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**TRANSMITTAL**

DATE: November 30, 2009 REFERENCE NO.: 241501  
PROJECT NAME: 461 8<sup>th</sup> Street, Oakland  
TO: Jerry Wickham  
Alameda County Environmental Health  
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Alameda, California 94502

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QUANTITY	DESCRIPTION
1	In Situ Chemical Oxidation Pilot Test Report

As Requested  For Review and Comment  
 For Your Use

**COMMENTS:**

If you have any questions regarding the contents of the document, please call Peter Schaefer at (510) 420-3319.

Copy to: Denis Brown, Shell Oil Products US, 20945 S. Wilmington Avenue, Carson, CA 90810  
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Grover Buhr, Treadwell & Rollo (*electronic copy only*)

Completed by: Peter Schaefer Signed:

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Mr. Jerry Wickham  
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**Subject:** Former Shell Service Station  
461 8<sup>th</sup> Street  
Oakland, California  
SAP Code 129453  
Incident No. 97093399  
ACEH Case No. RO0000343

Dear Mr. Wickham:

The attached document is provided for your review and comment. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

As always, please feel free to contact me directly at (707) 865-0251 with any questions or concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Denis L. Brown", is written over a horizontal line.

Denis L. Brown  
Project Manager



# **IN SITU CHEMICAL OXIDATION PILOT TEST REPORT**

**FORMER SHELL SERVICE STATION  
461 8<sup>th</sup> STREET  
OAKLAND, CALIFORNIA**

**SAP CODE           129453  
INCIDENT NO.    97093399  
AGENCY NO.       RO0000343**

**NOVEMBER 30, 2009  
REF. NO. 241501 (13)**

This report is printed on recycled paper.

**Prepared by:  
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## 1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) to present details of the second round of in situ chemical oxidation (ISCO) pilot testing using injections into monitoring wells within and down gradient of the source area. The pilot test was performed according to CRA's August 10, 2009 *Work Plan for Groundwater Treatment by In Situ Chemical Oxidation* which was approved in Alameda County Environmental Health's (ACEH's) August 14, 2009 letter.

The site is a paved parking lot located at the southwest corner of the intersection of 8th Street and Broadway in a primary commercial area of Oakland, California (Figure 1). The former station layout included an underground storage tank (UST) complex and dispenser islands (Figure 2). The site is currently a paid public parking lot.

The property was leased by American Oil Company from at least 1965 until 1972 when the lease was assigned to Shell. A Shell service station operated on the property from 1972 to 1980. The USTs associated with the former Shell service station were removed after Shell terminated operations at the site in May 1980. A history of previous site environmental activities is presented in Appendix A.

## 2.0 EXECUTIVE SUMMARY

ISCO pilot test results show ISCO is safe and effective in remediating residual hydrocarbons in groundwater at this site. Remediation has consisted of:

- Excavation of source material,
- ISCO pilot testing in the area of the excavated source area, and
- ISCO pilot testing in monitoring wells down gradient of the excavated source area.

Groundwater monitoring results following each of the ISCO pilot test injection events show that TPHg and benzene levels are being reduced, and ORP and DO readings indicate that further degradation of TPHg and benzene can be expected. Based on current results, no further ISCO pilot testing is recommended. Additional groundwater monitoring will be conducted to further quantify the ISCO pilot test's effectiveness in degrading hydrocarbons.

### 3.0 ISCO PILOT TEST

In June 2008, approximately 1,340 tons of soil was excavated to remove source area impacts. The excavation limits are depicted in Figure 2. The excavation extended to approximately 20 feet below grade (fbg). To supplement the source removal by excavation, CRA installed an infiltration gallery in the excavation backfill to conduct an ISCO pilot test using sodium persulfate catalyzed with hydrogen peroxide to treat the remaining impacted areas. The primary objective of the ISCO pilot test was to decrease soil concentrations to levels which would allow future redevelopment of the site.

Soil vapor and groundwater parameters were monitored prior to, during, and after the initial ISCO events to assess health risks and the effectiveness of this remedial strategy.

Following the two excavation area ISCO events in December 2008 and January 2009, CRA performed additional ISCO events in March 2009 and August 2009 using existing monitoring wells around the excavated area. Details of the second monitoring well injection ISCO event are presented herein.

### 3.1 MONITORING WELL INJECTION ACTIVITIES

Based on CRA's review of data following the initial monitoring well ISCO event, dose estimates were prepared for sodium persulfate, catalyzed with hydrogen peroxide.

CRA estimated that the reagent would disperse from the point of injection up to a radius of 10 feet based on the soil types described in boring logs. CRA installed a chemically compatible well packer in each injection well to apply the reagent to a target zone of 15 to 25 fbg. The reagent was injected at approximately 25 fbg over a 10-foot screened interval for wells S-13, S-18, S-20, and S-23 and over a 5-foot screened interval for wells S-21A and S-22A. CRA calculated the dosing based on the amount of reagent that was needed to treat hydrocarbons in the groundwater and hydrocarbons sorbed in the soil, and to overcome the natural oxidant demand of that soil volume within the radius of influence.

The volume targeted by the injection was conceptualized as a cylinder with a radius of 10 feet and a height of 10 feet (or 5 feet for wells S-21A and S-22A). Using this model, CRA calculated that 3,140 cubic feet of soil would be contained within the cylinder. Using 30 percent porosity for the soil, CRA calculated that 942 cubic feet of groundwater (7,046 gallons) would be contained within this cylinder (474 cubic feet or 3,523 gallons for wells S-21A and S-22A).

CRA conducted the injection by gravity feeding the reagent into the wells. Between August 24, 2009 and August 27, 2009, CRA injected a total of 9,900 pounds of sodium persulfate in 3,100 gallons of water (40 percent solution) and 1,600 gallons of 10 percent hydrogen peroxide into the six wells over a 4 day period. Table 1 presents the reagent injection volumes.

### **3.2 MONITORING ACTIVITIES**

#### **3.2.1 FIELD OBSERVATIONS DURING THE ISCO EVENT**

During the injection event, CRA scanned for evidence of surfacing of materials due to the injection process and subsequent reaction. In addition, CRA measured temperature, soil vapor, and pressure changes in wells S-9 and S-19. CRA fitted the wellheads with a threaded Schedule 40 PVC cap equipped with a sampling port and a groundwater temperature gauge (thermocouple). The thermocouples were placed near the middle of the groundwater column to provide a groundwater temperature reading. Temperature readings were collected from groundwater prior to and during injection activities.

#### **3.2.2 GROUNDWATER SAMPLING TO DETERMINE ISCO EFFECTIVENESS**

Groundwater monitoring data indicates that ISCO is effective in reducing residual hydrocarbons in groundwater within and down gradient from the source area. Extensive groundwater sampling following the previous ISCO injection events showed that dissolved-phase total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations generally increase shortly (1 week) after the injection event, but subsequently decrease (1 month after the injection event). TPHg and BTEX have been substantially reduced by ISCO and data indicate mobilization of TPHg and BTEX is not a concern.

Groundwater sampling following the second monitoring well ISCO injection event was conducted on October 1, 2009 following the modified sampling protocol presented in CRA's August 10, 2009 work plan.



On October 1, 2009, Blaine Tech Services, Inc. (Blaine) collected groundwater samples from monitoring wells S-8, S-9, S-13, S-14R, S-19, S-21A, S-21B, S-22A, and S-22B. Groundwater samples collected were analyzed for the following parameters:

- TPHg (EPA Method 8260B),
- BTEX (EPA Method 8260B),
- Sulfate (EPA Method 300 series),
- Dissolved Oxygen (DO) (field instrument),
- Oxygen Reduction Potential (ORP) (field instrument),
- Conductivity (field instrument),
- Temperature (field instrument), and
- Static water level (field instrument).

### **3.2.3 SOIL VAPOR MONITORING**

Volatile organic compounds (VOCs) were measured from ambient air and monitoring wells prior to and during the injection events. Monitoring well VOCs were measured using the modified well cap's sample port. VOCs were measured using a photo ionization detector (PID).

## **4.0 MONITORING RESULTS**

### **4.1 FIELD OBSERVATIONS AND MEASUREMENTS**

No surfacing of materials due to the injection process and subsequent reaction was observed during the injection events. Table 2 summarizes the groundwater field observations. CRA's field measurements found:

- No significant changes to groundwater temperature during the course of the injections. Very small (<2 degrees C) fluctuations to temperature were recorded throughout the project.
- The pre-injection baseline measurements of pH ranged from 6.28 to 7.47. The pH ranged from 6.77 to 7.35 during post injection monitoring.
- The pre-injection baseline specific conductivity readings ranged from 41 to 1,137 micro Siemens/centimeter ( $\mu\text{S}/\text{cm}$ ). The specific conductivity ranged from 342 to 16,550  $\mu\text{S}/\text{cm}$  post injection monitoring.

- Baseline DO readings ranged from 0.22 to 1.94 milligrams per liter (mg/l). The DO ranged from 0.52 to 8.64 mg/l post injection monitoring.
- Baseline ORP readings ranged from -104 to 39 millivolts (mv). The ORP ranged from 135 to 575 mv in post injection monitoring.
- No significant changes to well head pressure were observed during the course of the injections.
- Baseline VOC readings measured at the soil vapor monitoring locations (including wellheads with modified caps) by PID ranged from 0 to 55 ppmv. During the injection events, VOCs by PID ranged from 0 to 360 ppmv.

#### 4.2 GROUNDWATER SAMPLE RESULTS

Groundwater data collected following the second ISCO injection into monitoring wells down gradient of the source area indicates that TPHg and benzene levels are generally continuing to decline. Historic groundwater monitoring data through October 2009 is included as Appendix B. The fourth quarter 2009 groundwater monitoring report will be submitted to ACEH under separate cover. Figures 3 and 4 present TPHg and benzene isoconcentration contour maps for October 2009 groundwater monitoring event. Graphs of TPHg, benzene, and groundwater elevation versus time for each of the onsite wells are included in Appendix C.

Benzene is the primary driver for remediation groundwater impacts and its concentration trend is therefore the best indicator of ISCO effectiveness. The following table compares benzene concentrations in on-site wells from before (November 11, 2008) through after (October 29, 2009) the ISCO injections.

<i>Table A</i>						
<i>Well</i>	<i>Location Relative to Source Area</i>	<i>Benzene (µg/l)</i>				
		<i>11/11/08</i>	<i>2/12/09</i>	<i>4/9/09</i>	<i>7/23/09</i>	<i>10/1/09</i>
S-9	down gradient	74	120	450	430	180
S-17	down gradient	2,500	750	200	480	32
S-13	injection	2,400	800	510	1,800	330
S-18	injection	3,900	1,200	NA	500	49
S-20	injection	1,300	1,300	80	4,900	140
S-21A	injection	6,300	3,100	700	4,800	2,300
S-22A	injection	8,500	6,700	120	5,100	1,400
S-23	injection	640	160	180	180	40
S-8	cross gradient	29	7.2	<0.50	0.55	0.68
S-12	cross gradient	8.1	5.0	6.0	29	25
S-14R	cross gradient	680	40	230	81	12

<i>Table A</i>						
<i>Well</i>	<i>Location Relative to Source Area</i>	<i>Benzene (µg/l)</i>				
		<i>11/11/08</i>	<i>2/12/09</i>	<i>4/9/09</i>	<i>7/23/09</i>	<i>10/1/09</i>
S-19	cross gradient	500	130	140	77	160
S-21B	deeper	67	12	14	5.0	2.6
S-22B	deeper	3.3	11	5.3	8.9	2.4

NA = Not Analyzed

Benzene concentrations detected in untreated well S-17, located directly down gradient of the source area, show a reduction in benzene concentrations of nearly two orders of magnitude over the last year. All benzene concentrations detected in the October 2009 monitoring event are lower than those detected in the July 2009 monitoring event with the exception of wells S-8 and S-19 which are still less than half of their pre-ISCO concentrations. Since November 2008, benzene concentrations in several wells have shown short-term increases, likely due to the ISCO process mobilizing VOCs. Previous data indicates that the mobilizing effects of the ISCO injections diminish over time and the general decline in benzene concentrations indicates that ISCO is effectively degrading the residual benzene in groundwater.

## 5.0 CONCLUSIONS

ISCO feasibility is verified by increased dissolved oxygen readings, changes in oxidation-reduction potential (ORP), increased sulfate, soil vapor, oxygen, and lower explosive limit (LEL) levels.

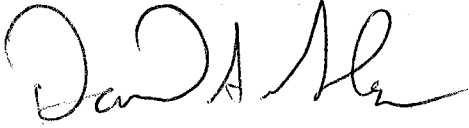
Historical soil vapor analyses and current field observations demonstrate that mobilization of potentially harmful soil vapors from the ISCO injection is not a concern.

ISCO effectiveness is verified by hydrocarbon concentration reductions in groundwater. Benzene concentrations have significantly decreased, indicating that ISCO is effectively treating hydrocarbons in the subsurface.

## 6.0 RECOMMENDATIONS

CRA recommends additional groundwater monitoring to assess the effectiveness of the recent ISCO activities. We recommend monthly groundwater monitoring during the fourth quarter of 2009 and quarterly monitoring through the first half of 2010 to further assess the effectiveness of ISCO.

All of Which is Respectfully Submitted,  
CONESTOGA-ROVERS & ASSOCIATES



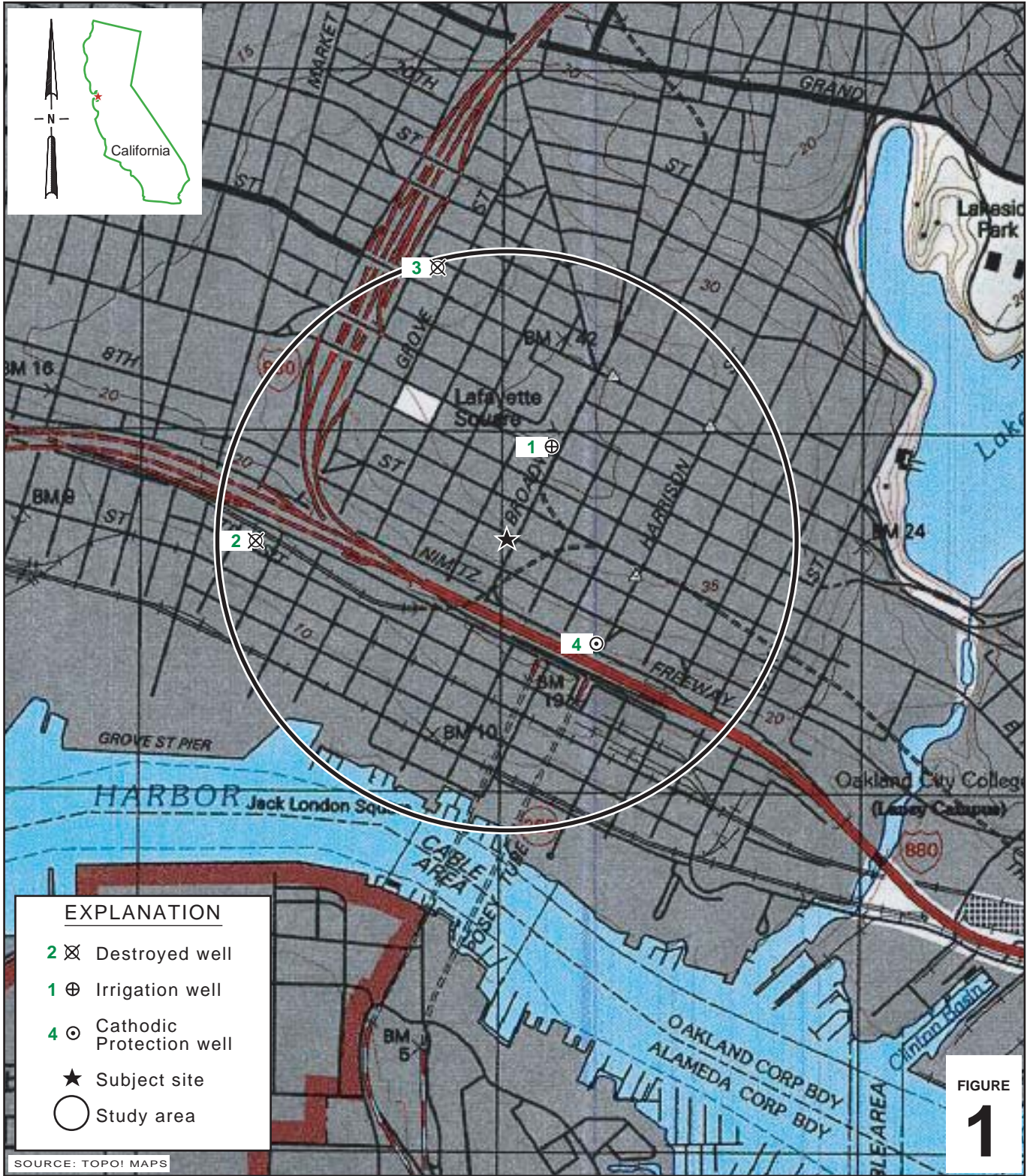
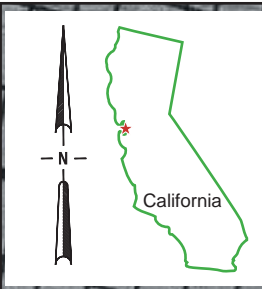
Daniel A. Glaze



Daniel N. Lescure, PE



## FIGURES



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SOURCE: TOPOI MAPS



**Former Shell Service Station**  
 461 8th Street  
 Oakland, California

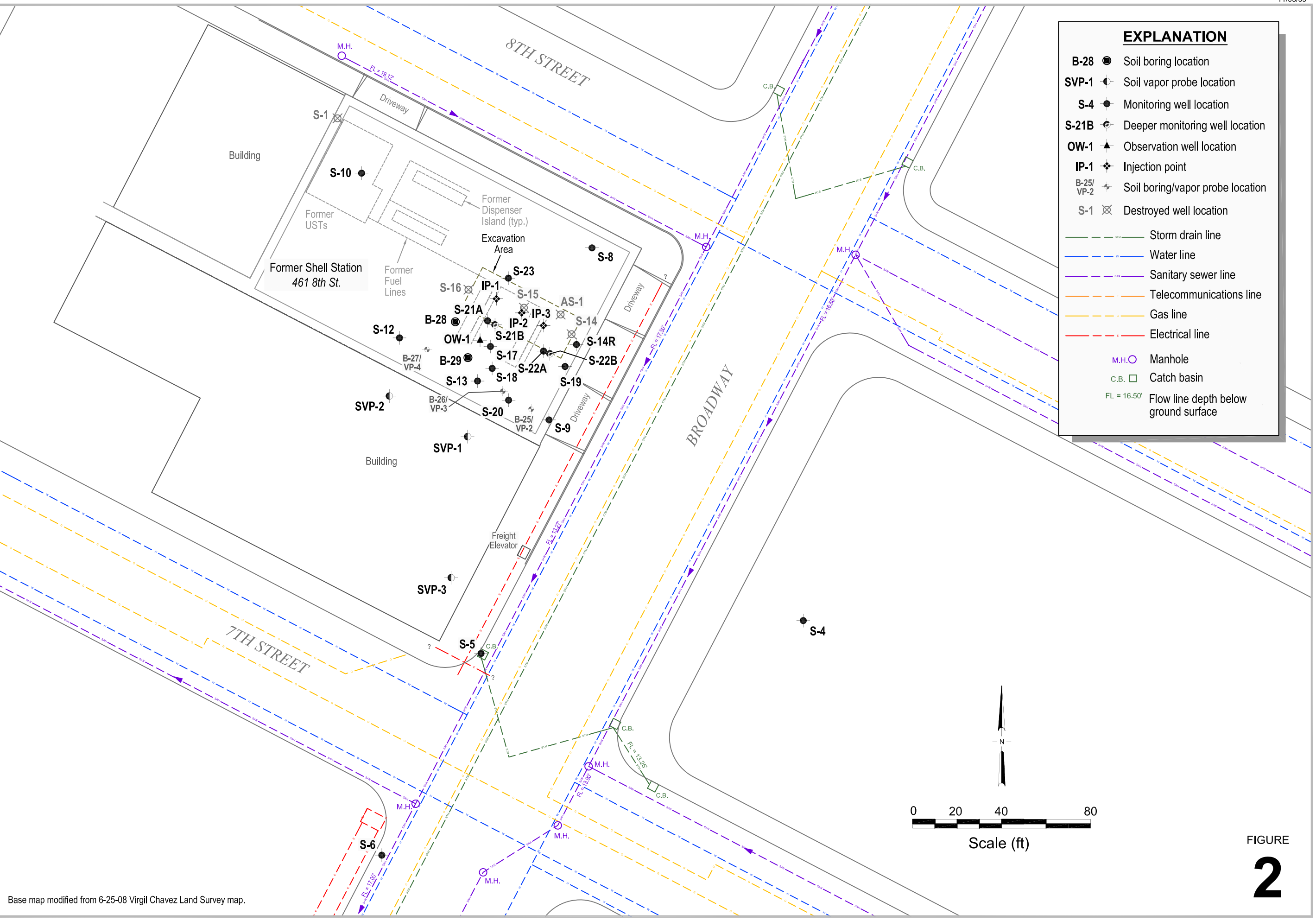


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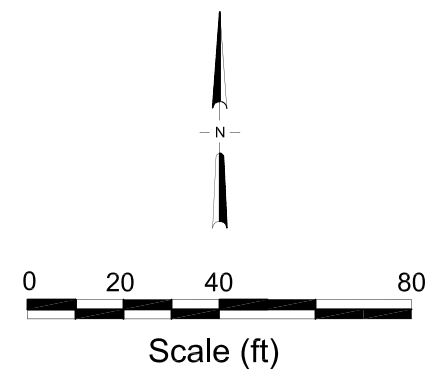
**Vicinity Map**



I:\Shell\6-chars\2415-1241501-Oakland 461 8th\241501-FIGURES\241501 SITE PLAN.DWG



EXPLANATION	
B-28	● Soil boring location
SVP-1	⊙ Soil vapor probe location
S-4	● Monitoring well location
S-21B	⊙ Deeper monitoring well location
OW-1	▲ Observation well location
IP-1	◆ Injection point
B-25/VP-2	⊕ Soil boring/vapor probe location
S-1	⊗ Destroyed well location
	Storm drain line
	Water line
	Sanitary sewer line
	Telecommunications line
	Gas line
	Electrical line
M.H. ⊙	Manhole
C.B. □	Catch basin
FL = 16.50'	Flow line depth below ground surface



Base map modified from 6-25-08 Virgil Chavez Land Survey map.

FIGURE  
**2**

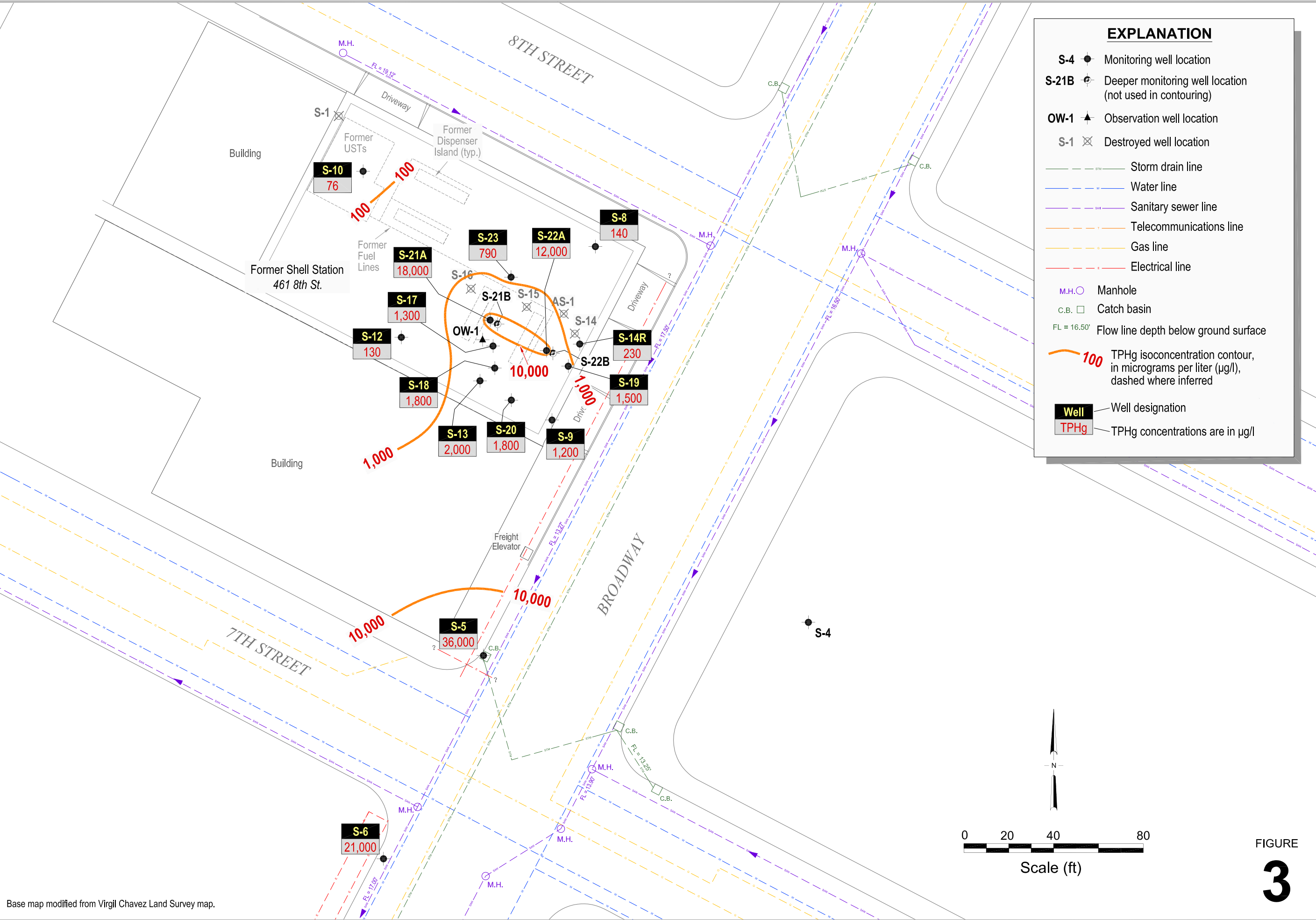
Site Plan

Former Shell Service Station

461 8th Street  
Oakland, California



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Base map modified from Virgil Chavez Land Survey map.

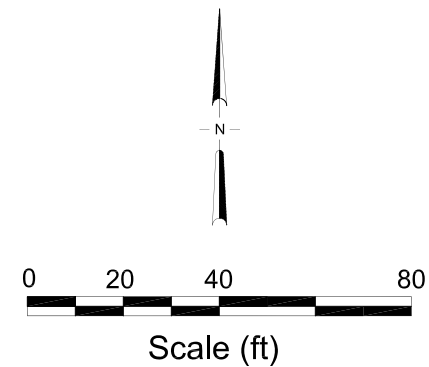
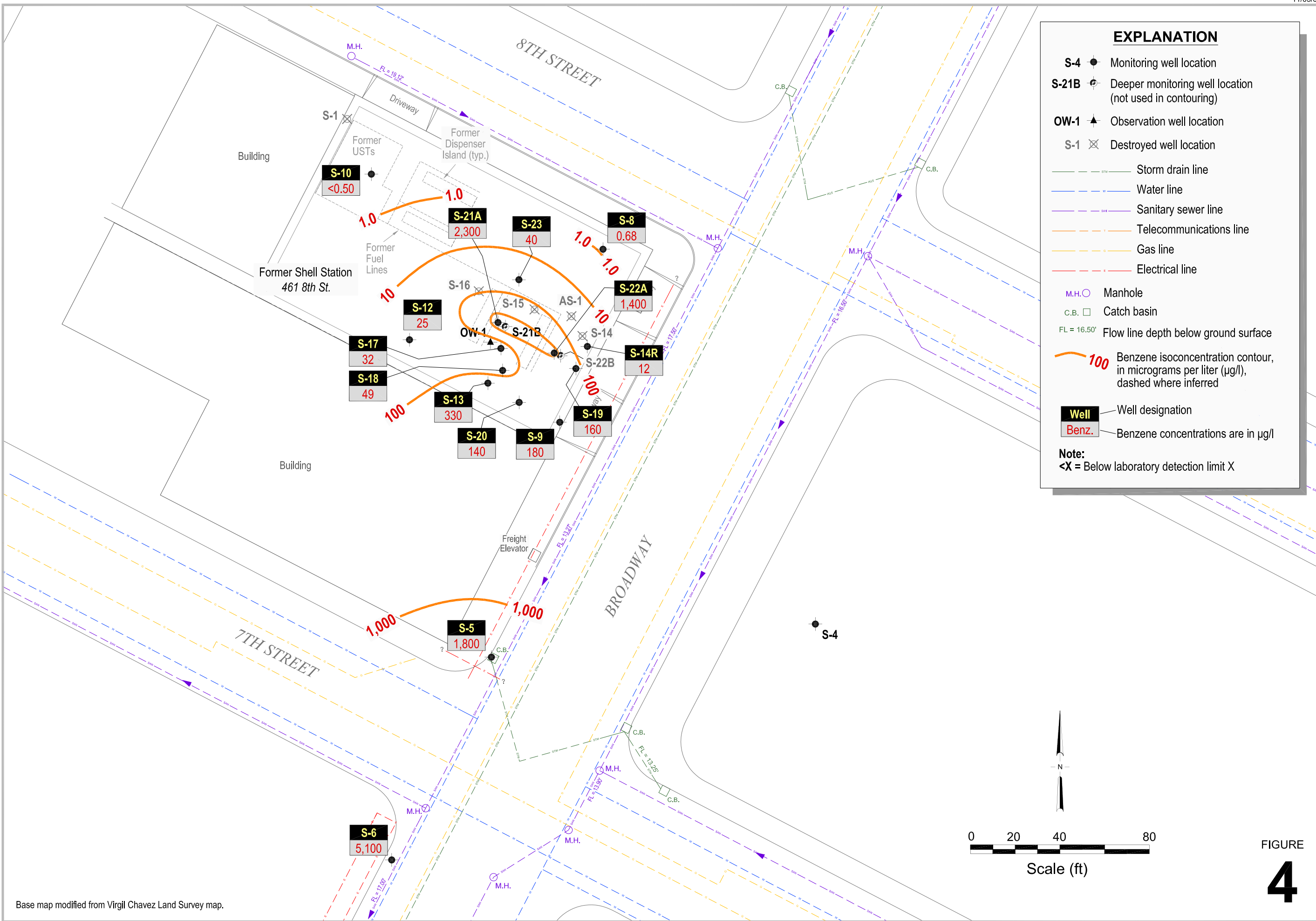


FIGURE 3



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### EXPLANATION

- S-4 ● Monitoring well location
- S-21B ● Deeper monitoring well location (not used in contouring)
- OW-1 ▲ Observation well location
- S-1 ⊗ Destroyed well location
- Storm drain line
- Water line
- Sanitary sewer line
- Telecommunications line
- Gas line
- Electrical line
- M.H. ○ Manhole
- C.B. □ Catch basin
- FL = 16.50' Flow line depth below ground surface
- 100 Benzene isoconcentration contour, in micrograms per liter (µg/l), dashed where inferred
- Well Well designation
- Benz. Benzene concentrations are in µg/l

**Note:**  
 <X = Below laboratory detection limit X

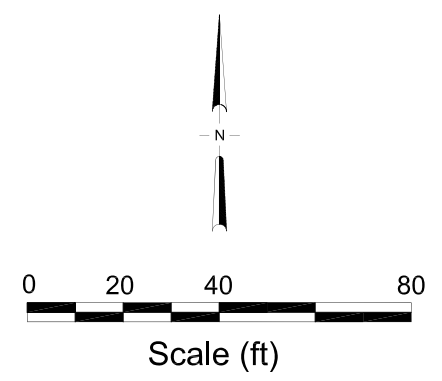


FIGURE 4

Base map modified from Virgil Chavez Land Survey map.

Benzene in Shallow Groundwater Isoconcentration Map



Former Shell Service Station  
 461 8th Street  
 Oakland, California

October 1, 2009

TABLE

**IN SITU CHEMICAL OXIDATION  
INJECTION VOLUMES  
FORMER SHELL SERVICE STATION  
461 8TH STREET  
OAKLAND, CALIFORNIA**

<i>Date</i>	<i>Well ID</i>	<i>Reagent</i>	<i>Total Proposed Amount of Reagent per Well (gal)</i>	<i>Injection Concentrations</i>	<i>Proposed Injection Volume (gal)</i>	<i>Actual Injected Volume (gal)</i>
August 2009	S-21A	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	390	40%	590	900
		H <sub>2</sub> O <sub>2</sub>	200	10%		
	S-22A	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	390	40%	590	600
		H <sub>2</sub> O <sub>2</sub>	200	10%		
	S-23	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	580	40%	880	900
		H <sub>2</sub> O <sub>2</sub>	300	10%		
	S-13	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	580	40%	880	595
		H <sub>2</sub> O <sub>2</sub>	300	10%		
	S-18	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	580	40%	880	880
		H <sub>2</sub> O <sub>2</sub>	300	10%		
	S-20	Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub>	580	40%	880	825
		H <sub>2</sub> O <sub>2</sub>	300	10%		

**Abbreviations & Notes:**

gal=Gallon

Na<sub>2</sub>S<sub>2</sub>O<sub>8</sub>=Sodium PersulfateH<sub>2</sub>O<sub>2</sub>=Hydrogen Peroxide

APPENDIX A

SITE HISTORY

## SITE HISTORY

**1978-1980 Separate Phase Hydrocarbons (SPH) Discovered in Bay Area Rapid Transit's (BART's) KE Line Tunnel:** In January 1979, BART notified Shell that they had found SPH in a tunnel under the intersection of 7<sup>th</sup> Street and Broadway. Shell tested the product lines at the subject site and found a pressure leak. Shell replaced the product lines in January 1979. Shell also tested the underground storage tanks (USTs) tightness and they passed. According to BART's January 10, 1979 to December 3, 1981 *Bart Recovery Project Log* and Groundwater Technology, Inc.'s 1981 *Considerations on Infiltration of Gasoline into BART KE Line* report, one observation well was installed to a depth of 25 feet concurrent with piping replacement and no contamination was reported. SPH analyses conducted in January 1979 and in May 1981 identified the SPH in the BART tunnel as Shell Regular gasoline. Between October 1979 and April 1980, approximately 4,400 gallons of water and gasoline were removed from the BART tunnel. The Shell station discontinued station operations in May 1980, and all existing improvements, tanks, and associated piping were removed. No UST removal or piping removal reports are available.

**1981-1988 Monitoring Well Installation and Groundwater Extraction (GWE):** In August and September 1981, Groundwater Technology, Inc. (GTI) installed seven monitoring wells (L-1 through L-7) to delineate the extent of hydrocarbons in groundwater. Based groundwater sampling results, in December 1981 Gettler-Ryan, Inc. (G-R) installed a recovery well adjacent to well L-6. GWE from the recovery well began in February 1982 and continued until August 1982. Wells L-1 through L-3 were destroyed during construction of the BART tunnels in the mid-1980's. Records of the well destructions are not available. Wells L-4, L-5, and L-6 were renamed S-4, S-5, and S-6. G-R began gauging wells S-4 through S-6 in 1986 and collecting groundwater samples for analysis in 1988. G-R conducted periodic GWE from wells S-5 and S-6 by bailing or by vacuum truck beginning in October 1988. GeoStrategies Inc.'s (GSI's) September 14, 1993 *Work Plan* summarizes GWE activities associated with the recovery well and Enviros, Inc.'s (Enviros') November 2, 1993 *Work Plan for Soil and Groundwater Sampling* summarizes the periodic GWE activities.

**1993 Phase I Assessment:** GSI's June 30, 1993 *Phase I Preliminary Site Assessment* identified seven sites with known UST leaks within a ¼-mile radius of the site including an Oakland Police Department (OPD) site located down gradient (southwest). The *Bart Recovery Project Log* noted that leaking USTs were replaced at the OPD site in October 1979 and that OPD had received product deliveries from a local Shell gasoline distributor. In addition, a permit to repair the product lines and dispensers at the OPD site was taken out in 1984 by Egan and Paradiso Company, but no additional

information was available. The OPD site is not listed in Geotracker or on Alameda County Environmental Health's (ACEH's) website.

**1994 Subsurface Investigation:** During July 1994, Enviro's drilled nine soil borings (B-1 through B-9) in the vicinity of the former pump islands and the former USTs. Up to 15 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg) and 0.24 mg/kg benzene were detected in soil samples collected near the former pump islands. No TPHg or benzene was detected in soil samples in the area of the former piping or the former USTs. Investigation activities are described in Enviro's August 16, 1994 *Site Investigation Report*.

**1994-1995 Well Installation:** During December 1994, Enviro's installed three monitoring wells (S-8, S-9, and S-10). No TPHg or benzene was reported in soil samples collected from the wells, with the exceptions of 0.014 mg/kg benzene in a sample from S-8 at 21.5 feet below grade (fbg) and 760 mg/kg TPHg and 0.0032 mg/kg benzene reported in the sample from S-10 at 11.5 fbg. Investigation activities are described in Enviro's February 14, 1995 *Site Investigation Report and Quarterly Monitoring Report - First Quarter 1995*.

**2003 Offsite Investigation:** During October 2003, Cambria Environmental Technology, Inc. (Cambria) drilled one soil boring (HA-1) within 7<sup>th</sup> Street, south of the site. No TPHg, benzene, or methyl tertiary-butyl ether (MTBE) was detected in soil samples. A grab groundwater sample contained 6.3 micrograms per liter ( $\mu\text{g/L}$ ) MTBE. Investigation activities are described in Cambria's December 16, 2003 *Subsurface Investigation Report*.

**2004 Subsurface Investigation for Development:** During May 2004, Treadwell & Rollo, Inc. (T&R) of Oakland, California drilled four soil borings (TR-1 through TR-4) onsite to collect soil and soil vapor samples. TPHg and volatile organic compounds (VOCs) were not detected in soil samples, and benzene, toluene, ethylbenzene, and xylenes (BTEX) were not detected in soil vapor samples collected. Investigation results are summarized in T&R's March 27, 2006 *Subsurface Investigation* report.

**December 2006 Subsurface Investigation:** During December 2006, Cambria drilled 14 soil borings (B-10 through B-23) to determine the extent of hydrocarbon impacts in soil. Fuel oxygenates were not detected in any of the soil samples with the exception of up to 0.083 mg/kg of tertiary-butyl alcohol in three soil samples from borings B-13 and B-14. Lead scavengers (1,2-Dichloroethane [1,2-DCA] and ethylene dibromide [EDB]) were not detected in soil samples. Grab groundwater samples contained up to 960,000 micrograms per liter ( $\mu\text{g/l}$ ) TPHg (B-22) 24,000  $\mu\text{g/l}$  benzene (B-10). No fuel

oxygenates were detected in the grab groundwater samples. Up to 410 µg/l 1,2-DCA was detected in grab groundwater samples, and 52 µg/l EDB was reported in one grab groundwater sample (B-12). Investigation results are summarized in Conestoga-Rovers & Associates (CRA's) March 2, 2007 *Subsurface Investigation*.

**November 2007 - January 2008 Subsurface Investigation and Pilot Testing:** Between November 3 and December 13, 2007, CRA drilled four soil borings (B-24 through B-27), completed them into vapor probes (VP-1 through VP-4), installed five monitoring wells (S-12 through S-16) and an air sparge well (AS-1). A dual-phase extraction (DPE) pilot test was performed on January 7 and 8, 2008 and an air sparging (AS) pilot test was performed on January 10 and 11, 2008. These activities are documented in CRA's February 25, 2008 *Site Investigation and Pilot Test Report, and Corrective Action Plan*.

**May 2008 Well Destructions and Installations:** In May 2008, CRA properly destroyed four wells (S-14, S-15, S-16, and AS-1) and installed three wells (S-17, S-18, and OW-1) to accommodate source area excavation activities. These activities are documented in CRA's August 20, 2008 *Well Destruction and Installation Report*.

**June 2008 Soil Excavation and In Situ Chemical Oxidation (ISCO) Piping Installation:** Gettler-Ryan Inc. (GRI) of Dublin, California excavated soil to approximately 20 feet below grade (fbg) in the southeastern portion of the site. Three sets of ISCO injection points were placed within the excavation. Approximately 1,340 tons of soil generated during excavation activities was removed and properly disposed. CRA's September 17, 2008 *Soil Sampling and ISCO Piping Installation Report* provides details of the excavation and ISCO gallery installation activities.

**September 2009 Subsurface Investigation:** CRA installed four deep wells (S-19, S-20, S-21B, and S-22B) and four shallow wells (S-14R, S-19, S-20, and S-23) to facilitate planned ISCO pilot testing, and drilled two soil borings (B-28 and B-29) to delineate vertical soil impact in the southern portion of the site. Soil hydrocarbon impacts were found to be concentrated within a zone 20 to 26.5 fbg deep and to diminish in concentration with depth and horizontal distance from the June 2008 excavation pit. This investigation is detailed in CRA's December 8, 2008 *Subsurface Investigation Report*.

**December 2008- March 2009 ISCO Pilot Testing:** In December 2008 and January 2009, CRA performed two rounds of ISCO pilot test using the injection gallery to treat hydrocarbon impacts to soil within the source area. In March 2009, CRA continued the ISCO pilot testing using injection into monitoring wells. CRA's July 17, 2009 *In Situ Chemical Oxidation Pilot Test Report* details these ISCO injection events.

APPENDIX B

HISTORICAL GROUNDWATER MONITORING DATA



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**BLAINE**  
**TECH SERVICES** INC.

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GROUNDWATER SAMPLING SPECIALISTS  
SINCE 1988

October 16, 2009

Denia Brown  
Shell Oil Products US  
20945 South Wilmington Avenue  
Carson, CA 90810

Fourth Quarter 2009 Groundwater Monitoring at  
Former Shell-branded Service Station  
461 8th Street  
Oakland, CA

Monitoring performed on October 1, 2009

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Groundwater Monitoring Report 091001-WW-1

This report covers the routine monitoring of groundwater wells at this former Shell-branded facility. In accordance with standard procedures that conform to Regional Water Quality Control Board requirements, routine field data collection includes depth to water, total well depth, thickness of any separate immiscible layer, water column volume, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

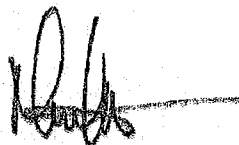
Basic field information is presented alongside analytical values excerpted from the laboratory report in the cumulative table of **WELL CONCENTRATIONS**. The full analytical report for the most recent samples and the field data sheets are attached to this report.

At a minimum, Blaine Tech Services, Inc. field personnel are certified on completion of a forty-hour Hazardous Materials and Emergency Response training course per 29 CFR 1910.120. Field personnel are also enrolled in annual eight-hour refresher courses.

Blaine Tech Services, Inc. conducts sampling and documentation assignments of this type as an independent third party. Our activities at this site consisted of objective data and sample collection only. No interpretation of analytical results, defining of hydrological conditions or formulation of recommendations was performed.

Please call if you have any questions.

Yours truly,



Mike Ninokata  
Project Manager

MN/np

attachments: Cumulative Table of WELL CONCENTRATIONS  
Certified Analytical Report  
Field Data Sheets

cc: Anni Kreml  
Conestoga-Rovers & Associates  
5900 Hollis Street, Suite A  
Emeryville, CA 94608

SAN JOSE

SACRAMENTO

LOS ANGELES

SAN DIEGO

SEATTLE

1680 ROGERS AVENUE SAN JOSE, CA (408) 573-0555 FAX (408) 573-7771 LIC. 746684 www.blainetech.com

**WELL CONCENTRATIONS - TABLE 1**  
**Former Shell Service Station**  
**461 8th Street**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.O. (mg/L)	O.R.P. (mV)
S-4	10/26/1988	130	3.8	13	4.0	30	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA	NA	NA
S-4	02/14/1989	<50	0.5	<1	<1	3.0	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	12.82	80.69	NA	NA	NA
S-4	05/01/1989	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	16.48	77.03	NA	NA	NA
S-4	07/27/1989	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.84	77.67	NA	NA	NA
S-4	10/05/1989	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.98	77.53	NA	NA	NA
S-4	01/09/1990	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.96	77.65	NA	NA	NA
S-4	04/30/1990	<50	<0.5	<0.5	<0.5	<1	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	14.48	79.03	NA	NA	NA
S-4	07/31/1990	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA	NA	NA
S-4	10/30/1990	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA	NA	NA
S-4	05/06/1991	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.23	78.28	NA	NA	NA
S-4	06/27/1991	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	13.54	79.97	NA	NA	NA
S-4	09/24/1991	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.85	77.66	NA	NA	NA
S-4	11/07/1991	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.60	77.91	NA	NA	NA
S-4	02/13/1992	<50	<0.5	<0.5	<0.5	3.0	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	14.27	79.24	NA	NA	NA
S-4	05/11/1992	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA	NA	NA
S-4	12/03/1992	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA	NA	NA
S-4	05/13/1993	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	14.81	78.78	NA	NA	NA
S-4	07/22/1993	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	14.42	79.09	NA	NA	NA
S-4	10/20/1993	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA	NA	NA
S-4	01/25/1994	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	14.60	78.91	NA	NA	NA
S-4	04/25/1994	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	14.39	79.12	NA	NA	NA
S-4	07/21/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	22.29	71.22	NA	NA	NA
S-4	10/24/1994	<500	<0.3	<0.3	<0.3	<0.6	NA	NA	NA	NA	NA	NA	NA	NA	93.51 (TOC)	22.72	70.79	NA	NA	NA
S-4	12/22/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	25.77*	22.25	3.52	NA	NA	NA
S-4	04/20/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	25.77	21.16	4.61	NA	NA	NA
S-4	10/04/1995	<50	1.2	0.7	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	25.77	22.25	3.52	NA	NA	NA
S-4	01/03/1996	<50	0.6	<0.5	<0.5	1.7	NA	NA	NA	NA	NA	NA	NA	NA	25.77	23.28	2.49	NA	NA	NA
S-4	04/11/1996	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	NA	NA	NA	NA	NA	NA	25.77	21.58	4.19	NA	NA	NA
S-4	07/11/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	NA	NA	25.77	21.60	4.17	NA	NA	NA
S-4	10/02/1996	<50	<0.50	<0.50	<0.50	<0.50	2.6	NA	NA	NA	NA	NA	NA	NA	25.77	22.46	3.31	NA	NA	NA
S-4	01/23/1997	<50	0.73	<0.50	<0.50	0.63	<2.5	NA	NA	NA	NA	NA	NA	NA	25.77	20.96	5.71	NA	NA	NA
S-4	07/21/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	NA	NA	25.77	22.10	3.57	NA	NA	NA
S-4	01/22/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	NA	NA	25.77	20.50	5.27	NA	NA	NA
S-4	07/06/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	NA	NA	25.77	20.86	4.91	NA	NA	NA
S-4	10/26/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.77	21.41	4.36	NA	NA	NA
S-4	01/28/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	NA	NA	25.77	22.34	3.43	NA	NA	NA
S-4	04/23/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.77	21.43	4.34	NA	NA	NA

**WELL CONCENTRATIONS - TABLE 1**

Former Shell Service Station

461 8th Street

Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TGC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.G. (mg/L)	O.R.P. (mV)
S-4	07/29/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	NA	NA	NA	NA	NA	25.77	21.45	4.32	NA	NA	NA
S-4	11/01/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.77	22.08	3.69	NA	NA	NA
S-4	01/07/2000	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	NA	NA	25.77	22.28	3.48	NA	NA	NA
S-4	04/11/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.77	21.11	4.66	NA	NA	NA
S-4	07/19/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	NA	25.77	21.19	4.56	NA	NA	NA
S-4	10/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.77	22.22	3.55	NA	NA	NA
S-4	01/09/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	NA	25.77	22.17	3.60	NA	NA	NA
S-4	04/06/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.77	21.50	4.27	NA	NA	NA
S-4	07/25/2001	<50	2.0	0.52	<0.50	1.0	NA	<5.0	NA	NA	NA	NA	NA	NA	25.77	21.50	4.27	NA	NA	NA
S-4	11/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.77	21.95	3.82	NA	NA	NA
S-4	01/17/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	25.77	21.13	4.64	NA	NA	NA
S-4	05/08/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25.77	21.35	4.42	NA	NA	NA
S-4	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	34.41	21.19	13.22	NA	NA	NA
S-4	10/15/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	21.42	12.99	NA	NA	NA
S-4	01/02/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	34.41	20.75	13.66	NA	NA	NA
S-4	04/15/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	21.08	13.33	NA	NA	NA
S-4	07/14/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	19.93	14.48	NA	NA	NA
S-4	10/20/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	19.56	14.85	NA	NA	NA
S-4	01/22/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	34.41	19.12	15.29	NA	NA	NA
S-4	04/19/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	19.15	15.26	NA	NA	NA
S-4	07/13/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	20.48	13.93	NA	NA	NA
S-4	10/26/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	21.09	13.41	NA	NA	NA
S-4	01/17/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	34.41	20.17	14.24	NA	NA	NA
S-4	04/14/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	19.82	14.59	NA	NA	NA
S-4	07/28/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	20.71	13.70	NA	NA	NA
S-4	10/05/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	20.85	13.56	NA	NA	NA
S-4	02/09/2006	<50.0	<0.500	<0.500	<0.500	<0.500	NA	<0.500	NA	NA	NA	NA	NA	NA	34.41	19.47	14.94	NA	NA	NA
S-4	05/15/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	19.52	14.69	NA	NA	NA
S-4	08/23/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	20.75	13.66	NA	NA	NA
S-4	11/15/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	20.03	14.38	NA	NA	NA
S-4	01/30/2007	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	34.41	21.39	13.11	NA	NA	NA
S-4	05/29/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	21.15	13.26	NA	NA	NA
S-4	08/15/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	21.38	13.03	NA	NA	NA
S-4	11/28/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	21.55	12.66	NA	NA	NA
S-4	02/08/2008	64 h	<0.50	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	34.41	22.75	11.66	NA	NA	NA
S-4	05/08/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	22.18	12.23	NA	NA	NA
S-4	08/14/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	21.77	12.64	NA	NA	NA

**WELL CONCENTRATIONS - TABLE 1**  
**Former Shell Service Station**  
**451 8th Street**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE S020 (ug/L)	MTBE S260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.G. (mg/L)	O.R.P. (mV)
S-4	11/1/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	20.66	13.73	NA	NA	NA
S-4	01/05/2009	250	1.8	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	34.41	20.92	13.49	NA	NA	NA
S-4	04/09/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	21.30	13.31	NA	NA	NA
S-4	07/23/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	21.76	12.65	NA	NA	NA
S-4	10/01/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.41	22.48	12.31	NA	NA	NA
S-5	04/16/1987	130000	15000	16000	NA	14000 a	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	NA	NA	NA	NA	NA
S-5	10/26/1988	110000	20000	25000	2300	10000	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	NA	NA	NA	NA	NA
S-5	02/14/1989	94000	16000	21000	1800	10000	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	19.87	79.49	NA	NA	NA
S-5	05/01/1989	120000	29000	35000	3100	15000	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.23	78.13	NA	NA	NA
S-5	07/27/1989	110000	20000	29000	2400	14000	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.41	78.85	NA	NA	NA
S-5	10/05/1989	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.43	78.94	0.01	NA	NA
S-5	01/09/1990	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.16	78.21	0.01	NA	NA
S-5	04/30/1990	100000	13000	22000	2100	11000	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.95	78.43	NA	NA	NA
S-5	07/31/1990	53000	8300	14000	1200	7400	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.88	78.48	NA	NA	NA
S-5	10/30/1990	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.96	77.42	0.03	NA	NA
S-5	05/06/1991	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	23.08	76.46	0.13	NA	NA
S-5	06/27/1991	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.53	78.85	0.03	NA	NA
S-5	09/24/1991	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.40	78.01	0.06	NA	NA
S-5	11/07/1991	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.33	78.23	0.25	NA	NA
S-5	02/13/1992	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.52	77.09	0.31	NA	NA
S-5	05/11/1992	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.46	77.36	0.58	NA	NA
S-5	12/03/1992	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	NA	NA	NA	NA	NA
S-5	05/13/1993	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.22	77.36	0.27	NA	NA
S-5	07/22/1993	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.68	77.88	0.25	NA	NA
S-5	10/20/1993	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.31	79.03	0.23	NA	NA
S-5	01/25/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.95	77.57	0.18	NA	NA
S-5	04/25/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.97	77.67	0.35	NA	NA
S-5	05/26/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.84	78.80	0.35	NA	NA
S-5	06/10/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.01	78.61	0.32	NA	NA
S-5	07/21/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.18	77.56	0.47	NA	NA
S-5	08/25/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.01	77.70	0.44	NA	NA
S-5	09/22/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.00	77.48	0.15	NA	NA
S-5	10/24/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.28	77.53	0.56	NA	NA
S-5	12/22/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94*	22.88	0.85	0.99	NA	NA
S-5	04/20/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	21.66	1.54	0.33	NA	NA
S-5	10/04/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	22.18	0.76	NA	NA	NA

**WELL CONCENTRATIONS - TABLE 1**  
**Former Shell Service Station**  
**461 8th Street**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8228 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.O. (mg/L)	O.R.P. (mV)
S-5	01/03/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	22.80	0.60	0.63	NA	NA
S-5	04/11/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	21.15	2.33	0.67	NA	NA
S-5	07/11/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	22.62	1.04	0.90	NA	NA
S-5	10/02/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	23.07	0.38	0.64	NA	NA
S-5	01/22/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	20.83	2.24	0.16	NA	NA
S-5	07/21/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	21.36	1.62	0.05	NA	NA
S-5	01/22/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	20.04	2.98	0.04	NA	NA
S-5	07/08/1998	220	14	40	5.8	34	3.3	NA	NA	NA	NA	NA	NA	NA	22.94	18.61	4.33	NA	NA	NA
S-5	10/26/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	17.31	5.63	NA	NA	NA
S-5	01/28/1999	51600	13000	1200	1200	2400	2400	NA	NA	NA	NA	NA	NA	NA	22.94	20.11	2.83	NA	NA	NA
S-5	04/23/1999	65600	2540	7300	1790	9840	<1000	NA	NA	NA	NA	NA	NA	NA	22.94	19.21	3.78	NA	NA	NA
S-5	07/29/1999	61400	3320	6980	1520	7700	<1000	NA	NA	NA	NA	NA	NA	NA	22.94	14.77	8.17	NA	NA	NA
S-5	11/01/1999	48200	2700	5740	1290	7850	<500	<40.0	NA	NA	NA	NA	NA	NA	22.94	15.56	7.38	NA	NA	NA
S-5	01/07/2000	39000	3900	8500	790	8300	1500	NA	NA	NA	NA	NA	NA	NA	22.94	15.62	7.12	NA	NA	NA
S-5	04/11/2000	29300	1680	5080	1130	6220	<250	NA	NA	NA	NA	NA	NA	NA	22.94	18.19	4.75	NA	NA	NA
S-5	07/19/2000	8420	2110	207	252	681	355	253 b	NA	NA	NA	NA	NA	NA	22.94	19.01	3.93	NA	NA	NA
S-5	10/12/2000	41500	2940	4940	1520	7770	<250	<66.7	NA	NA	NA	NA	NA	NA	22.94	19.62	3.32	NA	NA	NA
S-5	01/09/2001	142000	7030	9550	2340	12600	779	NA	NA	NA	NA	NA	NA	NA	22.94	19.94	3.00	NA	NA	NA
S-5	04/06/2001	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	NA	NA	NA	NA	NA
S-5	04/13/2001	59600	4810	10800	1950	10100	842	<10.0	NA	NA	NA	NA	NA	NA	22.94	14.72	8.22	NA	NA	NA
S-5	07/25/2001	71000	2900	6800	1700	9100	NA	<250	NA	NA	NA	NA	NA	NA	22.94	14.91	8.03	NA	NA	NA
S-5	08/13/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	19.43	3.51	NA	NA	NA
S-5	11/01/2001	Unable to locate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.94	NA	NA	NA	NA	NA
S-5	01/17/2002 d	58000	460	3300	1900	8400	NA	<200	NA	NA	NA	NA	NA	NA	c	14.27	NA	NA	NA	NA
S-5	05/08/2002 d	60000	650	2700	1800	8800	NA	<100	NA	NA	NA	NA	NA	NA	22.94	18.40	4.54	NA	NA	NA
S-5	07/18/2002	53000	240	1200	1500	6400	NA	<100	NA	NA	NA	NA	NA	NA	27.36	14.25	13.11	NA	NA	NA
S-5	10/15/2002	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.36	NA	NA	NA	NA	NA
S-5	10/17/2002	42000	420	1100	1200	5500	NA	<10	NA	NA	NA	NA	NA	NA	27.36	14.90	12.46	NA	NA	NA
S-5	01/02/2003	26000	680	1500	760	3800	NA	<5.0	NA	NA	NA	NA	NA	NA	27.36	14.72	12.64	NA	NA	NA
S-5	04/15/2003	3600	29	38	65	370	NA	<5.0	NA	NA	NA	NA	NA	NA	e	14.45	NA	NA	NA	NA
S-5	07/14/2003	21000	210	460	650	2900	NA	<10	NA	NA	NA	NA	NA	NA	e	14.18	NA	NA	NA	NA
S-5	10/20/2003	37000	390	590	870	3500	NA	<13	NA	NA	NA	NA	NA	NA	e	14.63	NA	NA	NA	NA
S-5	01/22/2004	29000	200	210	710	2400	NA	<13	NA	NA	NA	NA	NA	NA	e	14.08	NA	NA	NA	NA
S-5	04/19/2004	25000	490	460	750	2400	NA	19	NA	NA	NA	NA	NA	NA	e	13.43	NA	NA	NA	NA
S-5	07/13/2004	28000	300	260	690	2400	NA	<13	NA	NA	NA	NA	NA	NA	e	14.88	NA	NA	NA	NA
S-5	08/14/2006	31000	1700	1600	1400	3350	NA	<10	NA	NA	NA	NA	<5.0	<10	e	16.65	NA	NA	NA	NA
S-5	11/14/2008 k	37000	2500	1300	2000	3490	NA	<50	NA	NA	NA	NA	<25	<60	e	16.81	NA	NA	NA	NA

**WELL CONCENTRATIONS - TABLE 1**  
**Former Shell Service Station**  
**461 8th Street**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MIBZ (ug/L)	MIBX (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	B.O. (mg/L)	G.R.P. (m/V)
S-5	11/11/2008	40000	2300	1400	1900	3630	NA	<50	NA	NA	NA	NA	<25	<50	e	16.81	NA	NA	NA	NA
S-5	01/05/2009	57000	2300	1400	1500	2900	NA	<10	NA	NA	NA	NA	<5.0	<10	e	16.71	NA	NA	NA	NA
S-5	04/09/2009	52000	2100	3500	1900	5400	NA	<20	NA	NA	NA	NA	<10	<20	e	16.31	NA	NA	0.3	163
S-5	07/23/2009	37000	1800	1900	1400	3800	NA	NA	NA	NA	NA	NA	NA	NA	e	16.62	NA	NA	1.48	-84
S-5	10/11/2009	36000	1800	1900	1400	3700	NA	NA	NA	NA	NA	NA	NA	NA	27.24	16.35	10.89	NA	0.86	-52
S-6	04/16/1987	81000	16000	9000	NA	6400 a	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	NA	NA	NA	NA	NA
S-6	10/26/1988	110000	29000	18000	2500	8200	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	NA	NA	NA	NA	NA
S-6	02/14/1989	54000	18000	4500	1400	4000	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	20.87	79.71	NA	NA	NA
S-6	05/01/1989	53000	43000	9900	3000	8000	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	20.49	80.89	NA	NA	NA
S-6	07/27/1989	52000	20000	3200	1700	5500	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	21.01	79.57	NA	NA	NA
S-6	10/05/1989	55000	20000	2900	1600	5500	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	21.24	79.34	NA	NA	NA
S-6	01/09/1990	76000	35000	9100	2300	8600	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.62	77.96	SHEEN	NA	NA
S-6	04/20/1990	39000	13000	2300	900	2800	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.10	78.48	NA	NA	NA
S-6	07/31/1990	48000	20000	4600	1500	4900	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.00	78.58	NA	NA	NA
S-6	10/30/1990	27000	7400	900	600	1400	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.14	78.44	NA	NA	NA
S-6	05/06/1991	35000	3900	2700	2300	3500	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.40	78.18	NA	NA	NA
S-6	06/27/1991	51000	19000	5600	1700	6300	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	21.21	79.37	NA	NA	NA
S-6	09/24/1991	42000	14000	4300	1200	4000	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.26	78.32	NA	NA	NA
S-6	11/07/1991	39000	11000	2000	800	2300	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.35	78.23	NA	NA	NA
S-6	02/13/1992	64000	21000	6200	1600	5100	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.26	78.30	NA	NA	NA
S-6	05/11/1992	57000	22000	7600	2200	7700	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.10	78.48	NA	NA	NA
S-6	12/03/1992	110000	26000	9400	2100	5700	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.14	78.44	NA	NA	NA
S-6	05/13/1993	56000	21000	6800	2500	9800	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.16	78.42	NA	NA	NA
S-6	07/22/1993	70000	31000	14000	3000	13000	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	21.64	78.94	NA	NA	NA
S-6	10/20/1993	48000	28000	9800	3200	12000	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	21.62	78.96	NA	NA	NA
S-6	01/25/1994	70000	23000	7500	2500	8000	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	21.80	78.78	NA	NA	NA
S-6	04/25/1994	61000	16000	4000	1800	5100	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	21.85	78.98	NA	NA	NA
S-6	07/21/1994	44000	8200	3600	1400	3900	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	21.78	78.80	NA	NA	NA
S-6 (D)	07/21/1994	32000	7800	3400	1300	3700	NA	NA	NA	NA	NA	NA	NA	NA	22.08	NA	NA	NA	NA	NA
S-6	10/24/1994	2936	1184	440.6	163	643.4	NA	NA	NA	NA	NA	NA	NA	NA	100.58 (TOC)	22.06	78.52	NA	NA	NA
S-6 (D)	10/24/1994	2968	770.8	325.3	144	622	NA	NA	NA	NA	NA	NA	NA	NA	22.08	NA	NA	NA	NA	NA
S-6	12/22/1994	32000	7000	2900	790	2400	NA	NA	NA	NA	NA	NA	NA	NA	22.08*	21.91	8.17	NA	NA	NA
S-6 (D)	12/22/1994	32000	8000	3800	1100	3400	NA	NA	NA	NA	NA	NA	NA	NA	22.08	NA	NA	NA	NA	NA
S-6	04/20/1995	56000	15000	3600	1900	4900	NA	NA	NA	NA	NA	NA	NA	NA	22.08	21.36	8.70	NA	NA	NA
S-6 (D)	04/20/1995	49000	13000	3500	1800	4700	NA	NA	NA	NA	NA	NA	NA	NA	22.08	NA	NA	NA	NA	NA
S-6	10/04/1995	49000	8400	4700	1800	4800	NA	NA	NA	NA	NA	NA	NA	NA	22.08	21.88	0.28	NA	NA	NA



**WELL CONCENTRATIONS - TABLE 1**

Former Shell Service Station

461 8th Street

Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TSA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.C. (mg/L)	O.R.P. (mV)
S-6 (D)	10/04/1995	41000	8400	4100	1400	4400	NA	NA	NA	NA	NA	NA	NA	NA	22.08	NA	NA	NA	NA	NA
S-6	01/03/1996	52000	9100	7100	1800	5800	NA	NA	NA	NA	NA	NA	NA	NA	22.08	21.78	0.38	NA	NA	NA
S-6	04/11/1996	59000	11000	7100	2100	6400	<500	NA	NA	NA	NA	NA	NA	NA	22.08	21.62	0.46	NA	NA	NA
S-6 (D)	04/11/1996	59000	11000	6800	1900	6400	<500	NA	NA	NA	NA	NA	NA	NA	22.08	NA	NA	NA	NA	NA
S-6	07/11/1996	72000	18000	6500	2500	8400	<1000	NA	NA	NA	NA	NA	NA	NA	22.08	21.65	2.72	NA	NA	NA
S-6	10/02/1996	57000	11000	6500	1500	5100	<500	NA	NA	NA	NA	NA	NA	NA	22.08	21.90	2.63	NA	NA	NA
S-6	01/22/1997	67000	15000	5800	1800	5400	<1000	NA	NA	NA	NA	NA	NA	NA	22.08	19.95	2.13	NA	NA	NA
S-6 (D)	01/22/1997	63000	15000	4800	1800	5200	<1000	NA	NA	NA	NA	NA	NA	NA	22.08	NA	NA	NA	NA	NA
S-6	07/21/1997	61000	15000	2100	1100	3500	1900	NA	NA	NA	NA	NA	NA	NA	22.08	20.61	1.47	NA	NA	NA
S-6	01/22/1998	46000	14000	3200	1300	3400	<500	NA	NA	NA	NA	NA	NA	NA	22.08	19.82	2.26	NA	NA	NA
S-6	07/08/1998	74000	26000	7500	2200	6200	<1000	NA	NA	NA	NA	NA	NA	NA	22.08	18.20	3.68	NA	NA	NA
S-6	10/26/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.08	18.81	3.27	NA	NA	NA
S-6	01/28/1999	120000	9000	14000	2700	14000	3700	NA	NA	NA	NA	NA	NA	NA	22.08	19.73	2.35	NA	NA	NA
S-6	04/23/1999	58500	15900	1360	1640	3030	<2500	NA	NA	NA	NA	NA	NA	NA	22.08	17.56	4.50	NA	NA	NA
S-6	07/29/1999	36200	10300	760	930	1360	<1000	NA	NA	NA	NA	NA	NA	NA	22.08	21.25	0.73	NA	NA	NA
S-6	11/01/1999	36000	11700	767	865	1670	<1250	<40.0	NA	NA	NA	NA	NA	NA	22.08	19.23	2.85	NA	NA	NA
S-6	01/07/2000	36000	7600	4600	840	3600	<1000	NA	NA	NA	NA	NA	NA	NA	22.08	19.53	2.55	NA	NA	NA
S-6	04/11/2000	14600	7540	205	306	609	621	NA	NA	NA	NA	NA	NA	NA	22.08	18.16	3.92	NA	NA	NA
S-6	07/19/2000	2590	629	63.9	99.6	267	124	72.7 b	NA	NA	NA	NA	NA	NA	22.08	18.40	3.68	NA	NA	NA
S-6	10/12/2000	32900	14200	966	1060	1790	<500	<100	NA	NA	NA	NA	NA	NA	22.08	19.52	2.56	NA	NA	NA
S-6	01/09/2001	27600	11200	675	666	1580	1430	<10.0 b	NA	NA	NA	NA	NA	NA	22.08	19.60	2.39	NA	NA	NA
S-6	02/05/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	22.08	19.20	2.88	NA	NA	NA
S-6	04/06/2001	16900	7800	343	172	966	809	<20.0	NA	NA	NA	NA	NA	NA	22.08	18.25	3.63	NA	NA	NA
S-6	07/25/2001	29000	9800	1700	1000	1600	NA	<250	NA	NA	NA	NA	NA	NA	22.08	18.27	3.81	NA	NA	NA
S-6	11/01/2001	41000	15000	2400	1100	2500	NA	<500	NA	NA	NA	NA	NA	NA	22.08	19.30	2.76	NA	NA	NA
S-6	01/17/2002 d	38000	11000	1700	990	2200	NA	<500	NA	NA	NA	NA	NA	NA	22.08	18.51	3.57	NA	NA	NA
S-6	05/08/2002	72000	21000	4400	2200	5300	NA	<1000	NA	NA	NA	NA	NA	NA	22.08	18.30	3.78	NA	NA	NA
S-6	07/18/2002	71000	17000	4300	1700	4800	NA	<1000	NA	NA	NA	NA	NA	NA	30.56	18.19	12.37	NA	NA	NA
S-6	10/15/2002	55000	16000	4600	1500	4600	NA	<100	NA	NA	NA	NA	NA	NA	30.56	18.77	11.79	NA	NA	NA
S-6	01/02/2003	75000	21000	5000	2400	6400	NA	<50	NA	NA	NA	NA	NA	NA	30.56	18.60	11.96	NA	NA	NA
S-6	04/15/2003	64000	29000	6400	2700	5600	NA	<1000	NA	NA	NA	NA	NA	NA	30.56	18.27	12.29	NA	NA	NA
S-6	07/14/2003	47000	19000	4300	1500	4300	NA	<100	NA	NA	NA	NA	NA	NA	30.56	18.05	12.51	NA	NA	NA
S-6	10/20/2003	63000	21000	5800	1900	5200	NA	<130	NA	NA	NA	NA	NA	NA	30.56	18.55	12.01	f	NA	NA
S-6	01/22/2004	41000	21000	4300	1800	4000	NA	<130	NA	NA	NA	NA	NA	NA	30.56	18.18	12.38	f	NA	NA
S-6	04/19/2004	58000	23000	4200	2200	3600	NA	<130	NA	NA	NA	NA	NA	NA	30.56	17.32	13.24	NA	NA	NA
S-6	05/03/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.56	17.30	13.26	NA	NA	NA
S-6	06/17/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.56	17.70	12.86	NA	NA	NA



**WELL CONCENTRATIONS - TABLE 1**  
**Former Shell Service Station**  
**461 8th Street**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	SPH Thickness (ft)	B.C. (mg/L)	O.R.P. (mV)
S-6	07/13/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.56	17.85	12.71	NA	NA	NA
S-6	10/26/2004 g	45000	21000	3600	1700	3300	NA	<130	NA	NA	NA	NA	NA	NA	30.56	18.45	12.14	NA	NA	NA
S-6	01/17/2005	61000	21000	3500	1600	3200	NA	<130	NA	NA	NA	NA	NA	NA	30.56	17.52	13.04	NA	NA	NA
S-6	04/14/2005	36000	12000	6200	850	4900	NA	<50	NA	NA	NA	NA	NA	NA	30.56	22.49	8.67	NA	NA	NA
S-6	07/26/2005	54000	16000	9100	1800	5900	NA	<130	NA	NA	NA	NA	NA	NA	30.56	19.36	11.18	NA	NA	NA
S-6	10/05/2005	59000	14000	7500	1400	5000	NA	<50	NA	NA	NA	NA	NA	NA	30.56	16.32	12.24	NA	NA	NA
S-6	02/09/2006	41100	7660	3900	673	2360	NA	<0.500	NA	NA	NA	NA	NA	NA	30.56	17.11	13.45	NA	NA	NA
S-6	05/15/2006	188000	24800	28700	2540	12400	NA	<5.0	NA	NA	NA	NA	NA	NA	30.56	19.89	10.76	NA	NA	NA
S-6	08/23/2006	133000	24300	16100	2260	10500	NA	<0.500	NA	NA	NA	NA	NA	NA	30.56	20.45	10.11	NA	NA	NA
S-6	11/15/2006	66000	19000	8400	1900	7400	NA	<100	NA	NA	NA	NA	NA	NA	30.56	20.41	10.15	NA	NA	NA
S-6	01/30/2007	86000	18000	9600	1900	7200	NA	<100	NA	NA	NA	NA	NA	NA	30.56	20.47	10.09	NA	NA	NA
S-6	05/29/2007	56000 h	17000	6700	1700	5400	NA	<20	NA	NA	NA	NA	NA	NA	30.56	20.49	10.16	NA	NA	NA
S-6	08/15/2007	57000 h,j	15000	6800	1600	6100	NA	<100	NA	NA	NA	NA	NA	NA	30.56	20.48	10.07	NA	NA	NA
S-6	11/28/2007	42000 h	13000	5000	1300	5000	NA	<100	NA	NA	NA	NA	NA	NA	30.56	20.65	9.91	NA	NA	NA
S-6	02/06/2008	35000 h	12800	5000	1200	4650	NA	<100	NA	NA	NA	NA	<50	<100	30.56	20.31	10.25	NA	NA	NA
S-6	05/08/2008	45000 h	15900	6100	1400	5000	NA	<100	NA	NA	NA	NA	<50	<100	30.56	20.63	9.93	NA	NA	NA
S-6	08/14/2008	37000	11000	5200	1200	4500	NA	<100	NA	NA	NA	NA	<50	<100	30.56	20.65	9.91	NA	NA	NA
S-6	11/11/2008 k	37000	15000	6200	1200	3390	NA	<10	NA	NA	NA	NA	<5.0	<10	30.56	20.79	9.77	NA	NA	NA
S-6	11/11/2008 l	14000	5200	660	400	1060	NA	<50	NA	NA	NA	NA	<25	<50	30.56	20.79	9.77	NA	NA	NA
S-6	01/05/2009	53000	9400	3600	890	3100	NA	<100	NA	NA	NA	NA	<50	<100	30.56	21.66	8.90	NA	NA	NA
S-6	04/09/2009	Unable to sample	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	30.56	NA	NA	NA	NA	NA
S-6	04/21/2009	13000	3700	1100	270	750	NA	<100	NA	NA	NA	NA	<50	<100	30.56	20.29	10.36	NA	NA	NA
S-6	07/23/2009	15000	4400	1100	360	1000	NA	NA	NA	NA	NA	NA	NA	NA	30.56	20.66	9.90	NA	1.15	-73
S-6	10/01/2009	21000	5100	1300	420	1200	NA	NA	NA	NA	NA	NA	NA	NA	30.56	20.86	9.70	NA	0.58	16
S-6	12/22/1994	600	120	32	5.2	34	NA	NA	NA	NA	NA	NA	NA	NA	27.21	24.87	2.34	NA	NA	NA
S-6	04/20/1995	460	180	23	5.2	21	NA	NA	NA	NA	NA	NA	NA	NA	27.21	23.98	3.31	NA	NA	NA
S-6	10/04/1995	530	210	38	11	42	NA	NA	NA	NA	NA	NA	NA	NA	27.21	24.48	2.73	NA	NA	NA
S-6	01/03/1996	350	61	12	2.5	12	NA	NA	NA	NA	NA	NA	NA	NA	27.21	24.62	2.59	NA	NA	NA
S-6 (D)	01/03/1996	340	54	12	2.4	12	NA	NA	NA	NA	NA	NA	NA	NA	27.21	NA	NA	NA	NA	NA
S-6	04/11/1996	570	140	37	12	47	<6.2	NA	NA	NA	NA	NA	NA	NA	27.21	24.32	2.69	NA	NA	NA
S-6	07/11/1996	980	98	32	9.1	180	<12	NA	NA	NA	NA	NA	NA	NA	27.21	24.00	3.11	NA	NA	NA
S-6	10/02/1996	280	62	13	3.3	25	15	NA	NA	NA	NA	NA	NA	NA	27.21	25.38	1.83	NA	NA	NA
S-6 (D)	10/02/1996	490	110	24	7.0	45	22	<2.0	NA	NA	NA	NA	NA	NA	27.21	NA	NA	NA	NA	NA
S-6	01/22/1997	400	90	13	4.9	25	12	NA	NA	NA	NA	NA	NA	NA	27.21	23.91	3.30	NA	NA	NA
S-6	07/21/1997	2900	380	110	26	260	85	NA	NA	NA	NA	NA	NA	NA	27.21	23.62	3.59	NA	NA	NA
S-6 (D)	07/21/1997	3200	430	120	32	300	130	NA	NA	NA	NA	NA	NA	NA	27.21	NA	NA	NA	NA	NA

**WELL CONCENTRATIONS - TABLE 1**

Former Shell Service Station

461 8th Street

Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.S. (mg/L)	D.R.P. (m/y)
S-8	01/22/1998	3800	790	140	42	330	160	NA	NA	NA	NA	NA	NA	NA	27.21	23.52	3.69	NA	NA	NA
S-8 (D)	01/22/1998	3500	780	120	33	300	160	NA	NA	NA	NA	NA	NA	NA	27.21	NA	NA	NA	NA	NA
S-8	07/02/1998	3600	1600	<25	<25	<25	<125	NA	NA	NA	NA	NA	NA	NA	27.21	21.52	5.69	NA	NA	NA
S-8 (D)	07/02/1998	4000	1800	<25	<25	31	<125	NA	NA	NA	NA	NA	NA	NA	27.21	NA	NA	NA	NA	NA
S-8	10/26/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.21	22.01	5.29	NA	NA	NA
S-8	01/28/1999	2000	630	6.2	24	51	43	NA	NA	NA	NA	NA	NA	NA	27.21	23.03	4.18	NA	NA	NA
S-8	04/23/1999	1050	406	<5.00	<5.00	6.65	<50.0	NA	NA	NA	NA	NA	NA	NA	27.21	22.45	5.06	NA	NA	NA
S-8	07/29/1999	955	344	<2.50	6.90	16.2	<25.0	NA	NA	NA	NA	NA	NA	NA	27.21	21.95	5.26	NA	NA	NA
S-8	11/01/1999	1800	550	6.45	15	40.4	<50.0	NA	NA	NA	NA	NA	NA	NA	27.21	22.55	4.66	NA	NA	NA
S-8	01/07/2000	1300	600	11	29	48	<13	NA	NA	NA	NA	NA	NA	NA	27.21	22.87	4.34	NA	NA	NA
S-8	04/11/2000	342	101	4.42	4.24	14.7	21.4	NA	NA	NA	NA	NA	NA	NA	27.21	21.86	5.35	NA	NA	NA
S-8	07/19/2000	579	228	6.37	6.45	25.0	<12.5	NA	NA	NA	NA	NA	NA	NA	27.21	21.93	5.28	NA	NA	NA
S-8	10/12/2000	947	340	6.64	3.26	38.3	<12.5	<100	NA	NA	NA	NA	NA	NA	27.21	22.92	4.29	NA	NA	NA
S-8	01/09/2001	1090	394	<10.0	<10.0	33.3	57.6	NA	NA	NA	NA	NA	NA	NA	27.21	23.19	4.02	NA	NA	NA
S-8	04/06/2001	671	182	12.5	16.4	47.1	42.5	NA	NA	NA	NA	NA	NA	NA	27.21	22.46	4.75	NA	NA	NA
S-8	07/25/2001	500	70	6.7	11	23	NA	<5.0	NA	NA	NA	NA	NA	NA	27.21	22.50	4.71	NA	NA	NA
S-8	11/01/2001	1900	250	28	39	180	NA	<5.0	NA	NA	NA	NA	NA	NA	27.21	22.44	4.77	NA	NA	NA
S-8	01/17/2002 d	830	140	11	12	89	NA	<5.0	NA	NA	NA	NA	NA	NA	27.21	21.82	5.39	NA	NA	NA
S-8	05/08/2002 d	210	34	1.7	4.1	15	NA	<5.0	NA	NA	NA	NA	NA	NA	27.21	21.35	5.86	NA	NA	NA
S-8	07/18/2002	650	68	2.8	9.7	42	NA	<5.0	NA	NA	NA	NA	NA	NA	35.85	21.53	14.32	NA	NA	NA
S-8	10/15/2002	1000	160	4.2	7.7	74	NA	<1.50	NA	NA	NA	NA	NA	NA	35.85	21.95	13.90	NA	NA	NA
S-8	01/02/2003	440	55	1.8	2.9	31	NA	<1.50	NA	NA	NA	NA	NA	NA	35.85	21.73	14.12	NA	NA	NA
S-8	04/15/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	21.48	14.45	NA	NA	NA
S-8	07/14/2003	60	6.8	<0.50	0.98	4.9	NA	<1.50	NA	NA	NA	NA	NA	NA	35.85	21.94	13.91	NA	NA	NA
S-8	10/20/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	21.40	14.45	NA	NA	NA
S-8	01/22/2004	210	19	0.52	3.6	17	NA	<1.50	NA	NA	NA	NA	NA	NA	35.85	21.40	14.45	NA	NA	NA
S-8	04/19/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	20.83	15.02	NA	NA	NA
S-8	07/13/2004	420	77	0.62	14	31	NA	<1.50	NA	NA	NA	NA	NA	NA	35.85	21.05	14.80	NA	NA	NA
S-8	10/28/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	21.77	14.08	NA	NA	NA
S-8	01/17/2005	490	85	0.89	13	28	NA	<1.50	NA	NA	NA	NA	NA	NA	35.85	20.92	14.93	NA	NA	NA
S-8	04/14/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	21.57	14.28	NA	NA	NA
S-8	07/26/2005	64	12	<0.50	1.5	1.6	NA	<1.50	NA	NA	NA	NA	NA	NA	35.85	21.62	14.23	NA	NA	NA
S-8	10/05/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	21.11	14.74	NA	NA	NA
S-8	02/09/2006	<50.0	2.79	<0.500	<0.500	<0.500	NA	<0.500	NA	NA	NA	NA	NA	NA	35.85	20.18	15.67	NA	NA	NA
S-8	05/15/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	20.53	15.32	NA	NA	NA
S-8	08/23/2006	<50.0	<0.500	<0.500	<0.500	<0.500	NA	<0.500	NA	NA	NA	NA	NA	NA	35.85	21.49	14.36	NA	NA	NA
S-8	11/15/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	22.05	13.89	NA	NA	NA

WELL CONCENTRATIONS - TABLE 1

Former Shell Service Station

461 8th Street

Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE S220 (ug/L)	MTBE S260 (ug/L)	DPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDS (ug/L)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	SPH Thickness (ft)	B.D. (ug/L)	G.R.P. (mV)
S-8	01/30/2007	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	35.85	22.41	13.44	NA	NA	NA
S-8	05/29/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	22.65	13.20	NA	NA	NA
S-8	08/15/2007	65 h.i	7.4	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	NA	NA	35.85	22.68	12.97	NA	NA	NA
S-8	11/28/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	23.20	12.65	NA	NA	NA
S-8	02/08/2008	350 h	22	<1.0	4.8	2.6	NA	1.2	NA	NA	NA	NA	<0.50	<1.0	35.85	22.72	13.13	NA	NA	NA
S-8	05/08/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.85	22.91	12.94	NA	NA	NA
S-8	08/14/2008	420	28	<1.0	6.3	1.4	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	35.85	23.32	12.73	NA	NA	NA
S-8	11/11/2008 k	330	37	<1.0	5.1	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	35.85	23.37	12.48	NA	1.6	28
S-8	11/11/2008 l	480	29	<1.0	5.4	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.85	23.37	12.48	NA	2.2	103
S-8	12/18/2008	340	38	<1.0	5.4	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.83	23.31	12.52	NA	NA	NA
S-8	01/05/2009	170	15	<1.0	1.2	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.83	23.28	12.55	NA	NA	NA
S-8	01/15/2009	260	45	<1.0	3.2	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.83	23.05	12.78	NA	NA	NA
S-8	02/12/2009	88	7.2	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.83	23.34	12.48	NA	NA	NA
S-8	03/12/2009	12,000	1,700	2,100	200	2,400	NA	NA	NA	NA	NA	NA	NA	NA	35.83	22.96	12.98	NA	NA	NA
S-8	04/09/2009	170	<0.50	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.83	23.10	12.73	NA	NA	504
S-8	07/23/2009	140	0.55	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.83	23.02	12.81	NA	2.38	-54
S-8	10/01/2009	140	0.68	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.83	23.31	12.52	NA	4.34	359

S-9	12/22/1994	2600	400	150	42	310	NA	NA	NA	NA	NA	NA	NA	NA	26.06	24.37	1.69	NA	NA	NA
S-9	04/20/1995	1900	400	130	51	200	NA	NA	NA	NA	NA	NA	NA	NA	26.06	23.49	2.57	NA	NA	NA
S-9	10/04/1995	3200	590	260	68	280	NA	NA	NA	NA	NA	NA	NA	NA	26.06	24.01	2.05	NA	NA	NA
S-9	01/03/1996	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	NA	NA	NA	NA	NA
S-9	04/11/1996	2100	440	1500	42	210	<25	NA	NA	NA	NA	NA	NA	NA	26.06	23.61	2.45	NA	NA	NA
S-9	07/11/1996	5200	940	450	120	520	<50	NA	NA	NA	NA	NA	NA	NA	26.06	23.78	2.28	NA	NA	NA
S-9 (D)	07/11/1996	4800	890	430	110	500	<50	NA	NA	NA	NA	NA	NA	NA	26.06	NA	NA	NA	NA	NA
S-9	10/02/1996	3000	680	220	56	270	<62	NA	NA	NA	NA	NA	NA	NA	26.06	24.31	1.75	NA	NA	NA
S-9	01/22/1997	1500	230	71	36	130	<12	NA	NA	NA	NA	NA	NA	NA	26.06	23.08	2.98	NA	NA	NA
S-9	07/21/1997	3400	590	57	19	210	96	NA	NA	NA	NA	NA	NA	NA	26.06	22.83	3.28	NA	NA	NA
S-9	01/22/1998	2600	300	48	<10	270	62	NA	NA	NA	NA	NA	NA	NA	26.06	21.96	4.10	NA	NA	NA
S-9	07/08/1998	820	150	6.2	8	57	<10	NA	NA	NA	NA	NA	NA	NA	26.06	20.85	5.21	NA	NA	NA
S-9	10/26/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	21.39	4.67	NA	NA	NA
S-9	01/28/1999	<50	1.0	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	NA	NA	26.06	22.32	3.74	NA	NA	NA
S-9	04/28/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	21.41	4.85	NA	NA	NA
S-9	07/29/1999	117	7.77	0.817	0.683	5.05	<5.00	NA	NA	NA	NA	NA	NA	NA	26.06	21.25	4.81	NA	NA	NA
S-9	11/01/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	21.92	4.14	NA	NA	NA
S-9	01/07/2000	<50	1.2	<0.50	<0.50	<0.50	<2.5	NA	NA	NA	NA	NA	NA	NA	26.06	22.11	3.95	NA	NA	NA
S-9	04/11/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	21.14	4.92	NA	NA	NA

WELL CONCENTRATIONS - TABLE 1

Former Shell Service Station

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Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TDC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.G. (mg/L)	O.R.P. (mV)
S-9	07/19/2000	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	NA	NA	NA	NA	NA
S-9	10/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	22.24	3.52	NA	NA	NA
S-9	01/09/2001	<50.0	1.45	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	NA	26.06	22.52	3.54	NA	NA	NA
S-9	04/06/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	23.61	2.45	NA	NA	NA
S-9	07/25/2001	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	NA	NA	NA	NA	NA
S-9	08/13/2001	Well inaccessible	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	NA	NA	NA	NA	NA
S-9	11/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	21.78	4.28	NA	NA	NA
S-9	01/17/2002 d	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	26.06	21.15	4.91	NA	NA	NA
S-9	05/08/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	26.06	20.56	5.58	NA	NA	NA
S-9	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	34.70	20.88	13.82	NA	NA	NA
S-9	10/15/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	21.41	13.29	NA	NA	NA
S-9	01/02/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	34.70	21.35	13.35	NA	NA	NA
S-9	04/15/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	21.14	13.56	NA	NA	NA
S-9	07/14/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	34.70	20.80	13.90	NA	NA	NA
S-9	10/20/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	21.53	13.37	NA	NA	NA
S-9	01/22/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	34.70	20.77	13.93	NA	NA	NA
S-9	04/19/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	20.06	14.64	NA	NA	NA
S-9	07/13/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	34.70	20.44	14.26	NA	NA	NA
S-9	10/28/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	21.02	13.68	NA	NA	NA
S-9	01/17/2005	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	34.70	20.16	14.52	NA	NA	NA
S-9	04/14/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	21.85	12.85	NA	NA	NA
S-9	07/28/2005	360	190	1.8	1.1	3.9	NA	<0.50	<2.0	<2.0	<2.0	<5.0	NA	NA	34.70	21.22	13.48	NA	NA	NA
S-9	10/05/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	20.63	14.07	NA	NA	NA
S-9	02/09/2006	<50.0	0.940	<0.500	<0.500	<0.500	NA	<0.500	NA	NA	NA	NA	NA	NA	34.70	19.23	15.47	NA	NA	NA
S-9	05/15/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	20.28	14.42	NA	NA	NA
S-9	08/23/2006	7000	1740	55.6	193	278	NA	<0.500	<0.500	<0.500	<0.500	<10.0	NA	NA	34.70	21.31	13.39	NA	NA	NA
S-9	11/15/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	21.79	12.91	NA	NA	NA
S-9	01/30/2007	12000	2200	250	480	980	NA	<0.50	NA	NA	NA	NA	NA	NA	34.70	22.08	12.62	NA	NA	NA
S-9	05/29/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	22.22	12.48	NA	NA	NA
S-9	08/15/2007	9800 ft.i	2400	100	410	602	NA	<10	<20	<20	<20	<100	NA	NA	34.70	22.43	12.27	NA	NA	NA
S-9	11/28/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	22.75	11.95	NA	NA	NA
S-9	02/08/2008	69 h	2.2	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	34.70	22.31	12.39	NA	NA	NA
S-9	05/08/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.70	22.49	12.21	NA	NA	NA
S-9	08/14/2008	<50	<0.50	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	34.70	22.70	12.08	NA	NA	NA
S-9	11/11/2008 k	<50	2.4	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	34.70	22.90	11.80	NA	1.1	92
S-9	11/11/2008 l	550	74	12	22	55.3	NA	NA	NA	NA	NA	NA	NA	NA	34.70	22.90	11.80	NA	3.6	98
S-9	12/16/2008	1500	280	43	71	162	NA	NA	NA	NA	NA	NA	NA	NA	34.34	22.81	11.53	NA	NA	NA

WELL CONCENTRATIONS - TABLE 1

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Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.O. (mg/L)	D.R.P. (m%)
S-9	01/05/2009	1000	230	24	45	64	NA	NA	NA	NA	NA	NA	NA	NA	34.34	22.75	11.59	NA	NA	NA
S-9	01/15/2009	2100	560	75	100	245	NA	NA	NA	NA	NA	NA	NA	NA	34.34	22.97	11.97	NA	NA	NA
S-9	02/12/2009	500	120	19	26	50	NA	NA	NA	NA	NA	NA	NA	NA	34.34	22.61	11.73	NA	NA	NA
S-9	03/12/2009	810	200	30	50	110	NA	NA	NA	NA	NA	NA	NA	NA	34.34	22.22	12.12	NA	NA	NA
S-9	04/09/2009	2300	450	60	110	260	NA	NA	NA	NA	NA	NA	NA	NA	34.34	22.12	12.22	NA	0.65	79
S-9	05/18/2009	1500	200	35	61	180	NA	NA	NA	NA	NA	NA	NA	NA	34.34	22.09	12.25	NA	2.71	173
S-9	07/23/2009	1700	430	49	110	195	NA	NA	NA	NA	NA	NA	NA	NA	34.34	22.48	11.86	NA	0.21	345
S-9	10/01/2009	1200	180	12	58	93	NA	NA	NA	NA	NA	NA	NA	NA	34.34	22.84	11.50	NA	1.37	146
S-10	12/22/1994	420	27	8.0	18	45	NA	NA	NA	NA	NA	NA	NA	NA	28.04	25.84	2.20	NA	NA	NA
S-10	04/20/1995	820	49	3.7	97	52	NA	NA	NA	NA	NA	NA	NA	NA	28.04	24.92	3.12	NA	NA	NA
S-10	10/04/1995	240	6.5	1.1	16	12	NA	NA	NA	NA	NA	NA	NA	NA	28.04	25.47	2.57	NA	NA	NA
S-10	01/03/1996	1100	27	4.9	110	70	NA	NA	NA	NA	NA	NA	NA	NA	28.04	25.60	2.44	NA	NA	NA
S-10	04/11/1996	530	19	1.6	82	52	<5.0	NA	NA	NA	NA	NA	NA	NA	28.04	25.27	2.77	NA	NA	NA
S-10	07/11/1996	570	16	3.2	53	53	<2.5	NA	NA	NA	NA	NA	NA	NA	28.04	25.46	2.58	NA	NA	NA
S-10	10/02/1996	270	8.2	0.77	24	23	3.3	NA	NA	NA	NA	NA	NA	NA	28.04	25.81	2.23	NA	NA	NA
S-10	01/22/1997	160	4.8	0.73	16	11	<2.5	NA	NA	NA	NA	NA	NA	NA	28.04	24.74	3.30	NA	NA	NA
S-10	07/23/1997	530	5.7	0.70	29	69	<2.5	NA	NA	NA	NA	NA	NA	NA	28.04	24.50	3.54	NA	NA	NA
S-10	01/22/1998	1500	15	<5.0	88	130	<2.5	NA	NA	NA	NA	NA	NA	NA	28.04	24.44	3.60	NA	NA	NA
S-10	07/08/1998	530	4.8	1.1	47	51	<2.5	NA	NA	NA	NA	NA	NA	NA	28.04	22.36	5.68	NA	NA	NA
S-10	10/26/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.04	22.81	5.23	NA	NA	NA
S-10	01/26/1999	630	4.6	0.98	<0.50	59	<2.5	NA	NA	NA	NA	NA	NA	NA	28.04	23.82	4.22	NA	NA	NA
S-10	04/23/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.04	22.36	5.08	NA	NA	NA
S-10	07/29/1999	728	3.40	<1.00	41.8	38.0	<10.0	NA	NA	NA	NA	NA	NA	NA	28.04	22.68	5.41	NA	NA	NA
S-10	11/01/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.04	23.82	5.82	NA	NA	NA
S-10	01/07/2000	870	8.5	1.3	110	110	<2.5	NA	NA	NA	NA	NA	NA	NA	28.04	23.33	4.71	NA	NA	NA
S-10	04/11/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.04	22.84	5.40	NA	NA	NA
S-10	07/19/2000	612	3.75	<0.500	41.6	43.6	<2.50	NA	NA	NA	NA	NA	NA	NA	28.04	23.04	5.00	NA	NA	NA
S-10	10/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.04	23.92	4.12	NA	NA	NA
S-10	01/09/2001	647	7.62	1.01	66.2	42.4	<2.50	NA	NA	NA	NA	NA	NA	NA	28.04	24.13	3.91	NA	NA	NA
S-10	04/06/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.04	25.37	2.67	NA	NA	NA
S-10	07/25/2001	340	1.5	<0.50	42	10	NA	<5.0	NA	NA	NA	NA	NA	NA	28.04	25.35	2.69	NA	NA	NA
S-10	11/01/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.04	23.22	4.62	NA	NA	NA
S-10	01/17/2002 d	1100	3.5	<0.50	55	46	NA	<5.0	NA	NA	NA	NA	NA	NA	28.04	22.72	5.32	NA	NA	NA
S-10	05/08/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28.04	22.35	5.69	NA	NA	NA
S-10	07/18/2002	750	1.8	<0.50	42	26	NA	<5.0	NA	NA	NA	NA	NA	NA	36.35	22.05	14.30	NA	NA	NA
S-10	10/15/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	22.51	13.64	NA	NA	NA

**WELL CONCENTRATIONS - TABLE 1**

Former Shell Service Station

461 8th Street

Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8220 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TDC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	SPH Thickness (ft)	D.O. (mg/L)	G.R.P. (mV)
S-10	01/02/2003	440	1.8	<0.50	14	24	NA	<0.50	NA	NA	NA	NA	NA	NA	36.35	22.50	13.85	NA	NA	NA
S-10	04/15/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	22.32	14.03	NA	NA	NA
S-10	07/14/2003	210	0.86	<0.50	13	12	NA	<0.50	NA	NA	NA	NA	NA	NA	36.35	21.99	14.36	NA	NA	NA
S-10	10/20/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	22.53	13.82	NA	NA	NA
S-10	01/22/2004	280	0.86	<0.50	10	11	NA	<0.50	NA	NA	NA	NA	NA	NA	36.35	22.02	14.38	NA	NA	NA
S-10	04/19/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	21.43	14.92	NA	NA	NA
S-10	07/13/2004	770	1.5	<0.50	70	42	NA	<0.50	NA	NA	NA	NA	NA	NA	36.35	21.68	14.67	NA	NA	NA
S-10	10/29/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	22.37	13.98	NA	NA	NA
S-10	01/17/2005	1100	1.5	<0.50	73	51	NA	<0.50	NA	NA	NA	NA	NA	NA	36.35	21.45	14.90	NA	NA	NA
S-10	04/14/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	22.18	14.17	NA	NA	NA
S-10	07/28/2005	260	<0.50	<0.50	19	9.7	NA	<0.50	<2.0	<2.0	<2.0	<5.0	NA	NA	36.35	22.25	14.10	NA	NA	NA
S-10	10/05/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	21.70	14.65	NA	NA	NA
S-10	02/09/2006	630	<0.500	<0.500	13.8	13.8	NA	<0.500	NA	NA	NA	NA	NA	NA	36.35	20.37	15.98	NA	NA	NA
S-10	05/15/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	21.31	15.04	NA	NA	NA
S-10	08/23/2006	<50.0	<0.500	<0.500	14.5	3.40	NA	<0.500	<0.500	<0.500	<0.500	<10.0	NA	NA	36.35	22.12	14.23	NA	NA	NA
S-10	11/15/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	22.68	13.67	NA	NA	NA
S-10	01/30/2007	120	<0.50	<0.50	7.0	3.3	NA	<0.50	NA	NA	NA	NA	NA	NA	36.35	23.09	13.25	NA	NA	NA
S-10	05/29/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.20	13.15	NA	NA	NA
S-10	08/15/2007	64 h,i	0.15 j	<1.0	1.4	0.72 j	NA	<1.0	<2.0	<2.0	<2.0	<10	NA	NA	36.35	23.48	12.67	NA	NA	NA
S-10	11/28/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.82	12.53	NA	NA	NA
S-10	02/08/2008	61 h	<0.50	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	36.35	23.31	13.04	NA	NA	NA
S-10	05/08/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.55	12.80	NA	NA	NA
S-10	08/14/2008	58	<0.50	<1.0	2.7	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	36.35	23.75	12.60	NA	NA	NA
S-10	11/11/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.08	13.27	NA	NA	NA
S-10	12/18/2008	<50	<0.50	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.35	24.00	12.35	NA	NA	NA
S-10	01/05/2009	<50	<0.50	<1.0	<1.0	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.87	12.43	NA	NA	NA
S-10	01/15/2009	<50	<0.50	<1.0	1.1	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.66	12.69	NA	NA	NA
S-10	02/12/2009	56	<0.50	<1.0	3.4	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.96	12.39	NA	NA	NA
S-10	03/12/2009	53	<0.50	<1.0	4.9	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.44	12.91	NA	NA	NA
S-10	04/09/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.26	13.09	NA	NA	NA
S-10	07/23/2009	66	<0.50	<1.0	5.7	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.56	12.79	NA	0.95	112
S-10	10/01/2009	75	<0.50	<1.0	4.6	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.35	23.80	12.55	NA	1.25	206
S-12	12/17/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.44	24.58	11.86	NA	NA	NA
S-12	02/06/2008	55 h	<0.50	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	36.44	24.32	12.12	NA	NA	NA
S-12	05/08/2008	<50 h	<0.50	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	36.44	24.51	11.93	NA	NA	NA
S-12	08/14/2008	<50	1.0	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	36.44	24.63	11.81	NA	NA	NA



**WELL CONCENTRATIONS - TABLE 1**  
**Former Shell Service Station**  
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**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE S20 (ug/L)	MTBE S260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TDC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	SPH Thickness (ft)	D.O. (mg/L)	O.R.P. (mV)
S-12	11/11/2008 k	<50	0.95	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	36.44	24.85	11.59	NA	0.2	37
S-12	11/11/2008 l	85	8.1	2.2	4.8	1.5	NA	NA	NA	NA	NA	NA	NA	NA	36.44	24.85	11.59	NA	0.2	45
S-12	12/18/2008	<50	8.3	<1.0	1.8	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.44	24.81	11.63	NA	NA	NA
S-12	01/05/2009	95	16	<1.0	3.2	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.44	24.75	11.69	NA	NA	NA
S-12	01/15/2009	140	36	<1.0	12	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.44	24.54	11.90	NA	NA	NA
S-12	02/12/2009	<50	5.0	<1.0	1.6	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.44	24.61	11.63	NA	NA	NA
S-12	03/12/2009	<50	4.6	<1.0	1.5	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.44	24.91	12.03	NA	NA	NA
S-12	04/09/2009	59	6.0	<1.0	1.6	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.44	24.23	12.21	NA	0.50	-3
S-12	07/23/2009	130	29	<1.0	13	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.44	24.50	11.94	NA	0.07	142
S-12	10/01/2009	130	25	<1.0	15	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	36.44	24.36	11.68	NA	0.74	135
S-13	12/17/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.16	23.33	11.63	NA	NA	NA
S-13	02/06/2008	14000 h	1900	1300	280	3000	NA	<10	NA	NA	NA	NA	<5.0	<10	35.16	23.01	12.15	NA	NA	NA
S-13	05/08/2008	18000 h	2600	3400	550	3500	NA	<10	NA	NA	NA	NA	<5.0	<10	35.16	23.31	11.85	NA	NA	NA
S-13	08/14/2008	16000	2400	3100	580	3100	NA	<20	NA	NA	NA	NA	<10	<20	35.16	23.31	11.85	NA	NA	NA
S-13	11/11/2008 k	16000	2400	2800	270	2500	NA	<50	NA	NA	NA	NA	<25	<50	35.16	23.60	11.56	NA	0.8	-48
S-13	11/11/2008 l	4400	560	630	88	530	NA	NA	NA	NA	NA	NA	NA	NA	35.16	23.60	11.56	NA	1.2	-60
S-13	12/18/2008	3900	530	560	76	510	NA	NA	NA	NA	NA	NA	NA	NA	35.05	23.61	11.44	NA	NA	NA
S-13	01/05/2009	8200	700	670	67	1000	NA	NA	NA	NA	NA	NA	NA	NA	35.05	23.54	11.51	NA	NA	NA
S-13	01/15/2009	5400	610	610	48	950	NA	NA	NA	NA	NA	NA	NA	NA	35.05	23.40	11.95	NA	NA	NA
S-13	02/12/2009	6300	800	1000	110	670	NA	NA	NA	NA	NA	NA	NA	NA	35.05	23.35	12.60	NA	NA	NA
S-13	03/12/2009	14000	1700	2300	190	2400	NA	NA	NA	NA	NA	NA	NA	NA	35.05	23.20	11.85	NA	NA	NA
S-13	04/09/2009	35000	510	7800	1000	4900	NA	NA	NA	NA	NA	NA	NA	NA	35.05	23.02	12.03	NA	25.9	433
S-13	05/18/2009	35000	820	7000	1100	6600	NA	NA	NA	NA	NA	NA	NA	NA	35.05	23.07	11.98	NA	5.21	83
S-13	07/23/2009	18000	1800	3000	480	2500	NA	NA	NA	NA	NA	NA	NA	NA	35.05	23.51	11.54	NA	1.23	148
S-13	10/01/2009	2000	338	87	33	5.2	NA	NA	NA	NA	NA	NA	NA	NA	35.05	22.61	11.44	NA	1.23	413
S-14	12/17/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.94	22.66	12.26	NA	NA	NA
S-14	02/08/2008	5300 h	380	300	34	970	NA	<10	NA	NA	NA	NA	<5.0	<10	34.94	22.82	12.12	NA	NA	NA
S-14	05/08/2008	4300 h	750	270	30	520	NA	<10	NA	NA	NA	NA	<5.0	<10	34.94	22.41	12.53	NA	NA	NA
S-14	Well destroyed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-14R	11/07/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.19	22.91	12.26	NA	NA	NA
S-14R	11/11/2008 k	8500	680	270	<25	1130	NA	NA	NA	NA	NA	NA	NA	NA	35.19	23.13	12.06	NA	0.60	115
S-14R	11/11/2008 l	4300	270	190	43	470	NA	NA	NA	NA	NA	NA	NA	NA	35.19	23.13	12.06	NA	1.5	116
S-14R	12/18/2008	7800	530	640	73	1010	NA	NA	NA	NA	NA	NA	NA	NA	34.95	22.80	12.15	NA	NA	NA
S-14R	01/05/2009	2100	89	66	19	140	NA	NA	NA	NA	NA	NA	NA	NA	34.95	22.80	12.15	NA	NA	NA

**WELL CONCENTRATIONS - TABLE 1**  
**Former Shell Service Station**  
**461 8th Street**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	SPH Thickness (ft)	D.D. (ug/L)	G.R.P. (m/V)
S-14R	01/15/2009	4800	430	540	83	730	NA	NA	NA	NA	NA	NA	NA	NA	34.95	22.57	12.38	NA	NA	NA
S-14R	02/12/2009	1000	40	29	7.3	55	NA	NA	NA	NA	NA	NA	NA	NA	34.95	22.69	12.06	NA	NA	NA
S-14R	03/12/2009	350	22	18	3.3	29	NA	NA	NA	NA	NA	NA	NA	NA	34.95	22.38	12.56	NA	NA	NA
S-14R	04/09/2009	2300	230	240	47	250	NA	NA	NA	NA	NA	NA	NA	NA	34.95	22.25	12.60	NA	0.30	430
S-14R	05/18/2009	750	51	48	17	67	NA	NA	NA	NA	NA	NA	NA	NA	34.95	22.20	12.75	NA	5.63	93
S-14R	07/23/2009	600	61	57	19	47	NA	NA	NA	NA	NA	NA	NA	NA	34.95	22.56	12.38	NA	0.05	246
S-14R	10/01/2009	230	12	10	5.3	23	NA	NA	NA	NA	NA	NA	NA	NA	34.95	22.59	12.85	NA	2.22	291
S-15	12/17/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.34	23.00	12.34	NA	NA	NA
S-15	02/08/2008	55000 h	6700	13000	1100	9800	NA	<10	NA	NA	NA	NA	<5.0	<10	35.34	22.71	12.63	NA	NA	NA
S-15	05/08/2008	53000 h	6300	13000	1500	7500	NA	<200	NA	NA	NA	NA	<100	<200	35.34	22.91	12.43	NA	NA	NA
S-15	Well destroyed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-16	12/17/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36.08	23.88	12.20	NA	NA	NA
S-16	02/08/2008	6000 h	670	730	88	1290	NA	<5.0	NA	NA	NA	NA	<2.5	<5.0	36.08	23.52	12.56	NA	NA	NA
S-16	05/08/2008	3200 h	670	320	18	590	NA	<10	NA	NA	NA	NA	<5.0	<10	36.08	23.69	12.39	NA	NA	NA
S-16	Well destroyed	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
S-17	06/19/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.49	23.30	12.19	NA	NA	NA
S-17	06/25/2008	21000	1300	1300	160	2850	NA	<5.0	NA	NA	NA	NA	<2.5	<5.0	35.49	23.33	12.16	NA	NA	NA
S-17	08/14/2008	14000	1700	1700	310	2250	NA	<10	NA	NA	NA	NA	<5.0	<10	35.49	23.50	11.99	NA	NA	NA
S-17	11/11/2008 k	7200	1600	820	140	760	NA	<5.0	NA	NA	NA	NA	<2.5	<5.0	35.49	23.70	11.79	NA	NA	NA
S-17	11/11/2008 l	32000	2500	3100	820	4000	NA	<25	NA	NA	NA	NA	<12	<25	35.49	23.70	11.79	NA	NA	NA
S-17	01/05/2009	15000	790	700	150	1260	NA	<10	NA	NA	NA	NA	<5.0	<10	35.50	23.66	11.84	NA	NA	NA
S-17	01/15/2009	2300	220	170	19	300	NA	NA	NA	NA	NA	NA	NA	NA	35.50	23.37	12.13	NA	NA	NA
S-17	02/12/2009	4700	750	200	37	23	NA	NA	NA	NA	NA	NA	NA	NA	35.50	23.66	11.84	NA	NA	NA
S-17	03/12/2009	3300	640	370	81	290	NA	NA	NA	NA	NA	NA	NA	NA	35.50	23.24	12.26	NA	NA	NA
S-17	04/09/2009	1300	260	110	37	100	NA	NA	NA	NA	NA	NA	NA	NA	35.50	23.20	12.30	NA	0.60	429
S-17	05/18/2009	630	97	44	17	25	NA	NA	NA	NA	NA	NA	NA	NA	35.50	23.21	12.29	NA	5.93	442
S-17	07/23/2009	3900	480	410	160	480	NA	NA	NA	NA	NA	NA	NA	NA	35.50	23.70	11.80	NA	0.15	34
S-17	10/01/2009	1300	32	24	3.1	72	NA	NA	NA	NA	NA	NA	NA	NA	35.50	23.64	11.86	NA	1.30	294
S-18	06/19/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.04	22.94	12.10	NA	NA	NA
S-18	06/25/2008	58000	2200	5600	880	10200	NA	<10	NA	NA	NA	NA	<5.0	<10	35.04	22.92	12.12	NA	NA	NA
S-18	08/14/2008	25000	2500	4500	860	5800	NA	<50	NA	NA	NA	NA	<25	<50	35.04	23.08	11.96	NA	NA	NA
S-18	11/11/2008 k	24000	2400	3300	820	3900	NA	<25	NA	NA	NA	NA	<12	<25	35.04	23.30	11.74	NA	NA	NA
S-18	11/11/2008 l	43000	3900	5500	1300	6500	NA	<50	NA	NA	NA	NA	<25	<50	35.04	23.30	11.74	NA	NA	NA



**WELL CONCENTRATIONS - TABLE 1**  
**Former Shell Service Station**  
**461 8th Street**  
**Oakland, CA**

Well ID	Date	TPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8620 (ug/L)	MTBE 8260 (ug/L)	DPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.G. (mg/L)	G.R.P. (m%)
S-18	01/05/2009	20000	830	1000	290	1400	NA	<50	NA	NA	NA	NA	<25	<50	35.03	23.16	11.87	NA	NA	NA
S-18	01/15/2009	8200	690	790	150	1230	NA	NA	NA	NA	NA	NA	NA	NA	35.03	22.97	12.06	NA	NA	NA
S-18	02/12/2009	13000	1200	1400	330	940	NA	NA	NA	NA	NA	NA	NA	NA	35.03	23.29	11.74	NA	NA	NA
S-18	03/12/2009	52000	5900	9000	1,600	10000	NA	NA	NA	NA	NA	NA	NA	NA	35.03	22.85	12.18	NA	NA	NA
S-18	04/09/2009	insufficient water	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.03	22.79	12.24	NA	NA	NA
S-18	05/18/2009	6700	320	1100	200	1800	NA	NA	NA	NA	NA	NA	NA	NA	35.03	22.91	12.22	NA	6.51	377
S-18	07/23/2009	8900	500	890	290	1600	NA	NA	NA	NA	NA	NA	NA	NA	35.03	22.91	12.12	NA	0.20	NA
S-18	10/01/2009	1800	49	5.5	5.3	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	35.03	23.85	11.38	NA	6.25	557
S-19	11/07/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.78	22.73	12.05	NA	NA	NA
S-19	11/11/2008 k	7100	500	600	25	1010	NA	NA	NA	NA	NA	NA	NA	NA	34.78	22.87	11.91	NA	1.0	62
S-19	11/11/2008 l	2300	110	160	43	290	NA	NA	NA	NA	NA	NA	NA	NA	34.78	22.87	11.91	NA	1.3	71
S-19	12/18/2008	2900	190	300	41	420	NA	NA	NA	NA	NA	NA	NA	NA	34.57	22.80	11.97	NA	NA	NA
S-19	01/05/2009	3400	230	250	50	380	NA	NA	NA	NA	NA	NA	NA	NA	34.57	22.56	12.01	NA	NA	NA
S-19	01/15/2009	3100	340	540	70	440	NA	NA	NA	NA	NA	NA	NA	NA	34.57	22.31	12.26	NA	NA	NA
S-19	02/12/2009	1300	130	180	37	190	NA	NA	NA	NA	NA	NA	NA	NA	34.57	22.58	11.99	NA	NA	NA
S-19	03/12/2009	890	110	150	30	160	NA	NA	NA	NA	NA	NA	NA	NA	34.57	22.44	12.13	NA	NA	NA
S-19	04/09/2009	1300	140	190	32	190	NA	NA	NA	NA	NA	NA	NA	NA	34.57	22.02	12.55	NA	0.57	166
S-19	05/18/2009	780	69	87	17	100	NA	NA	NA	NA	NA	NA	NA	NA	34.57	22.04	12.53	NA	6.47	75
S-19	07/23/2009	400	77	59	15	38	NA	NA	NA	NA	NA	NA	NA	NA	34.57	22.40	12.17	NA	0.06	31
S-19	10/01/2009	1500	160	170	33	120	NA	NA	NA	NA	NA	NA	NA	NA	34.57	22.66	11.91	NA	0.52	301
S-20	11/07/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34.50	22.80	11.70	NA	NA	NA
S-20	11/11/2008 k	13000	1300	1600	80	1920	NA	NA	NA	NA	NA	NA	NA	NA	34.50	22.90	11.60	NA	0.6	-39
S-20	11/11/2008 l	16000	1100	1800	220	1930	NA	NA	NA	NA	NA	NA	NA	NA	34.50	22.90	11.60	NA	2.6	-64
S-20	01/05/2009	17000	1500	1700	320	1900	NA	NA	NA	NA	NA	NA	NA	NA	34.50	22.78	11.72	NA	NA	NA
S-20	02/12/2009	11000	1300	1400	230	1600	NA	NA	NA	NA	NA	NA	NA	NA	34.50	22.60	11.70	NA	2.6	-64
S-20	03/12/2009	19000	2700	3200	390	3100	NA	NA	NA	NA	NA	NA	NA	NA	34.50	22.40	12.10	NA	NA	NA
S-20	04/09/2009	8200	80	480	220	490	NA	NA	NA	NA	NA	NA	NA	NA	34.50	22.90	11.60	NA	13.80	578
S-20	05/18/2009	21000	970	1500	630	4800	NA	NA	NA	NA	NA	NA	NA	NA	34.50	22.42	12.08	NA	4.58	197
S-20	07/23/2009	41000	4900	2900	990	7300	NA	NA	NA	NA	NA	NA	NA	NA	34.50	22.73	11.77	NA	0.27	419
S-20	10/01/2009	1800	140	39	33	35	NA	NA	NA	NA	NA	NA	NA	NA	34.50	23.00	11.50	NA	0.85	533
S-21A	11/07/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.81	23.73	12.08	NA	NA	NA
S-21A	11/11/2008 k	96000	6100	11000	1700	10500	NA	NA	NA	NA	NA	NA	NA	NA	35.81	23.86	11.95	NA	1.6	-42
S-21A	11/11/2008 l	87000	6300	13000	1700	10300	NA	NA	NA	NA	NA	NA	NA	NA	35.81	23.86	11.95	NA	1.6	-51
S-21A	12/16/2008	17000	3700	1200	170	47	NA	NA	NA	NA	NA	NA	NA	NA	35.80	23.91	11.89	NA	NA	NA

**WELL CONCENTRATIONS - TABLE 1**

Former Shell Service Station

461 8th Street

Oakland, CA

Well ID	Date	TPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 6026 (ug/L)	MTBE 8269 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	D.O. (mg/L)	O.R.P. (mV)
S-21A	01/05/2009	26000	3100	2900	450	1100	NA	NA	NA	NA	NA	NA	NA	NA	35.80	23.76	12.82	NA	NA	NA
S-21A	01/15/2009	9700	2100	290	45	<25	NA	NA	NA	NA	NA	NA	NA	NA	25.89	23.58	12.27	NA	NA	NA
S-21A	02/12/2009	19000	3100	2500	330	500	NA	NA	NA	NA	NA	NA	NA	NA	35.80	23.83	11.97	NA	NA	NA
S-21A	03/12/2009	31000	2500	3800	810	3700	NA	NA	NA	NA	NA	NA	NA	NA	35.80	23.35	12.45	NA	NA	NA
S-21A	04/09/2009	7800	700	750	130	<25	NA	NA	NA	NA	NA	NA	NA	NA	35.80	24.00	11.68	NA	0.94	384
S-21A	05/18/2009	15000	1800	2200	390	1900	NA	NA	NA	NA	NA	NA	NA	NA	35.80	23.45	12.34	NA	2.37	529
S-21A	07/23/2009	51000	4800	7100	1100	7900	NA	NA	NA	NA	NA	NA	NA	NA	35.80	23.85	11.95	NA	0.14	-3
S-21A	10/01/2009	16800	2300	2200	310	2400	NA	NA	NA	NA	NA	NA	NA	NA	35.80	24.06	11.74	NA	7.92	575
S-21B	11/07/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.79	23.66	12.11	NA	NA	NA
S-21B	11/11/2008 k	3200	49	300	93	510	NA	NA	NA	NA	NA	NA	NA	NA	35.79	23.80	11.99	NA	0.4	-108
S-21B	11/11/2008 l	7500	67	470	150	960	NA	NA	NA	NA	NA	NA	NA	NA	35.79	23.80	11.99	NA	5.6	-135
S-21B	12/18/2008	5300	36	310	120	770	NA	NA	NA	NA	NA	NA	NA	NA	35.76	23.72	12.04	NA	NA	NA
S-21B	01/05/2009	5400	35	290	93	600	NA	NA	NA	NA	NA	NA	NA	NA	35.76	23.70	12.05	NA	NA	NA
S-21B	01/15/2009	3300	30	150	78	470	NA	NA	NA	NA	NA	NA	NA	NA	35.76	23.43	12.33	NA	NA	NA
S-21B	02/12/2009	2800	12	100	69	450	NA	NA	NA	NA	NA	NA	NA	NA	35.76	23.81	11.95	NA	NA	NA
S-21B	03/12/2009	2300	9.4	72	50	320	NA	NA	NA	NA	NA	NA	NA	NA	35.76	23.32	12.44	NA	NA	NA
S-21B	04/09/2009	890	14	55	19	140	NA	NA	NA	NA	NA	NA	NA	NA	35.76	23.29	12.56	NA	0.56	459
S-21B	05/18/2009	390	6.8	14	12	27	NA	NA	NA	NA	NA	NA	NA	NA	35.76	23.24	12.52	NA	1.62	458
S-21B	06/17/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.76	23.40	12.36	NA	NA	NA
S-21B	07/23/2009	920	5.0	17	28	120	NA	NA	NA	NA	NA	NA	NA	NA	35.76	23.52	12.24	NA	0.26	37
S-21B	10/01/2009	620	2.6	10	17	89	NA	NA	NA	NA	NA	NA	NA	NA	35.76	23.95	11.81	NA	0.96	353
S-22A	11/07/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.06	22.91	12.17	NA	NA	NA
S-22A	11/11/2008 k	84000	8500	11000	2200	13900	NA	NA	NA	NA	NA	NA	NA	NA	35.06	23.15	11.93	NA	1.0	117
S-22A	11/11/2008 l	85000	7600	10000	2500	12400	NA	NA	NA	NA	NA	NA	NA	NA	35.06	23.15	11.93	NA	1.6	100
S-22A	12/18/2008	42000	6300	6600	1200	4400	NA	NA	NA	NA	NA	NA	NA	NA	35.06	23.03	12.03	NA	NA	NA
S-22A	01/05/2009	59000	4500	5300	1200	6400	NA	NA	NA	NA	NA	NA	NA	NA	35.06	23.03	12.03	NA	NA	NA
S-22A	01/15/2009	25000	5900	4400	740	1570	NA	NA	NA	NA	NA	NA	NA	NA	35.06	22.84	12.22	NA	NA	NA
S-22A	02/12/2009	43000	6700	6800	1200	5000	NA	NA	NA	NA	NA	NA	NA	NA	35.06	23.15	11.91	NA	NA	NA
S-22A	03/12/2009	35800	4600	4600	950	4600	NA	NA	NA	NA	NA	NA	NA	NA	35.06	22.65	12.41	NA	NA	NA
S-22A	04/09/2009	22000	120	1900	680	3400	NA	NA	NA	NA	NA	NA	NA	NA	35.06	22.88	12.18	NA	6.41	556
S-22A	05/18/2009	25000	4700	1300	590	3700	NA	NA	NA	NA	NA	NA	NA	NA	35.06	22.83	12.23	NA	2.46	539
S-22A	07/23/2009	49000	5100	4800	700	4900	NA	NA	NA	NA	NA	NA	NA	NA	35.06	23.81	12.05	NA	0.18	167
S-22A	10/01/2009	12800	1400	600	88	500	NA	NA	NA	NA	NA	NA	NA	NA	35.06	23.06	12.09	NA	4.08	523
S-22B	11/07/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.15	23.06	12.09	NA	NA	NA

**WELL CONCENTRATIONS - TABLE 1**  
**Former Shell Service Station**  
**461 8th Street**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	BTBE (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EOB (ug/L)	TDC (MGL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	B.O. (mg/L)	O.R.P. (mV)
S-228	11/11/2008 k	<50	<0.50	<1.0	<1.0	1.2	NA	NA	NA	NA	NA	NA	NA	NA	35.15	23.20	11.95	NA	0.9	92
S-228	11/11/2008 l	360	3.3	12	5.8	38	NA	NA	NA	NA	NA	NA	NA	NA	35.15	23.20	11.95	NA	1.6	90
S-228	12/18/2008	150	2.9	6.1	2.9	17.5	NA	NA	NA	NA	NA	NA	NA	NA	35.24	23.26	11.98	NA	NA	NA
S-228	01/05/2009	110	1.9	5.0	2.6	11	NA	NA	NA	NA	NA	NA	NA	NA	35.24	23.12	7.12	NA	NA	NA
S-228	01/15/2009	59	1.3	1.9	1.6	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.24	22.90	12.34	NA	NA	NA
S-228	02/12/2009	290	11	6.8	7.9	19	NA	NA	NA	NA	NA	NA	NA	NA	35.24	23.02	12.22	NA	NA	NA
S-228	03/12/2009	300	4.4	4.6	3.8	12	NA	NA	NA	NA	NA	NA	NA	NA	35.24	22.86	12.36	NA	NA	NA
S-228	04/09/2009	280	5.3	2.5	4.0	6.8	NA	NA	NA	NA	NA	NA	NA	NA	35.24	22.62	12.62	NA	2.24	164
S-228	05/16/2009	170	3.7	2.9	2.4	8.6	NA	NA	NA	NA	NA	NA	NA	NA	35.24	22.62	12.62	NA	1.42	-171
S-228	07/23/2009	160	8.9	5.7	3.8	12	NA	NA	NA	NA	NA	NA	NA	NA	35.24	22.65	12.58	NA	0.15	28
S-228	10/01/2009	300	2.4	1.0	1.2	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.24	23.18	12.86	NA	2.62	173
S-23	11/07/2008	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.77	23.26	12.46	NA	NA	NA
S-23	11/11/2008 k	8800	640	610	82	1,200	NA	NA	NA	NA	NA	NA	NA	NA	35.77	23.58	12.19	NA	NA	NA
S-23	11/11/2008 l	6400	520	640	34	760	NA	NA	NA	NA	NA	NA	NA	NA	35.77	23.58	12.19	NA	NA	NA
S-23	01/05/2009	830	63	98	14	56	NA	NA	NA	NA	NA	NA	NA	NA	35.75	23.51	12.24	NA	NA	NA
S-23	02/12/2009	3400	160	320	55	430	NA	NA	NA	NA	NA	NA	NA	NA	35.75	23.62	12.13	NA	NA	NA
S-23	03/12/2009	4500	210	460	71	610	NA	NA	NA	NA	NA	NA	NA	NA	35.75	23.03	12.72	NA	NA	NA
S-23	04/09/2009	2700	180	95	33	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	35.75	22.88	12.77	NA	1.24	567
S-23	05/16/2009	3000	350	440	79	300	NA	NA	NA	NA	NA	NA	NA	NA	35.75	23.48	12.57	NA	19.77	503
S-23	07/23/2009	2900	180	400	67	340	NA	NA	NA	NA	NA	NA	NA	NA	35.75	23.46	12.27	NA	0.21	133
S-23	10/01/2009	790	40	24	5.4	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	35.75	23.82	11.93	NA	6.64	425
AS-1	12/17/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.33	22.91	12.42	NA	NA	NA
AS-1	02/08/2008	130 h	1.1	3.4	<1.0	5.4	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	35.33	22.62	12.71	NA	NA	NA
AS-1	05/06/2008	<50 h	<0.50	<1.0	<1.0	<1.0	NA	<1.0	NA	NA	NA	NA	<0.50	<1.0	35.33	27.76	7.55	NA	NA	NA
OW-1	04/09/2009	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
OW-1	05/18/2009	Well dry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

**WELL CONCENTRATIONS - TABLE 1**

Former Shell Service Station

461 6th Street

Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 6020 (ug/L)	MTBE 6200 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	EDC (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	SPH Thickness (ft)	D.O. (mg/L)	O.R.P. (mV)
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Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B, prior to July 25, 2001, analyzed by EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to July 25, 2001, analyzed by EPA Method 8020.

MTBE = Methyl tertiary butyl ether

ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B.

DIPE = Di-isopropyl ether, analyzed by EPA Method 8260B.

TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B.

TBA = Tertiary butyl alcohol, analyzed by EPA Method 8260B.

EDC = 1,2-Dichloroethane, analyzed by EPA Method 8260B.

EDB = 1,2-Dibromoethane, analyzed by EPA Method 8260B.

TOC = Top of Casing Elevation

TOB = Top of Wellbox Elevation

SPH = Separate-Phase Hydrocarbons

GW = Groundwater

ug/L = Parts per billion

MSL = Mean sea level

ft = Feet

D.O. = Dissolved Oxygen

O.R.P. = Oxygen Redox Potential

mg/L = Parts per million

mV = Microvolts

<n = Below detection limit

(D) = Duplicate sample

NA = Not applicable

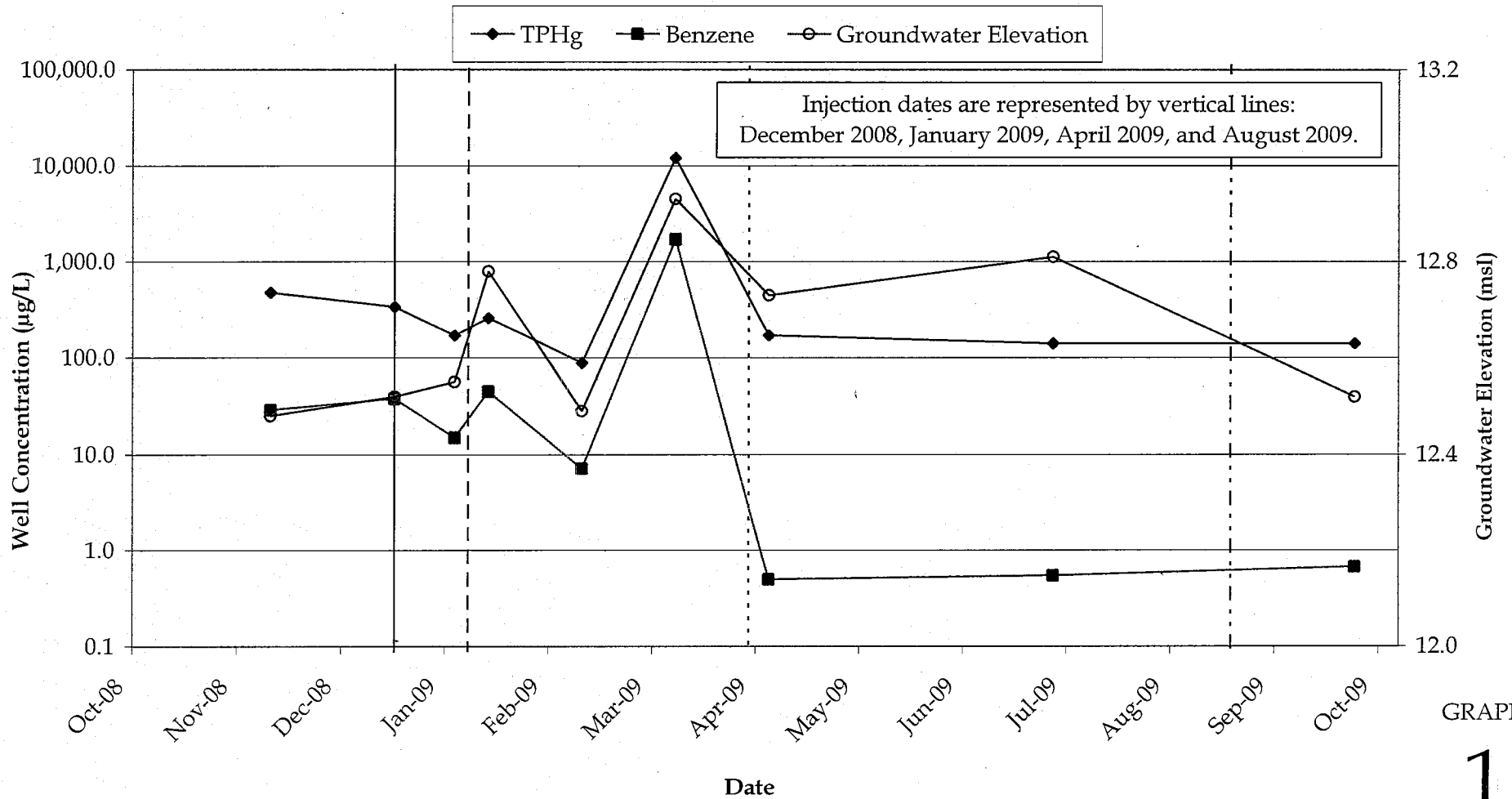
**WELL CONCENTRATIONS - TABLE 1**  
**Former Shell Service Station**  
**461 8th Street**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MIBE 0020 (ug/L)	MIBE 0050 (ug/L)	DNPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TEA (ug/L)	EDC (ug/L)	EES (ug/L)	TBC (MGL)	Depth to Water (ft)	GW Elevation (MSL)	SPH Viscosity (cP)	D.G. (ug/L)	G.R.P. (mg/L)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	----------------	----------------	----------------	---------------	---------------	---------------	--------------	---------------------------	--------------------------	--------------------------	----------------	------------------

- Notes:
- a = Ethylbenzene and xylenes combined.
  - b = This sample analyzed outside of EPA recommended holding time.
  - c = Depth to water measured from Top of Casing; elevation unknown.
  - d = Grab sampled.
  - e = Casing broken; Top of Casing elevation unknown.
  - f = SPH detected at <0.01 feet.
  - g = S-5 was purged prior to sampling.
  - h = Analyzed by EPA Method 8015B (M).
  - i = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
  - j = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
  - k = Pre-purge sample
  - l = Post-purge sample
  - \* = Prior to December 22, 1994, well elevations taken from Top of Casing.
- Beginning July 18, 2002, well elevations taken from Top of Casing.
- Site surveyed March 5, 2002 by Virgil Chavez Land Surveying of Vallejo, CA.
- Site surveyed December 18, 2007 by Virgil Chavez Land Surveying of Vallejo, CA.
- Wells S-14R and S-19 through S-23 surveyed on November 11, 2008 by Virgil Chavez Land Surveying of Vallejo, CA.
- Well S-5 surveyed on November 11, 2008 by Virgil Chavez Land Surveying of Vallejo, CA.

APPENDIX C

TREND GRAPHS

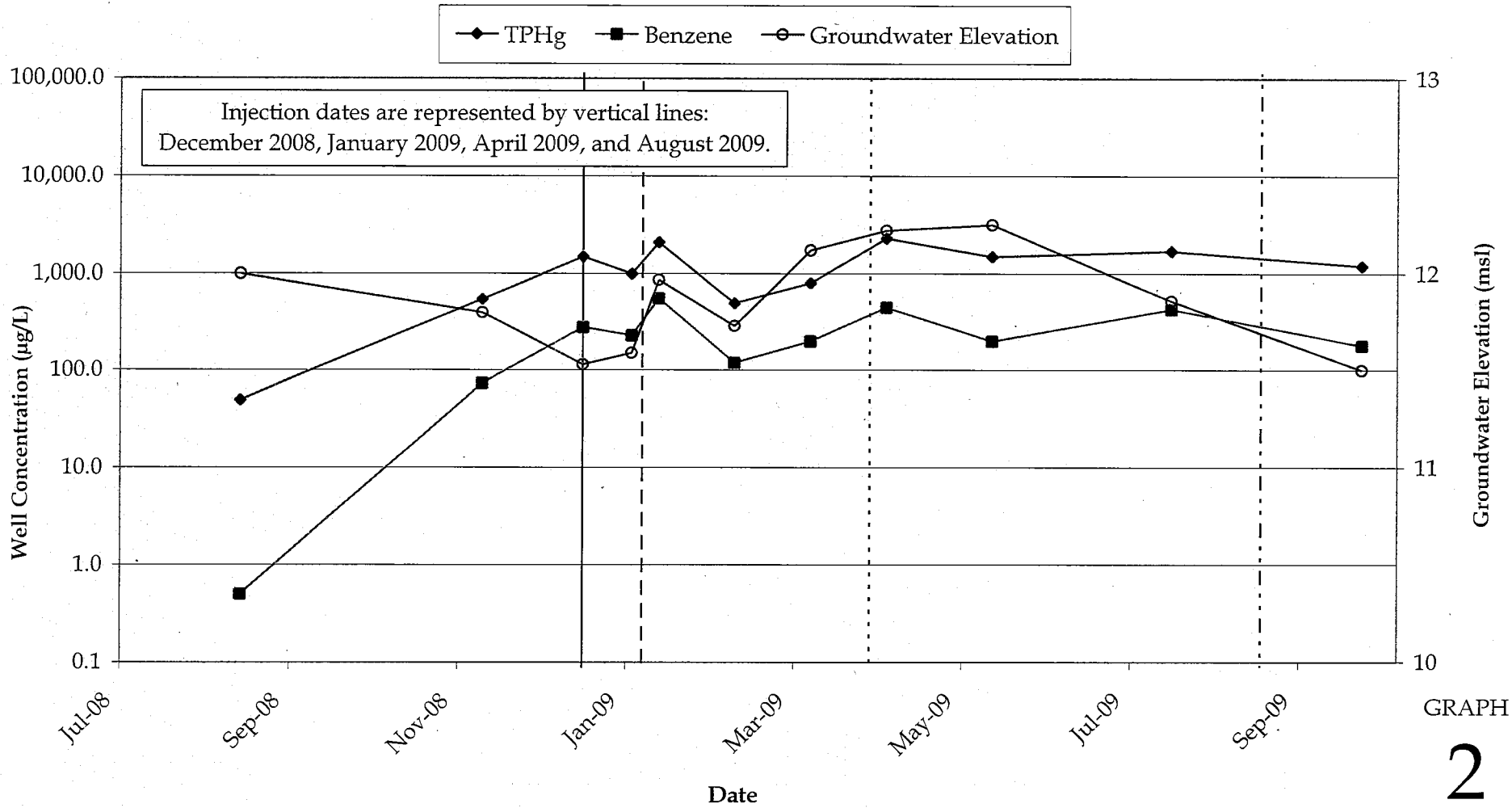


GRAPH  
**1**

Former Shell Service Station  
461 8th Street  
Oakland, California



S-8 TPHg and Benzene Groundwater  
Concentrations and Groundwater Elevation versus  
Time



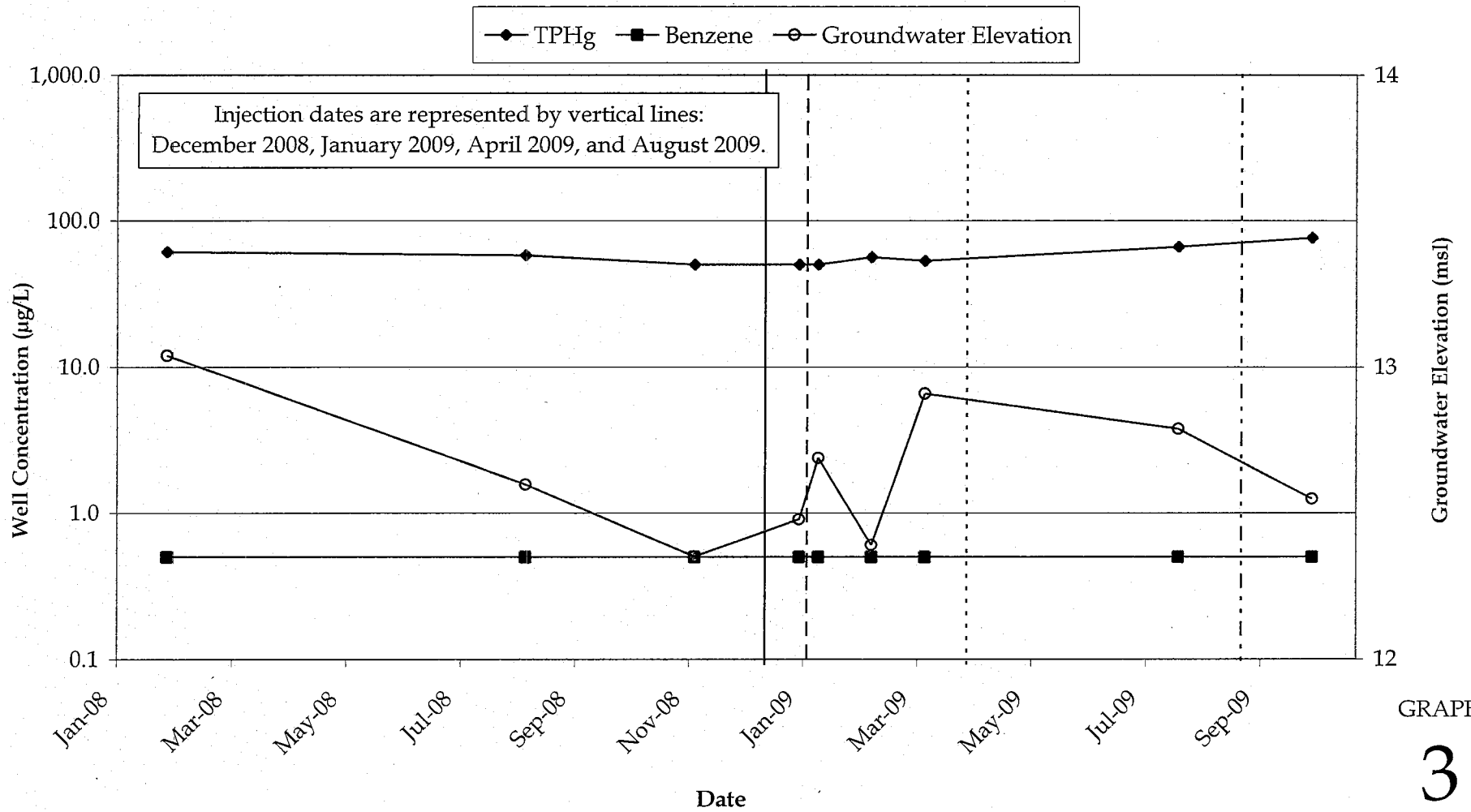
GRAPH  
2

Former Shell Service Station  
461 8th Street  
Oakland, California



S-9 TPHg and Benzene Groundwater  
Concentrations and Groundwater Elevation versus  
Time





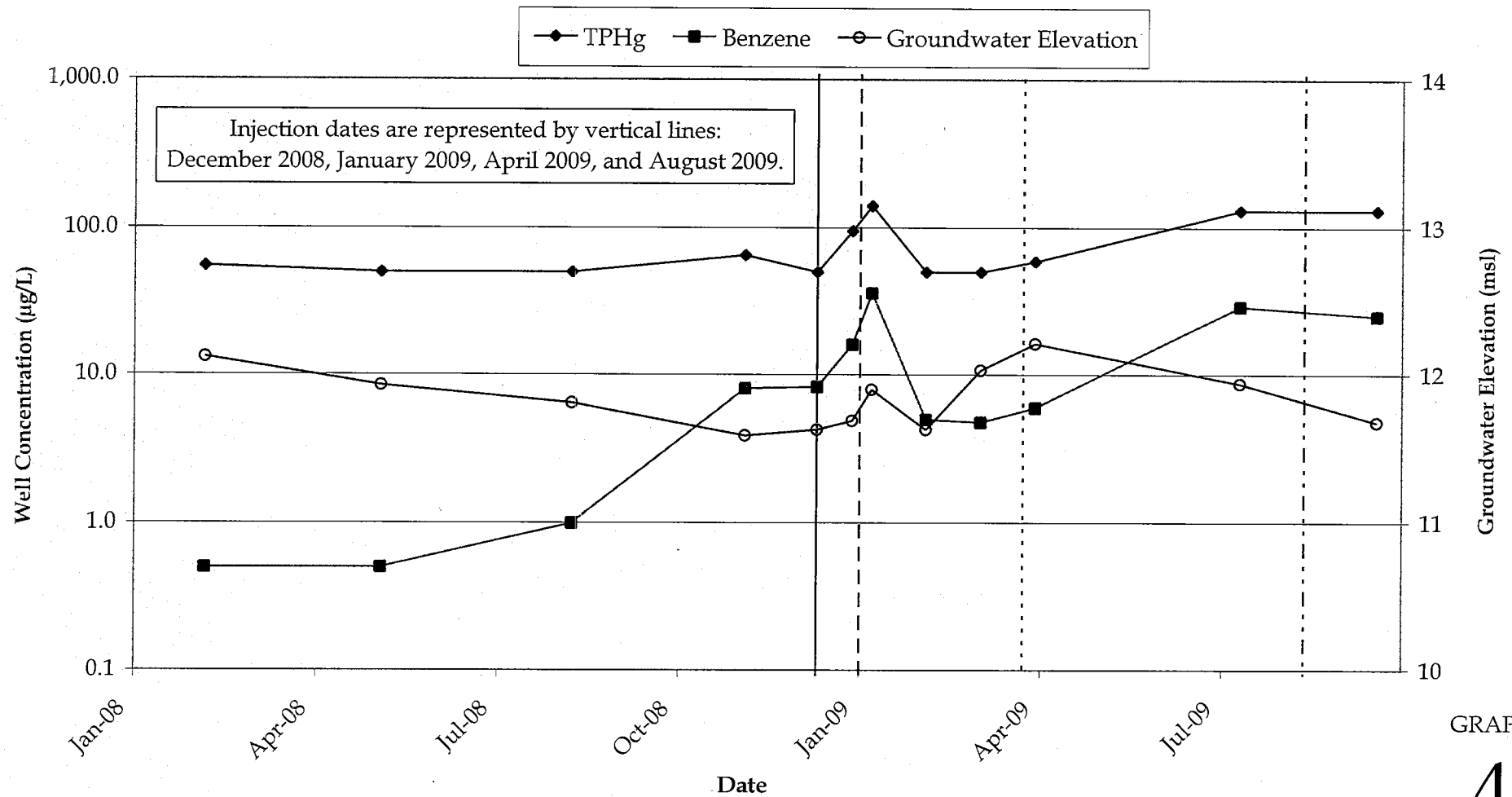
GRAPH

3

Former Shell Service Station  
461 8th Street  
Oakland, California



S-10 TPHg and Benzene Groundwater  
Concentrations and Groundwater Elevation  
versus Time



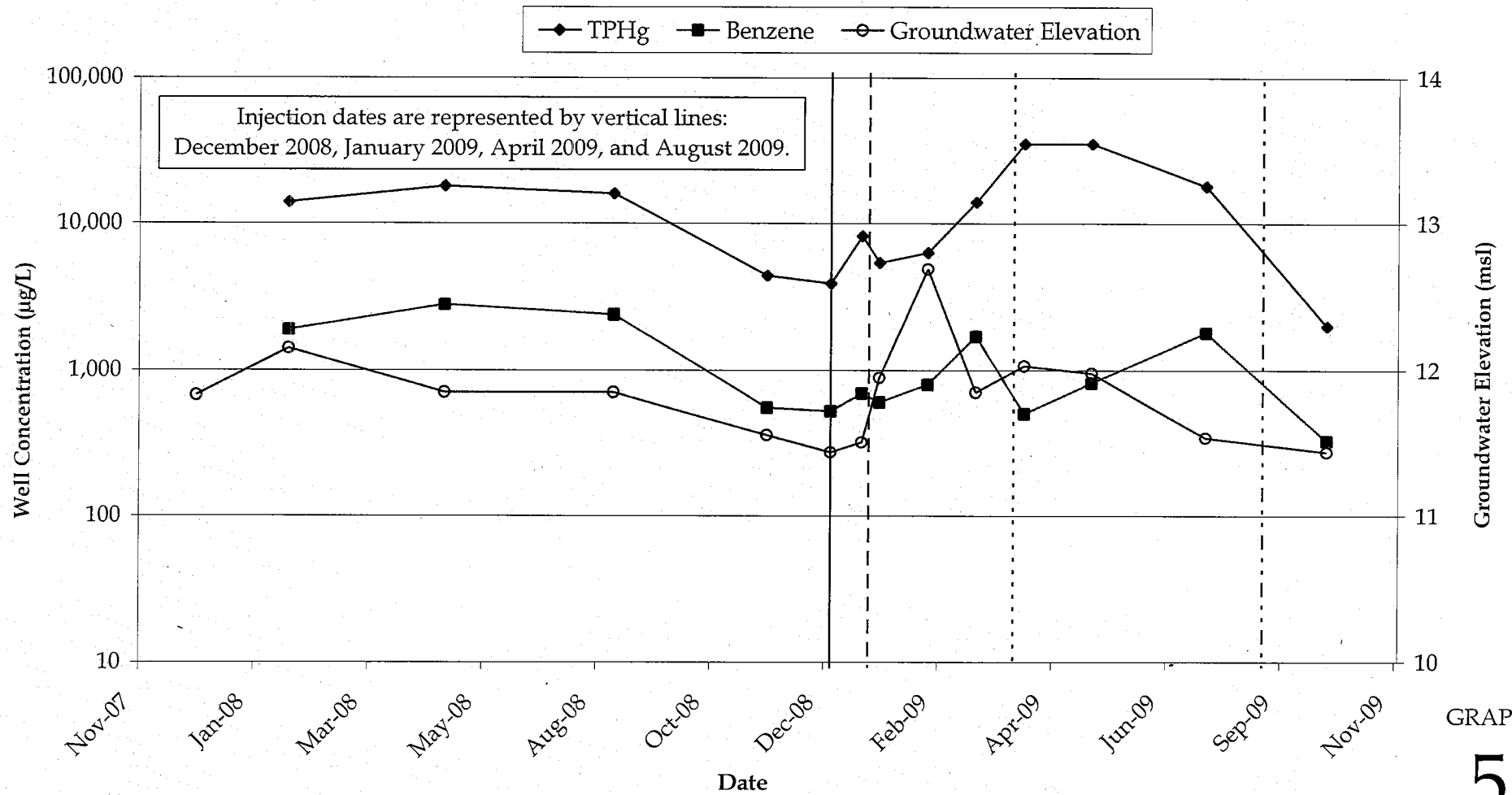
GRAPH  
**4**

Former Shell Service Station  
461 8th Street  
Oakland, California



CONESTOGA-ROVERS  
& ASSOCIATES

S-12 TPHg and Benzene Groundwater  
Concentrations and Groundwater Elevation versus  
Time

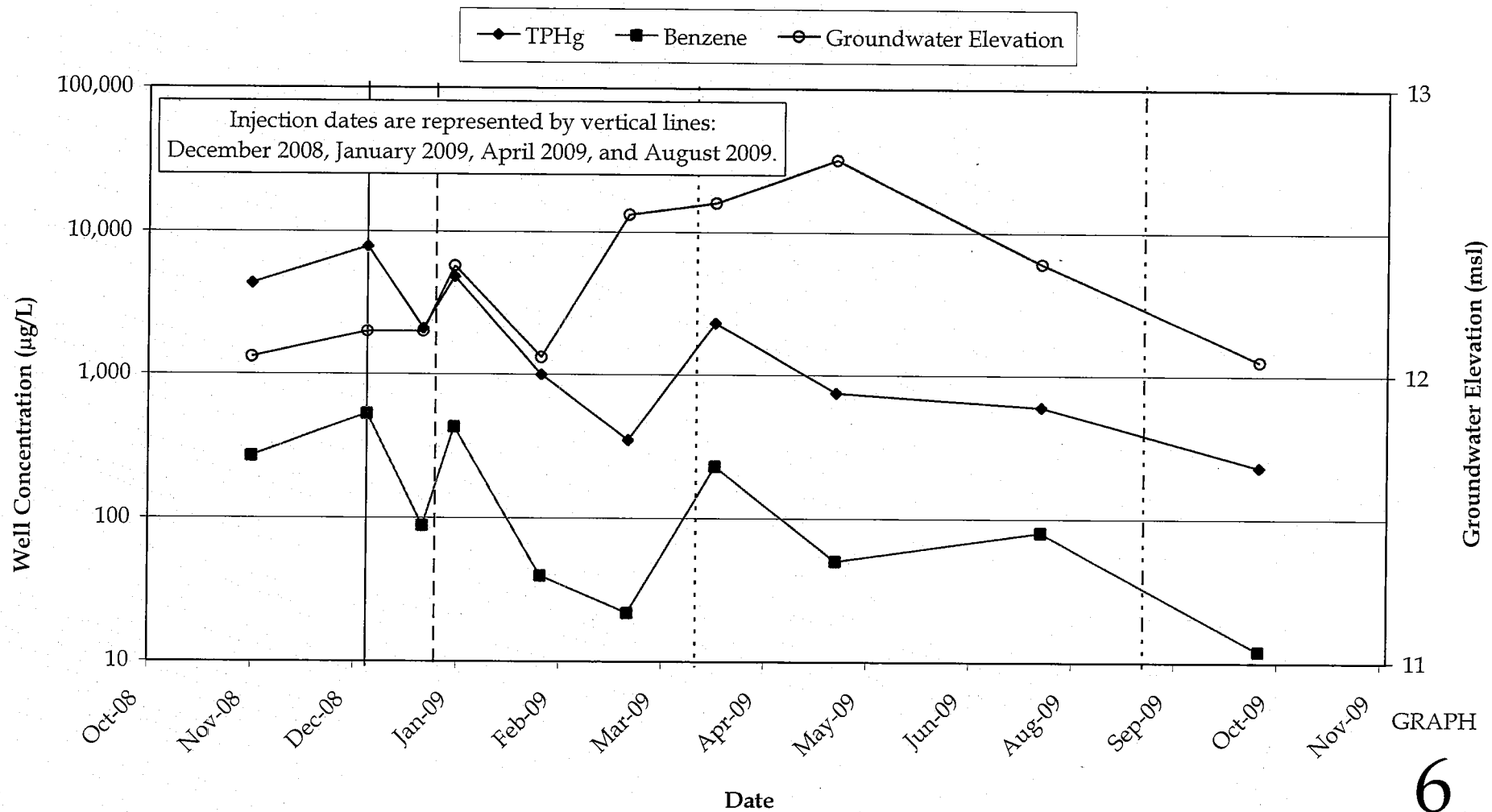


GRAPH  
**5**

Former Shell Service Station  
461 8th Street  
Oakland, California



**S-13 TPHg and Benzene Groundwater  
Concentrations and Groundwater Elevation  
versus Time**



GRAPH

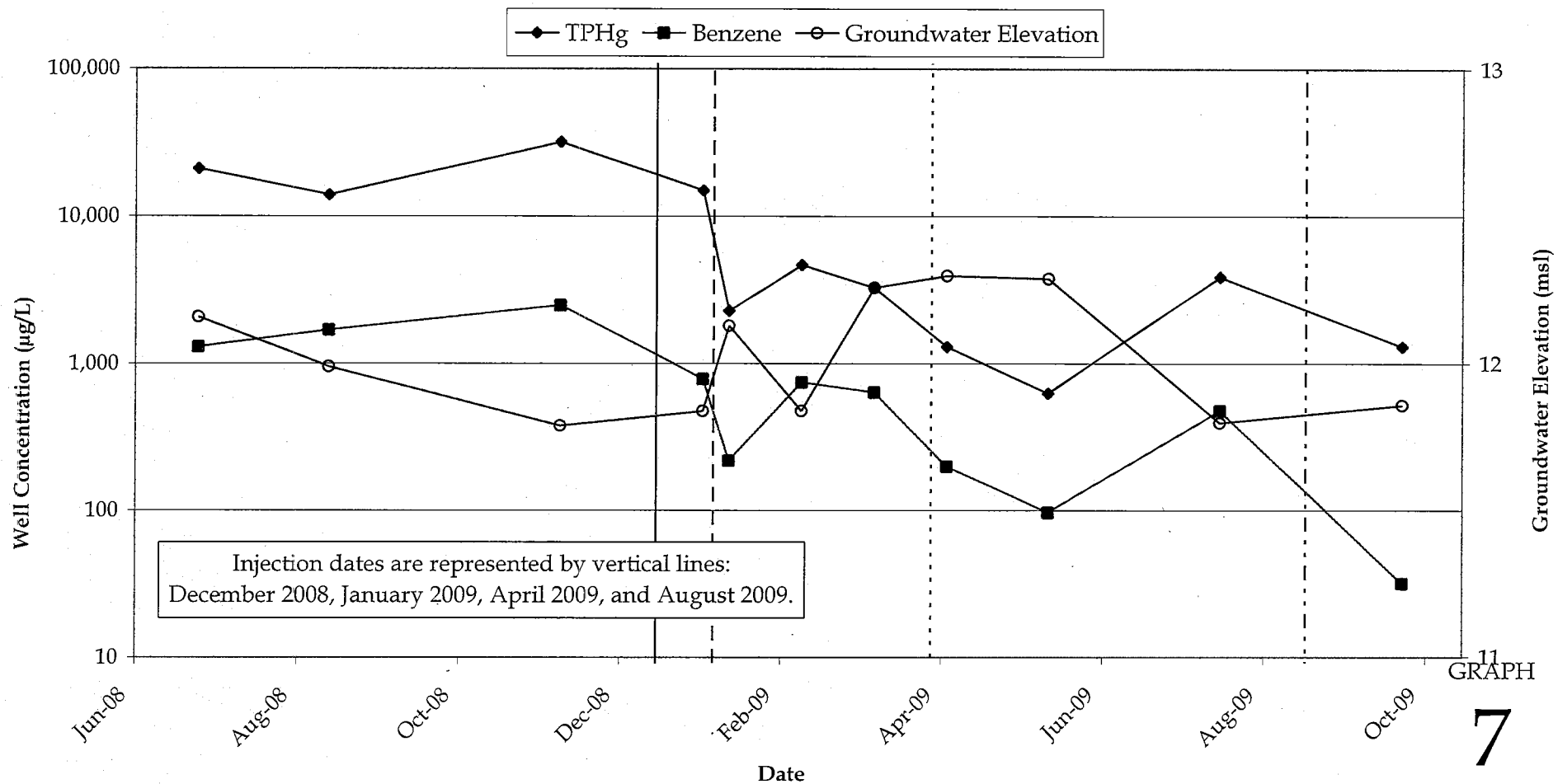
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Former Shell Service Station  
461 8th Street  
Oakland, California



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& ASSOCIATES

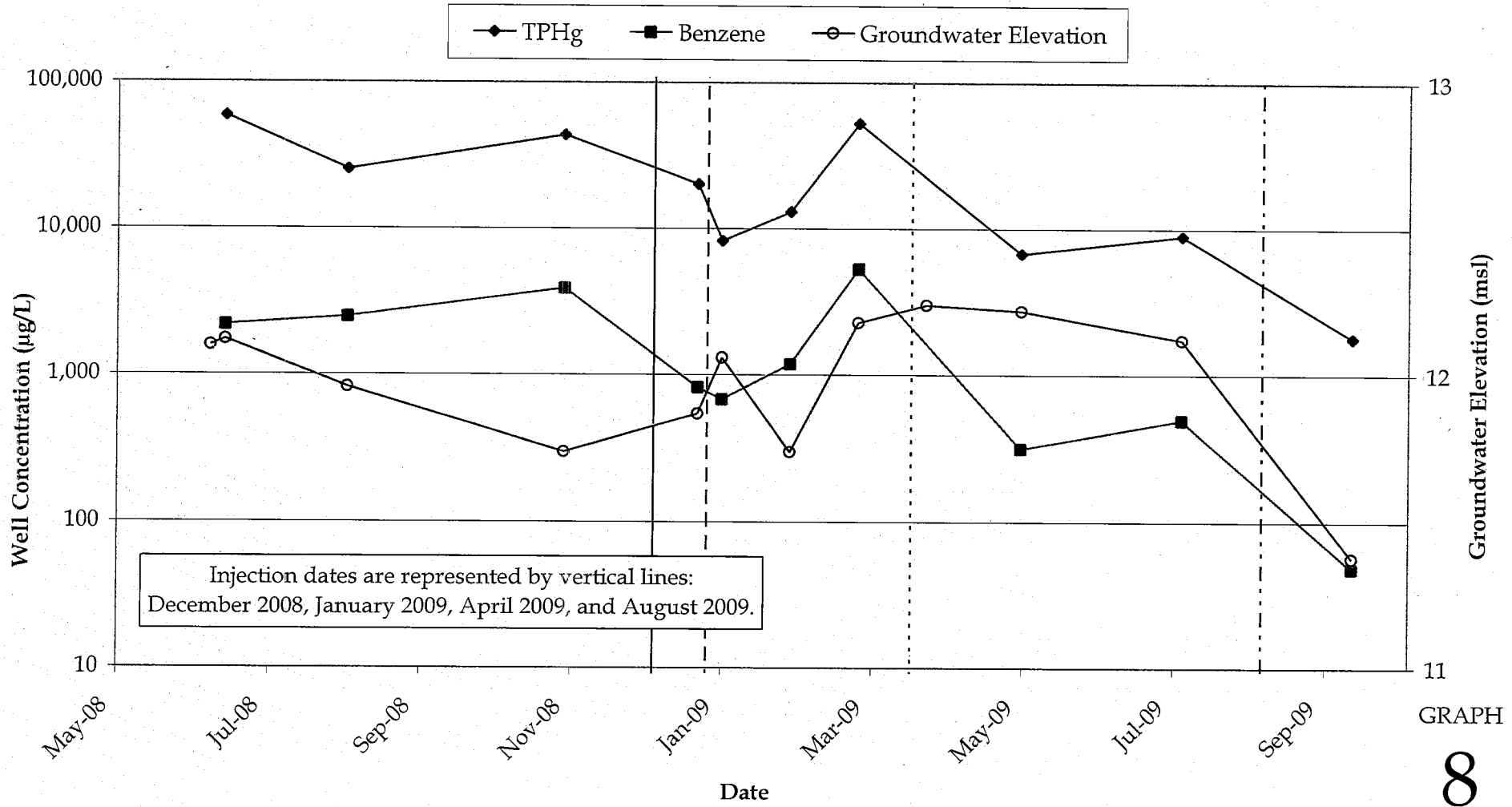
S-14R TPHg and Benzene Groundwater  
Concentrations and Groundwater Elevation  
versus Time



Former Shell Service Station  
461 8th Street  
Oakland, California



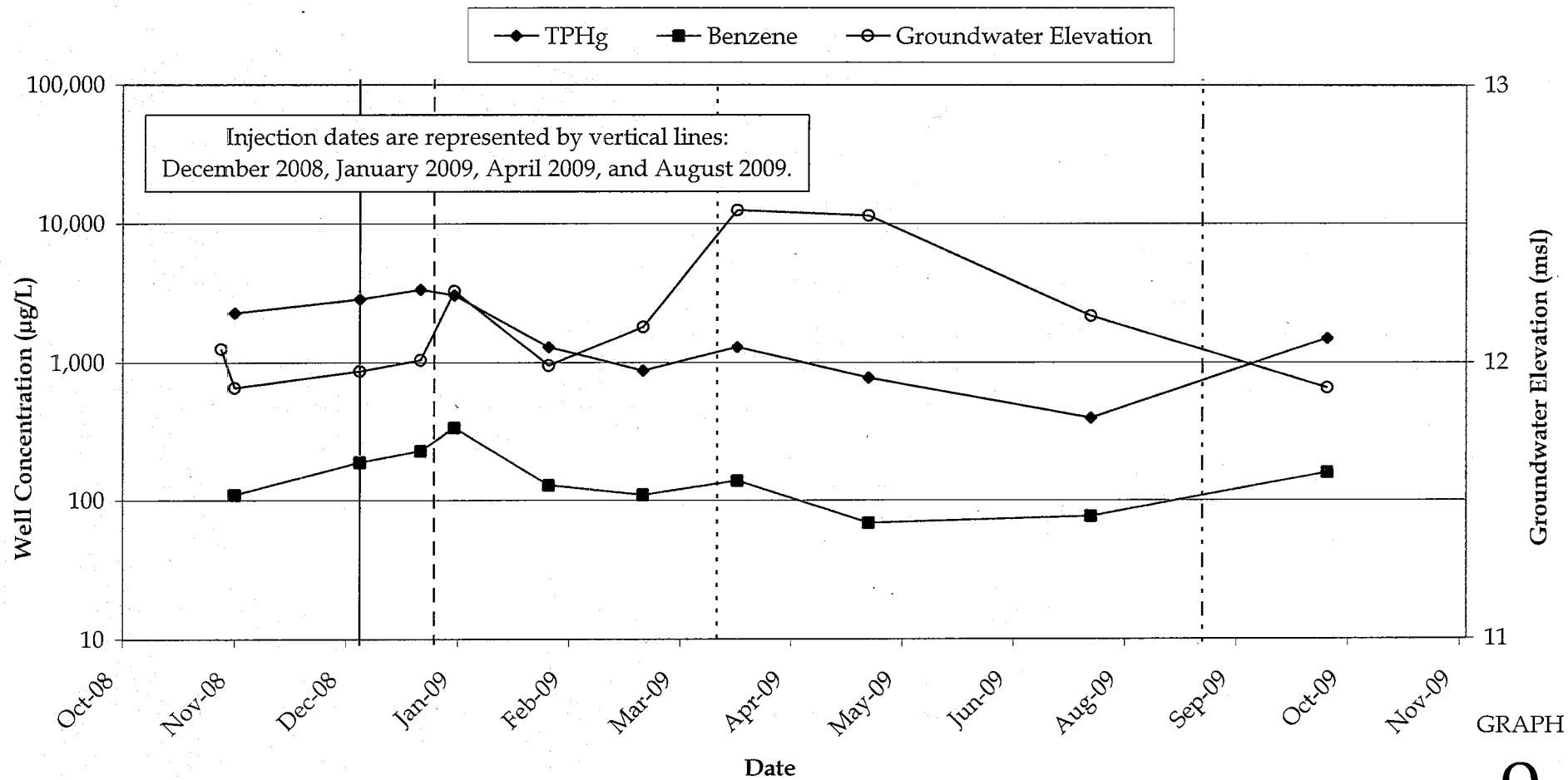
S-17 TPHg and Benzene Groundwater  
Concentrations and Groundwater Elevation  
versus Time



Former Shell Service Station  
 461 8th Street  
 Oakland, California



S-18 TPHg and Benzene Groundwater  
 Concentrations and Groundwater Elevation versus  
 Time



GRAPH

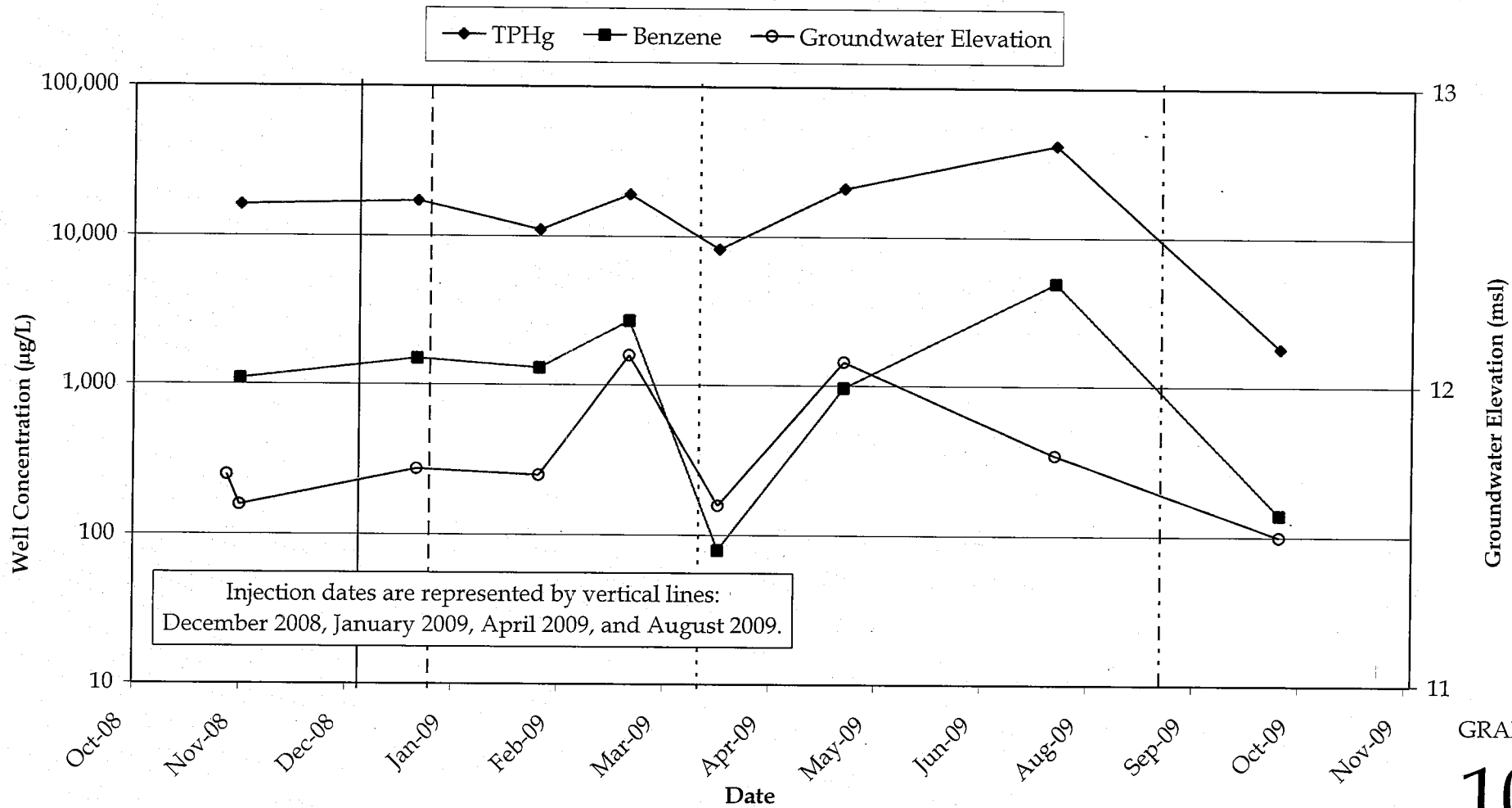
9

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461 8th Street  
Oakland, California



CONESTOGA-ROVERS  
& ASSOCIATES

S-19 TPHg and Benzene Groundwater  
Concentrations and Groundwater Elevation versus  
Time



GRAPH  
**10**

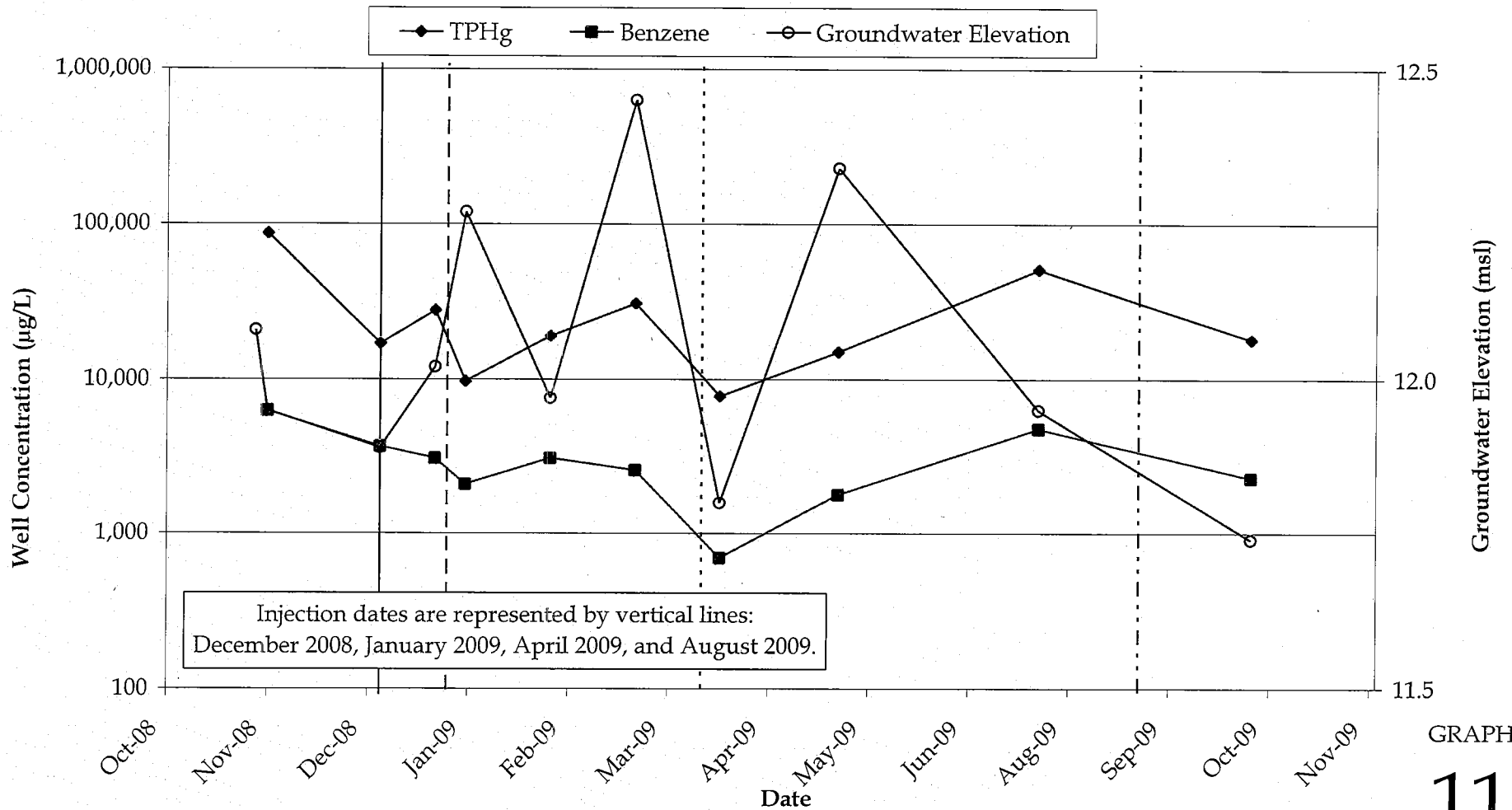
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461 8th Street  
Oakland, California



CONESTOGA-ROVERS  
& ASSOCIATES

S-20 TPHg and Benzene Groundwater  
Concentrations and Groundwater Elevation  
versus Time



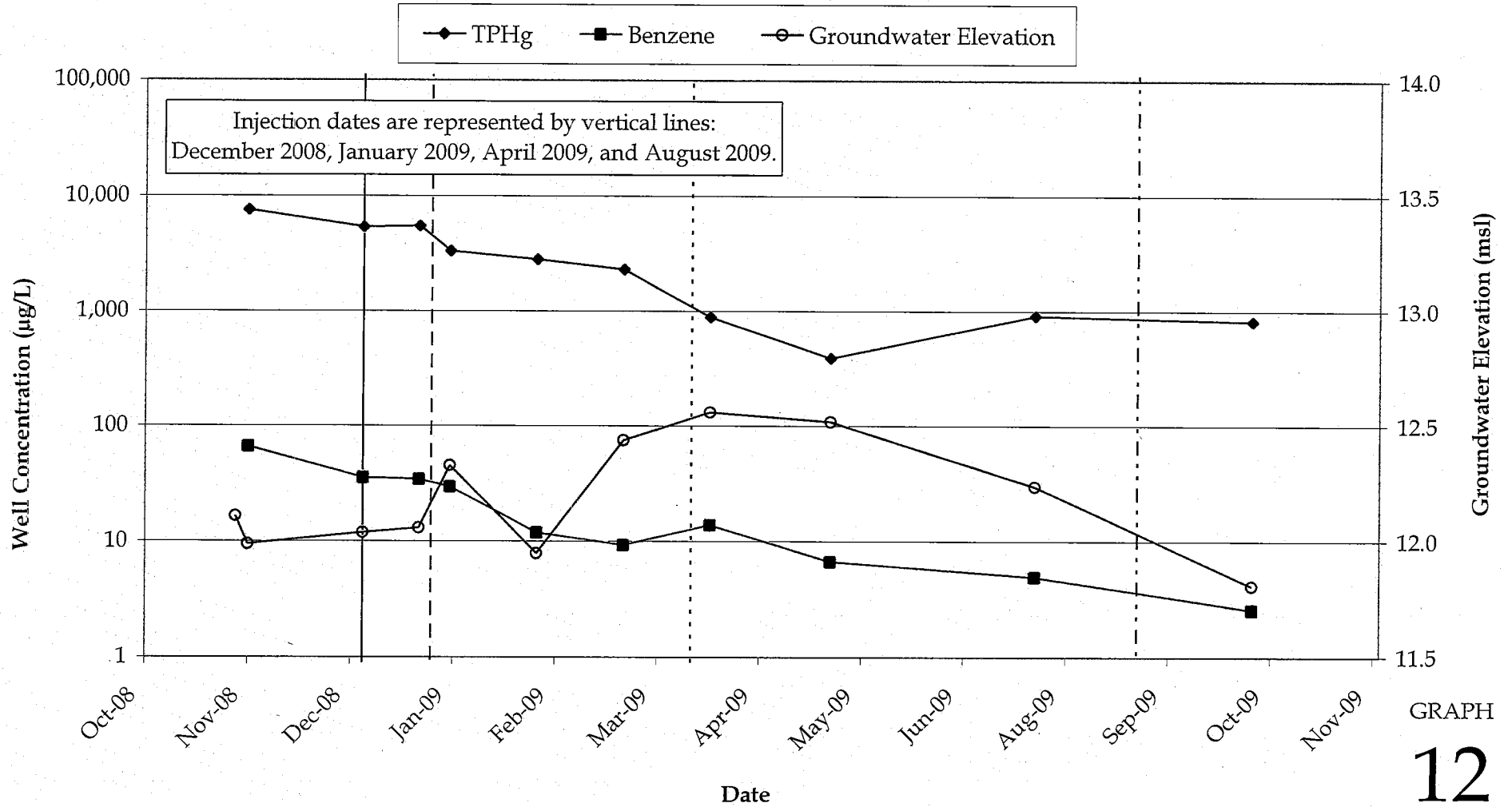


Injection dates are represented by vertical lines:  
 December 2008, January 2009, April 2009, and August 2009.

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 Oakland, California



S-21A TPHg and Benzene Groundwater  
 Concentrations and Groundwater Elevation  
 versus Time

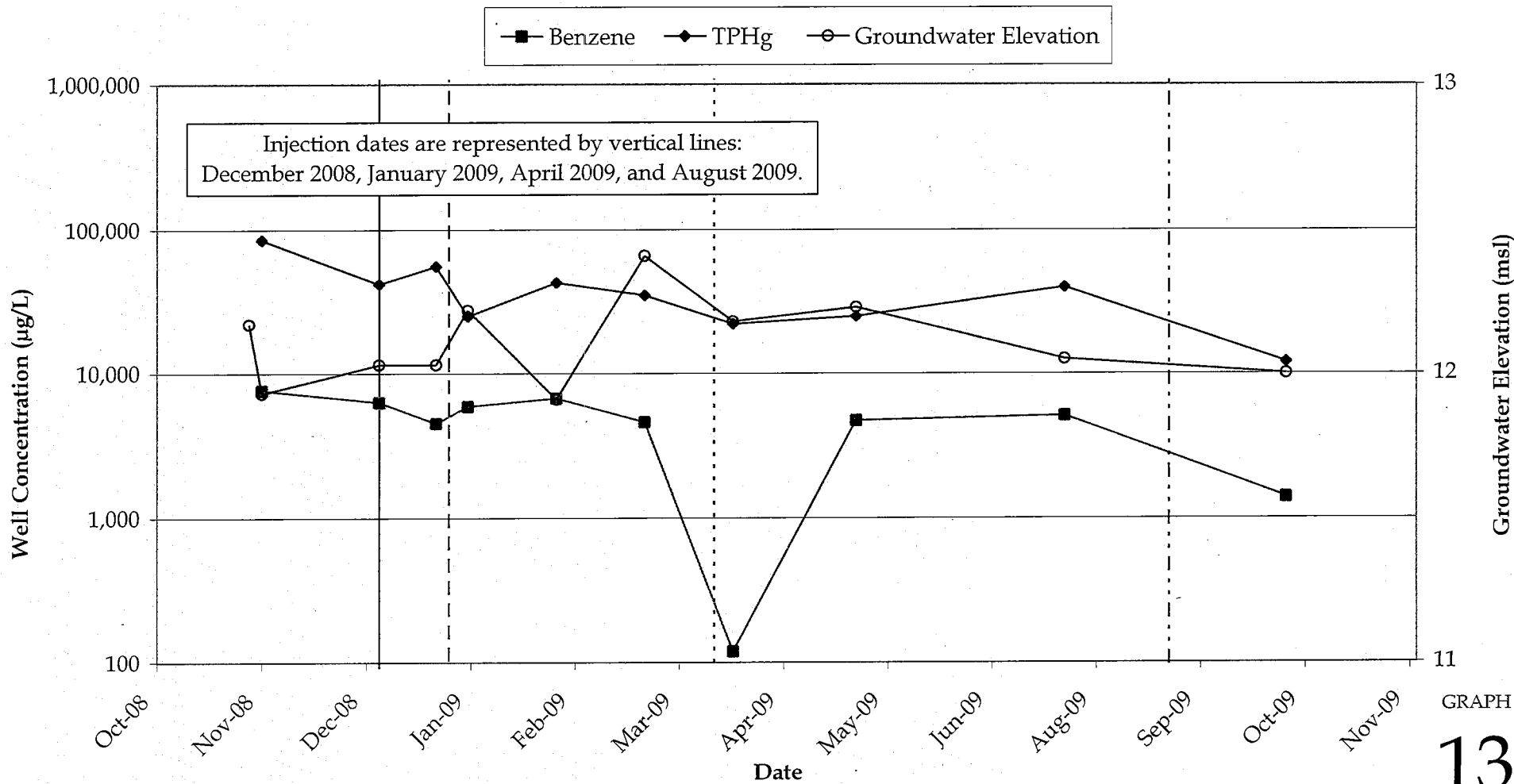


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S-21B TPHg and Benzene Groundwater  
 Concentrations and Groundwater Elevation  
 versus Time

GRAPH  
 12

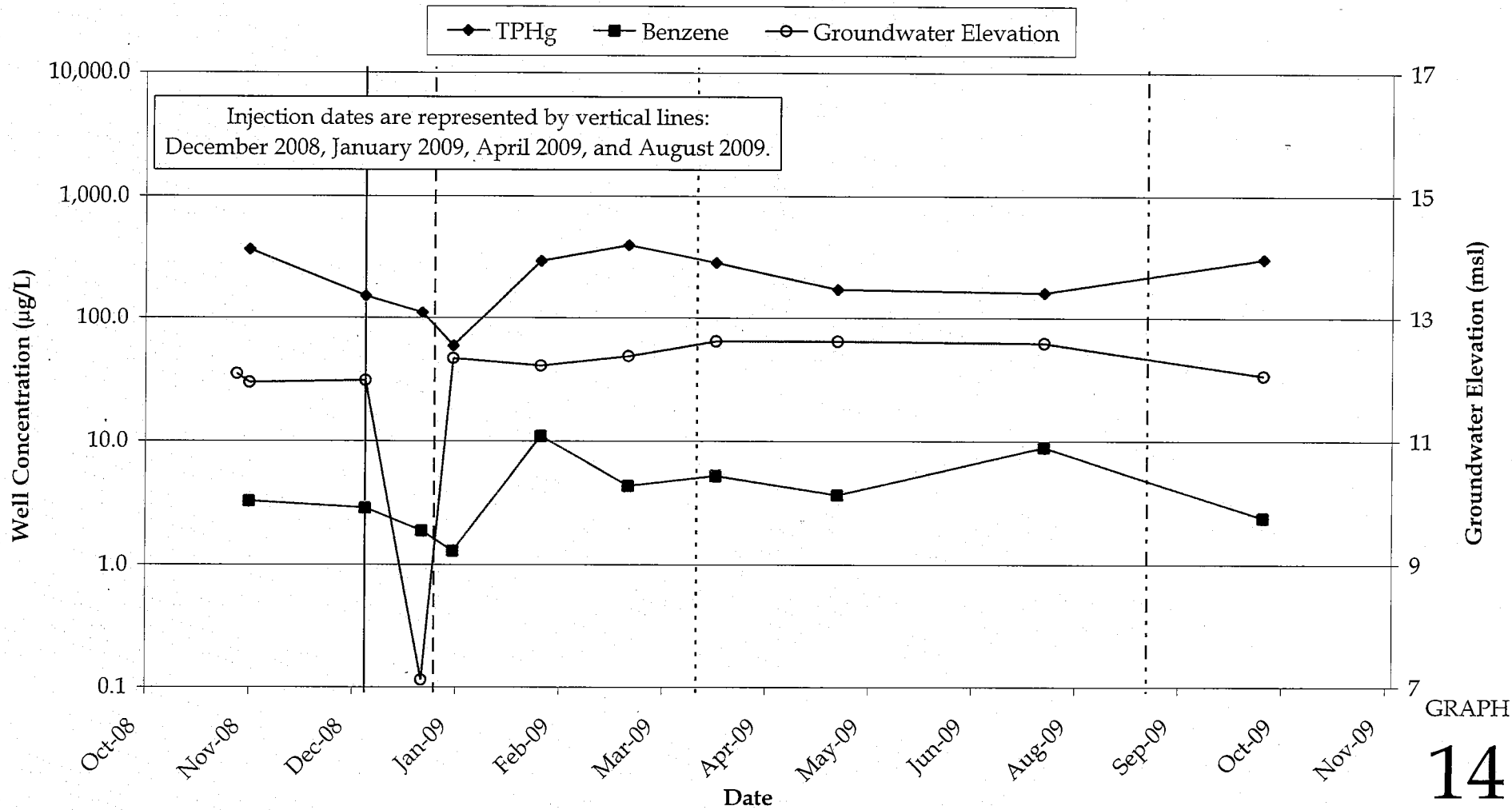


GRAPH  
13

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461 8th Street  
Oakland, California



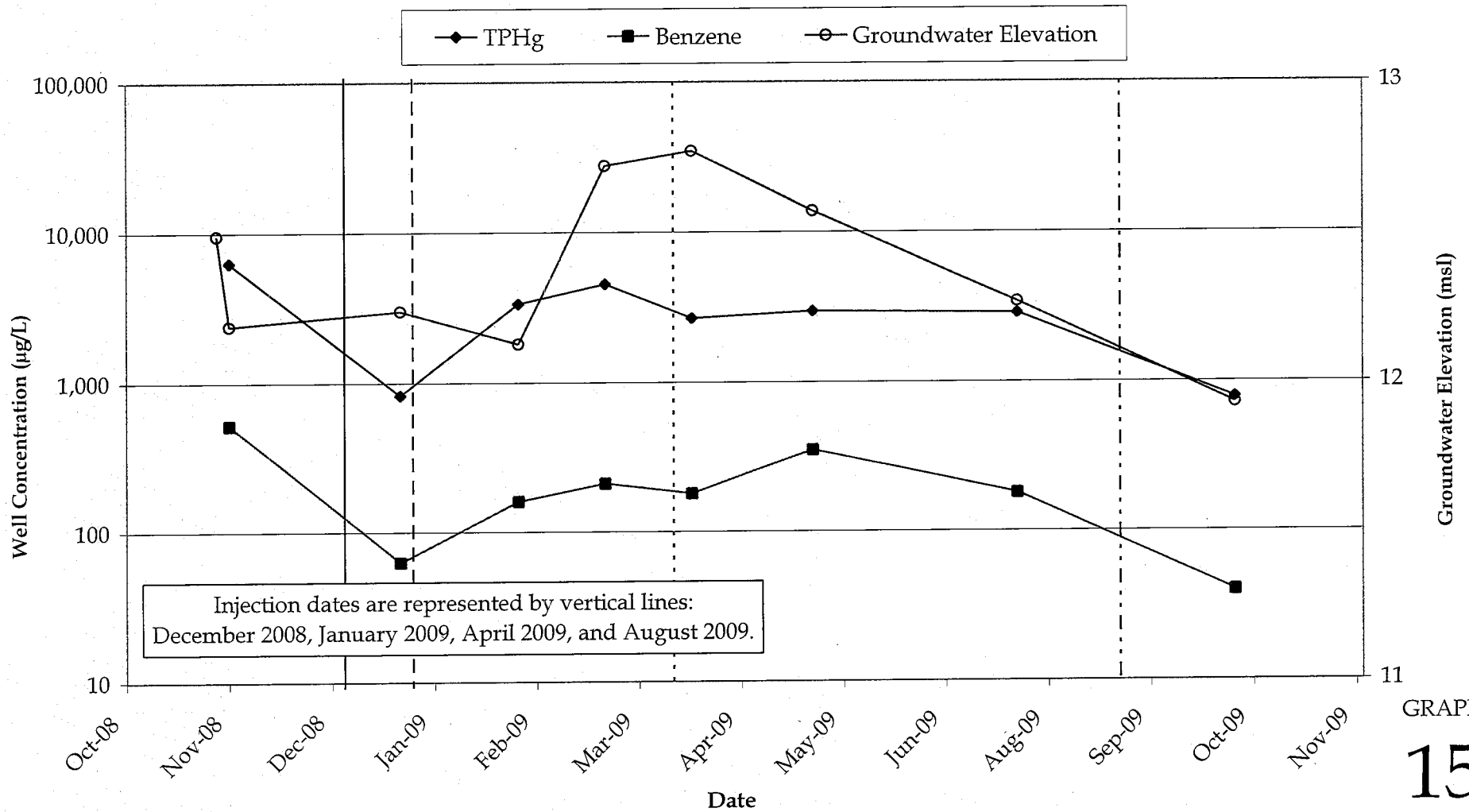
S-22A TPHg and Benzene Groundwater  
Concentrations and Groundwater Elevation versus  
Time



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 Oakland, California



S-22B TPHg and Benzene Groundwater  
 Concentrations and Groundwater Elevation  
 versus Time



GRAPH  
15

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 Oakland, California



CONESTOGA-ROVERS  
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S-23 TPHg and Benzene Groundwater  
 Concentrations and Groundwater Elevation  
 versus Time