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January 18, 2012

1211.001.01.007

Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Attention: Mr. Mark Detterman

**Transmittal
Groundwater Monitoring Report
Fourth Quarter 2011 Sampling Event
1650 65th Street
Emeryville, California
Fuel Leak Case No. RO0000440
Geotracker Global ID T0600100511**

RECEIVED

5:33 pm, Jan 23, 2012

Alameda County
Environmental Health

Dear Mr. Detterman:

Submitted herewith for your review is the *Groundwater Monitoring Report, Fourth Quarter 2011 Sampling Event, 1650 65th Street, Emeryville, California* prepared by PES Environmental, Inc.

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

Very truly yours,

GRIFFIN CAPITAL CORPORATION

Julie A. Treinen
Director of Asset Management

cc: Chris Baldassari, PES Environmental, Inc.

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A Report Prepared for:

Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Attention: Mr. Mark Detterman, PG, CEG

**GROUNDWATER MONITORING REPORT
FOURTH QUARTER 2011 SAMPLING EVENT
1650 65TH STREET
EMERYVILLE, CALIFORNIA
FUEL LEAK CASE NO. RO0000440
GEOTRACKER GLOBAL ID T0600100511**

JANUARY 19, 2012

By:

Christopher J. Baldassari, P.G. #8920
Senior Geologist

Robert S. Creps, P.E.
Principal Engineer

1211.001.01.006

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DISTRIBUTION

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1.0 INTRODUCTION

This *Groundwater Monitoring Report* (Report) has been prepared by PES Environmental, Inc. (PES), on behalf of Griffin Capital Corporation (Griffin) as agent for the fee owners, to document the results of a Fourth Quarter 2011 semi-annual groundwater monitoring event, at 1650 65th Street, in Emeryville, California (the Site, Plate 1). PES has previously performed several environmental investigations as well as conducted routine groundwater monitoring at the Site. The Fourth Quarter 2011 groundwater monitoring event was performed in accordance with a November 1, 2011 letter from the Alameda County Environmental Health Department (ACEH, 2011b).

2.0 BACKGROUND INFORMATION

One 2,000-gallon gasoline underground storage tank (UST) was removed from the Site in July 1987. A fuel release affecting soil and groundwater was discovered at that time. Soil remediation activities were completed under a remedial plan approved by ACEH in 1988 (ES, 1987). Groundwater monitoring was first initiated in November 1989. A groundwater remediation system was installed in December 1990 to extract and treat groundwater. Remediation via groundwater extraction continued until October 1993, and an *in-situ* bioremediation pilot study program was initiated in August 1994. The *in-situ* bioremediation program continued until December 1998. At that time, ACEH: (1) approved cessation of groundwater remediation and monitoring; and (2) directed the Site be evaluated for closure. In April 2001, PES submitted a report to ACEH that recommended no further groundwater monitoring on the basis of the stable and localized nature of the groundwater plume, and requested documentation of No Further Action (NFA) with respect to the former UST (PES, 2001).

In response to the NFA request in April 2001, ACEH issued a letter to Griffin dated July 7, 2009 (ACEH, 2009). To address technical comments in the ACEH 2009 Letter, PES prepared a Work Plan on behalf of Griffin (PES, 2009), which ACEH conditionally approved on August 16, 2010 (ACEH, 2010). PES implemented the Work Plan and subsequently submitted an investigation report (PES, 2010) on behalf of Griffin to the ACEH; the 2010 report summarized the results of groundwater sampling conducted during the Fourth Quarter 2010 and a preferential pathway study. In response, ACEH issued a letter dated April 1, 2011 (ACEH, 2011a), which included a request to conduct groundwater monitoring of selected wells on a semi-annual basis.

3.0 SITE DESCRIPTION

This 5.0-acre project site is located within the Emeryville Brownfield Redevelopment Area. The property includes an existing commercial building (~ 127,000 square feet) divided into three tenant suites (A, B, and C). The property is situated at an elevation of approximately

15 feet above mean sea level (msl), and the terrain slopes gently to the west-southwest. The nearest surface water body is San Francisco Bay, located approximately 1,000 feet west of the subject property.

4.0 GROUNDWATER MONITORING ACTIVITIES

Field activities were conducted under a Site-specific Health and Safety Plan (HSP) and in accordance with federal and California Occupational Safety and Health Administration (OSHA) guidelines.

The Fourth Quarter 2011 groundwater monitoring activities consisted of: (1) field preparation activities; (2) collecting groundwater samples from five¹ of the eight groundwater monitoring wells located at the Site (MW-2, MW-4, MW-6, MW-8, and EW-1) as shown on Plate 2; and (3) report preparation and submittal. Groundwater sampling services were conducted under PES' direction by Confluence Environmental Field Services, Inc. (Confluence) of Sacramento, California. Laboratory chemical analyses of groundwater samples were performed by Curtis & Tompkins, Ltd. of Berkeley, California, a California-certified laboratory. The results of these activities are described below.

4.1 Groundwater-Level Measurements

Groundwater-level measurements were collected on November 17, 2011 prior to commencing groundwater purging and sampling activities. Depth to groundwater measurements were recorded to the nearest 0.01-foot using an electronic sounding probe. To reduce the potential for cross-contamination of wells during the collection of groundwater-level measurements, the portion of sounding probe that potentially came into contact with the well casing or groundwater was cleaned and double-rinsed between measurements. Depth-to-groundwater measurements were converted to groundwater-level elevations referenced to mean sea level (msl).

4.2 Groundwater Sampling and Analyses

Sampling of the wells was performed on November 17, 2011, after collecting groundwater-level measurements, Confluence commenced sampling activities at the wells on November 17, 2011. Prior to collecting samples, groundwater in each well casing was purged using a disposable polyethylene bailer. A minimum of three well volumes of groundwater was removed from each well during purging. Water quality parameters

¹ In accordance with the ACEH 2011 approval letter, no samples were collected from wells MW-3, MW-5 and MW-7 as these wells were requested by ACEH to be monitored by others in conjunction with the LUST case for the adjacent 6601 Shellmound Street site. As further requested by ACEH, all Site wells were gauged for depth-to-water measurements during the subject groundwater monitoring event, and laboratory analytical data generated for MW-3, -5, and -7 from the 6601 Shellmound Street site will be incorporated (as available) into the summary tables for the Site for completeness.

including temperature, pH, specific conductance, and turbidity were monitored during well purging and recorded on the Groundwater Sampling Forms (presented in Appendix A). As noted on the sampling forms, none of the wells dewatered during purging activities and all wells were allowed to recharge to at least 80% of the pre-purging water level prior to sampling. Following purging, groundwater samples were collected from each well in the proper laboratory provided containers using new polyethylene disposable bailers with bottom emptying devices.

The filled sample bottles were labeled, packaged, and stored in a chilled, thermally insulated cooler for delivery to the laboratory. Each sample was assigned a sample number and logged on the Chain-of Custody (COC) Record. The COC Record accompanied the samples to the laboratory to document sample possession from the time of collection. The laboratory analytical report and COC Record is provided with the laboratory analytical report in Appendix B.

The groundwater samples were analyzed for: (1) total petroleum hydrocarbons quantified as gasoline (TPHg) using U.S. EPA Test Method 8015B; (2) benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Test Method 8260B; and (3) fuel oxygenates methyltertiary-butyl ether (MTBE), ethyl tertiary-butyl ether (ETBE), di-isopropyl ether (DIPE), tert-butyl alcohol (TBA), ethylene dibromide (EDB), 1,2-dichloroethane (1,2-DCA), and tertiary-amyl methyl ether (TAME) using U.S. EPA Test Method 8260B.

5.0 GROUNDWATER MONITORING RESULTS

5.1 Groundwater Elevation Measurements

Construction details for the monitoring wells are provided in Table 1. Depth-to-groundwater measurements from November 17, 2011 and the calculated groundwater elevations (referenced to the North American Vertical Datum of 1988 [NAVD88]) are summarized in Table 2.

Groundwater-level elevations collected from the monitoring wells on November 17, 2011 ranged from 6.16 feet above mean sea level (feet msl; MW-6) to 8.35 feet msl (MW-7). Groundwater elevation contours developed for November 17, 2011 are presented on Plate 3. In general, groundwater elevations are slightly lower than measurements obtained during Second Quarter 2011. Historical Site groundwater-level elevation data is also presented in Appendix C. Based on measured water levels on November 17, 2011, groundwater flow direction at the Site was calculated to be toward the southwest, with an approximate gradient ranging from 0.004 to 0.005 foot per foot. The direction of groundwater flow and gradient are consistent with historical data, and with regional groundwater flow directions (generally westward, toward San Francisco Bay).

5.2 Groundwater Analytical Results

The results of laboratory analyses of groundwater samples are presented in Table 3. The concentrations of petroleum hydrocarbons detected in groundwater at the Site are shown on Plate 4. The laboratory analytical report for groundwater samples collected during the subject groundwater sampling event is provided in Appendix B. A table of analytical results from historical monitoring events (1990 to 2000) is presented in Appendix C. Results for analytes not detected and not listed in Table 2 are provided in the laboratory analytical report.

Concentrations of TPHg and BTEX during the Fourth Quarter 2011 event for wells nearest the source area (wells MW-2 and EW-1) are generally equal to or slightly higher than Second Quarter 2011 results, but lower than results from the Fourth Quarter 2010 monitoring event. Taken as a whole the results indicate that, when compared to historical levels (Appendix C), concentrations of TPHg and BTEX have consistently declined over time and represent a long-term trend of decreasing concentrations at wells MW-2 and EW-1.

Groundwater samples from wells MW-4 and MW-6 (in the area downgradient of the former UST) had low or non-detected concentrations of TPHg, BTEX, and fuel oxygenates, consistent with samples from Second Quarter 2011. In well MW-4 only a low concentration of benzene (1.3 µg/L) was detected. TPHg, BTEX, and fuel oxygenates were not detected at or above their respective laboratory reporting limits in well MW-6.

In upgradient well MW-8, TPHg and BTEX were detected during the current monitoring event, but at concentrations significantly lower than were detected during the Fourth Quarter 2010 event. These constituents were not detected during the Second Quarter 2011 event, with the exception of a low detection of benzene (0.60 µg/L).

5.3 Quality Assurance/Quality Control Assessment of Chemical Data

The quality of the chemical data reported by Curtis & Tompkins was assessed from the results of internal laboratory spikes, method blanks, and field duplicates, and indicate the following:

- The data are within acceptable recovery limits;
- The results for the duplicate sample collected at MW-8 indicate good reproducibility based on detections in both the primary and duplicate sample;
- The samples were analyzed within acceptable EPA holding times; and
- The data from Curtis & Tompkins are considered to be representative and of good quality.

6.0 CONCLUSIONS

The Fourth Quarter 2011 groundwater monitoring event is the 42nd sampling event performed at the Site since November 1989. The results of the recent groundwater monitoring event, taken with results from historical groundwater monitoring activities, indicate the following:

- Depth-to-water measurements and corresponding groundwater elevations collected during the Fourth Quarter 2011 groundwater monitoring indicate that (1) the direction of groundwater flow in the vicinity of the former UST is to the southwest with a shallow gradient; and (2) the direction of groundwater flow is consistent with historical groundwater monitoring data;
- Concentrations of TPHg and BTEX in wells MW-2 and EW-1 (in the near vicinity of the former UST) have continued a decreasing trend compared to historical data and are expected to continue to attenuate over time;
- Concentrations of TPHg and BTEX in downgradient wells MW-4 and MW-6, when compared to prior monitoring data, suggest the plume is stable or shrinking;
- Groundwater concentrations at the Site are all below the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Limits (ESLs) for potential vapor intrusion concerns at commercial/industrial sites; and
- TPHg and BTEX were detected in upgradient well MW-8 during the current monitoring event, but at concentrations significantly lower than those detected during the Fourth Quarter 2010 event. TPHg and BTEX were not detected at or above their respective laboratory reporting limits during the Second Quarter 2011 event, with the exception of a low detection of benzene (0.60 µg/L). The detected concentrations are below the ESLs for potential vapor intrusion concerns at commercial/industrial sites. Monitoring of MW-8 should be continued to evaluate groundwater conditions in the vicinity of the well.

7.0 CLOSURE

The Fourth Quarter 2011 groundwater monitoring event was successfully completed. Anticipated additional work to be conducted during the first and second quarter 2012 include implementation of soil, sub-slab soil vapor, and groundwater investigation programs under Work Plans approved by ACEH. In accordance with current ACEH requirements, the next groundwater monitoring event is scheduled for the second quarter 2012.

8.0 REFERENCES

- Alameda County Environmental Health (ACEH), 2009. *Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511, Emery Bay Plaza, 1650 65th Street, Emeryville, CA 94608.* July 7.
- ACEH, 2010. *Work Plan Approval, Request for Information and a Work Plan; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511, Emery Bay Plaza, 1650 65th Street, Emeryville, CA 94608.* August 16.
- ACEH, 2011a. *Request for Work Plan; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511, Emery Bay Plaza, 1650 65th Street, Emeryville, CA 94608.* April 1.
- ACEH, 2011b. *Request for Work Plan Addendum; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511, Emery Bay Plaza, 1650 65th Street, Emeryville, CA 94608.* November 1.
- California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), 2010. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan).* December 31.
- Engineering-Science (ES) 1987. *Soil Remediation Plan for the Southeastern Corner of 1650 65th Street Property, Emeryville, California.* December 18.
- PES Environmental, Inc. 2001. *Groundwater Monitoring Report and Request for Closure, Emery Bay Plaza, 1650 65th Street, Emeryville, California.* April 27.
- PES Environmental, Inc. 2009. *Work Plan for Groundwater Monitoring and Preferential Pathway Study, 1650 65th Street, Emeryville, California.* October 7.
- PES Environmental, Inc. 2010. *Results of Groundwater Monitoring and Preferential Pathway Study, and Request for Case Closure, 1650 65th Street, Emeryville, California.* October 25.

TABLES

Table 1
Summary of Groundwater Monitoring Well Construction Details
1650 65th Street
Emeryville, California

Well Identification	Top of Casing (feet MSL)	Date Installed	Screened Interval (feet bgs)	Filter Pack Interval (feet bgs)	Screen Slot Size (inches)
EW-1	18.25	28-Mar-90	8.3 - 28.9	6.3 - 30.0	0.020
MW-2	18.24	28-Sep-89	8.3 - 28.0	7.0 - 29.0	0.020
MW-3	14.92	14-Nov-89	6.6 - 18.0	5.3 - 18.3	0.020
MW-4	14.73	15-Nov-89	6.1 - 15.8	5.1 - 16.3	0.020
MW-5	15.34	16-Nov-89	6.7 - 17.9	5.3 - 17.9	0.020
MW-6	14.53	27-Mar-90	7.1 - 21.8	5.7 - 22.1	0.020
MW-7	15.45	29-Mar-90	6.7 - 18.7	5.0 - 18.7	0.020
MW-8	17.52	22-Sep-94	6 - 26	4.0 - 26.0	0.020

Notes:

MSL - mean sea level, referenced to North American Vertical Datum of 1988 (NAVD88).

bgs - below ground surface.

Table 2
Depth-to-Groundwater and Groundwater Elevations
1650 65th Street
Emeryville, California
(Historical Data in Appendix C)

Well Identification	Measurement Date	Top of Casing Elevation (feet MSL)	Depth to Groundwater (feet btoc)	Groundwater Elevation (feet MSL)
EW-1	10/6/2010	18.25	10.39	7.86
	5/26/2011	18.25	10.30	7.95
	11/17/2011	18.25	10.61	7.64
MW-2	10/6/2010	18.24	10.36	7.88
	5/26/2011	18.24	10.29	7.95
	11/17/2011	18.24	10.73	7.51
MW-3	10/6/2010	14.92	8.41	6.51
	5/26/2011	14.92	7.72	7.20
	11/17/2011	14.92	8.7	6.22
MW-4	10/6/2010	14.73	8.03	6.70
	5/26/2011	14.73	7.83	6.90
	11/17/2011	14.73	8.02	6.71
MW-5	10/6/2010	15.34	6.83	8.51
	5/26/2011	15.34	6.45	8.89
	11/17/2011	15.34	7.10	8.24
MW-6	10/6/2010	14.53	8.19	6.34
	5/26/2011	14.53	7.95	6.58
	11/17/2011	14.53	8.37	6.16
MW-7	10/6/2010	15.45	5.78	9.67
	5/26/2011	15.45	5.80	9.65
	11/17/2011	15.45	7.10	8.35
MW-8	10/6/2010	17.52	10.85	6.67
	5/26/2011	17.52	10.46	7.06
	11/17/2011	17.52	10.85	6.67

Notes:

MSL - mean sea level, referenced to North American Vertical Datum of 1988 (NAVD88).

btoc - below top of casing

Table 3
Summary of Groundwater Analytical Data
1650 65th Street
Emeryville, California
(Historical Data in Appendix C)

Sample Identification	Date Collected	TPHmo ($\mu\text{g/L}$)	TPHd ($\mu\text{g/L}$)	TPHg ($\mu\text{g/L}$)	BTEX & Fuel Oxygenates							HVOCs	Metals (mg/L)	TDS (mg/L)
					Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethylbenzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)	TBA ($\mu\text{g/L}$)	DIPE ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)			
EW-1	10/7/2010	--	--	1,200	170	36	6.5	16.2	ND (25)	ND (1.3)	ND (1.3)	--	--	--
	5/26/2011	ND (300)	--	1,100	110	4.3	1.6	8.4	ND (20)	ND (1.0)	ND (1.0)	ND (1.0)	--	720
	11/17/2011	--	--	1,100	73	27	3.8	11.1	ND (10)	0.62	ND (0.50)	--	--	--
MW-2	10/7/2010	--	--	6,100	700	510	190	641	ND (10)	ND (0.5)	ND (0.5)	--	--	--
	5/26/2011	ND (300)	--	1,900	220	18	8.2	54.5	ND (40)	ND (2.0)	ND (2.0)	ND (2.0)	ND*	790
	11/17/2011	--	--	2,400	270	120	29	135	ND (40)	ND (2.0)	ND (2.0)	--	--	--
MW-3	10/7/2010	--	--	110	4.2	0.90	0.80	1.8	ND (10)	ND (0.5)	1.4	--	--	--
MW-4	10/7/2010	--	--	52	1.5	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	14	ND (0.5)	--	--	--
	5/26/2011	ND (300)	--	64 Y	1.0	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	15	ND (0.5)	ND (0.5)	ND*	5,340
	11/17/2011	--	--	ND (50)	1.3	ND (0.5)	ND (0.5)	ND (0.5)	ND (10)	ND (0.50)	ND (0.50)	--	--	--
MW-5	3/6/2010	--	--	250 Y	99 Y	ND (0.5)	ND (0.5)	ND (0.5)	ND (10)	ND (0.5)	2	--	--	1,290
MW-6	10/7/2010	--	--	ND (50)	1.7	1.0	0.9	2.3	ND (10)	ND (0.5)	ND (0.5)	--	--	--
	5/26/2011	ND (300)	--	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (10)	ND (0.5)	ND (0.5)	ND (0.5)	ND*	4,440
	11/17/2011	--	--	ND (50)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (10)	ND (0.5)	ND (0.5)	--	--	--
MW-7	3/6/2010	--	ND (50)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (20)	ND (1)	ND (1)	--	--	780
MW-8	10/6/2010	--	ND (300) / ND (300)	--	2,900	1,500	15	ND (10)	ND (200)	ND (10)	ND (10)	--	--	--
	5/26/2011	--	--	ND (50) / ND (50)	0.60 / 0.70	ND (0.5) / ND (0.5)	ND (0.5) / ND (0.5)	ND (0.5) / ND (0.5)	ND (10) / ND (10)	ND (0.5) / ND (0.5)	ND (0.5) / ND (0.5)	3.7 / 3.6	ND*	2,710 / 2,750
	11/17/2011	--	--	73 / 65	570 / 520	6.3 / 5.1	0.76 / 0.63	4.2 / 3.3	ND (10) / ND (10)	ND (0.5) / ND (0.5)	ND (0.5) / ND (0.5)	--	--	--
Vapor Intrusion ESL - C/I Exposure ⁽⁴⁾	--	--	--	1,800	530,000	170,000	160,000	--	--	80,000	120	--	--	--
Drinking Water Ceiling ESL ⁽²⁾	100	100	100	170	40	30	20	50,000	--	5	5	--	--	--
Drinking Water ESL ⁽³⁾	210	210	210	1	150	300	1,800	12	--	13	5	--	500 to 1,500	
Non-Drinking Water Ceiling ESL ⁽¹⁾	2,500	5,000	5,000	20,000	400	300	5,300	50,000	--	1,800	360	--	--	--
San Francisco Bay Basin Plan ⁽⁵⁾	--	--	--	1	150	300	1,750	--	--	13	5	--	3,000	

Notes:

BTEX and Fuel Oxygenates analyzed using U.S. Environmental Protection Agency (EPA) Test Method 8260B.

TPHg analyzed using EPA Test Method 8015B

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPHmo = total petroleum hydrocarbons quantified as motor oil

TPHd = total petroleum hydrocarbons quantified as diesel

TPHg = total petroleum hydrocarbons quantified as gasoline

TBA = Tert-butyl alcohol

DIPE = Diisopropyl Ether

MTBE = Methyl tert-butyl ether

TCE = Trichloroethylene

TDS = Total Dissolved Solids

HVOCs = Halogenated volatile organic compounds

ND (50) / ND (50) = Indicates primary / duplicate sample results

Only detected analytes are tabulated here. See Appendix B for laboratory analytical reports.

Y = sample exhibits chromatographic pattern which does not resemble laboratory standard.

-- = Not applicable or not analyzed

ND* = LUFT -5 metals reporting limits of 5.0 mg/L for cadmium, chromium, lead and nickel, and 20 mg/L for zinc

(1) California Regional Water Quality Control Board, San Francisco Region (RWQCB) Environmental Screening Level (ESL), Non-Drinking Water Gross Contamination Ceiling Levels (Table I-2; May 2008)

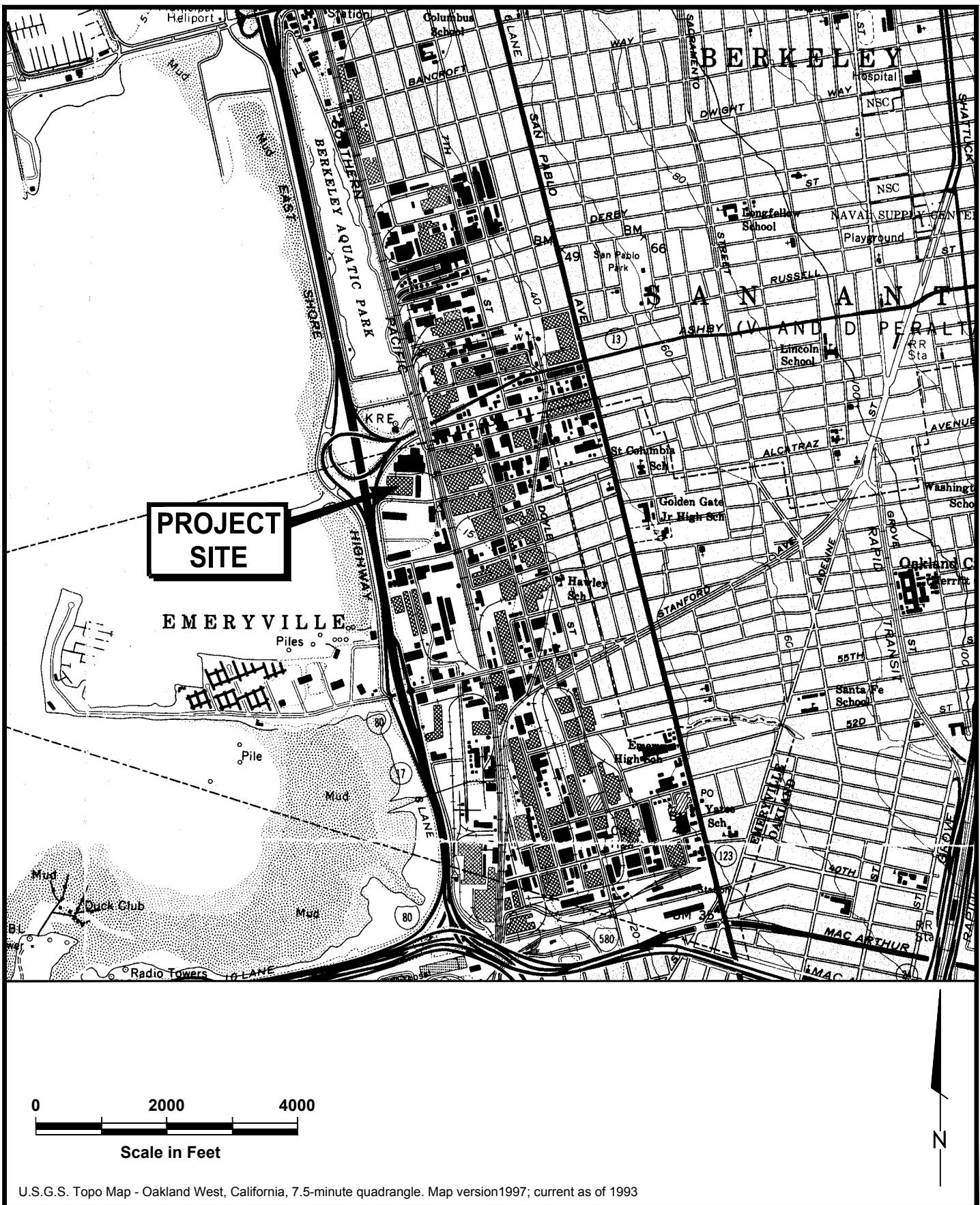
(2) RWQCB Drinking Water Ceiling Levels (Table I-1; May 2008).

(3) RWQCB Drinking Water Screening Levels (Table F-3; May 2008).

(4) RWQCB Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns (Table E-1; May 2008).

(5) RWQCB San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan), December 2010.

ILLUSTRATIONS



PES Environmental, Inc.

Site Location Map

1650 65th Street
Emeryville, California

PLATE

1

1211.001.01.001 121100101003 11Q4 1-4

CJB

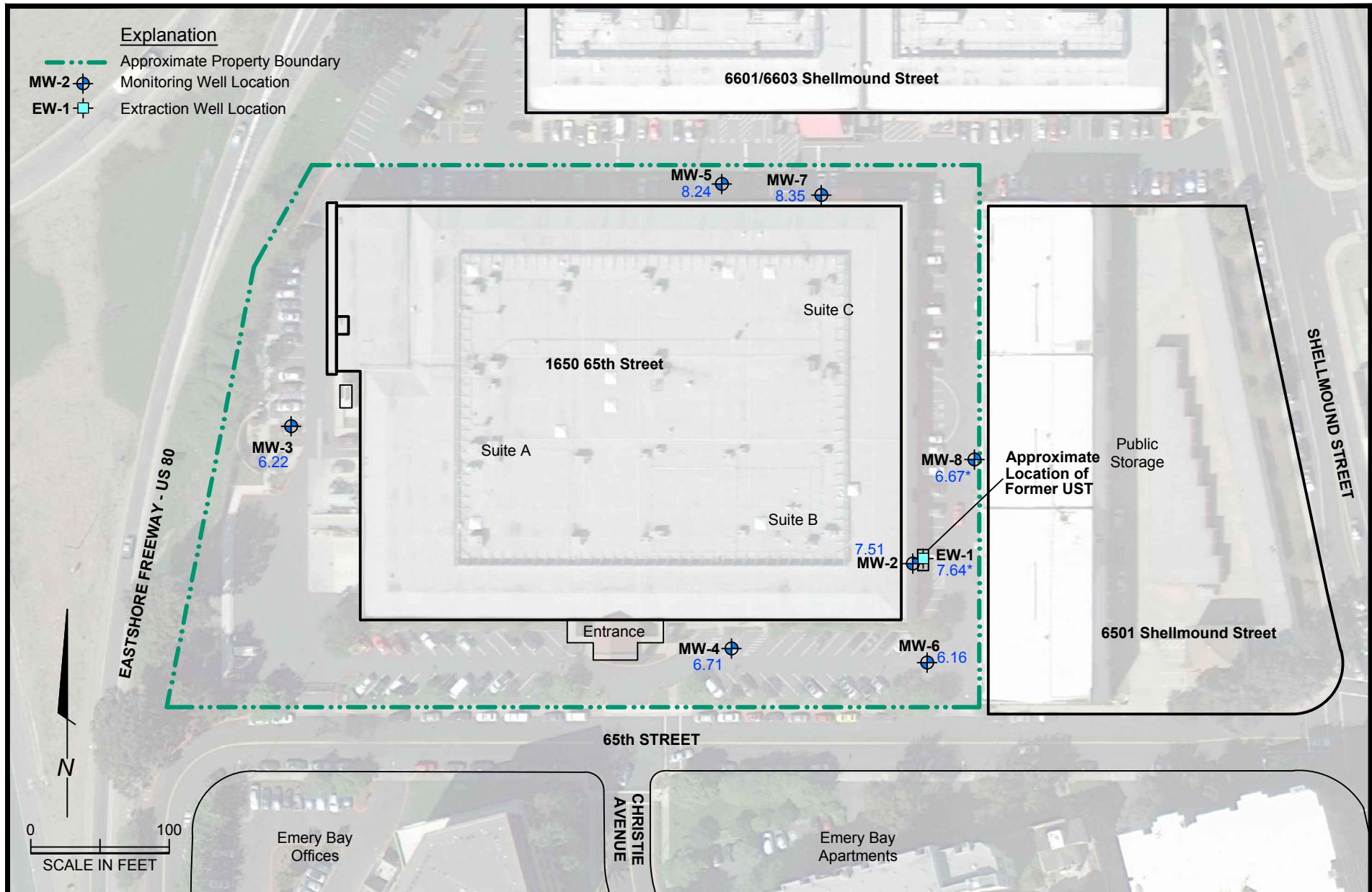
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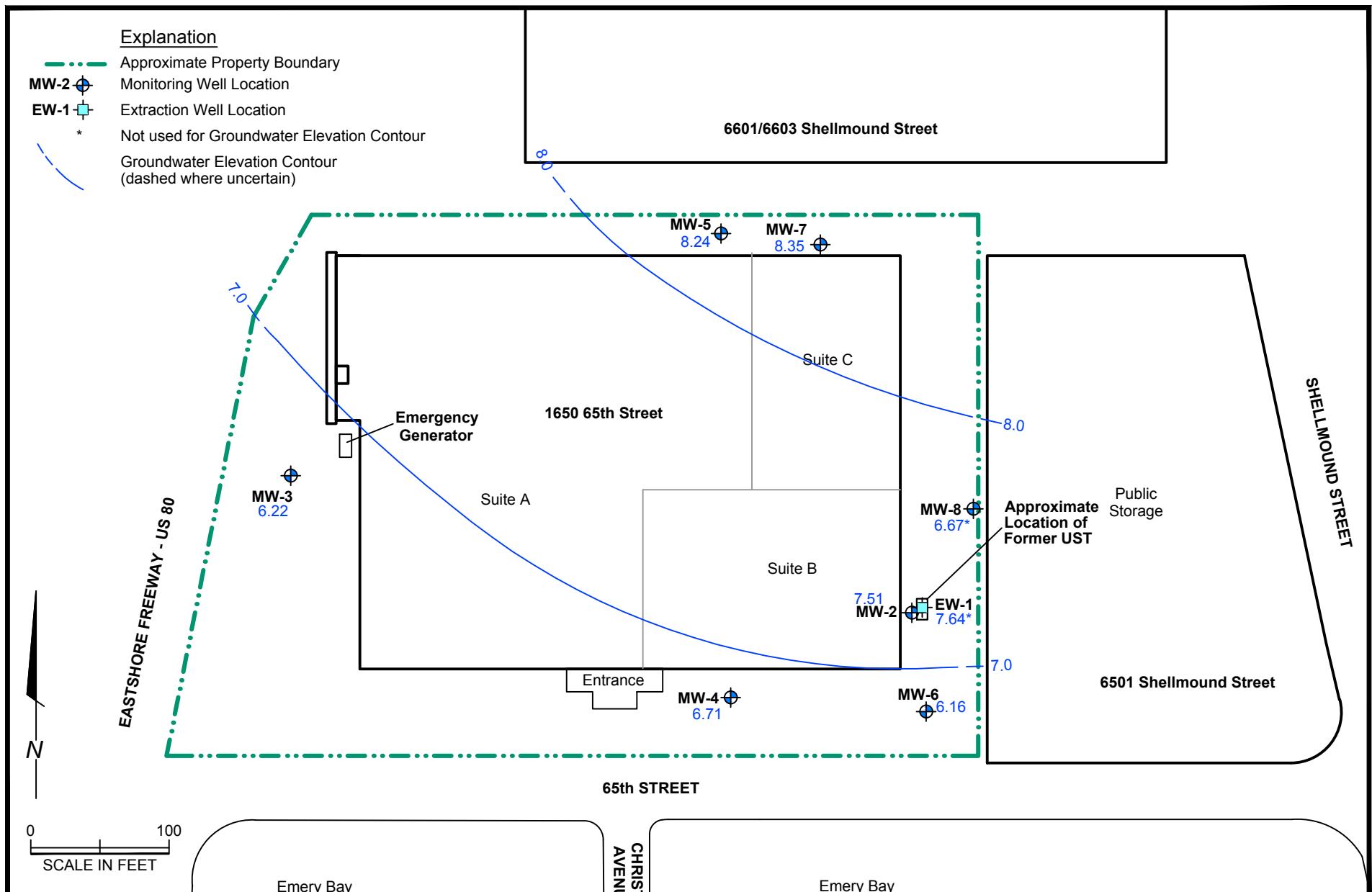
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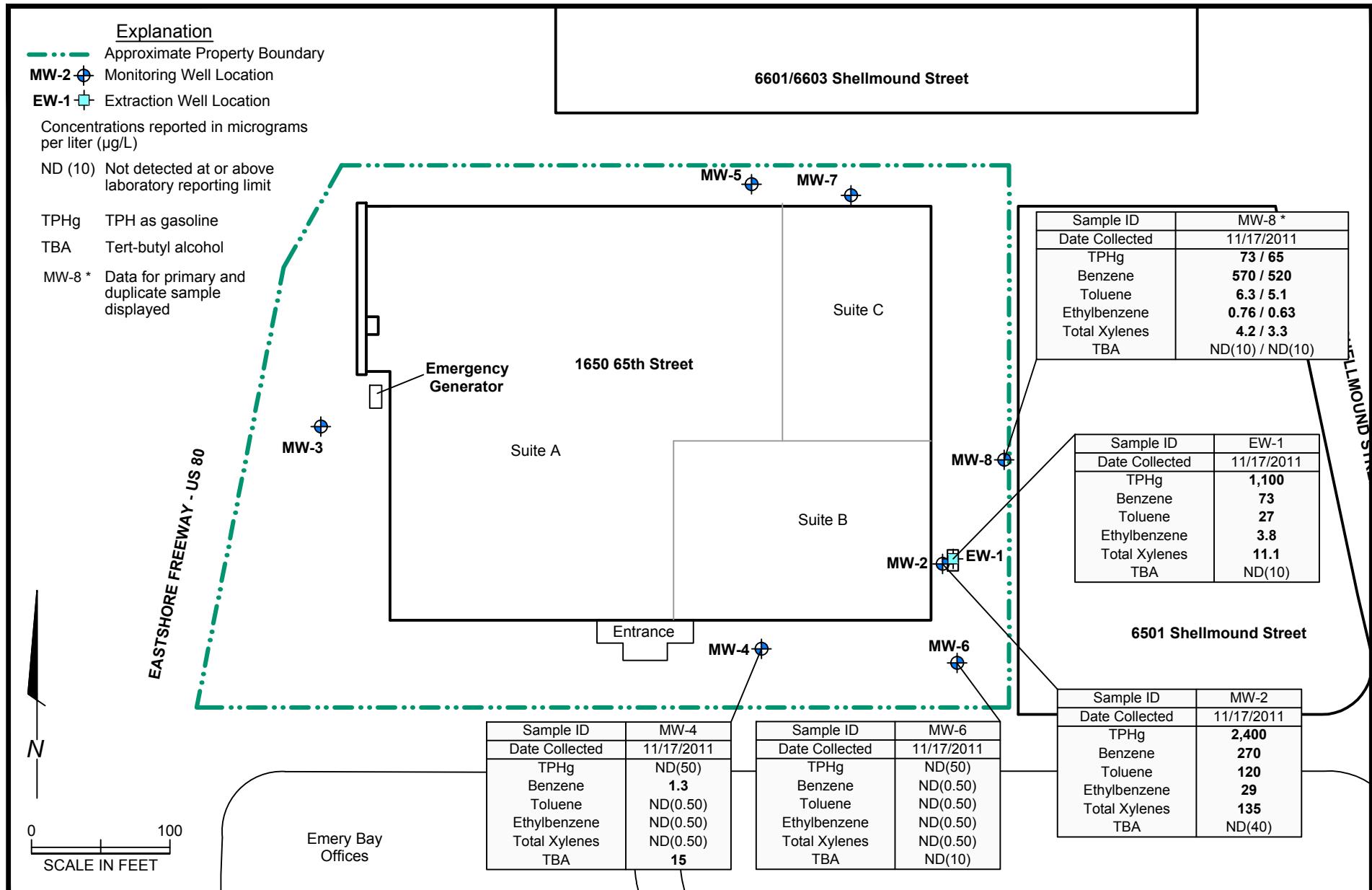
REVIEWED BY

1/12

DATE







APPENDIX A

MONITORING WELL SAMPLING FORMS



Confluence Environmental, Inc.
3308 El Camino Ave, Suite 300 # 140
Sacramento, CA 95821
916-760-7641 - main
916-473-8617 - fax
www.confluence-env.com

Chain of Custody

Page 1 of 1

Project Name: Emeryville Site
Job Number: E1-11117
TAT: STANDARD 5 DAY 2 DAY 24 HOUR OTHER:

Lab: Curtis & Tompkins Address: 2323 5th St, Berekely Contact: Phone/ Fax: 510-486-0900				Site Address: 1650 65th St, Emeryville California Global ID No.: Include EDF w/ Report: Yes No *per agreement w/ PES Consultant / PM: PES / Chris Baldassari Phone / Fax: 415-899-1600				Confluence PM: Jason Brown Phone / Fax: 916-760-7641 / 916-473-8617 Confluence Log Code: CESC Report to: Chris Baldassari Invoice to: PES							
Sample ID	Time	Date	Matrix	Laboratory No.	No. of Containers	Preservative				Requested Analysis				Notes and Comments	
						Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	TPH-G	BTEX, Oxygenates(5), 1,2-DCA, EDB			
EW-1	1450	11-17-01	X		6			X			X	X			
MW-2	1445		X		6			X			X	X			
MW-4	1530		X		6			X			X	X			
MW-6	1505		X		6			X			X	X			
MW-8	1520		X		6			X			X	X			
2 Dsp MW-8A	1535		X		6			X			X	X			
TB	-	-	X		1			X			X	X			3 broken in transit

Sampler's Name: E. Morse

Sampler's Company: Confluence Environmental

Shipment Date:

Shipment Method:

Special Instructions: *Metals samples were field filtered.

Relinquished By / Affiliation

D2

1

Accepted By: L. A. GUNN

1

Date _____

Equipment Calibration Log

Notes/comments:

Well Maintenance Inspection Form

Client: PES

Site: 1650 65th st, Emeryville

Date: 11-17-11

Job #: E1-11117

Technician: E. Morse

Page 1 of 1

Notes:

Repair codes: **rt**=retap/ bolts added or replaced **as**=annular seal repair.

Water Level Measurements

Job Number: E1-11117

Date: 11/17/11 Client: PES

Site: 1650 65th St. Emeryville

Purging And Sampling Data Sheet

Job#: E1-111117	Sampler:	E Morse	Client:	PES
Well ID: EW /	Date:	11/17/11	Site:	Emeryville
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 10.61	Total Depth: 28.05		
Purge equipment: ES - diam: Bladder Peri Waterra Positive Air Displacement Ext. System				
disp bailer teflon bailer other:	Tubing:	OD: New Dedicated NA		
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:				
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163			
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)			

$$1 \text{ Volume} = 11.33 \times 3 = 34.0 \quad (\text{Total Purge}) \qquad 80\% = 14.09$$

Did well dewater? YES NO Total volume removed: 34.5 (gal/L)

Sample method: Disp Bailer Dred. Tubing New Tubing Ext. Port Other:

Sample date: 11/17/11 Sample time: 1450 DTW at sample: 10.76

Sample ID: EW-1 Lab: Curtis & Tompkins Number of bottles: 6

Analysis: TPH-G, BTEX, Oxy's(5), 1,2-DCA, EDB

Equipment blank ID _____ Field blank ID _____

Duplicate ID: Pre-purge DO: Post purge DO:

Pre-purge ORP: Post purge ORP:

NAPL depth: Volume of NAPL: Volume removed: ml

Purging And Sampling Data Sheet

Job#: E1-111117	Sampler:	E Morse	Client:	PES
Well ID: MW-2	Date:	11/17/11	Site:	Emeryville
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 0.73 Total Depth: 23.75			
Purge equip: TS - diam: Bladder Peri Waterra Positive Air Displacement Ext. System				
disp bailer teflon bailer other:	Tubing: OD: New Dedicated NA			
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:				
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ³ X 0.163			
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)			

$$1 \text{ Volume} = 2.0 \quad \times 3 = 6.0 \quad (\text{Total Purge}) \quad 80\% = 13.33$$

Did well dewater? YES NO Total volume removed: 6.0 (gal)/L

Sample method Disp Bailey Ded. Tubing New Tubing Ext. Port Other:

Sample date: 11/17/11 Sample time: 1445 DTW at sample: 1081

Sample ID: MW-2 Lab: Curtis & Tompkins Number of bottles: 6

Analysis: TPH-G, BTEX, Oxy's(5), 1,2-DCA, EDB

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Equipment blank ID @	Field blank ID @	
Duplicate ID:	Pre-purge DO:	Post purge DO:
Fe2 ⁺ :	Pre-purge ORP:	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

Purging And Sampling Data Sheet

Job#: E1-111117	Sampler:	E Morse	Client:	PES
Well ID: Mhw-4	Date:	11/17/11	Site:	Emeryville
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 8.02 Total Depth: 15.92			
Purge equip: <u>ES-diam:</u> Bladder Peri Waterra Positive Air Displacement Ext. System				
disp bailer teflon bailer other:	Tubing: OD: New Dedicated NA			
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:				
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163			
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)			

$$1 \text{ Volume} = 5.13 \quad x \quad 3 = 15.4 \quad (\text{Total Purge}) \quad 80\% = 9.60$$

Did well dewater? YES NO Total volume removed: (gal / L)

Sample method: Disp Bailer Ded. Tubing New Tubing Ext. Port Other:

Sample date: 11/17/11 Sample time: 1530 DTW at sample: 8.9

Sample ID: MWS-4 Lab: Curtis & Tompkins Number of bottles: 6

Analysis: TPH-G, BTEX, Ox's(5), 1,2-DCA, FDR

Table 1. Summary of the main characteristics of the four groups of patients.

Equipment blank ID @ Field blank ID @

Duplicate ID: Pre-purge DO: Post purge DO:

Fe^{2+} : Pre-purge ORP: Post-purge ORP:

Pre- : Pre-purge ORP: Post-purge ORP:

Purging And Sampling Data Sheet

Job#: E1-111117	Sampler:	E Morse	Client:	PES	
Well ID: MW-6	Date:	11/17/11	Site:	Emeryville	
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 8.37 Total Depth: 18.81				
Purge equip: (ES - diam)	Bladder	Peri	Waterra	Positive Air Displacement	Ext. System
disp bailer	teflon bailer	other:	Tubing: OD: New Dedicated NA		
Purge method: 3-5 Case Volume	Micro/Low-Flow	Extraction	Other:		
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163				
(TD - DTW X Multiplier = 1 Volume		80% Recovery (TD - DTW X 0.20 + DTW)			

$$1 \text{ Volume} = 16.78 \times 3 = 20.36 \text{ (Total Purge)} \quad 80\% = 10.46$$

Did well dewater? YES NO Total volume removed: 21.0 (gal / L)

Sample methods: Disp Bailer Ded. Tubing New Tubing Ext. Port Other:

Sample date: 11/17/11 Sample time: 1505 DTW at sample: 8.97

Sample ID: MW-6 Lab: Curtis & Tompkins Number of bottles: 6

Analysis: TPH-G, BTEX, Oxy's(5), 1,2-DCA, EDB

Environ Monit Assess (2010) 162:1–10
DOI 10.1007/s10661-009-1033-2

Equipment blank ID	@	Field blank ID	@
Duplicate ID:		Pre-purge DO:	Post purge DO:
Fe ²⁺ :		Pre-purge ORP:	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed:	ml

Purging And Sampling Data Sheet

APPENDIX B

LABORATORY ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY DOCUMENTATION



Curtis & Tompkins, Ltd.

Analytical Laboratories, Since 1878



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 232883
ANALYTICAL REPORT

PES Environmental, Inc.
1682 Novato Boulevard
Novato, CA 94947

Project : 1211-001-01
Location : 1650 65th St. Emeryville
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
EW-1	232883-001
MW-2	232883-002
MW-4	232883-003
MW-6	232883-004
MW-8	232883-005
MW-8A	232883-006
TB	232883-007

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature:



Project Manager

Date: 12/02/2011

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: **232883**
Client: **PES Environmental, Inc.**
Project: **1211-001-01**
Location: **1650 65th St. Emeryville**
Request Date: **11/17/11**
Samples Received: **11/17/11**

This data package contains sample and QC results for seven water samples, requested for the above referenced project on 11/17/11. The samples were received cold and intact.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for tert-butyl alcohol (TBA) in the ICV analyzed 11/11/11 00:12; affected data was qualified with "b". Low response was observed for tert-butyl alcohol (TBA) in the CCV analyzed 11/30/11 08:42; this analyte met minimum response criteria, and affected data was qualified with "b". No other analytical problems were encountered.



Confluence Environmental, Inc.
3308 El Camino Ave, Suite 300 #148
Sacramento, CA 95821
916-760-7641 - main
916-473-8617 - fax
www.confluence-env.com

Chain of Custody

Page 1 of 1

Project Name: Emeryville Site

232883

Job Number: E1-11117

TAT: STANDARD 5 DAY 2 DAY 24 HOUR OTHER:

Lab: Curtis & Tompkins Address: 2323 5th St, Berekely Contact: Phone/ Fax: 510-486-0900					Site Address: 1650 65th St, Emeryville California Global ID No.: Include EDF w/ Report: Yes No *per agreement w/ PES Consultant / PM: PES / Chris Baldassari Phone / Fax: 415-899-1600					Confluence PM: Jason Brown Phone / Fax: 916-760-7641 / 916-473-8617 Confluence Log Code: CESC Report to: Chris Baldassari Invoice to: PES						
	Sample ID	Time	Date	Matrix	Laboratory No.	No. of Containers	Preservative				Requested Analysis				Notes and Comments	
							Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	TPH-G	BTEX, Oxygenates(5), 1,2-DCA, EDB			
1	EW-1	1450	11-17-11	✓		6			✓		✓	✓				
2	MW-2	1445	1	✓		6			✓		✓	✓				
3	MW-4	1530		✓		6			✓		✓	✓				
4	MW-6	1505		✓		6			✓		✓	✓				
5	MW-8	1520		✓		6			✓		✓	✓				
b	0 MW-8A	1525	1	✓		6			✓		✓	✓				
7	• TB	-	-	✓		1			✓		✓	✓				3 broken in transit
Sampler's Name: <u>E. Morse</u>					Relinquished By / Affiliation				Date	Time	Accepted By / Affiliation				Date	Time
Sampler's Company: Confluence Environmental					<u>S</u>				11/17/11	1605	<u>Pat Langley</u>				11/17/11	1605
Shipment Date:																
Shipment Method:																
Special Instructions: *Metals samples were field filtered																

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 272 883 Date Received 11/17/11 Number of coolers 1
 Client Confluence Project E I-11117

Date Opened 11/17/11 By (print) David Solberg (sign) D.S.
 Date Logged in \ By (print) L. Choy (sign) L.C.

1. Did cooler come with a shipping slip (airbill, etc) _____ YES NO
 Shipping info _____

2A. Were custody seals present? YES (circle) on cooler on samples NO
 How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? _____ YES NO N/A

3. Were custody papers dry and intact when received? _____ YES NO N/A

4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO N/A

5. Is the project identifiable from custody papers? (If so fill out top of form) _____ YES NO N/A

6. Indicate the packing in cooler: (if other, describe) _____

Bubble Wrap Foam blocks Bags None
 Cloth material Cardboard Styrofoam Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: Wet Blue/Gel None Temp(°C) 4.5

Samples Received on ice & cold without a temperature blank

Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
 If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ YES NO N/A

10. Are there any missing / extra samples? _____ YES NO N/A

11. Are samples in the appropriate containers for indicated tests? _____ YES NO N/A

12. Are sample labels present, in good condition and complete? _____ YES NO N/A

13. Do the sample labels agree with custody papers? _____ YES NO N/A

14. Was sufficient amount of sample sent for tests requested? _____ YES NO N/A

15. Are the samples appropriately preserved? _____ YES NO N/A

16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A

17. Did you document your preservative check? _____ YES NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A

20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A

21. Was the client contacted concerning this sample delivery? _____ YES NO

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

1) Rec'd 3 broken VOAs that was broken during transit as stated on COC
 2) -oob 1.F 6 live bubble

Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	EW-1	Diln Fac:	1.000
Lab ID:	232883-001	Sampled:	11/17/11
Matrix:	Water	Received:	11/17/11
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	1,100	50	181754	12/01/11
tert-Butyl Alcohol (TBA)	ND	10	181782	11/30/11
Isopropyl Ether (DIPE)	0.62	0.50	181782	11/30/11
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	181782	11/30/11
Methyl tert-Amyl Ether (TAME)	ND	0.50	181782	11/30/11
MTBE	ND	0.50	181782	11/30/11
1,2-Dichloroethane	ND	0.50	181782	11/30/11
Benzene	73	0.50	181782	11/30/11
Toluene	27	0.50	181782	11/30/11
1,2-Dibromoethane	ND	0.50	181782	11/30/11
Ethylbenzene	3.8	0.50	181782	11/30/11
m,p-Xylenes	9.1	0.50	181782	11/30/11
o-Xylene	2.0	0.50	181782	11/30/11

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	93	80-127	181782	11/30/11
1,2-Dichloroethane-d4	103	73-145	181782	11/30/11
Toluene-d8	98	80-120	181782	11/30/11
Bromofluorobenzene	96	80-120	181782	11/30/11

ND= Not Detected

RL= Reporting Limit

Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	181754
Lab ID:	232883-002	Sampled:	11/17/11
Matrix:	Water	Received:	11/17/11
Units:	ug/L	Analyzed:	11/30/11
Diln Fac:	4.000		

Analyte	Result	RL
Gasoline C7-C12	2,400	200
tert-Butyl Alcohol (TBA)	ND	40
Isopropyl Ether (DIPE)	ND	2.0
Ethyl tert-Butyl Ether (ETBE)	ND	2.0
Methyl tert-Amyl Ether (TAME)	ND	2.0
MTBE	ND	2.0
1,2-Dichloroethane	ND	2.0
Benzene	270	2.0
Toluene	120	2.0
1,2-Dibromoethane	ND	2.0
Ethylbenzene	29	2.0
m,p-Xylenes	100	2.0
o-Xylene	35	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	100	73-145
Toluene-d8	103	80-120
Bromofluorobenzene	102	80-120

ND= Not Detected

RL= Reporting Limit

Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	MW-4	Diln Fac:	1.000
Lab ID:	232883-003	Sampled:	11/17/11
Matrix:	Water	Received:	11/17/11
Units:	ug/L	Analyzed:	11/30/11

Analyte	Result	RL	Batch#
Gasoline C7-C12	ND	50	181754
tert-Butyl Alcohol (TBA)	15	10	181782
Isopropyl Ether (DIPE)	ND	0.50	181782
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	181782
Methyl tert-Amyl Ether (TAME)	ND	0.50	181782
MTBE	ND	0.50	181782
1,2-Dichloroethane	ND	0.50	181782
Benzene	1.3	0.50	181782
Toluene	ND	0.50	181782
1,2-Dibromoethane	ND	0.50	181782
Ethylbenzene	ND	0.50	181782
m,p-Xylenes	ND	0.50	181782
o-Xylene	ND	0.50	181782

Surrogate	%REC	Limits	Batch#
Dibromofluoromethane	91	80-127	181782
1,2-Dichloroethane-d4	102	73-145	181782
Toluene-d8	99	80-120	181782
Bromofluorobenzene	92	80-120	181782

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1

Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	MW-6	Diln Fac:	1.000
Lab ID:	232883-004	Sampled:	11/17/11
Matrix:	Water	Received:	11/17/11
Units:	ug/L	Analyzed:	11/30/11

Analyte	Result	RL	Batch#
Gasoline C7-C12	ND	50	181754
tert-Butyl Alcohol (TBA)	ND	10	181782
Isopropyl Ether (DIPE)	ND	0.50	181782
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	181782
Methyl tert-Amyl Ether (TAME)	ND	0.50	181782
MTBE	ND	0.50	181782
1,2-Dichloroethane	ND	0.50	181782
Benzene	ND	0.50	181782
Toluene	ND	0.50	181782
1,2-Dibromoethane	ND	0.50	181782
Ethylbenzene	ND	0.50	181782
m,p-Xylenes	ND	0.50	181782
o-Xylene	ND	0.50	181782

Surrogate	%REC	Limits	Batch#
Dibromofluoromethane	92	80-127	181782
1,2-Dichloroethane-d4	100	73-145	181782
Toluene-d8	99	80-120	181782
Bromofluorobenzene	95	80-120	181782

ND= Not Detected
 RL= Reporting Limit
 Page 1 of 1

Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	MW-8	Units:	ug/L
Lab ID:	232883-005	Sampled:	11/17/11
Matrix:	Water	Received:	11/17/11

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	73	50	1.000	181754	11/30/11
tert-Butyl Alcohol (TBA)	ND	10	1.000	181782	12/01/11
Isopropyl Ether (DIPE)	ND	0.50	1.000	181782	12/01/11
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	181782	12/01/11
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	181782	12/01/11
MTBE	ND	0.50	1.000	181782	12/01/11
1,2-Dichloroethane	ND	0.50	1.000	181782	12/01/11
Benzene	570	5.0	10.00	181790	12/01/11
Toluene	6.3	0.50	1.000	181782	12/01/11
1,2-Dibromoethane	ND	0.50	1.000	181782	12/01/11
Ethylbenzene	0.76	0.50	1.000	181782	12/01/11
m,p-Xylenes	3.1	0.50	1.000	181782	12/01/11
o-Xylene	1.1	0.50	1.000	181782	12/01/11

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	90	80-127	1.000	181782	12/01/11
1,2-Dichloroethane-d4	76	73-145	1.000	181782	12/01/11
Toluene-d8	97	80-120	1.000	181782	12/01/11
Bromofluorobenzene	94	80-120	1.000	181782	12/01/11

ND= Not Detected

RL= Reporting Limit

Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	MW-8A	Units:	ug/L
Lab ID:	232883-006	Sampled:	11/17/11
Matrix:	Water	Received:	11/17/11

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	65	50	1.000	181754	11/30/11
tert-Butyl Alcohol (TBA)	ND	10	1.000	181782	12/01/11
Isopropyl Ether (DIPE)	ND	0.50	1.000	181782	12/01/11
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	1.000	181782	12/01/11
Methyl tert-Amyl Ether (TAME)	ND	0.50	1.000	181782	12/01/11
MTBE	ND	0.50	1.000	181782	12/01/11
1,2-Dichloroethane	ND	0.50	1.000	181782	12/01/11
Benzene	520	4.2	8.333	181790	12/01/11
Toluene	5.1	0.50	1.000	181782	12/01/11
1,2-Dibromoethane	ND	0.50	1.000	181782	12/01/11
Ethylbenzene	0.63	0.50	1.000	181782	12/01/11
m,p-Xylenes	2.5	0.50	1.000	181782	12/01/11
o-Xylene	0.81	0.50	1.000	181782	12/01/11

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	92	80-127	1.000	181782	12/01/11
1,2-Dichloroethane-d4	81	73-145	1.000	181782	12/01/11
Toluene-d8	100	80-120	1.000	181782	12/01/11
Bromofluorobenzene	92	80-120	1.000	181782	12/01/11

ND= Not Detected

RL= Reporting Limit

Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	TB	Batch#:	181754
Lab ID:	232883-007	Sampled:	11/17/11
Matrix:	Water	Received:	11/17/11
Units:	ug/L	Analyzed:	11/30/11
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	99	73-145
Toluene-d8	105	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected

RL= Reporting Limit

Page 1 of 1

9.0

Batch QC Report

Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	181754
Units:	ug/L	Analyzed:	11/30/11
Diln Fac:	1.000		

Type: BS Lab ID: QC620648

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	80.76 b	65	46-141
Isopropyl Ether (DIPE)	25.00	22.32	89	52-139
Ethyl tert-Butyl Ether (ETBE)	25.00	21.94	88	56-131
Methyl tert-Amyl Ether (TAME)	25.00	18.90	76	65-120
MTBE	25.00	17.74	71	59-123
1,2-Dichloroethane	25.00	26.14	105	71-135
Benzene	25.00	24.26	97	80-122
Toluene	25.00	22.68	91	80-120
1,2-Dibromoethane	25.00	20.21	81	79-120
Ethylbenzene	25.00	24.68	99	80-120
m,p-Xylenes	50.00	49.04	98	80-120
o-Xylene	25.00	23.27	93	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	115	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-120

Type: BSD Lab ID: QC620649

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	80.13 b	64	46-141	1	31
Isopropyl Ether (DIPE)	25.00	21.90	88	52-139	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	21.38	86	56-131	3	20
Methyl tert-Amyl Ether (TAME)	25.00	17.53	70	65-120	8	20
MTBE	25.00	17.17	69	59-123	3	20
1,2-Dichloroethane	25.00	23.77	95	71-135	9	20
Benzene	25.00	21.15	85	80-122	14	20
Toluene	25.00	23.06	92	80-120	2	20
1,2-Dibromoethane	25.00	21.31	85	79-120	5	20
Ethylbenzene	25.00	24.50	98	80-120	1	20
m,p-Xylenes	50.00	48.74	97	80-120	1	20
o-Xylene	25.00	24.00	96	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-127
1,2-Dichloroethane-d4	104	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	109	80-120

b= See narrative

RPD= Relative Percent Difference

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10.0

Batch QC Report
Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC620650	Batch#:	181754
Matrix:	Water	Analyzed:	11/30/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-127
1,2-Dichloroethane-d4	102	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-120

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	181754
Units:	ug/L	Analyzed:	11/30/11
Diln Fac:	1.000		

Type: BS Lab ID: QC620651

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,096	110	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	106	73-145
Toluene-d8	97	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC620652

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	1,000	1,036	104	80-120	6 20

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-127
1,2-Dichloroethane-d4	99	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	101	80-120

RPD= Relative Percent Difference

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12.0

Batch QC Report
Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC620764	Batch#:	181782
Matrix:	Water	Analyzed:	11/30/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	NA	
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	90	80-127
1,2-Dichloroethane-d4	99	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	94	80-120

NA= Not Analyzed

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	181782
Units:	ug/L	Analyzed:	11/30/11
Diln Fac:	1.000		

Type: BS Lab ID: QC620765

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	47.00	75	46-141
Isopropyl Ether (DIPE)	12.50	9.639	77	52-139
Ethyl tert-Butyl Ether (ETBE)	12.50	10.90	87	56-131
Methyl tert-Amyl Ether (TAME)	12.50	11.04	88	65-120
MTBE	12.50	9.889	79	59-123
1,2-Dichloroethane	12.50	11.33	91	71-135
Benzene	12.50	12.70	102	80-122
Toluene	12.50	13.39	107	80-120
1,2-Dibromoethane	12.50	13.33	107	79-120
Ethylbenzene	12.50	14.03	112	80-120
m,p-Xylenes	25.00	29.82	119	80-120
o-Xylene	12.50	14.83	119	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-127
1,2-Dichloroethane-d4	92	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	92	80-120

Type: BSD Lab ID: QC620766

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	55.05	88	46-141	16	31
Isopropyl Ether (DIPE)	12.50	9.637	77	52-139	0	20
Ethyl tert-Butyl Ether (ETBE)	12.50	11.24	90	56-131	3	20
Methyl tert-Amyl Ether (TAME)	12.50	11.84	95	65-120	7	20
MTBE	12.50	10.55	84	59-123	6	20
1,2-Dichloroethane	12.50	12.13	97	71-135	7	20
Benzene	12.50	12.57	101	80-122	1	20
Toluene	12.50	12.90	103	80-120	4	20
1,2-Dibromoethane	12.50	13.73	110	79-120	3	20
Ethylbenzene	12.50	13.35	107	80-120	5	20
m,p-Xylenes	25.00	28.22	113	80-120	6	20
o-Xylene	12.50	14.36	115	80-120	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-127
1,2-Dichloroethane-d4	96	73-145
Toluene-d8	94	80-120
Bromofluorobenzene	92	80-120

RPD= Relative Percent Difference

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14.0

Batch QC Report
Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC620767	Batch#:	181754
Matrix:	Water	Analyzed:	11/30/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	ND	50
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-127
1,2-Dichloroethane-d4	103	73-145
Toluene-d8	106	80-120
Bromofluorobenzene	97	80-120

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	181790
Units:	ug/L	Analyzed:	12/01/11
Diln Fac:	1.000		

Type: BS Lab ID: QC620793

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	126.6 b	101	46-141
Isopropyl Ether (DIPE)	25.00	20.50	82	52-139
Ethyl tert-Butyl Ether (ETBE)	25.00	24.11	96	56-131
Methyl tert-Amyl Ether (TAME)	25.00	22.45	90	65-120
MTBE	25.00	20.69	83	59-123
1,2-Dichloroethane	25.00	30.91	124	71-135
Benzene	25.00	26.11	104	80-122
Toluene	25.00	24.71	99	80-120
1,2-Dibromoethane	25.00	23.42	94	79-120
Ethylbenzene	25.00	26.12	104	80-120
m,p-Xylenes	50.00	52.40	105	80-120
o-Xylene	25.00	24.63	99	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	114	80-127
1,2-Dichloroethane-d4	124	73-145
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-120

Type: BSD Lab ID: QC620794

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	135.7 b	109	46-141	7	31
Isopropyl Ether (DIPE)	25.00	20.74	83	52-139	1	20
Ethyl tert-Butyl Ether (ETBE)	25.00	23.70	95	56-131	2	20
Methyl tert-Amyl Ether (TAME)	25.00	22.36	89	65-120	0	20
MTBE	25.00	24.30	97	59-123	16	20
1,2-Dichloroethane	25.00	29.98	120	71-135	3	20
Benzene	25.00	25.02	100	80-122	4	20
Toluene	25.00	23.76	95	80-120	4	20
1,2-Dibromoethane	25.00	23.77	95	79-120	2	20
Ethylbenzene	25.00	25.03	100	80-120	4	20
m,p-Xylenes	50.00	50.26	101	80-120	4	20
o-Xylene	25.00	23.76	95	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-127
1,2-Dichloroethane-d4	125	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	99	80-120

b= See narrative

RPD= Relative Percent Difference

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16.0

Batch QC Report
Gasoline by GC/MS

Lab #:	232883	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC620795	Batch#:	181790
Matrix:	Water	Analyzed:	12/01/11
Units:	ug/L		

Analyte	Result	RL
Gasoline C7-C12	NA	
tert-Butyl Alcohol (TBA)	ND	10
Isopropyl Ether (DIPE)	ND	0.50
Ethyl tert-Butyl Ether (ETBE)	ND	0.50
Methyl tert-Amyl Ether (TAME)	ND	0.50
MTBE	ND	0.50
1,2-Dichloroethane	ND	0.50
Benzene	ND	0.50
Toluene	ND	0.50
1,2-Dibromoethane	ND	0.50
Ethylbenzene	ND	0.50
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.50

Surrogate	%REC	Limits
Dibromofluoromethane	120	80-127
1,2-Dichloroethane-d4	123	73-145
Toluene-d8	101	80-120
Bromofluorobenzene	105	80-120

NA= Not Analyzed

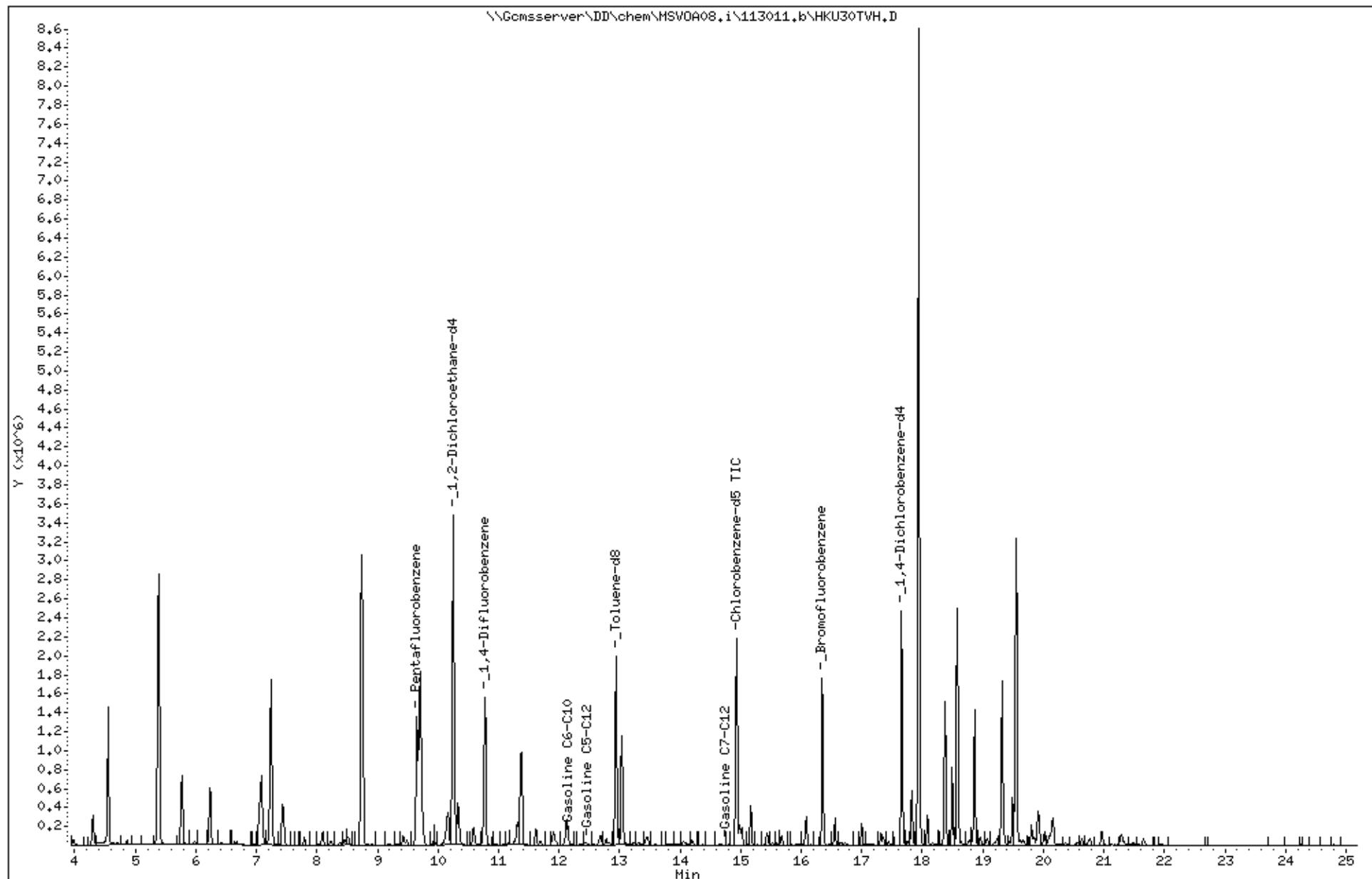
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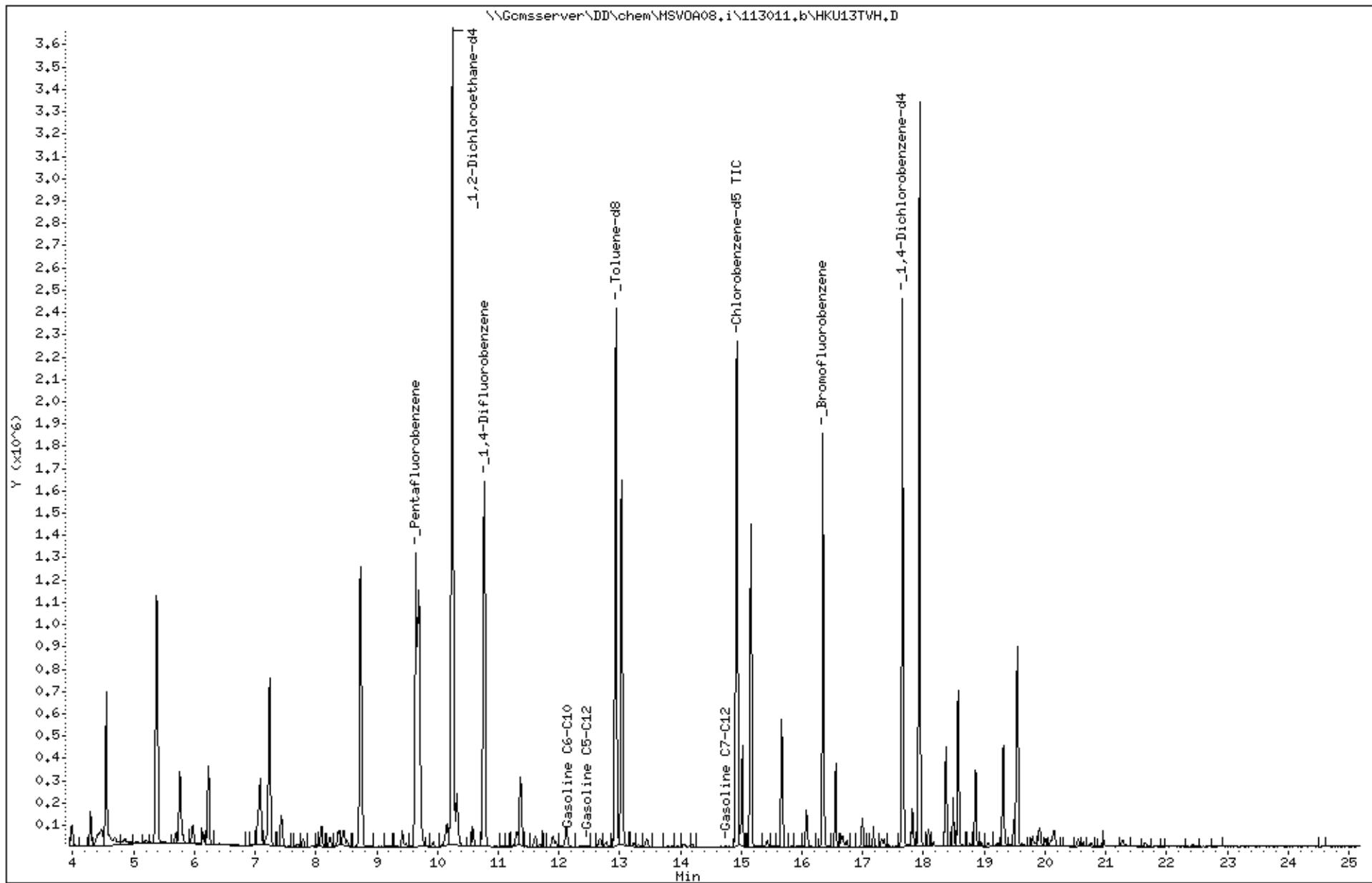


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Instrument: MSV0A08.i

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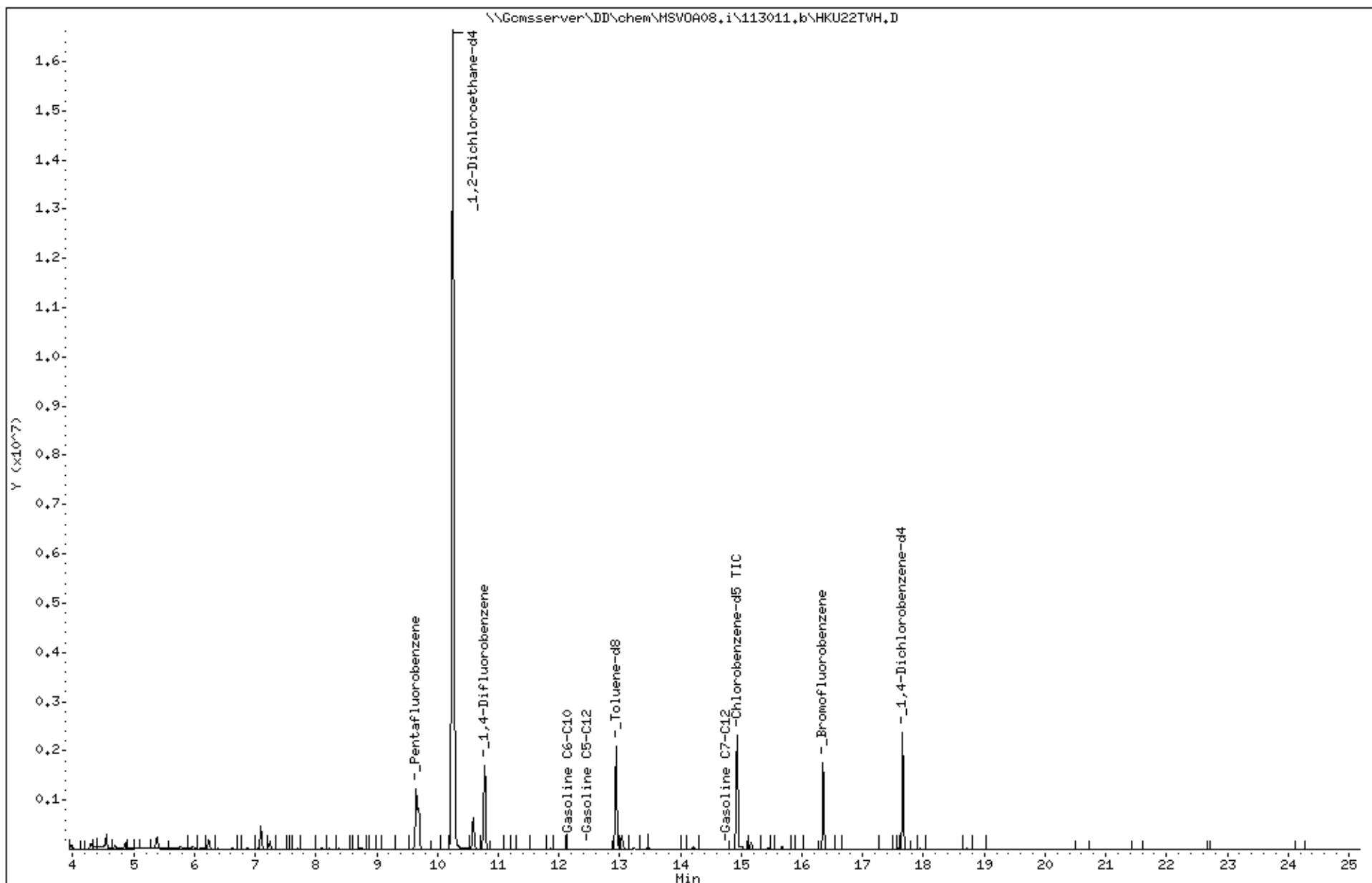
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Instrument: MSV0A08.i
Operator: VOC
Column diameter: 2.00

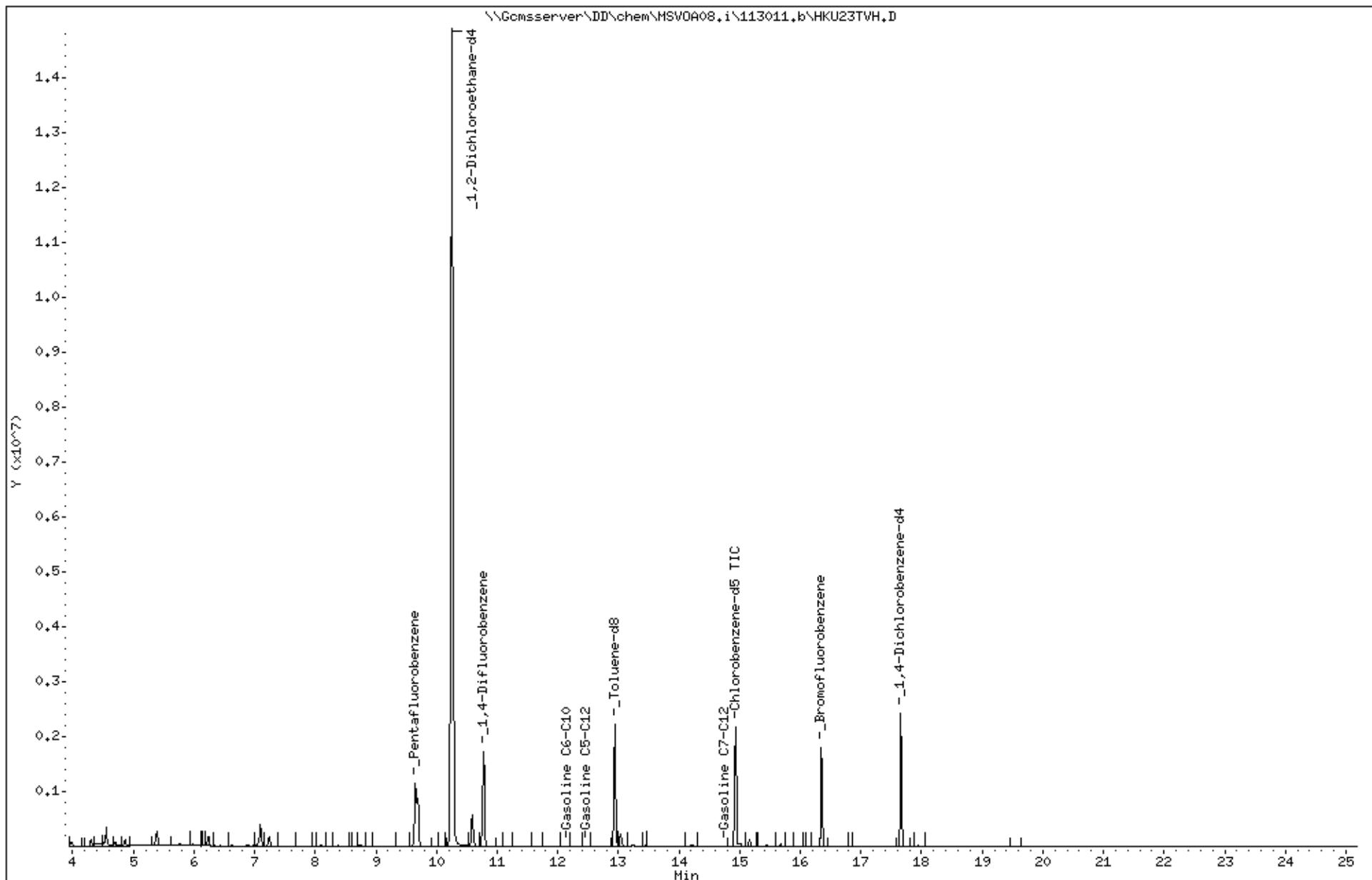
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Instrument: MSV0A08.i
Operator: VOC
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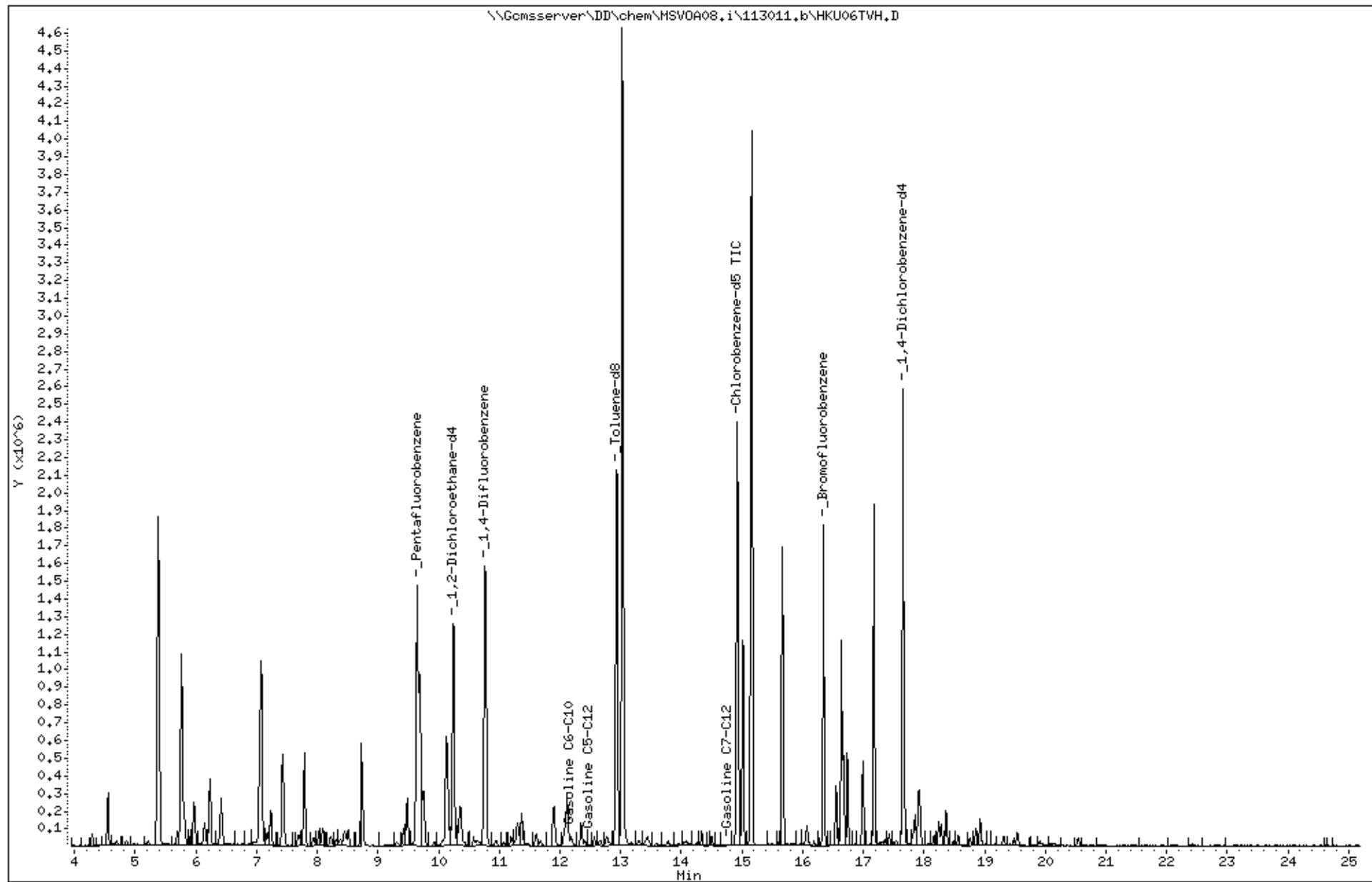
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Sample Info: CCV/BS,QC620651,181754,S18583,.01/100

Instrument: MSV0A08.i
Operator: VOC
Column diameter: 2.00

Column phase:



APPENDIX C

HISTORICAL GROUNDWATER DATA

Table 1. Summary of Groundwater Elevations Through October 2000
 1650 65th Street, Emeryville, California

Well Number	Date	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-2	21-Feb-90	15.75	11.72	4.03
	25-May-90	15.75	11.83	3.92
	29-Aug-90	15.75	11.72	4.03
	29-Nov-90	15.75	11.99	3.76
	1-Mar-91	15.79	12.87	2.92
	28-May-91	15.79	12.21	3.58
	1-Aug-91	15.79	NA	NA
	27-Jan-92	15.79	11.78	4.01
	28-Feb-92	15.79	11.70	4.09
	28-May-92	15.79	11.83	3.96
	27-Aug-92	15.79	12.28	3.51
	10-Nov-92	15.79	12.40	3.39
	18-Feb-93	15.79	12.00	3.79
	20-May-93	15.79	12.00	3.79
	19-Aug-93	15.79	12.11	3.68
	15-Nov-93	15.79	11.64	4.15
	14-Feb-94	15.79	11.45	4.34
	16-May-94	15.79	11.25	4.54
	10-Aug-94	15.79	11.22	4.57
	3-Nov-94	15.79	11.32	4.47
	9-Feb-95	15.79	10.64	5.15
	9-May-95	15.79	10.60	5.19
	10-Aug-95	15.79	10.98	4.81
	13-Nov-95	15.79	11.18	4.61
	2-Mar-96	15.79	10.42	5.37
	9-May-96	15.79	10.78	5.01
	8-Aug-96	15.79	10.56	5.23
	11-Nov-96	15.79	10.64	5.15
	14-Feb-97	15.79	10.29	5.50
	14-May-97	15.79	10.60	5.19
	12-Aug-97	15.79	10.87	4.92
	12-Nov-97	15.79	10.64	5.15
	4-Feb-98	15.79	10.83	4.96
	18-May-98	15.79	10.10	5.69
	11-Aug-98	15.79	10.58	5.21
	17-Dec-98	15.79	10.45	5.34
	7-Oct-99	15.79	10.51	5.28
	12-Oct-00	15.79	10.73	5.06
MW-3	21-Feb-90	12.45	9.18	3.27
	25-May-90	12.45	9.25	3.20
	29-Aug-90	12.45	9.50	2.95
	29-Nov-90	12.45	9.80	2.65
	1-Mar-91	12.43	9.51	2.92
	28-May-91	12.43	9.03	3.40
	1-Aug-91	12.43	NA	NA
	27-Jan-92	12.43	9.44	2.99

Table 1. Summary of Groundwater Elevations Through October 2000
 1650 65th Street, Emeryville, California

Well Number	Date	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-3	28-Feb-92	12.43	8.80	3.63
Cont.	28-May-92	12.43	8.80	3.63
	27-Aug-92	12.43	9.18	3.25
	10-Nov-92	12.43	9.44	2.99
	18-Feb-93	12.43	7.59	4.84
	20-May-93	12.43	8.21	4.22
	19-Aug-93	12.43	8.71	3.72
	15-Nov-93	12.43	9.09	3.34
	14-Feb-94	12.43	8.84	3.59
	16-May-94	12.43	8.18	4.25
	10-Aug-94	12.43	8.72	3.71
	3-Nov-94	12.43	8.13	4.30
	9-Feb-95	12.43	6.86	5.57
	9-May-95	12.43	7.16	5.27
	10-Aug-95	12.43	8.00	4.43
	13-Nov-95	12.43	8.44	3.99
	2-Mar-96	12.43	7.31	5.12
	9-May-96	12.43	7.72	4.71
	8-Aug-96	12.43	8.22	4.21
	11-Nov-96	12.43	8.67	3.76
	14-Feb-97	12.43	7.18	5.25
	14-May-97	12.43	8.03	4.40
	12-Aug-97	12.43	7.39	5.04
	12-Nov-97	12.43	8.53	3.90
	4-Feb-98	12.43	7.39	5.04
	18-May-98	12.43	7.31	5.12
	11-Aug-98	12.43	7.95	4.48
	17-Dec-98	12.43	8.58	3.85
	7-Oct-99	12.43	8.25	4.18
	12-Oct-00	12.43	8.22	4.21
MW-4	21-Feb-90	12.24	8.63	3.61
	25-May-90	12.24	8.58	3.66
	29-Aug-90	12.24	8.50	3.74
	29-Nov-90	12.24	8.74	3.50
	1-Mar-91	12.24	8.65	3.59
	28-May-91	12.24	8.57	3.67
	1-Aug-91	12.24	NA	NA
	27-Jan-92	12.24	8.62	3.62
	28-Feb-92	12.24	8.52	3.72
	28-May-92	12.94	8.35	3.89
	27-Aug-92	12.24	9.00	3.24
	10-Nov-92	12.24	8.85	3.39
	18-Feb-93	12.24	8.17	4.07
	20-May-93	12.24	8.21	4.03
	19-Aug-93	12.24	8.20	4.04
	15-Nov-93	12.24	8.33	3.91

Table 1. Summary of Groundwater Elevations Through October 2000
 1650 65th Street, Emeryville, California

Well Number	Date	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-4	14-Feb-94	12.24	8.30	3.94
Cont.	16-May-94	12.24	8.20	4.04
	10-Aug-94	12.24	8.14	4.10
	3-Nov-94	12.24	8.30	3.94
	9-Feb-95	12.24	8.11	4.13
	9-May-95	12.24	7.76	4.48
	10-Aug-95	12.24	7.91	4.33
	13-Nov-95	12.24	7.95	4.29
	2-Mar-96	12.24	7.89	4.35
	9-May-96	12.24	7.64	4.60
	8-Aug-96	12.24	7.76	4.48
	11-Nov-96	12.24	8.00	4.24
	14-Feb-97	12.24	7.63	4.61
	14-May-97	12.24	7.78	4.46
	12-Aug-97	12.24	7.71	4.53
	12-Nov-97	12.24	7.84	4.40
	4-Feb-98	12.24	7.11	5.13
	18-May-98	12.24	7.35	4.89
	11-Aug-98	12.24	7.52	4.72
	17-Dec-98	12.24	7.99	4.25
	7-Oct-99	12.24	7.82	4.42
	12-Oct-00	12.24	7.97	4.27
MW-5	21-Feb-90	12.81	6.91	5.90
	25-May-90	12.81	7.58	5.23
	29-Aug-90	12.81	7.75	5.06
	29-Nov-90	12.81	8.17	4.64
	1-Mar-91	12.82	8.11	4.71
	28-May-91	12.82	7.39	5.43
	1-Aug-91	12.82	NA	NA
	27-Jan-92	12.82	7.90	4.92
	28-Feb-92	12.82	7.73	5.09
	28-May-92	12.82	7.18	5.64
	27-Aug-92	12.82	7.54	5.28
	10-Nov-92	12.82	7.90	4.92
	18-Feb-93	12.82	6.58	6.24
	20-May-93	12.82	6.29	6.53
	19-Aug-93	12.82	6.89	5.93
	15-Nov-93	12.82	7.43	5.39
	14-Feb-94	12.82	7.16	5.66
	16-May-94	12.82	6.50	6.32
	10-Aug-94	12.82	6.98	5.84
	3-Nov-94	12.82	7.36	5.46
	9-Feb-95	12.82	5.68	7.14
	9-May-95	12.82	5.36	7.46
	10-Aug-95	12.82	6.29	6.53
	13-Nov-95	12.82	6.89	5.93

Table 1. Summary of Groundwater Elevations Through October 2000
 1650 65th Street, Emeryville, California

Well Number	Date	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-5	2-Mar-96	12.82	7.26	5.56
Cont.	9-May-96	12.82	6.00	6.82
	8-Aug-96	12.82	6.67	6.15
	11-Nov-96	12.82	6.69	6.13
	14-Feb-97	12.82	5.88	6.94
	14-May-97	12.82	6.25	6.57
	12-Aug-97	12.82	6.77	6.05
	12-Nov-97	12.82	7.21	5.61
	4-Feb-98	12.82	6.81	6.01
	18-May-98	12.82	4.81	8.01
	11-Aug-98	12.82	6.38	6.44
	17-Dec-98	12.82	7.00	5.82
	7-Oct-99	12.82	7.23	5.59
	12-Oct-00	12.82	7.30	5.52
MW-6	1-Mar-91	12.03	8.59	3.44
	28-May-91	12.03	8.35	3.68
	1-Aug-91	12.03	NA	NA
	27-Jan-92	12.03	8.32	3.71
	28-Feb-92	12.03	8.08	3.95
	28-May-92	12.03	8.04	3.99
	27-Aug-92	12.03	8.48	3.55
	10-Nov-92	12.03	8.52	3.51
	18-Feb-93	12.03	8.14	3.89
	20-May-93	12.03	8.46	3.57
	19-Aug-93	12.03	8.61	3.42
	15-Nov-93	12.03	8.30	3.73
	14-Feb-94	12.03	8.09	3.94
	16-May-94	12.03	7.82	4.21
	10-Aug-94	12.03	8.46	3.57
	3-Nov-94	12.03	8.16	3.87
	9-Feb-95	12.03	7.66	4.37
	9-May-95	12.03	8.57	3.46
	10-Aug-95	12.03	7.72	4.31
	13-Nov-95	12.03	8.15	3.88
	2-Mar-96	12.03	8.02	4.01
	9-May-96	12.03	7.64	4.39
	8-Aug-96	12.03	7.53	4.50
	11-Nov-96	12.03	8.45	3.58
	14-Feb-97	12.03	7.58	4.45
	14-May-97	12.03	8.62	3.41
	12-Aug-97	12.03	7.62	4.41
	12-Nov-97	12.03	8.56	3.47
	4-Feb-98	12.03	6.56	5.47
	18-May-98	12.03	7.29	4.74
	11-Aug-98	12.03	7.25	4.78

Table 1. Summary of Groundwater Elevations Through October 2000
 1650 65th Street, Emeryville, California

Well Number	Date	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-6	17-Dec-98	12.03	8.42	3.61
Cont.	7-Oct-99	12.03	7.62	4.41
	12-Oct-00	12.03	8.05	3.98
MW-7	1-Mar-91	12.9	7.51	5.39
	28-May-91	12.9	7.07	5.83
	1-Aug-91	12.9	NA	NA
	27-Jan-92	12.9	7.28	5.62
	28-Feb-92	12.9	7.04	5.86
	28-May-92	12.9	6.81	6.09
	27-Aug-92	12.9	7.12	5.78
	10-Nov-92	12.9	7.80	5.10
	18-Feb-93	12.9	6.54	6.36
	20-May-93	12.9	6.17	6.73
	19-Aug-93	12.9	6.60	6.30
	15-Nov-93	12.9	6.89	6.01
	14-Feb-94	12.9	6.50	6.40
	17-May-94	12.9	6.07	6.83
	10-Aug-94	12.9	6.34	6.56
	3-Nov-94	12.9	6.18	6.72
	9-Feb-95	12.9	5.57	7.33
	9-May-95	12.9	5.15	7.75
	10-Aug-95	12.9	5.72	7.18
	13-Nov-95	12.9	5.98	6.92
	2-Mar-96	12.9	6.02	6.88
	9-May-96	12.9	6.11	6.79
	8-Aug-96	12.9	6.87	6.03
	11-Nov-96	12.9	6.39	6.51
	14-Feb-97	12.9	5.97	6.93
	14-May-97	12.9	5.89	7.01
	12-Aug-97	12.9	6.56	6.34
	12-Nov-97	12.9	6.76	6.14
	4-Feb-98	12.9	5.94	6.96
	18-May-98	12.9	4.19	8.71
	11-Aug-98	12.9	6.21	6.69
	17-Dec-98	12.9	6.80	6.10
	7-Oct-99	12.9	NM	NM
	12-Oct-00	12.9	7.18	5.72
MW-8	3-Nov-94	15.01	11.06	3.95
	9-Feb-95	15.01	10.23	4.78
	9-Feb-95	15.01	10.48	4.53
	10-Aug-95	15.01	10.74	4.27
	13-Nov-95	15.01	11.02	3.99
	2-Mar-96	15.01	10.11	4.90
	9-May-96	15.01	10.50	4.51
	8-Aug-96	15.01	10.04	4.97

Table 1. Summary of Groundwater Elevations Through October 2000
 1650 65th Street, Emeryville, California

Well Number	Date	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-8	11-Nov-96	15.01	10.55	4.46
Cont.	14-Feb-97	15.01	9.95	5.06
	14-May-97	15.01	10.08	4.93
	12-Aug-97	15.01	10.63	4.38
	12-Nov-97	15.01	10.13	4.88
	4-Feb-98	15.01	10.17	4.84
	18-May-98	15.01	9.49	5.52
	11-Aug-98	15.01	10.57	4.44
	17-Dec-98	15.01	10.52	4.49
	7-Oct-99	15.01	NM	NM
	12-Oct-00	15.01	10.15	4.86

NOTES:

Ft MSL = feet above Mean Sea Level

ES = Engineering-Science, Inc.

PES = PES Environmental, Inc.

BLAINE = Blaine Tech Services, Inc.

NA = Information not available at this date.

NM = Well was inaccessible due to parked cars

Table 2. Summary of Historical Analytical Results for Groundwater Samples Through Second Quarter 2011
 1650 65th Street, Emeryville, California

Concentrations expressed in milligrams per liter (mg/l) - equivalent to parts per million (ppm)

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
MW-2	Nov-89	ES	100	NA	NA	8.4	7.4	2.4	13	0.015 *	0.05
	Feb-90	ES	54	NA	NA	7.8	5.6	1.6	8.4	0.032 *	0.021
	May-90	ES	40	NA	NA	7.8	7.5	1.6	7.6	0.076 *	0.025
	Aug-90	ES	49	4.6	NA	9	8	ND	8.9	0.040 *	0.0059
	Nov-90	ES	73	3.5	NA	6.9	5.9	1.4	7.4	NA	NA
	Mar-91	ES	72	1.8	NA	5.5	6.6	1	7.7	NA	NA
	May-91	ES	31	ND	NA	8.4	4.7	1.7	6.3	NA	NA
	Aug-91	ES	47	ND	NA	7.6	1.6	7.3	7.8	NA	NA
	29-Jan-92	PES	77	NA	NA	10.000	8.700	2.000	7.600	NA	NA
	28-Feb-92	PES	70	NA	NA	9.100	6.400	0.530	7.400	NA	NA
	28-May-92	PES	54	NA	NA	8.000	4.800	2.400	6.200	NA	NA
	27-Aug-92	PES	47	NA	NA	2.700	2.900	3.400	9.200	NA	NA
	10-Nov-92	PES	45	<20	NA	6.600	4.000	2.000	5.800	<0.050	NA
	18-Feb-93	PES	14	NA	NA	2.300	0.810	0.670	1.400	NA	NA
	20-May-93	PES	43	NA	NA	7.300	5.200	1.500	5.500	NA	NA
	19-Aug-93	PES	45	NA	NA	4.900	3.700	1.300	3.400	NA	NA
	15-Nov-93	PES	97	NA	NA	6.100	1.700	1.700	4.100	NA	NA
	14-Feb-94	PES	27	NA	NA	5.000	0.830	1.200	3.100	NA	NA
	16-May-94	PES	77	NA	NA	6.800	1.100	1.400	3.300	NA	NA
	10-Aug-94	PES	25	NA	NA	5.600	0.750	1.400	1.700	NA	NA
	3-Nov-94	PES	24	NA	NA	7.200	0.500	1.500	1.600	NA	NA
	9-Feb-95	PES	12	NA	NA	2.200	0.100	0.480	0.940	NA	NA
	9-May-95	PES	7.8	NA	NA	1.300	0.078	0.340	0.480	NA	NA
	10-Aug-95	PES	5.3	NA	NA	1.300	0.150	0.240	0.270	NA	NA
	13-Nov-95	PES	8.5	NA	NA	2.100	0.250	0.430	0.440	NA	NA
	13-Feb-96	PES	5.2	NA	NA	1.500	0.190	0.210	0.290	NA	NA
	9-May-96	PES	1.7	NA	NA	0.370	0.130	0.060	0.090	NA	NA
	8-Aug-96	PES	4.5	NA	NA	1.200	0.490	0.160	0.380	NA	NA
	11-Nov-96	PES	6.0	NA	NA	2.100	0.920	0.200	0.590	NA	NA
	14-Feb-97	PES	3.8	NA	NA	1.500	0.056	0.240	0.040	NA	NA
	14-May-97	PES	3.6	NA	NA	2.000	0.100	0.160	0.220	NA	NA
	12-Aug-97	PES	7.3	NA	NA	3.200	0.330	0.290	0.420	NA	NA
	12-Nov-97	PES	8.9	NA	NA	3.000	1.300	0.330	0.750	NA	NA
	4-Feb-98	PES	7.6	NA	NA	2.800	0.190	0.410	0.150	NA	NA
	18-May-98	PES	2.2	NA	NA	1.300	0.240	0.078	0.120	NA	NA
	11-Aug-98	PES	11	NA	NA	2.3	0.42	0.29	0.77	NA	NA

Table 2. Summary of Historical Analytical Results for Groundwater Samples Through Second Quarter 2011
 1650 65th Street, Emeryville, California

Concentrations expressed in milligrams per liter (mg/l) - equivalent to parts per million (ppm)

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
MW-2 Cont.	17-Dec-98	PES	14	NA	<0.2	3.5	0.49	0.49	0.58	NA	NA
	7-Oct-99	PES	11	NA	<0.5	4.8	1.5	0.81	1.6	NA	NA
	7-Oct-00	PES	16	NA	<0.010	3.8	1.3	0.73	1.8	NA	NA
	7-Oct-10	PES	6.10	NA	< 0.0005	0.70	0.51	0.19	0.64	NA	NA
	26-May-11	PES	1.90	NA	<0.002	0.22	0.0180	0.0082	0.0545	<0.002	<0.005
MW-3	Nov-89	ES	0.13	NA	NA	0.0022	ND	ND	0.003	ND	ND
	Feb-90	ES	ND	NA	NA	0.0025	ND	ND	ND	NA	0.011
	May-90	ES	ND	ND	NA	0.002	ND	ND	ND	ND	NA
	Aug-90	ES	ND	0.8	NA	0.0044	0.0029	ND	0.0054	NA	NA
	Nov-90	ES	0.9	0.8	NA	0.0034	ND	ND	ND	NA	NA
	Mar-91	ES	ND	ND	NA	0.025	0.025	0.0053	0.32	NA	NA
	May-91	ES	ND	ND	NA	0.0026	ND	ND	ND	NA	NA
	Aug-91	ES	ND	ND	NA	0.0019	ND	ND	ND	NA	NA
	29-Jan-92	PES	0.092	NA	NA	0.0024	<0.0003	0.0006	<0.0003	NA	NA
	28-Feb-92	PES	0.160***	NA	NA	0.0028	<0.0003	0.0007	0.0005	NA	NA
	28-May-92	PES	<0.050	NA	NA	0.0025	<0.0005	<0.0005	<0.0005	NA	NA
	27-Aug-92	PES	0.370	NA	NA	0.0040	<0.001	<0.0005	<0.0005	NA	NA
	10-Nov-92	PES	0.240	<0.100	NA	0.0042	<0.0003	<0.0003	<0.0006	<0.0003	NA
	18-Feb-93	PES	0.140	NA	NA	0.0018	<0.0005	<0.0005	<0.0005	NA	NA
	20-May-93	PES	0.072	NA	NA	0.0031	<0.0005	<0.0005	<0.0005	NA	NA
	19-Aug-93	PES	<0.050	NA	NA	0.0032	<0.0005	<0.0005	0.0007	NA	NA
	15-Nov-93	PES	0.070	NA	NA	0.0023	0.0007	<0.0005	0.0015	NA	NA
	14-Feb-94	PES	0.120	NA	NA	0.0053	0.0023	0.0012	0.0042	NA	NA
	16-May-94	PES	0.120	NA	NA	0.0031	<0.0005	<0.0005	0.0017	NA	NA
	10-Aug-94	PES	0.1	NA	NA	0.003	< 0.0005	0.0005	<0.002	NA	NA
	3-Nov-94	PES	0.1	NA	NA	0.003	< 0.0005	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	0.1	NA	NA	0.002	<0.0005	<0.0005	<0.002	NA	NA
	9-May-95	PES	0.1	NA	NA	0.003	<0.0005	0.0005	<0.002	NA	NA
	10-Aug-95	PES	0.1	NA	NA	0.003	<0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	<0.05	NA	NA	0.003	<0.0005	<0.0005	<0.002	NA	NA
	7-Oct-10	PES	0.110	NA	0.0014	0.0042	0.0009	0.0008	0.0018	NA	NA

Table 2. Summary of Historical Analytical Results for Groundwater Samples Through Second Quarter 2011
 1650 65th Street, Emeryville, California

Concentrations expressed in milligrams per liter (mg/l) - equivalent to parts per million (ppm)

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
MW-4	Nov-89	ES	0.2	NA	NA	0.0023	ND	ND	ND	ND	ND
	Feb-90	ES	ND	NA	NA	ND	ND	ND	ND	NA	0.006
	May-90	ES	ND	ND	NA	0.001	ND	ND	ND	ND	NA
	Aug-90	ES	ND	0.8	NA	0.0089	0.0071	ND	0.0094	NA	NA
	Nov-90	ES	ND	0.7	NA	0.0027	ND	ND	ND	NA	NA
	Mar-91	ES	NA	ND	NA	0.003	ND	ND	ND	NA	NA
	May-91	ES	NA	ND	NA	0.0024	ND	ND	ND	NA	NA
	Aug-91	ES	NA	ND	NA	0.0015	ND	ND	ND	NA	NA
	29-Jan-92	PES	<0.050	NA	NA	0.0022	0.0004	<0.0003	0.0007	NA	NA
	28-Feb-92	PES	<0.050	NA	NA	0.0016	<0.0003	<0.0003	0.0003	NA	NA
	28-May-92	PES	<0.050	NA	NA	0.0015	<0.0005	<0.0005	<0.0005	NA	NA
	27-Aug-92	PES	0.080	NA	NA	0.003	<0.001	<0.0005	0.0005	NA	NA
	10-Nov-92	PES	0.180	<0.100	NA	0.060	0.0009	<0.0003	<0.0006	<0.0003	NA
	18-Feb-93	PES	0.060	NA	NA	0.0017	<0.0005	<0.0005	<0.0005	NA	NA
	20-May-93	PES	<0.050	NA	NA	0.0022	<0.0005	<0.0005	<0.0005	NA	NA
	19-Aug-93	PES	<0.050	NA	NA	0.0020	0.0006	<0.0005	0.0005	NA	NA
	15-Nov-93	PES	<0.050	NA	NA	0.0020	0.0005	<0.0005	0.0009	NA	NA
	14-Feb-94	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	16-May-94	PES	<0.050	NA	NA	0.0017	0.0009	<0.0005	0.0011	NA	NA
	10-Aug-94	PES	<0.05	NA	NA	0.002	<0.0005	<0.0005	<0.002	NA	NA
	3-Nov-94	PES	0.06	NA	NA	0.002	<0.0005	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	0.06	NA	NA	0.002	0.0006	<0.0005	<0.002	NA	NA
	9-May-95	PES	0.07	NA	NA	0.001	<0.0005	<0.0005	<0.002	NA	NA
	10-Aug-95	PES	<0.05	NA	NA	0.001	<0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	<0.05	NA	NA	0.003	<0.0005	<0.0005	<0.002	NA	NA
	13-Feb-96	PES	<0.05	NA	NA	0.0013	<0.0005	<0.0005	<0.002	NA	NA
	9-May-96	PES	<0.05	NA	NA	0.0009	<0.0005	<0.0005	<0.002	NA	NA
	8-Aug-96	PES	<0.05	NA	NA	0.0009	<0.0005	<0.0005	<0.002	NA	NA
	11-Nov-96	PES	<0.05	NA	NA	0.0013	0.0006	<0.0005	<0.002	NA	NA
	14-Feb-97	PES	<0.05	NA	NA	0.0006	<0.0005	<0.0005	<0.002	NA	NA
	14-May-97	PES	<0.05	NA	NA	0.0009	<0.0005	<0.0005	<0.002	NA	NA
	12-Aug-97	PES	<0.05	NA	NA	0.0009	<0.0005	<0.0005	<0.002	NA	NA
	12-Nov-97	PES	<0.05	NA	NA	0.0013	<0.0005	<0.0005	<0.002	NA	NA
	4-Feb-98	PES	0.05	NA	NA	0.0019	0.0018	0.0011	0.004	NA	NA
	18-May-98	PES	<0.05	NA	NA	0.00091	<0.0005	<0.0005	0.0011	NA	NA
	11-Aug-98	PES	<0.05	NA	NA	0.00063	<0.0005	<0.0005	<0.0005	NA	NA

Table 2. Summary of Historical Analytical Results for Groundwater Samples Through Second Quarter 2011
 1650 65th Street, Emeryville, California

Concentrations expressed in milligrams per liter (mg/l) - equivalent to parts per million (ppm)

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
MW-4 Cont.	17-Dec-98	PES	<0.1	NA	<0.01	<0.001	<0.001	<0.001	<0.001	NA	NA
	7-Oct-99	PES	<0.05	NA	<0.005	0.0015	<0.0005	<0.0005	<0.0005	NA	NA
	7-Oct-00	PES	<0.05	NA	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	NA	NA
	7-Oct-10	PES	0.052	NA	<0.0005	0.0015	<0.0005	<0.0005	<0.0005	NA	NA
	26-May-11	PES	0.064***	NA	<0.0005	0.0010	<0.0005	<0.0005	<0.0005	<0.0005	<0.005
MW-5	Nov-89	ES	ND	NA	NA	0.074	ND	ND	0.0042	ND	ND
	Feb-90	ES	ND	NA	NA	0.2	ND	ND	ND	NA	0.012
	May-90	ES	ND	ND	NA	0.11	ND	ND	ND	ND	NA
	Aug-90	ES	ND	0.7	NA	0.066	0.0022	ND	0.0038	NA	NA
	Nov-90	ES	0.6	0.9	NA	0.069	ND	ND	ND	NA	NA
	Mar-91	ES	ND	1.1	NA	0.066	0.0023	ND	ND	NA	NA
	May-91	ES	ND	ND	NA	0.11	ND	ND	ND	NA	NA
	Aug-91	ES	ND	ND	NA	0.078	0.0021	ND	ND	NA	NA
	29-Jan-92	PES	0.190	NA	NA	0.090	0.0005	<0.0003	0.0006	NA	NA
	28-Feb-92	PES	0.230***	NA	NA	0.110	0.0009	<0.0003	0.0005	NA	NA
	28-May-92	PES	0.130	NA	NA	0.100	<0.0005	<0.0005	<0.0005	NA	NA
	27-Aug-92	PES	0.520	NA	NA	0.083	0.002	<0.0005	<0.0005	NA	NA
	10-Nov-92	PES	0.240	<0.100	NA	0.074	0.0010	<0.0003	<0.0006	<0.0003	NA
	18-Feb-93	PES	0.190	NA	NA	0.056	0.0006	<0.0005	<0.0005	NA	NA
	20-May-93	PES	<0.200	NA	NA	0.056	<0.002	<0.002	<0.002	NA	NA
	19-Aug-93	PES	0.170	NA	NA	0.050	0.0007	<0.0005	<0.0005	NA	NA
	15-Nov-93	PES	0.220	NA	NA	0.049	0.001	<0.001	<0.001	NA	NA
	14-Feb-94	PES	0.140	NA	NA	0.062	<0.0005	<0.0005	<0.0005	NA	NA
	16-May-94	PES	0.310	NA	NA	0.140	0.003	<0.003	<0.003	NA	NA
	12-Aug-94	PES	0.5	NA	NA	0.095	0.034	0.004	0.014	NA	NA
	3-Nov-94	PES	0.4	NA	NA	0.079	0.0006	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	0.3	NA	NA	0.074	0.0008	<0.0005	<0.0002	NA	NA
	9-May-95	PES	0.2	NA	NA	0.047	0.0005	<0.0005	<0.002	NA	NA
	10-Aug-95	PES	0.2	NA	NA	0.046	0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	0.3	NA	NA	0.048	0.0007	<0.0005	<0.002	NA	NA

Table 2. Summary of Historical Analytical Results for Groundwater Samples Through Second Quarter 2011
 1650 65th Street, Emeryville, California

Concentrations expressed in milligrams per liter (mg/l) - equivalent to parts per million (ppm)

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
MW-6	May-90	ES	NA	ND	NA	ND	ND	ND	ND	ND	ND**
	Aug-90	ES	NA	ND	NA	NA	NA	NA	NA	NA	ND**
	Nov-90	ES	1.2	1.4	NA	0.0012	ND	ND	ND	0.0012	NA
	Mar-91	ES	ND	ND	NA	ND	ND	ND	ND	NA	NA
	May-91	ES	ND	ND	NA	ND	ND	ND	ND	NA	NA
	Aug-91	ES	ND	ND	NA	ND	ND	ND	ND	NA	NA
	29-Jan-92	PES	<0.050	NA	NA	<0.0003	<0.0003	<0.0003	<0.0003	NA	NA
	28-Feb-92	PES	<0.050	NA	NA	<0.0003	<0.0003	<0.0003	<0.0003	NA	NA
	28-May-92	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	27-Aug-92	PES	<0.050****	NA	NA	<0.0005	<0.001	<0.0005	<0.0005	NA	NA
	10-Nov-92	PES	<0.050	<0.100	NA	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	NA
	18-Feb-93	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	20-May-93	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	19-Aug-93	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	15-Nov-93	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	14-Feb-94	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	16-May-94	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	10-Aug-94	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	3-Nov-94	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	9-May-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	10-Aug-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	7-Oct-10	PES	<0.05	NA	<0.0005	0.0017	0.001	0.0009	0.0023	NA	NA
	26-May-11	PES	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.005
MW-7	May-90	ES	NA	0.6	NA	0.24	ND	ND	ND	0.24	ND**
	Aug-90	ES	ND	ND	NA	0.081	0.0018	ND	ND	0.0844	ND**
	Nov-90	ES	ND	0.8	NA	0.054	ND	ND	ND	0.054	NA
	Mar-91	ES	ND	ND	NA	0.1	0.0036	ND	ND	NA	NA
	May-91	ES	ND	ND	NA	0.12	0.0027	ND	ND	NA	NA
	Aug-91	ES	ND	ND	NA	0.074	0.0033	ND	ND	NA	NA
	29-Jan-92	PES	0.270	NA	NA	0.025	0.0005	<0.0003	0.0008	NA	NA
	28-Feb-92	PES	0.100***	NA	NA	0.033	0.0007	<0.0003	0.0007	NA	NA
	28-May-92	PES	0.150	NA	NA	0.021	<0.0005	<0.0005	<0.0005	NA	NA
	27-Aug-92	PES	0.440	NA	NA	0.011	0.001	<0.0005	<0.0005	NA	NA

Table 2. Summary of Historical Analytical Results for Groundwater Samples Through Second Quarter 2011
 1650 65th Street, Emeryville, California

Concentrations expressed in milligrams per liter (mg/l) - equivalent to parts per million (ppm)

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
MW-7	10-Nov-92	PES	0.370	<0.100	NA	0.031	0.0012	<0.0003	0.0012	<0.0003	NA
Cont.	18-Feb-93	PES	0.270	NA	NA	0.077	0.0013	<0.0005	0.0014	NA	NA
	20-May-93	PES	0.300	NA	NA	0.150	0.003	<0.002	0.003	NA	NA
	19-Aug-93	PES	0.110	NA	NA	0.040	0.0010	<0.0005	0.0011	NA	NA
	15-Nov-93	PES	0.120	NA	NA	0.015	0.0006	<0.0005	0.0023	NA	NA
	14-Feb-94	PES	0.120	NA	NA	0.038	<0.0005	<0.0005	<0.0005	NA	NA
	17-May-94	PES	<0.300	NA	NA	0.061	<0.003	<0.003	<0.003	NA	NA
	10-Aug-94	PES	0.1	NA	NA	0.009	<0.0005	<0.0005	<0.002	NA	NA
	3-Nov-94	PES	0.1	NA	NA	0.003	<0.0005	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	0.2	NA	NA	0.050	0.0006	<0.0005	<0.002	NA	NA
	9-May-95	PES	0.3	NA	NA	0.120	0.001	<0.0005	<0.002	NA	NA
	10-Aug-95	PES	<0.05	NA	NA	0.007	<0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	0.09	NA	NA	0.003	<0.0005	<0.0005	<0.002	NA	NA
MW-8	3-Nov-94	PES	<0.05	NA	NA	0.001	<0.0005	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	9-May-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	10-Aug-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	13-Feb-96	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	9-May-96	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	8-Aug-96	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	11-Nov-96	PES	<0.05	NA	NA	<0.0005	0.0009	<0.0005	<0.002	NA	NA
	14-Feb-97	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	14-May-97	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	12-Aug-97	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	12-Nov-97	PES	<0.05	NA	NA	0.0033	0.0023	<0.0005	<0.002	NA	NA
	4-Feb-98	PES	<0.05	NA	NA	0.0011	<0.0005	<0.0005	<0.002	NA	NA
	18-May-98	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	11-Aug-98	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	17-Dec-98	PES	<0.05	NA	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	7-Oct-99	PES	NS	NS	NS	NS	NS	NS	NS	NA	NA
	12-Oct-00	PES	<0.05	NA	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	7-Oct-10	PES	2.900	NA	<0.001	0.0015	0.0150	<0.010	0.010	NA	NA
	26-May-11	PES	<0.05	NA	<0.0005	0.0006	<0.0005	<0.0005	<0.0005	3.7 ¹	<0.005

Table 2. Summary of Historical Analytical Results for Groundwater Samples Through Second Quarter 2011
 1650 65th Street, Emeryville, California

Concentrations expressed in milligrams per liter (mg/l) - equivalent to parts per million (ppm)

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
EW-1	May-90	ES	20	ND	NA	7.5	4.5	1	6.3	0.068	ND**
	Aug-90	ES	NA	3.5	NA	6	4.2	ND	4.6	0.016 *	ND**
	Nov-90	ES	47	3.1	NA	6	3.4	1	4.7	NA	NA
	17-Dec-90	ES	NA	NA	NA	11	7.9	2.2	10	NA	NA
	19-Dec-90	ES	NA	NA	NA	3.7	2.5	ND	2.3	NA	NA
	21-Dec-90	ES	NA	NA	NA	3.2	2.2	ND	1.7	NA	NA
	27-Dec-90	ES	NA	NA	NA	2.9	2.1	0.16	1.5	NA	NA
	4-Jan-91	ES	NA	NA	NA	3.2	2.8	ND	ND	NA	NA
	11-Jan-91	ES	NA	NA	NA	3	2.4	0.2	1.8	NA	NA
	6-Feb-91	ES	NA	NA	NA	0.47	0.23	0.011	0.39	NA	NA
	13-Feb-91	ES	NA	NA	NA	1.2	0.28	ND	0.36	NA	NA
	15-Mar-91	ES	NA	NA	NA	0.13	0.085	0.006	0.17	NA	NA
	3-Jul-91	ES	NA	NA	NA	1.3	0.95	0.22	1.4	NA	NA
	1-Aug-91	ES	NA	NA	NA	0.22	0.19	0.013	0.27	NA	NA
	16-Aug-91	ES	NA	NA	NA	0.17	0.16	0.013	0.19	NA	NA
	13-Nov-91	ES	NA	NA	NA	3.1	0.27	0.04	0.22	NA	NA
	29-Jan-92	PES	2.700	NA	NA	0.570	0.150	0.0070	0.260	NA	NA
	26-Mar-92	PES	25.000	NA	NA	3.600	2.600	0.530	2.600	NA	NA
	28-May-92	PES	16.000	NA	NA	3.300	3.200	0.750	2.600	NA	NA
	29-Jun-92	PES	7.000	NA	NA	2.200	3.100	0.270	1.400	NA	NA
	21-Jul-92	PES	1.600	NA	NA	0.220	0.017	<0.0005	0.100	NA	NA
	27-Aug-92	PES	NS	NS	NA	NS	NS	NS	NS	NS	NS
	23-Sep-92	PES	5.200	NA	NA	1.100	0.590	0.100	1.000	NA	NA
	27-Oct-92	PES	1.300	NA	NA	0.220	0.061	0.0053	0.110	NA	NA
	24-Nov-92	PES	7.100	NA	NA	1.400	1.100	0.120	0.890	NA	NA
	18-Feb-93	PES	7.200	NA	NA	1.400	0.930	0.210	1.000	NA	NA
	09-Mar-93	PES	4.600	NA	NA	0.990	0.750	0.062	0.840	NA	NA
	21-Apr-93	PES	4.900	NA	NA	0.270	0.180	0.020	0.190	NA	NA
	13-May-93	PES	2.600	NA	NA	0.520	0.110	0.023	0.330	NA	NA
	28-Jun-93	PES	9.500	NA	NA	1.900	0.460	0.230	1.000	NA	NA
	11-Aug-93	PES	1.300	NA	NA	<0.002	<0.002	<0.002	0.400	NA	NA
	15-Nov-93	PES	46.000	NA	NA	2.900	0.380	0.500	1.700	NA	NA
	14-Feb-94	PES	21.000	NA	NA	4.500	0.860	1.000	2.800	NA	NA
	16-May-94	PES	19.000	NA	NA	7.300	0.930	1.300	3.300	NA	NA
	10-Aug-94	PES	19	NA	NA	4.200	0.490	1.100	1.500	NA	NA
	3-Nov-94	PES	20	NA	NA	6.000	0.230	1.400	1.400	NA	NA
	9-Feb-95	PES	8.7	NA	NA	1.800	0.110	0.380	0.740	NA	NA

Table 2. Summary of Historical Analytical Results for Groundwater Samples Through Second Quarter 2011
 1650 65th Street, Emeryville, California

Concentrations expressed in milligrams per liter (mg/l) - equivalent to parts per million (ppm)

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
EW-1	9-May-95	PES	6.6	NA	NA	1.100	0.051	0.270	0.380	NA	NA
Cont.	10-Aug-95	PES	2.6	NA	NA	0.410	0.016	0.110	0.097	NA	NA
	13-Nov-95	PES	14	NA	NA	2.900	0.110	0.550	0.440	NA	NA
	13-Feb-96	PES	3.7	NA	NA	1.000	0.220	0.170	0.280	NA	NA
	9-May-96	PES	0.97	NA	NA	0.230	0.050	0.039	0.047	NA	NA
	8-Aug-96	PES	0.74	NA	NA	0.200	0.063	0.025	0.049	NA	NA
	11-Nov-96	PES	0.64	NA	NA	0.340	0.110	0.034	0.090	NA	NA
	14-Feb-97	PES	4.20	NA	NA	1.600	0.043	0.260	0.040	NA	NA
	14-May-97	PES	2.2	NA	NA	0.940	0.011	0.064	0.068	NA	NA
	12-Aug-97	PES	3.2	NA	NA	1.400	0.028	0.086	0.110	NA	NA
	12-Nov-97	PES	2.0	NA	NA	0.790	0.045	0.028	0.090	NA	NA
	4-Feb-98	PES	7.2	NA	NA	2.600	0.190	0.310	0.140	NA	NA
	18-May-98	PES	1.5	NA	NA	0.820	0.019	0.071	0.067	NA	NA
	11-Aug-98	PES	5.1	NA	NA	1.2	0.0065	0.075	0.21	NA	NA
	17-Dec-98	PES	5.9	NA	0.04	2.2	0.16	0.0035	0.31	NA	NA
	7-Oct-99	PES	11	NA	<0.5	3.1	0.098	0.49	0.89	NA	NA
	12-Oct-00	PES	7.7	NA	<0.010	3.0	0.056	0.38	0.20	NA	NA
	7-Oct-10	PES	1.2	NA	<0.0013	0.170	0.036	0.0065	0.0162	NA	NA
	26-May-11	PES	1.1	NA	<0.001	0.110	0.0043	0.0016	0.0084	<0.001	<0.005

NOTES:

* = 1,2-Dichlorethane concentration (only 1,2-Dichloroethane detected).

** = Organic Lead

*** = TPH quantified as gasoline but chromatogram pattern was not typical of gasoline.

¹ = Trichloroethylene concentration (only trichloroethylene detected).

ES = Engineering-Science, Inc.

PES = PES Environmental, Inc.

BLAINE = Blaine Tech Services, Inc.

NA = Not analyzed

ND = Not detected above method detection limit.

NS = Not sampled.

<0.0005 = Not detected above indicated laboratory reporting limit.

MCL = California Maximum Contaminant level, current as of January 1991.

DAL = Department of Health Services Action Levels, current as of January 1991.

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl tert butyl ether

DISTRIBUTION

**GROUNDWATER MONITORING REPORT
FOURTH QUARTER 2011 SAMPLING EVENT
1650 65TH STREET
EMERYVILLE, CALIFORNIA
FUEL LEAK CASE NO. RO0000440
GEOTRACKER GLOBAL ID T0600100511**

JANUARY 19, 2012

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