



January 31, 2003

167.002.01.006

Mr. Don Hwang  
Alameda County Environmental Health Services  
1131 Harbor Parkway, Suite 250  
Alameda, California 94502

Alameda County  
FEB 06 2003  
Environmental Health

**QUARTERLY MONITORING REPORT  
FOURTH QUARTER 2002  
FORMER COX CADILLAC FACILITY  
230 BAY PLACE  
OAKLAND, CALIFORNIA  
LOP CASE RO-0000148**

Dear Mr. Hwang:

This report presents the results of groundwater monitoring conducted on October 22, 2002 at the former Bill Cox Cadillac facility at 230 Bay Place, Oakland, California (Site, Plate 1). The groundwater monitoring was performed by PES Environmental, Inc. (PES) on behalf of the former property owner, Greater Bay Trust Company, trustee for the Robert Shepard Trust, Brian F. Shepard Trust, Douglas C. Shepard Trust, and Lisa C. Shepard Trust. The current owner of the Site is Avalon Bay Communities. Groundwater monitoring has been conducted in accordance with the requirements presented in an April 6, 2001 letter from Alameda County Environmental Health Services (ACEHS) to Greater Bay Trust.

Seven monitoring wells are currently located at and adjacent to the Site (Plate 2). The monitoring wells were installed to investigate subsurface conditions related to two former underground storage tanks (USTs) on the Site: one 3,000-gallon waste oil UST and one 10,000-gallon gasoline UST. The waste oil UST was removed in December 1988 and the gasoline UST and associated piping were removed in January 1994. Additional excavation of soil in the vicinity of the gasoline UST pump and piping was conducted in July 1997.

**QUARTERLY MONITORING ACTIVITIES**

Depth to groundwater measurements, groundwater sampling activities, and dissolved oxygen measurements were performed by Blaine Tech Services, Inc. (Blaine Tech) on October 22, 2002. Blaine Tech's field data forms are presented in Appendix A.

Mr. Don Hwang  
January 31, 2003  
Page 2

### Groundwater Elevation Measurements

Blaine Tech measured water levels in the seven site monitoring wells (MW-1, MW-2, TW-2, TW-4, TW-5, TW-6, and TW-7) on October 22, 2002. Depth-to-groundwater measurements were obtained using an electronic water-level indicator and recorded to the nearest 0.01-foot. The water-level indicator was cleaned with a solution of non-phosphate detergent and de-ionized water, and rinsed before each use. Groundwater elevation data (referenced to Site datum) are presented in Table 1 and inferred groundwater elevation contours are presented on Plate 3. Groundwater elevations ranged from 91.23 feet in well MW-2 to 98.46 feet in well TW-2. Groundwater flow direction is to the west, at a hydraulic gradient of approximately 0.044-foot per foot. No separate-phase free product or hydrocarbon sheen were observed in the wells.

### Groundwater Sampling and Analysis

Five groundwater-monitoring wells (MW-1, MW-2, TW-2, TW-6, and TW-7) were sampled on October 22, 2002. Samples from these wells were analyzed for total petroleum hydrocarbons quantified as gasoline (TPHg) using EPA Test Method 8015 modified; benzene, toluene, ethylbenzene and total xylenes (BTEX), using EPA Test Method 8020; and fuel oxygenates including methyl tert-butyl ether (MTBE), tert-butanol (TBA), di-isopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), tert-amyl methyl ether (TAME), 1,2-dichloroethane (1,2-DCA), and 1,2-dibromomethane (EDB) using EPA Test Method 8260B. Entech Analytical Labs, Inc. (Entech) of Santa Clara, California, a California state-certified laboratory, performed the chemical analyses. The analytical laboratory report, including chain-of-custody documentation, is included as Appendix B. Analytical results are presented in Table 2 and on Plate 4.

### Dissolved Oxygen Measurements

Total dissolved oxygen was measured in five of the monitoring wells (MW-1, MW-2, TW-2, TW-6, and TW-7) prior to measuring groundwater levels or sampling the wells. The measurements were collected from each well within the middle portion of the water column using a YSI, Inc., Model 51B Dissolved Oxygen (DO) Meter. The equipment was calibrated according to the manufacturer's specifications before use. Prior to each measurement, the portion of the equipment submerged in the well was cleaned with a solution of non-phosphate detergent and de-ionized water then rinsed with de-ionized water. Total dissolved oxygen measurements through October 22, 2002 are summarized in Table 3 and are included with the well sampling documentation presented in Appendix A.

Mr. Don Hwang  
January 31, 2003  
Page 3

**SUMMARY**

Groundwater monitoring of the former Cox Cadillac facility was conducted in the fourth quarter of 2002 on October 22, 2002. The monitoring was performed consistent with the monitoring program for the Site. The next quarterly sampling event is scheduled for January 2003.

Please contact us at (415) 899-1600 should you have questions regarding this letter report.

Very truly yours,

**PES ENVIRONMENTAL, INC.**

  
François A. Bush  
Senior Geologist

  
Robert S. Creps, P. E.  
Principal Engineer

Attachments: Table 1 - Groundwater Elevation Data Through October 22, 2002  
Table 2 - Groundwater Sample Analytical Results Through  
October 22, 2002  
Table 3 - Summary of Dissolved Oxygen Measurements  
Plate 1 - Site Location Map  
Plate 2 - Site Plan and Well Location Map  
Plate 3 - Groundwater Elevation Contours on October 22, 2002  
Plate 4 - Distribution of Dissolved Hydrocarbons in Groundwater -  
October 22, 2002  
Appendix A - Well Sampling Documentation  
Appendix B - Laboratory Analytical Reports and Chain of Custody  
Documentation

cc: Ms. Cheryl Howell - Greater Bay Trust Company  
Rory Campbell, Esq. - Hanson Bridgett  
Mr. Mark Owens - California UST Cleanup Fund  
Ms. Lita Freeman - LFR

**Table 1**  
**Groundwater Elevation Data Through October 22, 2002**  
**Quarterly Monitoring**  
**Former Cox Cadillac, 230 Bay Place**  
**Oakland, California**

<b>Well Number</b>	<b>Date Measured</b>	<b>Top-of-Casing Reference Elevation (feet*)</b>	<b>Depth to Water (feet BTOC)</b>	<b>Groundwater Elevation (feet*)</b>
<b>MW-1</b>	12/22/1994	100.00	2.96	97.04
	3/24/1995		2.21	97.79
	6/29/1995		2.44	97.56
	9/29/1995		3.00	97.00
	2/23/1996		2.18	97.82
	1/12/1999		2.79	97.21
	4/13/1999		2.00	98.00
	7/7/1999		2.60	97.40
	10/6/1999		2.94	97.06
	1/11/2000		2.69	97.31
	4/6/2001		2.99	97.01
	7/25/2001		6.00	94.00
	11/20/2001		3.32	96.68
	1/23/2002		2.47	97.53
	4/26/2002		2.25	97.75
7/25/2002	3.04	96.96		
<b>10/22/2002</b>	<b>3.02</b>	<b>96.98</b>		
<b>MW-2</b>	1/12/1999	97.48	5.62	91.86
	4/13/1999		5.30	92.18
	7/7/1999		5.80	91.68
	10/6/1999		5.99	91.49
	1/11/2000		5.73	91.75
	4/6/2001		5.65	91.83
	7/25/2001		6.41	92.07
	11/20/2001		5.89	92.59
	1/23/2002		5.68	91.80
	4/26/2002		5.85	91.63
	7/25/2002		6.15	91.33
<b>10/22/2002</b>	<b>6.25</b>	<b>91.23</b>		
<b>TW-2</b>	12/22/1994	100.43	2.88	97.55
	3/24/1995		1.87	98.56
	6/29/1995		2.10	98.33
	9/29/1995		3.02	97.41
	2/23/1996		2.13	98.30
	1/12/1999		1.91	98.52
	4/13/1999		2.51	97.92
	7/7/1999		1.89	98.54
	10/6/1999		1.97	98.46
	1/11/2000		1.79	98.64
	4/6/2001		3.46	96.97

**Table 1**  
**Groundwater Elevation Data Through October 22, 2002**  
**Quarterly Monitoring**  
**Former Cox Cadillac, 230 Bay Place**  
**Oakland, California**

Well Number	Date Measured	Top-of-Casing Reference Elevation (feet*)	Depth to Water (feet BTOC)	Groundwater Elevation (feet*)
TW-2 cont.	7/25/2001		2.60	98.83
	11/20/2001		1.85	99.58
	1/23/2002		3.21	97.22
	4/26/2002		4.30	96.13
	7/25/2002		1.89	98.54
	10/22/2002		1.97	98.46
TW-4	4/13/1999	99.35	1.82	97.53
	7/7/1999		2.36	96.99
	1/11/2000		2.63	96.72
	4/6/2001		3.97	95.38
	7/25/2001		2.55	96.80
	11/20/2001		2.33	97.02
	1/23/2002		2.26	97.09
	4/26/2002		2.20	97.15
	7/25/2002		2.24	97.11
	10/22/2002		2.60	96.75
TW-5	4/13/1999	99.40	1.96	97.44
	7/7/1999		3.12	92.28
	1/11/2000		1.03	98.37
	4/6/2001		3.04	96.36
	7/25/2001		3.90	95.50
	11/20/2001		2.55	96.85
	1/23/2002		2.64	96.76
	4/26/2002		2.50	96.90
	7/25/2002		3.15	96.25
	10/22/2002		3.69	95.71
TW-6	12/22/1994	98.75	4.66	94.09
	3/24/1995		3.81	94.94
	6/29/1995		5.25	93.50
	9/29/1995		6.12	92.63
	2/23/1996		3.66	95.09
	1/12/1999		5.52	93.23
	4/13/1999		4.91	93.84
	7/7/1999		6.04	92.71
	10/6/1999		6.64	92.11
	1/11/2000		6.41	92.34
	4/6/2001		4.93	93.82
	7/25/2001		6.72	92.03
	11/20/2001		5.44	93.31
	1/23/2002		3.25	95.50

**Table 1**  
**Groundwater Elevation Data Through October 22, 2002**  
**Quarterly Monitoring**  
**Former Cox Cadillac, 230 Bay Place**  
**Oakland, California**

<b>Well Number</b>	<b>Date Measured</b>	<b>Top-of-Casing Reference Elevation (feet*)</b>	<b>Depth to Water (feet BTOC)</b>	<b>Groundwater Elevation (feet*)</b>
<b>TW-6 cont.</b>	4/26/2002		3.40	95.35
	7/25/2002		6.54	92.21
	10/22/2002		7.06	91.69
<b>TW-7</b>	12/22/1994	97.96	4.50	93.46
	3/24/1995		2.98	94.98
	6/29/1995		4.30	93.66
	9/29/1995		5.19	92.77
	2/23/1996		3.45	94.51
	1/12/1999		4.81	93.15
	4/13/1999		4.73	93.23
	7/7/1999		5.17	92.79
	10/6/1999		5.70	92.26
	1/11/2000		5.42	92.54
	4/6/2001		4.63	93.33
	7/25/2001		6.80	91.16
	11/20/2001		4.75	93.21
	1/23/2002		5.68	92.28
	4/26/2002		4.80	93.16
7/25/2002	5.61	92.35		
10/22/2002	6.11	91.85		

**Notes:**

\* = Referenced to site datum  
 BTOC = Below top of casing

NA = Data not available  
 NM = Depth to water not measured

Table 2  
 Groundwater Sample Analytical Results Through October 22, 2002  
 Quarterly Monitoring  
 Former Cox Cadillac, 230 Bay Place  
 Oakland, California

Well Number	Sample Date	TPH as Gasoline (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Lead (µg/L)	1,1-DCA (µg/L)
MW-1	3/3/1993	110,000	NA	8,500	7,500	4,400	15,000	350	NA	NA	NA	NA	NA	NA	NA
	10/13/1993	74,000	NA	6,100	4,800	4,000	11,000	350	80	NA	NA	NA	NA	NA	NA
	12/22/1994	110,000	NA	18,000	11,000	2,800	16,000	130	NA	NA	NA	NA	NA	NA	<1.0
	3/24/1995	25,000	NA	3,700	1,800	2,200	4,700	130	NA	NA	NA	NA	NA	23	<5.0
	6/29/1995	28,000	NA	5,300	2,100	3,200	7,500	110	NA	NA	NA	NA	NA	14	<2.0
	9/29/1995	43,000	NA	5,600	2,200	3,800	7,400	98	NA	NA	NA	NA	NA	16	<1.0
	2/23/1996	46,000	NA	4,800	3,000	3,400	7,700	96	NA	NA	NA	NA	NA	24	<1.0
	1/12/1999	39,000	800	2,600	970	2,900	5,700	NA	NA	NA	NA	NA	NA	NA	NA
	4/13/1999	29,000	520	1,500	500	<50	4,000	NA	NA	NA	NA	NA	NA	NA	NA
	7/7/1999	31,000	<250	1,900	870	1,600	3,900	NA	NA	NA	NA	NA	NA	NA	NA
	10/6/1999	32,000	<250*	2,100	910	1,800	4,400	NA	NA	NA	NA	NA	NA	NA	NA
	1/11/2000	2,400	<5.0*	52	3.9	63	12	NA	NA	NA	NA	NA	NA	NA	NA
	4/6/2001	32,000	<10*	4,300	3,200	2,600	7,300	NA	NA	NA	NA	NA	NA	NA	NA
	7/25/2001	24,000	<25*	2,300	1,300	2,500	6,200	NA	NA	NA	NA	NA	NA	NA	NA
	11/20/2001	33,000	<100*	2,100	890	2,500	3,600	NA	NA	NA	NA	NA	NA	NA	NA
	1/23/2002	28,000	350	2,400	1,400	2,500	5,900	NA	NA	NA	NA	NA	NA	NA	NA
	4/26/2002	39,000	2,800	3,200	2,400	2,700	6,300	NA	NA	NA	NA	NA	NA	NA	NA
	7/25/2002	26,000	<500	2,300	1,300	2,500	4,700	NA	NA	NA	NA	NA	NA	NA	NA
10/22/2002	42,000	<10	2,800	1,300	4,300	8,600	<50	<50	<100	<50	<50	<50	NA	NA	
MW-2	1/12/1999	<50	2,900	1.5	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA
	4/13/1999	<50	3,800	0.76	<0.50	<0.50	<0.50	NA	NA	NA	NA	NA	NA	NA	NA
	7/7/1999	<2,500	7000*	<25	<25	<25	<25	NA	NA	NA	NA	NA	NA	NA	NA
	10/6/1999	2,800	300*	73	<25	<25	<25	NA	NA	NA	NA	NA	NA	NA	NA
	1/11/2000	11,000	8,400*	890	<100	<100	<100	NA	NA	NA	NA	NA	NA	NA	NA
	4/6/2001	2,800	3,800	210	<25	<25	<25	NA	NA	NA	NA	NA	NA	NA	NA
	7/25/2001	3,400	4,200*	250	<12.5	<12.5	<12.5	NA	NA	NA	NA	NA	NA	NA	NA
	11/20/2001	12,000	8,700	870	<100	<100	200	NA	NA	NA	NA	NA	NA	NA	NA
	1/23/2002	3,900	3,300	100	<25	<25	<25	NA	NA	NA	NA	NA	NA	NA	NA
	4/26/2002	90	6,900	13	<0.5	<0.5	<1.5	NA	NA	NA	NA	NA	NA	NA	NA
	7/25/2002	<5,000	6,600	<50	<50	<50	<100	NA	NA	NA	NA	NA	NA	NA	NA
10/22/2002	7,800	7,000	<5	<5	<5	<10	<250	<250	<500	<250	<250	<250	NA	NA	
TW-1	10/13/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA
TW-2	10/13/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA
	1/12/1999	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	4/13/1999	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	7/7/1999	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	10/6/1999	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	1/11/2000	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	4/6/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	7/25/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	11/20/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	1/23/2002	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA

Table 2  
 Groundwater Sample Analytical Results Through October 22, 2002  
 Quarterly Monitoring  
 Former Cox Cadillac, 230 Bay Place  
 Oakland, California

Well Number	Sample Date	TPH as Gasoline (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Lead (µg/L)	1,1-DCA (µg/L)
TW-2 cont.	4/26/2002	<50	<5	<0.5	<0.5	<0.5	<1.5	NA	NA	NA	NA	NA	NA	NA	NA
	7/25/2002	<50	<5	<0.5	<0.5	<0.5	<1	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2002	<50	<1	<0.5	<0.5	<0.5	<1	<5	<5	<10	<5	<5	<5	NA	NA
TW-3	10/13/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA
TW-4	10/13/1993	2,000	NA	65	18	49	33	<5.0	<5.0	NA	NA	NA	NA	NA	NA
TW-5	10/13/1993	140,000	NA	20,000	25,000	3,800	23,000	<100	<100	NA	NA	NA	NA	NA	NA
TW-6	10/14/1993	4,100	NA	3,800	1,600	110	540	<1.0	<1.0	NA	NA	NA	NA	NA	NA
	12/22/1994	24,000	NA	5,400	2,700	3,100	6,800	<1.0	NA	NA	NA	NA	NA	NA	<1.0
	3/24/1995	10,000	NA	4,900	530	270	380	<2.0	NA	NA	NA	NA	NA	<3.0	<2.0
	6/29/1995	28,000	NA	12,000	6,600	1,000	3,000	<1.0	NA	NA	NA	NA	NA	4.2	<1.0
	9/29/1995	47,000	NA	19,000	5,200	1,500	4,000	<1.0	NA	NA	NA	NA	NA	3.3	<1.0
	2/23/1996	25,000	NA	13,000	5,200	1,100	2,770	<1.0	NA	NA	NA	NA	NA	5.2	<1.0
	1/12/1999	29,000	210	9,900	4,100	1,000	4,000	NA	NA	NA	NA	NA	NA	NA	NA
	4/13/1999	<50	22	0.70	<0.5	<0.5	0.62	NA	NA	NA	NA	NA	NA	NA	NA
	7/7/1999	55	8.1*	13	<0.5	<0.5	2.2	NA	NA	NA	NA	NA	NA	NA	NA
	10/6/1999	<50	<5	0.59	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	1/11/2000	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	4/6/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	7/25/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	11/20/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	1/23/2002	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	NA	NA	NA	NA
	4/26/2002	<50	<5	<0.5	<0.5	<0.5	<1.5	NA	NA	NA	NA	NA	NA	NA	NA
7/25/2002	<50	<5	0.60	<0.5	<0.5	<1	NA	NA	NA	NA	NA	NA	NA	NA	
10/22/2002	<50	<1	<0.5	<0.5	<0.5	<0.5	<1	<5	<5	<10	<5	<5	<5	NA	NA
TW-7	10/14/1993	100,000	NA	48,000	15,000	3,400	16,000	<50	<50	NA	NA	NA	NA	NA	NA
	12/22/1994	210,000	NA	49,000	33,000	7,300	28,000	<1.0	NA	NA	NA	NA	NA	NA	<1.0
	3/24/1995	56,000	NA	13,000	7,000	1,500	5,600	<2.0	NA	NA	NA	NA	NA	<3.0	<2.0
	6/29/1995	100,000	NA	39,000	8,100	3,000	8,300	<1.0	NA	NA	NA	NA	NA	3.5	<1.0
	9/29/1995	74,000	NA	32,000	8,700	2,900	8,600	<1.0	NA	NA	NA	NA	NA	3.5	<1.0
	2/23/1996	50,000	NA	22,000	8,400	2,700	6,900	<5.0	NA	NA	NA	NA	NA	3.8	<5.0
	1/12/1999	29,000	<100	7,300	670	2,700	960	NA	NA	NA	NA	NA	NA	NA	NA
	4/13/1999	54,000	1,200	4,500	1,800	180	8,200	NA	NA	NA	NA	NA	NA	NA	NA
	7/7/1999	42,000	2200*	8,000	4,500	1,200	3,500	NA	NA	NA	NA	NA	NA	NA	NA
	10/6/1999	29,000	580*	9,700	1,600	1,600	2,100	NA	NA	NA	NA	NA	NA	NA	NA
	1/11/2000	52,000	2,600*	8,500	7,100	1,600	6,700	NA	NA	NA	NA	NA	NA	NA	NA
	4/6/2001	22,000	690	4,800	1,800	2,200	3,400	NA	NA	NA	NA	NA	NA	NA	NA
	7/25/2001	20,000	1,100*	5,100	660	1,400	2,100	NA	NA	NA	NA	NA	NA	NA	NA
	11/20/2001	26,000	1,600	6,400	1,100	1,000	2,400	NA	NA	NA	NA	NA	NA	NA	NA

Table 2  
 Groundwater Sample Analytical Results Through October 22, 2002  
 Quarterly Monitoring  
 Former Cox Cadillac, 230 Bay Place  
 Oakland, California

Well Number	Sample Date	TPH as Gasoline (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Lead (µg/L)	1,1-DCA (µg/L)
TW-7 cont.	1/23/2002	25,000	1,200	5,100	510	2,200	3,900	NA	NA	NA	NA	NA	NA	NA	NA
	4/26/2002	29,000	1,600	4,400	1,300	2,900	2,370	NA	NA	NA	NA	NA	NA	NA	NA
	7/25/2002	21,000	1,900	4,900	470	1,600	1,700	NA	NA	NA	NA	NA	NA	NA	NA
	10/22/2002	31,000	1,700	6,700	410	1,100	1,500	<100	<100	<200	<100	<100	<100	NA	NA

Notes:

TPH - Total Petroleum Hydrocarbons  
 TBA - tert-Butanol  
 MTBE - Methyl tert-butyl ether  
 1,1-DCA and 1,2-DCA - Dichloroethane  
 EDB - Ethylene dibromide  
 DIPE - Diisopropyl Ether  
 ETBE - Ethyl-t-butyl Ether  
 TAME - tert-Amyl Methyl Ether  
 µg/L = Micrograms per liter.  
 <0.50 = Not detected at or above indicated laboratory reporting limit.  
 Samples analyzed for BTEX and MTBE by EPA Method 8020.  
 Samples analyzed for TPHgas by EPA Methods 8020 and 8015 Modified.  
 Samples analyzed for 1,1-DCA and 1,2-DCA by EPA Method 8010 or EPA Method 8240.  
 Samples analyzed for dissolved lead by EPA Method 6010A. Samples filtered through a 0.45 micron filter prior to analysis.  
 \*MTBE confirmation by EPA Method 8260.  
 NA= Not Analyzed  
 TW-1, TW-3, TW-4 and TW-5 only sampled one time (October 13, 1993)  
 Samples collected in 1993 and 1999 to 2002 were collected by PES Environmental, Inc.  
 Samples collected in 1994, 1995, and 1996 collected by Eisenberg, Olivieri & Associates, Inc.

**Table 3**  
**Summary of Total Dissolved Oxygen Measurements**  
**Quarterly Monitoring**  
**Former Cox Cadillac, 230 Bay Place**  
**Oakland, California**

<b>Well Number</b>	<b>Date Measured</b>	<b>Time of Day</b>	<b>Total Dissolved Oxygen (mg/L)</b>	<b>Notes</b>
<b>MW-1</b>	1/12/1999	15:30	3.4	(1)
	3/11/1999	15:46	0.72	(1)
	3/17/1999	12:30	14.1	(2)
	3/17/1999	18:13	>15.0	(3)
	4/13/1999	9:44	8.9	(2)
	6/1/1999	14:59	6.2	(2)
	6/1/1999	18:46	>15.0	(3)
	7/7/1999	9:20	3.55	(2)
	7/7/1999	19:38	>18.0	(3)
	8/19/1999	10:45	1.0	(2)
	8/19/1999	18:48	>15.0	(3)
	10/6/1999	10:42	10.3	(2)
	10/6/1999	17:11	>15.0	(3)
	11/17/1999	11:13	4.4	(2)
	11/17/1999	17:34	>15.0	(3)
	1/11/2000	NA	4.0	(2)
	4/6/2001	10:55	0.45	(4)
	7/25/2001	11:25	3.60	(4)
	11/20/2001	12:30	10.3	(4)
	1/23/2002	12:05	0.5	(4)
4/26/2002	10:20	0.5	(4)	
7/25/2002	10:15	1.0	(4)	
10/22/2002	11:30	0.4	(4)	
<b>MW-2</b>	1/12/1999	12:30	3	(1)
	4/13/1999	9:17	0.2	(2)
	4/13/1999	19:11	0.6	(3)
	7/7/1999	8:56	1.03	(2)
	7/7/1999	19:13	7.22	(3)
	10/6/1999	10:10	1.2	(2)
	10/6/1999	16:58	0.5	(3)
	1/11/2000	NA	3.9	(2)
	4/6/2001	10:21	0.69	(4)
	7/25/2001	11:25	3.10	(4)
	11/20/2001	13:20	5.00	(4)
	1/23/2002	11:46	0.30	(4)
	4/26/2002	9:40	0.40	(4)
	7/25/2002	11:10	0.8	(4)
10/22/2002	11:02	0.70	(4)	
<b>TW-2</b>	1/12/1999	15:03	5.5	(1)
	4/13/1999	9:10	2.6	(2)
	4/13/1999	19:06	5.8	(3)
	7/7/1999	8:50	0.65	(2)
	7/7/1999	19:01	5.14	(3)
	10/6/1999	9:59	3.2	(2)
	10/6/1999	16:48	2.6	(3)
	1/11/2000	NA	4.6	(2)
	4/6/2001	9:45	2.9	(4)
	7/25/2001	11:25	3.0	(4)
	11/20/2001	11:00	10.3	(4)
	1/23/2002	10:54	2.6	(4)
	4/26/2002	10:40	2.00	(4)
	7/25/2002	9:55	1.8	(4)
10/22/2002	10:15	1.3	(4)	

**Table 3**  
**Summary of Total Dissolved Oxygen Measurements**  
**Quarterly Monitoring**  
**Former Cox Cadillac, 230 Bay Place**  
**Oakland, California**

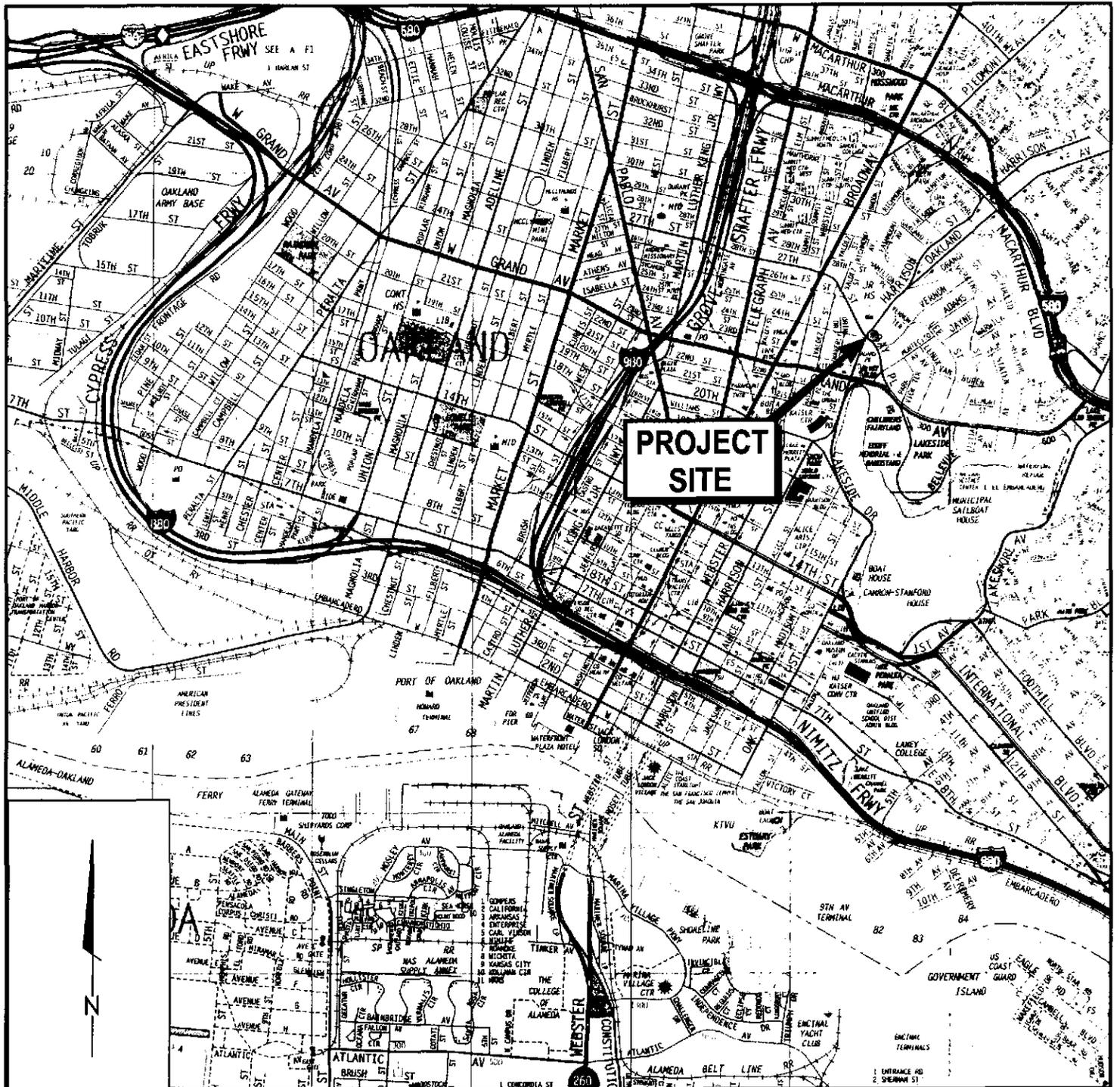
<b>Well Number</b>	<b>Date Measured</b>	<b>Time of Day</b>	<b>Total Dissolved Oxygen (mg/L)</b>	<b>Notes</b>
<b>TW-4</b>	3/11/1999	15:20	3.4	(1)
	3/17/1999	12:18	14.4	(2)
	3/17/1999	17:54	12.6	(3)
	4/13/1999	9:00	12.2	(2)
	4/13/1999	19:03	>15.0	(3)
	6/1/1999	14:29	9.3	(2)
	6/1/1999	18:33	>15.0	(3)
	7/7/1999	9:09	>18.0	(2)
	7/7/1999	19:36	>18.0	(3)
	8/19/1999	10:41	13.4	(2)
	8/19/1999	18:27	>15.0	(3)
	10/6/1999	9:50	>15.0	(2)
	10/6/1999	16:40	>15.0	(3)
	11/17/1999	11:16	10.6	(2)
	11/17/1999	17:35	>15.0	(3)
	7/25/2001	11:25	17.0*	(4)
	11/20/2001	NA	15.3*	(4)
1/23/2002	NA	13.3	(4)	
4/26/2002	10:00	1.6	(4)	
7/25/2002	NA	5.0	(4)	
10/22/2002	NM	NM		
<b>TW-5</b>	1/12/1999	16:40	1.7	(1)
	3/11/1999	15:36	0.58	(1)
	3/17/1999	12:20	14.3	(2)
	3/17/1999	17:57	14.6	(3)
	4/13/1999	9:39	3.8	(2)
	4/13/1999	19:28	>15.0	(3)
	6/1/1999	14:40	5.4	(2)
	6/1/1999	18:38	>15.0	(3)
	7/7/1999	9:05	0.25	(2)
	7/7/1999	19:32	>18.0	(3)
	8/19/1999	10:38	1.0	(2)
	8/19/1999	18:33	>15.0	(3)
	10/6/1999	10:31	0.2	(2)
	10/6/1999	17:08	>15.0	(3)
	11/17/1999	11:22	0.8	(2)
	11/17/1999	17:37	>15.0	(3)
	7/25/2001	11:25	0.7	(4)
11/20/2001	NA	5.0	(4)	
1/23/2002	NA	0.5	(4)	
4/26/2002	NA	0.2	(4)	
7/25/2002	NA	0.2	(4)	
10/22/2002	NM	NM		
<b>TW-6</b>	1/12/1999	15:02	3.9	(1)
	3/11/1999	15:39	0.62	(1)
	3/17/1999	12:23	14.1	(2)
	3/17/1999	18:06	>15.0	(3)
	4/13/1999	9:35	14.2	(2)
	4/13/1999	19:23	>15.0	(3)
	6/1/1999	14:48	11.1	(2)
	6/1/1999	18:40	>15.0	(3)
	7/7/1999	9:00	>18.0	(2)
	7/7/1999	19:21	>18.0	(3)
8/19/1999	10:35	14.8	(2)	

**Table 3**  
**Summary of Total Dissolved Oxygen Measurements**  
**Quarterly Monitoring**  
**Former Cox Cadillac, 230 Bay Place**  
**Oakland, California**

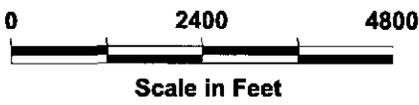
Well Number	Date Measured	Time of Day	Total Dissolved Oxygen (mg/L)	Notes
TW-6 (Cont.)	8/19/1999	18:38	>15.0	(3)
	10/6/1999	10:27	3.8	(2)
	10/6/1999	17:06	>15.0	(3)
	11/17/1999	11:24	1.5	(2)
	11/17/1999	17:39	>15.0	(3)
	1/11/2000	NA	4.9	(2)
	4/6/2001	10:00	0.78	(4)
	7/25/2001	11:25	2.70	(4)
	11/20/2001	11:30	9.40	(4)
	1/23/2002	11:22	8.60	(4)
	4/26/2002	10:00	3.9	(4)
	7/25/2002	10:30	1.1	(4)
	10/22/2002	10:45	3.1	(4)
TW-7	1/12/1999	13:10	2.7	(1)
	3/11/1999	15:42	0.74	(1)
	3/17/1999	12:25	6.5	(2)
	3/17/1999	18:12	14	(3)
	4/13/1999	9:25	0.4	(2)
	4/13/1999	19:16	>15.0	(3)
	6/1/1999	14:52	0.7	(2)
	6/1/1999	18:43	>15.0	(3)
	7/7/1999	9:15	0.26	(2)
	7/7/1999	19:26	>18.0	(3)
	8/19/1999	10:30	0.9	(2)
	8/19/1999	18:46	>15.0	(3)
	10/6/1999	10:19	0.5	(2)
	10/6/1999	17:03	>15.0	(3)
	11/17/1999	11:28	1.1	(2)
	11/17/1999	17:40	>15.0	(3)
	1/11/2000	NA	5.2	(2)
	4/6/2001	11:25	0.53	(4)
	7/25/2001	11:25	2.0	(4)
	11/20/2001	13:00	4.6	(4)
1/23/2002	12:25	0.3	(4)	
4/26/2002	9:20	0.50	(4)	
7/25/2002	10:45	0.8	(4)	
10/22/2002	11:55	1.0	(4)	

**Notes:**

- >15 = Above indicated equipment quantification maximum
- (1) = Baseline measurement taken before initial introduction of enriched water
- (2) = Measured prior to enriched water introduction, and water-level measurement and well purging
- (3) = Measured after enriched water introduction
- (4) = Measured prior to water-level measurement and well purging
- mg/L = milligrams per liter
- NA = information not available
- NM = Not Measured
- \* Concentration exceeds DO saturation concentration.



**PROJECT  
SITE**



Ref: "The Thomas Guide- Alameda/Contra Costa Counties Street Guide and Directory" 1998 Edition



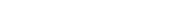
**PES Environmental, Inc.**  
Engineering & Environmental Services

**Site Location Map**  
Quarterly Groundwater Monitoring  
Former Cox Cadillac-230 Bay Place  
Oakland, California

PLATE  
**1**

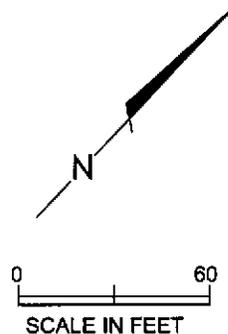
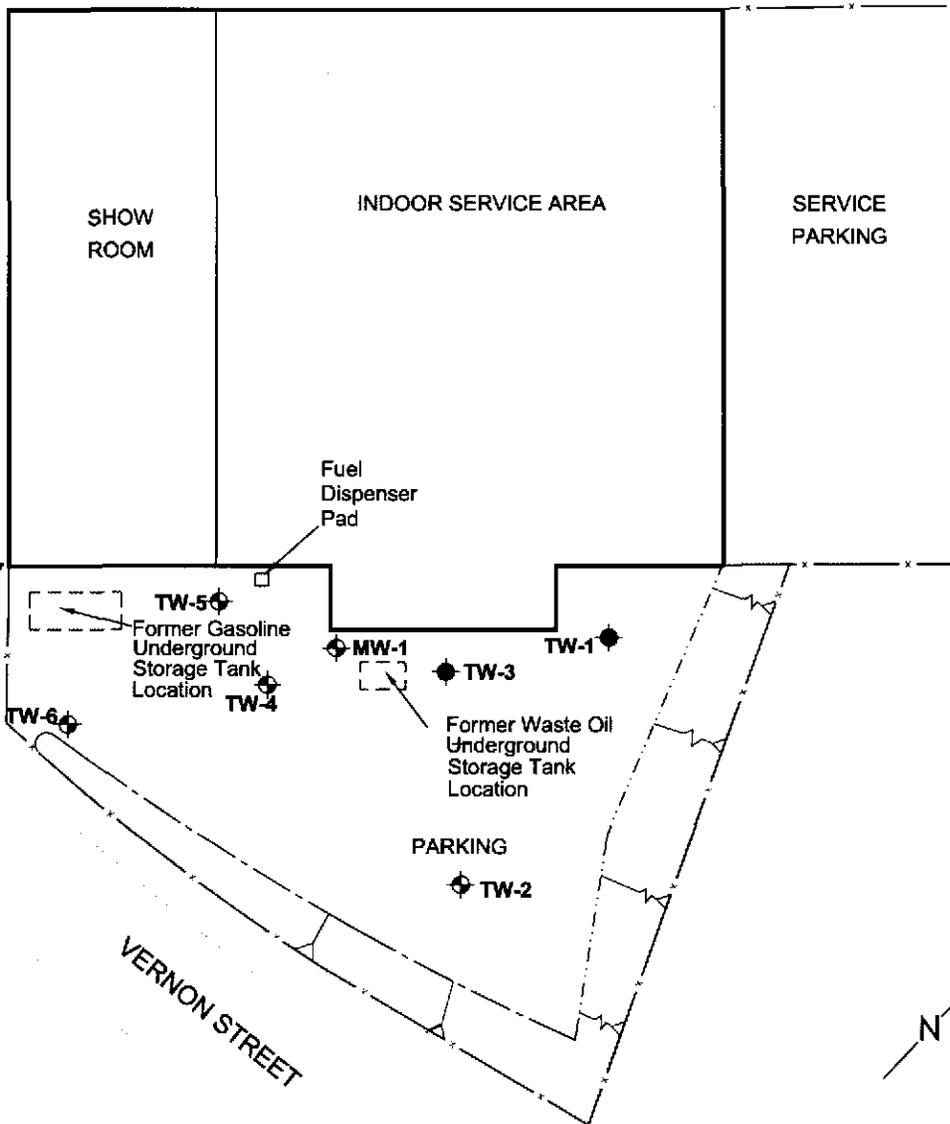
Explanation

- MW-1  Monitoring Well Location
- TW-1  Former Monitoring Well Location

-  Fence
-  Retaining Wall
-  Curb

HARRISON STREET

BAY PLACE



**PES Environmental, Inc.**  
Engineering & Environmental Services

**Site Plan and Well Location Map**  
Quarterly Groundwater Monitoring  
Former Cox Cadillac-230 Bay Place  
Oakland, California

PLATE

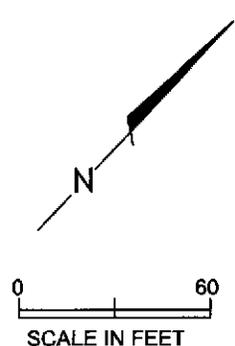
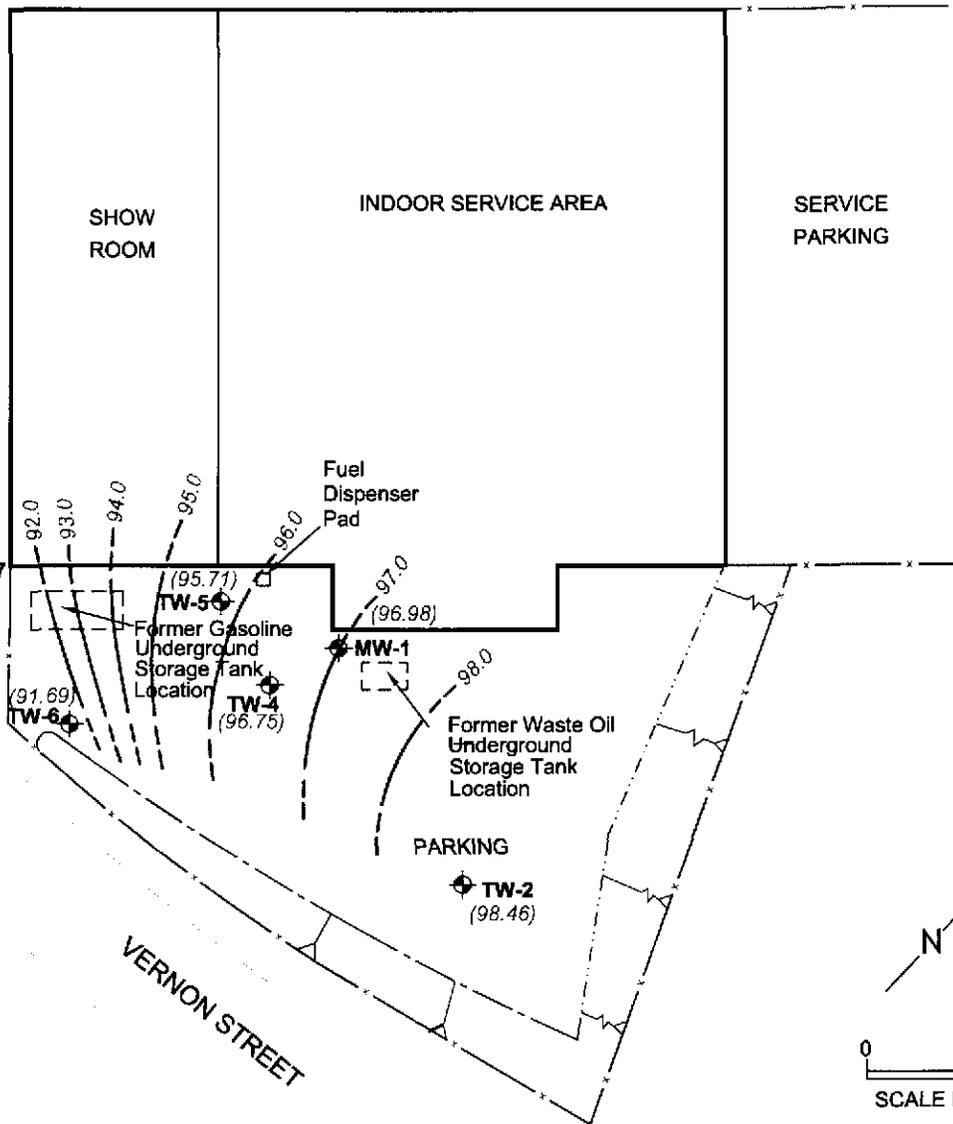
**2**

Explanation

- MW-1  Monitoring Well Location
-  Former UST Location
- (97.15) Groundwater Elevation (Referenced to Site Datum) measured October 22, 2002
- 94.0  Groundwater Elevation Contour, Dashed where Inferred (Contour Interval is 1.0 feet)

HARRISON STREET

BAY PLACE



**Groundwater Elevation Contours on October 22, 2002**  
 Quarterly Groundwater Monitoring  
 Former Cox Cadillac-230 Bay Place  
 Oakland, California

PLATE  
**3**

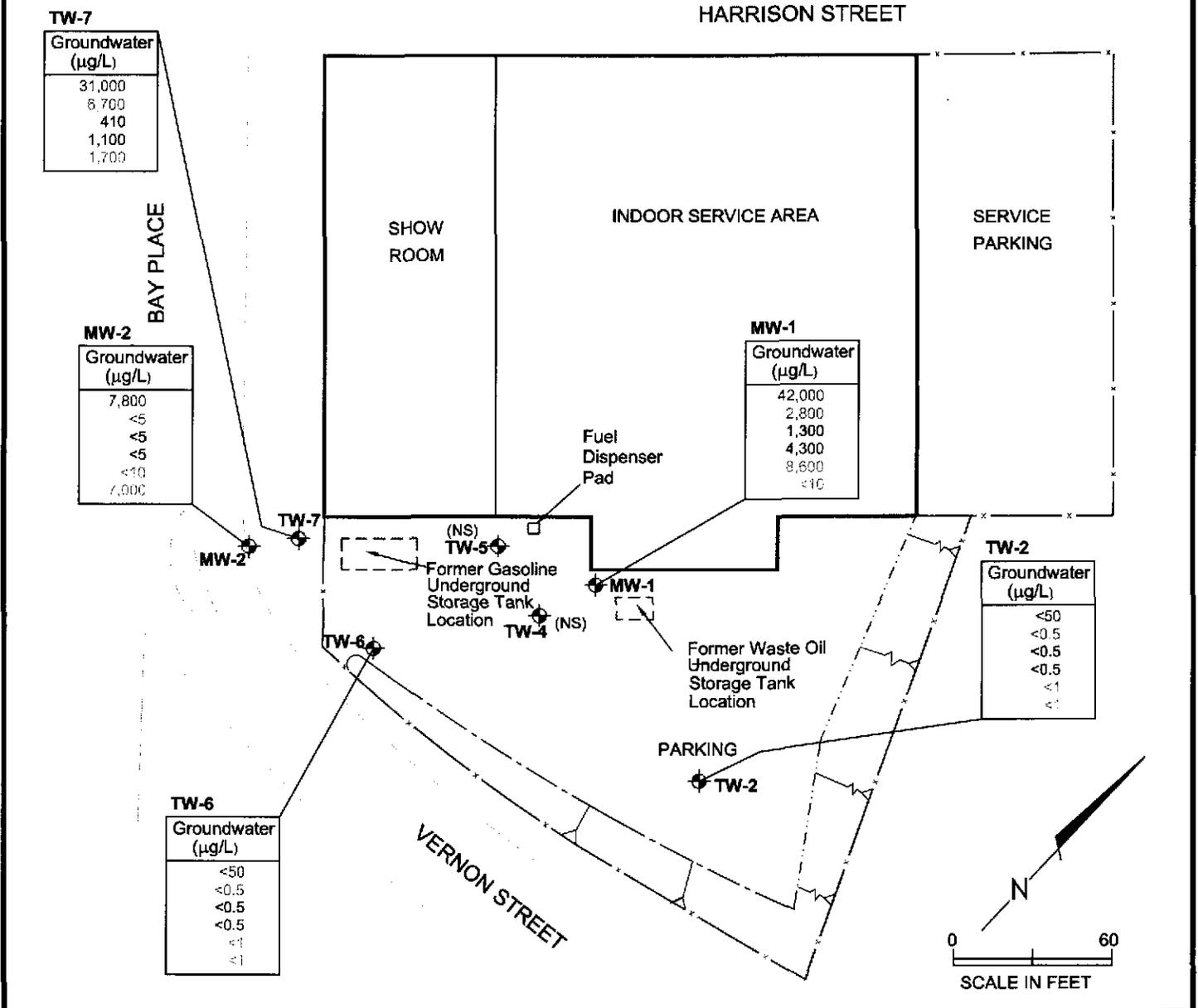
Explanation

- MW-1  Monitoring Well Location
-  Former UST Location
- (NS) Not Sampled

Concentrations of Dissolved Hydrocarbons  
in Micrograms per liter ( $\mu\text{g/l}$ ) in Groundwater

Groundwater ( $\mu\text{g/L}$ )
Total Petroleum Hydrocarbons as Gasoline
Benzene
Toluene
Ethylbenzene
Total Xylenes
Methyl-Tert-Butyl Ether

<0.50 Not detected at or above indicated laboratory reporting limit



**PES Environmental, Inc.**  
Engineering & Environmental Services

**Distribution of Dissolved Hydrocarbons  
in Groundwater - October 22, 2002**  
Quarterly Groundwater Monitoring  
Former Cox Cadillac-230 Bay Place  
Oakland, California

PLATE

**4**

**APPENDIX A**

**BLAINE TECH SERVICES  
FIELD DATA SHEETS**

## WELL GAUGING DATA

Project # 021022-DW-1 Date 10-22-02 Client PES

Site 230 Bay Place Oakland

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC
1 TW-2	2					1.97	<del>7.80</del> 7.80	↓
TW-4	2	gauged w/ ORC in well				2.60	<del>19.97</del> 8.65	
TW-5	2	removed ORC before gauging well				3.69	7.60	
2 TW-6	2	removed ORC before gauging				7.06	<del>7.60</del> 7.60	
5 TW-7	2	removed ORC before gauging				6.11	<del>7.60</del> 9.85	
4 MW-1	2	gauged w/ ORC in well				3.02	<del>7.60</del> 19.80	
3 MW-2	2					6.25	<del>9.85</del> 19.97	
		✓✓ double checked						

## WELL MONITORING DATA SHEET

Project #: 021022-DW-1	Client: PES @ 230 Bay Place Oakland
Sampler: Dave Walter	Start Date: 10-22-02
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8
Total Well Depth: 19.80	Depth to Water: 3.02
Before:                      After:	Before:                      After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH

Purge Method:	Sampling Method: Bailer
<input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Middleburg <input type="checkbox"/> Electric Submersible	<input type="checkbox"/> Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump <input type="checkbox"/> Other: _____
	<input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing <input type="checkbox"/> Other: _____

2.7 (Gals.) X 3 = 8.1  
Gals.

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or μS)	Turbidity (NTU)	Gals. Removed	Observations
11:30	66.2	7.0	3142	>200	2.7	odor
11:34	67.0	6.9	3158	>200	5.4	
11:38	66.7	6.9	3166	>200	8.1	

Did well dewater? Yes  No  Gallons actually evacuated: 8.1

Sampling Time: 11:42                      Sampling Date: 10-22-02

Sample I.D.: MW-1                      Laboratory: Entech

Analyzed for: (TPH-G BTEX) MTBE TPH-D Other: Oxygenates by 8260

Equipment Blank I.D.: @ Time Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge: 0.4 mg/L	Post-purge: mg/L
ORP (if req'd):	Pre-purge: mV	Post-purge: mV

## WELL MONITORING DATA SHEET

Project #: 021022-DW-1	Client: PES @ 230 Bay Place Oakland
Sampler: Dave Walter	Start Date: 10-22-02
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8
Total Well Depth: 19.97	Depth to Water: 6.25
Before:                      After:	Before:                      After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:	Sampling Method: Bailer
<input type="checkbox"/> Bailer <input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Middleburg <input type="checkbox"/> Electric Submersible	<input type="checkbox"/> Waterra <input type="checkbox"/> Peristaltic <input type="checkbox"/> Extraction Pump <input type="checkbox"/> Other _____
	<input checked="" type="checkbox"/> Disposable Bailer <input type="checkbox"/> Extraction Port <input type="checkbox"/> Dedicated Tubing <input type="checkbox"/> Other: _____

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

2.2 (Gals.) X 3 = 6.6  
Gals.

Time	Temp. (F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
11:02	68.8	6.5	1712	>200	2.2	light brown
11:07	68.9	6.6	1790	>200	4.4	
11:11	69.4	6.6	1833	>200	6.6	

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: 6.6
Sampling Time: 11:15	Sampling Date: 10-22-02
Sample I.D.: MW-2	Laboratory: Entech
Analyzed for: TPH-G BTEX MTBE TPH-D	Other: Oxygenates by 8260
Equipment Blank I.D.: @ Time	Duplicate I.D.:
Analyzed for: TPH-G BTEX MTBE TPH-D	Other:
D.O. (if req'd): Pre-purge: 0.7 mg/L	Post-purge: mg/L
ORP (if req'd): Pre-purge: mV	Post-purge: mV

## WELL MONITORING DATA SHEET

Project #: 021022-DW-1	Client: PES @ 230 Bay Place Oakland
Sampler: Dave Walter	Start Date: 10-22-02
Well I.D.: TW-2	Well Diameter: (2) 3 4 6 8
Total Well Depth: <del>1980</del> 280	Depth to Water: 1.97
Before:                      After:	Before:                      After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSI</u> HACH

Purge Method:

- Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible  
 Waterra  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:

- Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: \_\_\_\_\_

$29^{0.9} \text{ (Gals.)} \times 3 = \del{27} 27$

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
10:15	66.0	6.1	5398	77	1	
10:20	68.1	6.2	5469	61	2	
10:25	68.4	6.2	5393	63	3	

Did well dewater? Yes  No  Gallons actually evacuated: 3

Sampling Time: 10:25                      Sampling Date: 10-22-02

Sample I.D.: TW-2                      Laboratory: Entech

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oxygenates by 8260

Equipment Blank I.D.:                      @                      Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): ~~1.8~~ 1.3 mg/L                      Pre-purge:                      Post-purge:                      mg/L

ORP (if req'd):                      Pre-purge:                      mV                      Post-purge:                      mV

## WELL MONITORING DATA SHEET

Project #: 021022-DW-1	Client: PES @ 230 Bay Place Oakland
Sampler: Dave Walter	Start Date: 10-22-02
Well I.D.: TW-6	Well Diameter: (2) 3 4 6 8
Total Well Depth: 7.60	Depth to Water: 7.06
Before:                      After:	Before:                      After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

- Bailer  
 Disposable Bailer  
 Middleburg  
 Electric Submersible  
 Waterra  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method:

- Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: \_\_\_\_\_

.08 (Gals.) X 3 = .24 Gals.

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or μS)	Turbidity (NTU)	Gals. Removed	Observations
10:45	65.0	7.2	1120	7200	.08	Brown
10:46	66.0	7.1	1072	7200	.16	
10:47	67.4	7.1	850	7200	.24	

Did well dewater? Yes  No  Gallons actually evacuated: .24

Sampling Time: 10:50                      Sampling Date: 10-22-02

Sample I.D.: TW-6                      Laboratory: Entech

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oxygenates by 8260

Equipment Blank I.D.: @ Time                      Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: 3.1 mg/L                      Post-purge: mg/L

ORP (if req'd): Pre-purge: mV                      Post-purge: mV

## WELL MONITORING DATA SHEET

Project #: 021022-DW-1	Client: PES @ 230 Bay Place Oakland
Sampler: Dave Walter	Start Date: 10-22-02
Well I.D.: TW-7	Well Diameter: (2) 3 4 6 8
Total Well Depth: 9.85	Depth to Water: 6.11
Before:                      After:	Before:                      After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC                      Grade	D.O. Meter (if req'd): YSI                      HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other \_\_\_\_\_

Sampling Method:

- Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: \_\_\_\_\_

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

0.6 (Gals.) X 3 = 1.8 Gals.

Time	Temp. (°F or °C)	pH	Conductivity (mS or μS)	Turbidity (NTU)	Gals. Removed	Observations
11:55	68.6	6.7	1085	98	0.6	odor
11:57	70.5	6.6	960	7200	1.2	
11:59	70.5	6.6	944	7200	1.8	

Did well dewater? Yes  No  Gallons actually evacuated: 1.8

Sampling Time: 12:04                      Sampling Date: 10-22-02

Sample I.D.: TW-7                      Laboratory: Entech

Analyzed for: TPH-G BTEX MTBE TPH-D Other: Oxygenates by 8260

Equipment Blank I.D.:                      @                      Time                      Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd): Pre-purge: 1.0 mg/L                      Post-purge: ~~1.0~~ mg/L

ORP (if req'd): Pre-purge:                      mV                      Post-purge:                      mV

**APPENDIX B**

**ENTECH ANALYTICAL LABS, INC.  
ANALYTICAL LABORATORY REPORT**

# Entech Analytical Labs, Inc.

RECEIVED NOV 12 2002

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

November 07, 2002

Francois Bush  
PES Environmental, Inc.  
1682 Novato Boulevard, Suite 100  
Novato, CA 94947

**Order:** 31747  
**Project Name:**  
**Project Number:** BTS# 021022-DW-1  
**Project Notes:**

**Date Collected:** 10/22/02  
**Date Received:** 10/24/02  
**P.O. Number:** BTS# 021022-DW-1

On October 24, 2002, samples were received under documented chain of custody. Results for the following analyses are attached:

<u>Matrix</u>	<u>Test</u>	<u>Method</u>
Liquid	Gas/BTEX	EPA 8015 MOD. (Purgeable)
	Oxygenates+1,2DCA+EDB	EPA 8020
		EPA 8260B

Chemical analysis of these samples has been completed. Summaries of the data are contained on the following pages. USEPA protocols for sample storage and preservation were followed.

Entech Analytical Labs, Inc. is certified by the State of California (#2346). If you have any questions regarding procedures or results, please call me at 408-588-0200.

Sincerely,



Patti Sandrock  
QA/QC Manager

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

**PES Environmental, Inc.**  
**1682 Novato Boulevard, Suite 100**  
**Novato, CA 94947**  
**Attn: Francois Bush**

Date: 11/7/02  
 Date Received: 10/24/02  
 Project Name:  
 Project Number: BTS# 021022-DW-1  
 P.O. Number: BTS# 021022-DW-1  
 Sampled By:

## Certified Analytical Report

Order ID: 31747

Lab Sample ID: 31747-001

Client Sample ID: MW-1

Sample Time: 11:42 AM

Sample Date: 10/22/02

Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	2800		100	0.5	50	µg/L	N/A	10/31/02	WGC42633C	EPA 8020
Toluene	1300		100	0.5	50	µg/L	N/A	10/31/02	WGC42633C	EPA 8020
Ethyl Benzene	4300		100	0.5	50	µg/L	N/A	10/31/02	WGC42633C	EPA 8020
Xylenes, Total	8600		100	1	100	µg/L	N/A	10/31/02	WGC42633C	EPA 8020
			<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>	
			4-Bromofluorobenzene			114.6			65 - 135	

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
tert-Butanol	ND		10	10	100	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
Methyl-t-butyl Ether	ND		10	1	10	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
Diisopropyl Ether	ND		10	5	50	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
Ethyl-t-butyl Ether	ND		10	5	50	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
tert-Amyl Methyl Ether	ND		10	5	50	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
1,2-Dichloroethane	ND		10	5	50	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
1,2-Dibromoethane (EDB)	ND		10	5	50	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
			<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>	
			4-Bromofluorobenzene			93.8			73 - 151	
			Dibromofluoromethane			92.4			57 - 156	
			Toluene-d8			93.7			77 - 150	

**Comment:** Sample diluted due to high concentrations of non-target hydrocarbons.

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	42000		100	50	5000	µg/L	N/A	10/31/02	WGC42633C	EPA 8015 MOD. (Purgeable)
			<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>	
			4-Bromofluorobenzene			146.1			65 - 135	
			aaa-Trifluorotoluene			92.6			65 - 135	

**Comment:** High surrogate recovery for 4-BFB due to matrix interference. See TFT results.

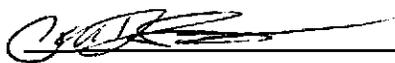
DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

  
 Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

**PES Environmental, Inc.**  
 1682 Novato Boulevard, Suite 100  
 Novato, CA 94947  
 Attn: Francois Bush

Date: 11/7/02  
 Date Received: 10/24/02  
 Project Name:  
 Project Number: BTS# 021022-DW-1  
 P.O. Number: BTS# 021022-DW-1  
 Sampled By: Blaine Tech

## Certified Analytical Report

Order ID: 31747

Lab Sample ID: 31747-002

Client Sample ID: MW-2

Sample Time: 11:15 AM

Sample Date: 10/22/02

Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		10	0.5	5	µg/L	N/A	10/30/02	WGC42633B	EPA 8020
Toluene	ND		10	0.5	5	µg/L	N/A	10/30/02	WGC42633B	EPA 8020
Ethyl Benzene	ND		10	0.5	5	µg/L	N/A	10/30/02	WGC42633B	EPA 8020
Xylenes, Total	ND		10	1	10	µg/L	N/A	10/30/02	WGC42633B	EPA 8020

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	122.6	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
tert-Butanol	ND		50	10	500	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
Methyl-t-butyl Ether	7000		50	1	50	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
Diisopropyl Ether	ND		50	5	250	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
Ethyl-t-butyl Ether	ND		50	5	250	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
tert-Amyl Methyl Ether	ND		50	5	250	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
1,2-Dichloroethane	ND		50	5	250	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
1,2-Dibromoethane (EDB)	ND		50	5	250	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B

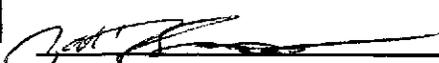
<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	88.0	73 - 151
Dibromofluoromethane	92.7	57 - 156
Toluene-d8	94.6	77 - 150

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	7800	x	10	50	500	µg/L	N/A	10/30/02	WGC42633B	EPA 8015 MOD. (Purgeable)

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	84.7	65 - 135

**Comment:** Reported TPH as Gasoline value is the result of high concentration of a discrete peak(MTBE) within the TPH as Gasoline quantitation range.

DF = Dilution Factor      ND = Not Detected      DLR = Detection Limit Reported      PQL = Practical Quantitation Limit  
 Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

  
 Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

**PES Environmental, Inc.**  
 1682 Novato Boulevard, Suite 100  
 Novato, CA 94947  
 Attn: Francois Bush

Date: 11/7/02  
 Date Received: 10/24/02  
 Project Name:  
 Project Number: BTS# 021022-DW-1  
 P.O. Number: BTS# 021022-DW-1  
 Sampled By: Blaine Tech

## Certified Analytical Report

Order ID: 31747

Lab Sample ID: 31747-003

Client Sample ID: TW-2

Sample Time: 10:25 AM

Sample Date: 10/22/02

Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	10/30/02	WGC42633B	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	10/30/02	WGC42633B	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	10/30/02	WGC42633B	EPA 8020
Xylenes, Total	ND		1	1	1	µg/L	N/A	10/30/02	WGC42633B	EPA 8020

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	96.8	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
tert-Butanol	ND		1	10	10	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
Methyl-t-butyl Ether	ND		1	1	1	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
Diisopropyl Ether	ND		1	5	5	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
Ethyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
1,2-Dichloroethane	ND		1	5	5	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
1,2-Dibromoethane (EDB)	ND		1	5	5	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	89.8	73 - 151
Dibromofluoromethane	93.3	57 - 156
Toluene-d8	94.0	77 - 150

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	10/30/02	WGC42633B	EPA 8015 MOD. (Purgeable)

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	83.9	65 - 135

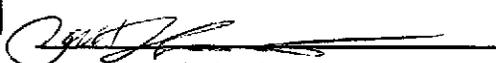
DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

  
 Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

**PES Environmental, Inc.**  
 1682 Novato Boulevard, Suite 100  
 Novato, CA 94947  
 Attn: Francois Bush

Date: 11/7/02  
 Date Received: 10/24/02  
 Project Name:  
 Project Number: BTS# 021022-DW-1  
 P.O. Number: BTS# 021022-DW-1  
 Sampled By: Blaine Tech

## Certified Analytical Report

Order ID: 31747

Lab Sample ID: 31747-004

Client Sample ID: TW-6

Sample Time: 10:50 AM

Sample Date: 10/22/02

Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	ND		1	0.5	0.5	µg/L	N/A	10/31/02	WGC42633C	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	10/31/02	WGC42633C	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	10/31/02	WGC42633C	EPA 8020
Xylenes, Total	ND		1	1	1	µg/L	N/A	10/31/02	WGC42633C	EPA 8020

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	92.4	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
tert-Butanol	ND		1	10	10	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
Methyl-t-butyl Ether	ND		1	1	1	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
Diisopropyl Ether	ND		1	5	5	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
Ethyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
tert-Amyl Methyl Ether	ND		1	5	5	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
1,2-Dichloroethane	ND		1	5	5	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B
1,2-Dibromoethane (EDB)	ND		1	5	5	µg/L	N/A	10/29/02	WMS21781B	EPA 8260B

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	89.7	73 - 151
Dibromofluoromethane	92.4	57 - 156
Toluene-d8	94.0	77 - 150

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	ND		1	50	50	µg/L	N/A	10/31/02	WGC42633C	EPA 8015 MOD. (Purgeable)

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	95.2	65 - 135

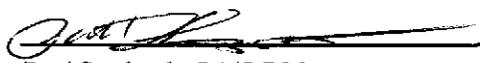
DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

  
 Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

**PES Environmental, Inc.**  
 1682 Novato Boulevard, Suite 100  
 Novato, CA 94947  
 Attn: Francois Bush

Date: 11/7/02  
 Date Received: 10/24/02  
 Project Name:  
 Project Number: BTS# 021022-DW-1  
 P.O. Number: BTS# 021022-DW-1  
 Sampled By: Blaine Tech

## Certified Analytical Report

Order ID: 31747

Lab Sample ID: 31747-005

Client Sample ID: TW-7

Sample Time: 12:04 PM

Sample Date: 10/22/02

Matrix: Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	6700		200	0.5	100	µg/L	N/A	10/31/02	WGC42633C	EPA 8020
Toluene	410		200	0.5	100	µg/L	N/A	10/31/02	WGC42633C	EPA 8020
Ethyl Benzene	1100		200	0.5	100	µg/L	N/A	10/31/02	WGC42633C	EPA 8020
Xylenes, Total	1500		200	1	200	µg/L	N/A	10/31/02	WGC42633C	EPA 8020

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	104.1	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
tert-Butanol	ND		20	10	200	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
Methyl-t-butyl Ether	1700		20	1	20	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
Diisopropyl Ether	ND		20	5	100	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
Ethyl-t-butyl Ether	ND		20	5	100	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
tert-Amyl Methyl Ether	ND		20	5	100	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
1,2-Dichloroethane	ND		20	5	100	µg/L	N/A	10/30/02	WMS21785	EPA 8260B
1,2-Dibromoethane (EDB)	ND		20	5	100	µg/L	N/A	10/30/02	WMS21785	EPA 8260B

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	92.6	73 - 151
Dibromofluoromethane	95.3	57 - 156
Toluene-d8	93.7	77 - 150

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	31000		200	50	10000	µg/L	N/A	10/31/02	WGC42633C	EPA 8015 MOD. (Purgeable)

<b>Surrogate</b>	<b>Surrogate Recovery</b>	<b>Control Limits (%)</b>
4-Bromofluorobenzene	113.9	65 - 135

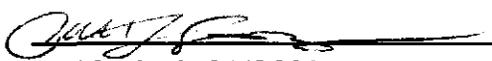
DF = Dilution Factor

ND = Not Detected

DLR = Detection Limit Reported

PQL = Practical Quantitation Limit

Analysis performed by Entech Analytical Labs, Inc. (CA ELAP #2346)

  
 Patti Sandrock, QA/QC Manager

Environmental Analysis Since 1983

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

## Quality Control Results Summary

QC Batch #: WGC42633B  
 Matrix: Liquid

Units: µg/L  
 Date Analyzed: 10/30/02

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
<b>Test: TPH as Gasoline</b>											
TPH as Gasoline	EPA 8015 M	ND		100		131.6	LCS	131.6			65.0 - 135.0
<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>					
	4-Bromofluorobenzene			97.6		65 - 135					
<b>Test: BTEX</b>											
Benzene	EPA 8020	ND		8		8.26	LCS	103.3			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		8.21	LCS	102.6			65.0 - 135.0
Toluene	EPA 8020	ND		8		7.74	LCS	96.8			65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		25.	LCS	104.2			65.0 - 135.0
<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>					
	4-Bromofluorobenzene			92.0		65 - 135					
<b>Test: TPH as Gasoline</b>											
TPH as Gasoline	EPA 8015 M	ND		100		139.2	LCSD	139.2	5.61	25.00	65.0 - 135.0
<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>					
	4-Bromofluorobenzene			99.8		65 - 135					
<b>Test: BTEX</b>											
Benzene	EPA 8020	ND		8		8.7	LCSD	108.7	5.19	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		8.91	LCSD	111.4	8.18	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		8		8.16	LCSD	102.0	5.28	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		28.	LCSD	116.7	11.32	25.00	65.0 - 135.0
<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>					
	4-Bromofluorobenzene			92.2		65 - 135					

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

## Quality Control Results Summary

QC Batch #: WGC42633C  
Matrix: Liquid

Units: µg/L  
Date Analyzed: 10/31/02

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
<b>Test: TPH as Gasoline</b>											
TPH as Gasoline	EPA 8015 M	ND		100		125.4	LCS	125.4			65.0 - 135.0
<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>					
	4-Bromofluorobenzene			95.9		65 - 135					
<b>Test: BTEX</b>											
Benzene	EPA 8020	ND		8		8.36	LCS	104.5			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		8.08	LCS	101.0			65.0 - 135.0
Toluene	EPA 8020	ND		8		7.71	LCS	96.4			65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		24.6	LCS	102.5			65.0 - 135.0
<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>					
	4-Bromofluorobenzene			96.2		65 - 135					
<b>Test: TPH as Gasoline</b>											
TPH as Gasoline	EPA 8015 M	ND		100		121.8	LCSD	121.8	2.91	25.00	65.0 - 135.0
<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>					
	4-Bromofluorobenzene			96.8		65 - 135					
<b>Test: BTEX</b>											
Benzene	EPA 8020	ND		8		8.16	LCSD	102.0	2.42	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		8		7.84	LCSD	98.0	3.02	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		8		7.49	LCSD	93.6	2.89	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		24		23.8	LCSD	99.2	3.31	25.00	65.0 - 135.0
<b>Surrogate</b>			<b>Surrogate Recovery</b>			<b>Control Limits (%)</b>					
	4-Bromofluorobenzene			96.0		65 - 135					

# Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

## Quality Control Results Summary

QC Batch #: WMS21781B  
 Matrix: Liquid

Units: µg/L  
 Date Analyzed: 10/29/02

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
<b>Test: Oxygenates+1,2DCA+EDB</b>											
Methyl-t-butyl Ether	EPA 8260B	ND		20		16.5666	LCS	82.8			65.0 - 135.0
			<b>Surrogate</b>		<b>Surrogate Recovery</b>		<b>Control Limits (%)</b>				
			4-Bromofluorobenzene		91.5		73 - 151				
			Dibromofluoromethane		89.3		57 - 156				
			Toluene-d8		94.7		77 - 150				
<b>Test: Oxygenates+1,2DCA+EDB</b>											
Methyl-t-butyl Ether	EPA 8260B	ND		20		16.423	LCSD	82.1	0.87	25.00	65.0 - 135.0
			<b>Surrogate</b>		<b>Surrogate Recovery</b>		<b>Control Limits (%)</b>				
			4-Bromofluorobenzene		90.2		73 - 151				
			Dibromofluoromethane		90.3		57 - 156				
			Toluene-d8		95.3		77 - 150				

# Entech Analytical Labs, Inc.

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## Quality Control Results Summary

QC Batch #: WMS21785  
Matrix: Liquid

Units: µg/L  
Date Analyzed: 10/30/02

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
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Test: Oxygenates+1,2DCA+EDB  
Methyl-t-butyl Ether EPA 8260B ND 20 16.4969 LCS 82.5 65.0 - 135.0

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	93.4	73 - 151
Dibromofluoromethane	89.3	57 - 156
Toluene-d8	91.3	77 - 150

Test: Oxygenates+1,2DCA+EDB  
Methyl-t-butyl Ether EPA 8260B ND 20 17.2922 LCSD 86.5 4.71 25.00 65.0 - 135.0

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	92.6	73 - 151
Dibromofluoromethane	90.9	57 - 156
Toluene-d8	92.8	77 - 150

# BLAINE

TECH SERVICES, INC.

1680 ROGERS AVENUE  
 SAN JOSE, CALIFORNIA 95112-1105  
 FAX (408) 573-7771  
 PHONE (408) 573-0555

## CONDUCT ANALYSIS TO DETECT

LAB Entech

DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

- EPA  
 LIA  
 OTHER
- RWQCB REGION \_\_\_\_\_

### CHAIN OF CUSTODY

BTS # 021022-DW-1

CLIENT PES  
 SITE 230 Bay Place  
 Oakland, CA

C = COMPOSITE ALL CONTAINERS

TPH - Gas (8015)

BTEX (8020)

\* Oxygenates and Lead Scavengers (8260)

### SPECIAL INSTRUCTIONS

Invoice and Report to : PES

Attn: Francois Bush

Oxygenates and Lead Scavengers (8260): MTBE, TAME, ETBE, DIPE, TBA, EDB, EDC

SAMPLE I.D.	DATE	TIME	MATRIX	CONTAINERS		C	TPH - Gas (8015)	BTEX (8020)	* Oxygenates and Lead Scavengers (8260)							ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
			S= SOIL W=H <sub>2</sub> O	TOTAL															
MW-1	10-22	11:42	W	6			X	X	X							31747-001			
MW-3		11:15					X	X	X							002			
TW-2		10:35					X	X	X							003			
TW-6		10:50					X	X	X							004			
TW-7		12:04					X	X	X							005			

SAMPLING COMPLETED 10-22-02 12:30 SAMPLING PERFORMED BY Dave Walter RESULTS NEEDED NO LATER THAN As Contracted

RELEASED BY: <i>David C. Clark</i>	DATE: 10-24-02	TIME: 14:35	RECEIVED BY: <i>James Healy</i>	DATE: 10-24-02	TIME: 14:35
RELEASED BY: <i>James Healy</i>	DATE: 10-24-02	TIME: 15:25	RECEIVED BY: <i>James Healy</i>	DATE: 10/24/02	TIME: 15:30
RELEASED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:

SHIPPED VIA DATE SENT TIME SENT COOLER #