RS-5



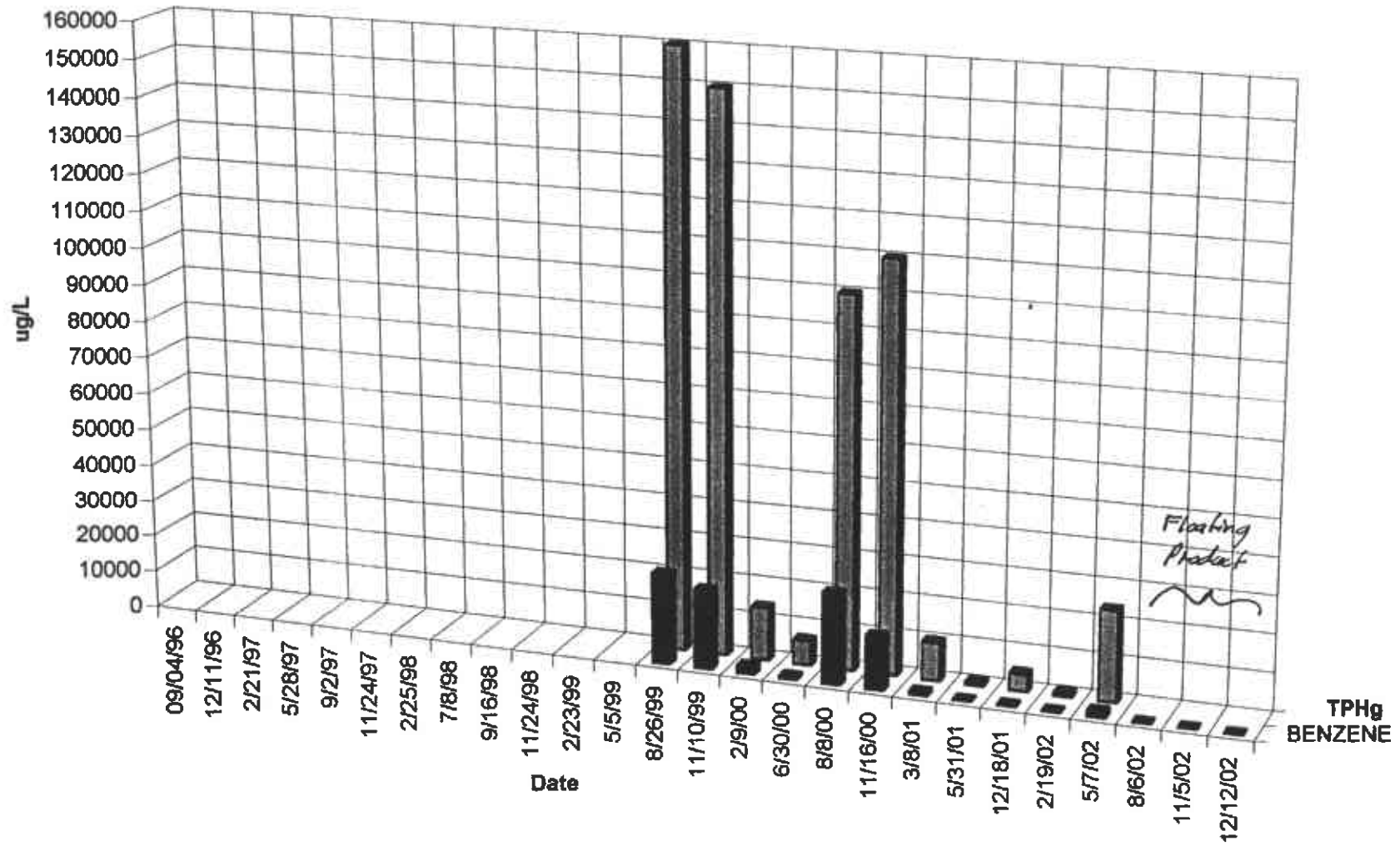
RS-6



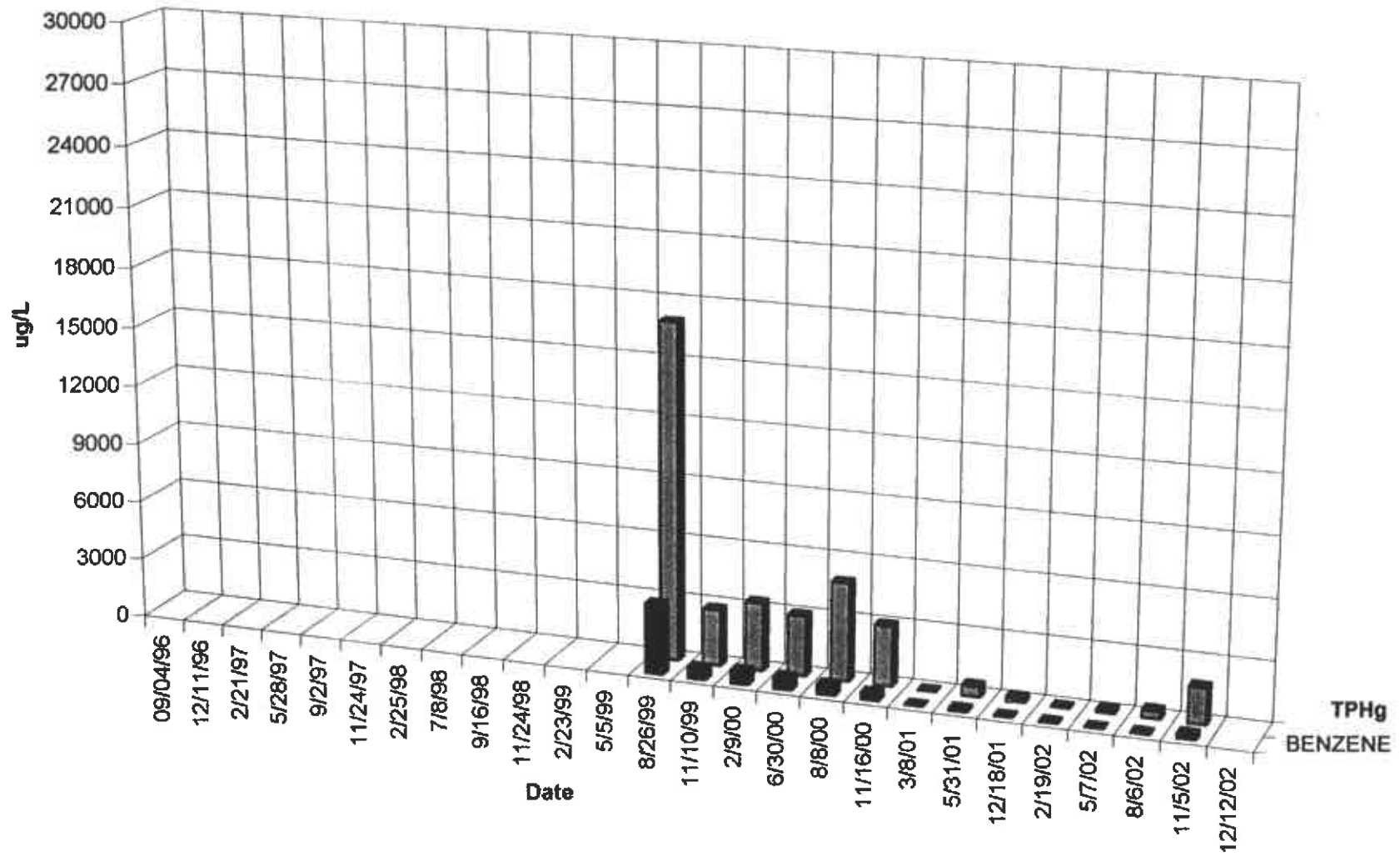
RS-7



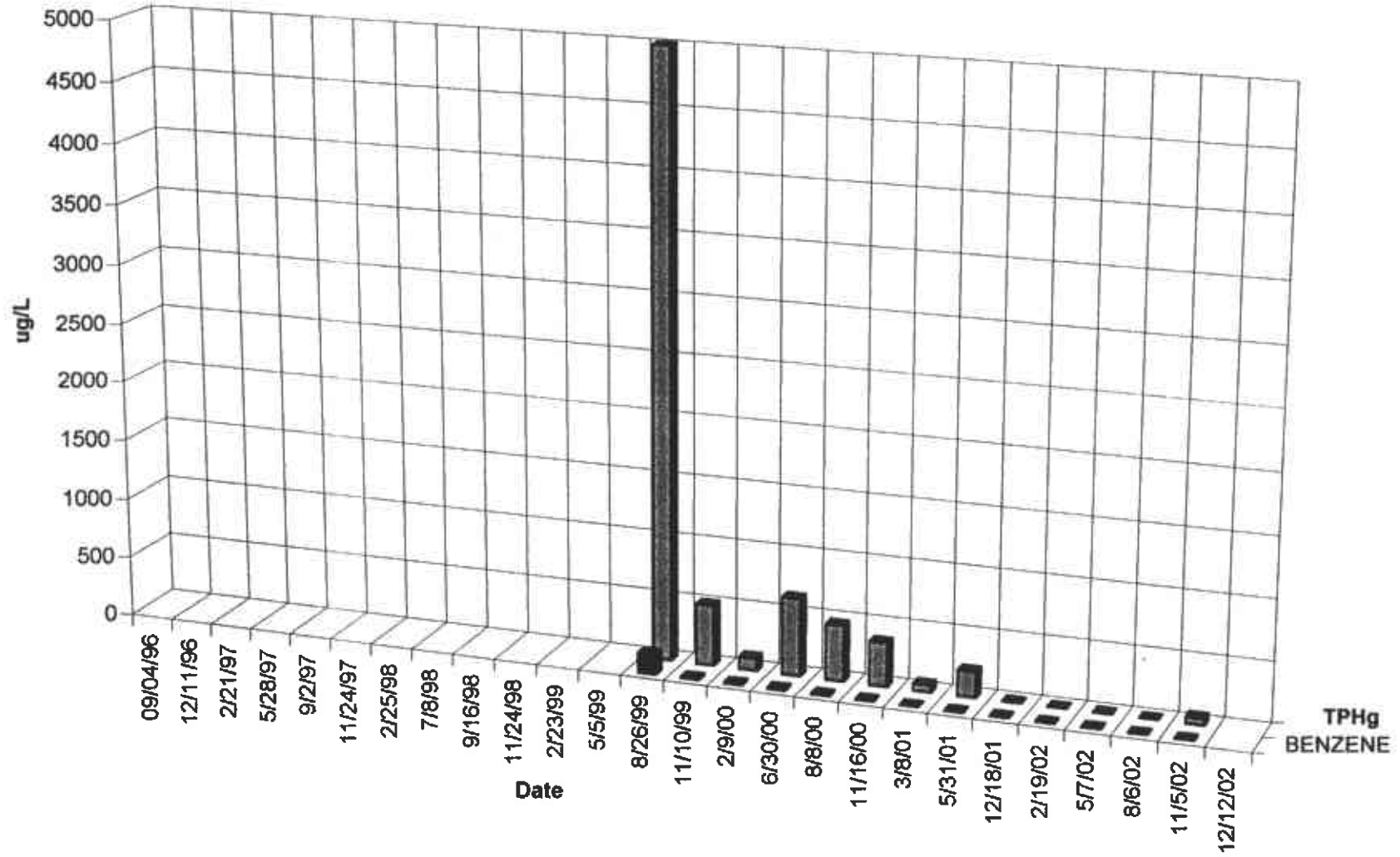
RS-8



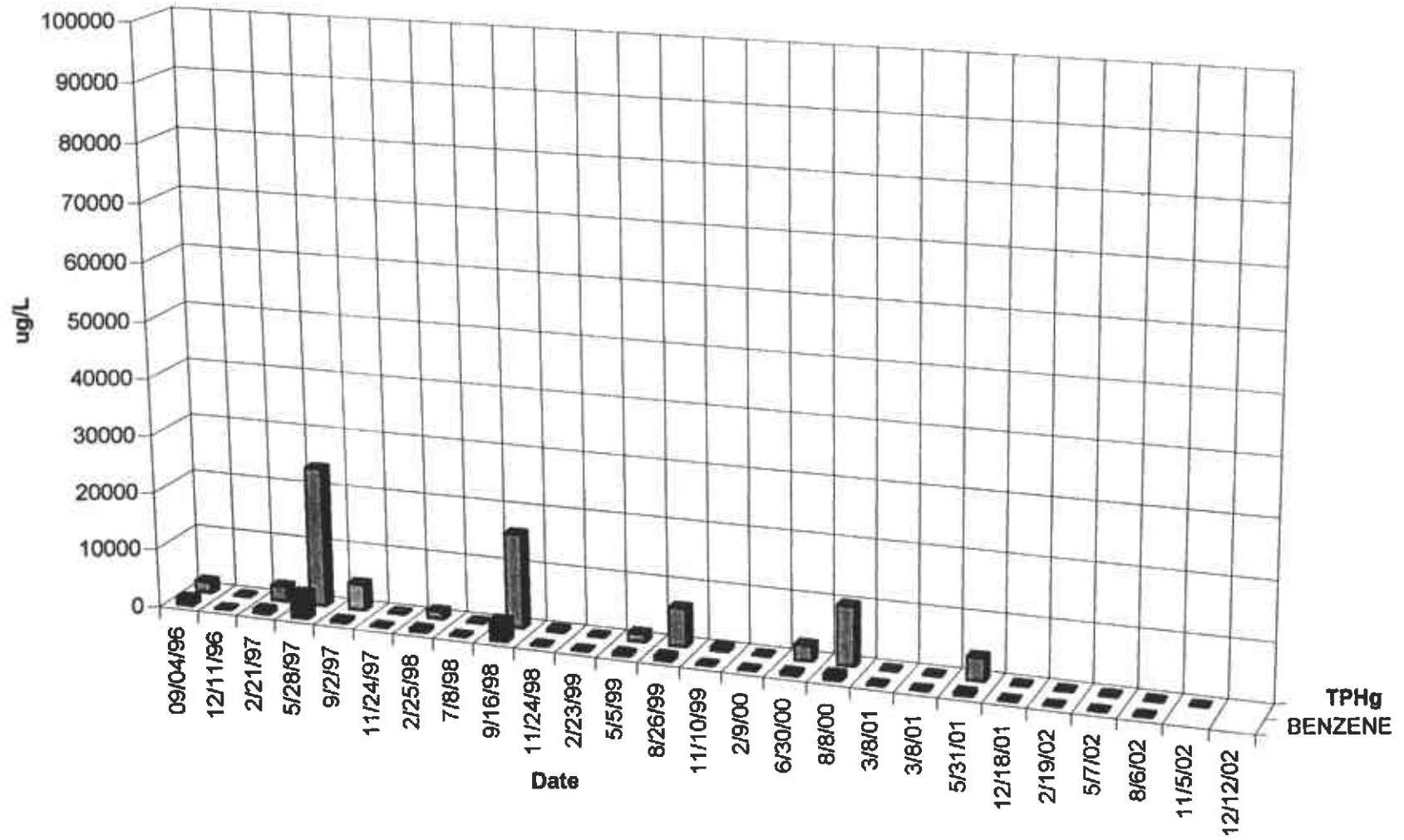
RS-9



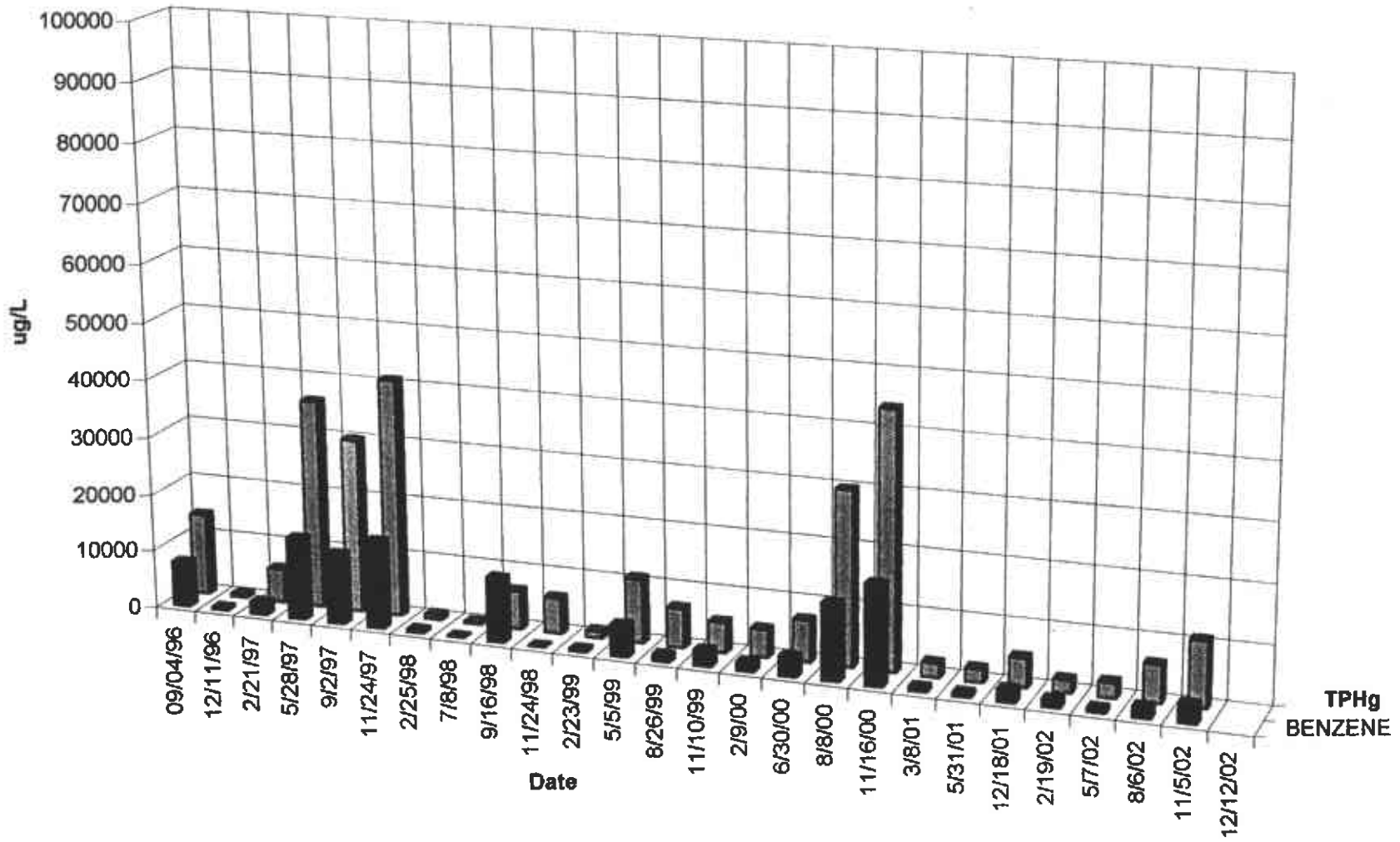
RS-10



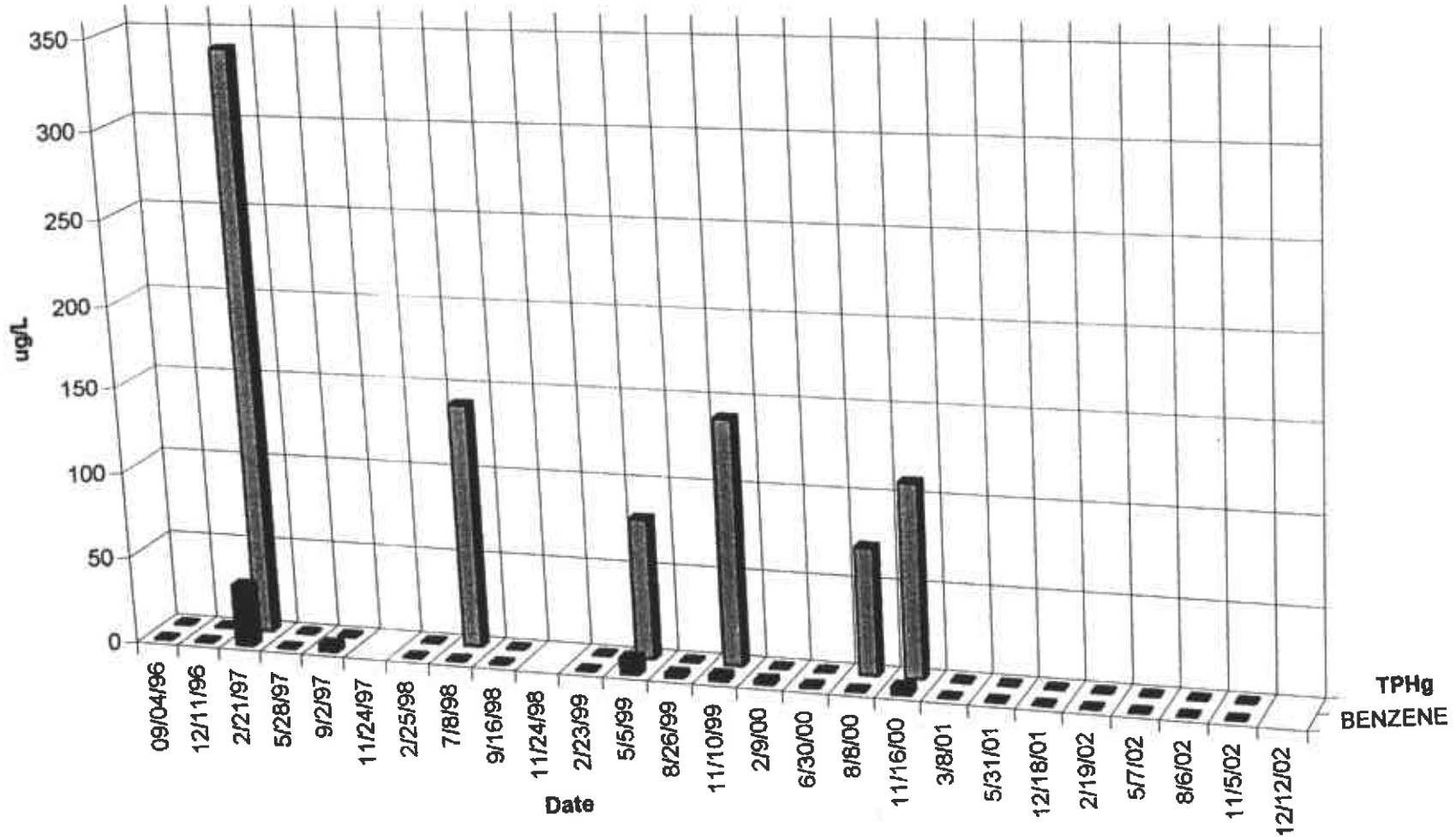
R-1



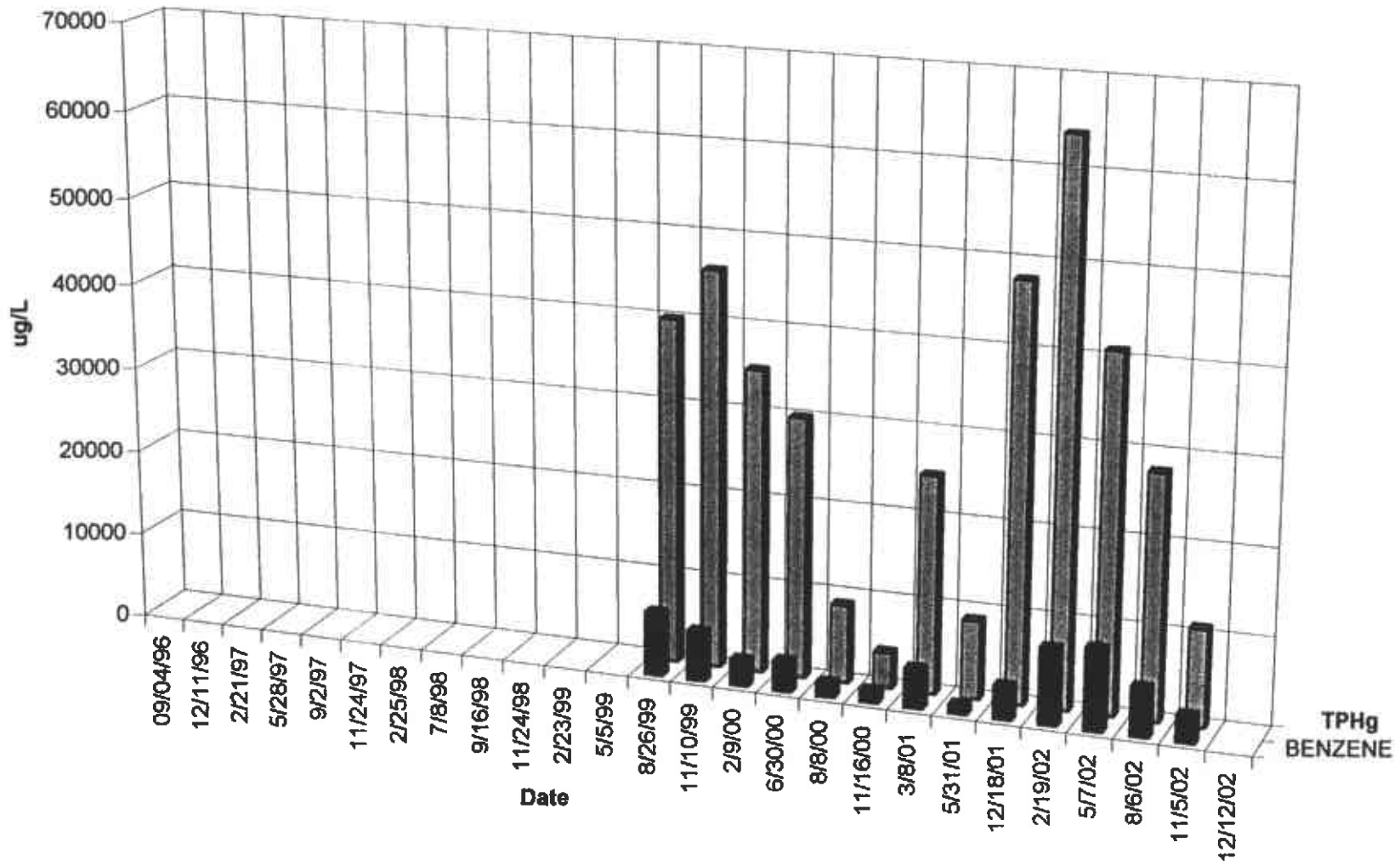
R-2



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

December 30, 2002

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

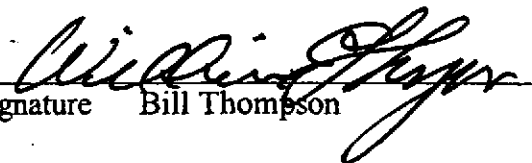
Dear Ms. Ong:

The enclosed table and certified laboratory report represents the sampling for wastewater Discharge Permit #5043550 1 for the period between September 4, And December 12, 2002. Continues discharge from pumping at RS-5 was discontinued on July 19, 2001. This pumping was restarted on March 21, 2002 and is continuing as of this date. A sample of the water discharged to sewer was obtained on December 12, 2002 and analyzed for TPHg, BTEX and MtBE using EPA method 8260B.

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 of 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 1/7/03
date

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

WASTEWATER
 SOURCE ID

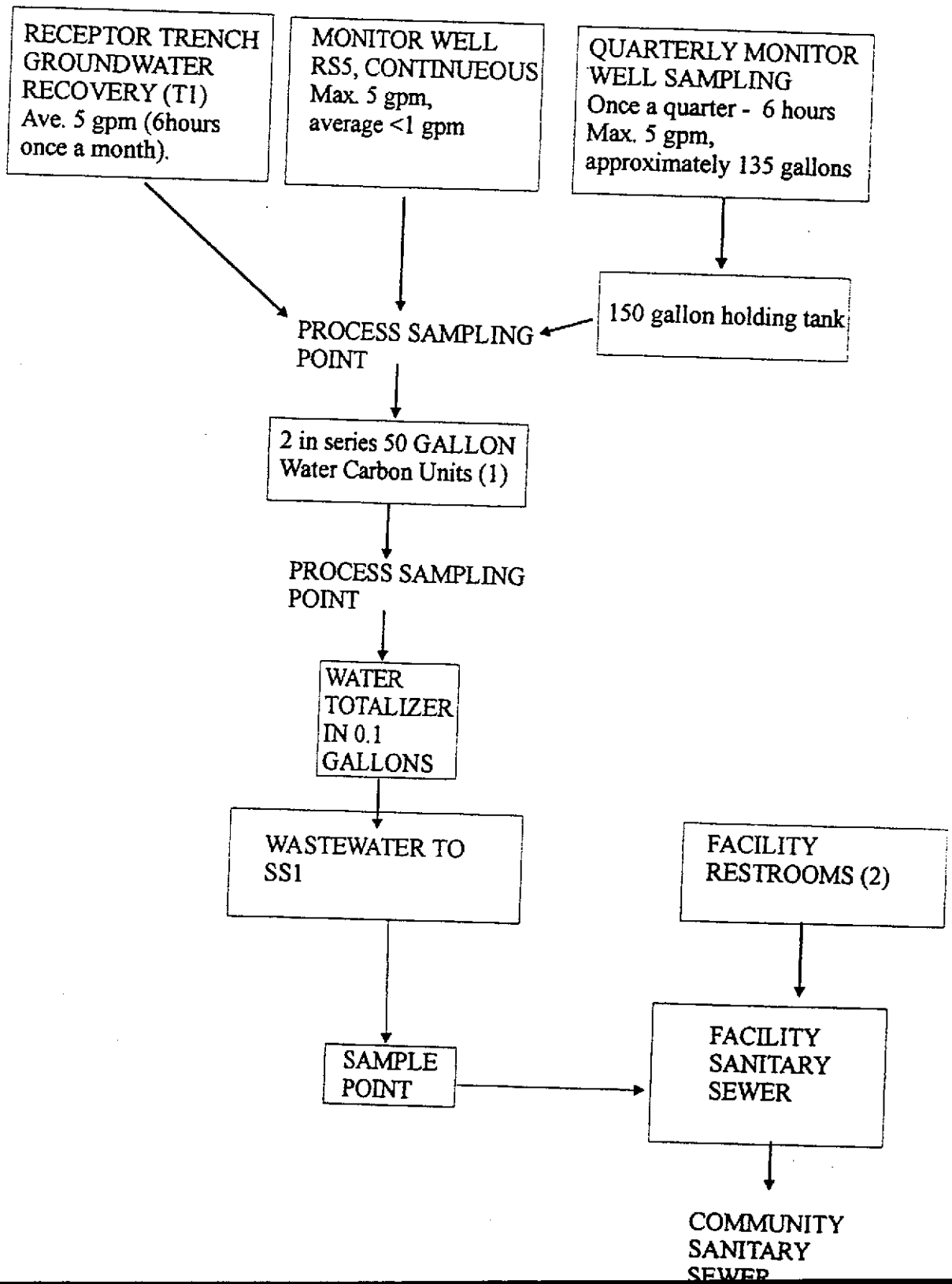
DATE	METER READING IN GALLONS #35635668 314110	NEW METER IN GALLONS #47083428	GALLONS DISCHARGED BETWEEN VISITS	ACCUMULATIVE GALLONS DISCHARGED	AVERAGE DISCHARGE PER MINUTE IN GALLONS	EPA METHOD 624 BENZENE ug/L	TOLUENE ug/L	ETHYL- BENZENE ug/L	XYLENES ug/L	7420 LEAD ug/L
F1 (PSP No. 1)	7/12/01									
F1 (PSP No. 1)	7/19/01		1228500	4875	137180	0.48				
			1232750.7	4251	141431	0.42				
REMOVE PUMP AND DISCONTINUE SEWER DISCHARGE ON July 19, 2001, COMMENCE 1/4LY DISCHARGE										
F1 (PSP No. 1) 1/4LY SAMPLES	12/18/01			238	141669	5.00	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1) 1/4LY SAMPLES	2/19/02			246	141915	5.00	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	3/21/02	1235760		0	141915	2.00	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	3/27/02	1243817.8		8058	149973	0.93				
F1 (PSP No. 1)	4/11/02	1259678.6		15861	165833	0.73	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	5/7/02	1283903.1		24225	190058	0.65				
F1 (PSP No. 1)	6/8/02	1308480		24577	214635	0.57				
F1 (PSP No. 1)	7/18/02	1330934.8		22455	237090	0.37				
F1 (PSP No. 1)	8/8/02	1340694.7		9780	246849	0.36	<0.5	<0.5	<0.5	<0.5
F1 (PSP No. 1)	9/12/02	1384301.5		23607	270458	0.44	<0.5	<0.5	<0.5	<0.5
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

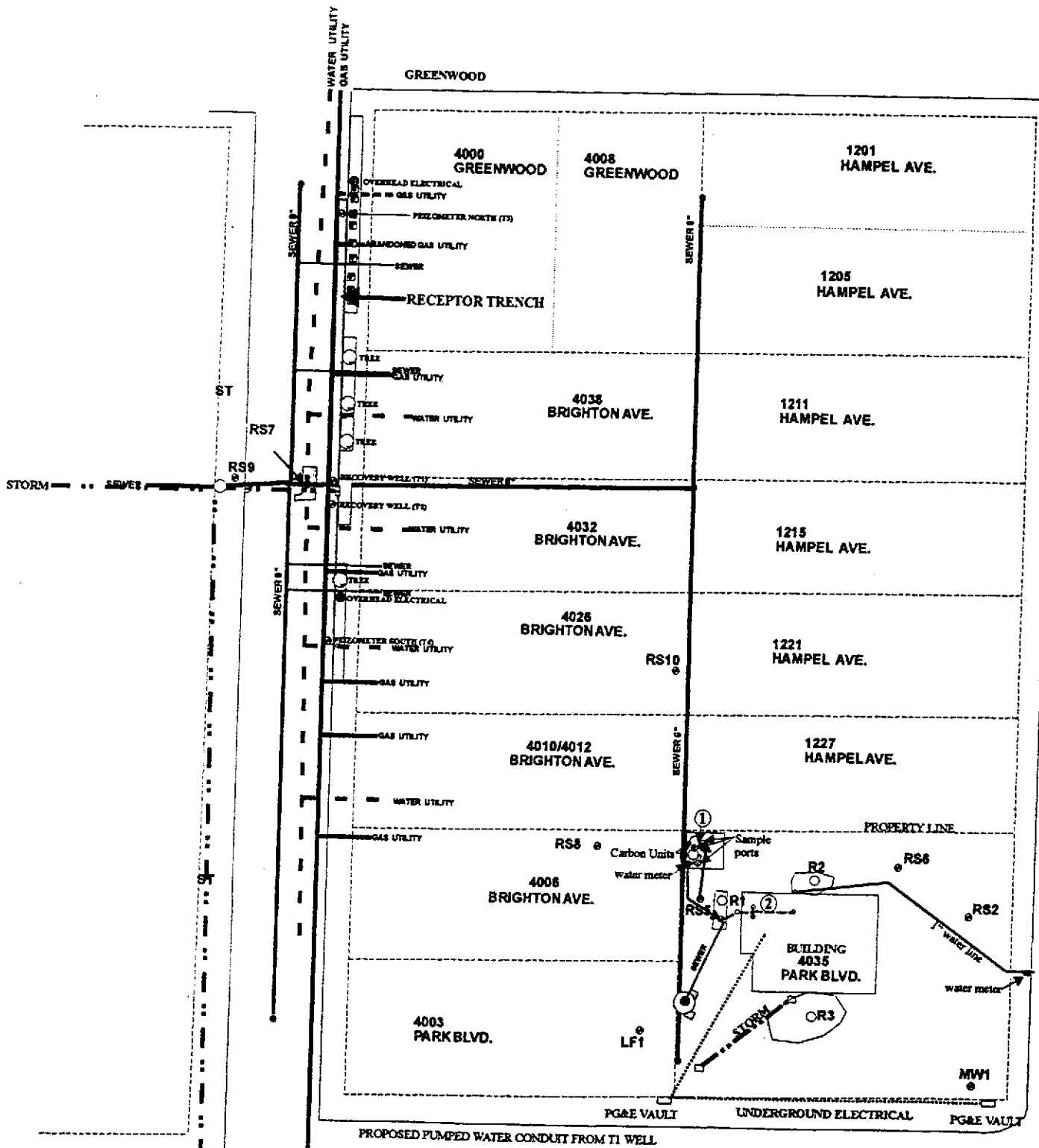
< BELOW LABORATORY LOWER DETECTION LIMITS

Note: water meter #47083428 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 1/4LY SAMPLING.

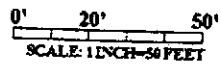
Figure 1(Revised October 31, 2002)
Activity: GROUNDWATER RECOVERY AND DISCHARGE SYSTEM
FORMER DESERT PETROLEUM SITE DP 793.





WASTEWATER DISCHARGE

**DP 793, 4035 PARK BLVD.
 OAKLAND, CALIFORNIA
 BUILDING LAYOUT AND LOCATION OF
 RECEPTOR TRENCH
 DECEMBER 12, 2002**



NORTH
 MW1 GROUNDWATER
 MONITORING WELL

FORMER DESERT PETROLEUM SITE DP 793
 4035 PARK BLVD.
 OAKLAND, CALIFORNIA 94602
 WASTE WATER DISCHARGE PERMIT NUMBER 5043550 1

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

DATE 12-12-02

REASON FOR SITE VISIT EB-Mud Inspect/Pump Trench

TRENCH WELL T1					
TIME	PID	DTW	pH	TEMP.	COND.
12:00					
14:00					
15:00					

TRENCH WELL T2				
PID	DTW	pH	TEMP.	COND.
1	2.83	196.56		
	2.97			
	3.30			
	3.58			
	3.86			
	4.22			

TRENCH WELL T3				
PID	DTW	pH	TEMP.	COND.

TRENCH WELL T4				
PID	DTW	pH	TEMP.	COND.

DEPTH TO WATER

TIME	MW1	RS2	RS5	RS8
	15.46	13.18	21.53	17.57
	214.04	214.29	306.08	209.65

RS7	RS8	RS9	RS10
4.13	14.38	9.23	2.81
191.86	202.29	188.4	201.65

R1	R2	R3
16.94	15.70	11.28
210.25	211.38	215.97

COMMENTS Built new drum connections for trench hose & fit hose for water transfer - Pump Trench

ELECTRIC METER 16447

WATER METER 1410216.0
1408784.2

SAMPLE: discharge

SITE MONITORED BY: BROADWAY

TIME
pH
Conductivity
Temperature
PID

WASTEWATER	
INFLUENT	EFFLUENT

WATER TREATMENT

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

GALLONS PURGED
 GALLONS PURGED 1432

PRESSURE WATER CARBONS #1 3.4 PSI, #2 3.7 PSI

WATER PHASE CARBON UNITS INSPECTION COMMENTS OK

CONDITION OF COMPOUND COMMENTS OK

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

Product from RS-8 stored on site

RS-8
 Prod H₂O
 1st Bailler - .9" - 7.1"
 2nd - .5" - 1.8"
 3rd - .4" - .3"

 1.8 inches 9.2"



Report Number : 30443

Date : 12/24/2002

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

Subject : 1 Water Sample
Project Name : Discharge
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,


Joel Kiff



Report Number : 30443

Date : 12/24/2002

Project Name : Discharge

Project Number : DP793

Sample : Discharge

Matrix : Water

Lab Number : 30443-01

Sample Date :12/12/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/19/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/19/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/19/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/19/2002
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/19/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/19/2002
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	12/19/2002
4-Bromofluorobenzene (Surr)	96.1		% Recovery	EPA 8260B	12/19/2002

Approved By:  Joel Kiff

QC Report : Method Blank Data

Project Name : Discharge

Project Number : DP793

Report Number : 30443

Date : 12/24/2002

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/19/2002
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/19/2002
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/19/2002
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/19/2002
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/19/2002
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/19/2002
Toluene - dB (Surr)	102		%	EPA 8260B	12/19/2002
4-Bromofluorobenzene (Surr)	96.6		%	EPA 8260B	12/19/2002

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 : 30443

Date : 12/24/2002

Project Name : Discharge

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	30443-01	<0.50	40.0	40.0	39.6	39.5	ug/L	EPA 8260B	12/19/02	99.1	98.8	0.303	70-130	25
Toluene	30443-01	<0.50	40.0	40.0	39.4	39.4	ug/L	EPA 8260B	12/19/02	98.6	98.6	0.0254	70-130	25
Tert-Butanol	30443-01	<5.0	200	200	201	207	ug/L	EPA 8260B	12/19/02	100	103	2.94	70-130	25
Methyl-t-Butyl Ether	30443-01	<0.50	40.0	40.0	42.0	41.8	ug/L	EPA 8260B	12/19/02	105	104	0.501	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 : 30443

Date : 12/24/2002

Project Name : Discharge

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	12/19/02	97.5	70-130
Toluene	40.0	ug/L	EPA 8260B	12/19/02	97.2	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/19/02	98.9	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/19/02	103	70-130

KIFF ANALYTICAL, LLC

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

Approved By: 
Joel Kiff

