PES Environmental, Inc.
Engineering & Environmental Services

September 10, 2001

167.002.01.006

Greater Bay Trust Company
Hanson, Bridgett, Marcus, Vlahos & Rudy
333 Market Street, Suite 2300
San Francisco, California 94105-2173

SEP 14 2001

Attention: Rory Campbell, Esq.

QUARTERLY GROUNDWATER MONITORING
JULY 2001 QUARTERLY EVENT
FORMER COX CADILLAC FACILITY
230 BAY PLACE
OAKLAND, CALIFORNIA

Dear Ms. Goldberg:

This report presents the results of groundwater monitoring conducted by PES Environmental, Inc. (PES) on July 25, 2001 at the former Bill Cox Cadillac facility at 230 Bay Place, Oakland, California. The work is being performed as part of a response action to address releases from a former 10,000-gallon gasoline underground storage tank (UST) operated at the site by Bill Cox Cadillac. The location of the site is shown on Plate 1. The work was performed on behalf of Greater Bay Trust Company, trustee for the Robert Shepard Trust, Brian F. Shepard Trust, Douglas C. Shepard Trust, and the Lisa C. Shepard Trust, the former owners of the property. The current owner of the site is Avalon Bay Communities.

In a letter to The Greater Bay Trust Company dated April 6, 2001, ACEHS requested that groundwater monitoring at the site be continued. The objective of the groundwater monitoring program at this site is to evaluate the presence of petroleum hydrocarbons in groundwater. The monitoring is performed in accordance with California Regional Water Quality Control Board (RWQCB) guidelines.

BACKGROUND INFORMATION

One groundwater monitoring well (Well MW-1) and seven temporary monitoring wells (Wells TW-1 through TW-7) were installed at the site by PES in 1993 to investigate subsurface conditions following removal of a 3,000-gallon waste oil storage tank in December 1988.

MW-1 was installed in February 1993 down gradient of the former waste oil tank and a groundwater sample was collected from it in March 1993. Elevated concentrations of total petroleum hydrocarbons quantified as gasoline (TPHg) were detected in the sample analyzed from Well MW-1. Gasoline detected in groundwater was characterized as "fresh" and no waste oil constituents were detected. Temporary wells, Wells TW-1 through TW-7 were subsequently installed in March 1993 to investigate the degree and extent, and the likely source of the gasoline contamination in groundwater. Results of the additional investigation indicated that elevated TPHg and benzene, toluene, ethylbenzene, and total xylenes (BTEX) were detected in groundwater samples from four of the temporary wells and in Well MW-1. MTBE was not detected in the samples. The highest concentrations of petroleum hydrocarbon constituents were detected in groundwater samples from two wells (TW-5 and TW-7) closest to a 10,000-gallon gasoline tank and associated product piping located to the west of the former waste oil tank. The results of the investigations were presented in PES' report, *Soil and Groundwater Investigation, Bill Cox Cadillac, 230 Bay Place, Oakland, California* dated December 23, 1993. The well locations and former waste oil tank location are shown on Plate 2.

The 10,000-gallon underground gasoline tank and product piping were removed by DECON Environmental Services of Hayward, California and observed and documented by Eisenberg, Olivieri & Associates (EOA) of Oakland, California in January 1994. During removal, a hole was observed in the product piping between the tank and dispenser. Floating free-phase product was observed on the groundwater surface in the tank excavation. EOA, on behalf of Bill Cox, subsequently performed limited investigations to evaluate the lateral downgradient extent of gasoline contamination. EOA performed quarterly groundwater monitoring of wells MW-1, TW-2, TW-6 and TW-7 between December 1994 and February 1996.

Soil and groundwater remediation was subsequently requested by ACEHS in a letter to the Harold Shepard Trust and Bill Cox Cadillac dated October 24, 1996. In the letter, ACEHS specified that soil remediation consisting of excavation of hydrocarbon-affected soil, and groundwater remediation consisting of oxygen introduction was required. PES developed a Remedial Plan in response to that request. PES' Remedial Plan consisted of a *Revised Interim Remedial Action Plan* (IRAP) dated October 31, 1996 and an *Addendum, Revised Interim Remedial Action Plan* dated November 26, 1996. As part of the Remedial Plan, site characterization, additional well installation, soil remediation, baseline groundwater monitoring, and initial groundwater remediation were conducted by PES between June 1997 and April 1999. The results of work conducted between June 1997 and April 1999 were previously submitted to ACEHS in PES' report, *Site Characterization and Interim Remedial Actions, Former Cox Cadillac Facility, Oakland, California,* dated September 30, 1999.

A pilot program commenced in January 1999 to remediate groundwater by applying a combination of in-situ bioremediation methods to introduce oxygen and nutrients into groundwater at the site to enhance natural biodegradation rates of petroleum hydrocarbons.

The methods included: (1) adding a nutrient- and hydrogen peroxide-enriched water (hereinafter referred to as enriched water); and (2) placement of Oxygen Releasing Compound (ORC) in selected wells at the site. There were a total of eight applications of enriched water from March 1999 to November 1999. Application of hydrogen peroxide-enriched water and ORC in selected wells was not conducted in the current quarter.

The July 2001 monitoring is the sixth monitoring event since the groundwater remediation program and baseline monitoring was initiated by PES in January 1999. The results of the July 2001 groundwater monitoring are presented below.

GROUNDWATER MONITORING ACTIVITIES

Depth to Groundwater Measurements

Water levels were measured by Blaine Tech Services (Blaine Tech) of San Jose, California at monitoring wells MW-1, MW-2, TW-2, TW-4, TW-5, TW-6, and TW-7 on April 6, 2001. 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 then rinsed before each use. Groundwater elevation data are presented in Table 1 and groundwater elevation contours are presented on Plate 3. Dissolved oxygen concentrations were measured by Blaine Tech in the five wells to be sampled prior to measuring groundwater levels.

Groundwater Sampling and Analyses

Groundwater samples were collected from wells MW-1, MW-2, TW-2, TW-6, and TW-7 by Blaine Tech on July 25, 2001. After dissolved oxygen and water-level measurements were obtained, the wells were purged by bailing until approximately three well volumes of water were removed. During purging, the water was monitored for pH, temperature, conductivity, and turbidity. Purge water was collected in DOT-approved 55-gallon steel drums and stored on site. Following well purging, a groundwater sample was collected from each well using a disposable bailer. The sample was transferred to the appropriate laboratory sample containers using a bottom draining bailer stopcock. The sample containers were filled slowly to minimize sample volatilization and ensure that the sample was free of air bubbles. The sample containers were labeled with project site, well identification number, sample number, sampling date and time, and requested analyses. Well sampling documentation is presented in Appendix A.

The groundwater samples were transported in a chilled, thermally insulated cooler under chain-of-custody protocol to Entech Analytical Labs, Inc. of Santa Clara, California, a California Department of Health Services-certified laboratory. The groundwater samples were

analyzed for TPHg using EPA Test Method 8015 modified, BTEX and methyl tertiary butyl ether (MTBE) using EPA Test Method 8020. MTBE confirmation was performed by EPA Test Method 8260. Groundwater sample analytical results are presented in Table 2 and shown on Plate 4. Copies of the laboratory reports and chain-of-custody documentation are presented in Appendix B.

Dissolved Oxygen Measurements

Total dissolved oxygen was measured on July 25, 2001 in wells MW-1, MW-2, TW-2, TW-6, and TW-7, at the start of the day before measuring groundwater levels and purging and sampling. 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 July 25, 2001 are summarized in Table 3 and are included with the well sampling documentation presented in Appendix A.

GROUNDWATER MONITORING RESULTS

Groundwater Elevation Measurements

Depth-to-groundwater data collected from wells MW-1, MW-2, TW-2, TW-6 and TW-7 on July 25, 2001 were converted to groundwater elevations referenced to site datum. Groundwater elevations ranged from 91.16 feet in well TW-7 to 98.83 feet in well TW-2. Groundwater flow direction at the site is to the southwest, at a hydraulic gradient of approximately 0.037-foot per foot. No floating free product or hydrocarbon sheen was observed in the wells. Groundwater elevation data are presented in Table 1 and elevation contours are presented on Plate 3.

Groundwater Sample Analytical Results

The analytical results of the groundwater samples collected on July 25, 2001 are presented in Table 2 and shown on Plate 4. TPHg was detected in the samples from wells MW-1, MW-2, and TW-7 at concentrations of 24,000 µg/L, 3,400 µg/L, and 20,000 µg/L, respectively. MTBE was detected in the samples from wells MW-2 and TW-7 at concentrations of 4,200 µg/L and 700 µg/L, respectively. Benzene was detected in the samples from wells MW-1, MW-2, TW-7 at concentrations of 2,300 µg/L, 250 µg/L, and 5,100 µg/L, respectively. The highest concentrations of toluene, ethylbenzene and total xylenes were detected in the sample from well MW-1 at 1,300 µg/L, 2,500 µg/L, and 6,200 µg/L,

respectively. Copies of the laboratory reports and chain-of-custody documentation are presented in Appendix B.

SUMMARY

Results of the July 25, 2001 groundwater elevations indicate a hydraulic gradient of approximately 0.037-foot per foot. As with historical observations, the groundwater flow direction continues to be toward the southwest.

Concentrations of TPHg and BTEX detected in the wells in July 2001 are similar to those detected in April 2001. However, a significant decrease in the MTBE and aromatic hydrocarbon concentrations in well MW-1 was observed in the sample from July 2001 compared to April 2001. Hydrocarbon concentrations in groundwater from well TW-6 remained below the laboratory reporting limit, further indicating that previous biodegradation activities were effective in the vicinity of this well. Consistent with historical findings, the highest concentrations of petroleum hydrocarbons were detected in the groundwater from wells nearest to the former gasoline UST and product piping, specifically Wells MW-1 and TW-7.

MTBE concentrations in wells MW-2 and TW-7, located downgradient and nearest to several utility trenches, have been significantly higher than in onsite wells. MTBE concentrations have been the highest in MW-2 since the start of monitoring for MTBE in January 1999. The high concentrations of MTBE detected in samples from well MW-2 are likely the result of elevated concentrations from offsite sources that are being conveyed toward the site via preferential flow as a result of utility trenches adjacent to the well. In 1993 PES performed sampling of groundwater from Wells MW-1, TW-4, TW-5, TW-6, and TW-7 for analyses by EPA Test Method 8260. No MTBE was detected in the samples at that time. Additionally, a utility location assessment was conducted by EOA in late 1995/early 1996. EOA identified numerous utility trenches and vaults along the western property boundary and within Vernon Street, Bay Place, and Harrison Street surrounding the site. EOA interviews with utility providers indicated most utility trenches are backfilled with permeable materials including gravel and sand. The depth of many of these utility trenches is sufficient to intercept shallow groundwater flow in the site vicinity. The results of the EOA utility assessment were presented in a document titled *Corrective Action Plan Development Report, Phase I, Cox Cadillac, 230 Bay Place, Oakland, California*, dated April 1, 1996.

In accordance with the April 6, 2001 ACEHS letter, PES will continue with quarterly groundwater monitoring. In addition, PES presented a workplan for the installation of another monitoring well and for resumption of the enhanced bio-remediation program to the ACEHS on August 29, 2001. If you have any questions or comments, please do not hesitate to call either of the undersigned.

Yours very truly,

PES ENVIRONMENTAL, INC.

François Bush
Project Geologist

Andrew A. Briefer, P. E.
Principal Engineer

Attachments:

	Table 1	Groundwater Elevation Data Through July 25, 2001
	Table 2	Groundwater Sample Analytical Results Through July 25, 2001
	Table 3	Summary of Total Dissolved Oxygen Measurements
	Plate 1	Site Location Map
	Plate 2	Site Plan and Well Location Map
	Plate 3	Groundwater Elevation Contours on July 25, 2001
	Plate 4	Distribution of Dissolved Hydrocarbons in Groundwater July 25, 2001
	Appendix A	Well Sampling Documentation
	Appendix B	Laboratory Analytical Reports and Chain of Custody Documentation

cc: Ms. Cheryl Howell – Greater Bay Trust Company
Mr. Don Huang – Alameda County Environmental Health Services
Mr. Mark Owens – California UST Cleanup Fund
Ms. Lita Freeman - LFR

Table 1
Groundwater Elevation Data Through January 11, 2000
Interim Remedial Actions
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	1/12/99	100.00	2.79	97.21
	4/13/99	100.00	2.00	98.00
	7/7/99	100.00	2.60	97.40
	10/6/99	100.00	2.94	97.06
	1/11/00	100.00	2.69	97.31
	4/6/01	100.00	2.99	97.01
	7/25/01	100.00	6.00	94.00
MW-2	1/12/99	97.48	5.62	91.86
	4/13/99	97.48	5.30	92.18
	7/7/99	97.48	5.80	91.68
	10/6/99	97.48	5.99	91.49
	1/11/00	97.48	5.73	91.75
	4/6/01	97.48	5.65	91.83
	7/25/01	98.48	6.41	92.07
TW-2	1/12/99	100.43	1.91	98.52
	4/13/99	100.43	2.51	97.92
	7/7/99	100.43	1.89	98.54
	10/6/99	100.43	1.97	98.46
	1/11/00	100.43	1.79	98.64
	4/6/01	100.43	3.46	96.97
	7/25/01	101.43	2.60	98.83
TW-4	1/12/99	99.35	NM	NA
	4/13/99	99.35	1.82	97.53
	7/7/99	99.35	2.36	96.99
	10/6/99	99.35	NM	NA
	1/11/00	99.35	2.63	96.72
	4/6/01	99.35	3.97	95.38
	7/25/01	99.35	2.55	96.80
TW-5	1/12/99	99.40	NM	NA
	4/13/99	99.40	1.96	97.44
	7/7/99	99.40	3.12	96.28
	10/6/99	99.40	NM	NA
	1/11/00	99.40	1.03	98.37
	4/6/01	99.40	3.04	96.36
	7/25/01	99.40	3.90	95.50
TW-6	1/12/99	98.75	5.52	93.23
	4/13/99	98.75	4.91	93.84
	7/7/99	98.75	6.04	92.71
	10/6/99	98.75	6.64	92.11
	1/11/00	98.75	6.41	92.34
	4/6/01	98.75	4.93	93.82
	7/25/01	99.75	6.72	93.03
TW-7	1/12/99	97.96	4.81	93.15
	4/13/99	97.96	4.73	93.23
	7/7/99	97.96	5.17	92.79
	10/6/99	97.96	5.70	92.26
	1/11/00	97.96	5.42	92.54
	4/6/01	97.96	4.63	93.33
	7/25/01	97.96	6.80	91.16

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 11, 2000
Interim Remedial Actions
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)
MW-1	1/12/99	39,000	800	2,600	970	2,900	5,700
	4/13/99	29,000	520	1,500	500	<50	4,000
	7/7/99	31,000	<250*	1,900	870	1,600	3,900
	10/6/99	32,000	<250*	2,100	910	1,800	4,400
	1/11/00	2,400	<5.0*	52	3.9	63	12
	4/6/01	32,000	470	4,300	3,200	2,600	7,300
	7/25/01	**24,000**	**<25***	**2,300**	**1,300**	**2,500**	**6,200**
MW-2	1/12/99	<50	2,900	1.5	<0.50	<0.50	<0.50
	4/13/99	<50	3,800	0.76	<0.50	<0.50	<0.50
	7/7/99	<2,500	7000*	<25	<25	<25	<25
	10/6/99	2,800	300*	73	<25	<25	<25
	1/11/00	11,000	8400*	890	<100	<100	<100
	4/6/01	2,800	3,800	210	<25	<25	<25
	7/25/01	**3,400**	**4,200***	**250**	**<12.5**	**<12.5**	**<12.5**
TW-2	1/12/99	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	4/13/99	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	7/7/99	<50	<5.0*	<0.50	<0.50	<0.50	<0.50
	10/6/99	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	1/11/00	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	4/6/01	<50	<5	<0.5	<0.5	<0.5	<0.5
	7/25/01	**<50**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
TW-6	1/12/99	29,000	210	9,900	4,100	1,000	4,000
	4/13/99	<50	22	0.70	<0.50	<0.50	0.62
	7/7/99	55	8.1*	13	<0.50	<0.50	2.2
	10/6/99	<50	<5.0	0.59	<0.50	<0.50	<0.50
	1/11/00	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	4/6/01	<50	<5	<0.5	<0.5	<0.5	<0.5
	7/25/01	**<50**	**<5**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
TW-7	1/12/99	29,000	<100	7,300	670	2,700	960
	4/13/99	54,000	1,200	4,500	1,800	180	8,200
	7/7/99	42,000	2200*	8,000	4,500	1,200	3,500
	10/6/99	29,000	580*	9,700	1,600	1,600	2,100
	1/11/00	52,000	2600*	8,500	7,100	1,600	6,700
	4/6/01	22,000	990	4,800	1,800	2,200	3,400
	7/25/01	**20,000**	**700***	**5,100**	**660**	**1,400**	**2,100**

Notes:
TPH - Total Petroleum Hydrocarbons
MTBE - Methyl tert-butyl ether
µg/L = Micrograms per liter.
<0.50 = Not detected at or above indicated laboratory reporting limit.
Samples analyzed by EPA Method 8020 for BTEX and MTBE and by EPA Method 8015 for TPH/gas.
*MTBE confirmation by EPA Method 8260.

Table 3
Summary of Total Dissolved Oxygen Measurements
Interim Remedial Actions
Former Cox Cadillac, 230 Bay Place
Oakland, California

Well Number	Date Measured	Time of Day	Total Dissolved Oxygen (mg/L)	Notes
MW-1	1/12/99	15:30	3.4	(1)
	3/11/99	15:46	0.72	(1)
	3/17/99	12:30	14.1	(2)
	3/17/99	18:13	>15.0	(3)
	4/13/99	9:44	8.9	(2)
	6/1/99	14:59	6.2	(2)
	6/1/99	18:46	>15.0	(3)
	7/7/99	9:20	3.55	(2)
	7/7/99	19:38	>18.0	(3)
	8/19/99	10:45	1.0	(2)
	8/19/99	18:48	>15.0	(3)
	10/6/99	10:42	10.3	(2)
	10/6/99	17:11	>15.0	(3)
	11/17/99	11:13	4.4	(2)
	11/17/99	17:34	>15.0	(3)
	1/11/00	NA	4.0	(2)
	4/6/01	10:55	0.45	(4)
	7/25/01	11:25	3.60	(4)
MW-2	1/12/99	12:30	3	(1)
	4/13/99	9:17	0.2	(2)
	4/13/99	19:11	0.6	(3)
	7/7/99	8:56	1.03	(2)
	7/7/99	19:13	7.22	(3)
	10/6/99	10:10	1.2	(2)
	10/6/99	16:58	0.5	(3)
	1/11/00	NA	3.9	(2)
	4/6/01	10:21	0.69	(4)
	7/25/01	11:25	3.10	(4)
TW-2	1/12/99	15:03	5.5	(1)
	4/13/99	9:10	2.6	(2)
	4/13/99	19:06	5.8	(3)
	7/7/99	8:50	0.65	(2)
	7/7/99	19:01	5.14	(3)
	10/6/99	9:59	3.2	(2)
	10/6/99	16:48	2.6	(3)
	1/11/00	NA	4.6	(2)
	4/6/01	9:45	2.9	(4)
	7/25/01	11:25	3.0	(4)
TW-4	3/11/99	15:20	3.4	(1)
	3/17/99	12:18	14.4	(2)
	3/17/99	17:54	12.6	(3)
	4/13/99	9:00	12.2	(2)
	4/13/99	19:03	>15.0	(3)
	6/1/99	14:29	9.3	(2)
	6/1/99	18:33	>15.0	(3)
	7/7/99	9:09	>18.0	(2)
	7/7/99	19:36	>18.0	(3)
	8/19/99	10:41	13.4	(2)
	8/19/99	18:27	>15.0	(3)
	10/6/99	9:50	>15.0	(2)
	10/6/99	16:40	>15.0	(3)
	11/17/99	11:16	10.6	(2)
	11/17/99	17:35	>15.0	(3)
	7/25/01	11:25	17.0*	(4)

Table 3
Summary of Total Dissolved Oxygen Measurements
Interim Remedial Actions
Former Cox Cadillac, 230 Bay Place
Oakland, California

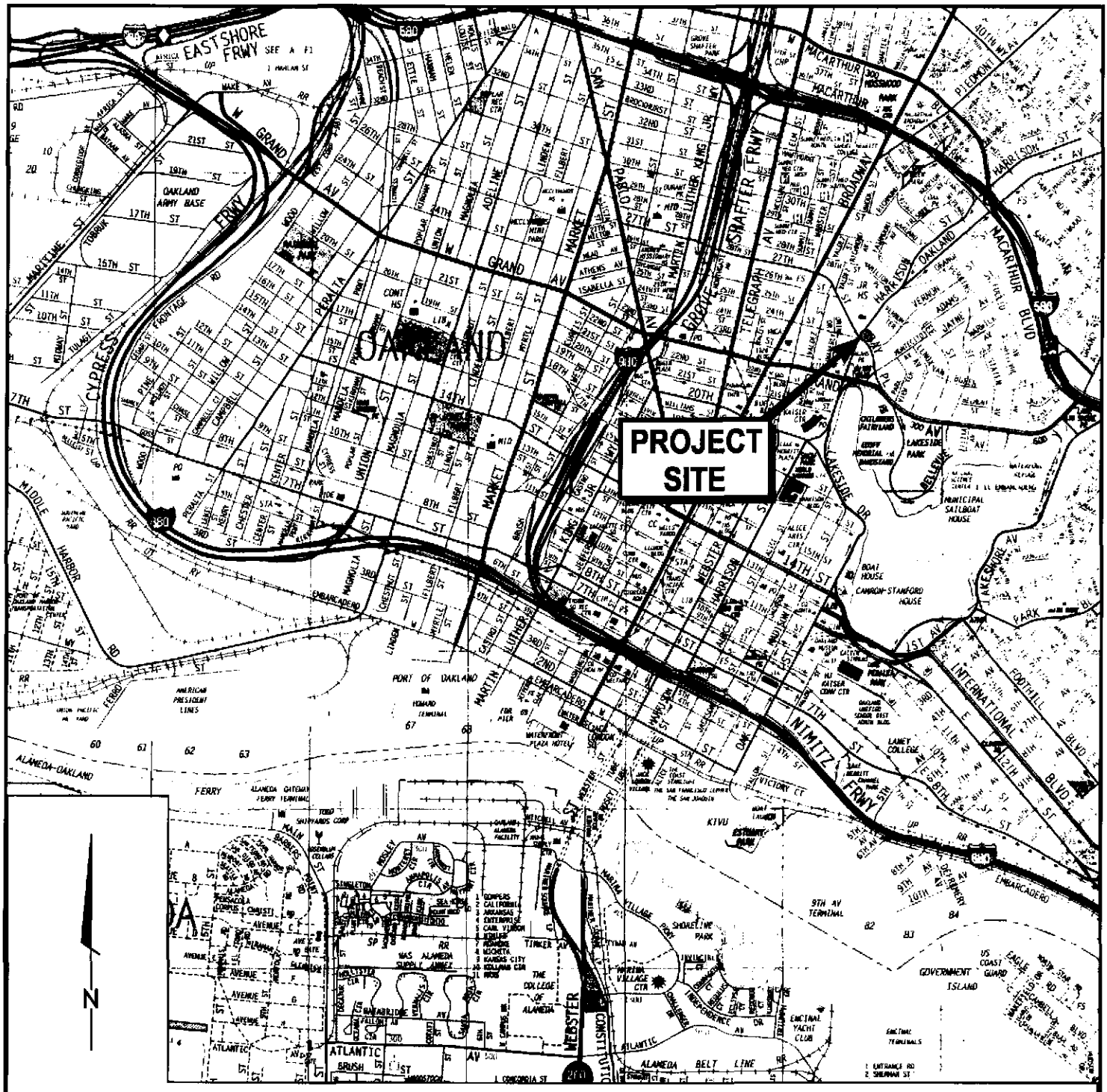
Well Number	Date Measured	Time of Day	Total Dissolved Oxygen (mg/L)	Notes
TW-5	1/12/99	16:40	1.7	(1)
	3/11/99	15:36	0.58	(1)
	3/17/99	12:20	14.3	(2)
	3/17/99	17:57	14.6	(3)
	4/13/99	9:39	3.8	(2)
	4/13/99	19:28	>15.0	(3)
	6/1/99	14:40	5.4	(2)
	6/1/99	18:38	>15.0	(3)
	7/7/99	9:05	0.25	(2)
	7/7/99	19:32	>18.0	(3)
	8/19/99	10:38	1.0	(2)
	8/19/99	18:33	>15.0	(3)
	10/6/99	10:31	0.2	(2)
	10/6/99	17:08	>15.0	(3)
	11/17/99	11:22	0.8	(2)
	11/17/99	17:37	>15.0	(3)
	7/25/01	11:25	0.7	(4)
TW-6	1/12/99	15:02	3.9	(1)
	3/11/99	15:39	0.62	(1)
	3/17/99	12:23	14.1	(2)
	3/17/99	18:06	>15.0	(3)
	4/13/99	9:35	14.2	(2)
	4/13/99	19:23	>15.0	(3)
	6/1/99	14:48	11.1	(2)
	6/1/99	18:40	>15.0	(3)
	7/7/99	9:00	>18.0	(2)
	7/7/99	19:21	>18.0	(3)
	8/19/99	10:35	14.8	(2)
	8/19/99	18:38	>15.0	(3)
	10/6/99	10:27	3.8	(2)
	10/6/99	17:06	>15.0	(3)
	11/17/99	11:24	1.5	(2)
	11/17/99	17:39	>15.0	(3)
	1/11/00	NA	4.9	(2)
	4/6/01	10:00	0.78	(4)
	7/25/01	11:25	2.70	(4)
TW-7	1/12/99	13:10	2.7	(1)
	3/11/99	15:42	0.74	(1)
	3/17/99	12:25	6.5	(2)
	3/17/99	18:12	14	(3)
	4/13/99	9:25	0.4	(2)
	4/13/99	19:16	>15.0	(3)
	6/1/99	14:52	0.7	(2)
	6/1/99	18:43	>15.0	(3)
	7/7/99	9:15	0.26	(2)
	7/7/99	19:26	>18.0	(3)
	8/19/99	10:30	0.9	(2)
	8/19/99	18:46	>15.0	(3)
	10/6/99	10:19	0.5	(2)
	10/6/99	17:03	>15.0	(3)
	11/17/99	11:28	1.1	(2)
	11/17/99	17:40	>15.0	(3)
	1/11/00	NA	5.2	(2)
	4/6/01	11:25	0.53	(4)
	7/25/01	11:25	2.0	(4)

Table 3
Summary of Total Dissolved Oxygen Measurements
Interim Remedial Actions
Former Cox Cadillac, 230 Bay Place
Oakland, California

Well Number	Date Measured	Time of Day	Total Dissolved Oxygen (mg/L)	Notes

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
An initial approximate 200 gallons of enriched water was introduced to wells MW-1, TW-4, TW-5, TW-6, and TW-7 in the late afternoon of March 11 and 17, 1999 during setup, testing, and refinement of the remediation system. March 17 measurements reflect the initial introduction of enriched water.
NA = information not available
* Concentration exceeds DO saturation concentration.



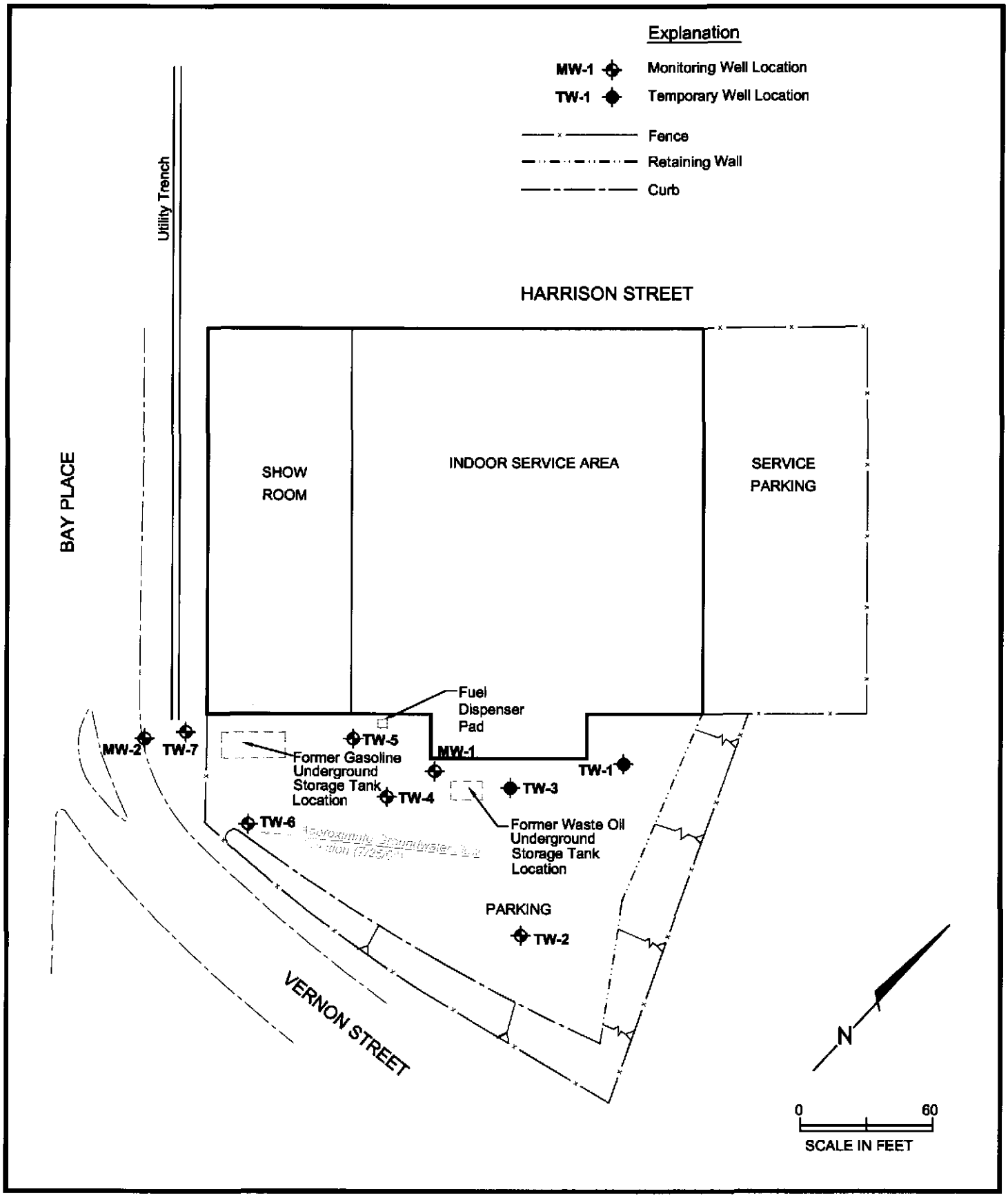
Ref: "The Thomas Guide- Alameda/Contra Costa Counties Street Guide and Directory" 1998 Edition

PES Environmental, Inc.
Engineering & Environmental Services

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

PLATE
1

167.0201.006	1670200006_3QTR-2001.dwg	FAB	5/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

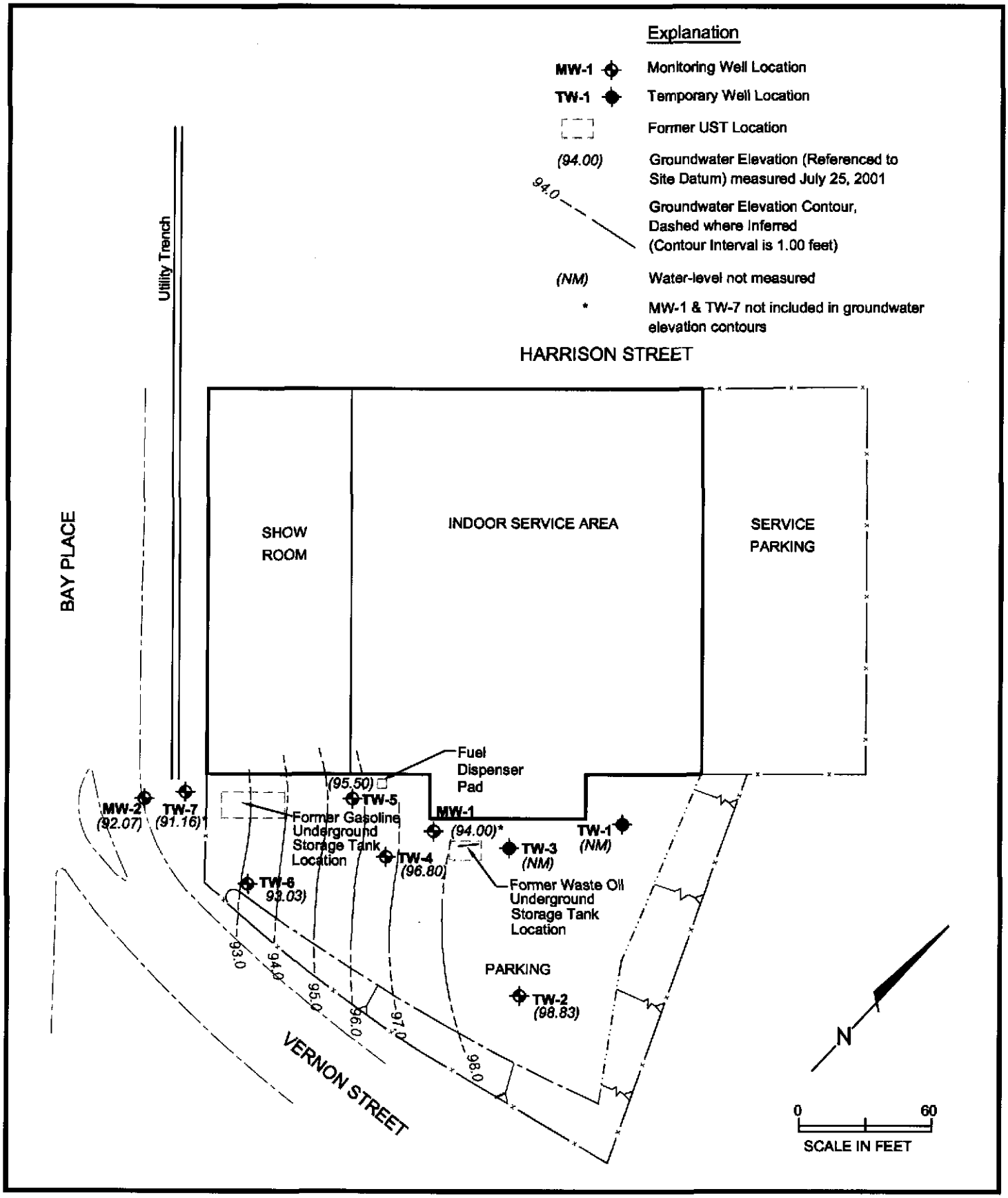


PES Environmental, Inc.
Engineering & Environmental Services

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

PLATE
2

167.0201.006	1670200006_3QTR-2001.dwg	FNS	8/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

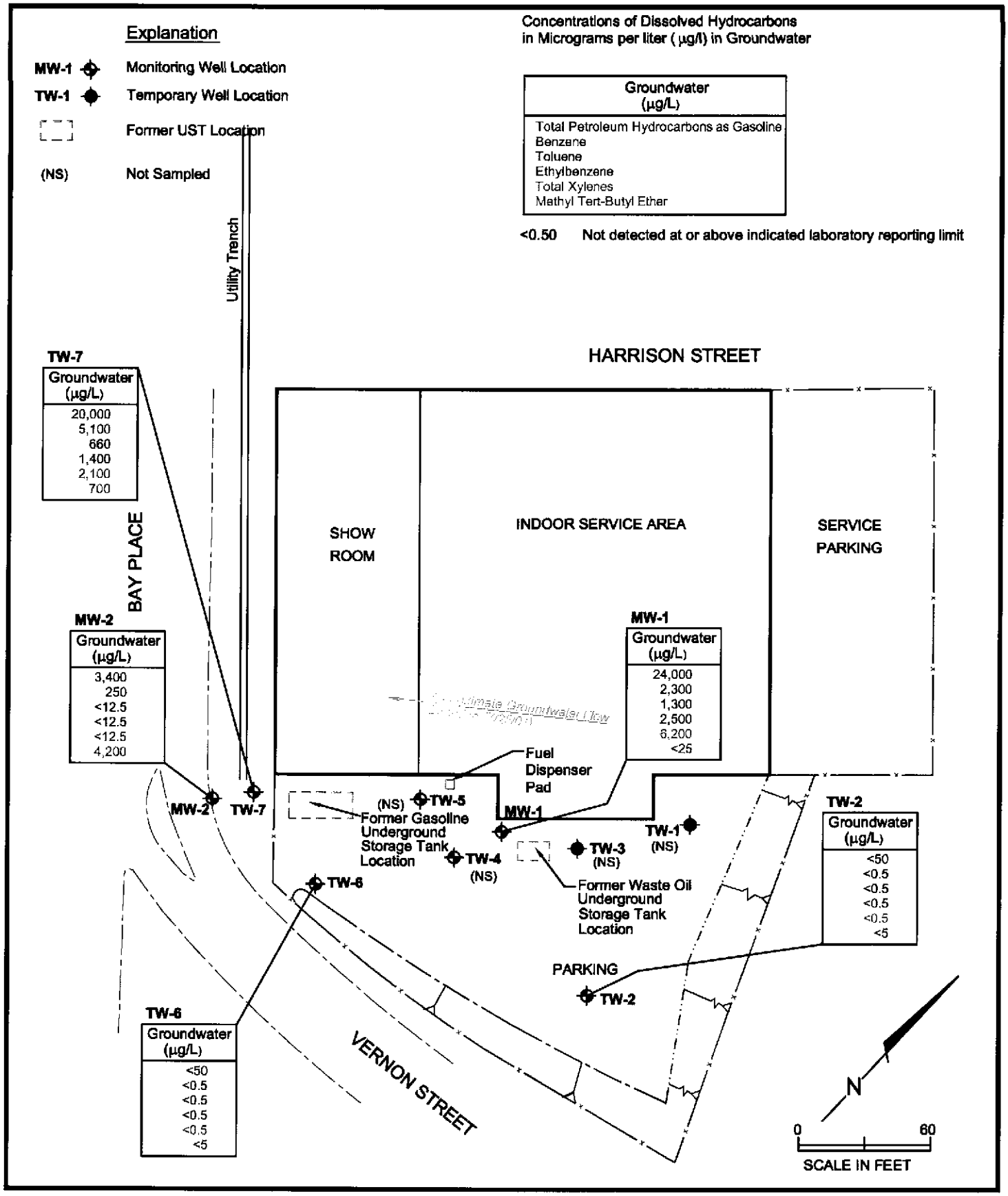


PES Environmental, Inc.
Engineering & Environmental Services

Groundwater Elevation Contours on July 25, 2001
Quarterly Groundwater Monitoring
Former Cox Cadillac-230 Bay Place
Oakland, California

PLATE
3

167.0201.006	1670200006_3QTR-2001.dwg	FAS	8/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



PES Environmental, Inc.
Engineering & Environmental Services

Distribution of Dissolved Hydrocarbons In Groundwater - July 25, 2001
Quarterly Groundwater Monitoring
Former Cox Cadillac-230 Bay Place
Oakland, California

PLATE 4

167.0201.006	1670200006_3QTR-2001.dwg	FAS	8/01
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

APPENDIX A

WELL SAMPLING DOCUMENTATION

RECEIVED AUG 2 0 2001

WELLHEAD INSPECTION CHECKLIST AND REPAIR ORDER

Client PES Inspection Date 7-25-01

Site Address 230 Bay Pl., Oakland Inspected By MT

1. Lid on box?	6. Casing secure?	12. Water standing in wellbox?	15. Well cap functional?
2. Lid broken?	7. Casing cut level?	12a. Standing above the top of casing?	16. Can cap be pulled loose?
3. Lid bolts missing?	8. Debris in wellbox?	12b. Standing below the top of casing?	17. Can cap seal out water?
4. Lid bolts stripped?	9. Wellbox is too far above grade?	12c. Water even with the top of casing?	18. Padlock present?
5. Lid seal intact?	10. Wellbox is too far below grade?	13. Well cap present?	19. Padlock functional?
	11. Wellbox is crushed/damaged?	14. Well cap found secure?	

☐ Check box if no deficiencies were found. Note below deficiencies you were able to correct.

Well I.D.	Deficiency	Corrective Action Taken
TW2	BROKEN Lock ; Well box pulls out of ground	NONE
MW1	NO LOCK	
MW2	"	
TW4	"	
TW5	" , ORC's won't go backdown well	
TW6	" "	
TW7	" "	

Note below all defiencies that could not be corrected and still need to be corrected.

Well I.D.	Persisting Deficiency	BTS Office assigns or defers Correction to:	Date assigned	Date corrected
~~TW2~~		BTS ABLE TO		
All wells	Need a Lock	ADD LOCKS IF		
TW5, TW6, TW7	Need ORC's Restrung	REQUESTED/AUTHORIZED		
	properly so they will slide			
	down into water Column.			

WELL MONITORING DATA SHEET

Project #: 010725-T1	Client: PES @ BAY PLACE
Sampler: MT	Start Date: 7-25-01
Well I.D.: MW1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 19.80	Depth to Water: ~~3.80~~ 6.30
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: _____

~~2.6~~ 2.2 (Gals.) X 3 = ~~7.8~~ 6.6 Gals.

1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1115	69.2	6.9	3610	131	2.25	odor
1117	69.0	6.9	3600	149	4.5	"
1120	69.1	6.9	3570	176	6.75	"

Did well dewater? Yes (No)		Gallons actually evacuated: 6.75	
Sampling Time: 1125		Sampling Date: 7-25-01	
Sample I.D.: MW1		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):	3.6 mg/L	Post-purge:	mg/L
ORP (if req'd): Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 010725-T1	Client: PES @ BAY PLACE
Sampler: MT	Start Date: 7-25-01
Well I.D.: MW2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 9.56	Depth to Water: 3.90 10.40
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: _____

0.5 0.9 (Gals.) X 3 = 2.7 1.5 Gals.

1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1102	73.0	6.7	1707	70.3	.5	Odor
1103	72.9	6.9	1724	103	1	"
1104	72.8	6.9	1730	121	1.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 1.5

Sampling Time: 1110 Sampling Date: 7-25-01

Sample I.D.: MW2 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):	3.1 mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 010725-T1	Client: PES @ BAY PLACE
Sampler: MT	Start Date: 7-25-01
Well I.D.: TW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 7.80	Depth to Water: 2.60
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: _____

0.9 (Gals.) X 3 = 2.4 Gals.
1 Case Volume | Specified Volumes | 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
1024	73.5	6.7	3733	22.1	1	
1025	73.0	6.7	3729	20.0	2	
1026	73.0	6.7	3730	20.8	2.5	

Did well dewater? Yes (No)		Gallons actually evacuated: 2.5	
Sampling Time: 1030		Sampling Date: 7-25-01	
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):	3.0 mg/L	Post-purge:	mg/L
ORP (if req'd): Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 010725-Tw1	Client: PES @ BAY PLACE
Sampler: MT	Start Date: 7-25-01
Well I.D.: Tw-6	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 7.60	Depth to Water: 6.72
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: _____

0.1 (Gals.) X 3 = 0.3 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1046	72.2	7.2	551	>200	.1 ~~25.~~	
1047	72.5	7.3	540	>200	.25	
1049	72.3	7.3	529	>200	.45	
1055					DTW = 6.87	
*	Measured	w/ Measuring cup				

Did well dewater? Yes (No) Gallons actually evacuated: .45

Sampling Time: 1055 Sampling Date: 7-25-01

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

WELL MONITORING DATA SHEET

Project #: 010725-T1	Client: PES @ BAY PLACE
Sampler: MT	Start Date: 7-25-01
Well I.D.: TW-7	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 19.67	Depth to Water: 6.90
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	radius² * 0.163

2.1 (Gals.) X 3 = 6.3 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1130	71.0	6.9	939	>200	2.25	Odor
1139	71.2	7.0	1000	>200	4.5	"
1142	71.0	7.0	999	>200	6.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 6.5

Sampling Time: 1145 Sampling Date: 7-25-01

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

APPENDIX B

LABORATORY ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Entech Analytical Labs, Inc.

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

August 09, 2001

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

Order: 26374
Project Name: 230 Bay Place
Project Number: BTS# 010725-T1
Project Notes:

Date Collected: 7/25/2001
Date Received: 7/26/2001
P.O. Number: 230 Bay Place

On July 26, 2001, samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
Liquid	MTBE by EPA 8260B	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,

Michelle L. Anderson
Laboratory Director

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: 8/9/01
Date Received: 7/26/01
Project Name: 230 Bay Place
Project Number: BTS# 010725-T1
P.O. Number: 230 Bay Place
Sampled By: Mike Toll

Certified Analytical Report

Order ID: 26374 **Lab Sample ID:** 26374-001 **Client Sample ID:** MW-1

Sample Time: 11:25 AM **Sample Date:** 7/25/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND		5	5	25	µg/L	7/28/01	WMS21100	EPA 8260B

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

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

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

Michelle L. Anderson, Laboratory Director

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: 8/9/01
Date Received: 7/26/01
Project Name: 230 Bay Place
Project Number: BTS# 010725-T1
P.O. Number: 230 Bay Place
Sampled By: Mike Toll

Certified Analytical Report

Order ID: 26374 **Lab Sample ID:** 26374-002 **Client Sample ID:** MW-2

Sample Time: 11:10 AM **Sample Date:** 7/25/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	6700		50	5	250	µg/L	7/28/01	WMS21100	EPA 8260B

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

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

Michelle L. Anderson, Laboratory Director

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: 8/9/01
Date Received: 7/26/01
Project Name: 230 Bay Place
Project Number: BTS# 010725-T1
P.O. Number: 230 Bay Place
Sampled By: Mike Toll

Certified Analytical Report

Order ID: 26374 **Lab Sample ID:** 26374-005 **Client Sample ID:** TW-7

Sample Time: 11:45 AM **Sample Date:** 7/25/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	1100		10	5	50	µg/L	7/31/01	WMS21100	EPA 8260B

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	119	65 - 135
Dibromofluoromethane	124	57 - 139
Toluene-d8	85	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)

Michelle L. Anderson, Laboratory Director

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 #: WMS21100 Units: µg/L
Matrix: Liquid Date Analyzed: 7/31/01

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: Oxygenates by EPA 8260B											
Methyl-t-butyl Ether	EPA 8260B	ND		20		18.7	LCS	93.5			65.0 - 135.0

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	108	65 - 135
Dibromofluoromethane	89	57 - 139
Toluene-d8	88	65 - 135

Parameter	Method	Blank Result	Spike Sample ID	Spike Amount	Sample Result	Spike Result	QC Type	% Recovery	RPD	RPD Limits	Recovery Limits
Test: Oxygenates by EPA 8260B											
Methyl-t-butyl Ether	EPA 8260B	ND		20		17.1	LCSD	85.5	8.94	25.00	65.0 - 135.0

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	112	65 - 135
Dibromofluoromethane	92	57 - 139
Toluene-d8	85	65 - 135

Entech Analytical Labs, Inc.

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

August 02, 2001

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

Order: 26374
Project Name: 230 Bay Place
Project Number:
Project Notes:

Date Collected: 7/25/01
Date Received: 7/26/01
P.O. Number: 230 Bay Place

On July 26, 2001, samples were received under documentented chain of custody. Results for the following analyses are attached:

Matrix	Test	Method
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,

Michelle L. Anderson
Laboratory Director

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: 8/2/01
Date Received: 7/26/01
Project Name: 230 Bay Place
Project Number:
P.O. Number: 230 Bay Place
Sampled By: Mike Toll

Certified Analytical Report

Order ID: 26374 **Lab Sample ID:** 26374-001 **Client Sample ID:** MW-1

Sample Time: 11:25 AM **Sample Date:** 7/25/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	2300		20	0.5	10	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Toluene	1300		20	0.5	10	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Ethyl Benzene	2500		20	0.5	10	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Xylenes, Total	6200		20	0.5	10	µg/L	N/A	7/27/01	WGC42107	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	85	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	ND	Z	20	5	100	µg/L	N/A	7/27/01	WGC42107	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	85	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	24000		20	50	1000	µg/L	N/A	7/27/01	WGC42107	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	75	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)

Michelle L. Anderson, Laboratory Director

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: 8/2/01
Date Received: 7/26/01
Project Name: 230 Bay Place
Project Number:
P.O. Number: 230 Bay Place
Sampled By: Mike Toll

Certified Analytical Report

Order ID: 26374 **Lab Sample ID:** 26374-002 **Client Sample ID:** MW-2

Sample Time: 11:10 AM **Sample Date:** 7/25/01 **Matrix:** Liquid

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Benzene	250		25	0.5	12.5	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Toluene	ND		25	0.5	12.5	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Ethyl Benzene	ND		25	0.5	12.5	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Xylenes, Total	ND		25	0.5	12.5	µg/L	N/A	7/27/01	WGC42107	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	81	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	4200		25	5	125	µg/L	N/A	7/27/01	WGC42107	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	81	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	3400		25	50	1250	µg/L	N/A	7/27/01	WGC42107	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	86	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)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

Entech Analytical Labs, Inc.

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Novato, CA 94947
Attn: Francois Bush

Date: 8/2/01
Date Received: 7/26/01
Project Name: 230 Bay Place
Project Number:
P.O. Number: 230 Bay Place
Sampled By: Mike Toll

Certified Analytical Report

Order ID: 26374 **Lab Sample ID:** 26374-003 **Client Sample ID:** TW-2

Sample Time: 10:30 AM **Sample Date:** 7/25/01 **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	7/27/01	WGC42107	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	7/27/01	WGC42107	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	7/27/01	WGC42107	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	7/27/01	WGC42107	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	106	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)

Michelle L. Anderson, Laboratory Director

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: 8/2/01
Date Received: 7/26/01
Project Name: 230 Bay Place
Project Number:
P.O. Number: 230 Bay Place
Sampled By: Mike Toll

Certified Analytical Report

Order ID: 26374 **Lab Sample ID:** 26374-004 **Client Sample ID:** TW-6

Sample Time: 10:55 AM **Sample Date:** 7/25/01 **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	7/27/01	WGC42107	EPA 8020
Toluene	ND		1	0.5	0.5	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Ethyl Benzene	ND		1	0.5	0.5	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Xylenes, Total	ND		1	0.5	0.5	µg/L	N/A	7/27/01	WGC42107	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	95	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	7/27/01	WGC42107	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	95	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	7/27/01	WGC42107	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	107	65 - 135

DF = Dilution Factor ND = Not Detected DLR = Detection Limit Reported PQL = Practical Quantitation Limit

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

Date: 8/2/01
Date Received: 7/26/01
Project Name: 230 Bay Place
Project Number:
P.O. Number: 230 Bay Place
Sampled By: Mike Toll

Certified Analytical Report

Order ID: 26374 **Lab Sample ID:** 26374-005 **Client Sample ID:** TW-7

Sample Time: 11:45 AM **Sample Date:** 7/25/01 **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	7/27/01	WGC42107	EPA 8020
Toluene	660		50	0.5	25	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Ethyl Benzene	1400		50	0.5	25	µg/L	N/A	7/27/01	WGC42107	EPA 8020
Xylenes, Total	2100		50	0.5	25	µg/L	N/A	7/27/01	WGC42107	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	90	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
Methyl-t-butyl Ether	700		50	5	250	µg/L	N/A	7/27/01	WGC42107	EPA 8020

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	90	65 - 135

Parameter	Result	Flag	DF	PQL	DLR	Units	Extraction Date	Analysis Date	QC Batch ID	Method
TPH as Gasoline	20000		50	50	2500	µg/L	N/A	7/27/01	WGC42107	EPA 8015 MOD. (Purgeable)

Surrogate	Surrogate Recovery	Control Limits (%)
aaa-Trifluorotoluene	91	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)

Michelle L. Anderson, Laboratory Director

Environmental Analysis Since 1983

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STANDARD LAB QUALIFIERS (FLAGS)

All Entech lab reports now reference standard lab qualifiers. These qualifiers are noted in the adjacent column to the analytical result and are adapted from the U.S. EPA CLP program. The current qualifier list is as follows:

Qualifier (Flag)	Description
U	Compound was analyzed for but not detected
J	Estimated value for tentatively identified compounds or if result is below PQL but above MDL
N	Presumptive evidence of a compound (for Tentatively Identified Compounds)
B	Analyte is found in the associated Method Blank
E	Compounds whose concentrations exceed the upper level of the calibration range
D	Multiple dilutions reported for analysis; discrepancies between analytes may be due to dilution
X	Results within quantitation range; chromatographic pattern not typical of fuel
Z	Sample required MTBE confirmation

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 ☐ RWQCB REGION ____
☐ LIA
☐ OTHER

CHAIN OF BTS # 010725-T1

CLIENT PES

SITE 230 Bay Place
Oakland, CA

SPECIAL INSTRUCTIONS

Invoice and Report to : PES
Attn: FRANCOIS GUH
* Confirm MTBE hits by EPA 8260

SAMPLE I.D.	DATE	TIME	MATRIX S=SOIL W=H_2O	CONTAINERS TOTAL		C = COMPOSITE ALL CONTAINERS	TPH - Gas (8015)	BTEX (8020)	MTBE (8020) *					ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
MW-1	7-25-01	1125	W	3	VOA/HCl		X	X	X					26374-001			
MW-2	"	1110	"	3	"		X	X	X					002			
TW-2	"	1030	"	3	"		X	X	X					003			
TW-6	"	1055	"	3	"		X	X	X					004			
TW-7	"	1145	"	3	"		X	X	X					005			

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY	RESULTS NEEDED NO LATER THAN
	7/25/01	1145	Mike Toll	Per Client

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
Mike Toll	7/26/01	11:45	[signature]	7/26/01	1145
[signature]			[signature]	7/26/01	1300

SHIPPED VIA	DATE SENT	TIME SENT	COOLER #

No. 0018 P. 9/9

Aug. 2. 2001 5:17PM