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July 22, 2011

1211.001.01.006

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

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9:33 am, Aug 04, 2011

Alameda County
Environmental Health

Attention: Mr. Mark Detterman

Transmittal

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

Dear Mr. Detterman:

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

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

Very truly yours,

GRIFFIN CAPITAL CORPORATION

Julie A. Treinen
Managing Director, Asset Management

cc: Chris Baldassari, PES Environmental, Inc.

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A Report Prepared for:

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

Attention: Mr. Mark Detterman, P.G., CEG

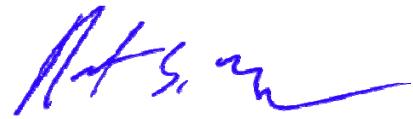
**GROUNDWATER MONITORING REPORT
SECOND QUARTER 2011 SAMPLING EVENT
1650 65TH STREET
EMERYVILLE, CALIFORNIA
FUEL LEAK CASE NO. RO0000440
GEOTRACKER GLOBAL ID T0600100511**

JULY 22, 2011

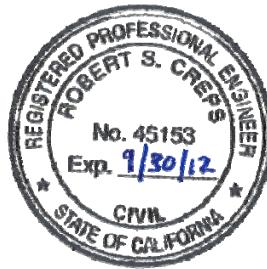
By:


Christopher J Baldassari

Senior Geologist


Robert S. Creps, P.E.

Principal Engineer



1211.001.01.006

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DISTRIBUTION

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1.0 INTRODUCTION

This *Groundwater Monitoring Report* (Report) has been prepared by PES Environmental, Inc. (PES), on behalf of Griffin Capital Corporation (Griffin) as agent for the fee owners, to document the results of a Second Quarter 2011 semi-annual groundwater monitoring event, at 1650 65th Street, in Emeryville, California (the Site, Plate 1). PES has performed several environmental investigations at the Site; the results from the most recent investigation were summarized in an October 25, 2010 report prepared by PES entitled *Results of Groundwater Monitoring and Preferential Pathway Study, and Request for Case Closure* (PES, 2010). The Second Quarter 2011 groundwater monitoring event was performed in accordance with an April 1, 2011 letter from the Alameda County Environmental Health Department (ACEH, 2011).

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 approved: (1) 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 submitted 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 the 2010 Report on behalf of Griffin to the ACEH; the 2010 Report summarized the results of groundwater sampling conducted during the Fourth Quarter 2010 and a preferential pathway study. In response, ACEH issued their 2011 Letter, which included a request to conduct groundwater monitoring of selected wells on a semi-annual basis.

3.0 SITE DESCRIPTION

This 5.0-acre project site is located within the Emeryville Brownfield Redevelopment Area. The property includes an existing commercial building (~127,000 square feet) divided into

three tenant suites (A, B, and C). The property is situated at an elevation of approximately 15 feet above mean sea level (msl), and the terrain slopes gently to the west-southwest. The nearest surface water body is San Francisco Bay, located approximately 1,000 feet west of the subject property.

4.0 GROUNDWATER MONITORING ACTIVITIES

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

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

4.1 Groundwater-Level Measurements

Groundwater-level measurements were collected on May 26, 2011 prior to commencing groundwater purging and sampling activities. Depth to groundwater measurements were recorded to the nearest 0.01-foot using an electronic sounding probe. To reduce the potential for cross-contamination of wells during the collection of groundwater-level measurements, the portion of sounding probe that potentially came into contact with the well casing or groundwater was cleaned and double-rinsed between measurements. Depth-to-groundwater measurements were converted to groundwater-level elevations referenced to mean sea level (msl).

4.2 Groundwater Sampling and Analyses

After collecting groundwater-level measurements, Confluence commenced sampling activities at the wells on May 26, 2011. Prior to collecting samples, groundwater in each well casing was purged using a combination of disposable polyethylene bailers and electric submersible pumps. 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

¹ In accordance with the ACEH 2011 letter, groundwater samples were collected from wells EW-1, MW-2, MW-4, MW-6, and MW-8. No samples were collected from wells MW-3, MW-5 and MW-7; however, all the wells were gauged for depth-to-water measurements during the groundwater monitoring activities.

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.

Additionally, in accordance with ACEH's request for analyses of waste oil parameters, the following analyses were performed: (1) TPH quantified as motor oil (TPHmo) using U.S. EPA Method 8015B (with silica gel cleanup); (2) the LUFT list of 5 metals (cadmium, chromium, lead, nickel, and zinc) using U.S. EPA Method 6010B; and (3) halogenated volatile organic compounds (HVOCs) using U.S. EPA Method 8260B. Analyses performed during the Second Quarter 2011 also included total dissolved solids (TDS) using SM 2540C.

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 May 26, 2011 and the calculated groundwater elevations (referenced to the North American Vertical Datum of 1988 [NAVD88]) are summarized in Table 2.

Groundwater-level elevations collected from the monitoring wells on May 26, 2011 ranged from 6.58 feet above mean sea level (feet msl; MW-6) to 9.65 feet msl (MW-7). Groundwater elevation contours developed for May 26, 2011 are presented on Plate 3. In general, groundwater elevations are consistent with measurements obtained during Fourth Quarter 2010. Historical groundwater-level elevation data is presented in Appendix C. Based on measured water levels on May 26, 2011, groundwater flow direction at the Site was calculated to be toward the southwest, with an approximate gradient ranging from 0.004 to 0.005 foot per foot. The direction of groundwater flow and gradient are consistent with historical data, and with regional groundwater flow directions (generally westward, toward San Francisco Bay).

5.2 Groundwater Analytical Results

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

Consistent with the historical trend of decreasing concentrations of TPHg and BTEX from wells nearest the source area (wells MW-2 and EW-1, located within the backfill of the former UST excavation), concentrations for the Second Quarter 2011 were lower compared to the last monitoring event (Fourth Quarter 2010) and remain significantly lower as compared to historical levels (Appendix C). A comparison of Second Quarter 2011 groundwater results to concentrations detected in Fourth Quarter 2010 samples for wells MW-2 and EW-1 indicates:

- TPHg in wells MW-2 and EW-1 decreased from 6,100 µg/L to 1,900 µg/L, and from 1,200 µg/L to 1,100 µg/L, respectively;
- Benzene in wells MW-2 and EW-1 decreased from 700 µg/L to 220 µg/L, and from 170 µg/L to 110 µg/L, respectively;
- Toluene in wells MW-2 and EW-1 decreased from 510 µg/L to 18 µg/L, and from 36 µg/L to 4.3 µg/L, respectively;
- Ethylbenzene in wells MW-2 and EW-1 decreased from 190 µg/L to 8.2 µg/L, and from 6.5 µg/L to 1.6 µg/L, respectively; and
- Total xylenes in wells MW-2 and EW-1 decreased from 641 µg/L to 54.5 µg/L, and from 16.2 µg/L to 8.4 µg/L, respectively.

In the downgradient area of the former UST, groundwater samples from wells MW-4 and MW-6 had low or non-detected concentrations of TPHg, BTEX, and TBA, consistent with samples from the Fourth Quarter 2010. In well MW-4, relatively low concentrations of TPHg, benzene, and TBA (64, 1.0, and 15 µg/L, respectively) were detected. TPHg and BTEX were not detected at or above their respective laboratory reporting limits in well MW-6.

Well MW-8, located up-gradient of the former UST, has historically not had TPHg or BTEX detections (from 1994 to 2000); however, TPHg and BTEX were detected in the sample collected during the Fourth Quarter 2010. With the exception of a low detection of benzene (0.60 µg/L), TPHg and BTEX constituents were not detected at or above their respective laboratory reporting limits in the Second Quarter 2011 sample from well MW-8.

TPHmo, metals (cadmium, chromium, lead, nickel, and zinc), and HVOCs were not detected at or above the laboratory reporting limit in the groundwater samples, with the exception of trichloroethylene, which was detected in well MW-8 at a concentration of 3.7 µg/L.

TDS in groundwater samples ranged from 720 to 5,340 milligrams per liter (mg/L).

5.3 Quality Assurance/Quality Control Assessment of Chemical Data

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

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

6.0 CONCLUSIONS

The Second Quarter 2011 groundwater monitoring event is the 41st sampling event performed at the Site since November 1989. The results of the recent groundwater monitoring event, taken with results from historical groundwater monitoring activities, indicate the following:

- Depth-to-water measurements and corresponding groundwater elevations collected during the Second Quarter 2011 groundwater monitoring demonstrate that (1) the direction of groundwater flow in the vicinity of the former UST is to the southwest with a shallow gradient; and (2) the direction of groundwater flow is consistent with historical groundwater monitoring data;
- Concentrations of TPHg and BTEX in wells MW-2 and EW-1 (in the near vicinity of the former UST) have continued a decreasing trend compared to historical data² and are expected to continue to attenuate with time;
- Concentrations of TPHg and BTEX in downgradient wells MW-4 and MW-6, when compared to prior monitoring data, suggest the plume is stable or shrinking;

² See Appendix C; note that for comparison, recent analytical results (2010-2011) for applicable wells have also been appended to the table.

- In well MW-8, the petroleum hydrocarbon constituents detected during the prior monitoring event were generally not present, and suggest the source may be transient in nature and not a significant new source onto the property;
- Groundwater concentrations at the Site are all below the San Francisco Bay Regional Water Quality Control Board (RWQCB) Environmental Screening Limits (ESLs) for potential vapor intrusion concerns at commercial/industrial sites;
- TPHmo, metals, and HVOCs were not detected in any of the groundwater samples, with the exception of a low concentration of TCE in upgradient well MW-8. The detected concentration of TCE in well MW-8 ($3.7 \mu\text{g}/\text{L}$) is less than the Maximum Contaminant Level (MCL) of $5 \mu\text{g}/\text{L}$ for drinking water. Taken as a whole, the results suggest that (1) waste oil reportedly stored in the former UST is not a concern in groundwater at the site; and (2) the detection of TCE in well MW-8 is likely from an offsite source; and
- Concentrations of TDS were above the secondary MCL of 500 mg/L for all sampled wells. Three of the sampled wells (MW-4, MW-6, and MW-8) were above the upper secondary MCL of 1,000 mg/L, and two of the wells (MW-4 and MW-6) were above the RWQCB limit of 3,000 mg/L for waters potentially suitable for municipal supplies (RWQCB, 2010).

7.0 CLOSURE

The Second Quarter 2011 groundwater monitoring event was successfully completed. In accordance with current ACEH requirements, the next groundwater monitoring event is scheduled for the fourth quarter 2011.

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, 2011. *Request for Work Plan; Fuel Leak Case No. RO0000440 and Geotracker ID T0600100511, Emery Bay Plaza, 1650 65th Street, Emeryville, CA 94608.* April 1.

California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB),
2010. *San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan)*.
December 31.

Engineering-Science (ES) 1987. *Soil Remediation Plan for the Southeastern Corner of
1650 65th Street Property, Emeryville, California*. December 18.

PES Environmental, Inc. 2001. *Groundwater Monitoring Report and Request for Closure,
Emery Bay Plaza, 1650 65th Street, Emeryville, California*. April 27.

PES Environmental, Inc. 2009. *Work Plan for Groundwater Monitoring and Preferential
Pathway Study, 1650 65th Street, Emeryville, California*. October 7.

PES Environmental, Inc. 2010. *Results of Groundwater Monitoring and Preferential Pathway
Study, and Request for Case Closure, 1650 65th Street, Emeryville, California*. October
25.

TABLES

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

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

Notes:

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

bgs - below ground surface.

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

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

Notes:

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

btoc - below top of casing

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

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

TPHg = total petroleum hydrocarbons quantified as gasoline

TBA = Tert-butyl alcohol

MTBE = Methyl tert-butyl ether

TCE = Trichloroethylene

TDS = Total Dissolved Solids

HVOCs = Halogenated volatile organic compounds

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

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

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

-- = Not applicable or not analyzed

ND* = LUFT - 5 metals reporting limits are 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)

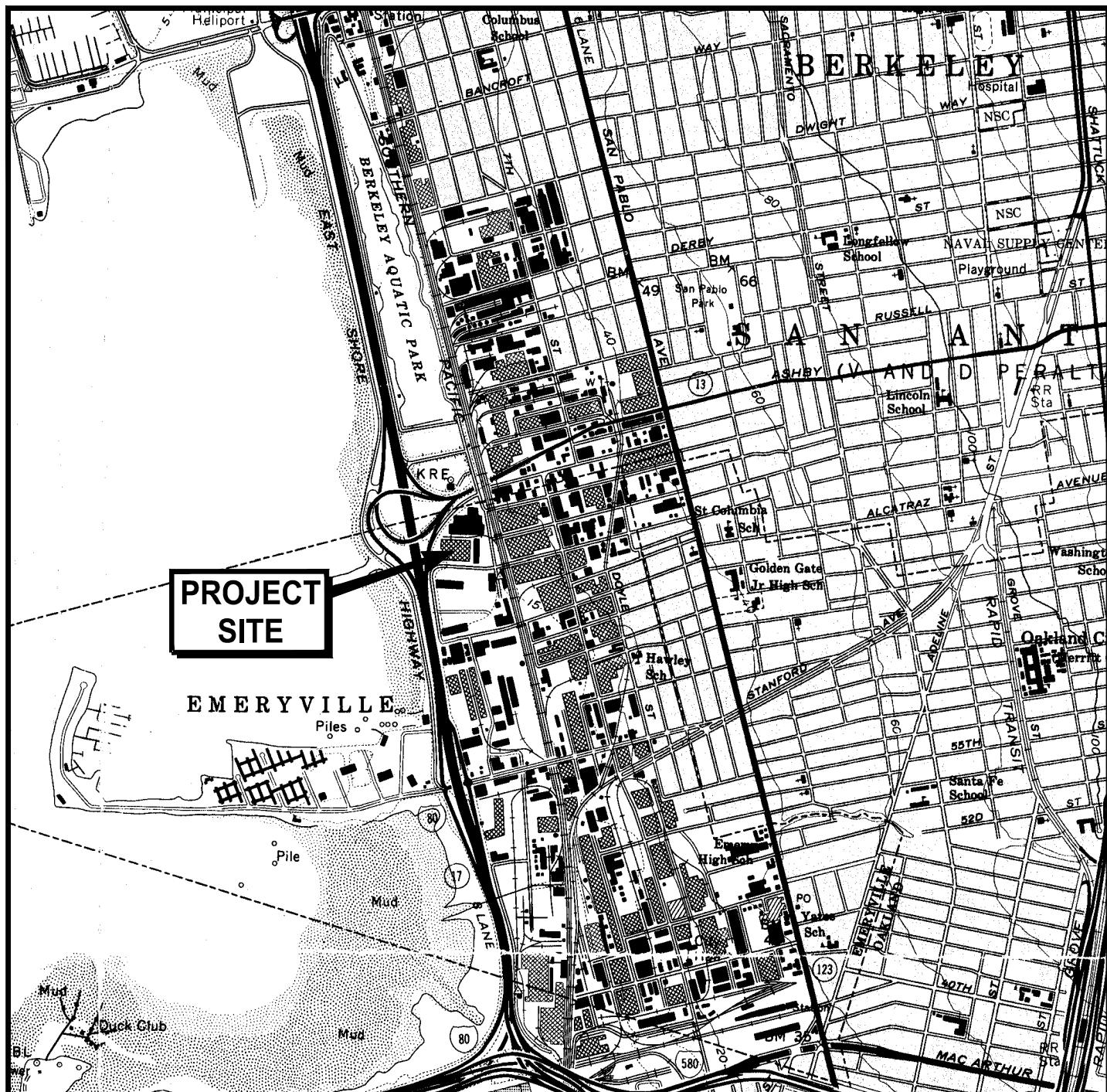
(2) RWQCB Drinking Water Ceiling Levels (Table I-1; May 2008).

(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



0 2000 4000
Scale in Feet

PLATE

1



PES Environmental, Inc.
Engineering & Environmental Services

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121100101003_1-4

JOB NUMBER

DRAWING NUMBER

RSC

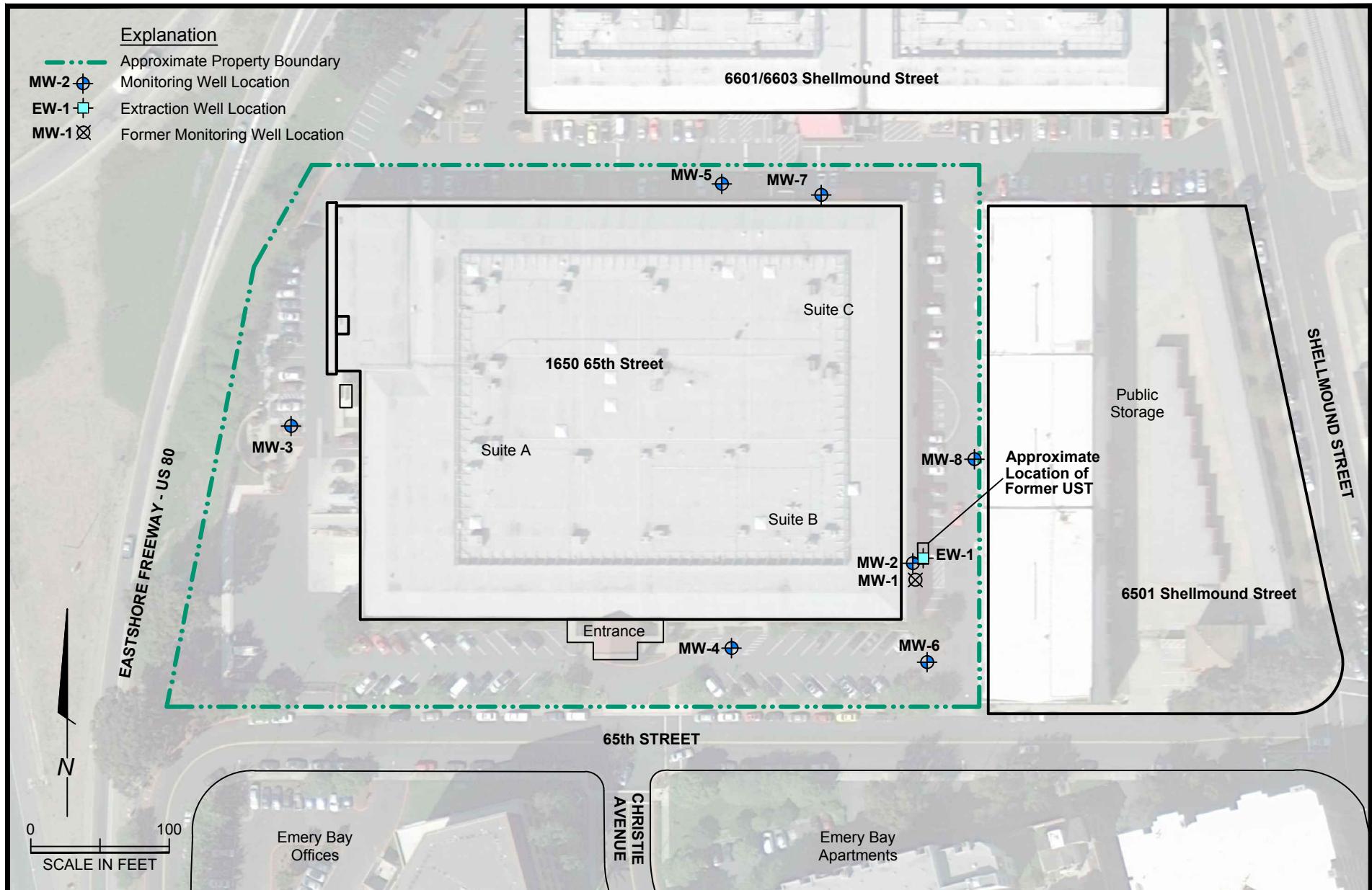
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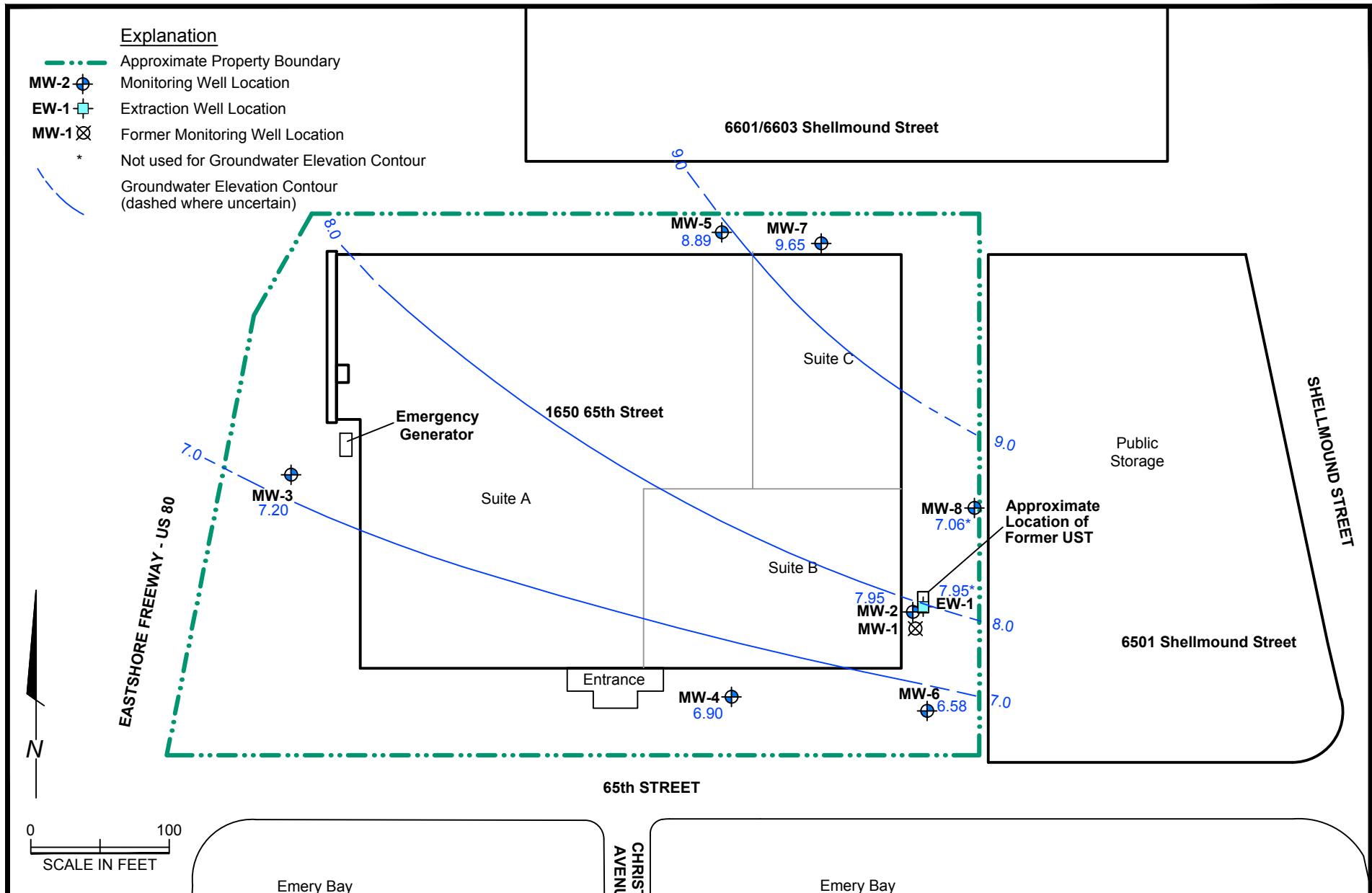
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Site Location Map
1650 65th Street
Emeryville, California

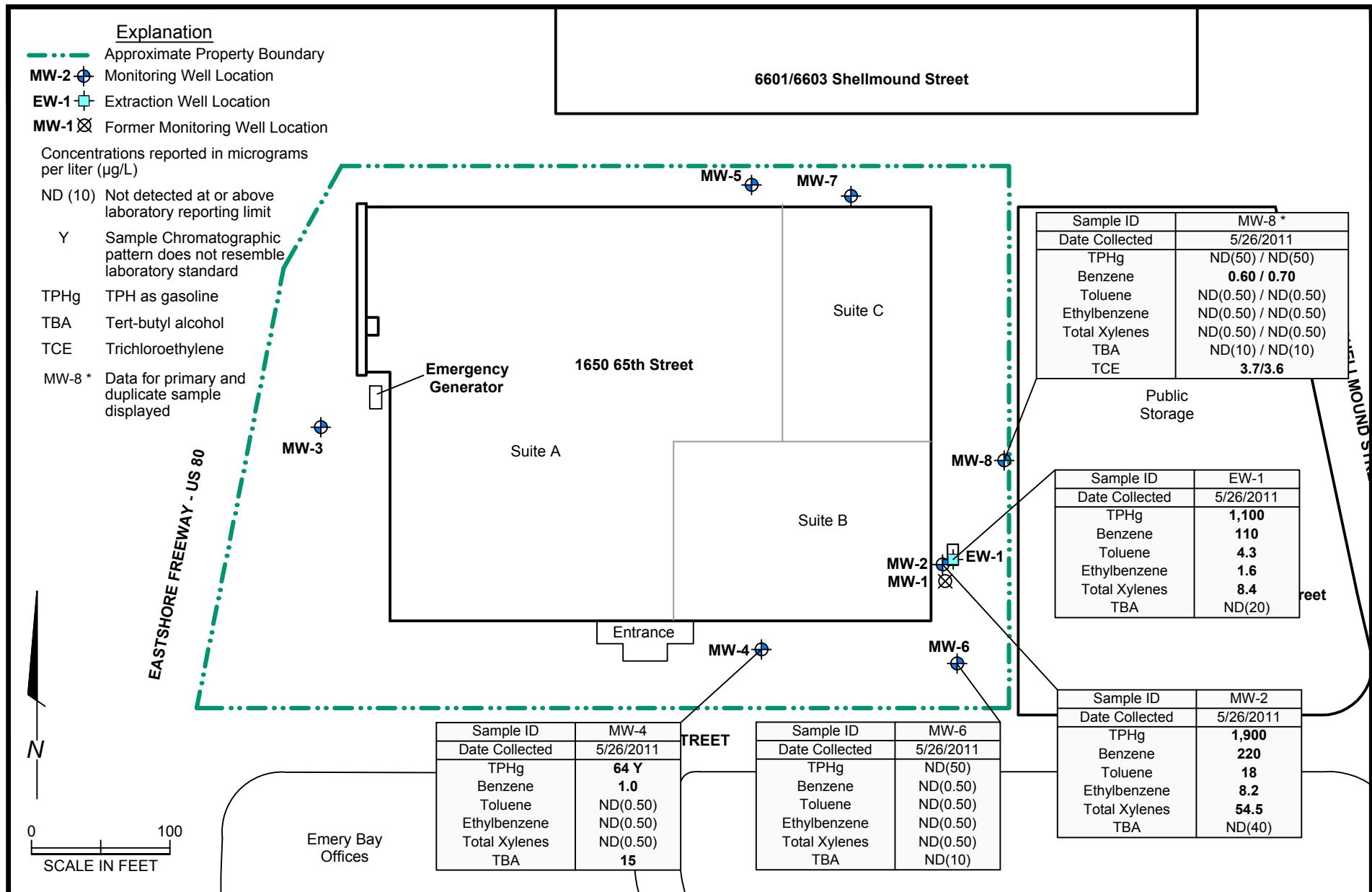
DATE

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





PES Environmental, Inc.
Engineering & Environmental Services



APPENDIX A

MONITORING WELL SAMPLING FORMS



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

Chain of Custody

Page 1 of 1

Project Name: Emeryville Site
Job Number: K1-110526
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, Berekely				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.	Preservative					Requested Analysis					Notes and Comments	
					Soil/Solid	Water/Liquid	Air	No. of Containers	Unpreserved	H ₂ SO ₄	HNO ₃	HCl	NaOH	TPH-G		BTEX, Oxygenates(5), 1,2-DCA, EDB, HVOOC's
MW-1	1130	5-26	X		10	3	1	6		X	X	X	X	X		
MW-2	1200	—	X		10	3	1	6		X	X	X	X	X		
MW-4	1040	—	X		10	3	1	6		X	X	X	X	X		
MW-6	1270	—	X		10	3	1	6		X	X	X	X	X		
MW-8	1230	—	X		10	3	1	6		X	X	X	X	X		
MW-8A	1235	—	X		10	3	1	6		X	X	X	X	X		
TB	—	5-26	X		2		2			(X)				X		
Sampler's Name: <u>J. Kerns</u>				Relinquished By / Affiliation					Date	Time	Accepted By / Affiliation				Date	Time
Sampler's Company: Confluence Environmental				<u>J. Kerns</u>					5-16-11	13:35	<u>Detrae Blalock</u>				5/16/11	13:35
Shipment Date:																
Shipment Method:																
Special Instructions: *Metals samples were field filtered																

Equipment Calibration Log

Notes/comments:

Water Level Measurements

Job Number: K1-110526

Date: 5-26-11

Client: PES

Site: 1650 65th Street - Emeryville

Well Maintenance Inspection Form

Client: PES

Site: 1650 65th St. - Emeryville

Date: 5-26-11

Job #: X1-110574

Technician: jlc

Page 1 of 1

Notes:

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

Purging And Sampling Data Sheet

Job#: K1-110526	Sampler:	J Kerns	Client:	PES
Well ID: Ew-1	Date:	5/26/11	Site:	Emeryville
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 10.30 Total Depth: 28.05			
Purge equip: ES - diam: 2" Bladder Peri Waterra Positive Air Displacement Ext. System disp bailer teflon bailer other:				
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:				
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163			
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)			

$$1 \text{ Volume} = 11.5 \times 3 = 34.6 \text{ (Total Purge)} \quad 80\% = 12.85$$

Did well dewater? YES NO Total volume removed: 35 (gal) / L

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

Sample date: 5/26/11 Sample time: 11:50 DTW at sample: 10.45

Sample ID: EW-1 Lab: Curtis & Tompkins Number of bottles: 10

Analysis: TPH-G, BTEX, Oxy's(5), 1,2-DCA, EDB, HVOC's, LUFT list of 5 metals, TDS & TPH-MO w/ sgc

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#: K1-110526	Sampler:	J Kerns	Client:	PES
Well ID: MW-2	Date:	5/26/11	Site:	Emeryville
Well diam: 1/4" 1" 2" 3" 4" 6" Other:		DTW: 10.79 Total Depth: 23.75		
Purge equip: ES - diam: 2" 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:	Multippliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163			
(TD - DTW X Multiplier = 1 Volume		80% Recovery (TD - DTW X 0.20 + DTW)		

$$1 \text{ Volume} = \underline{2.2} \times 3 = \underline{6.6} \text{ (Total Purge)} \quad 80\% = \underline{12.9\%}$$

Did well dewater? YES NO Total volume removed: 7.0 (gal/L)

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

Sample date: 5/26/11 Sample time: 12:02 RTW at sample: 10.4%

Sample ID: WW-2 Lab: Curtis & Tompkins Number of bottles: 10

TPH-G, BTEX, Oxy's(5), 1,2-DCA, EDB, HVOG's, LLIFT list of 5 metals, TDS & TPH-MO w/ sqc

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#: K1-110526	Sampler:	J Kerns	Client:	PES
Well ID: MW - 4	Date:	5/26/11	Site:	Emeryville
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 7.83 Total Depth: 15.92			
Purge equip: ES - diam: 2" Bladder Peri Waterra Positive Air Displacement Ext. System	disp bailer	teflon bailer	other:	Tubing: OD: New Dedicated NA
Purge method: 3-5 Case Volume	Micro/Low-Flow	Extraction	Other:	
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163			
(TD - DTW X Multiplier = 1 Volume	80% Recovery (TD - DTW X 0.20 + DTW)			

$$1 \text{ Volume} = \underline{5.3} \times 3 = \underline{15.8} \text{ (Total Purge)} \quad 80\% = \underline{9.45}$$

Did well dewater? YES NO Total volume removed: 16 (gal/L)

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

Sample date: 5/26/11 Sample time: 1042 DTW at sample: 9.38

Sample ID: M-1-1 Lab: Curtis & Tompkins Number of bottles: 10

Analysis: TPH-G, BTEX, Oxy's(5), 1,2-DCA, EDB, HVOC's, LUFT list of 5 metals, TDS & TPH-MO w/ sgc

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

Purging And Sampling Data Sheet

Job#: K1-110526	Sampler:	J Kerns	Client:	PES
Well ID: MW-6	Date:	5/26/11	Site:	Emeryville
Well diam: 1/4" 1" 2" 3" 4" 6" Other:	DTW: 7.95 Total Depth: 18.81			
Purge equip: Bladder Peri Waterra Positive Air Displacement Ext. System disp bailer teflon bailer other:				
Tubing: OD: New Dedicated NA				
Purge method: 3-5 Case Volume	Micro/Low-Flow Extraction Other:			
Pump depth/ intake:	Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163			
(TD - DTW X Multiplier = 1 Volume		80% Recovery (TD - DTW X 0.20 + DTW)		

$$1 \text{ Volume} = 7.1 \times 3 = 21.3 \text{ (Total Purge)} \quad 80\% = 10.17$$

Did well dewater? YES NO Total volume removed: 21.5 (gal) / L

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

Sample date: 5/26/11 Sample time: 12:20 DTW at sample: 10.0

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

Analysis: TPH-G, BTEX, Oxy's(5), 1,2-DCA, EDB, HVOC's, LUFT list of 5 metals, TDS & TPH-MO w/ sgc

Equipment blank ID: _____ @ _____ Field blank ID: _____ @ _____

Duplicate ID: Pre-surge DO:

Estimated Date of Birth: _____ Estimated Date of Death: _____

1995-1996
1996-1997
1997-1998

Purging And Sampling Data Sheet

Job#: K1-110526	Sampler:	J Kerns	Client:	PES
Well ID: MW - 8	Date:	5/26/11	Site:	Emeryville
Well diam: 1/4" 1" 2" 3" 4" 6" Other:		DTW: 10.46 Total Depth: 25.10		
Purge equip: ES - diam: 1" Bladder Peri Waterra Positive Air Displacement Ext. System disp bailer teflon bailer other:				
Tubing: OD: New Dedicated NA				
Purge method: 3-5 Case Volume Micro/Low-Flow Extraction Other:				
Pump depth/ intake: Multipliers: 1" = 0.04 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 Radius ² X 0.163				
(TD - DTW X Multiplier = 1 Volume		80% Recovery (TD - DTW X 0.20 + DTW)		

$$1 \text{ Volume} = \underline{2.3} \times 3 = \underline{7.0} \text{ (Total Purge)} \quad 80\% = \underline{13.39}$$

Did well dewater? YES NO Total volume removed: 2,0 gal/L

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

Sample date: 5/26/11 Sample time: 12:20 DTW at sample: 10.45

Sample ID: MW-8 Lab: Curtis & Tompkins Number of bottles:

Analysis: TPH-G, BTEX, Oxy's(5), 1,2-DCA, EDB, HVOC's, LUFT list of 5 metals, TDS & TPH-MO w/ sgc

Flight Plan ID: 00000000000000000000000000000000

Equipment blank ID	Vial blank ID		
Duplicate ID: MW-8A @ 1235	Pre-purge DO:	Post purge DO:	
Fe2+:	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 228327
ANALYTICAL REPORT**

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

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

<u>Sample ID</u>	<u>Lab ID</u>
EW-1	228327-001
MW-2	228327-002
MW-4	228327-003
MW-6	228327-004
MW-8	228327-005
MW-8A	228327-006
TB	228327-007

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.

Desiree N. Tetzlaff

Signature: _____
Project Manager

Date: 06/06/2011

NELAP # 01107CA

CASE NARRATIVE

Laboratory number: 228327
Client: PES Environmental, Inc.
Project: 1211-001-01
Location: 1650 65th St. Emeryville
Request Date: 05/26/11
Samples Received: 05/26/11

This data package contains sample and QC results for seven water samples, requested for the above referenced project on 05/26/11. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

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

High surrogate recovery was observed for dibromofluoromethane in MW-8 (lab # 228327-005); the associated analytes were not detected at or above the RL. No other analytical problems were encountered.

Metals (EPA 6010B):

Low recovery was observed for nickel in the MS for batch 175310; the parent sample was not a project sample, the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Total Dissolved Solids (TDS) (SM2540C):

High RPD was observed for total dissolved solids in the SDUP for batch 175376; the parent sample was not a project sample. No other analytical problems were encountered.



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

Chain of Custody

Page 1 of 1

228327

Project Name: Emeryville Site

Job Number: K1-110576

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, Berekely				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
1	MW-1	1130	5-26	X		10	3	1	6		X	X	X	X	X	
2	MW-2	1200		X		10	3	1	6		X	X	X	X	X	
3	MW-4	1040		X		10	3	1	6		X	X	X	X	X	
4	MW-6	1220		X		10	3	1	6		X	X	X	X	X	
5	MW-8	1230		X		10	3	1	6		X	X	X	X	X	
6	MW-8A	1235		X		10	3	1	6		X	X	X	X	X	
7	TB	-	5-26	X		2					(X)				X	
Sampler's Name: <u>J. Kern</u>					Relinquished By / Affiliation				Date	Time	Accepted By / Affiliation				Date	Time
Sampler's Company: Confluence Environmental					<u>[Signature]</u>				5-26-11	1335	<u>Defender Trail</u>				5/26/11	1335
Shipment Date:																
Shipment Method:																
Special Instructions: *Metals samples were field filtered																

COOLER RECEIPT CHECKLIST



Curtis & Tompkins, Ltd.

Login # 228327 Date Received 5/26/11 Number of coolers 1
Client Confluence Environmental Project Emergency Site

Date Opened 5/26/11 By (print) Vidya Qarshi (sign) Vidya Qarshi
Date Logged in 5/27/11 By (print) R. Paris (sign) R. Paris

- | | | | | |
|--|---|------------|------------|--|
| 1. Did cooler come with a shipping slip (airbill, etc) | YES | NO | | |
| Shipping info _____ | | | | |
| 2A. Were custody seals present? | <input type="checkbox"/> YES (circle) | on cooler | on samples | <input checked="" type="checkbox"/> 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? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | | | |
| 4. Were custody papers filled out properly (ink, signed, etc)? | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | | | |
| 5. Is the project identifiable from custody papers? (If so fill out top of form) | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | | | |
| 6. Indicate the packing in cooler: (if other, describe) | | | | |

7. Temperature documentation:

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

Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? _____ YES NO

If YES, what time were they transferred to freezer? _____

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

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

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

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

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

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

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

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

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

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

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

COMMENTS

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1

Rev. 7 Number 1 of 1
Effective: 1 September 2010
F:\qc\sop\client services\Cooler Receipt Checklist_rv7.doc

Curtis & Tompkins Sample Preservation for 228327

Sample pH: <2 >12 Other

-001a [] [] _____

b [] [] _____

c [] [] _____

d [] [] _____

e [] [] _____

f [] [] _____

g [] [] _____

h [] [] _____

i [] [] _____

j [] [] _____

-002a [] [] _____

b [] [] _____

c [] [] _____

d [] [] _____

e [] [] _____

f [] [] _____

g [] [] _____

h [] [] _____

i [] [] _____

j [] [] _____

-003a [] [] _____

b [] [] _____

c [] [] _____

d [] [] _____

e [] [] _____

f [] [] _____

g [] [] _____

h [] [] _____

i [] [] _____

j [] [] _____

Sample pH: <2 >12 Other

-004a [] [] _____

b [] [] _____

c [] [] _____

d [] [] _____

e [] [] _____

f [] [] _____

g [] [] _____

h [] [] _____

i [] [] _____

j [] [] _____

-005a [] [] _____

b [] [] _____

c [] [] _____

d [] [] _____

e [] [] _____

f [] [] _____

g [] [] _____

h [] [] _____

i [] [] _____

j [] [] _____

-006a [] [] _____

b [] [] _____

c [] [] _____

d [] [] _____

e [] [] _____

f [] [] _____

g [] [] _____

h [] [] _____

i [] [] _____

j [] [] _____

Analyst: VO
 Date: 5/27/11
 Page 1 of 1

Total Volatile Hydrocarbons

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	175345
Units:	ug/L	Sampled:	05/26/11
Diln Fac:	1.000	Received:	05/26/11

Field ID: EW-1 Lab ID: 228327-001
Type: SAMPLE Analyzed: 05/31/11

Analyte	Result	RL
Gasoline C7-C12	1,100	50
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	78-123

Field ID: MW-2 Lab ID: 228327-002
Type: SAMPLE Analyzed: 05/31/11

Analyte	Result	RL
Gasoline C7-C12	1,900	50
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	99	78-123

Field ID: MW-4 Lab ID: 228327-003
Type: SAMPLE Analyzed: 06/01/11

Analyte	Result	RL
Gasoline C7-C12	64 Y	50
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	78-123

Field ID: MW-6 Lab ID: 228327-004
Type: SAMPLE Analyzed: 06/01/11

Analyte	Result	RL
Gasoline C7-C12	ND	50
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	97	78-123

Field ID: MW-8 Lab ID: 228327-005
Type: SAMPLE Analyzed: 06/01/11

Analyte	Result	RL
Gasoline C7-C12	ND	50
Surrogate	%REC	Limits
Bromofluorobenzene (FID)	96	78-123

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

Total Volatile Hydrocarbons

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	175345
Units:	ug/L	Sampled:	05/26/11
Diln Fac:	1.000	Received:	05/26/11

Field ID: MW-8A Lab ID: 228327-006
 Type: SAMPLE Analyzed: 06/01/11

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	78-123

Type: BLANK Analyzed: 05/31/11
 Lab ID: QC594121

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	102	78-123

Y= Sample exhibits chromatographic pattern which does not resemble standard
 ND= Not Detected

RL= Reporting Limit

Page 2 of 2

7.0

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC594120	Batch#:	175345
Matrix:	Water	Analyzed:	05/31/11
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	979.1	98	80-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	100	78-123

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	175345
MSS Lab ID:	228229-005	Sampled:	05/24/11
Matrix:	Water	Received:	05/24/11
Units:	ug/L	Analyzed:	06/01/11
Diln Fac:	1.000		

Type: MS Lab ID: QC594122

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	16.21	2,000	1,622	80	66-120
Surrogate					
Bromofluorobenzene (FID)	98	78-123			

Type: MSD Lab ID: QC594123

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	2,000	1,544	76	66-120	5 25
Surrogate					
Bromofluorobenzene (FID)	80	78-123			

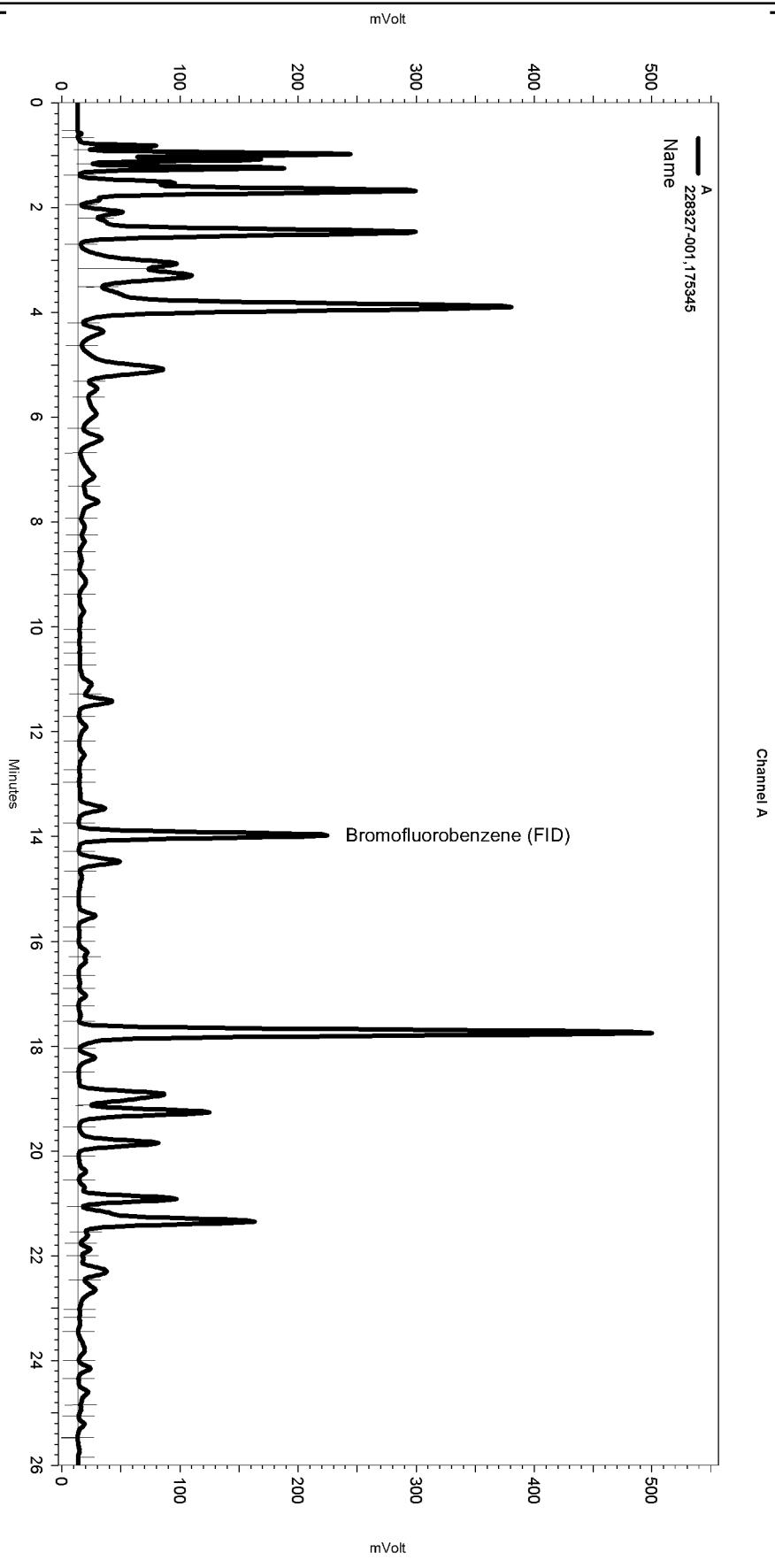
RPD= Relative Percent Difference

Page 1 of 1

9.0

Sequence File: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Sequence\\151.seq
Sample Name: 228327-001,175345
Data File: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Data\\151-014
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (\\ims2k3\\tvh2)
Method Name: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Method\\tvhtxe143.met

Software Version 3.1.7
Run Date: 5/31/2011 10:56:37 PM
Analysis Date: 6/1/2011 3:36:08 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: a1.0



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Integration Events

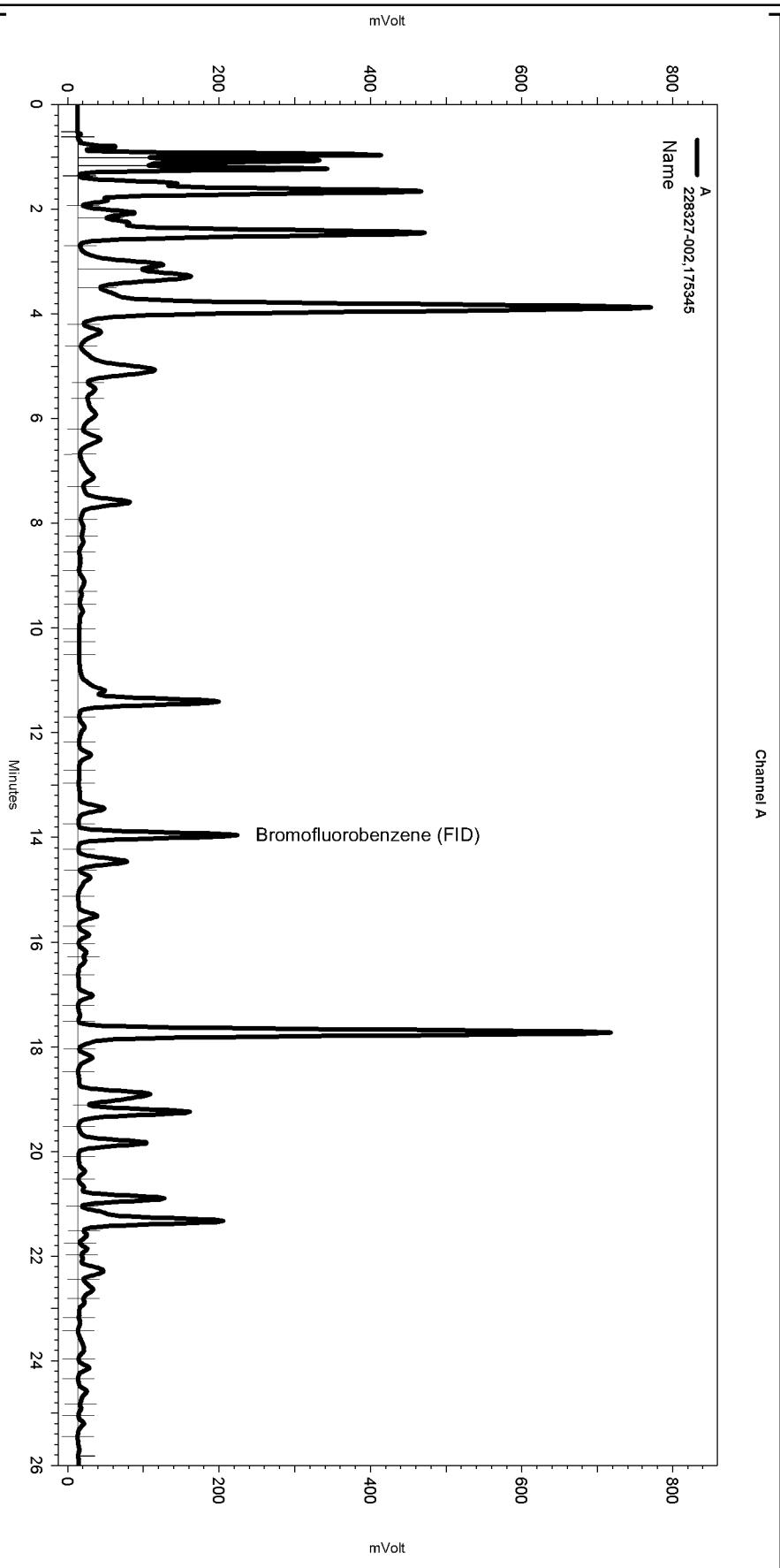
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Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File:	Start	Stop		
Enabled	Event Type	(Minutes)	(Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0.408	25.604	0

Sequence File: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Sequence\\151.seq
Sample Name: 228327-002,175345
Data File: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Data\\151-015
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (\\ims2k3\\tvh2)
Method Name: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Method\\tvhtxe143.met

Software Version 3.1.7
Run Date: 5/31/2011 11:34:13 PM
Analysis Date: 6/1/2011 3:36:58 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: a1.0



-----< General Method Parameters >-----

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No items selected for this section

Integration Events

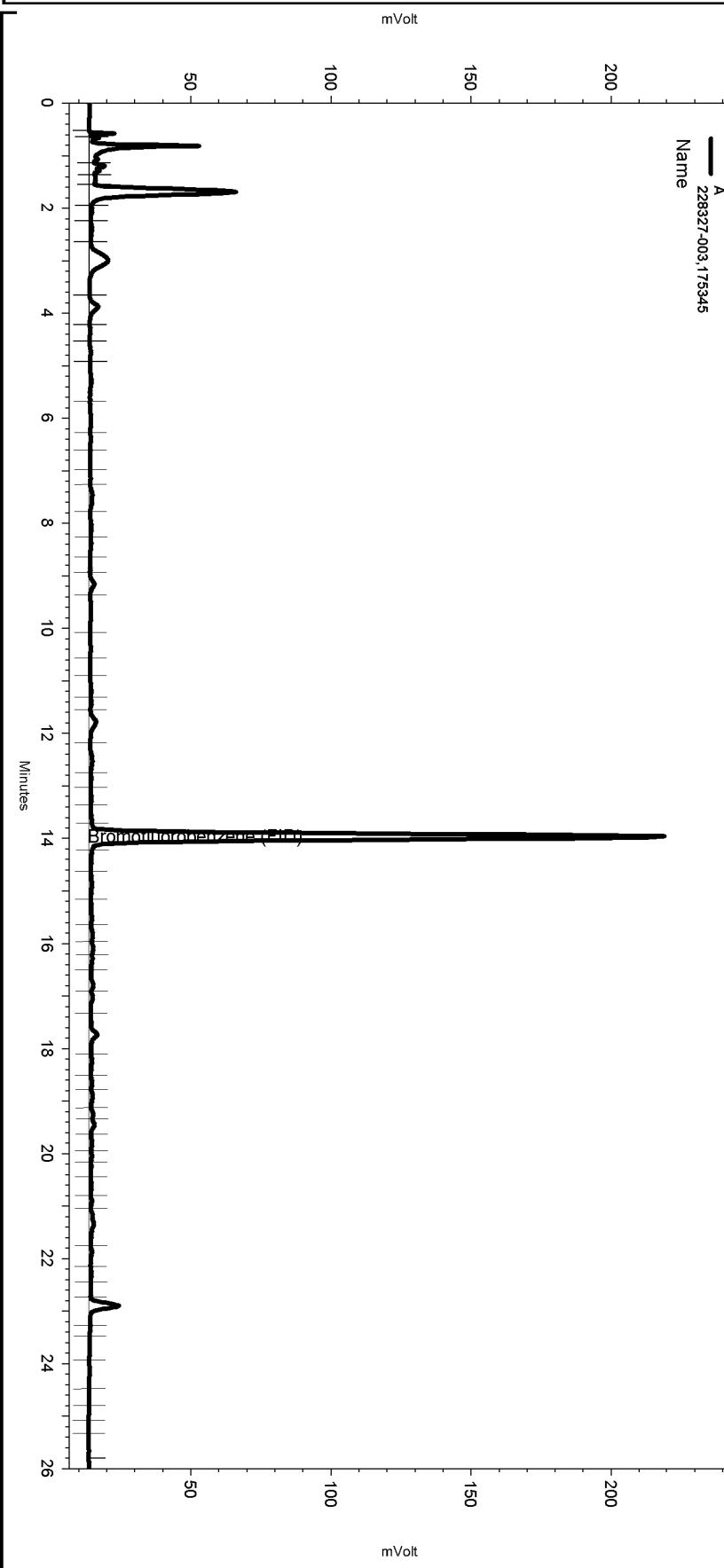
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File:	Start	Stop		
Enabled	Event Type	(Minutes)	(Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0.383	25.741	0

Sequence File: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Sequence\\151.seq
Sample Name: 228327-003,175345
Data File: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Data\\151-016
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (\\ims2k3\\tvh2)
Method Name: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Method\\tvhtxe143.met

Software Version 3.1.7
Run Date: 6/1/2011 12:11:45 AM
Analysis Date: 6/1/2011 3:38:46 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: a1.0



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

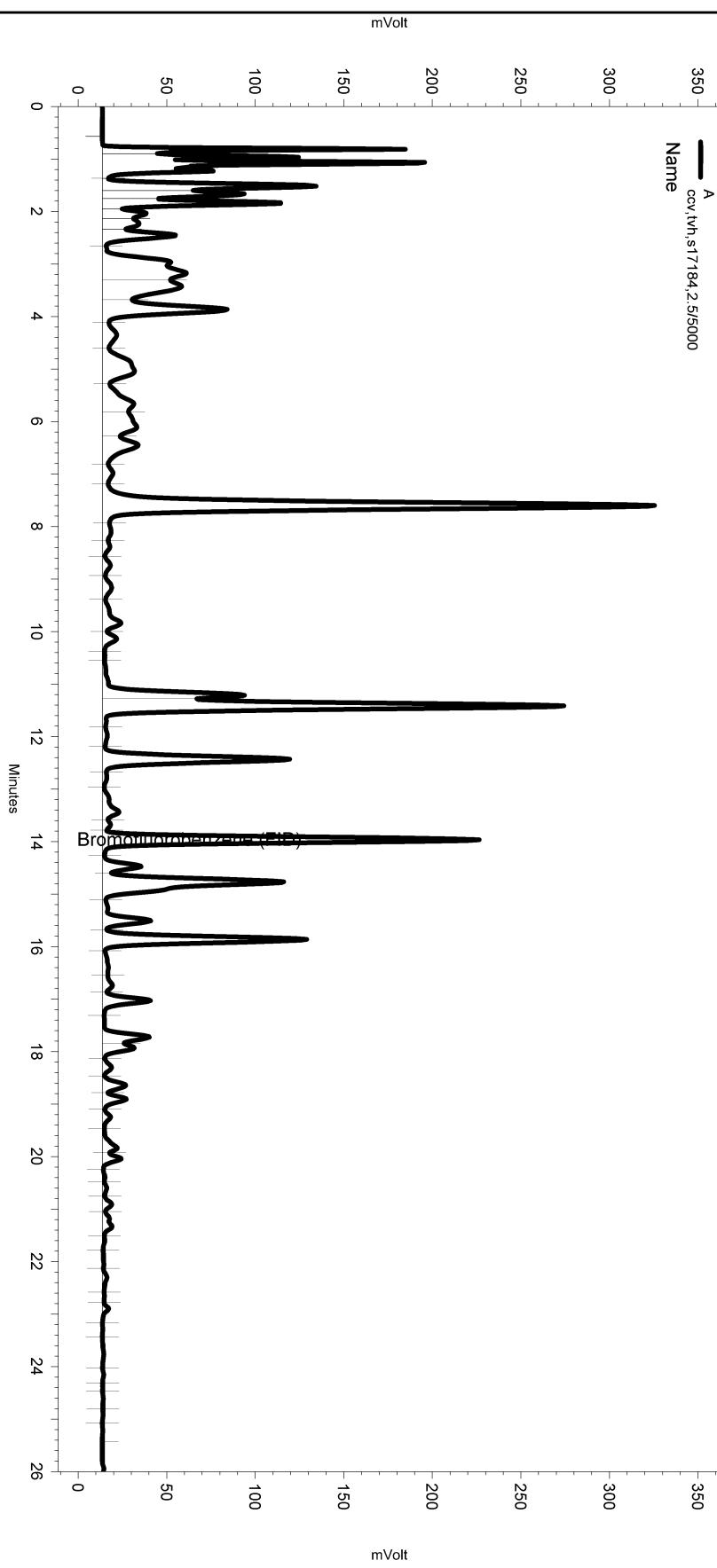
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File:	Start	Stop	Enabled	Event Type	(Minutes)	(Minutes)	Value
\\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Data\\151-016							
Yes	Lowest Point Horizontal Baseli	0.209	25.169	0			
Yes	Split Peak	13.719	0	0			
Yes	Split Peak	14.213	0	0			

Sequence File: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Sequence\\151.seq
Sample Name: ccv, tvh, s17184, 2.5/5000
Data File: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Data\\151-004
Instrument: GC19 Vial: N/A Operator: lims2k3\\tvh3
Method Name: \\Lims\\gdrive\\ezchrom\\Projects\\GC19\\Method\\tvhbtxe143.met

Software Version 3.1.7
Run Date: 5/31/2011 1:43:02 PM
Analysis Date: 5/31/2011 2:12:06 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



-----< General Method Parameters >-----

No items selected for this section

-----< A >-----

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: C:\\Documents and Settings\\All Users\\Application Data\\Chromatography\\System\\Recovery\\Data\\Instrument.10050\\151-004_66C7.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Total Extractable Hydrocarbons

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 3520C
Project#:	1211-001-01	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	05/26/11
Units:	ug/L	Received:	05/26/11
Diln Fac:	1.000	Prepared:	05/31/11
Batch#:	175340		

Field ID: EW-1 Analyzed: 06/02/11
 Type: SAMPLE Cleanup Method: EPA 3630C
 Lab ID: 228327-001

Analyte	Result	RL
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	75	68-120

Field ID: MW-2 Analyzed: 06/02/11
 Type: SAMPLE Cleanup Method: EPA 3630C
 Lab ID: 228327-002

Analyte	Result	RL
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	82	68-120

Field ID: MW-4 Analyzed: 06/02/11
 Type: SAMPLE Cleanup Method: EPA 3630C
 Lab ID: 228327-003

Analyte	Result	RL
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	69	68-120

Field ID: MW-6 Analyzed: 06/02/11
 Type: SAMPLE Cleanup Method: EPA 3630C
 Lab ID: 228327-004

Analyte	Result	RL
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
o-Terphenyl	80	68-120

ND= Not Detected
 RL= Reporting Limit

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Total Extractable Hydrocarbons

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 3520C
Project#:	1211-001-01	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	05/26/11
Units:	ug/L	Received:	05/26/11
Diln Fac:	1.000	Prepared:	05/31/11
Batch#:	175340		

Field ID: MW-8 Analyzed: 06/02/11
 Type: SAMPLE Cleanup Method: EPA 3630C
 Lab ID: 228327-005

Analyte	Result	RL
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	85	68-120

Field ID: MW-8A Analyzed: 06/02/11
 Type: SAMPLE Cleanup Method: EPA 3630C
 Lab ID: 228327-006

Analyte	Result	RL
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	74	68-120

Type: BLANK Analyzed: 06/01/11
 Lab ID: QC594103 Cleanup Method: EPA 3630C

Analyte	Result	RL
Motor Oil C24-C36	ND	300
Surrogate	%REC	Limits
o-Terphenyl	79	68-120

ND= Not Detected
 RL= Reporting Limit
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Batch QC Report

Total Extractable Hydrocarbons

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 3520C
Project#:	1211-001-01	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	175340
Units:	ug/L	Prepared:	05/31/11
Diln Fac:	1.000	Analyzed:	06/01/11

Type: BS Cleanup Method: EPA 3630C
 Lab ID: QC594104

Analyte	Spiked	Result	%REC	Limits
Diesel C10-C24	2,500	1,890	76	61-120

Surrogate	%REC	Limits
o-Terphenyl	93	68-120

Type: BSD Cleanup Method: EPA 3630C
 Lab ID: QC594105

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C10-C24	2,500	1,933	77	61-120	2	20

Surrogate	%REC	Limits
o-Terphenyl	82	68-120

RPD= Relative Percent Difference

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11.0

Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	EW-1	Batch#:	175470
Lab ID:	228327-001	Sampled:	05/26/11
Matrix:	Water	Received:	05/26/11
Units:	ug/L	Analyzed:	06/03/11
Diln Fac:	2.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	20
Chloromethane	ND	2.0
Isopropyl Ether (DIPE)	ND	1.0
Vinyl Chloride	ND	1.0
Bromomethane	ND	2.0
Ethyl tert-Butyl Ether (ETBE)	ND	1.0
Chloroethane	ND	2.0
Methyl tert-Amyl Ether (TAME)	ND	1.0
Trichlorofluoromethane	ND	2.0
Freon 113	ND	4.0
1,1-Dichloroethene	ND	1.0
Methylene Chloride	ND	40
MTBE	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
1,1-Dichloroethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
Chloroform	ND	1.0
1,1,1-Trichloroethane	ND	1.0
Carbon Tetrachloride	ND	1.0
1,2-Dichloroethane	ND	1.0
Benzene	110	1.0
Trichloroethene	ND	1.0
1,2-Dichloropropane	ND	1.0
Bromodichloromethane	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Toluene	4.3	1.0
trans-1,3-Dichloropropene	ND	1.0
1,1,2-Trichloroethane	ND	1.0
Tetrachloroethene	ND	1.0
Dibromochloromethane	ND	1.0
Chlorobenzene	ND	1.0
Ethylbenzene	1.6	1.0
m,p-Xylenes	7.3	1.0
o-Xylene	1.1	1.0
Bromoform	ND	1.0
1,1,2,2-Tetrachloroethane	ND	1.0
1,3-Dichlorobenzene	ND	1.0
1,4-Dichlorobenzene	ND	1.0
1,2-Dichlorobenzene	ND	1.0

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	89	73-145
Toluene-d8	94	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected

RL= Reporting Limit

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17.0

Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	MW-2	Batch#:	175470
Lab ID:	228327-002	Sampled:	05/26/11
Matrix:	Water	Received:	05/26/11
Units:	ug/L	Analyzed:	06/03/11
Diln Fac:	4.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	40
Chloromethane	ND	4.0
Isopropyl Ether (DIPE)	ND	2.0
Vinyl Chloride	ND	2.0
Bromomethane	ND	4.0
Ethyl tert-Butyl Ether (ETBE)	ND	2.0
Chloroethane	ND	4.0
Methyl tert-Amyl Ether (TAME)	ND	2.0
Trichlorofluoromethane	ND	4.0
Freon 113	ND	8.0
1,1-Dichloroethene	ND	2.0
Methylene Chloride	ND	80
MTBE	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
1,2-Dichloroethane	ND	2.0
Benzene	220	2.0
Trichloroethene	ND	2.0
1,2-Dichloropropane	ND	2.0
Bromodichloromethane	ND	2.0
cis-1,3-Dichloropropene	ND	2.0
Toluene	18	2.0
trans-1,3-Dichloropropene	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Tetrachloroethene	ND	2.0
Dibromochloromethane	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	8.2	2.0
m,p-Xylenes	51	2.0
o-Xylene	3.5	2.0
Bromoform	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	87	73-145
Toluene-d8	95	80-120
Bromofluorobenzene	90	80-120

ND= Not Detected

RL= Reporting Limit

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Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	175423
Lab ID:	228327-003	Sampled:	05/26/11
Matrix:	Water	Received:	05/26/11
Units:	ug/L	Analyzed:	06/02/11
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	15	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	1.0	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	125	80-127
1,2-Dichloroethane-d4	121	73-145
Toluene-d8	92	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected

RL= Reporting Limit

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Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	MW-6	Batch#:	175423
Lab ID:	228327-004	Sampled:	05/26/11
Matrix:	Water	Received:	05/26/11
Units:	ug/L	Analyzed:	06/02/11
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	127	80-127
1,2-Dichloroethane-d4	123	73-145
Toluene-d8	92	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected

RL= Reporting Limit

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Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	175423
Lab ID:	228327-005	Sampled:	05/26/11
Matrix:	Water	Received:	05/26/11
Units:	ug/L	Analyzed:	06/02/11
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	0.6	0.5
Trichloroethene	3.7	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	130 *	80-127
1,2-Dichloroethane-d4	125	73-145
Toluene-d8	92	80-120
Bromofluorobenzene	102	80-120

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

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Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	MW-8A	Batch#:	175422
Lab ID:	228327-006	Sampled:	05/26/11
Matrix:	Water	Received:	05/26/11
Units:	ug/L	Analyzed:	06/02/11
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	0.7	0.5
Trichloroethene	3.6	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-127
1,2-Dichloroethane-d4	106	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	105	80-120

ND= Not Detected

RL= Reporting Limit

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Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	TB	Batch#:	175422
Lab ID:	228327-007	Sampled:	05/26/11
Matrix:	Water	Received:	05/26/11
Units:	ug/L	Analyzed:	06/02/11
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	111	80-127
1,2-Dichloroethane-d4	111	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	106	80-120

ND= Not Detected

RL= Reporting Limit

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Batch QC Report

Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175422
Units:	ug/L	Analyzed:	06/02/11
Diln Fac:	1.000		

Type: BS Lab ID: QC594462

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	62.50	62.03	99	46-141
Isopropyl Ether (DIPE)	12.50	12.24	98	52-139
Ethyl tert-Butyl Ether (ETBE)	12.50	11.68	93	56-131
Methyl tert-Amyl Ether (TAME)	12.50	10.50	84	65-120
1,1-Dichloroethene	12.50	11.52	92	64-133
Benzene	12.50	12.89	103	80-122
Trichloroethene	12.50	11.80	94	78-120
Toluene	12.50	11.97	96	80-120
Chlorobenzene	12.50	11.76	94	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-127
1,2-Dichloroethane-d4	109	73-145
Toluene-d8	99	80-120
Bromofluorobenzene	98	80-120

Type: BSD Lab ID: QC594463

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	62.50	66.97	107	46-141	8	31
Isopropyl Ether (DIPE)	12.50	12.96	104	52-139	6	20
Ethyl tert-Butyl Ether (ETBE)	12.50	12.48	100	56-131	7	20
Methyl tert-Amyl Ether (TAME)	12.50	10.53	84	65-120	0	20
1,1-Dichloroethene	12.50	12.29	98	64-133	6	20
Benzene	12.50	12.62	101	80-122	2	20
Trichloroethene	12.50	11.89	95	78-120	1	20
Toluene	12.50	12.02	96	80-120	0	20
Chlorobenzene	12.50	11.73	94	80-120	0	20

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-127
1,2-Dichloroethane-d4	107	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	99	80-120

RPD= Relative Percent Difference

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24.0

Batch QC Report

Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	175423
Units:	ug/L	Analyzed:	06/02/11
Diln Fac:	1.000		

Type: BS Lab ID: QC594465

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	79.99	80	46-141
Isopropyl Ether (DIPE)	20.00	14.93	75	52-139
Ethyl tert-Butyl Ether (ETBE)	20.00	16.29	81	56-131
Methyl tert-Amyl Ether (TAME)	20.00	15.79	79	65-120
1,1-Dichloroethene	20.00	20.50	102	64-133
Benzene	20.00	19.88	99	80-122
Trichloroethene	20.00	18.68	93	78-120
Toluene	20.00	17.85	89	80-120
Chlorobenzene	20.00	18.45	92	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	115	80-127
1,2-Dichloroethane-d4	118	73-145
Toluene-d8	89	80-120
Bromofluorobenzene	97	80-120

Type: BSD Lab ID: QC594466

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	80.43	80	46-141	1	31
Isopropyl Ether (DIPE)	20.00	15.62	78	52-139	5	20
Ethyl tert-Butyl Ether (ETBE)	20.00	16.69	83	56-131	2	20
Methyl tert-Amyl Ether (TAME)	20.00	16.39	82	65-120	4	20
1,1-Dichloroethene	20.00	22.44	112	64-133	9	20
Benzene	20.00	21.64	108	80-122	8	20
Trichloroethene	20.00	20.66	103	78-120	10	20
Toluene	20.00	19.18	96	80-120	7	20
Chlorobenzene	20.00	19.93	100	80-120	8	20

Surrogate	%REC	Limits
Dibromofluoromethane	115	80-127
1,2-Dichloroethane-d4	117	73-145
Toluene-d8	89	80-120
Bromofluorobenzene	97	80-120

RPD= Relative Percent Difference

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26.0

Batch QC Report

Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC594467	Batch#:	175423
Matrix:	Water	Analyzed:	06/02/11
Units:	ug/L		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	124	80-127
1,2-Dichloroethane-d4	121	73-145
Toluene-d8	93	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected

RL= Reporting Limit

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Batch QC Report
Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC594553	Batch#:	175422
Matrix:	Water	Analyzed:	06/02/11
Units:	ug/L		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	114	80-127
1,2-Dichloroethane-d4	113	73-145
Toluene-d8	100	80-120
Bromofluorobenzene	104	80-120

ND= Not Detected

RL= Reporting Limit

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Batch QC Report

Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC594655	Batch#:	175470
Matrix:	Water	Analyzed:	06/03/11
Units:	ug/L		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
Chloromethane	ND	1.0
Isopropyl Ether (DIPE)	ND	0.5
Vinyl Chloride	ND	0.5
Bromomethane	ND	1.0
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
Chloroethane	ND	1.0
Methyl tert-Amyl Ether (TAME)	ND	0.5
Trichlorofluoromethane	ND	1.0
Freon 113	ND	2.0
1,1-Dichloroethene	ND	0.5
Methylene Chloride	ND	20
MTBE	ND	0.5
trans-1,2-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.5
cis-1,2-Dichloroethene	ND	0.5
Chloroform	ND	0.5
1,1,1-Trichloroethane	ND	0.5
Carbon Tetrachloride	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Trichloroethene	ND	0.5
1,2-Dichloropropane	ND	0.5
Bromodichloromethane	ND	0.5
cis-1,3-Dichloropropene	ND	0.5
Toluene	ND	0.5
trans-1,3-Dichloropropene	ND	0.5
1,1,2-Trichloroethane	ND	0.5
Tetrachloroethene	ND	0.5
Dibromochloromethane	ND	0.5
Chlorobenzene	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5
Bromoform	ND	0.5
1,1,2,2-Tetrachloroethane	ND	0.5
1,3-Dichlorobenzene	ND	0.5
1,4-Dichlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-127
1,2-Dichloroethane-d4	89	73-145
Toluene-d8	96	80-120
Bromofluorobenzene	89	80-120

ND= Not Detected

RL= Reporting Limit

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Batch QC Report

Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC594656	Batch#:	175470
Matrix:	Water	Analyzed:	06/03/11
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	88.40	88	46-141
Isopropyl Ether (DIPE)	20.00	14.84	74	52-139
Ethyl tert-Butyl Ether (ETBE)	20.00	16.43	82	56-131
Methyl tert-Amyl Ether (TAME)	20.00	16.08	80	65-120
1,1-Dichloroethene	20.00	17.86	89	64-133
Benzene	20.00	19.29	96	80-122
Trichloroethene	20.00	15.89	79	78-120
Toluene	20.00	18.67	93	80-120
Chlorobenzene	20.00	19.67	98	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-127
1,2-Dichloroethane-d4	88	73-145
Toluene-d8	94	80-120
Bromofluorobenzene	88	80-120

Batch QC Report

Volatile Organics

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	1211-001-01	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	175470
MSS Lab ID:	228309-003	Sampled:	05/26/11
Matrix:	Water	Received:	05/26/11
Units:	ug/L	Analyzed:	06/03/11
Diln Fac:	1.000		

Type: MS Lab ID: QC594679

Analyte	MSS Result	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	<1.230	125.0	178.5	143	62-143
Isopropyl Ether (DIPE)	<0.1000	25.00	18.70	75	69-126
Ethyl tert-Butyl Ether (ETBE)	<0.1000	25.00	21.06	84	72-121
Methyl tert-Amyl Ether (TAME)	<0.1000	25.00	21.45	86	75-120
1,1-Dichloroethene	<0.1591	25.00	22.32	89	73-126
Benzene	<0.1000	25.00	23.81	95	80-120
Trichloroethene	<0.1000	25.00	19.72	79	69-122
Toluene	<0.1000	25.00	23.20	93	80-120
Chlorobenzene	<0.1000	25.00	24.23	97	80-120

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-127
1,2-Dichloroethane-d4	90	73-145
Toluene-d8	95	80-120
Bromofluorobenzene	88	80-120

Type: MSD Lab ID: QC594680

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	170.0	136	62-143	5	30
Isopropyl Ether (DIPE)	25.00	18.14	73	69-126	3	20
Ethyl tert-Butyl Ether (ETBE)	25.00	20.33	81	72-121	4	20
Methyl tert-Amyl Ether (TAME)	25.00	20.87	83	75-120	3	20
1,1-Dichloroethene	25.00	21.13	85	73-126	5	20
Benzene	25.00	22.91	92	80-120	4	20
Trichloroethene	25.00	18.81	75	69-122	5	20
Toluene	25.00	22.20	89	80-120	4	20
Chlorobenzene	25.00	23.28	93	80-120	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-127
1,2-Dichloroethane-d4	89	73-145
Toluene-d8	94	80-120
Bromofluorobenzene	87	80-120

RPD= Relative Percent Difference

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Dissolved California LUFT Metals

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	METHOD
Project#:	1211-001-01	Analysis:	EPA 6010B
Matrix:	Filtrate	Sampled:	05/26/11
Units:	ug/L	Received:	05/26/11
Diln Fac:	1.000	Prepared:	05/31/11
Batch#:	175310	Analyzed:	05/31/11

Field ID: EW-1 Lab ID: 228327-001
 Type: SAMPLE

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	ND	5.0
Nickel	ND	5.0
Zinc	ND	20

Field ID: MW-2 Lab ID: 228327-002
 Type: SAMPLE

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	ND	5.0
Nickel	ND	5.0
Zinc	ND	20

Field ID: MW-4 Lab ID: 228327-003
 Type: SAMPLE

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	ND	5.0
Nickel	ND	5.0
Zinc	ND	20

Field ID: MW-6 Lab ID: 228327-004
 Type: SAMPLE

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	ND	5.0
Nickel	ND	5.0
Zinc	ND	20

ND= Not Detected
 RL= Reporting Limit

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4.0



Curtis & Tompkins, Ltd.

Dissolved California LUFT Metals

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	METHOD
Project#:	1211-001-01	Analysis:	EPA 6010B
Matrix:	Filtrate	Sampled:	05/26/11
Units:	ug/L	Received:	05/26/11
Diln Fac:	1.000	Prepared:	05/31/11
Batch#:	175310	Analyzed:	05/31/11

Field ID: MW-8 Lab ID: 228327-005
Type: SAMPLE

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	ND	5.0
Nickel	ND	5.0
Zinc	ND	20

Field ID: MW-8A Lab ID: 228327-006
Type: SAMPLE

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	ND	5.0
Nickel	ND	5.0
Zinc	ND	20

Type: BLANK Lab ID: QC593975

Analyte	Result	RL
Cadmium	ND	5.0
Chromium	ND	5.0
Lead	ND	5.0
Nickel	ND	5.0
Zinc	ND	20

ND= Not Detected
RL= Reporting Limit
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Batch QC Report
Dissolved California LUFT Metals

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	METHOD
Project#:	1211-001-01	Analysis:	EPA 6010B
Matrix:	Filtrate	Batch#:	175310
Units:	ug/L	Prepared:	05/31/11
Diln Fac:	1.000	Analyzed:	05/31/11

Type: BS Lab ID: QC593976

Analyte	Spiked	Result	%REC	Limits
Cadmium	50.00	45.64	91	80-120
Chromium	200.0	172.6	86	80-120
Lead	100.0	80.98	81	77-120
Nickel	500.0	426.7	85	80-120
Zinc	500.0	444.2	89	80-120

Type: BSD Lab ID: QC593977

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Cadmium	50.00	45.53	91	80-120	0	20
Chromium	200.0	172.6	86	80-120	0	20
Lead	100.0	81.99	82	77-120	1	20
Nickel	500.0	431.0	86	80-120	1	20
Zinc	500.0	446.7	89	80-120	1	20

RPD= Relative Percent Difference

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5.0

Batch QC Report

Dissolved California LUFT Metals

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	METHOD
Project#:	1211-001-01	Analysis:	EPA 6010B
Field ID:	ZZZZZZZZZZ	Batch#:	175310
MSS Lab ID:	228136-001	Sampled:	05/20/11
Matrix:	Filtrate	Received:	05/20/11
Units:	ug/L	Prepared:	05/31/11
Diln Fac:	1.000	Analyzed:	05/31/11

Type: MS Lab ID: QC593978

Analyte	MSS Result	Spiked	Result	%REC	Limits
Cadmium	<1.000	50.00	44.32	89	70-123
Chromium	67.61	200.0	221.8	77	70-120
Lead	<1.425	100.0	72.19	72	58-120
Nickel	771.7	500.0	1,082	62 *	66-120
Zinc	36.70	500.0	472.5	87	69-126

Type: MSD Lab ID: QC593979

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Cadmium	50.00	46.29	93	70-123	4 22
Chromium	200.0	235.8	84	70-120	6 22
Lead	100.0	73.97	74	58-120	2 29
Nickel	500.0	1,144	74	66-120	6 22
Zinc	500.0	503.1	93	69-126	6 23

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Total Dissolved Solids (TDS)

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	METHOD
Project#:	1211-001-01	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Sampled:	05/26/11
Matrix:	Water	Received:	05/26/11
Units:	mg/L	Prepared:	06/01/11
Batch#:	175376	Analyzed:	06/02/11

Field ID	Type	Lab ID	Result	RL	Diln Fac
EW-1	SAMPLE	228327-001	720	10	1.000
MW-2	SAMPLE	228327-002	790	10	1.000
MW-4	SAMPLE	228327-003	5,340	50	5.000
MW-6	SAMPLE	228327-004	4,440	50	5.000
MW-8	SAMPLE	228327-005	2,710	17	1.667
MW-8A	SAMPLE	228327-006	2,750	17	1.667
	BLANK	QC594254	ND	10	1.000

ND= Not Detected

RL= Reporting Limit

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14.0

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	228327	Location:	1650 65th St. Emeryville
Client:	PES Environmental, Inc.	Prep:	METHOD
Project#:	1211-001-01	Analysis:	SM2540C
Analyte:	Total Dissolved Solids	Batch#:	175376
Field ID:	ZZZZZZZZZZ	Sampled:	05/25/11
MSS Lab ID:	228284-006	Received:	05/25/11
Matrix:	Water	Prepared:	06/01/11
Units:	mg/L	Analyzed:	06/02/11

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln	Fac
BS	QC594255		104.0	100.0		96	75-120			1.000	
BSD	QC594256		104.0	104.0		100	75-120	4	5	1.000	
SDUP	QC594257	24,700		26,500	500.0				7 *	5	50.00

* = Value outside of QC limits; see narrative

RL= Reporting Limit

RPD= Relative Percent Difference

APPENDIX C

HISTORICAL GROUNDWATER DATA

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

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

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

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

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

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

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

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

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

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

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

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

NOTES:

Ft MSL = feet above Mean Sea Level

ES = Engineering-Science, Inc.

PES = PES Environmental, Inc.

BLAINE = Blaine Tech Services, Inc.

NA = Information not available at this date.

NM = Well was inaccessible due to parked cars

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

NOTES:

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

** = Organic Lead

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

¹ = Trichloroethylene concentration (only trichloroethylene detected).

ES = Engineering-Science, Inc.

PES = PES Environmental, Inc.

BLAINE = Blaine Tech Services, Inc.

NA = Not analyzed

ND = Not detected above method detection limit.

NS = Not sampled.

<0.0005 = Not detected above indicated laboratory reporting limit.

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

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

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl tert butyl ether

DISTRIBUTION

**SECOND QUARTER 2011
GROUNDWATER MONITORING REPORT
1650 65TH STREET
EMERYVILLE, CALIFORNIA**

JULY 22, 2011

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