



September 25, 2002

167.002.01.006

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

Alameda County
SEP 27 2002
Environmental Health

**QUARTERLY MONITORING REPORT
FIRST 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 January 23, 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.

Nine monitoring wells are 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 by PES 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 January 23, 2002. Blaine Tech's field data forms are presented in Appendix A.

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Groundwater Elevation Measurements

Blaine Tech measured water levels in seven of the nine monitoring wells (MW-1, MW-2, TW-2, TW-4, TW-5, TW-6, and TW-7) on January 23, 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 91.80 feet in well MW-2 to 97.53 feet in well MW-1. Groundwater flow direction is to the west, at a hydraulic gradient of approximately 0.045-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 January 23, 2002. Samples from these wells were analyzed for total petroleum hydrocarbons quantified as gasoline (TPHg) using EPA Test Method 8015 modified; and benzene, toluene, ethylbenzene, total xylenes (BTEX compounds), and methyl tert-butyl ether (MTBE), using EPA Test Method 8020. 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 seven of the nine Site monitoring wells (MW-1, MW-2, TW-2, TW-4, TW-5, 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 January 23, 2002 are summarized in Table 3 and are included with the well sampling documentation presented in Appendix A.

SUMMARY

Groundwater monitoring of the former Cox Cadillac facility was conducted in the first quarter of 2002 on January 23, 2002. The monitoring was performed consistent with the monitoring

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program for the Site. Second and third quarterly groundwater monitoring were conducted in April and July 2002; the results for these events are presented under separate cover.

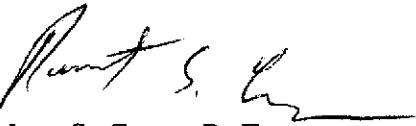
Please contact us at (415) 899-1600 should you have questions regarding this letter report.

Very truly yours,

PES ENVIRONMENTAL, INC.



François A. Bush
Senior Geologist



Robert S. Creps, P. E.
Principal Engineer



- Attachments:
- | | |
|------------|---|
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January 23, 2002 |
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| Plate 3 | Groundwater Elevation Contours on January 23, 2002 |
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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 January 23, 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*)
MW-1	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
MW-2	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
TW-2	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
	7/25/2001		2.60	98.83
	11/20/2001		1.85	99.58
	1/23/2002		3.21	97.22
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

Table 1
Groundwater Elevation Data Through January 23, 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-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
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
TW-7	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

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 January 23, 2002
Quarterly Monitoring
Former Cox Cadillac, 230 Bay Place
Oakland, California

Well Number	Sample Date	TPH as Gasoline ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)	1,1-DCA ($\mu\text{g/L}$)	1,2-DCA ($\mu\text{g/L}$)	EDB ($\mu\text{g/L}$)	Dissolved Lead ($\mu\text{g/L}$)
MW-1	3/3/1993	110,000	NA	8,500	7,500	4,400	15,000	NA	350	NA	NA
	10/13/1993	74,000	NA	6,100	4,800	4,000	11,000	NA	350	80	NA
	12/22/1994	110,000	NA	18,000	11,000	2,800	16,000	<1.0	130	NA	NA
	3/24/1995	25,000	NA	3,700	1,800	2,200	4,700	<5.0	130	NA	23
	6/29/1995	28,000	NA	5,300	2,100	3,200	7,500	<2.0	110	NA	14
	9/29/1995	43,000	NA	5,600	2,200	3,800	7,400	<1.0	98	NA	16
	2/23/1996	46,000	NA	4,800	3,000	3,400	7,700	<1.0	96	NA	24
	1/12/1999	39,000	800	2,600	970	2,900	5,700	NA	NA	NA	NA
	4/13/1999	29,000	520	1,500	500	<50	4,000	NA	NA	NA	NA
	7/7/1999	31,000	<250	1,900	870	1,600	3,900	NA	NA	NA	NA
	10/6/1999	32,000	<250*	2,100	910	1,800	4,400	NA	NA	NA	NA
	1/11/2000	2,400	<5.0*	52	3.9	63	12	NA	NA	NA	NA
	4/6/2001	32,000	<10*	4,300	3,200	2,600	7,300	NA	NA	NA	NA
	7/25/2001	24,000	<25*	2,300	1,300	2,500	6,200	NA	NA	NA	NA
	11/20/2001	33,000	<100*	2,100	890	2,500	3,600	NA	NA	NA	NA
	1/23/2002	28,000	350	2,400	1,400	2,500	5,900	NA	NA	NA	NA
MW-2	1/12/1999	<50	2,900	1.5	<0.50	<0.50	<0.50	NA	NA	NA	NA
	4/13/1999	<50	3,800	0.76	<0.50	<0.50	<0.50	NA	NA	NA	NA
	7/7/1999	<2,500	7000*	<25	<25	<25	<25	NA	NA	NA	NA
	10/6/1999	2,800	300*	73	<25	<25	<25	NA	NA	NA	NA
	1/11/2000	11,000	8,400*	890	<100	<100	<100	NA	NA	NA	NA
	4/6/2001	2,800	3,900*	210	<25	<25	<25	NA	NA	NA	NA
	7/25/2001	3,400	6,700*	250	<12.5	<12.5	<12.5	NA	NA	NA	NA
	11/20/2001	12,000	8,700	870	<100	<100	200	NA	NA	NA	NA
	1/23/2002	3,900	3,300	100	<25	<25	<25	NA	NA	NA	NA
TW-1	10/13/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	NA
TW-2	10/13/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	NA
	1/12/1999	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	4/13/1999	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	7/7/1999	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	10/6/1999	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	1/11/2000	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	4/6/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	7/25/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	11/20/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	1/23/2002	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
TW-3	10/13/1993	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	NA
TW-4	10/13/1993	2,000	NA	65	18	49	33	NA	<5.0	<5.0	NA
TW-5	10/13/1993	140,000	NA	20,000	25,000	3,800	23,000	NA	<100	<100	NA
TW-6	10/14/1993	4,100	NA	3,800	1,600	110	540	NA	<1.0	<1.0	NA
	12/22/1994	24,000	NA	5,400	2,700	3,100	6,800	<1.0	<1.0	NA	NA
	3/24/1995	10,000	NA	4,900	530	270	380	<2.0	<2.0	NA	<3.0
	6/29/1995	28,000	NA	12,000	6,600	1,000	3,000	<1.0	<1.0	NA	4.2
	9/29/1995	47,000	NA	19,000	5,200	1,500	4,000	<1.0	<1.0	NA	3.3
	2/23/1996	25,000	NA	13,000	5,200	1,100	2,770	<1.0	<1.0	NA	5.2
	1/12/1999	29,000	210	9,900	4,100	1,000	4,000	NA	NA	NA	NA
	4/13/1999	<50	22	0.70	<0.5	<0.5	0.62	NA	NA	NA	NA
	7/7/1999	55	8.1*	13	<0.5	<0.5	2.2	NA	NA	NA	NA
	10/6/1999	<50	<5	0.59	<0.5	<0.5	<0.5	NA	NA	NA	NA
	1/11/2000	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	4/6/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	7/25/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	11/20/2001	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	1/23/2002	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA

Table 2
Groundwater Sample Analytical Results Through January 23, 2002
Quarterly Monitoring
Former Cox Cadillac, 230 Bay Place
Oakland, California

Well Number	Sample Date	TPH as Gasoline ($\mu\text{g/L}$)	MTBE ($\mu\text{g/L}$)	Benzene ($\mu\text{g/L}$)	Toluene ($\mu\text{g/L}$)	Ethyl-benzene ($\mu\text{g/L}$)	Total Xylenes ($\mu\text{g/L}$)	1,1-DCA ($\mu\text{g/L}$)	1,2-DCA ($\mu\text{g/L}$)	EDB ($\mu\text{g/L}$)	Dissolved Lead ($\mu\text{g/L}$)
TW-7	10/14/1993	100,000	NA	48,000	15,000	3,400	16,000	NA	<50	<50	NA
	12/22/1994	210,000	NA	49,000	33,000	7,300	28,000	<1.0	<1.0	NA	NA
	3/24/1995	56,000	NA	13,000	7,000	1,500	5,600	<2.0	<2.0	NA	<3.0
	6/29/1995	100,000	NA	39,000	8,100	3,000	8,300	<1.0	<1.0	NA	3.5
	9/29/1995	74,000	NA	32,000	8,700	2,900	8,600	<1.0	<1.0	NA	3.5
	2/23/1996	50,000	NA	22,000	8,400	2,700	6,900	<5.0	<5.0	NA	3.8
	1/12/1999	29,000	<100	7,300	670	2,700	960	NA	NA	NA	NA
	4/13/1999	54,000	1,200	4,500	1,800	180	8,200	NA	NA	NA	NA
	7/7/1999	42,000	2,200*	8,000	4,500	1,200	3,500	NA	NA	NA	NA
	10/6/1999	29,000	580*	9,700	1,600	1,600	2,100	NA	NA	NA	NA
	1/11/2000	52,000	2,500*	8,500	7,100	1,600	6,700	NA	NA	NA	NA
	4/6/2001	22,000	690*	4,800	1,800	2,200	3,400	NA	NA	NA	NA
	7/25/2001	20,000	1,100*	5,100	660	1,400	2,100	NA	NA	NA	NA
	11/20/2001	26,000	1,600	6,400	1,100	1,000	2,400	NA	NA	NA	NA
	1/23/2002	25,000	1,200	5,100	510	2,200	3,900	NA	NA	NA	NA

Notes:

TPH - Total Petroleum Hydrocarbons

MTBE - Methyl tert-butyl ether

1,1-DCA and 1,2-DCA - Dichloroethane

EDB - Ethylene dibromide

 $\mu\text{g/L}$ = 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 were collected by Eisenberg, Olivieri, & Associates, Inc.

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
MW-1	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)
MW-2	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)
TW-2	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)

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-4	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)
TW-5	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)
TW-6	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)

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.)	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)
	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)
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)

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

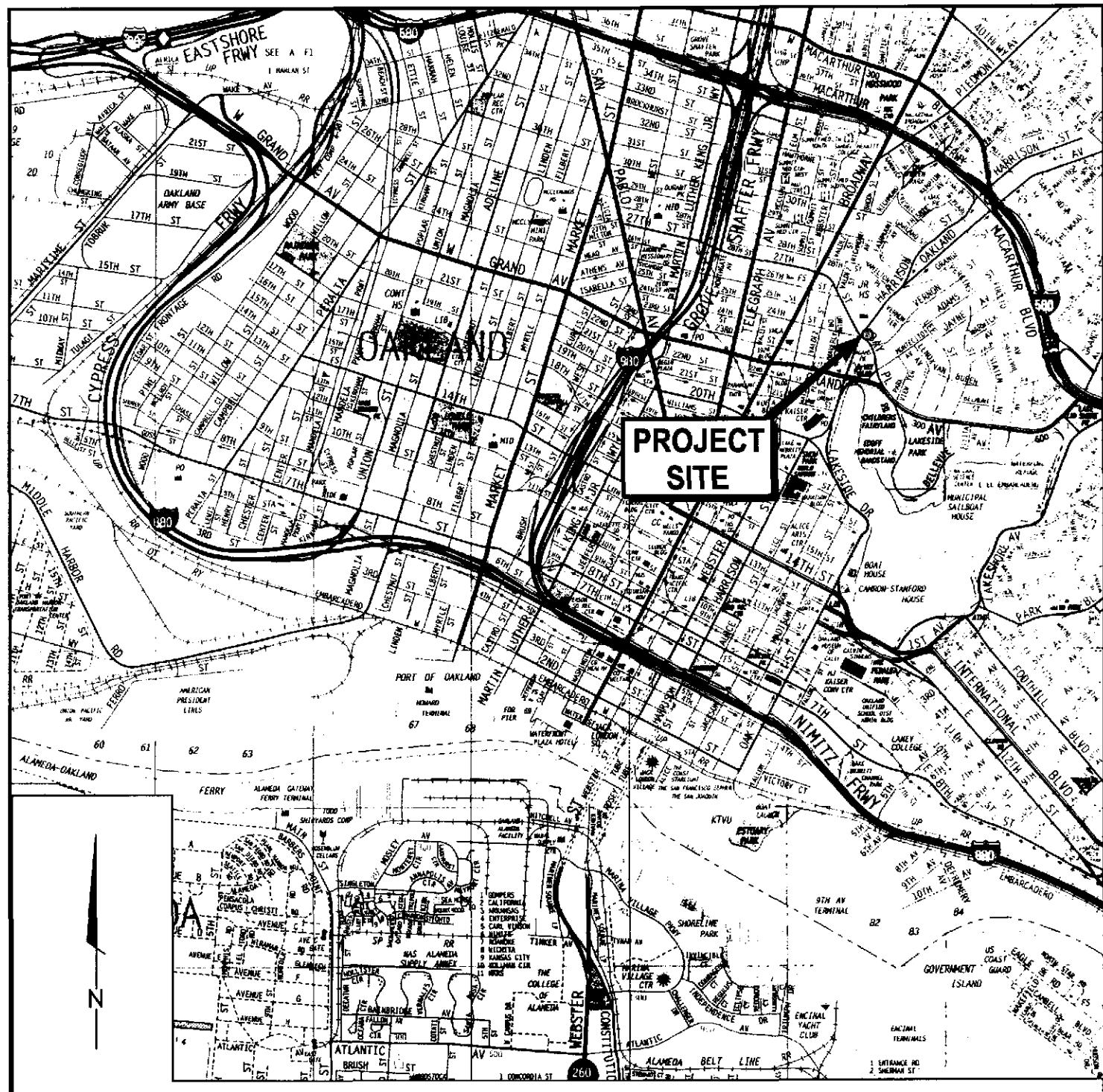
(3) = Measured after enriched water introduction

(4) = Measured prior to water-level measurement and well purging

mg/L = milligrams per liter

NA = information not available

* Concentration exceeds DO saturation concentration.



0 2400 4800

Scale In Feet

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

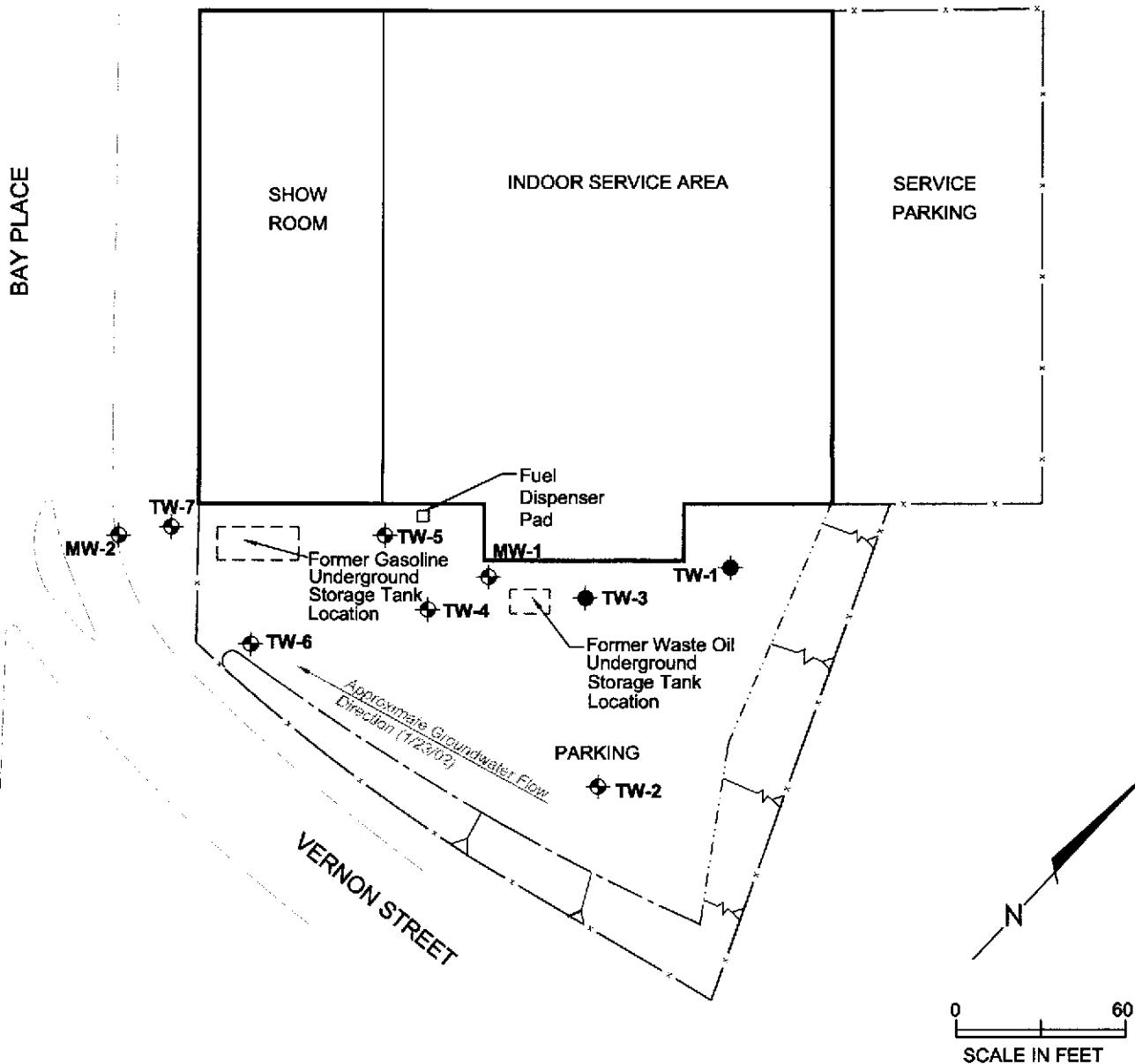
PLATE
1

Explanation

MW-1 Monitoring Well Location
TW-1 Temporary Well Location

—x— Fence
- - - - - Retaining Wall
—- - - Curb

HARRISON STREET



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

167.002.02.008

16700202008_1QTR-2002.dwg

FAB

5/02

JOB NUMBER

DRAWING NUMBER

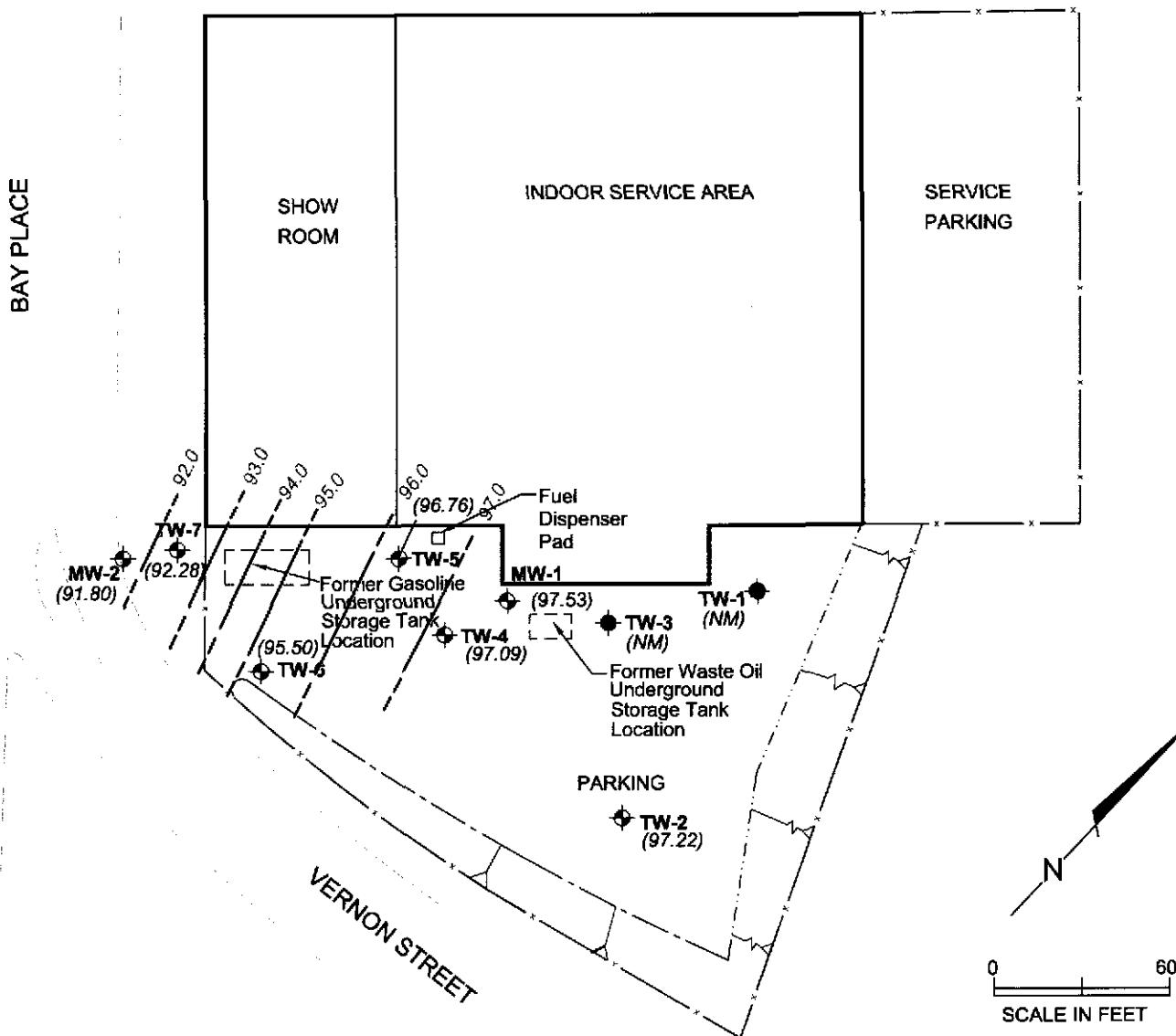
REVIEWED BY

DATE

Explanation

- MW-1 • Monitoring Well Location
- TW-1 • Temporary Well Location
- [] Former UST Location
- (97.53) Groundwater Elevation (Referenced to Site Datum) measured January 23, 2002
- 94.0 ————— Groundwater Elevation Contour, Dashed where Inferred (Contour Interval is 1.00 feet)
- (NM) Water-level not measured

HARRISON STREET



PES Environmental, Inc.
Engineering & Environmental Services

Groundwater Elevation Contours on January 23, 2002
Quarterly Groundwater Monitoring
Former Cox Cadillac-230 Bay Place
Oakland, California

PLATE

3

Explanation

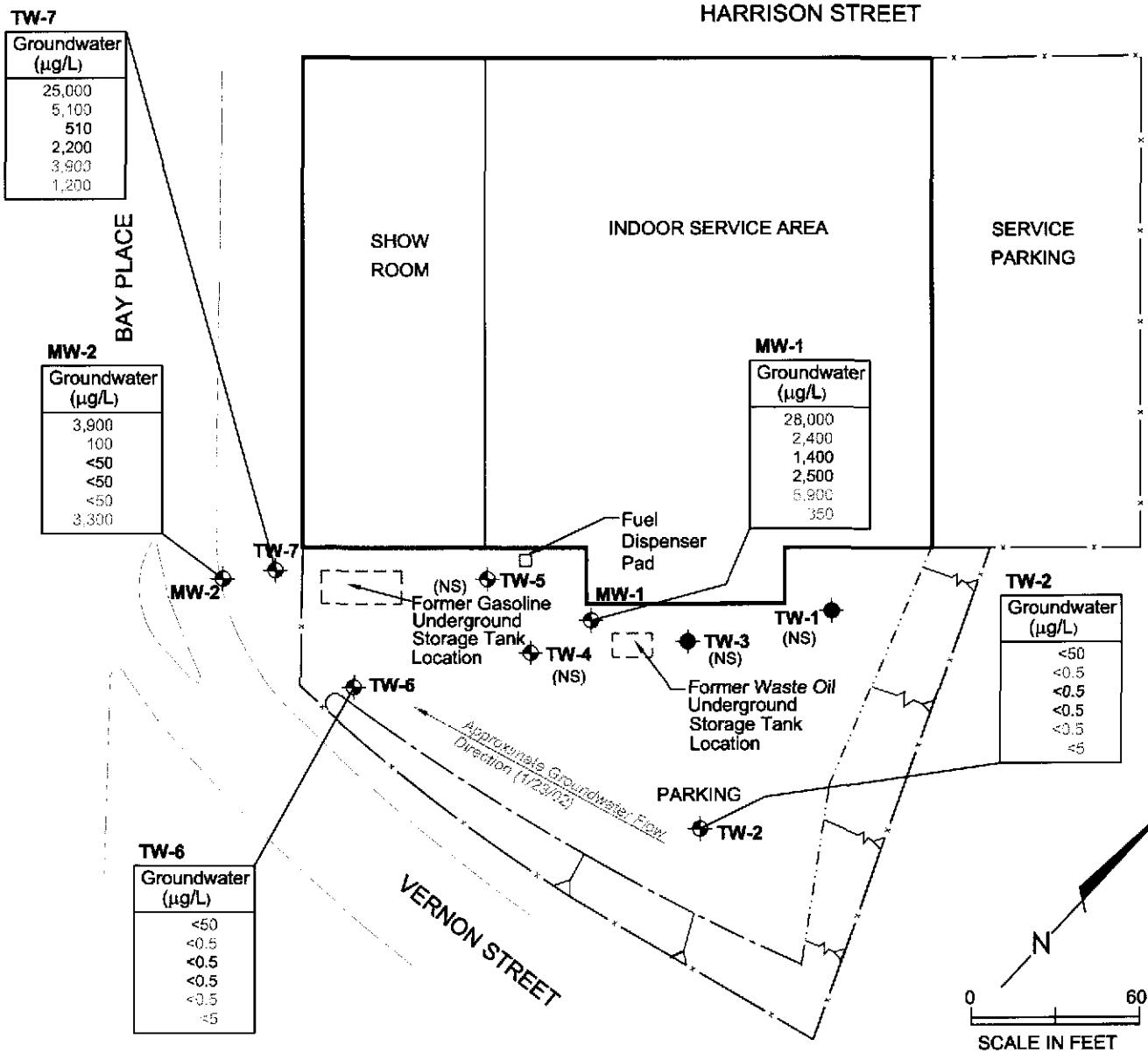
- MW-1** ● Monitoring Well Location
- TW-1** ● Temporary Well Location
- [] Former UST Location
- (NS) Not Sampled

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 Terti-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 - January 23, 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 # C20123-201 Date 1/22/02 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	DD
TW-2	2					3.21	9.50	TOG	2.6
TW-4	2					2.26	8.65		13.5 ✓
TW-5	2					2.64 2.26	7.60		0.5
TW-6	2					3.25	7.60		8.6
TW-7	2					4.71	19.50 19.67		0.2
MW-1	2					2.47	19.80		0.5
MW-2	2					5.68	19.67	✓	0.3

WELL MONITORING DATA SHEET

Project #: 020123-SD-1	Client: PES
Sampler: C Bryan	Start Date: 1/23/02
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8
Total Well Depth: 19.80	Depth to Water: 2.47
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

Waterra

Sampling Method: Bailer

Disposable Bailer

Peristaltic

Disposable Bailer

Middleburg

Extraction Pump

Extraction Port

Electric Submersible

Other _____

Dedicated Tubing

Other: _____

$$\frac{1.7 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{5.1}{\text{Calculated Volume}} \text{ Gals.}$$

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

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1207	61.5	6.9	3074	7200	1.75	Oiler, Grease
1209	61.3	6.9	3036	187	3.5	Falling
1211	61.3	6.9	2890	78	5.25	..

Did well dewater? Yes

No

Gallons actually evacuated:

5.25

Sampling Time: 1215

Sampling Date: 1/23/02

Sample I.D.: MW-1

Laboratory: Entech

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

Equipment Blank I.D.: @ Time

Duplicate I.D.:

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

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

WELL MONITORING DATA SHEET

Project #: 020123-SD-1	Client: PE S
Sampler: D'Bayan	Start Date: 1/23/02
Well I.D.: MW-2	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth: 19.67	Depth to Water: 5.68
Before: After:	Before: After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer

Waterra

Sampling Method: Bailer

Disposable Bailer

Peristaltic

Disposable Bailer

Middleburg

Extraction Pump

Extraction Port

Electric Submersible

Other _____

Dedicated Tubing

Other: _____

$$\frac{2.2 \text{ (Gals.)}}{\text{1 Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{6.6}{\text{Calculated Volume}} \text{ Gals.}$$

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

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1148	61.8	6.5	4620	>200	2.5	Brown
1150	62.8	6.6	3586	>200	4.75	
1152	63.2	6.6	3336	>200	6.5	↓

Did well dewater? Yes

(No)

Gallons actually evacuated: 6.5

Sampling Time: 1156

Sampling Date: 1/23/02

Sample I.D.: MW-2

Laboratory: Entech

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

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

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

D.O. (if req'd):	Pre-purge:	5.0 mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 020123-SO-1	Client: PES
Sampler: D. Bryan	Start Date: 1/23/02
Well I.D.: TW-2	Well Diameter: (2) 3 4 6 8
Total Well Depth: 9.50	Depth to Water: 3.21
Before: After:	Before: After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	D.O. Meter (if req'd): YSI HACH

Purge Method: Sampling Method: Bailer
 Bailer Waterra ~~Disposable Bailer~~
 Disposable Bailer Peristaltic Extraction Port
~~Middleburg~~ Extraction Pump Dedicated Tubing
 Electric Submersible Other _____ Other: _____

$$1 \text{ (Gals.)} \times \frac{3}{\text{1 Case Volume}} = \frac{3}{\text{Specified Volumes}} \text{ Gals. Calculated Volume}$$

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

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1058	53.4	5.6	3428	>200	1	
1059	57.1	6.3	3649	176	2	
1100	57.0	6.7	3696	98	3	

Did well dewater? Yes No Gallons actually evacuated: 3

Sampling Time: 1104 Sampling Date: 1/23/02

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

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

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

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

D.O. (if req'd):	Pre-purge:	10.3 mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 020123-SD-1	Client: PES
Sampler: O'Brien	Start Date: 1/23/02
Well I.D.: TW-6	Well Diameter: ② 3 4 6 8
Total Well Depth: 7.162	Depth to Water: 3.2
Before: After:	Before: After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC	Grade D.O. Meter (if req'd): YES HACH

Purge Method:

Bailer

Waterra

Bailer

Disposable Bailer

Peristaltic

Disposable Bailer

Middleburg

Extraction Pump

Extraction Port

Electric Submersible

Other _____

Dedicated Tubing

Other: _____

$$\frac{.7 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{2.1}{\text{Calculated Volume}} \text{ Gals.}$$

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

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1125	51.4	8.7	665	>200	.75	
1126	54.1	8.9	442	>200	1.5	
1127	55.0	8.2	365	>200	2.25	

Did well dewater? Yes

No

Gallons actually evacuated: 2.25

Sampling Time: 1131

Sampling Date: 1/23/02

Sample I.D.: TW-6

Laboratory: Entech

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

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

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

D.O. (if req'd):	Pre-purge:	9.4 mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #:	C20123-50-1		Client:	PES	
Sampler:	D. Bryan		Start Date:	1/23/02	
Well I.D.:	TW-7		Well Diameter:	2	3 4 6 8
Total Well Depth:	9.50		Depth to Water:	4.71	
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

Waterra

Sampling Method:

Bailer

Disposable Bailer

Peristaltic

~~Disposable Bailer~~

Middleburg

Extraction Pump

Extraction Port

Electric Submersible

Other _____

Dedicated Tubing

Other: _____

$$\frac{.8 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3 \text{ Specified Volumes}}{} = \frac{2.5 \text{ Gals.}}{\text{Calculated Volume}}$$

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

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1228	57.7	7.0	1181	188	.75	Sheen
1229	58.8	6.9	1080	162	1.5	↑ Cleaning
1230	59.1	6.9	1125	190	2.5	

Did well dewater? Yes

No

Gallons actually evacuated: 2.5

Sampling Time: 1234

Sampling Date: 1/23/02

Sample I.D.: TW-7

Laboratory: Entech

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

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

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

D.O. (if req'd):	Pre-purge:	4.6 mg/L	Post-purge:	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 FEB 25 2002

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

January 31, 2002

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

Order: 28641

Date Collected: 1/23/2002

Project Name:

Date Received: 1/24/2002

Project Number: BTS # 020123-SO-1

P.O. Number: BTS # 020123-SO-1

Project Notes:

On January 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/MTBE	EPA 8015 MOD. (Purgeable) EPA 8020

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: 01/31/02
Date Received: 1/24/2002
Project Name:
Project Number: BTS # 020123-SO-1
P.O. Number: BTS # 020123-SO-1
Sampled By: Blaine Tech

Certified Analytical Report

Order ID: 28641		Lab Sample ID: 28641-001					Client Sample ID: MW-1				
Sample Time: 12:15 PM			Sample Date: 1/23/2002				Matrix: Liquid				
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method	
Benzene	2400		50	0.5	25	µg/L	N/A	1/29/2002	WGC42310	EPA 8020	
Toluene	1400		50	0.5	25	µg/L	N/A	1/29/2002	WGC42310	EPA 8020	
Ethyl Benzene	2500		50	0.5	25	µg/L	N/A	1/29/2002	WGC42310	EPA 8020	
Xylenes, Total	5900		50	0.5	25	µg/L	N/A	1/29/2002	WGC42310	EPA 8020	
Surrogate						Surrogate Recovery			Control Limits (%)		
aaa-Trifluorotoluene						94			65 - 135		
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method	
Methyl-t-butyl Ether	350		50	5	250	µg/L	N/A	1/29/2002	WGC42310	EPA 8020	
Surrogate						Surrogate Recovery			Control Limits (%)		
aaa-Trifluorotoluene						94			65 - 135		
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method	
TPH as Gasoline	28000		50	50	2500	µg/L	N/A	1/29/2002	WGC42310	EPA 8015 MOD. (Purgeable)	
Surrogate						Surrogate Recovery			Control Limits (%)		
aaa-Trifluorotoluene						87			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: 01/31/02
Date Received: 1/24/2002
Project Name:
Project Number: BTS # 020123-SO-1
P.O. Number: BTS # 020123-SO-1
Sampled By: Blaine Tech

Certified Analytical Report

Order ID: 28641		Lab Sample ID: 28641-002				Client Sample ID: MW-2				
Sample Time: 11:56 AM		Sample Date: 1/23/2002				Matrix: Liquid				
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	100		50	0.5	25	µg/L	N/A	1/30/2002	WGC42311	EPA 8020
Toluene	ND		50	0.5	25	µg/L	N/A	1/30/2002	WGC42311	EPA 8020
Ethyl Benzene	ND		50	0.5	25	µg/L	N/A	1/30/2002	WGC42311	EPA 8020
Xylenes, Total	ND		50	0.5	25	µg/L	N/A	1/30/2002	WGC42311	EPA 8020
Surrogate						Surrogate Recovery			Control Limits (%)	
aaa-Trifluorotoluene						96.2			65 - 135	
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	3300		50	5	250	µg/L	N/A	1/30/2002	WGC42311	EPA 8020
Surrogate						Surrogate Recovery			Control Limits (%)	
aaa-Trifluorotoluene						96.2			65 - 135	
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	3900		50	50	2500	µg/L	N/A	1/30/2002	WGC42311	EPA 8015 MOD. (Purgeable)
Surrogate						Surrogate Recovery			Control Limits (%)	
aaa-Trifluorotoluene						99.9			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: 01/31/02
Date Received: 1/24/2002
Project Name:
Project Number: BTS # 020123-SO-1
P.O. Number: BTS # 020123-SO-1
Sampled By: Blaine Tech

Certified Analytical Report

Order ID: 28641		Lab Sample ID: 28641-003					Client Sample ID: TW-2				
Sample Time: 11:04 AM			Sample Date: 1/23/2002				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	1/29/2002	WGC42310	EPA 8020	
Toluene	ND		1	0.5	0.5	µg/L	N/A	1/29/2002	WGC42310	EPA 8020	
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	1/29/2002	WGC42310	EPA 8020	
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	1/29/2002	WGC42310	EPA 8020	
Surrogate						Surrogate Recovery			Control Limits (%)		
aaa-Trifluorotoluene						100			65 - 135		
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method	
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	1/29/2002	WGC42310	EPA 8020	
Surrogate						Surrogate Recovery			Control Limits (%)		
aaa-Trifluorotoluene						100			65 - 135		
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	1/29/2002	WGC42310	EPA 8015 MOD. (Purgeable)	
Surrogate						Surrogate Recovery			Control Limits (%)		
aaa-Trifluorotoluene						104			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: 01/31/02
Date Received: 1/24/2002
Project Name:
Project Number: BTS # 020123-SO-1
P.O. Number: BTS # 020123-SO-1
Sampled By: Blaine Tech

Certified Analytical Report

Order ID: 28641		Lab Sample ID: 28641-004				Client Sample ID: TW-6				
Sample Time: 11:31 AM		Sample Date: 1/23/2002				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	1/29/2002	WGC42310	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	1/29/2002	WGC42310	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	1/29/2002	WGC42310	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	1/29/2002	WGC42310	EPA 8020
Surrogate						Surrogate Recovery			Control Limits (%)	
aaa-Trifluorotoluene						96			65 - 135	
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		1	5	5	µg/L	N/A	1/29/2002	WGC42310	EPA 8020
Surrogate						Surrogate Recovery			Control Limits (%)	
aaa-Trifluorotoluene						96			65 - 135	
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	1/29/2002	WGC42310	EPA 8015 MOD. (Purgeable)
Surrogate						Surrogate Recovery			Control Limits (%)	
aaa-Trifluorotoluene						101			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

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Sampled By: Blaine Tech

Certified Analytical Report

Order ID: 28641		Lab Sample ID: 28641-005				Client Sample ID: TW-7				
Sample Time: 12:34 PM		Sample Date: 1/23/2002				Matrix: Liquid				
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	5100		50	0.5	25	µg/L	N/A	1/29/2002	WGC42310	EPA 8020
Toluene	510		50	0.5	25	µg/L	N/A	1/29/2002	WGC42310	EPA 8020
Ethyl Benzene	2200		50	0.5	25	µg/L	N/A	1/29/2002	WGC42310	EPA 8020
Xylenes, Total	3900		50	0.5	25	µg/L	N/A	1/29/2002	WGC42310	EPA 8020
Surrogate						Surrogate Recovery			Control Limits (%)	
aaa-Trifluorotoluene						91			65 - 135	
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	1200		50	5	250	µg/L	N/A	1/29/2002	WGC42310	EPA 8020
Surrogate						Surrogate Recovery			Control Limits (%)	
aaa-Trifluorotoluene						91			65 - 135	
Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	25000		50	50	2500	µg/L	N/A	1/29/2002	WGC42310	EPA 8015 MOD. (Purgeable)
Surrogate						Surrogate Recovery			Control Limits (%)	
aaa-Trifluorotoluene						88			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

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Quality Control Results Summary

QC Batch #: WGC42310
Matrix: Liquid

Units: µg/L

Date Analyzed: 1/29/2002

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		561		451.347	LCS	80.5			59.2 - 111.9
	Surrogate			Surrogate Recovery			Control Limits (%)				
	aaa-Trifluorotoluene			99		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		6.2		5.831	LCS	94.0			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		7.078	LCS	90.7			65.0 - 135.0
Toluene	EPA 8020	ND		35.8		32.788	LCS	91.6			65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		38.315	LCS	89.1			65.0 - 135.0
	Surrogate			Surrogate Recovery			Control Limits (%)				
	aaa-Trifluorotoluene			105		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		52.8		35.625	LCS	67.5			65.0 - 135.0
	Surrogate			Surrogate Recovery			Control Limits (%)				
	aaa-Trifluorotoluene			105		65 - 135					
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		561		453.650	LCSD	80.9	0.51	25.00	59.2 - 111.9
	Surrogate			Surrogate Recovery			Control Limits (%)				
	aaa-Trifluorotoluene			100		65 - 135					
Test: BTEX											
Benzene	EPA 8020	ND		6.2		5.598	LCSD	90.3	4.08	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		6.673	LCSD	85.6	5.89	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		35.8		30.884	LCSD	86.3	5.98	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		35.719	LCSD	83.1	7.01	25.00	65.0 - 135.0
	Surrogate			Surrogate Recovery			Control Limits (%)				
	aaa-Trifluorotoluene			107		65 - 135					
Test: MTBE by EPA 8020											
Methyl-t-butyl Ether	EPA 8020	ND		52.8		34.609	LCSD	65.5	2.89	25.00	65.0 - 135.0
	Surrogate			Surrogate Recovery			Control Limits (%)				
	aaa-Trifluorotoluene			107		65 - 135					

Entech Analytical Labs, Inc.

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Quality Control Results Summary

QC Batch #: WGC42311

Matrix: Liquid

Units: µg/L

Date Analyzed: 1/30/2002

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		561		453.575	LCS	80.9			59.2 - 111.9
	Surrogate				Surrogate Recovery		Control Limits (%)				
	aaa-Trifluorotoluene				101.2		65 - 135				
Test: BTEX											
Benzene	EPA 8020	ND		6.2		6.154	LCS	99.3			65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		7.858	LCS	100.7			65.0 - 135.0
Toluene	EPA 8020	ND		35.8		33.604	LCS	93.9			65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		41.52	LCS	96.6			65.0 - 135.0
	Surrogate				Surrogate Recovery		Control Limits (%)				
	aaa-Trifluorotoluene				117.5		65 - 135				
Test: TPH as Gasoline											
TPH as Gasoline	EPA 8015 M	ND		561		458.659	LCSD	81.8	1.11	25.00	59.2 - 111.9
	Surrogate				Surrogate Recovery		Control Limits (%)				
	aaa-Trifluorotoluene				100.7		65 - 135				
Test: BTEX											
Benzene	EPA 8020	ND		6.2		6.026	LCSD	97.2	2.10	25.00	65.0 - 135.0
Ethyl Benzene	EPA 8020	ND		7.8		7.382	LCSD	94.6	6.25	25.00	65.0 - 135.0
Toluene	EPA 8020	ND		35.8		34.371	LCSD	96.0	2.26	25.00	65.0 - 135.0
Xylenes, total	EPA 8020	ND		43		40.227	LCSD	93.6	3.16	25.00	65.0 - 135.0
	Surrogate				Surrogate Recovery		Control Limits (%)				
	aaa-Trifluorotoluene				109.2		65 - 135				

BLAINE

TECH SERVICES, INC.

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

CHAIN OF CUSTODY

BTS # 020123-SO-1

CLIENT PES

SITE 230 Bay Place

Oakland, CA

SAMPLE I.D.	DATE	TIME	S# SOIL W=H ₂ O	MATRIX	CONTAINERS
C = COMPOSITE ALL CONTAINERS					
MW-1	1/23/02	1215	W	3	HCUVOA
MW-2		1156			
TW-2		1104			
TW-6		1131			
TW-7	✓	1234	↓	✗	↓

SAMPLE I.D.	DATE	TIME	S# SOIL W=H ₂ O	MATRIX	CONTAINERS	C = COMPOSITE ALL CONTAINERS	TPH - Gas (8015)	BTEX (8020)	MTBE (8020)	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	1/23/02	1215	W	3	HCUVOA		✗	✗	✗		28641-001		
MW-2		1156					✗	✗	✗		002		
TW-2		1104					✗	✗	✗		003		
TW-6		1131					✗	✗	✗		004		
TW-7	✓	1234	↓	✗	↓		✗	✗	✗		005		

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED NO LATER THAN	Per Client
1/23/02	1245		Shawn O'Bryan		

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
D. Bryan	1/24/02	11:45	SMW	1/24/02	11:45

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
SMW	1/24/02	1200	Lindley	1/24/02	1230

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #	

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 _____