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January 22, 2013

1211.001.02.001

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

Attention: Mr. Mark Detterman

Transmittal
Groundwater Monitoring Report
Fourth Quarter 2012 Sampling Event
1650 65th Street
Emeryville, California
Fuel Leak Case No. RO0000440
Geotracker Global ID T0600100511

RECEIVED

By Alameda County Environmental Health at 4:59 pm, Jan 28, 2013

Dear Mr. Detterman:

Submitted herewith for your review is the *Groundwater Monitoring Report, Fourth Quarter 2012 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
Managing Director, Asset Management

cc: Chris Baldassari, PES Environmental, Inc.



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 2012 SAMPLING EVENT
1650 65TH STREET
EMERYVILLE, CALIFORNIA
Fuel Leak Case No. RO0000440
Geotracker Global ID T0600100511**

JANUARY 22, 2013

By:

A handwritten signature in blue ink, appearing to read 'Chris Baldassari', written over a horizontal line.

Christopher J Baldassari, P.G.
Senior Geologist



A handwritten signature in blue ink, appearing to read 'Robert S. Creps', written over a horizontal line.

Robert S. Creps, P.E.
Principal Engineer

1211.001.02.001

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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 the Fourth Quarter 2012 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 2012 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, and requested case closure.

In response, ACEH issued a letter dated April 1, 2011 (ACEH, 2011a), which included a request to conduct further investigations and groundwater monitoring of selected wells on a semi-annual basis. Based on the technical requests in the ACEH letter, PES prepared work plans for the additional investigation activities requested by ACEH, which included: (1) installing a temporary groundwater monitoring well between monitoring wells MW-4 and MW-6; (2) installing and sampling two sub-slab vapor probes near the southeast corner of the building (PES, 2011a,b); and (3) collecting soil matrix samples near the source area (PES, 2011c, 2012). The groundwater and sub-slab vapor investigation work plan was

approved by ACEH on January 6, 2012 (ACEH, 2012a), and the soil matrix investigation work plan was approved by ACEH on February 21, 2012 (ACEH, 2012b).

The approved Work Plans were implemented by PES in March and April 2012, and PES subsequently submitted a report to ACEH documenting the results of the focused soil, sub-slab vapor, and groundwater investigation activities. The results indicated: (1) petroleum hydrocarbon-affected groundwater is limited to the vicinity of the former UST and does not extend off-site; (2) fuel-related VOC vapors and methane are not present beneath the building slab at the southwestern portion of the building (in the near vicinity of the former tank); (3) high oxygen levels are present beneath the building slab in the vicinity of the former tank; and (4) petroleum hydrocarbon residuals present in soil beneath the building and around the former tank area have been effectively delineated. The report recommended preparing an evaluation of the Site for case closure under the California State Water Resource Control Board's (SWRCBs) low-threat underground storage tank (UST) closure policy¹ (Policy).

3.0 SITE DESCRIPTION

The 5.0-acre project site is located north of 65th Street at its western terminus. 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 2012 groundwater monitoring activities consisted of: (1) field preparation activities; (2) collecting groundwater samples from five 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.

¹ California State Water Resources Control Board, 2012. Resolution 2012-0016: "*Water Quality Control Policy for Low-Threat Underground Storage Tank Case Closure.*" May 1.

4.1 Groundwater-Level Measurements

Groundwater-level measurements were collected on November 21, 2012 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

After collecting groundwater-level measurements, Confluence sampled the wells on November 21, 2012. 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 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 methyl tertiary-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 21, 2012 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 21, 2012 ranged from 6.37 feet above mean sea level (feet msl; MW-6) to 11.01² feet msl (MW-7). Groundwater elevation contours developed for November 21, 2012 are presented on Plate 3. Historical Site groundwater-level elevation data is also presented in Appendix C. Based on measured water levels on November 21, 2012, 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 water levels, direction of groundwater flow, and groundwater gradient are consistent with historical data, and with regional groundwater flow directions (generally west to southwest, 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.

Detected concentrations of TPHg and BTEX from the Fourth Quarter 2012 event for wells nearest the source area (wells MW-2 and EW-1) are generally consistent with the prior monitoring event results and indicate that concentrations are generally stable or declining since the periodic groundwater monitoring resumed in October 2010. Taken as a whole, when compared to historical levels (presented in Appendix C), the results indicate that concentrations of TPHg and BTEX are declining over time and are indicative of a long-term trend of decreasing concentrations of petroleum hydrocarbon residuals in groundwater in the vicinity of the source area.

In the area downgradient of the former UST (represented by samples from wells MW-4 and MW-6), groundwater samples for the Fourth Quarter 2012 had very low or non-detected concentrations of TPHg, BTEX, and fuel oxygenates, consistent with samples from Second Quarter 2012. TPHg, BTEX, and fuel oxygenates were not detected at or above their respective laboratory reporting limits in well MW-6, and in well MW-4 only a low concentration of benzene (1.8 µg/L) was detected.

² Compared to historical depth to groundwater measurements, the groundwater elevation in well MW-7 was anomalously high on November 21, 2012.

In upgradient well MW-8, TPHg and BTEX were detected during the current monitoring event, but at concentrations significantly lower than those detected during the Fourth Quarter 2010 event. These constituents were not detected during the Second Quarter 2012 event, with the exception of a low detection of benzene (4.8 $\mu\text{g/L}$), and are comparable to concentrations detected in the Fourth Quarter 2011 event.

5.3 Quality Assurance/Quality Control Assessment of Chemical Data

The quality of the chemical data reported by the project laboratory 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 this monitoring event are considered to be representative and of good quality.

6.0 CONCLUSIONS

The results of the Fourth Quarter 2012 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 2012 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) indicate a decreasing trend when 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 indicate that the affected groundwater is restricted to the localized vicinity of the source area, and are indicative of stable or decreasing concentrations compared to prior monitoring data; and

- Groundwater concentrations at the Site are all well below the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Limits (ESLs) for potential vapor intrusion concerns at commercial/industrial sites.

7.0 CLOSURE

The Fourth Quarter 2012 groundwater monitoring event was successfully completed. In accordance with current ACEH requirements, the next groundwater monitoring event is scheduled for the Second Quarter 2013.

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.

ACEH, 2012a. *Request for Work Plan Addendum With Conditional Work Plan Approval; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511, Emery Bay Plaza, 1650 65th Street, Emeryville, CA 94608.* January 6.

ACEH, 2012b. *Conditional Approval of Focused Source Area Work Plan Addendum; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511, Emery Bay Plaza, 1650 65th Street, Emeryville, CA 94608.* February 21.

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.
- PES Environmental, Inc. 2011a. *Work Plan for Additional Investigation, 1650 65th Street, Emeryville, California; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511.* July 22.
- PES Environmental, Inc. 2011b. *Work Plan Addendum, 1650 65th Street, Emeryville, California; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511.* November 18.
- PES Environmental, Inc. 2011c. *Work Plan for Focused Source Area Soil Investigation, 1650 65th Street, Emeryville, California; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511.* December 5.
- PES Environmental, Inc. 2012. *Addendum to Work Plan for Focused Source Area Soil Investigation, 1650 65th Street, Emeryville, California; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511.* February 3.
- PES Environmental, Inc. 2012. *Second Quarter 2012 Groundwater Monitoring Report, 1650 65th Street, Emeryville, California; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511.* August 2.
- PES Environmental, Inc. 2012b. *Results of Additional Investigation, 1650 65th Street, Emeryville, California; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511.* September 18.

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
	5/23/2012	18.25	10.49	7.76
	11/21/2012	18.25	11.01	7.24
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
	5/23/2012	18.24	10.58	7.66
	11/21/2012	18.24	11.02	7.22
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	8.70	6.22
	5/23/2012	14.92	8.29	6.63
	11/21/2012	14.92	8.36	6.56
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
	5/23/2012	14.73	8.10	6.63
	11/21/2012	14.73	7.79	6.94
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
	5/23/2012	15.34	6.91	8.43
	11/21/2012	15.34	7.71	7.63
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
	5/23/2012	14.53	7.91	6.62
	11/21/2012	14.53	8.16	6.37
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
	5/23/2012	15.45	5.97	9.48
	11/21/2012	15.45	4.44	11.01
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
	5/23/2012	17.52	10.61	6.91
	11/21/2012	17.52	10.54	6.98

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 (µg/L)	TPHd (µg/L)	TPHg (µg/L)	BTEX & Fuel Oxygenates					HVOCs	Metals (mg/L)	TDS (mg/L)
					Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Other (µg/L)	TCE (µg/L)		
EW-1	10/7/2010	--	--	1,200	170	36	6.5	16.2		--	--	--
	5/26/2011	ND (300)	--	1,100	110	4.3	1.6	8.4		ND (1.0)	ND*	720
	11/17/2011	--	--	1,100	73	27	3.8	11.1	DIPE : 0.62	--	--	--
	5/23/2012	--	--	1,500	55	8.7	1.4	17		--	--	--
	11/21/2012	--	--	1,600	83	13	3.4	17.1	1,2-DCE : 0.51; DIPE : 0.51	--	--	--
MW-2	10/7/2010	--	--	6,100	700	510	190	641		--	--	--
	5/26/2011	ND (300)	--	1,900	220	18	8.2	54.5		ND (2.0)	ND*	790
	11/17/2011	--	--	2,400	270	120	29	135		--	--	--
	5/23/2012	--	--	2,000	200	75	26	109		--	--	--
	11/21/2012	--	--	2,700	310	170	42	197		--	--	--
MW-3	10/7/2010	--	--	110	4.2	0.90	0.80	1.8	MTBE : 1.4	--	--	--
MW-4	10/7/2010	--	--	52	1.5	ND (0.50)	ND (0.50)	ND (0.50)	TBA : 14	--	--	--
	5/26/2011	ND (300)	--	64 Y	1.0	ND (0.50)	ND (0.50)	ND (0.50)	TBA : 15	ND (0.5)	ND*	5,340
	11/17/2011	--	--	ND (50)	1.3	ND (0.50)	ND (0.50)	ND (0.50)		--	--	--
	5/23/2012	--	--	ND (50)	1.4	ND (0.50)	ND (0.50)	ND (0.50)	TBA : 11	--	--	--
	11/21/2012	--	--	ND (50)	1.8	ND (0.50)	ND (0.50)	ND (0.50)		--	--	--
MW-5	3/6/2010	--	250 Y	99 Y	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)	MTBE : 2.0	--	--	1,290
MW-6	10/7/2010	--	--	ND (50)	1.7	1.0	0.9	2.3		--	--	--
	5/26/2011	ND (300)	--	ND (50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)		ND (0.5)	ND*	4,440
	11/17/2011	--	--	ND (50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)		--	--	--
	5/23/2012	--	--	ND (50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)		--	--	--
	11/21/2012	--	--	ND (50)	ND (0.50)	ND (0.50)	ND (0.50)	ND (0.50)		--	--	--
MW-7	3/6/2010	--	ND (50)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)		--	--	780
MW-8	10/6/2010	--	--	2,900	1,500	15	ND (10)	10		--	--	--
	5/26/2011	ND (300) / ND (300)	--	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)		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		--	--	--
	5/23/2012	--	--	ND (50) / ND (50)	4.8 / 4.2	ND (0.5) / ND (0.5)	ND (0.5) / ND (0.5)	ND (0.5) / ND (0.5)		--	--	--
	11/21/2012	--	--	110 / 100	720 / 660	6.1 / 5.8	ND (3.6) / ND (3.1)	ND (3.6) / ND (3.1)		--	--	--
Vapor Intrusion ESL - C/I Exposure ⁽⁴⁾	--	--	--	1,800	530,000	170,000	160,000			120	--	--
Drinking Water Ceiling ESL ⁽²⁾	100	100	100	170	40	30	20			5	--	--
Drinking Water ESL ⁽³⁾	210	210	210	1	150	300	1,800		Varies	5	--	500 to 1,500
Non-Drinking Water Ceiling ESL ⁽¹⁾	2,500	5,000	5,000	20,000	400	300	5,300			360	--	--
San Francisco Bay Basin Plan ⁽⁵⁾	--	--	--	1	150	300	1,750			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

1,2-DCE = 1,2-dichloroethylene

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

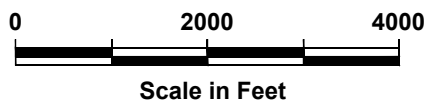


PROJECT SITE

EMERYVILLE

BERKELEY

SAN ANTONIO

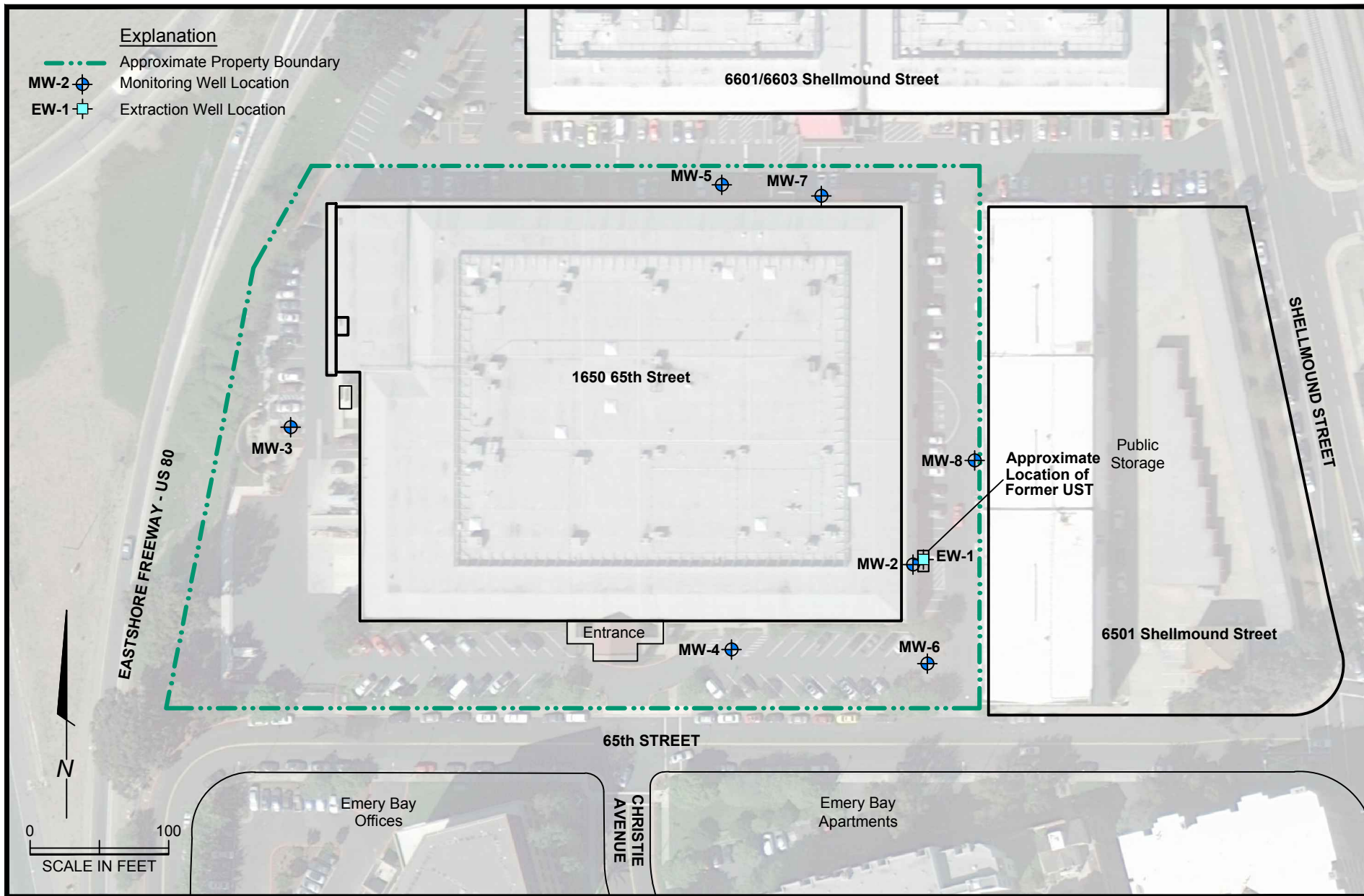


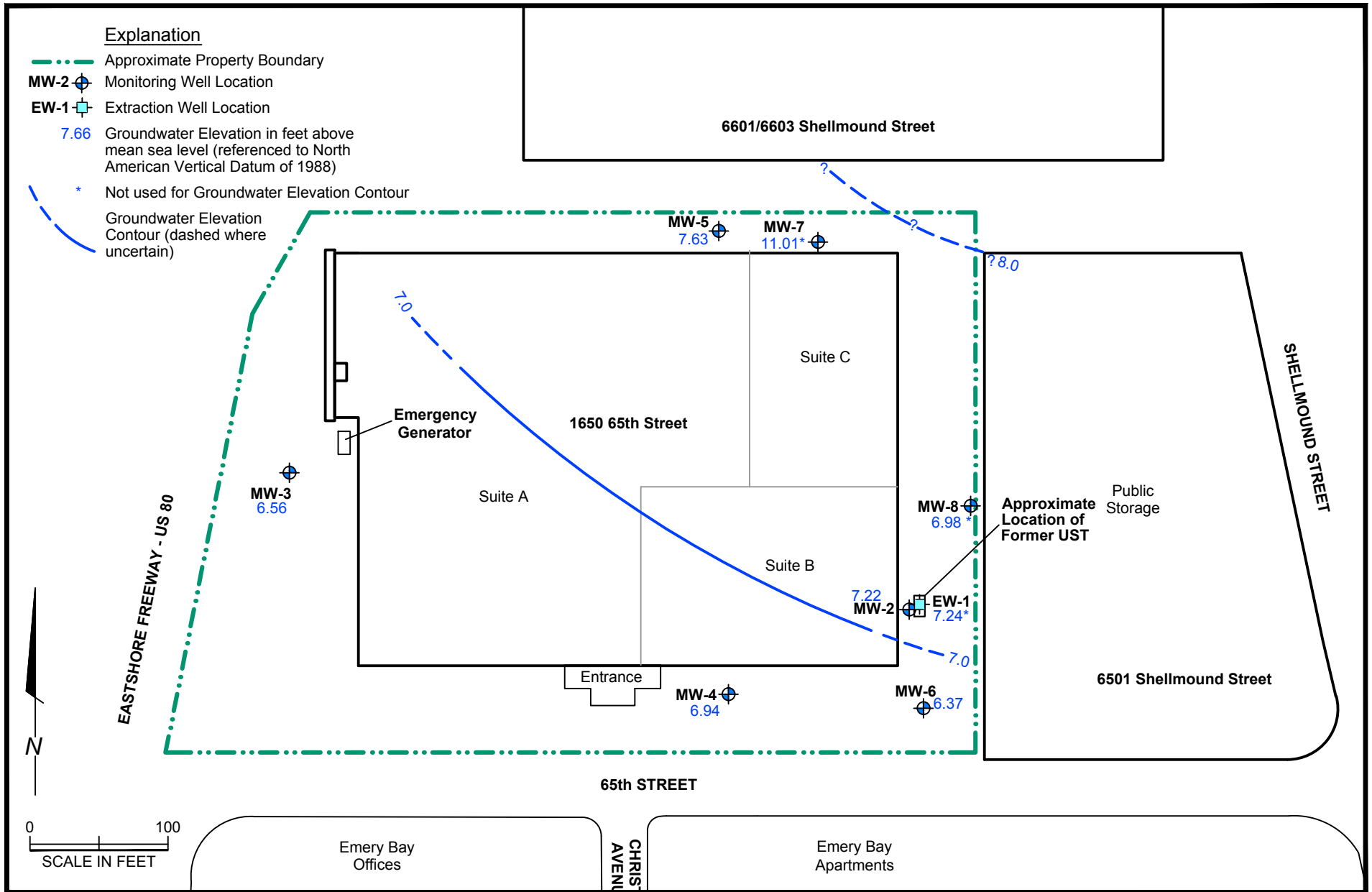
U.S.G.S. Topo Map - Oakland West, California, 7.5-minute quadrangle. Map version 1997; current as of 1993

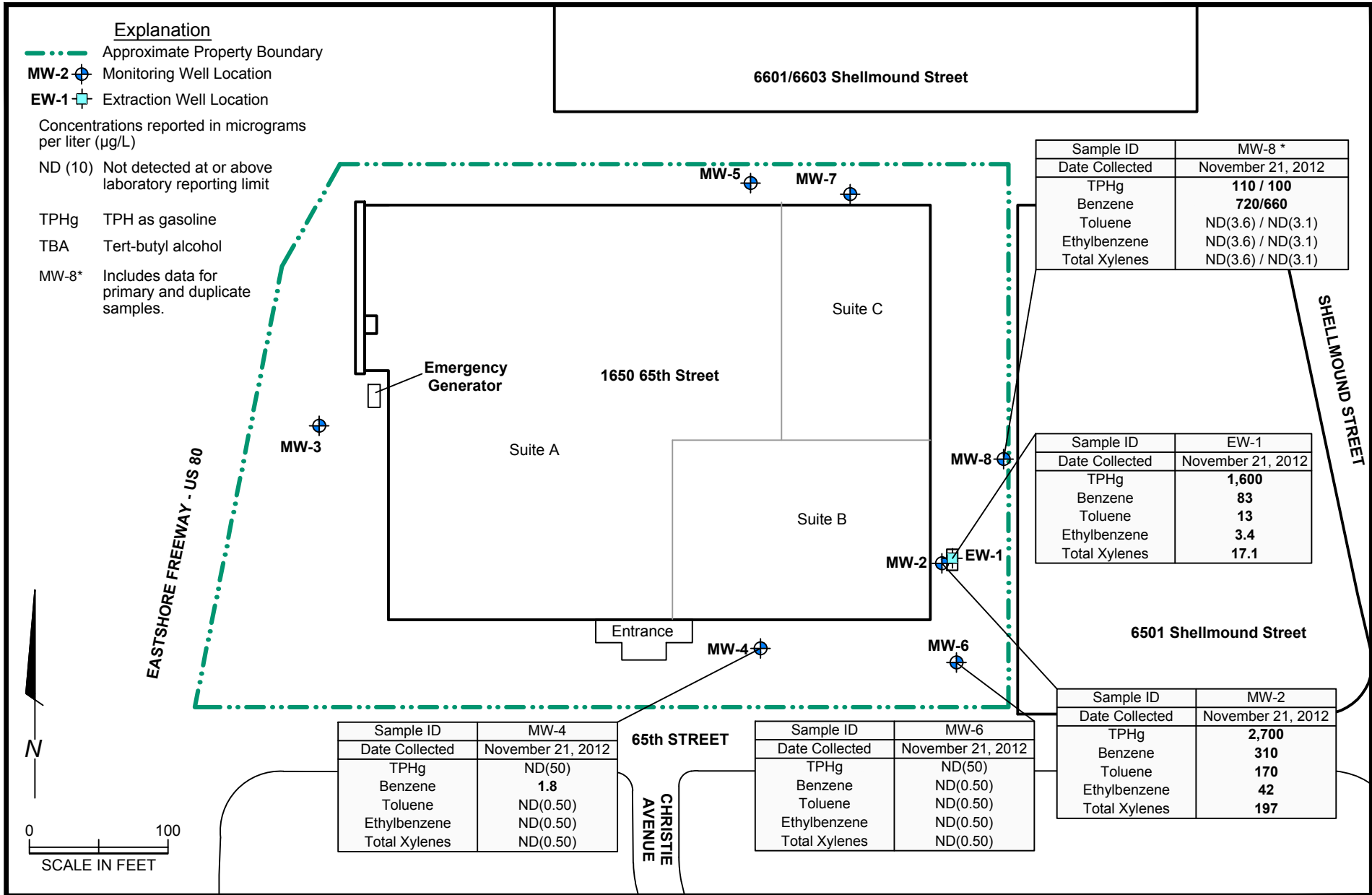


Site Location Map
1650 65th Street
Emeryville, California

PLATE
1







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

Project Name: Emeryville Site

Job Number: X1-121121

TAT: STANDARD 5 DAY 2 DAY 24 HOUR OTHER:

Lab: <u>Curtis & Tompkins</u>	Site Address: <u>1650 65th St, Emeryville</u>	Confluence PM: <u>Jason Brown</u>
Address: <u>2323 5th St, Berkeley</u>	California Global ID No.:	Phone / Fax: <u>916-760-7641 / 916-473-8617</u>
Contact:	Include EDF w/ Report: <u>Yes</u> No *per agreement w/ PES	Confluence Log Code: <u>CESC</u>
Phone/ Fax: <u>510-486-0900</u>	Consultant / PM: <u>PES / Chris Baldassari</u>	Report to: <u>Chris Baldassari</u>
	Phone / Fax: <u>415-899-1600</u>	Invoice to: <u>PES</u>

Sample ID	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Notes and Comments		
			Soil/Solid	Water/Liquid	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	TPH-G	BTEX, Oxygenates(5), 1,2-DCA, EDB						
FW-1	1015	11/2/12	X			6				X			X	X						
mw-2	1030		X			6				X			X	X						
mw-4	945		X			6				X			X	X						
mw-6	1115		X			6				X			X	X						
mw-8	1035		X			6				X			X	X						
mw-8A	-		X			6				X			X	X						
TB	-		X			2				X			X	X						

Sampler's Name: <u>J. McBurney</u>	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: <u>Confluence Environmental</u>	<u>J. McBurney / Confluence</u>	<u>11/2/12</u>	<u>1200</u>	<u>Jason Brown</u>	<u>11/2/12</u>	<u>1200</u>
Shipment Date:						
Shipment Method:						

Special Instructions:

Equipment Calibration Log

Equipment make/model	Equipment ID/serial number	Date	Time	Calibration Standards	Equipment Reading	Equipment Calibrated	Temp (°C/°F)	Tech init.	Comments
titrator II	6416261	11/21/12	945	pH 4.2, 10, Cond 1413	4.7, 10, 1413	Yes	17.2	JM	

Notes/comments:

Well Maintenance Inspection Form

Client: PES

Site: Emeryville site

Date: 11/21/12

Job #: X1-121121

Technician: J. McBurney

Page 1 of 1

Inspection Point	Well Inspected - No Corrective Action Required	Entry Indicates Deficiency										Notes (Note any repairs made while on site)						
		Cap non-functional	Lock non-functional	Lock missing	Bolts missing (# missing / # total tabs)	Tabs stripped (# stripped / # total tabs)	Tabs broken (# broken / # of total tabs)	Annular seal incomplete	Apron damaged	Rim / Lid broken	Trip Hazard		Below Grade	Other (explain in notes)	Well Not Inspected (explain in notes)			
EW-1					2 2	/	/	/	/	/	/	/	/	/	/			
MW-2	X				/	/	/	/	/	/	/	/	/	/	/	/		
MW-3		X	X		/	/	/	/	/	/	/	/	/	/	/	/		
MW-4	X				/	/	/	/	/	/	/	/	/	/	/	/		
MW-5				X	/	/	/	/	/	/	/	/	/	/	/	/		
MW-6	X				/	/	/	/	/	/	/	/	/	/	/	/		
MW-7	X				/	/	/	/	/	/	/	/	/	/	/	/		
MW-8					1 3	2 3	/	/	/	/	/	/	/	/	/	/		
					/	/	/	/	/	/	/	/	/	/	/	/		
					/	/	/	/	/	/	/	/	/	/	/	/		
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Notes: _____

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

Water Level Measurements

Job Number: X1-121121 Date: 11/21/12 Client: PES

Site: Emeryville site

Well I.D.	Time	Dia	Depth to NAPL	Thickness of NAPL	Depth to water (DTW)	Total Depth (measured)	Total Depth (historical)	Ref Point (OG/ TOB)		
EW-1	921	4			11.01		28.02		4	
mw-2	923	2			11.02		23.69		5	
mw-3	915	4			8.36		18.21			
mw-4	930	4			7.79		15.84		3	
mw-5	903	4			7.71		18.00			
mw-6	926	4			8.16		18.81		2	
mw-7	900	4			4.44		18.74			
mw-8	918	2			10.54		25.02		├──	1 Dup

Purging And Sampling Data Sheet

Job#: X1-121121	Sampler: J McBurney	Client: PES
Well ID: EW-1	Date: 11/21/12	Site: Emeryville
Well diam: 1/4" 1" 2" 3" (4") 6" Other:	DTW: 110.1 Total Depth: 28.02	
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 Volume = 11 X 3 = 33 (Total Purge) 80% = _____

Time	Temp (°C/°F)	pH	Cond (mS/µS)	Turbidity (NTU)	Purge Rate (gal or ml/min)	Volume Removed (gal/L)	Notes
957	20.8	7.3	1169	1	2.0	11.0	
1002	20.6	7.2	1181	1	↓	22.0	
1008	20.6	6.8	1199	1		33.0	
1014	20.5	6.8	1205	1		44.0	

Did well dewater? YES NO Total volume removed: 44.0 (gal/L)

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

Sample date: 11/21/12 Sample time: 1015 DTW at sample: 11.10

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:
Fe ²⁺ :	Pre-purge ORP: Post purge ORP:
NAPL depth:	Volume of NAPL: Volume removed: ml

Purging And Sampling Data Sheet

Job#: X1-121121	Sampler: J McBurney	Client: PES
Well ID: MW-2	Date: 11/21/12	Site: Emeryville
Well diam: 1/4" 1" (2) 3" 4" 6" Other:	DTW: 11-02 Total Depth: 23.69	
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 Volume = 2 X 3 = 6 (Total Purge) 80% = _____

Time	Temp (C/°F)	pH	Cond (mS/µS)	Turbidity (NTU)	Purge Rate (gal or mL/min)	Volume Removed (gal / L)	Notes
1023	20.6	7.1	1226	2	2.0	2.0	
1024	20.7	7.2	1221	2	1	4.0	
1025	20.8	7.1	1224	2	1	6.0	

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

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

Sample date: 11/21/12 Sample time: 1030 DTW at sample: 11.21

Sample ID: MW-2 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:
Fe ²⁺ :	Pre-purge ORP: Post purge ORP:
NAPL depth:	Volume of NAPL: Volume removed: ml

Purging And Sampling Data Sheet

Job#: X1-121121		Sampler: J McBurney		Client: PES	
Well ID: MW-4		Date: 11/21/12		Site: Emeryville	
Well diam: 1/4" 1" 2" 3" (4") 6" Other:				DTW: 7.79 Total Depth: 15.84	
Purge equip: ES <small>(diam)</small> : 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 Volume = 5 X 3 = 15 (Total Purge) 80% = 9.4

Time	Temp (C/°F)	pH	Cond (mS/µS)	Turbidity (NTU)	Purge Rate (gal or mL/ min)	Volume Removed (gal/ L)	Notes
930	72.7	9.5	8367	54	2.5	5.0	Strong odor
932	73.7	8.8	9762	22	↓	10.0	
934	73.3	8.9	10.06mS	1	↓	15.0	Cond now in mS

Did well dewater? YES NO Total volume removed: 15.0 (gal/L)

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

Sample date: 11/21/12 Sample time: 9.45 DTW at sample: 9.38

Sample ID: MW-4 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:
Fe ²⁺ :	Pre-purge ORP: Post purge ORP:
NAPL depth:	Volume of NAPL: Volume removed: ml

Purging And Sampling Data Sheet

Job#: X1-121121	Sampler: J McBurney	Client: PES
Well ID: mw-6	Date: 11/21/12	Site: Emeryville
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 8.16 Total Depth: 18.81	
Purge equip: <u>ES - diam</u> Bladder Peri Waterra Positive Air Displacement Ext. System		
disp bailer teflon bailer other: Tubing: OD: <u>New</u> Dedicated NA		
Purge method: <u>3-5 Case Volume</u> 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 Volume = 7 X 3 = 21 (Total Purge) 80% = 10.29

Time	Temp (°C / °F)	pH	Cond (ms / µS)	Turbidity (NTU)	Purge Rate (gal or mL / min)	Volume Removed (gal / L)	Notes
9:15	20.9	8.2	2540	1	2.0	7.0	
* Well dewatered @ 12g. Return to sample							
11:15	17.6	6.7	8442	2	—	—	

Did well dewater? <input checked="" type="checkbox"/> YES NO		Total volume removed: 12 (gal) / L	
Sample method: <u>Disp Bailor</u> Ded. Tubing New Tubing Ext. Port Other:			
Sample date: 11/21/12	Sample time: 11:15	DTW at sample: 11.59	
Sample ID: mw-6	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:	
Fe ²⁺ :	Pre-purge ORP:	Post purge ORP:	
NAPL depth:	Volume of NAPL:	Volume removed: ml	

Purging And Sampling Data Sheet

Job#: X1-121121	Sampler: J McBurney	Client: PES
Well ID: MW-8	Date: 11/21/12	Site: Emeryville
Well diam: 1/4" 1" (2) 3" 4" 6" Other:	DTW: 10.54 Total Depth: 25.02	
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 Volume = 2.5 x 3 = 7.5 (Total Purge) 80% = 13.43

Time	Temp (°C/°F)	pH	Cond. (mS/µS)	Turbidity (NTU)	Purge Rate (gal or ml/min)	Volume Removed (gal/L)	Notes
859	18.0	8.0	4895	518	2.0	2.5	
900	18.6	8.0	6384	818	↓	5.0	
901	18.8	8.0	6435	71000		7.5	
902	18.8	8.0	6525	71000		10.0	
							*Not @ 80% Return to sample

Did well dewater? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	Total volume removed: 10.0 (gal/L)	
Sample method: Disp Bailer <input checked="" type="checkbox"/> Ded. Tubing <input type="checkbox"/> New Tubing <input type="checkbox"/> Ext. Port <input type="checkbox"/> Other: <input type="checkbox"/>		
Sample date: 11/21/12	Sample time: 1035	DTW at sample: 11.10
Sample ID: MW-8	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: MW-8A	Pre-purge DO:	Post purge DO:
Fe ²⁺ :	Pre-purge ORP:	Post purge ORP:
NAPL depth:	Volume of NAPL:	Volume removed: ml

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 241450
ANALYTICAL REPORT

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

Project : 1211.001.02.003
Location : Emeryville Site
Level : II

<u>Sample ID</u>	<u>Lab ID</u>
EW-1	241450-001
MW-2	241450-002
MW-4	241450-003
MW-6	241450-004
MW-8	241450-005
MW-8A	241450-006
TB	241450-007

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: _____

Desiree N. Tetrault
Project Manager
(510) 486-0900

Date: 12/04/2012

CASE NARRATIVE

Laboratory number: 241450
Client: PES Environmental, Inc.
Project: 1211.001.02.003
Location: Emeryville Site
Request Date: 11/21/12
Samples Received: 11/21/12

This data package contains sample and QC results for seven water samples, requested for the above referenced project on 11/21/12. The samples were received on ice and intact.

Volatile Organics by GC/MS (EPA 8260B):
No 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

241450

Project Name: Emeryville Site

Job Number: X1-12121

TAT: STANDARD 5 DAY 2 DAY 24 HOUR OTHER:

Lab: Curtis & Tompkins	Site Address: 1650 65th St, Emeryville	Confluence PM: Jason Brown
Address: 2323 5th St, Berkeley	California Global ID No.:	Phone / Fax: 916-760-7641 / 916-473-8617
Contact:	Include EDF w/ Report: Yes No *per agreement w/ PES	Confluence Log Code: CESC
Phone/ Fax: 510-486-0900	Consultant / PM: PES / Chris Baldassari	Report to: Chris Baldassari
	Phone / Fax: 415-899-1600	Invoice to: PES

Sample ID	Time	Date	Matrix			Laboratory No.	No. of Containers	Preservative					Requested Analysis					Notes and Comments	
			Soil/Solid	Water/Liquid	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	TPH-G	BTEX, Oxygenates(5), 1,2-DCA, EDB					
1	EW-1	1015	X			6				X		X	X						
2	mw-2	1030	X			6				X		X	X						
3	mw-4	945	X			6				X		X	X						
4	mw-6	1115	X			6				X		X	X						
5	mw-8	1035	X			6				X		X	X						
6	mw-8A	-	X			6				X		X	X						
7	TB	-	X			2				X		X	X						

Sampler's Name: <u>J. MCBurney</u>	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Confluence Environmental	<u>Jim / Confluence</u>	<u>11/21/12</u>	<u>1200</u>	<u>Jason Brown</u>	<u>11/21/12</u>	<u>1200</u>
Shipment Date:						
Shipment Method:						

Special Instructions:

3 of 28

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 241450 Date Received 11/21/12 Number of coolers 1
Client PES Project EMMA Emeryville Site
Date Opened 11/21/12 By (print) [Signature] (sign) [Signature]
Date Logged in [Arrow] By (print) [Arrow] (sign) [Arrow]

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

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

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

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

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

7. Temperature documentation: * Notify PM if temperature exceeds 6°C
Type of ice used: Wet Blue/Gel None Temp(°C) 17

Samples Received on ice & cold without a temperature blank; temp. taken with IR gun

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

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

11. Are samples in the appropriate containers for indicated tests? YES NO

12. Are sample labels present, in good condition and complete? YES NO

13. Do the sample labels agree with custody papers? YES NO

14. Was sufficient amount of sample sent for tests requested? YES NO

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

20. Sample - 005 & - 006, 1 of 6 VOAs w/ bubble > 6mm.

Purgeable Organics by GC/MS

Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Field ID:	EW-1	Diln Fac:	1.000
Lab ID:	241450-001	Sampled:	11/21/12
Matrix:	Water	Received:	11/21/12
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	1,600	50	193154	11/26/12
tert-Butyl Alcohol (TBA)	ND	10	193298	11/29/12
Isopropyl Ether (DIPE)	0.54	0.50	193298	11/29/12
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	193298	11/29/12
Methyl tert-Amyl Ether (TAME)	ND	0.50	193298	11/29/12
MTBE	ND	0.50	193298	11/29/12
1,2-Dichloroethane	0.51	0.50	193298	11/29/12
Benzene	83	0.50	193298	11/29/12
Toluene	13	0.50	193298	11/29/12
1,2-Dibromoethane	ND	0.50	193298	11/29/12
Ethylbenzene	3.4	0.50	193298	11/29/12
m,p-Xylenes	14	0.50	193298	11/29/12
o-Xylene	3.1	0.50	193298	11/29/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	95	80-127	193298	11/29/12
1,2-Dichloroethane-d4	93	69-148	193298	11/29/12
Toluene-d8	93	80-120	193298	11/29/12
Bromofluorobenzene	83	80-121	193298	11/29/12

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Field ID:	MW-2	Diln Fac:	4.000
Lab ID:	241450-002	Sampled:	11/21/12
Matrix:	Water	Received:	11/21/12
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	2,700	200	193154	11/26/12
tert-Butyl Alcohol (TBA)	ND	40	193298	11/29/12
Isopropyl Ether (DIPE)	ND	2.0	193298	11/29/12
Ethyl tert-Butyl Ether (ETBE)	ND	2.0	193298	11/29/12
Methyl tert-Amyl Ether (TAME)	ND	2.0	193298	11/29/12
MTBE	ND	2.0	193298	11/29/12
1,2-Dichloroethane	ND	2.0	193298	11/29/12
Benzene	310	2.0	193298	11/29/12
Toluene	170	2.0	193298	11/29/12
1,2-Dibromoethane	ND	2.0	193298	11/29/12
Ethylbenzene	42	2.0	193298	11/29/12
m,p-Xylenes	160	2.0	193298	11/29/12
o-Xylene	37	2.0	193298	11/29/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	95	80-127	193298	11/29/12
1,2-Dichloroethane-d4	91	69-148	193298	11/29/12
Toluene-d8	91	80-120	193298	11/29/12
Bromofluorobenzene	87	80-121	193298	11/29/12

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Field ID:	MW-4	Diln Fac:	1.000
Lab ID:	241450-003	Sampled:	11/21/12
Matrix:	Water	Received:	11/21/12
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	ND	50	193255	11/28/12
tert-Butyl Alcohol (TBA)	ND	10	193298	11/29/12
Isopropyl Ether (DIPE)	ND	0.50	193298	11/29/12
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	193298	11/29/12
Methyl tert-Amyl Ether (TAME)	ND	0.50	193298	11/29/12
MTBE	ND	0.50	193298	11/29/12
1,2-Dichloroethane	ND	0.50	193298	11/29/12
Benzene	1.8	0.50	193298	11/29/12
Toluene	ND	0.50	193298	11/29/12
1,2-Dibromoethane	ND	0.50	193298	11/29/12
Ethylbenzene	ND	0.50	193298	11/29/12
m,p-Xylenes	ND	0.50	193298	11/29/12
o-Xylene	ND	0.50	193298	11/29/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	95	80-127	193298	11/29/12
1,2-Dichloroethane-d4	91	69-148	193298	11/29/12
Toluene-d8	92	80-120	193298	11/29/12
Bromofluorobenzene	93	80-121	193298	11/29/12

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Field ID:	MW-6	Diln Fac:	1.000
Lab ID:	241450-004	Sampled:	11/21/12
Matrix:	Water	Received:	11/21/12
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	ND	50	193255	11/28/12
tert-Butyl Alcohol (TBA)	ND	10	193298	11/29/12
Isopropyl Ether (DIPE)	ND	0.50	193298	11/29/12
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	193298	11/29/12
Methyl tert-Amyl Ether (TAME)	ND	0.50	193298	11/29/12
MTBE	ND	0.50	193298	11/29/12
1,2-Dichloroethane	ND	0.50	193298	11/29/12
Benzene	ND	0.50	193298	11/29/12
Toluene	ND	0.50	193298	11/29/12
1,2-Dibromoethane	ND	0.50	193298	11/29/12
Ethylbenzene	ND	0.50	193298	11/29/12
m,p-Xylenes	ND	0.50	193298	11/29/12
o-Xylene	ND	0.50	193298	11/29/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	97	80-127	193298	11/29/12
1,2-Dichloroethane-d4	92	69-148	193298	11/29/12
Toluene-d8	92	80-120	193298	11/29/12
Bromofluorobenzene	93	80-121	193298	11/29/12

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Field ID:	MW-8	Units:	ug/L
Lab ID:	241450-005	Sampled:	11/21/12
Matrix:	Water	Received:	11/21/12

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	110	50	1.000	193255	11/28/12
tert-Butyl Alcohol (TBA)	ND	71	7.143	193298	11/30/12
Isopropyl Ether (DIPE)	ND	3.6	7.143	193298	11/30/12
Ethyl tert-Butyl Ether (ETBE)	ND	3.6	7.143	193298	11/30/12
Methyl tert-Amyl Ether (TAME)	ND	3.6	7.143	193298	11/30/12
MTBE	ND	3.6	7.143	193298	11/30/12
1,2-Dichloroethane	ND	3.6	7.143	193298	11/30/12
Benzene	720	8.3	16.67	193330	11/30/12
Toluene	6.1	3.6	7.143	193298	11/30/12
1,2-Dibromoethane	ND	3.6	7.143	193298	11/30/12
Ethylbenzene	ND	3.6	7.143	193298	11/30/12
m,p-Xylenes	ND	3.6	7.143	193298	11/30/12
o-Xylene	ND	3.6	7.143	193298	11/30/12

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	97	80-127	7.143	193298	11/30/12
1,2-Dichloroethane-d4	93	69-148	7.143	193298	11/30/12
Toluene-d8	91	80-120	7.143	193298	11/30/12
Bromofluorobenzene	92	80-121	7.143	193298	11/30/12

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Field ID:	MW-8A	Units:	ug/L
Lab ID:	241450-006	Sampled:	11/21/12
Matrix:	Water	Received:	11/21/12

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
Gasoline C7-C12	100	50	1.000	193255	11/28/12
tert-Butyl Alcohol (TBA)	ND	63	6.250	193298	11/29/12
Isopropyl Ether (DIPE)	ND	3.1	6.250	193298	11/29/12
Ethyl tert-Butyl Ether (ETBE)	ND	3.1	6.250	193298	11/29/12
Methyl tert-Amyl Ether (TAME)	ND	3.1	6.250	193298	11/29/12
MTBE	ND	3.1	6.250	193298	11/29/12
1,2-Dichloroethane	ND	3.1	6.250	193298	11/29/12
Benzene	660	7.1	14.29	193330	11/30/12
Toluene	5.8	3.1	6.250	193298	11/29/12
1,2-Dibromoethane	ND	3.1	6.250	193298	11/29/12
Ethylbenzene	ND	3.1	6.250	193298	11/29/12
m,p-Xylenes	ND	3.1	6.250	193298	11/29/12
o-Xylene	ND	3.1	6.250	193298	11/29/12

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	95	80-127	6.250	193298	11/29/12
1,2-Dichloroethane-d4	91	69-148	6.250	193298	11/29/12
Toluene-d8	91	80-120	6.250	193298	11/29/12
Bromofluorobenzene	95	80-121	6.250	193298	11/29/12

ND= Not Detected
 RL= Reporting Limit

Purgeable Organics by GC/MS

Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Field ID:	TB	Diln Fac:	1.000
Lab ID:	241450-007	Sampled:	11/21/12
Matrix:	Water	Received:	11/21/12
Units:	ug/L		

Analyte	Result	RL	Batch#	Analyzed
Gasoline C7-C12	ND	50	193255	11/28/12
tert-Butyl Alcohol (TBA)	ND	10	193284	11/29/12
Isopropyl Ether (DIPE)	ND	0.50	193284	11/29/12
Ethyl tert-Butyl Ether (ETBE)	ND	0.50	193284	11/29/12
Methyl tert-Amyl Ether (TAME)	ND	0.50	193284	11/29/12
MTBE	ND	0.50	193284	11/29/12
1,2-Dichloroethane	ND	0.50	193284	11/29/12
Benzene	ND	0.50	193284	11/29/12
Toluene	ND	0.50	193284	11/29/12
1,2-Dibromoethane	ND	0.50	193284	11/29/12
Ethylbenzene	ND	0.50	193284	11/29/12
m,p-Xylenes	ND	0.50	193284	11/29/12
o-Xylene	ND	0.50	193284	11/29/12

Surrogate	%REC	Limits	Batch#	Analyzed
Dibromofluoromethane	108	80-127	193284	11/29/12
1,2-Dichloroethane-d4	120	69-148	193284	11/29/12
Toluene-d8	105	80-120	193284	11/29/12
Bromofluorobenzene	119	80-121	193284	11/29/12

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC667277	Batch#:	193154
Matrix:	Water	Analyzed:	11/26/12
Units:	ug/L		

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

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-127
1,2-Dichloroethane-d4	82	69-148
Toluene-d8	97	80-120
Bromofluorobenzene	101	80-121

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	193154
Units:	ug/L	Analyzed:	11/26/12
Diln Fac:	1.000		

Type: BS Lab ID: QC667290

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	1,047	105	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-127
1,2-Dichloroethane-d4	80	69-148
Toluene-d8	95	80-120
Bromofluorobenzene	99	80-121

Type: BSD Lab ID: QC667291

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	1,000	1,001	100	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	94	80-127
1,2-Dichloroethane-d4	82	69-148
Toluene-d8	97	80-120
Bromofluorobenzene	98	80-121

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC667734	Batch#:	193255
Matrix:	Water	Analyzed:	11/28/12
Units:	ug/L		

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

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-127
1,2-Dichloroethane-d4	91	69-148
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-121

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	193255
Units:	ug/L	Analyzed:	11/28/12
Diln Fac:	1.000		

Type: BS Lab ID: QC667735

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	800.0	723.7	90	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-127
1,2-Dichloroethane-d4	89	69-148
Toluene-d8	99	80-120
Bromofluorobenzene	97	80-121

Type: BSD Lab ID: QC667736

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	800.0	804.3	101	80-120	11	20

Surrogate	%REC	Limits
Dibromofluoromethane	87	80-127
1,2-Dichloroethane-d4	89	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	97	80-121

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	193284
Units:	ug/L	Analyzed:	11/29/12
Diln Fac:	1.000		

Type: BS Lab ID: QC667850

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	129.2	103	46-138
Isopropyl Ether (DIPE)	25.00	24.65	99	53-132
Ethyl tert-Butyl Ether (ETBE)	25.00	25.78	103	61-132
Methyl tert-Amyl Ether (TAME)	25.00	25.20	101	65-120
MTBE	25.00	23.85	95	59-120
1,2-Dichloroethane	25.00	27.12	108	72-139
Benzene	25.00	24.05	96	80-123
Toluene	25.00	23.50	94	80-120
1,2-Dibromoethane	25.00	23.56	94	80-120
Ethylbenzene	25.00	24.61	98	80-123
m,p-Xylenes	50.00	49.64	99	80-123
o-Xylene	25.00	23.72	95	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	116	69-148
Toluene-d8	103	80-120
Bromofluorobenzene	108	80-121

Type: BSD Lab ID: QC667851

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	161.7	129	46-138	22	24
Isopropyl Ether (DIPE)	25.00	25.07	100	53-132	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	26.98	108	61-132	5	20
Methyl tert-Amyl Ether (TAME)	25.00	25.80	103	65-120	2	20
MTBE	25.00	25.56	102	59-120	7	20
1,2-Dichloroethane	25.00	27.58	110	72-139	2	20
Benzene	25.00	24.50	98	80-123	2	20
Toluene	25.00	23.52	94	80-120	0	20
1,2-Dibromoethane	25.00	24.52	98	80-120	4	20
Ethylbenzene	25.00	24.89	100	80-123	1	20
m,p-Xylenes	50.00	50.46	101	80-123	2	20
o-Xylene	25.00	24.23	97	80-122	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	119	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	106	80-121

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC667852	Batch#:	193284
Matrix:	Water	Analyzed:	11/29/12
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	104	80-127
1,2-Dichloroethane-d4	116	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	117	80-121

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC667889	Batch#:	193298
Matrix:	Water	Analyzed:	11/29/12
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	95	80-127
1,2-Dichloroethane-d4	94	69-148
Toluene-d8	93	80-120
Bromofluorobenzene	96	80-121

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	193298
Units:	ug/L	Analyzed:	11/29/12
Diln Fac:	1.000		

Type: BS Lab ID: QC667890

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	117.7	118	46-138
Isopropyl Ether (DIPE)	20.00	17.09	85	53-132
Ethyl tert-Butyl Ether (ETBE)	20.00	18.07	90	61-132
Methyl tert-Amyl Ether (TAME)	20.00	19.36	97	65-120
MTBE	20.00	18.78	94	59-120
1,2-Dichloroethane	20.00	19.51	98	72-139
Benzene	20.00	19.88	99	80-123
Toluene	20.00	19.52	98	80-120
1,2-Dibromoethane	20.00	20.46	102	80-120
Ethylbenzene	20.00	18.96	95	80-123
m,p-Xylenes	40.00	40.60	101	80-123
o-Xylene	20.00	19.52	98	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-127
1,2-Dichloroethane-d4	95	69-148
Toluene-d8	93	80-120
Bromofluorobenzene	83	80-121

Type: BSD Lab ID: QC667891

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	117.8	118	46-138	0	24
Isopropyl Ether (DIPE)	20.00	16.77	84	53-132	2	20
Ethyl tert-Butyl Ether (ETBE)	20.00	17.94	90	61-132	1	20
Methyl tert-Amyl Ether (TAME)	20.00	18.98	95	65-120	2	20
MTBE	20.00	18.38	92	59-120	2	20
1,2-Dichloroethane	20.00	19.38	97	72-139	1	20
Benzene	20.00	19.12	96	80-123	4	20
Toluene	20.00	18.78	94	80-120	4	20
1,2-Dibromoethane	20.00	20.43	102	80-120	0	20
Ethylbenzene	20.00	18.19	91	80-123	4	20
m,p-Xylenes	40.00	38.66	97	80-123	5	20
o-Xylene	20.00	19.06	95	80-122	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-127
1,2-Dichloroethane-d4	96	69-148
Toluene-d8	94	80-120
Bromofluorobenzene	86	80-121

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	193284
MSS Lab ID:	241300-018	Sampled:	11/15/12
Matrix:	Water	Received:	11/15/12
Units:	ug/L	Analyzed:	11/29/12
Diln Fac:	4.000		

Type: MS Lab ID: QC667926

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<8.289	500.0	640.7	128	59-150
Isopropyl Ether (DIPE)	<0.4000	100.0	102.3	102	68-120
Ethyl tert-Butyl Ether (ETBE)	<0.4000	100.0	110.2	110	74-123
Methyl tert-Amyl Ether (TAME)	<0.4000	100.0	108.0	108	73-120
MTBE	<0.4000	100.0	104.4	104	68-120
1,2-Dichloroethane	<0.4000	100.0	112.0	112	80-129
Benzene	29.25	100.0	125.4	96	80-121
Toluene	1.577	100.0	95.00	93	80-120
1,2-Dibromoethane	<0.4000	100.0	101.4	101	80-120
Ethylbenzene	<0.4000	100.0	97.89	98	80-120
m,p-Xylenes	<0.5263	200.0	197.7	99	80-120
o-Xylene	<0.4000	100.0	95.18	95	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	122	69-148
Toluene-d8	105	80-120
Bromofluorobenzene	108	80-121

Type: MSD Lab ID: QC667927

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	500.0	691.1	138	59-150	8	26
Isopropyl Ether (DIPE)	100.0	110.9	111	68-120	8	20
Ethyl tert-Butyl Ether (ETBE)	100.0	116.1	116	74-123	5	20
Methyl tert-Amyl Ether (TAME)	100.0	113.2	113	73-120	5	20
MTBE	100.0	111.7	112	68-120	7	20
1,2-Dichloroethane	100.0	116.9	117	80-129	4	20
Benzene	100.0	135.7	106	80-121	8	20
Toluene	100.0	102.8	101	80-120	8	20
1,2-Dibromoethane	100.0	103.2	103	80-120	2	20
Ethylbenzene	100.0	104.3	104	80-120	6	20
m,p-Xylenes	200.0	214.2	107	80-120	8	20
o-Xylene	100.0	101.8	102	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	119	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	107	80-121

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	193330
Units:	ug/L	Analyzed:	11/30/12
Diln Fac:	1.000		

Type: BS Lab ID: QC668023

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	99.31	99	46-138
Isopropyl Ether (DIPE)	20.00	21.58	108	53-132
Ethyl tert-Butyl Ether (ETBE)	20.00	22.70	113	61-132
Methyl tert-Amyl Ether (TAME)	20.00	20.69	103	65-120
MTBE	20.00	20.89	104	59-120
1,2-Dichloroethane	20.00	22.93	115	72-139
Benzene	20.00	20.73	104	80-123
Toluene	20.00	20.61	103	80-120
1,2-Dibromoethane	20.00	19.14	96	80-120
Ethylbenzene	20.00	21.14	106	80-123
m,p-Xylenes	40.00	43.19	108	80-123
o-Xylene	20.00	20.35	102	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	118	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	110	80-121

Type: BSD Lab ID: QC668024

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	97.71	98	46-138	2	24
Isopropyl Ether (DIPE)	20.00	20.90	104	53-132	3	20
Ethyl tert-Butyl Ether (ETBE)	20.00	22.58	113	61-132	1	20
Methyl tert-Amyl Ether (TAME)	20.00	20.58	103	65-120	1	20
MTBE	20.00	20.49	102	59-120	2	20
1,2-Dichloroethane	20.00	22.30	111	72-139	3	20
Benzene	20.00	19.60	98	80-123	6	20
Toluene	20.00	19.13	96	80-120	7	20
1,2-Dibromoethane	20.00	19.51	98	80-120	2	20
Ethylbenzene	20.00	19.89	99	80-123	6	20
m,p-Xylenes	40.00	40.13	100	80-123	7	20
o-Xylene	20.00	18.77	94	80-122	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-127
1,2-Dichloroethane-d4	119	69-148
Toluene-d8	102	80-120
Bromofluorobenzene	111	80-121

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC668025	Batch#:	193330
Matrix:	Water	Analyzed:	11/30/12
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	107	80-127
1,2-Dichloroethane-d4	118	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	118	80-121

NA= Not Analyzed
 ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	241450	Location:	Emeryville Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211.001.02.003	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	193330
MSS Lab ID:	241543-002	Sampled:	11/28/12
Matrix:	Water	Received:	11/28/12
Units:	ug/L	Analyzed:	11/30/12
Diln Fac:	1.000		

Type: MS Lab ID: QC668073

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<2.072	125.0	167.1	134	59-150
Isopropyl Ether (DIPE)	<0.1000	25.00	25.98	104	68-120
Ethyl tert-Butyl Ether (ETBE)	<0.1000	25.00	27.50	110	74-123
Methyl tert-Amyl Ether (TAME)	<0.1000	25.00	26.29	105	73-120
MTBE	<0.1000	25.00	26.21	105	68-120
1,2-Dichloroethane	<0.1000	25.00	27.42	110	80-129
Benzene	<0.1000	25.00	24.09	96	80-121
Toluene	<0.1000	25.00	23.57	94	80-120
1,2-Dibromoethane	<0.1000	25.00	24.55	98	80-120
Ethylbenzene	<0.1000	25.00	24.11	96	80-120
m,p-Xylenes	<0.1316	50.00	47.82	96	80-120
o-Xylene	<0.1000	25.00	22.73	91	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	121	69-148
Toluene-d8	104	80-120
Bromofluorobenzene	111	80-121

Type: MSD Lab ID: QC668074

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	145.9	117	59-150	14	26
Isopropyl Ether (DIPE)	25.00	26.38	106	68-120	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	27.80	111	74-123	1	20
Methyl tert-Amyl Ether (TAME)	25.00	25.65	103	73-120	2	20
MTBE	25.00	25.47	102	68-120	3	20
1,2-Dichloroethane	25.00	28.11	112	80-129	2	20
Benzene	25.00	25.31	101	80-121	5	20
Toluene	25.00	24.74	99	80-120	5	20
1,2-Dibromoethane	25.00	24.82	99	80-120	1	20
Ethylbenzene	25.00	26.05	104	80-120	8	20
m,p-Xylenes	50.00	51.86	104	80-120	8	20
o-Xylene	25.00	24.43	98	80-120	7	20

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	117	69-148
Toluene-d8	105	80-120
Bromofluorobenzene	111	80-121

RPD= Relative Percent Difference

Date : 26-NOV-2012 18:46

Client ID: DYNA P&T

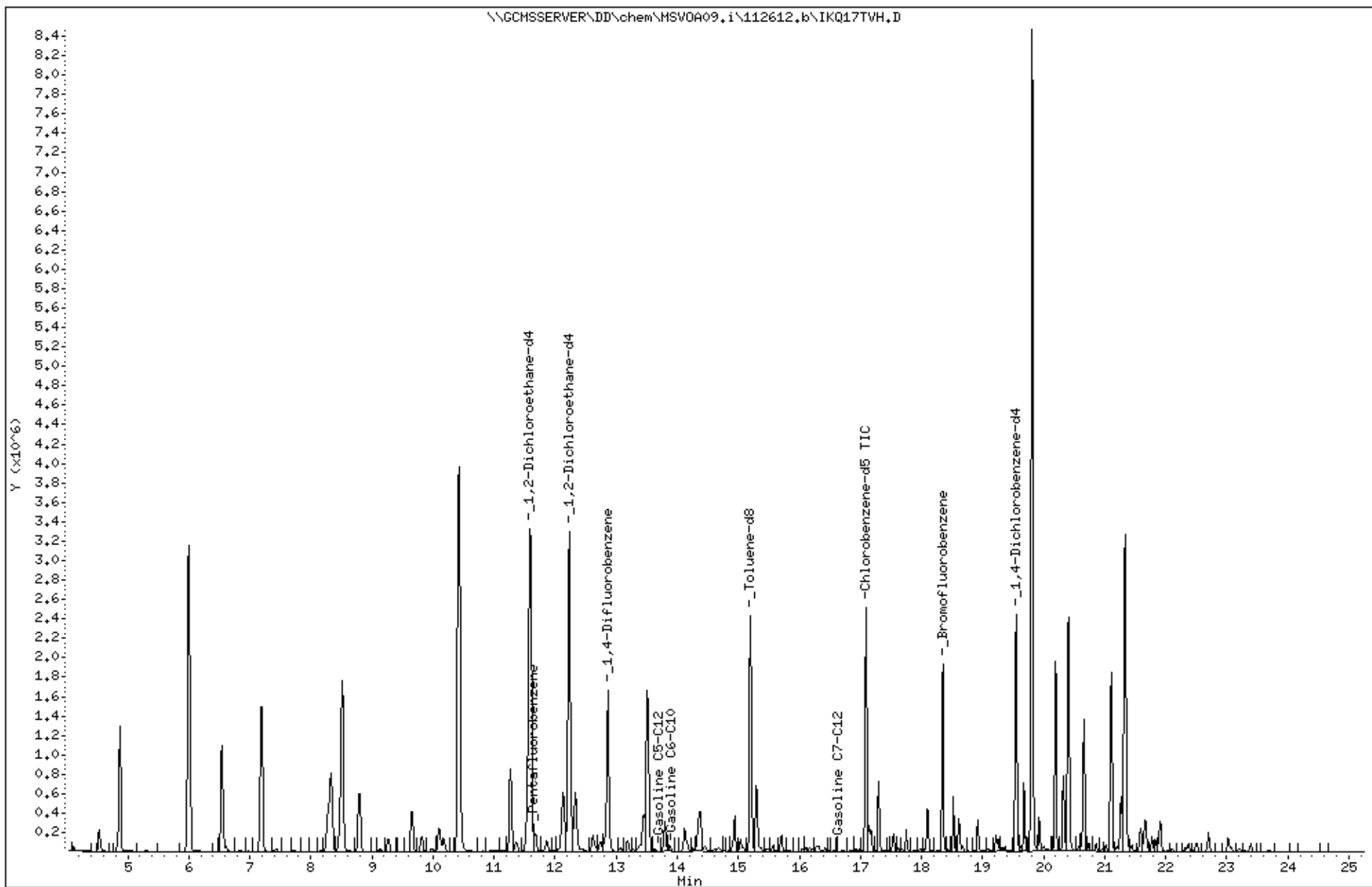
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Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:



Date : 26-NOV-2012 19:51

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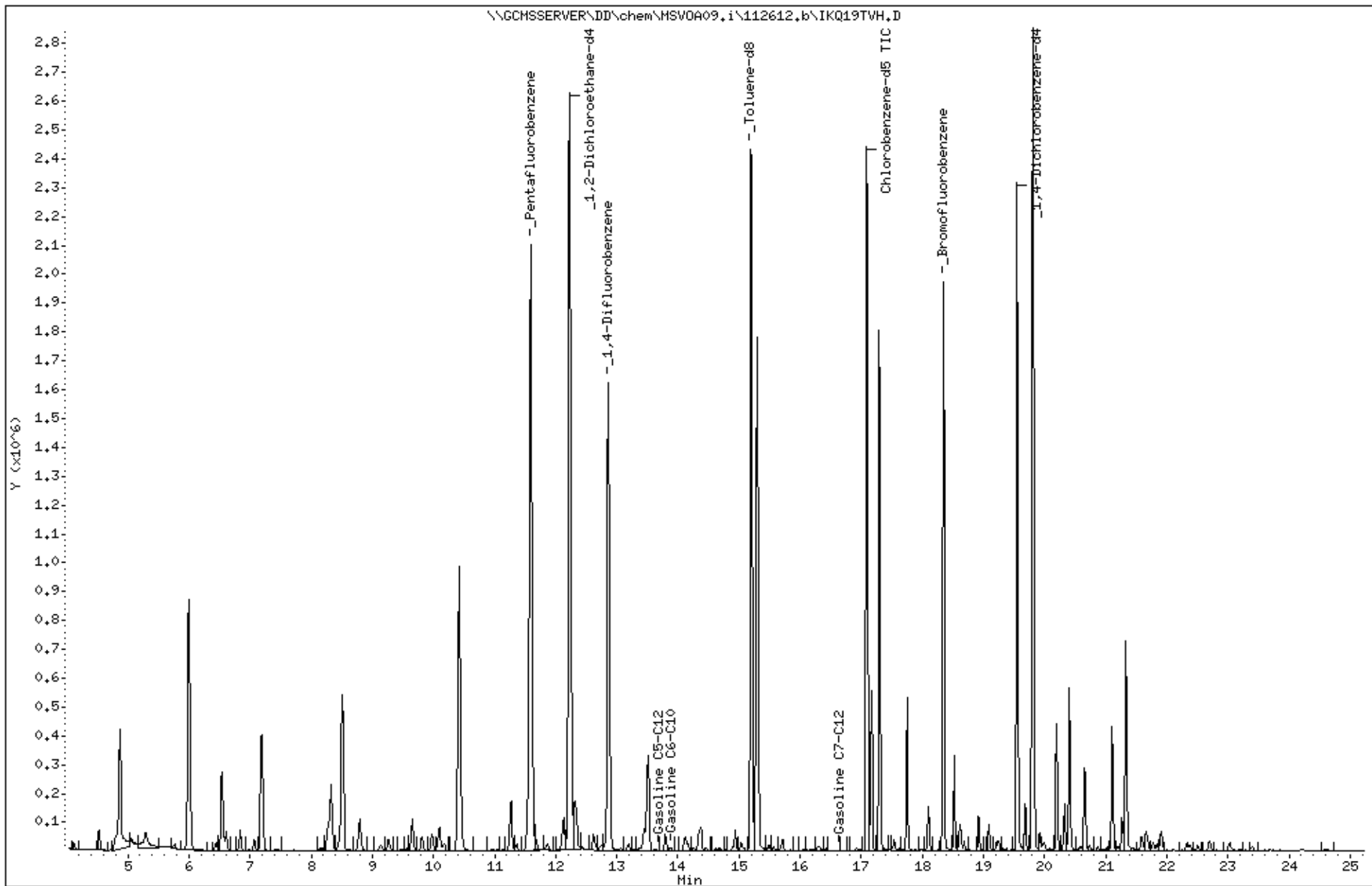
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Instrument: MSV0A09.i

Operator: VOC

Column diameter: 2.00

Column phase:



Date : 28-NOV-2012 18:00

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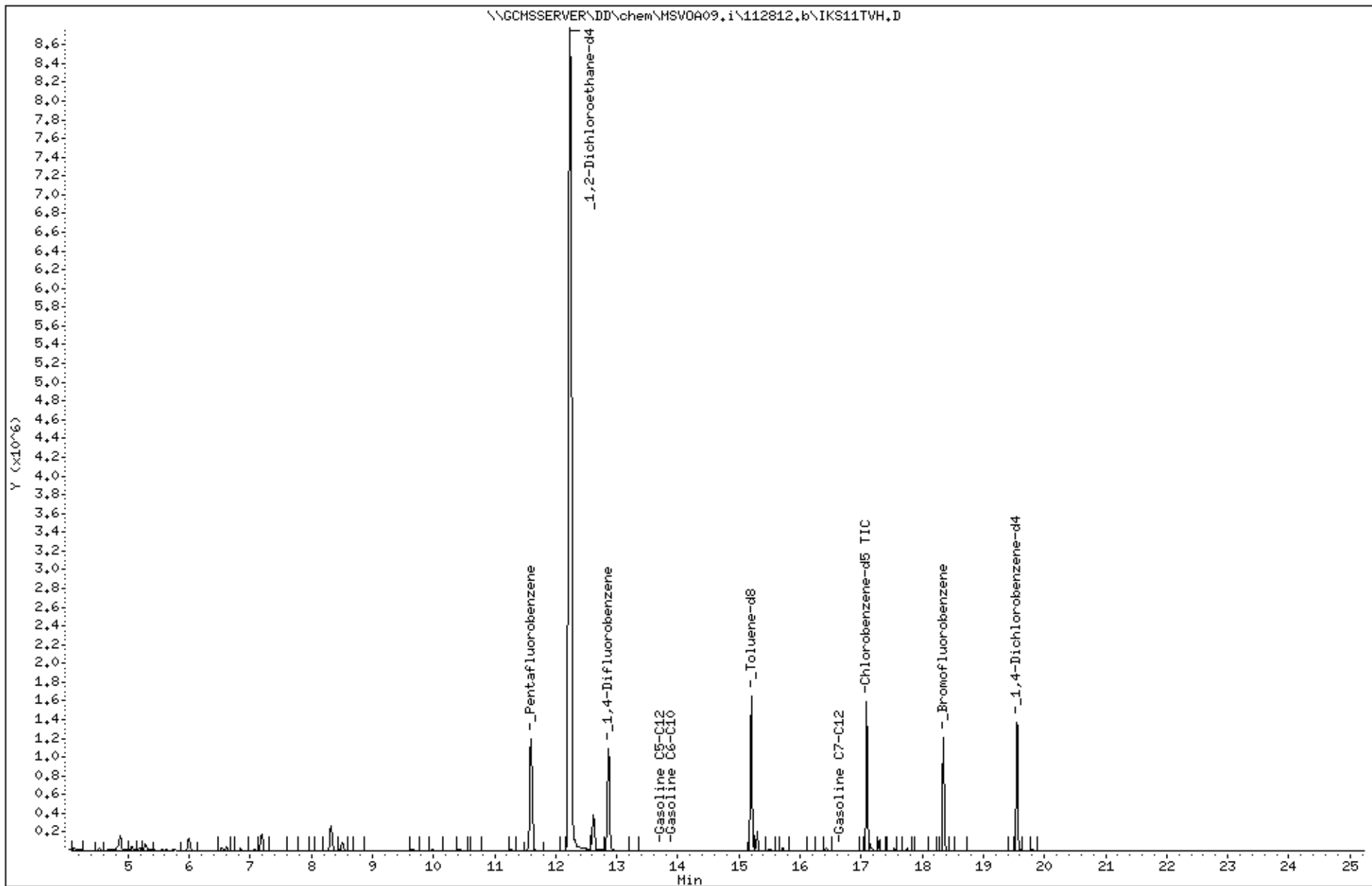
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Instrument: MSV0A09,i

Operator: VOC

Column diameter: 2,00

Column phase:



Date : 28-NOV-2012 18:33

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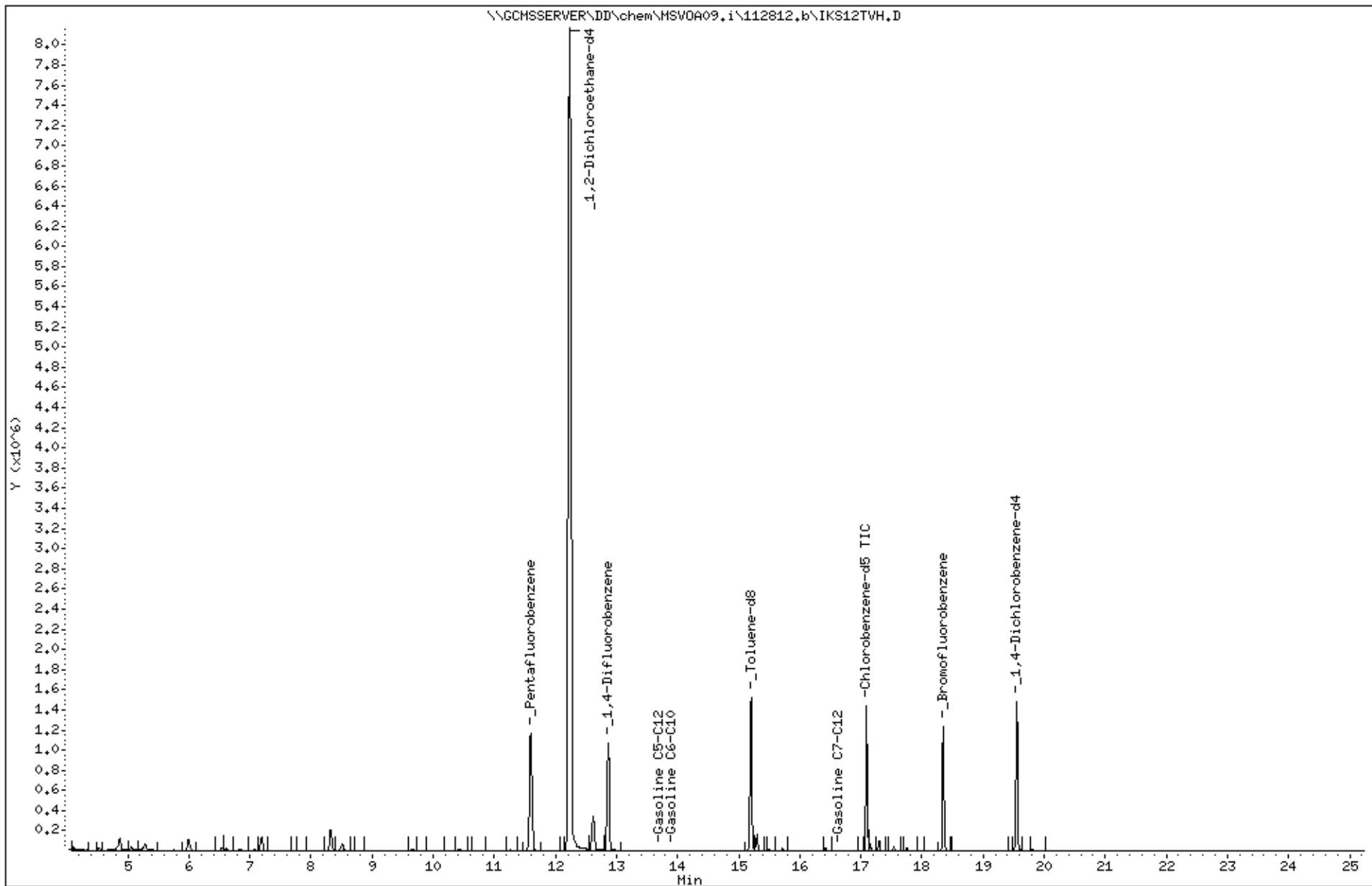
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Instrument: MSV0A09,i

Operator: VOC

Column diameter: 2.00

Column phase:



Date : 26-NOV-2012 15:28

Client ID: DYNA P&T

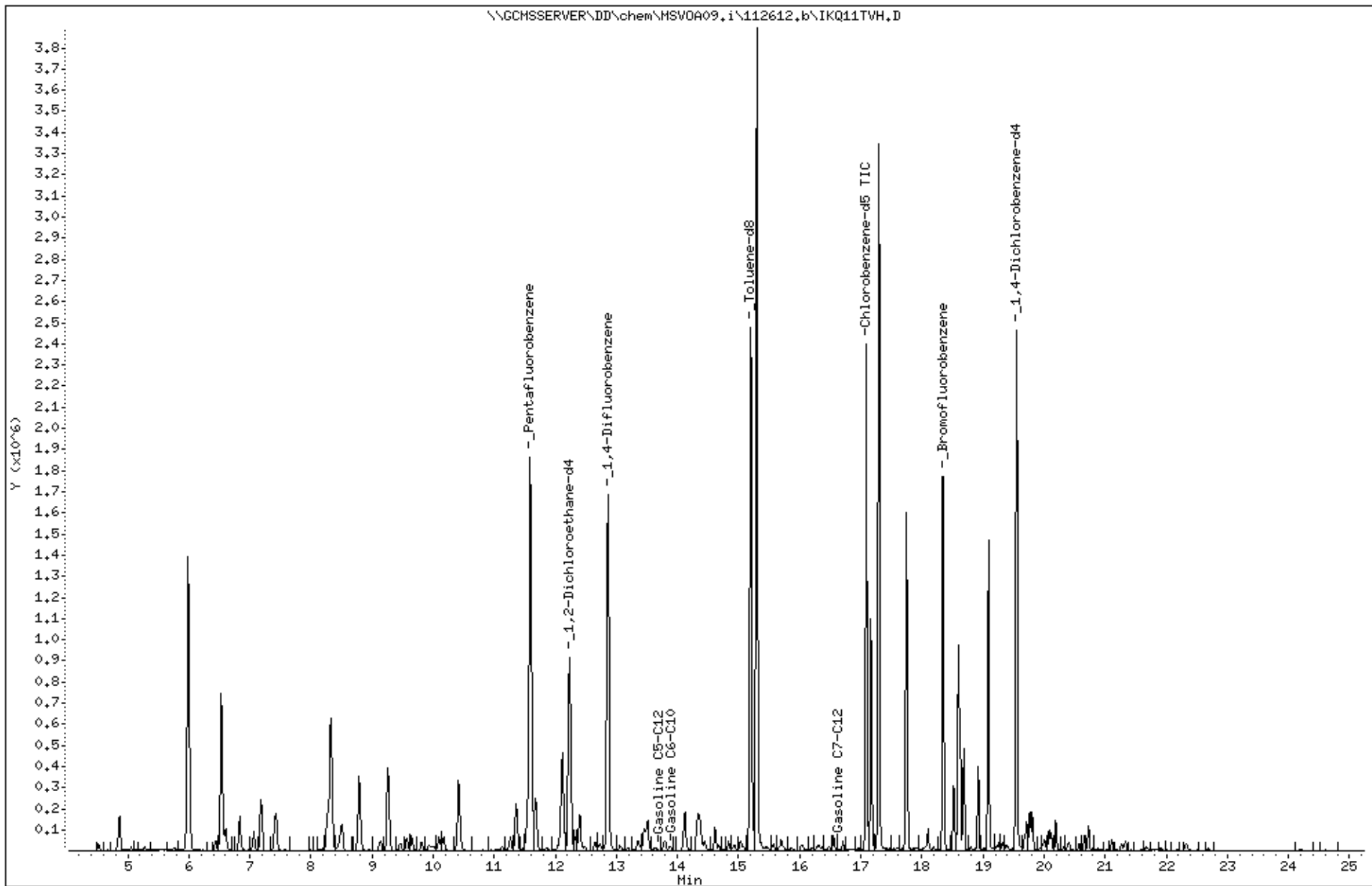
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Instrument: MSV0A09,i

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 Cont.	28-Feb-92	12.43	8.80	3.63
	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
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 Cont.	14-Feb-94	12.24	8.30	3.94
	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 Cont.	2-Mar-96	12.82	7.26	5.56
	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 Cont.	17-Dec-98	12.03	8.42	3.61
	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 October 2000
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 October 2000
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
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	

Table 2. Summary of Historical Analytical Results for Groundwater Samples Through October 2000
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 October 2000
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
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 October 2000
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	
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 October 2000
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 Cont.	10-Nov-92	PES	0.370	<0.100	NA	0.031	0.0012	<0.0003	0.0012	<0.0003	NA
	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	

Table 2. Summary of Historical Analytical Results for Groundwater Samples Through October 2000
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 October 2000
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

NOTES:

* = 1,2-Dichloroethane 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

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**GROUNDWATER MONITORING REPORT
FOURTH QUARTER 2012 SAMPLING EVENT
1650 65TH STREET
EMERYVILLE, CALIFORNIA
Fuel Leak Case No. RO0000440
Geotracker Global ID T0600100511**

JANUARY 22, 2013

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