



January 24, 2003

167.002.04.001

Mr. Don Hwang
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Alameda County
JAN 29 2003
Environmental Health

**WORKPLAN
SUPPLEMENTAL SITE INVESTIGATION
FORMER COX CADILLAC FACILITY
230 BAY PLACE
OAKLAND, CALIFORNIA
LOP CASE RO-0000148**

Dear Mr. Hwang:

PES Environmental, Inc. (PES) has prepared this workplan to describe procedures for a supplemental site investigation of soil and groundwater conditions at the former Cox Cadillac facility at 230 Bay Place, Oakland, California (Plate 1). The workplan has been prepared on behalf of Greater Bay Trust Company (GBTC), trustee for the Robert Shepard Trust, Brian F. Shepard Trust, Douglas C. Shepard Trust, and the Lisa C. Shepard Trust. These entities are successors to the Harold W. Shepard Trust, the former owner of the site. The current owner of the site is Avalon Bay Communities.

This workplan is submitted in response to the July 31, 2002 letter from Alameda County Environmental Health Services (ACEHS) and our telephone conversation on October 2, 2002. A copy of the letter is included as an attachment to this workplan. This workplan supersedes our previous Workplan¹ dated August 29, 2001 and Addendum to Workplan² dated December 17, 2001. This workplan presents: (1) a description of the project background; (2) objectives of the proposed investigation; and (3) a description of the proposed scope of work to achieve the site characterization objectives.

¹ PES Environmental, Inc. 2001. *Workplan, Monitoring Well Installation, Resumption of Enhanced Bio-Remediation, and Resumption of Quarterly Sampling, Former Cox Cadillac Facility, 230 Bay Place, Oakland, California, August 29.*

² PES Environmental, Inc. 2001. *Addendum to Workplan, Monitoring Well Installation, Resumption of Enhanced Bio-Remediation, and Resumption of Quarterly Sampling, Former Cox Cadillac Facility, 230 Bay Place, Oakland, California, December 17.*

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1.0 BACKGROUND INFORMATION

The nearly 2-acre former Bill Cox Cadillac facility is bounded on the northwest by Harrison Street, on the southwest by Bay Street, and on the southeast by Vernon Street (Plate 2). The facility has most recently been used for automobile sales and services. The facility presently contains an approximately 30,000 square foot vacant building. Approximately 6,500 square feet of the building was used as a sales showroom and offices, while the remainder of the building was used for automobile storage, bodywork and painting, as well as an indoor service area. The remaining areas of the site are asphalt-covered parking areas.

One 10,000-gallon steel, tarred and wrapped underground storage tank (UST) was installed at the facility in 1979. The UST and associated product piping were removed on behalf of Bill Cox Cadillac by DECON Environmental Services of Hayward, California under the direction of Eisenberg, Olivieri & Associates (EOA) of Oakland, California in January 1994. A summary of UST removal activities was presented in EOA's UST closure report of February 1994³. Observations made at the time of the UST excavation indicated that failed couplings along UST piping were the primary source of leaking product into the surrounding soil. An additional excavation of 50 cubic yards (cy) of hydrocarbon-affected soil from beneath the former product piping was conducted by PES in July 1997. The results of the excavation were summarized in PES' report of September 30, 1999⁴.

Groundwater monitoring wells installed at the site in 1993 and 1998 have been sampled by PES and EOA to evaluate site groundwater conditions in the vicinity of the former UST and piping. From January 1999 to January 2000, five of the monitoring wells were also used for introduction of enriched groundwater as part of a 1-year pilot program to evaluate possible enhanced in-situ bioremediation of groundwater. The pilot program consisted of injecting a solution of potable water, hydrogen peroxide, and a blend of nutrients to wells TW-4, TW-5, TW-6, TW-7, and MW-1 as well as installing Oxygen Releasing Compound (ORC) to the wells. The pilot bioremediation program was effective in reducing concentrations of petroleum hydrocarbons in groundwater from monitoring wells MW-1 and TW-6. Results of the bioremediation program are presented in PES' report dated May 24, 2000⁵.

A summary of groundwater analytical results for the quarterly monitoring is presented on Table 1. Quarterly monitoring since completion of the initial bioremediation program indicates levels of several dissolved-phase fuel constituents in groundwater from wells MW-1, MW-2,

³ Eisenberg, Olivieri, & Associates, 1994. *Report of UST Closure Activities, 230 Bay Place, Oakland, California, Prepared for Bill Cox Cadillac*, February.

⁴ PES Environmental, Inc. 1999. *Report, Site Characterization and Interim Remedial Actions, Former Cox Cadillac Facility, 230 Bay Place, Oakland, California*, September 30.

⁵ PES Environmental, Inc. 2000. *Quarterly Groundwater Monitoring and Year-End Bioremediation Evaluation Report, Former Cox Cadillac Facility, 230 Bay Place, Oakland, California*, May 24.

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and TW-7 have been rising. These results suggest that the definition of the hydrocarbon plume in groundwater remains unclear.

2.0 WORKPLAN OBJECTIVES

The objectives of the proposed investigation are to characterize the probable onsite or offsite sources of the hydrocarbon-affected groundwater plume at the site by reducing uncertainty regarding the lateral extent of the plume and clarifying its chemical characteristics. In the initial phase of this investigation, a more comprehensive survey of onsite conditions will be pursued, including evaluating soils that may be a source of hydrocarbons to groundwater to the northwest of the previous tank and piping excavations. The additional groundwater plume characterization includes: (1) collection of groundwater data in the vicinity of the utility trenches in the cross gradient and downgradient directions from the site; and (2) evaluation of the groundwater plume in the vicinity of well MW-1 and beneath the building.

As we discussed in our conference call, the results of this investigation may suggest modification of the remediation strategy for the site. As such, no interim remedial actions are contemplated in this workplan. Future remedial actions and remediation goals will be evaluated and proposed, as requested in your July 31, 2002 letter, after completion of this investigation.

3.0 PROPOSED SCOPE OF WORK

The proposed scope of work focuses on three areas of the site: (1) groundwater and potential migration pathways downgradient of the site; (2) soil and groundwater conditions northwest of the former UST and associated piping; and (3) groundwater in the vicinity of well MW-1. The scope of work consists of sampling existing wells TW-4 and TW-5, hydropunch and grab groundwater sampling, and soil borehole drilling and sampling. Grab groundwater sampling will be conducted in utility trenches in Bay Place. Hydropunch groundwater sampling will be conducted northwest of the former UST and piping excavations and in the vicinity of the well MW-1. Soil borehole drilling and sampling will be conducted northwest of the former UST and piping excavations. Proposed sampling locations are presented on Plate 3. The proposed scope of work is further described in the following sections.

3.1 Pre-field Activities

PES will retain subcontractors for subsurface utility locating, borehole drilling, and chemical analyses. The utility locator will identify utility lines and trenches to aid in the placement of

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the sampling locations within Bay Place. In addition, PES will contact Underground Service Alert to request marking of utilities by public and private utility companies.

Prior to conducting field activities, PES will update the existing site-specific Health and Safety Plan and obtain permits to perform the field activities. The Health and Safety Plan will comply with applicable federal and California Occupational Safety and Health Administration (OSHA) guidelines. Permitting activities include obtaining boring permits from ACEHS and an encroachment permit for drilling in Bay Place from the City of Oakland.

3.2 Groundwater Sampling from Bay Place Utility Trenches

Seven grab groundwater sampling borings will be drilled along Bay Place adjacent to active and abandoned storm drain lines, the sanitary sewer line, and a water main line. The groundwater sampling locations are presented on Plate 3.

Grab groundwater samples will be collected from each of the borings. Groundwater collection borings will be drilled using a hand auger. Upon reaching first groundwater (presumably between 3 and 6 feet below ground surface [bgs]) a PVC well screen will be placed into the boring. Groundwater samples will be obtained by using a bailer and transferred directly from the bailer into the appropriate sample containers. Care will be taken when transferring the water from the bailer to the containers to avoid turbulence as much as possible. The containers will be filled and capped so that no air bubbles are trapped. The sample containers will be labeled, placed in a thermally insulated cooler, and transported under chain-of-custody protocol to a state-certified laboratory for analysis. Groundwater samples will be analyzed for total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Test Method 8260. In addition, groundwater samples will be analyzed for gasoline oxygenates including methyl tert-butyl ether (MTBE), tert-amyl methyl ether (TAME), ethyl tert-butyl ether (ETBE), di-isopropyle ether (DIPE), tert-butyl alcohol (TBA), ethylene dibromide (EDB), and ethylene dichloride (EDC) by EPA Test Method 8260.

3.3 Sampling Northwest of the Former UST and Piping Excavation

Soil samples will be collected from six borings to be drilled northwest of the former UST and piping excavation. Groundwater samples will be collected from three of these borings. The proposed sampling locations are presented on Plate 3. Soil and grab groundwater borings will be drilled along the inside of the building wall in this area. The soil borings will be drilled with portable direct push sampling equipment. A PES geologist or engineer will observe the borehole drilling and will prepare a lithologic log of the borings using the Unified Soil Classification System (USCS). VOC screening of soil sample headspace will be conducted using a PID and results recorded on the boring log.

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Soil samples will be collected from the borings at approximately 3 to 4 feet bgs. Soil samples will be collected directly from soil boring cores into acetate liners. Grab groundwater samples will be collected from three of the six borings in this area. Groundwater samples will be collected in the same manner as the samples collected from the Bay Place borings described in Section 3.2. The sample containers will be labeled and submitted to a state-certified mobile laboratory for analysis.

Soil and groundwater samples will be analyzed for TPHg, BTEX and gasoline oxygenates (listed in Section 3.2) by EPA Test Method 8260. Analytical results from the mobile laboratory will be used to determine whether additional sampling will be necessary. Potential step out sampling locations are presented on Plate 3.

In addition to the soil and groundwater borings drilled in this area, PES will sample wells TW-4 and TW-5 during the next quarterly monitoring event. The data from these wells will be correlated with the boring data and used in determining potential step out sampling locations. Modifications to the groundwater monitoring program are further described in Section 3.5.

3.4 Groundwater Sampling Near Well MW-1

Three hydropunch groundwater sample borings will be drilled to the north, northeast, and east of monitoring well MW-1. The groundwater borings will be drilled with a direct push-drilling rig equipped with a groundwater sampler. Groundwater samples will be collected in the same manner as the samples collected from the Bay Place borings described in Section 3.2. Groundwater samples will be submitted to an onsite mobile laboratory for analysis.

Groundwater samples will be analyzed for TPHg, BTEX and gasoline oxygenates by EPA Test Method 8260. Analytical results from the mobile laboratory will be used to determine whether additional sampling will be necessary. Potential step out sampling locations are presented on Plate 3.

Upon completion of groundwater sampling and soil sampling activities, each borehole drilled during this investigation will be grouted to the surface with a bentonite or cement grout in accordance with ACEHS requirements.

3.5 Groundwater Monitoring

The groundwater monitoring program will be modified for one quarter to include the sampling of wells TW-4 and TW-5. These wells will be redeveloped prior to the groundwater monitoring event. Analysis of groundwater from these wells will include analysis of gasoline oxygenates by EPA Test Method 8260. Oxygenate analysis will also be added to the analytical

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program for future quarterly sampling events from wells MW-1, MW-2, TW-2, TW-6, and TW-7.

3.6 Decontamination Procedures

To reduce the potential for cross-contamination between sampling locations, all downhole drilling equipment, soil sampling equipment, and groundwater sampling equipment will be thoroughly cleaned prior to initiating work at each sampling location. Hand held drilling equipment and groundwater sampling equipment will be washed in a dilute Alconox solution, rinsed with potable water, and final rinsed with distilled water between each sampling location. Powered drilling equipment will be decontaminated with a high-pressure hot water wash between sampling locations. Decontamination fluids will be temporarily stored onsite pending characterization and offsite disposal.

3.7 Reporting

A site investigation report will be prepared within four weeks of completion of field activities. This report will describe: (1) field methods and procedures used for soil and groundwater sampling; (2) results of the soil and groundwater sampling; and (3) data evaluation, conclusions and recommendations.

4.0 SCHEDULE


Pre-approval from the California UST Cleanup Fund (Fund) of costs to perform the investigation is required before GBTC can proceed with the site investigation. Upon receiving ACEHS written approval of this workplan, PES will assist GBTC in obtaining pre-approval from the Fund. PES estimates that the investigation will require approximately 2 months to complete after obtaining pre-approval from the Fund.

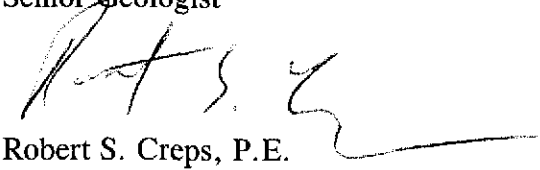
We trust this workplan provides you with the information required at this time and meets with your approval. If you have any questions or require additional information, please call either of the undersigned.

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Very truly yours,

PES ENVIRONMENTAL, INC.


François A. Bush
Senior Geologist


Robert S. Creps, P.E.
Principal Engineer

Attachments: Alameda County Environmental Health Services letter dated July 31, 2002
Table 1 - Groundwater Sample Analytical Results Through July 25, 2002
Plate 1 - Site Location Map
Plate 2 - Site Plan and Well Location Map
Plate 3 - Proposed Sampling Locations

cc: Cheryl Howell - Greater Bay Trust Company
Rory Campbell - Hanson, Bridgett, Marcus, Vlahos and Rudy LLP
Mark Owens - California UST Cleanup Fund
Lita Freeman - LFR



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July 31, 2002

Greater Bay Trust Co.
C/o Leah S. Goldberg, Esq.
Hanson, Bridgett, Marcus, Vlahos & Rudy
333 Market St., Suite 2300
San Francisco, CA 94105-2173

Dear Ms. Goldberg:

Subject: Fuel Leak Case No. RO0000148,
Former Cox Cadillac, 230 Bay Pl., Oakland, CA

Alameda County Environmental Health (ACEH) staff has reviewed "Addendum to Workplan, Monitoring Well Installation, Resumption of Enhanced Bio-Remediation, and Resumption of Quarterly Sampling" dated December 17, 2001" by PES Environmental, Inc. We request that you address the following technical comments and send us the technical reports requested below.

TECHNICAL COMMENTS

- 1) **Site Characterization** – Up to 210,000 microgram (ug/l) Total Petroleum Hydrocarbons – Gasoline (TPHG) and 49,000 ug/l Benzene have been detected in off-site monitoring well TW-7, located 15' downgradient from the former gasoline Underground Storage Tank (UST). Hydropunch samples collected in the intersection of Bay Place and Vernon Street, downgradient of TW-7, were predominately NonDetectable (ND) for the constituents of concern (HP-1 detected 1.3 ug/l Benzene). The presence of utility lines in the street between TW-7 and the hydropunch sampling locations have been noted in previous report(s) for this site ("Corrective Action Plan Development Report, Phase 1," dated April 1, 1996, prepared by EOA, Inc.). Depth to water measurements from your wells show that groundwater has been shallower than 2' below ground surface (bgs) indicating that the utility trenches may be preferential pathways for the spread of contamination from your site.

Additionally, up to 8,700 ug/l Methyl Tertiary-Butyl Ether (MTBE) has been detected in wells immediately downgradient of your former gasoline UST. Up to 800 ug/l MTBE has also been detected in on-site well MW-1 in the vicinity of your former waste oil UST. The Quarterly Report, dated April 25, 2002, prepared by PES Environmental, Inc., (PES) suggests that downgradient detections of MTBE are due to an unidentified off-site source migrating through the aforementioned utility lines. PES also reports that on-site monitoring wells tested ND for MTBE in 1993, however analytical data tables show that analysis for MTBE was not performed until 1999 at this site. While the presence or absence of MTBE may be discerned from historic samples by having your analytical laboratory review their chromatographs and report results for MTBE there is no documentation in the County file of these results.

The lateral and vertical extent of contamination associated with your site is not defined. We request that you define the groundwater plume associated with your site. Also, rather than installing an additional groundwater monitoring well (MW-3) crossgradient of your site, we request that you perform groundwater sampling within the utility trenches in the vicinity of your site. Submit your proposal for plume definition in the work plan requested below.

- 2) **Enhanced Bioremediation** - PES reports successful results with enhanced bioremediation in TW-6 but no success in MW-2 and TW-7 due to low numbers of hydrocarbon degrading bacteria. PES proposes to introduce a culture of hydrocarbon degrading bacteria into monitoring wells at the site and add nutrients over a four-year period. The work plan also proposes to collect groundwater samples, which will be analyzed and then evaluated by a microbiologist to determine an appropriate batch culture for introduction into the wells. Please indicate the analyses that will be performed, how these results will determine the composition of the batch culture, provide documentation which demonstrates that this approach would work, and is safe. Additionally, as wells MW-2 and TW-7 have not seen a decrease in contaminant concentration during the pilot program we cannot endorse you to conduct your enhanced bioremediation program over a four-year period.
- 3) **Groundwater Cleanup Objectives** - a) The work plan proposes using 10,000 ug/l as the cleanup standard for TPHG. Alternatively, we approve of using the ceiling value of 5,000 ug/l found in the State Regional Water Quality Control Board (SRWQCB)'s "Application of Risk Based Screening Levels and Decision Making to Sites with Impacted Soil and Groundwater" dated December 2001.
b) The work plan also proposes using Oakland-specific Tier 2 site specific target levels. However, the site does not appear to meet the eligibility criteria for its use. Please review the Oakland RBCA Eligibility Checklist.
- 4) **Fuel Oxygenate and Additive Analysis** - Groundwater analyses for fuel oxygenates and additives have not been performed at your site. Please collect and analyze groundwater samples for the following compounds: Tertiary Amyl Methyl Ether (TAME), Ethyl Tertiary Butyl Ether (ETBE), Di-Isopropyl Ether (DIPE), Tertiary Butyl Alcohol (TBA), Ethylene

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Dibromide (EDB), and Ethylene Dichloride (EDC) by EPA Method 8260. Report your results in the Quarterly Report requested below.

- 5) **Tank Excavation Soil Residual Contamination** - A soil sample from the north sidewall of the tank excavation, S2, collected on January 27, 1994, found 4,300 mg/kg Total Volatile Hydrocarbons - Gasoline (TVH-G) and 40 mg/kg benzene. The tank excavation has not been over excavated. Over excavation of the pipeline trench on June 22, 1994 resulted in confirmation samples of 700, 620, and 260 mg/kg TVH-G, for S-3, S-4, and S-5, respectively. Over excavation pipeline sample results for benzene were 7.3, 6.1, and 3.1 mg/kg for S-3, S-4, and S-5, respectively. These soil residual concentrations need to be evaluated for risk to human health and the environment.
- 6) **Analytical Data Tables** - A review of analytical data from your site indicates that historical groundwater concentrations are reported incorrectly in some cases and data for additional analyses e.g., EDC and EBD are not reported in your tables. We request that you revise your tables to include all groundwater analytical results for the site and include these updated tables in all future reports submitted for this site.

TECHNICAL REPORT REQUEST

Please send the following technical reports to Alameda County Environmental Health (Attention: Don Hwang) by **October 1, 2002**:

Work Plan Addendum

Quarterly Report for the First Quarter 2002

Quarterly Report for the Second Quarter 2002

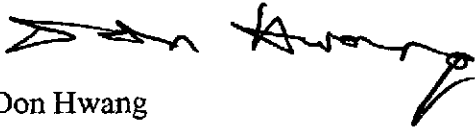
Quarterly Report for the Third Quarter 2002

These reports are being requested pursuant to the Regional Water Quality Control Board's (Regional Board) authority under Section 13267 of the California Water Code.

If you have any questions, please call me at (510) 567-6746.

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Sincerely,



Don Hwang
Hazardous Materials Specialist
Local Oversight Program

✓C: Francois Bush, Andy Briefer, PES Environmental, Inc., 1682 Novato Blvd., Suite 100,
Novato, CA 94947-7021

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Table 1
Groundwater Sample Analytical Results Through July 25, 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)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Dissolved Lead (µg/L)
TW-7	10/14/93	100,000	NA	48,000	15,000	3,400	16,000	NA	<50	<50	NA
	12/22/94	210,000	NA	49,000	33,000	7,300	28,000	<1.0	<1.0	NA	NA
	3/24/95	56,000	NA	13,000	7,000	1,500	5,600	<2.0	<2.0	NA	<3.0
	6/29/95	100,000	NA	39,000	8,100	3,000	8,300	<1.0	<1.0	NA	3.5
	9/29/95	74,000	NA	32,000	8,700	2,900	8,600	<1.0	<1.0	NA	3.5
	2/23/96	50,000	NA	22,000	8,400	2,700	6,900	<5.0	<5.0	NA	3.8
	1/12/99	29,000	<100	7,300	670	2,700	960	NA	NA	NA	NA
	4/13/99	54,000	1,200	4,500	1,800	180	8,200	NA	NA	NA	NA
	7/7/99	42,000	2200*	8,000	4,500	1,200	3,500	NA	NA	NA	NA
	10/6/99	29,000	580*	9,700	1,600	1,600	2,100	NA	NA	NA	NA
	1/11/00	52,000	2,600*	8,500	7,100	1,600	6,700	NA	NA	NA	NA
	4/6/01	22,000	690	4,800	1,800	2,200	3,400	NA	NA	NA	NA
	7/25/01	20,000	1,100*	5,100	660	1,400	2,100	NA	NA	NA	NA
	11/20/01	26,000	1,600	6,400	1,100	1,000	2,400	NA	NA	NA	NA
	1/23/02	25,000	1,200	5,100	510	2,200	3,900	NA	NA	NA	NA
	4/26/02	29,000	1,600	4,400	1,300	2,900	2,370	NA	NA	NA	NA
	7/25/02	21,000	1,900	4,900	470	1,600	1,700	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

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 TPHg as 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

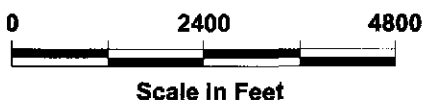
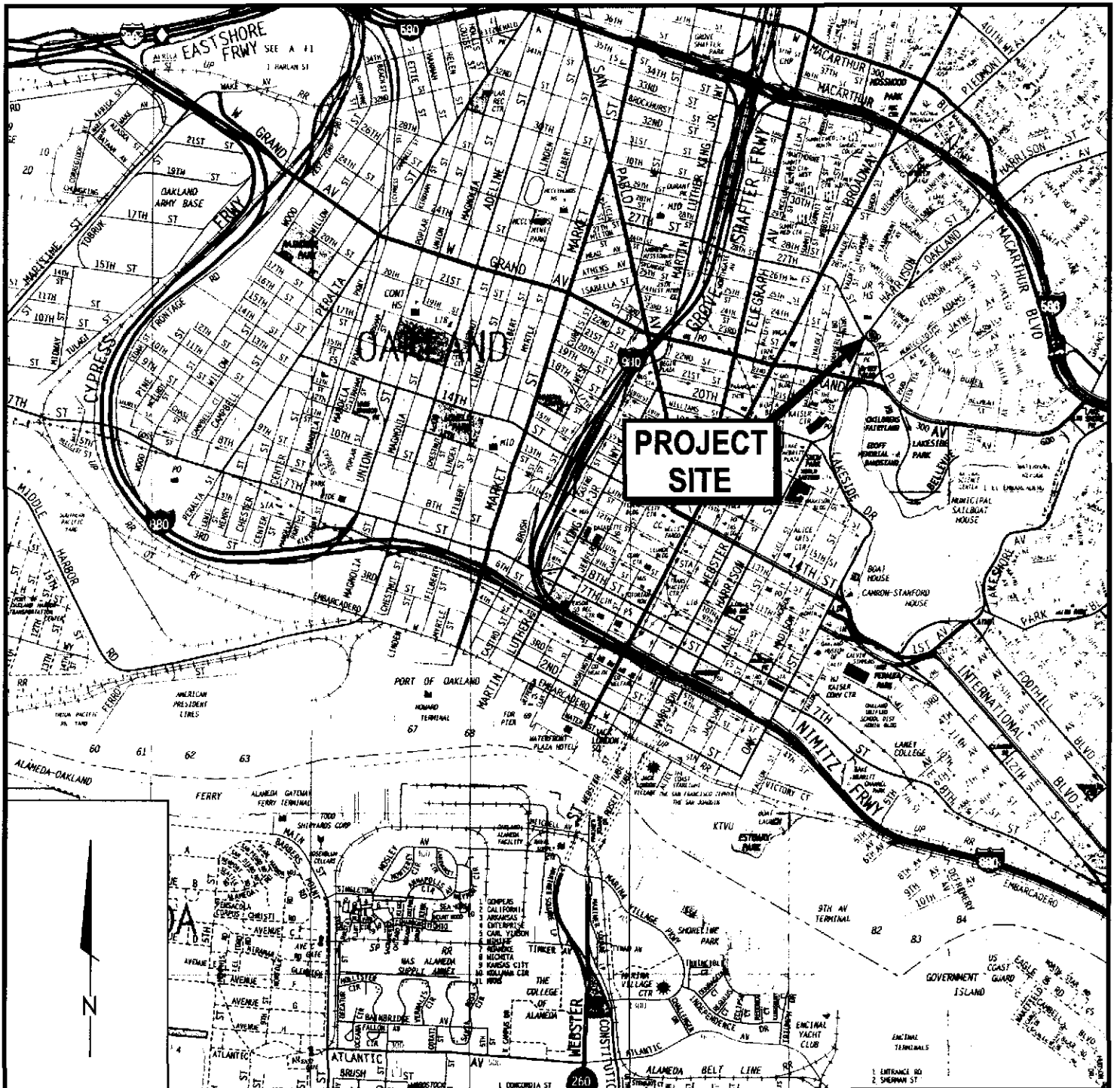
TW-1, TW-3, TW-4 and TW-5 only sampled one time (October 13, 1993)

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 1
 Groundwater Sample Analytical Results Through July 25, 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)	1,1-DCA (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Dissolved Lead (µg/L)
MW-1	3/3/93	110,000	NA	8,500	7,500	4,400	15,000	NA	350	NA	NA
	10/13/93	74,000	NA	6,100	4,800	4,000	11,000	NA	350	80	NA
	12/22/94	110,000	NA	18,000	11,000	2,800	16,000	<1.0	130	NA	NA
	3/24/95	25,000	NA	3,700	1,800	2,200	4,700	<5.0	130	NA	23
	6/29/95	28,000	NA	5,300	2,100	3,200	7,500	<2.0	110	NA	14
	9/29/95	43,000	NA	5,600	2,200	3,800	7,400	<1.0	98	NA	16
	2/23/96	46,000	NA	4,800	3,000	3,400	7,700	<1.0	96	NA	24
	1/12/99	39,000	800	2,600	970	2,900	5,700	NA	NA	NA	NA
	4/13/99	29,000	520	1,500	500	<50	4,000	NA	NA	NA	NA
	7/7/99	31,000	<250	1,900	870	1,600	3,900	NA	NA	NA	NA
	10/6/99	32,000	<250*	2,100	910	1,800	4,400	NA	NA	NA	NA
	1/11/00	2,400	<5.0*	52	3.9	63	12	NA	NA	NA	NA
	4/6/01	32,000	<10*	4,300	3,200	2,600	7,300	NA	NA	NA	NA
	7/25/01	24,000	<25*	2,300	1,300	2,500	6,200	NA	NA	NA	NA
	11/20/01	33,000	<100*	2,100	890	2,500	3,600	NA	NA	NA	NA
	1/23/02	28,000	350	2,400	1,400	2,500	5,900	NA	NA	NA	NA
	4/26/02	39,000	2,800	3,200	2,400	2,700	6,300	NA	NA	NA	NA
7/25/02	26,000	<500	2,300	1,300	2,500	4,700	NA	NA	NA	NA	
MW-2	1/12/99	<50	2,900	1.5	<0.50	<0.50	<0.50	NA	NA	NA	NA
	4/13/99	<50	3,800	0.76	<0.50	<0.50	<0.50	NA	NA	NA	NA
	7/7/99	<2,500	7000*	<25	<25	<25	<25	NA	NA	NA	NA
	10/6/99	2,800	300*	73	<25	<25	<25	NA	NA	NA	NA
	1/11/00	11,000	8,400*	890	<100	<100	<100	NA	NA	NA	NA
	4/6/01	2,800	3,800	210	<25	<25	<25	NA	NA	NA	NA
	7/25/01	3,400	4,200*	250	<12.5	<12.5	<12.5	NA	NA	NA	NA
	11/20/01	12,000	8,700	870	<100	<100	200	NA	NA	NA	NA
	1/23/02	3,900	3,300	100	<25	<25	<25	NA	NA	NA	NA
	4/26/02	90	6,900	13	<0.5	<0.5	<1.5	NA	NA	NA	NA
	7/25/02	<5,000	6,600	<50	<50	<50	<100	NA	NA	NA	NA
TW-1	10/13/93	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	NA
TW-2	10/13/93	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	NA
	1/12/99	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	4/13/99	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	7/7/99	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	10/6/99	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	1/11/00	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	4/6/01	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	7/25/01	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	11/20/01	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	1/23/02	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	4/26/02	<50	<5	<0.5	<0.5	<0.5	<1.5	NA	NA	NA	NA
7/25/02	<50	<5	<0.5	<0.5	<0.5	<1	NA	NA	NA	NA	
TW-3	10/13/93	<50	NA	<0.5	<0.5	<0.5	<0.5	NA	<0.5	<0.5	NA
TW-4	10/13/93	2,000	NA	65	18	49	33	NA	<5.0	<5.0	NA
TW-5	10/13/93	140,000	NA	20,000	25,000	3,800	23,000	NA	<100	<100	NA
TW-6	10/14/93	4,100	NA	3,800	1,600	110	540	NA	<1.0	<1.0	NA
	12/22/94	24,000	NA	5,400	2,700	3,100	6,800	<1.0	<1.0	NA	NA
	3/24/95	10,000	NA	4,900	530	270	380	<2.0	<2.0	NA	<3.0
	6/29/95	28,000	NA	12,000	6,600	1,000	3,000	<1.0	<1.0	NA	4.2
	9/29/95	47,000	NA	19,000	5,200	1,500	4,000	<1.0	<1.0	NA	3.3
	2/23/96	25,000	NA	13,000	5,200	1,100	2,770	<1.0	<1.0	NA	5.2
	1/12/99	29,000	210	9,900	4,100	1,000	4,000	NA	NA	NA	NA
	4/13/99	<50	22	0.70	<0.5	<0.5	0.62	NA	NA	NA	NA
	7/7/99	55	8.1*	13	<0.5	<0.5	2.2	NA	NA	NA	NA
	10/6/99	<50	<5	0.59	<0.5	<0.5	<0.5	NA	NA	NA	NA
	1/11/00	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	4/6/01	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
	7/25/01	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
11/20/01	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	
1/23/02	<50	<5	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA	
4/26/02	<50	<5	<0.5	<0.5	<0.5	<1.5	NA	NA	NA	NA	
7/25/02	<50	<5	0.60	<0.5	<0.5	<1	NA	NA	NA	NA	



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







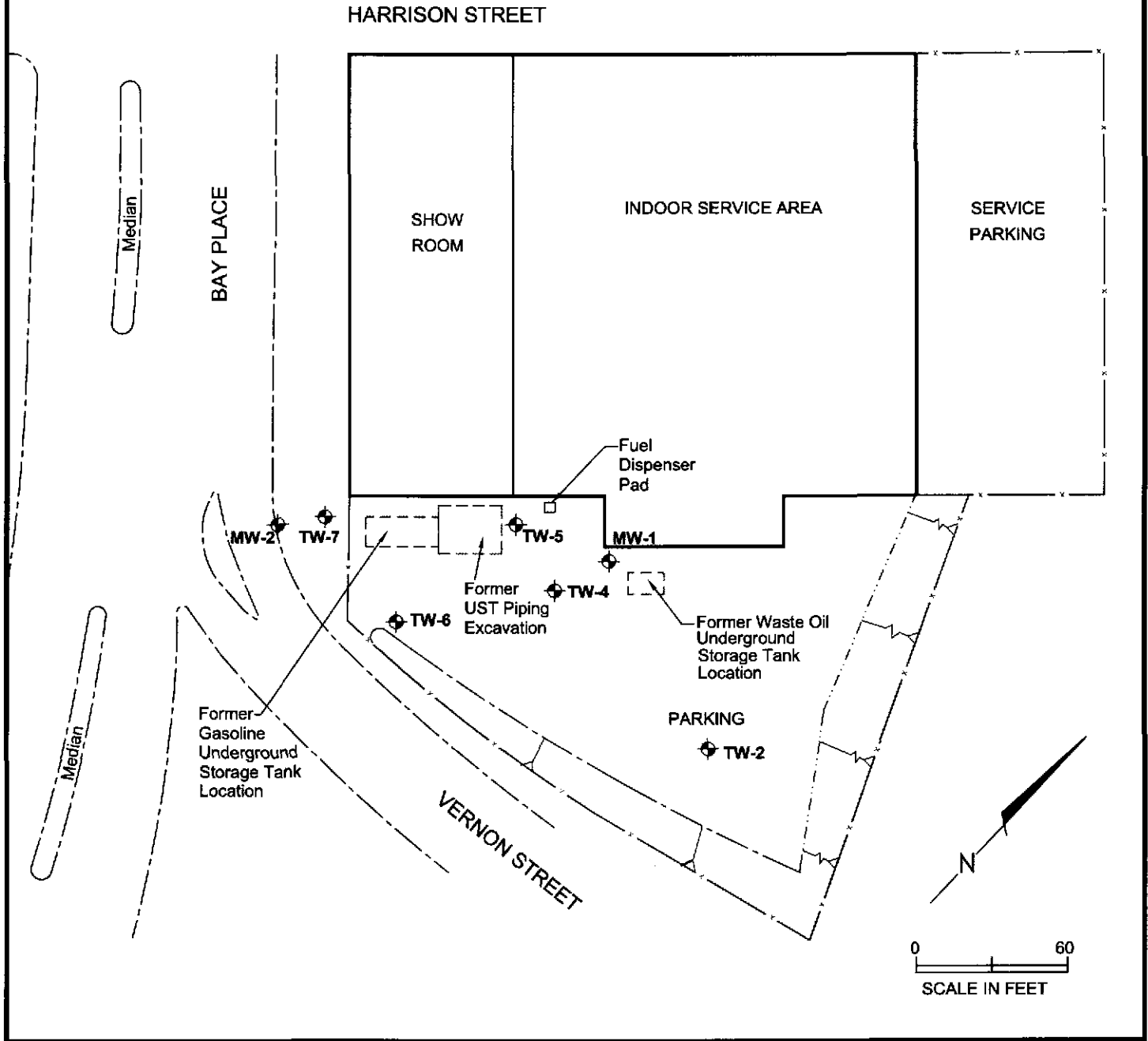
PES Environmental, Inc.
Engineering & Environmental Services

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

PLATE
1

Explanation

- MW-1  Monitoring Well Location
-  Fence
-  Retaining Wall
-  Curb



PES Environmental, Inc.
Engineering & Environmental Services

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

PLATE

2

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10/02






JOB NUMBER

DRAWING NUMBER

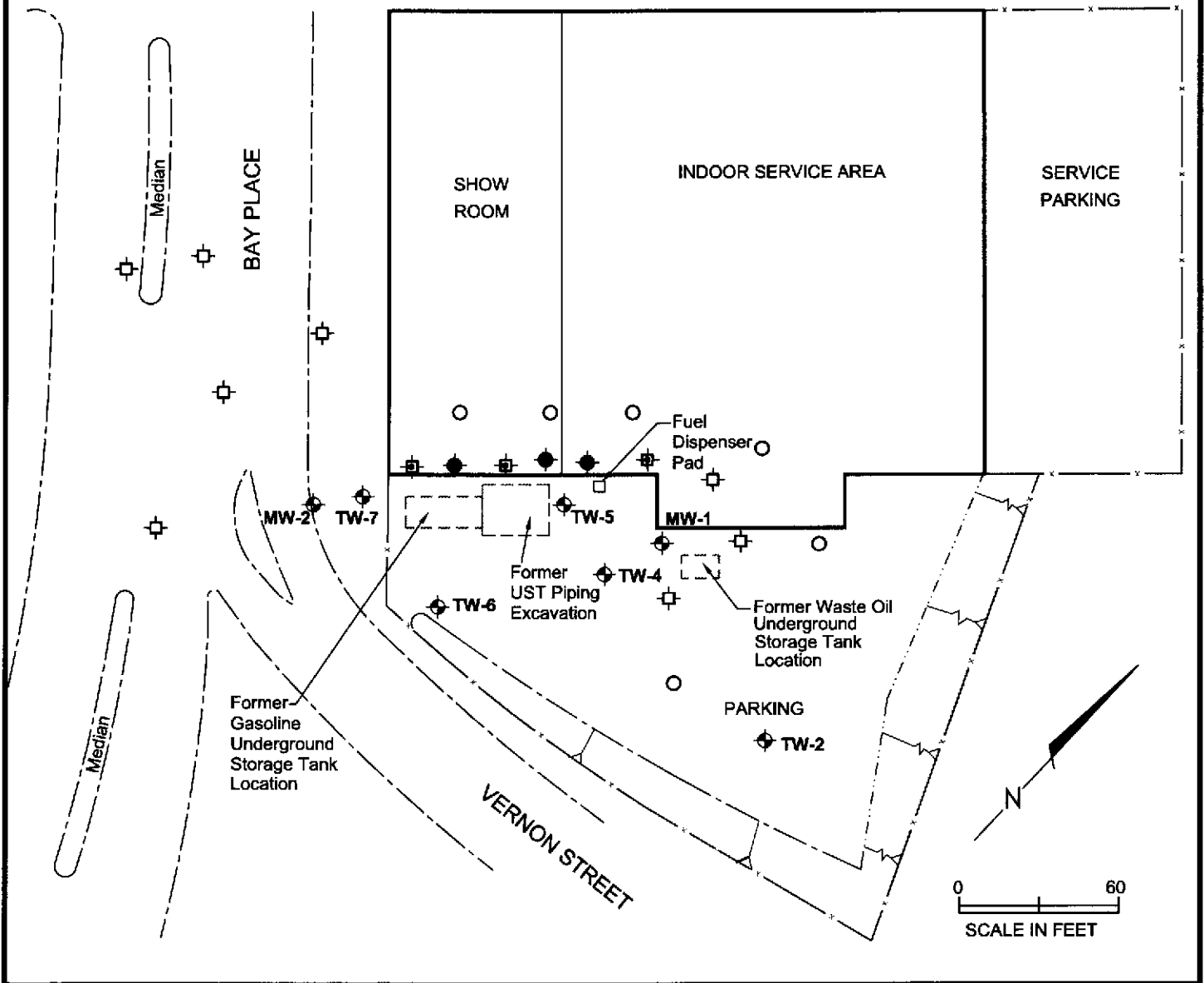
REVIEWED BY

DATE

Explanation

- MW-1  Monitoring Well Location
-  Proposed Grab Groundwater Sampling Location
-  Proposed Groundwater and Soil Sampling Location
-  Proposed Soil Sampling Location
-  Potential Step-Out Sampling Location
- x — Fence
- - - - - Retaining Wall
- - - - - Curb

HARRISON STREET



PES Environmental, Inc.
Engineering & Environmental Services

**Proposed Sampling Locations for
Additional Site Investigation**
Former Cox Cadillac-230 Bay Place
Oakland, California

PLATE

3

167.002.01.008

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12/02

JOB NUMBER

DRAWING NUMBER

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DATE