GRIFFIN CAPITAL

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October 25, 2010

1211.001.01.004

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

Attention: Mr. Mark Detterman

Transmittal
Results of Groundwater Monitoring
and Preferential Pathway Study,
and Request for Closure
1650 65th Street
Emeryville, California
Fuel Leak Case No. RO0000440
Geotracker Global ID T0600100511

Dear Mr. Detterman:

Submitted herewith for your review is the *Results of Groundwater Monitoring and Preferential Pathway Study, and Request for Case Closure, 1650 65th Street, Emeryville, California* prepared by PES Environmental, Inc.

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

Very truly yours,

GRIFFIN CAPITAL CORPORATION

Julie A. Treinen
Managing Director, Asset Management

cc: Chris Baldassari, PES Environmental, Inc.
121100101T002.doc

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PES Environmental, Inc.
Engineering & Environmental Services

October 25, 2010

1211.001.01.004

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

Attention: Mr. Mark Detterman, P.G.

Subject: Results of Groundwater Monitoring and Preferential Pathway Study, and Request for Case Closure
1650 65th Street, Emeryville, California
Fuel Leak Case No. RO0000440
Geotracker Global ID T0600100511

Dear Mr. Detterman:

This *Results of Groundwater Monitoring and Preferential Pathway Study, and Request for Case Closure* (Report) has been prepared by PES Environmental, Inc. (PES) on behalf of Griffin Capital Corporation (Griffin), agent for the fee owners for the property located at 1650 65th Street, in Emeryville, California (Site; Plate 1). This Report summarizes the results of groundwater sampling and a preferential pathway study that was conducted in accordance with: (1) the *Work Plan for Groundwater Monitoring and Preferential Pathway Study*[1] (Work Plan) submitted to the Alameda County Environmental Health department (ACEH) by PES on October 7, 2009; and (2) the August 16, 2010 Work Plan approval letter from the ACEH. The Work Plan was developed by PES for Griffin based on a request from ACEH to submit a Work Plan addressing technical comments concerning the subject property (also known as the Atrium, and formerly Emery Bay Plaza) presented in a letter to Griffin dated July 7, 2009 (ACEH 2009 Letter). The request is based on ACEH staff review of an April 27, 2001 report[2] prepared by PES, which included a request for regulatory case closure.

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

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

BACKGROUND INFORMATION

One 2,000-gallon gasoline underground storage tank (UST) was removed from the Site in July 1987. A fuel release affecting soil and groundwater was discovered at that time. Soil remediation activities were completed under a remedial plan[3] approved by ACEH in 1988. Groundwater monitoring was initiated in November 1989. A groundwater remediation system was installed in December 1990 to extract and treat groundwater. In December 1991, PES was retained by P.O. Partners, the Site manager at the time, to operate the remediation system. Because of the low rate at which petroleum hydrocarbons were being removed from the subsurface, remediation via groundwater extraction was terminated in October 1993 and an *in-situ* bioremediation pilot program was initiated to better address remaining concentrations of dissolved petroleum hydrocarbons in the vicinity of the former UST. The pilot study began in August 1994 and the *in-situ* bioremediation program continued until December 1998. At that time, ACEH approved cessation of groundwater remediation and monitoring, and directed the Site be evaluated for closure. In April 2001, PES submitted a report[4] to ACEH that recommended no further groundwater monitoring on the basis of the stable and localized nature of the groundwater plume, and requested documentation of "No Further Action" (NFA) with respect to the former UST.

In response to the NFA request in April 2001, the ACEH 2009 Letter was issued to Griffin. Technical comments in the ACEH 2009 Letter included requests for: (1) performing a groundwater sampling and monitoring event; and (2) performing a preferential pathway study. As described above, PES submitted a Work Plan on behalf of Griffin, and ACEH conditionally approved the Work Plan on August 16, 2010.

As a condition of the Work Plan approval, ACEH requested that reports referencing the installation of a passive soil methane collection, control, and monitoring system at the Site be submitted to ACEH for review. A Completion Report[5], and the Operation and Maintenance Manual[6] for the methane venting system were submitted to the ACEH for review on September 29, 2010. As detailed in the Completion Report, the system consists of 24 vertical gas ventilation wells which collect methane gas from beneath the building slab and vent the gas to the atmosphere at the roof. The methane system also significantly diminishes the potential for intrusion of fuel-related vapors, if any, to the building interior. Therefore, because the

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

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

[5] PES Environmental, Inc., 2005. *Completion Report, Construction of Methane Collection, Control, and Monitoring System, The Atrium Property, 1650 65th Street, Emeryville, California*. April 14.

[6] PES Environmental, Inc., 2005. *Operation and Maintenance Manual, Methane Collection, Control, and Monitoring System, The Atrium Property, 1650 65th Street, Emeryville, California*. April 14.

exposure pathway for sub-slab vapor intrusion by organic vapors is substantially mitigated by the methane control system, further evaluation of the vapor intrusion pathway was not contemplated in the Work Plan.

The results of the scope of work described in the approved Work Plan and a description of methods are presented below.

SCOPE OF WORK

The scope of work included the following activities: (1) field preparation activities; (2) collection and analysis of groundwater samples from Site monitoring wells MW-2, MW-3, MW-4, MW-6, MW-8, and extraction well EW-1; (3) conducting a preferential pathway study; and (4) technical report preparation and submittal. The results of these activities are described below.

DESCRIPTION OF FIELD PROCEDURES

Field Preparation Activities

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

C. Cruz Sub-Surface Locators, Inc. of Milpitas, California (a private underground utility locating service) was contracted to conduct subsurface electromagnetic surveys to assess for the presence of subsurface utilities in the source area. Groundwater monitoring well redevelopment and sampling services were provided by Blaine Tech, Inc. (Blaine Tech) of San Jose, California. Stationary laboratory chemical analyses of groundwater samples were performed by Curtis & Tompkins, Ltd. of Berkeley, California, a California-certified laboratory. The tops of the well casings were surveyed by PLS Surveys, Inc. of Oakland, California, a California registered land surveyor, to obtain vertical reference elevations relative to NAVD88 and horizontal coordinates relative to NAD83 at each monitoring well location. Survey results are presented in Appendix A.

Well Redevelopment

The last groundwater sampling event at the Site was in 2000. Based on the length of time since the wells were last sampled, and as described in the Work Plan, to obtain representative samples groundwater monitoring wells MW-2, MW-3, MW-4, MW-6, MW-8, and extraction

well EW-1 were redeveloped by Blain Tech utilizing a surge block and pumping with an electric submersible pump. The locations of groundwater monitoring wells are shown on Plate 2. The monitoring wells were developed on September 29 and 30, 2010. During development, water quality parameters including temperature, pH, specific conductance, and turbidity were monitored. Well development continued until water quality parameters were relatively stable. A minimum of 10 well casing volumes were removed from each well during redevelopment. Total purge volumes for the monitoring wells ranged from 65 to 115 gallons per well. Total well depth below top of casing (btoc) was recorded prior to and after well development; differences in total well depths ranged from 0.03 feet (MW-3) to 0.87 feet (MW-8), and indicate that the sedimentation rate in wells has been minimal. The post-development total well depths recorded by Blaine Tech are consistent with historical total well depths. Well development forms are presented in Appendix B.

The groundwater sampling activities included six groundwater monitoring wells located at the Site (MW-2, MW-3, MW-4, MW-6, MW-8, and EW-1, as shown on Plate 2). Wells MW-5 and MW-7 were recently sampled as part of an investigation at the two properties to the north (6601/6603 Shellmound Street), and were only gauged for depth-to-water measurements during the groundwater monitoring activities at the subject property.

Groundwater-Level Measurements

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

Groundwater Sampling Activities

Groundwater sampling activities were performed by Blaine Tech Services, Inc. of San Jose, and PES on October 6 and 7, 2010. Prior to the collecting of the samples, groundwater in each well casing was purged using a combination of disposable polyethylene bailers and electric submersible pumps. A minimum of three well volumes of groundwater was removed from each well during purging. Water quality parameters including temperature, pH, specific conductance, and turbidity were monitored during well purging and recorded on the Groundwater Sampling Forms (presented in Appendix C). Wells MW-3, MW-4, and MW-6 dewatered during purging activities. All wells were allowed to recharge to at least 80% of the pre-purging water level prior to sampling. Following purging, groundwater samples were

collected from each well in the proper laboratory provided containers using new polyethylene disposable bailers with bottom emptying devices designed to minimize sample volatilization.

The filled sample bottles were labeled, packaged, and stored in a chilled, thermally insulated cooler until delivery to Curtis & Tompkins of Berkeley, California. Each sample was assigned a sample number and logged on the Chain-of Custody (COC) Record. The COC Record accompanied the samples to the laboratory to document sample possession from the time of collection. The COC Record is provided with the laboratory analytical report in Appendix D.

The groundwater samples were analyzed for: (1) total petroleum hydrocarbons quantified as gasoline (TPHg) using U.S. EPA Test Method 8015B; and (2) benzene, toluene, ethylbenzene, xylenes (BTEX), and fuel additives methyl tertiary-butyl ether (MTBE), ethyl tertiary-butyl ether (ETBE), di-isopropyl ether (DIPE), tert-butyl alcohol (TBA), ethylene dibromide (EDB), 1,2-dichloroethane (1,2-DCA), and tertiary-amyl methyl ether (TAME) using U.S. EPA Test Method 8260B.

Investigation-Derived Wastes

Purged groundwater and rinsate generated during well redevelopment, sampling, and decontamination activities were temporarily stored on-Site in 55-gallon DOT-approved drums, pending IDW characterization results, and off-Site transportation and disposal.

RESULTS OF GROUNDWATER MONITORING

Groundwater Level Elevations

Depth-to-groundwater measurements from October 6, 2010 and the calculated groundwater elevations (referenced to the North American Vertical Datum of 1988 [NAVD88]) are summarized in Table 1.

Groundwater-level elevations collected from the monitoring wells on October 6, 2010 ranged from 6.34 feet above mean sea level (feet msl; MW-6) to 9.67 feet msl (MW-7). Groundwater elevation contours developed for October 6, 2010 are presented on Plate 3. In general, groundwater elevations are consistent with measurements obtained during previous monitoring events (from 1990 to 2000). Historical groundwater-level elevation data is presented in Appendix E. Based on measured water levels on October 6, 2010, groundwater flow direction at the Site was calculated to be toward the southwest, with an approximate gradient ranging from 0.004 to 0.005 foot per foot. The direction of groundwater flow and gradient are consistent with historical data, and with regional groundwater flow directions (generally westward, toward San Francisco Bay).

Groundwater Analytical Results

The results of laboratory analyses of groundwater samples are presented in Table 2. The distribution of petroleum hydrocarbons in groundwater at the Site is shown on Plate 4. The laboratory analytical report for groundwater samples collected during the subject groundwater sampling event is provided in Appendix D. A table of analytical results from historical monitoring events is presented in Appendix E. Results for analytes not detected and not listed in Table 2 are provided in the laboratory analytical report.

Concentrations of TPHg and BTEX from wells nearest the source area (wells MW-2 and EW-1, located within the backfill of the former UST excavation) significantly decreased compared to the last historical sampling event for the two wells (performed in October 2000). A comparison of groundwater results from the October 6 and 7, 2010 samples (October 2010) to concentrations detected in the last historical sampling event (October 2000) for wells MW-2 and EW-1 indicates:

- TPHg in wells MW-2 and EW-1 decreased from 16,000 µg/L to 6,100 µg/L, and from 7,700 µg/L to 1,200 µg/L, respectively;
- Benzene in wells MW-2 and EW-1 decreased from 3,800 µg/L to 700 µg/L, and from 3,000 µg/L to 170 µg/L, respectively;
- Toluene in wells MW-2 and EW-1 decreased from 3,800 µg/L to 700 µg/L, and from 3,000 µg/L to 170 µg/L, respectively;
- Ethylbenzene in wells MW-2 and EW-1 decreased from 730 µg/L to 190 µg/L, and from 380 µg/L to 6.5 µg/L, respectively; and
- Total Xylenes in wells MW-2 and EW-1 decreased from 1,800 µg/L to 641 µg/L, and from 200 µg/L to 16.2 µg/L, respectively.

The groundwater samples from wells MW-4 and MW-6, located downgradient of the former UST, had relatively low concentrations of TPHg, BTEX, and TBA. TPHg was detected at 52 µg/L in well MW-4, and was not detected at or above the laboratory reporting limit (50 µg/L) in well MW-6. BTEX was detected in MW-6 at concentrations of 1.7, 1.0, 0.9, and 2.3 µg/L, respectively. Low concentrations of benzene and TBA were detected in MW-4 (1.5 and 14 µg/L, respectively).

Well MW-3, cross-gradient from the former on-Site UST area, had relatively low detections of TPHg (110 μg/L), BTEX (4.2, 0.9, 0.8, 1.9 μg/L, respectively) and MTBE (1.4 μg/L). Well MW-8, located up-gradient of the former UST, had detections of TPHg (2,900 μg/L), benzene (1,500 μg/L), toluene (15 μg/L), and total xylenes (10 μg/L).

The October 2010 groundwater sampling results indicate that: (1) based on groundwater concentrations in wells MW-2 and EW-1 (in the vicinity of the former UST), MW-3, MW-4, and MW-6, the plume is stable or shrinking; and (2) groundwater concentrations are generally below the San Francisco Bay Regional Water Quality Control Board (RWQCB)[7] non-drinking water ceiling[8] Environmental Screening Levels (ESLs), with the exception of TPHg and toluene at MW-2, as shown in Table 2. Groundwater concentrations at the Site are all below commercial/industrial ESLs for potential vapor intrusion concerns.

Petroleum hydrocarbons were not detected in historical groundwater samples from well MW-8, upgradient of the former UST. The presence of BTEX in well MW-8, and in particular the elevated benzene-to-TPHg ratio in MW-8 relative to the on-Site source area wells[9], suggest that these petroleum hydrocarbon constituents are moving on to the Site from an off-Site source(s). Concentrations of TPHg and BTEX in well MW-8 are below non-drinking water ceiling and vapor intrusion ESLs.

RESULTS OF PREFERENTIAL PATHWAY STUDY

As described in the ACEH 2009 Letter, the purpose of the preferential pathway study was to locate potential migration pathways and conduits and determine the probability of dissolved contaminant plume(s) encountering preferential pathways and conduits that could spread contamination. Results of the preferential pathway study are presented below.

Utility Survey

PES performed file reviews at the City of Emeryville Building Department and Public Works Department. Pertinent information on utilities in the vicinity of the former UST included:

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[7] RWQCB, 2008. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater,* Interim Final. May.

[8] Groundwater found in the Berkeley Alluvial Plain is designated by the San Francisco Bay Regional Water Quality Control Board as being in Zone B, which indicates groundwater is unlikely to be used as a drinking water source. In addition, City of Emeryville Ordinance No. 07-006 prohibits the use of groundwater for water supply purposes. Given the designation of groundwater in the vicinity, non-drinking water supply ESLs are considered an applicable point of comparison in this Report.

[9] The benzene-to-TPHg ratio for well MW-8 (0.52) is approximately four times greater than the ratios for groundwater in well MW-2 (0.12) and well EW-1 (0.14), indicating that it is a less aged fuel.

(1) construction drawings, dated March 16, 1990 and indicating locations of sanitary sewer mains, laterals, and cleanouts, and location of the gas main; and (2) a grading and drainage plan, dated January 24, 1990, and indicating storm drain features at the Site. A subsurface electromagnetic survey was conducted on September 29, 2010 by C. Cruz Sub-Surface Locators, Inc. of Milpitas, California (a private underground utility locating service) to assess the presence of utilities in the vicinity of the former UST.

The locations of utilities within the vicinity of the former UST and plume area identified through the file review and field activities are shown on Plate 5. The natural gas main line is located at the northeast corner of the property, and is plumbed to gas meters located at the northeast corner of the building before distribution throughout the building from overhead lines. The sanitary sewer main line is located in 65th Street, and enters the property near the southwest portion of the Site. A sanitary sewer lateral is present approximately 100 feet west of the former UST, and runs westward toward the sanitary sewer main. A fire service line was identified west of MW-6.

Field measurements of the storm drains at the southern edge of the property indicate that the inverts range from approximately 1.5 to 2 feet below ground surface (bgs), which is above historical groundwater-level elevations. Based on the absence of identified horizontal conduits in the vicinity of the former UST and the affected groundwater plume, it is unlikely that on-Site utilities present a concern for preferential migration of contaminants.

Well Survey

PES reviewed water well completion reports obtained from the California Department of Water Resources (DWR) within a 0.25-mile radius of the Site. The well logs are presented in Appendix F. Based on the review of well logs, relatively shallow off-Site monitoring wells (less than 35 feet bgs total depth) are present at locations downgradient from the Site. Based on (1) the distance of the identified off-Site wells, and (2) the shallow screened intervals of the wells, it is unlikely that the off-Site wells present a concern for vertical migration of contaminants.

CONCLUSIONS

The results of the recent groundwater monitoring and preferential pathway study and, taken with results from historical groundwater monitoring activities, indicate the following:

- Depth-to-water measurements and corresponding groundwater elevations collected during the October 6, 2010 groundwater monitoring indicate (1) the direction of groundwater flow in the vicinity of the former UST is to the southwest with a shallow

gradient, and (2) the direction of groundwater flow is consistent with historical groundwater monitoring data;

- Concentrations of TPHg and BTEX in wells MW-2 and EW-1 (in the near vicinity of the former UST) have decreased significantly compared to data collected from MW-2 and EW-1 in October 2000, and confirm that groundwater concentrations in the vicinity of the former UST have continued to attenuate with time;

- Current concentrations of TPHg and BTEX in wells MW-4 and MW-6 suggest the plume is stable or shrinking when compared to prior monitoring data;

- Based on the lack of historical detections of BTEX in well MW-8, the recent detections of petroleum hydrocarbon constituents in this well suggest an off-Site source of petroleum fuel hydrocarbons upgradient from MW-8;

- No lateral or vertical conduits were identified in the vicinity of the former UST. Available water well information for the vicinity indicates that wells are generally used only for monitoring or remediation purposes;

- Groundwater concentrations in wells are below the ESLs for potential vapor intrusion concerns, and are generally below the non-drinking water ceiling ESLs; and

- The methane collection, control, and monitoring system significantly effectively diminishes the potential for intrusion of fuel-related vapors, if any, to the building interior in the vicinity of the former UST, and thus effectively mitigates the potential exposure pathway for sub-slab vapor intrusion by organic vapors.

RECOMMENDATIONS

On the basis of the results contained in this Report, which indicates the localized and stable nature of the groundwater plume and continued natural attenuation, and the absence of a potential vapor intrusion risk, no further soil or groundwater investigation or groundwater monitoring is recommended. Accordingly, on behalf of Griffin PES respectfully requests regulatory closure of the former UST located at 1650 65th Street.

We trust that this is the information you require at this time. Please call either of the undersigned if you have any questions.

Yours very truly,

PES ENVIRONMENTAL, INC.

Christopher J. Baldassari
Senior Geologist

Robert S. Creps, P.E.
Principal Engineer

Attachments: Table 1 – Depth to Groundwater and Groundwater Elevations
Table 2 – Summary of Groundwater Analytical Data
Plate 1 – Site Location Map
Plate 2 – Site Plan and Vicinity Map
Plate 3 – Groundwater Elevation Contours on October 6, 2010
Plate 4 – Groundwater Sampling Results
Plate 5 – Location of Utilities
Appendix A – Monitoring Well Survey Information
Appendix B – Well Development Forms
Appendix C – Groundwater Sampling Forms
Appendix D – Groundwater Samples – Laboratory Analytical Report and Chain of Custody Documentation
Appendix E – Groundwater Data Tables from April 2001 Groundwater Monitoring Report
Appendix F – DWR Water Well Logs (on Compact Disc)

cc: Barbara J. Jakub, Alameda County Department of Environmental Health
Julie A. Treinen, Griffin Capital Corporation

TABLES

Table 1
Depth-to-Groundwater and Groundwater Elevations
1650 65th Street
Emeryville, California

Well Identification	Measurement Date	Top of Casing Elevation (feet MSL)	Depth to Groundwater (feet btoc)	Groundwater Elevation (feet MSL)
EW-1	10/6/2010	18.25	10.39	7.86
MW-2	10/6/2010	18.24	10.36	7.88
MW-3	10/6/2010	14.92	8.41	6.51
MW-4	10/6/2010	14.73	8.03	6.70
MW-5	10/6/2010	15.34	6.83	8.51
MW-6	10/6/2010	14.53	8.19	6.34
MW-7	10/6/2010	15.45	5.78	9.67
MW-8	10/6/2010	17.52	10.85	6.67

Notes:
MSL - mean sea level, referenced to North American Vertical Datum of 1988 (NAVD88).
btoc - below top of casing

Table 2
Summary of Groundwater Analytical Data
1650 65th Street
Emeryville, California

Sample Identification	Date Collected	TPHg (µg/L)	BTEX & Fuel Oxygenates					
			Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	TBA (µg/L)	MTBE (µg/L)
EW-1	10/7/2010	**1,200**	**170**	**36**	**6.5**	**16.2**	ND (25)	ND (1.3)
MW-2	10/7/2010	**6,100**	**700**	**510**	**190**	**641**	ND (10)	ND (0.5)
MW-3	10/7/2010	**110**	**4.2**	**0.9**	**0.8**	**1.8**	ND (10)	**1.4**
MW-4	10/7/2010	**52**	**1.5**	ND (0.5)	ND (0.5)	ND (0.5)	**14**	ND (0.5)
MW-6	10/7/2010	ND (50)	**1.7**	**1**	**0.9**	**2.3**	ND (10)	ND (0.5)
MW-8	10/6/2010	**2,900**	**1,500**	**15**	ND (10)	**10**	ND (200)	ND (10)
Non-Drinking Water Ceiling ESL[(1)]		5,000	20,000	400	300	5,300	50,000	1,800
Drinking Water Ceiling ESL[(2)]		100	170	40	30	20	50,000	5
Drinking Water ESL[(3)]		210	1	150	300	1,800	12	13
Vapor Intrusion ESL - Commercial Exposure[(4)]		--	1,800	530,000	170,000	160,000	--	80,000

Notes:

BTEX and Fuel Oxygenates analyzed using U.S. Environmental Protection Agency (EPA) Test Method 8260B.

TPHg analyzed using EPA Test Method 8015B

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes

TPHg = total petroleum hydrocarbons quantified as gasoline

TBA = Tert-butyl alcohol

MTBE = Methyl tert-butyl ether

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

-- = Not applicable

(1) California Regional Water Quality Control Board, San Francisco Region (RWQCB) Environmental Screening Level (ESL), Non-Drinking Water Gross Contamination Ceiling Levels (Table I-2; May 2008).

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

(3) RWQCB Drinking Water Screening Levels (Table F-3; May 2008).

(4) RWQCB Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns (Table E-1; May 2008).

PLATES

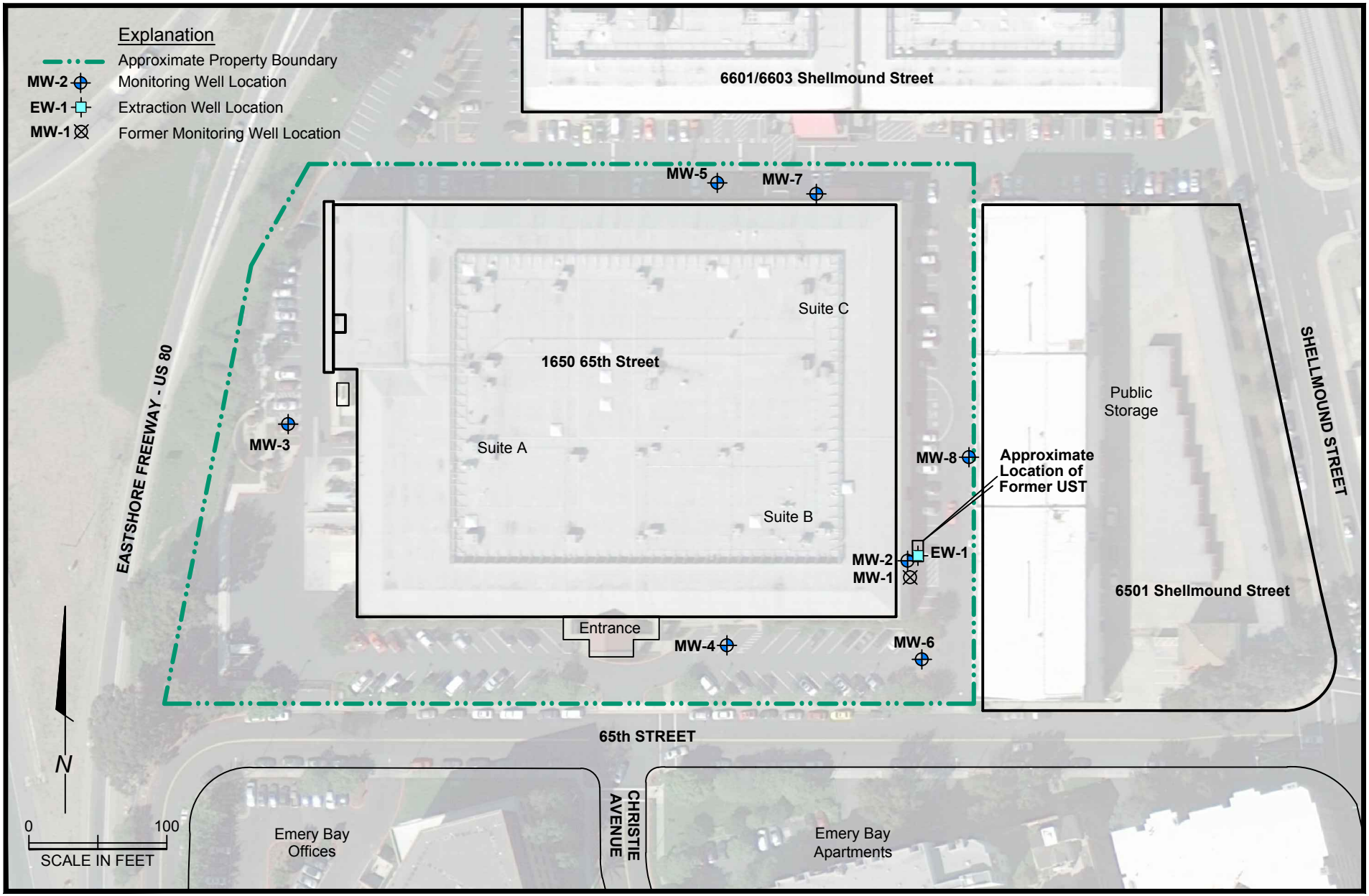
U.S.G.S. Topo Map - Oakland West, California, 7.5-minute quadrangle. Map version1997; current as of 1993

PES Environmental, Inc.
Engineering & Environmental Services

Site Location Map
1650 65th Street
Emeryville, California

PLATE
1

1211.001.01.001	121100101003_1-5	RSC	10/10
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

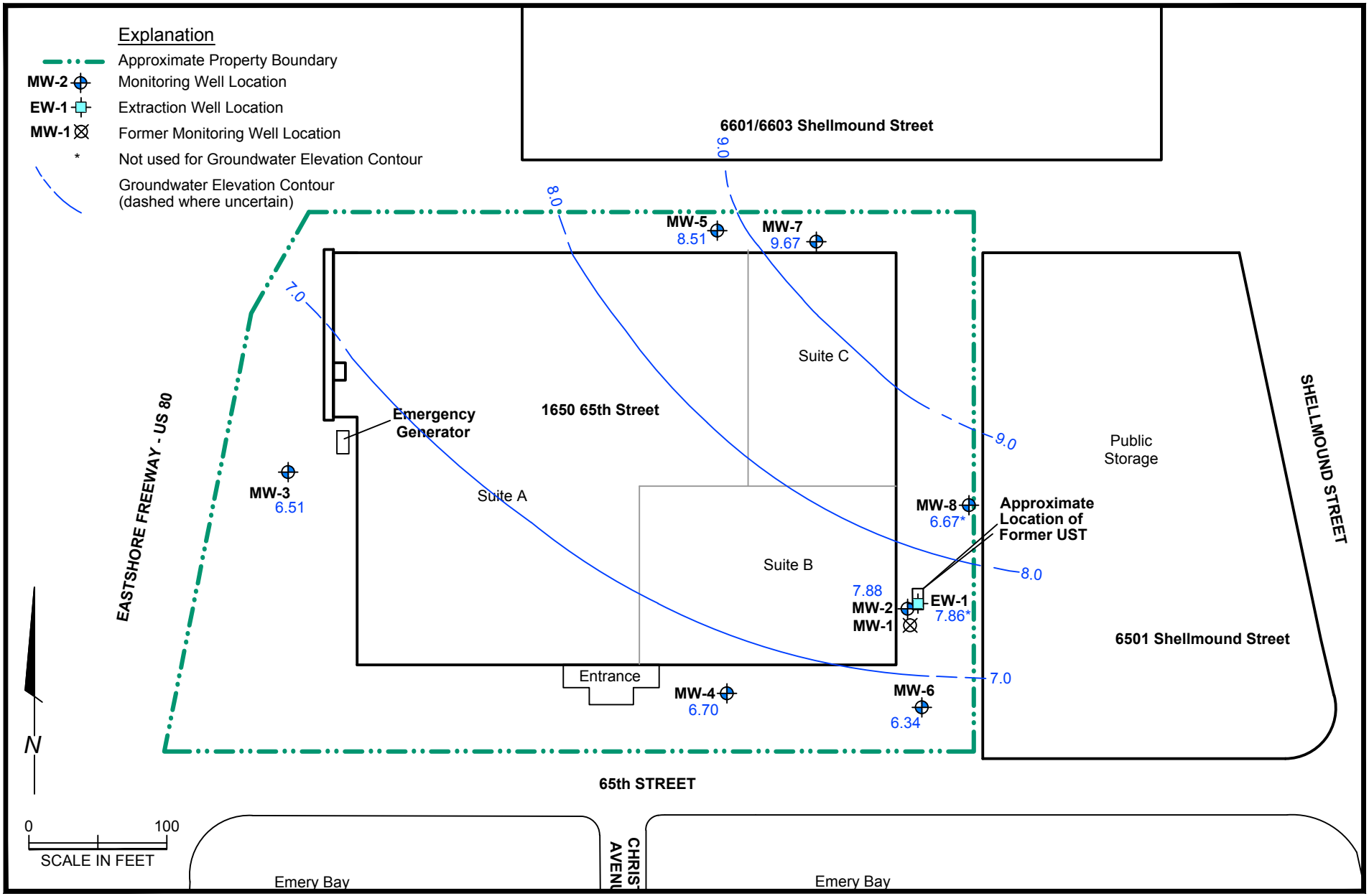


PES Environmental, Inc.
Engineering & Environmental Services

Site Plan and Vicinity Map
1650 65th Street
Emeryville, California

PLATE
2

1211.001.01.003	121100101003_1-5	RSC	10/10
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

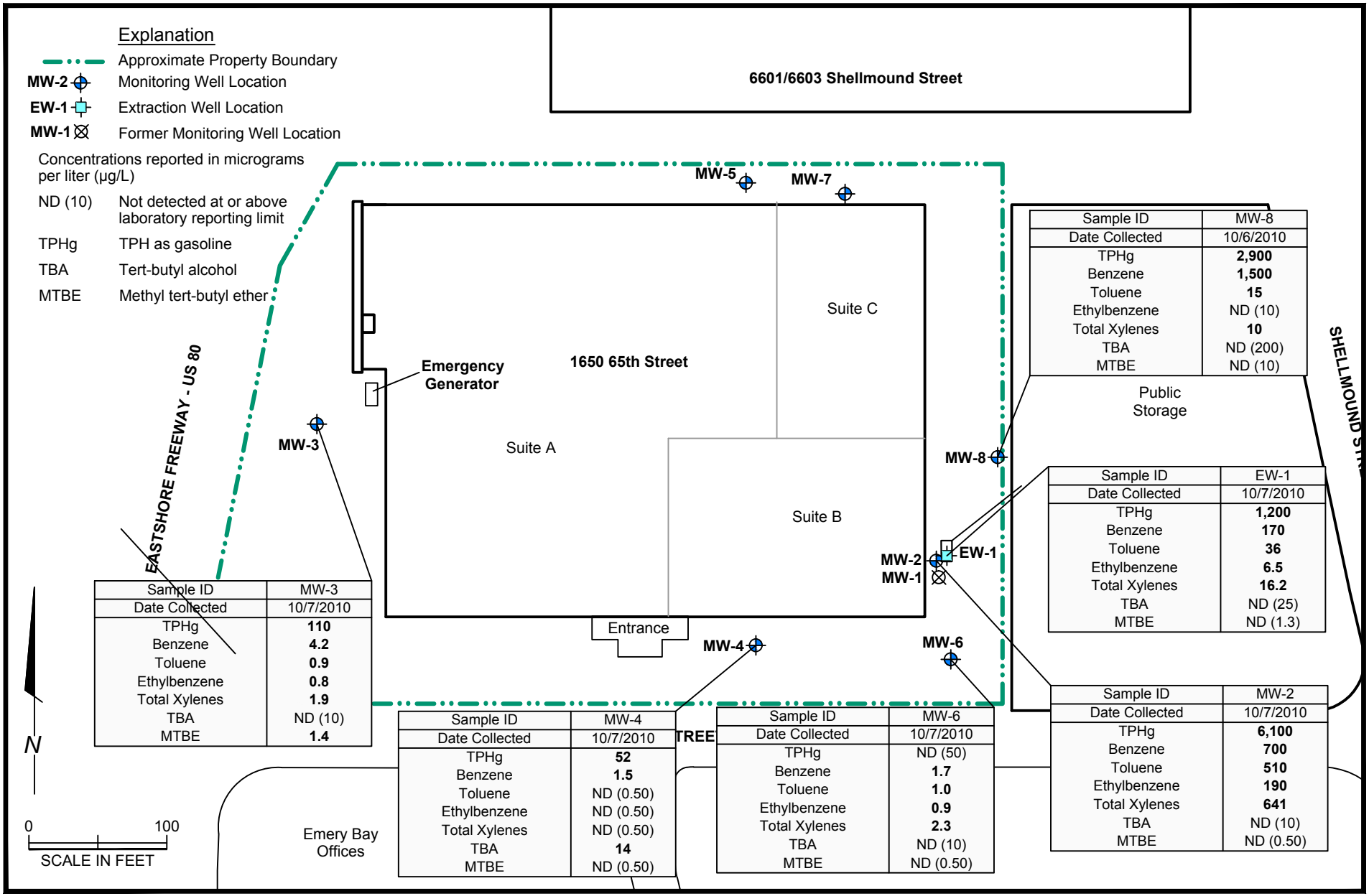


PES Environmental, Inc.
Engineering & Environmental Services

Groundwater Elevation Contours on October 6, 2010
1650 65th Street
Emeryville, California

PLATE
3

1211.001.01.003	121100101003_1-5	RSC	10/10
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



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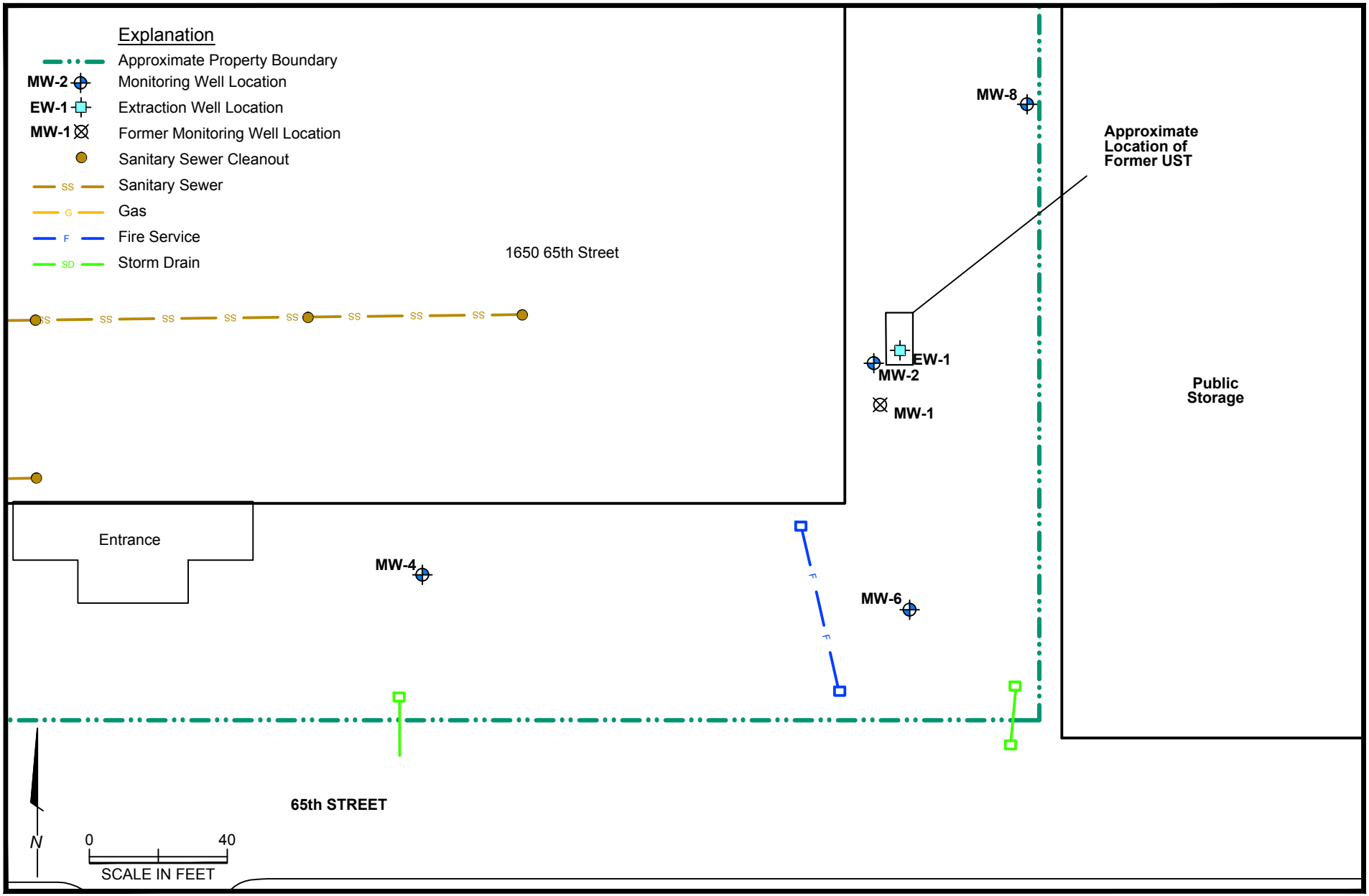
Groundwater Sampling Results
1650 65th Street
Emeryville, California

PLATE
4

1211.001.01.003	121100101003_1-5	RSC	10/10
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE



PES Environmental, Inc.
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Location of Utilities
1650 65th Street
Emeryville, California

PLATE
5

1211.001.01.003	121100101003_1-5	RSC	10/10
JOB NUMBER	DRAWING NUMBER	REVIEWED BY	DATE

APPENDIX A

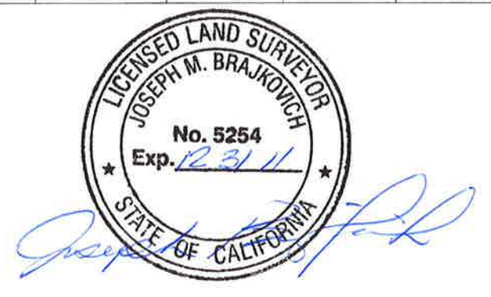
MONITORING WELL SURVEY INFORMATION

PLS Surveys Inc.
10/13/2010

1650 65th St. - Emeryville, CA - PSE Environmental

10059

POINT NO.	NORTHING NAD83	EASTING NAD83	LATTITUDE	LONGITUDE	ELEVATION CASING NAVD88	ELEVATION VAULT NAVD88	DESCRIPTION	GPS CODE	ACCURACY CENTIMETER	HORZ. CODE	COMPANY	EQUIP.	DATE	VERT. CODE	CLASS
31	2135613.91	6043195.83	37.5046883	-122.1744588	14.53	14.85	MW-6	RTK	0.50	NAD83	PLS SURVEYS INC.	L530	10/6/2010	DIG	MW
33	2135683.75	6043205.93	37.5047576	-122.1744479	18.25	18.77	EW-1	RTK	0.50	NAD83	PLS SURVEYS INC.	L530	10/6/2010	DIG	MW
35	2135683.40	6043197.47	37.5047571	-122.1744584	18.25	19.08	MW-2	RTK	0.50	NAD83	PLS SURVEYS INC.	L530	10/6/2010	DIG	MW
112	2135948.11	6043136.12	37.5050176	-122.1745412	15.45	15.89	MW_7	RTK	0.50	NAD83	PLS SURVEYS INC.	L530	10/6/2010	DIG	MW
117	2135950.38	6043067.17	37.5050185	-122.1746272	15.34	15.85	MW_5	RTK	0.50	NAD83	PLS SURVEYS INC.	L530	10/6/2010	DIG	MW
118	2135755.55	6043255.18	37.5048295	-122.1743882	17.52	17.84	MW_8	RTK	0.50	NAD83	PLS SURVEYS INC.	L530	10/6/2010	DIG	MW
120	2135624.13	6043065.67	37.5046960	-122.1746213	14.73	15.02	MW_4	RTK	0.50	NAD83	PLS SURVEYS INC.	L530	10/6/2010	DIG	MW
123	2135788.67	6042738.36	37.5048524	-122.1750332	14.92	15.36	MW_3	RTK	0.50	NAD83	PLS SURVEYS INC.	L530	10/6/2010	DIG	MW



APPENDIX B

WELL DEVELOPMENT FORMS

PURGE DRUM INVENTORY LOG

CLIENT P.E.S.

SITE ADDRESS 1650 65th ST Emeryville CA

STATUS OF DRUM(S) UPON ARRIVAL							
DATE	9-30-10						
Number of drum(s) empty:							
Number of drum(s) 1/4 full:							
Number of drum(s) 1/2 full:							
Number of drum(s) 3/4 full:							
Number of drum(s) full:							
Total drum(s) on site:	Ø						
Are the drum(s) properly labeled?							
Drum ID & Contents:							
STATUS OF DRUM(S) UPON DEPARTURE							
DATE	9-30-10						
Number of drum(s) empty:							
Number of drum(s) 1/4 full:							
Number of drum(s) 1/2 full:							
Number of drum(s) 3/4 full:							
Number of drum(s) full:	8						
Total drum(s) on site:	8						
Are the drum(s) properly labeled?	yes						
Drum ID & Contents:	Purged H_2O						
LOCATION OF DRUM(S)							
Describe location of drum(s):	Next To Cardboard Compactor in U.S. Treasury Dept. (close To MW-3)						
FINAL STATUS							
Number of new drum(s) left on site this event:	8						
Date of inspection:	9-30-10						
Logged by BTS Field Technician:	MP						
Office reviewed by:							

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME	Emery Bay Plaza Site - 1650 65th	JOB NUMBER	100929.mp1

EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED WITHIN 10%	COMMENTS	TEMP.	INIT
Ultrameter II	6223841	9/29/10 09:00 AM / PM	PH 4.7.10. cond 3900	4. 7. 10. 3900	Yes / No		68 °F / °C	
2100P Turbidimeter		9/29/10 09:50 AM / PM	800 NTU	800 NTU	Yes / No		— °F / °C	
myron L Ultrameter II	6222814	9/29/10 09:00 AM / PM	PH 7,10,4 3900 µs	7.02, 4.03, 10.03 3862 µs	Yes / No		69 °F / °C	
2100P Turbidimeter	08120C033043	/ / : AM / PM	500 NTU	500 NTU	Yes / No		NA °F / °C	
		/ / : AM / PM			Yes / No		°F / °C	
		/ / : AM / PM			Yes / No		°F / °C	
Ultrameter II	6223841	9/30/10 08:45 AM / PM	PH 4. 7. 10. cond 3900	4. 7. 10. 3900	Yes / No		65 °F / °C	
2100P Turbidimeter		9/30/10 08:47 AM / PM	800 NTU	801	Yes / No		— °F / °C	
myron L Ultrameter II	6222814	9/30/10 08:31 AM / PM	PH 7,10,4 3900µs	7.01, 10.03, 4.04 3906 µs	Yes / No		65 °F / °C	
2100P Turbidimeter	08120C033043	9/30/10 08:30 AM / PM	500 NTU	500 NTU	Yes / No		NA °F / °C	
		/ / : AM / PM			Yes / No		°F / °C	
		/ / : AM / PM			Yes / No		°F / °C	

WELL GAUGING DATA

Project # 100929mp1 Date 9-29-10 Client P.E.S.

Site: **Emery Bay Plaza Site - 1650 65th Street - Emeryville, CA**

Well ID	Time	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	Develop Order:
PRE: EW-1	1009	4	Strong odor				10.20	27.94	TOC	6
POST: EW-1	1230		Strong odor				10.80	28.10		
PRE: MW-2	10:19	2	odor				10.20	23.00		5
POST: MW-2	10:30		odor				10.32	23.82		
PRE: MW-3	1020	4					8.20	18.20		3
POST: MW-3	1315						16.20	18.23		
PRE: MW-4	1000	4					6.52	16.90		2
POST: MW-4	1150						11.20	16.95		
PRE: MW-6	1016	4					7.47	18.43		4
POST: MW-6	1355						16.90	18.80		
PRE: MW-8	10:15	2	odor				10.70	24.00		1
POST: MW-8	1010		odor				20.22	24.87		

WELL DEVELOPMENT DATA SHEET

Project #: 100929-MP1	Client: PES Environmental
Developer: M. Pestoni	Date Developed: 9/ 30 /2010
Well I.D. EW-1	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth: Before 27.92 After 28.10	Depth to Water: Before 10.20 After ~~10.80~~ 10.80
Reason not developed:	If Free Product, thickness:
Additional Notations:	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	2"	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

11.53	X	11	=	115.3
1 Case Volume		Specified Volumes		gallons

Purging Device: ~~Bailer~~ ☒ Middleburg ☒ Electric Submersible ☒ Suction Pump ☐

Type of Installed Pump _____

Other equipment used Surge Block

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1050	67.7	7.6	1192	58.2	11.5	D.T.W. 10.40 * Heavy Bottom
1106	68.8	7.2	1199	32.7	23.0	Strong oDor
1120	69.2	7.2	1198	18.9	34.5	
1136	69.2	7.2	1195	14.4	46.0	
- Re Surged Well - Changed To E.S. Pump -						D.T.W. 10.30
1200	69.3	7.4	1208	>1000	57.5	
1202	69.9	7.1	1201	161.6	69.0	clear
1205	70.0	7.1	1197	18.6	80.5	
1208	70.2	7.0	1196	8.5	92.0	DTW 10.80
1210	70.2	7.0	1195	6.6	103.5	
1213	70.3	7.0	1195	5.8	115.3	DTW 10.80
						TD 28.10

Did Well Dewater? No	If yes, note above.	Gallons Actually Evacuated:	115.3

WELL DEVELOPMENT DATA SHEET

Project #: 100929-MP1	Client: PES Environmental
Developer: M. Pestoni	Date Developed: 9/29/2010
Well I.D. MW-2	Well Diameter: (circle one) (2) 3 4 6
Total Well Depth: Before 23.00 After 23.82	Depth to Water: Before 10.20 After 10.32
Reason not developed:	If Free Product, thickness:
Additional Notations:	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	2"	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

2.0	X	10	=	20.5
1 Case Volume		Specified Volumes		gallons

Purging Device: Bailer ☒ Electric Submersible ☐
Middleburg ☒ Suction Pump ☐

Type of Installed Pump _____
Other equipment used Surge Block

TIME	TEMP (F)	pH	Cond. (mS or (µS))	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
9/29 1400	69.8	8.6	1175	>1000	2.0	Strong odor
1407	69.3	8.1	1165	>1000	4.0	Heavy with silt & sand
1413	69.4	7.8	1159	>1000	6.0	strong odor
1419	69.6	7.7	1145	>1000	8.0	
1425	69.7	7.6	1141	>1000	10.0	
1431	69.7	7.6	1141	>1000	12.0	D.T.W. 10.20
1437	69.7	7.5	1138	>1000	14.0	
1443	69.7	7.5	1135	>1000	16.0	
1449	69.7	7.5	1134	>1000	18.0	
1455	69.7	7.5	1130	>1000	20.0	
9/30 – Re Surged well						
0837	66.7	7.9	1190	>1000	22.0	
0844	67.9	7.7	1162	>1000	24.0	DTW 10.20
Did Well Dewater? No		If yes, note above.		Gallons Actually Evacuated:		24.0

WELL DEVELOPMENT DATA SHEET

Well I.D. MW-2	PAGE 2 OF 2
Project #: 100929-MP1	Client: PES Environmental

TIME	TEMP (F)	pH	Cond. (mS or (µS))	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0848	67.9	8.8	1201	>1000	24.0	* Hard Bottom *
0852	68.0	7.9	1166	>1000	26.0	
0855	68.1	7.8	1160	850	28.0	clearing
0859	68.3	7.7	1149	569	30.0	↓
0903	68.4	7.6	1151	258	32.0	
0906	68.5	7.5	1151	190	34.0	
0910	68.5	7.5	1151	110	36.0	D.T.W. 10.27
0914	68.5	7.5	1151	90	38.0	Amber yellow in color
0917	68.5	7.5	1150	43	40.0	↓
0920	68.5	7.5	1149	25	42.0	
0923	68.5	7.4	1148	19.0	44.0	
0927	68.5	7.4	1148	18.1	46.0	D.T.W. 10.30
0931	68.5	7.4	1149	15.2	48.0	
0935	68.5	7.4	1150	10.6	50.0	clear / No color
0939	68.5	7.4	1151	9.3	52.0	- strong odor - ↓
0944	68.4	7.4	1152	8.9	54.0	
0948	68.5	7.4	1153	8.9	56.0	
0952	68.5	7.4	1153	8.3	58.0	
0956	68.5	7.4	1153	7.6	60.0	D.T.W. 10.32
1000	68.6	7.4	1154	6.9	62.0	
1004	68.6	7.4	1154	6.6	64.0	
1008	68.6	7.4	1155	6.3	66.0	
1012	68.6	7.4	1155	5.8	68.0	
1016	68.6	7.4	1155	5.1	70.0	
1020	68.6	7.4	1156	4.8	72.0	
1024	68.6	7.4	1156	4.6	74.0	T.D. 23.82

WELL DEVELOPMENT DATA SHEET

Project #: 100929-MP1	Client: PES Environmental
Developer: M. Pestoni	Date Developed: 9/ 29 /2010
Well I.D. MW- 3	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth: Before 18.20 After 18.23	Depth to Water: Before 8.20 After 16.20
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged well for 15 mins	

Volume Conversion Factor (VCF):
{12 x (d^2/4) x π} /231
where
12 = in / foot
d = diameter (in.)
π = 3.1416
231 = in 3/gal

Well dia.		VCF
2"	=	0.16
3"	=	0.37
4"	=	0.65
6"	=	1.47
10"	=	4.08
12"	=	6.87

6.5	X	10	=	65
1 Case Volume		Specified Volumes		gallons

Purging Device: Bailer ☐ Electric Submersible ☐
Middleburg ☒ Suction Pump ☐

Type of Installed Pump None
Other equipment used Surge Block

TIME	TEMP (F)	pH	Cond. (mS or (µS))	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1229	79.2	8.32	2144	79	6.5	clear Hard Bottom
1236	77.1	8.31	2.100	42	13.0	clear Hard Bottom
1238	78.0	7.81	2124	41	19.5	switched to ES pump
1240	77.1	7.83	2193	38	26.0	clear hard Bottom
1242	76.1	7.81	2210	37	32.5	clear hard Bottom
1248	76.3	7.78	2213	35	39.0	clear Hard Bottom *
1254	76.9	7.77	2219	36	45.5	clear Hard Bottom
1300	76.8	7.76	2224	36	52.0	clear Hard Bottom
1306	77.2	7.75	2226	35	58.5	clear Hard Bottom
1312	77.4	7.73	2221	36	65.0	clear Hard Bottom
* well	Drawing	down	switched	back	to PES	pump

Did Well Dewater? NO	If yes, note above.	Gallons Actually Evacuated:	65.0

WELL DEVELOPMENT DATA SHEET

Project #: 100929-MP1	Client: PES Environmental
Developer: M. Pestoni	Date Developed: 9/ 29 /2010
Well I.D. MW-4	Well Diameter: (circle one) 2 3 (4) 6 __
Total Well Depth: Before 16.90 After 16.95	Depth to Water: Before 6.52 After 11.20
Reason not developed:	If Free Product, thickness:
Additional Notations: surged well for 15 mins	

Volume Conversion Factor (VCF):
{12 x (d^2/4) x π} /231
where
12 = in / foot
d = diameter (in.)
π = 3.1416
231 = in 3/gal

Well dia.		VCF
2"	=	0.16
3"	=	0.37
4"	=	0.65
6"	=	1.47
10"	=	4.08
12"	=	6.87

6.7	X	10	=	67
1 Case Volume		Specified Volumes		gallons

Purging Device: Bailer ☐ Electric Submersible ☐
Middleburg ☒ Suction Pump ☐

Type of Installed Pump None
Other equipment used Surge Block

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1042	75.2	8.38	10.34	248	6.7	odor Black / Hard Bottom
1052	76.2	8.67	10.17	132	13.4	odor / Hard Bottom clearing up
1056	75.8	8.64	10.16	44	20.1	odor Hard Bottom clear
1101	75.5	8.14	10.20	42	26.8	odor Hard Bottom clear
1108	75.8	8.10	10.21	40	33.5	odor Hard Bottom clear
1114	75.8	8.11	10.23	39	40.2	odor Hard Bottom clear
1120	75.9	8.15	10.24	37	46.9	odor Hard Bottom clear
1126	76.2	8.16	10.22	35	53.6	odor Hard Bottom clear
1133	76.3	8.17	10.22	31	60.3	odor Hard Bottom clear
1140	76.4	8.18	10.22	33	67.0	odor Hard Bottom clear

Did Well Dewater? NO	If yes, note above.	Gallons Actually Evacuated:	67

WELL DEVELOPMENT DATA SHEET

Project #: 100929-MP1	Client: PES Environmental
Developer: M. Pestoni	Date Developed: 9/ 30 /2010
Well I.D. MW-6	Well Diameter: (circle one) 2 3 (4) 6
Total Well Depth: Before 18.43 After 19.80	Depth to Water: Before 7.47 After 16.90
Reason not developed:	If Free Product, thickness:
Additional Notations: Surged well for 15	

Volume Conversion Factor (VCF):	Well dia.		VCF
{12 x (d^2/4) x π} /231	2"	=	0.16
where	3"	=	0.37
12 = in / foot	4"	=	0.65
d = diameter (in.)	6"	=	1.47
π = 3.1416	10"	=	4.08
231 = in 3/gal	12"	=	6.87

7.1	X	10	=	71
1 Case Volume		Specified Volumes		gallons

Purging Device: Bailer ☐ Electric Submersible ☐
Middleburg ☒ Suction Pump ☐

Type of Installed Pump —
Other equipment used Surge Block

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
0836	68.6	7.89	3837	53	7.1	Hard Bottom
0850	65.7	8.21	5172	49	14.2	Hard Bottom clear
0908	65.9	8.04	8691	43	21.3	Hard Bottom clear
0910	well	Dewatered	@ 22	gallons	DTW: 17.00	
1150	DTW =	10.20	Surged	well	for 10	mins
1203	65.8	8.00	8914	429	28.4	Hard Bottom cloudy
1214	68.6	7.04	6879	208	35.5	Hard Bottom cloudy
1229	68.7	7.02	6921	191	42.6	Hard Bottom cloudy
1238	69.4	7.03	7222	75	49.7	Hard Bottom clear
1248	69.5	7.04	7628	68	56.8	Hard Bottom clear
~~1259~~ 1305	70.2	7.09	7816	36	63.9	Hard Bottom clear
1324	70.8	7.11	8121	27	71.0	Hard Bottom clear

Did Well Dewater? yes | If yes, note above. | Gallons Actually Evacuated: 71.0

WELL DEVELOPMENT DATA SHEET

Project #: 100929-MP1	Client: PES Environmental
Developer: M. Pestoni	Date Developed: 9/ 29 /2010
Well I.D. MW-8	Well Diameter: (circle one) (2) 3 4 6 ___
Total Well Depth: Before 24.00 After 24.67	Depth to Water: Before 10.70 After 20.22
Reason not developed:	If Free Product, thickness:
Additional Notations:	

Volume Conversion Factor (VCF):
{12 x (d^2/4) x π} /231
where
12 = in / foot
d = diameter (in.)
π = 3.1416
231 = in 3/gal

Well dia.		VCF
2"	=	0.16
3"	=	0.37
4"	=	0.65
6"	=	1.47
10"	=	4.08
12"	=	6.87

2.1	X	10	=	21.3
1 Case Volume		Specified Volumes		gallons

Purging Device: Bailer ☐ Middleburg ☒ Electric Submersible ☐ Suction Pump ☐

Type of Installed Pump ___

Other equipment used Surge Block

TIME	TEMP (F)	pH	Cond. (mS or (µS))	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1-29 1130	70.9	8.0	514.1	>1000	2.1	
1140	66.0	7.9	1907	>1000	4.2	
1146	66.0	7.3	2025	>1000	6.3	D.T.W. 16.80
1150	65.6	7.3	2092	>1000	8.4	
1156	65.5	7.3	2173	>1000	10.5	
1159	65.4	7.2	2320	>1000	12.6	
1207	65.4	7.2	2466	>1000	14.7	
1214	65.4	7.2	2491	>1000	16.8	D.T.W. 18.90
1221	65.4	7.2	2507	>1000	18.9	
1228	65.4	7.2	2513	>1000	21.3	Total Depth 24.60
—	Pulled Pump - Resurged well					
1300	67.1	7.1	2112	>1000	23.4	
1307	66.5	7.3	2203	>1000	25.5	
Did Well Dewater? yes	If yes, note above.			Gallons Actually Evacuated:		73.8

WELL DEVELOPMENT DATA SHEET

Well I.D. MW-8	PAGE 2 OF 2
Project #: 100929-MP1	Client: PES Environmental

TIME	TEMP (F)	pH	Cond. (mS or µS)	TURBIDITY (NTUs)	VOLUME REMOVED:	NOTATIONS:
1314	65.5	7.2	2587	>1000	27.6	
1320	65.5	7.2	2641	>1000	29.7	
1325	65.4	7.1	2766	>1000	31.8	
1330	65.3	7.0	2889	>1000	33.9	DTW 19.50
1334	65.2	7.0	2903	>1000	36.0	
1338	65.2	7.0	2950	>1000	38.1	
1342	65.2	6.9	2989	>1000	40.2	
1346	65.2	6.9	2990	>1000	42.3	Total well Depth 21.65
	9-30-10	resurged	well			
0936	64.2	7.21	2783	>1000	44.4	Brown cloudy Hard Bottom
0939	64.3	7.2	2798	>1000	46.5	" "
0941	64.7	7.1	2800	>1000	48.6	" "
0943	65.2	7.1	2883	>1000	50.7	" "
0945	64.6	7.2	2887	>1000	52.8	" "
0948	64.7	7.2	2872	343	54.9	clearing up
0950	64.5	7.1	2892	294	57.0	Hard Bottom
0952	64.6	7.2	2899	242	59.1	" "
0954	64.3	7.1	2921	224	61.2	" "
0956	64.3	7.0	2977	202	63.3	" "
0958	64.4	7.0	2979	184	65.4	" "
1000	64.5	7.0	2981	112	67.5	" "
1002	64.6	7.0	2997	67	69.6	clear Hard Bottom
1004	64.7	7.0	2992	48	71.7	" "
1006	64.6	7.0	2994	41	73.8	" "

APPENDIX C

GROUNDWATER SAMPLING FORMS

PURGE DRUM INVENTORY LOG

CLIENT P.E.S.

SITE ADDRESS 1650 65th ST Emeryville CA

STATUS OF DRUM(S) UPON ARRIVAL							
DATE	9-30-10	10/6/10					
Number of drum(s) empty:							
Number of drum(s) 1/4 full:							
Number of drum(s) 1/2 full:							
Number of drum(s) 3/4 full:							
Number of drum(s) full:		8					
Total drum(s) on site:	Ø	8					
Are the drum(s) properly labeled?		YES					
Drum ID & Contents:		PURGE H_2O DEVELOPMENT					
STATUS OF DRUM(S) UPON DEPARTURE							
DATE	9-30-10	10/7/10					
Number of drum(s) empty:							
Number of drum(s) 1/4 full:							
Number of drum(s) 1/2 full:							
Number of drum(s) 3/4 full:		1					
Number of drum(s) full:	8	9					
Total drum(s) on site:	8	10					
Are the drum(s) properly labeled?	YES	YES					
Drum ID & Contents:	Purged H_2O	PURGE H_2O					
LOCATION OF DRUM(S)							
Describe location of drum(s): Next To Cardboard Compactor in U.S. Treasury Dept. (close To MW-3)							
FINAL STATUS							
Number of new drum(s) left on site this event:	8	2					
Date of inspection:	9-30-10	10/7/10					
Logged by BTS Field Technician:	MP	IW					
Office reviewed by:							

BLAINE
TECH SERVICES, INC.

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

CHAIN OF CUSTODY BTS # 101006-IW2

CLIENT: PES

SITE: Emery Bay Plaza Site
1650 65th Street
Emeryville, CA

C = COMPOSITE ALL CONTAINERS

CONDUCT ANALYSIS TO DETECT

LAB: Curtis & Tompkins DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA ☐ RWQCB REGION _____
☐ LIA
☐ OTHER

SPECIAL INSTRUCTIONS

Invoice and Report to : **PES Environmental, Inc.**
Attn: Chris Baldassari **Ph#415-899-1600**
cbaldassari@pesenv.com

SAMPLE I.D.	DATE	TIME	MATRIX S= SOIL W=H_2O	CONTAINERS TOTAL		C	TPH-G (8015M)	BTEX (8260B)	7 Fuel Oxygenates (8260B)	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
EW-1	10/7/10	0840	W	6	HCL VOAS		X	X	X				
MW-2	10/7/10	0910	"	6	"		X	X	X				
MW-3	10/7/10	0940	"	6	"		X	X	X				
MW-4	10/7/10	0625	"	6	"		X	X	X				
MW-6	10/7/10	0920	"	6	"		X	X	X				
MW-8	10/6/10	1720	↓	6	↓		X	X	X				

SAMPLING COMPLETED	DATE	TIME	SAMPLING PERFORMED BY:
	10/7/10	0940	IAN WILLIAMS

RESULTS NEEDED NO LATER THAN: **Standard TAT / As Contracted**

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	10/7/10	10:58	Pat Hanafy	10/7/10	10:58
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME

Note(s): (7) Fuel Oxygenates to Include: MTBE, ETBE, DIPE, TBA, EDB, 1,2-DCA, TAME (8260B)

TEST EQUIPMENT CALIBRATION LOG

PROJECT NAME: Emery Bay Plaza Site - Emeryville, CA		JOB NUMBER: 101006-IWZ						
EQUIPMENT NAME	EQUIPMENT NUMBER	DATE/TIME OF TEST	STANDARDS USED	EQUIPMENT READING	CALIBRATED WITHIN 10%	COMMENTS	TEMP.	INIT
MULTIRAE PLUS	095-527050	10/6/10 4:50 AM / PM	FRESH AIR CAL → YES ISOBUTYENE 100 PPM →	104 PPM	Yes / No	———	°F / °C	IW
MYRON L ULTRAMETER II	6209048	10/6/10 4:56 AM / PM	= 3900 uS	3899 uS	Yes / No	63.1	°F °C	IW
		10/6/10 4:58 AM / PM	=7.00 =10.00 pH → =4.00	=7.00 =10.02 pH =4.01	Yes / No	60.3	°F / °C	IW
MYRON L ULTRAMETER II	6209048	10/7/10 6:00 AM / PM	= 3900 uS →	3900 uS	Yes / No	59.6	°F / °C	IW
		/ / 6:07 AM / PM	=7.00 =10.00 pH → =4.00	=6.99 =9.98 pH =4.00	Yes / No	60.1	°F °C	IW
		/ / : AM / PM			Yes / No		°F / °C	
		/ / : AM / PM			Yes / No		°F / °C	
		/ / : AM / PM			Yes / No		°F / °C	
		/ / : AM / PM			Yes / No		°F / °C	
		/ / : AM / PM			Yes / No		°F / °C	
		/ / : AM / PM			Yes / No		°F / °C	
		/ / : AM / PM			Yes / No		°F / °C	

WELL GAUGING DATA

Project # 101006-IW2 Date 10/6/10 Client PES

Site: **Emery Bay Plaza Site - 1650 65th Street - Emeryville, CA**

Well ID	Time	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	PID Reading
EW-1 ~~VW-1~~ IW	1620	4	ODOR	—	Ø		10.39	28.10		7.9
MW-2	1627	2	ODOR	—	Ø		10.36	23.75		22.6
MW-3	1540	4		—	Ø		8.41	18.18		0.0
MW-4	1603	4		—	Ø		8.03	15.89		0.6
MW-5	1637	4	ODOR	—	Ø		6.83	17.98		0.8
MW-6	1614	4		—	Ø		8.19	18.82		0.0
MW-7	1652	4	ODOR	—	Ø		5.78	18.75		0.0
MW-8	1552	2		—	Ø		10.85	25.10	↓	0.4

WELL MONITORING DATA SHEET

BTS #: 101006-IW2	Client: **PES Enviornmental**
Sampler: IW	Date: ~~10/6/2010~~ IW 10/7/10
Well I.D.: EW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 28.10	Depth to Water (DTW): 10.39
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.94	

Purge Method: Bailer; Disposable Bailer; Postive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

11.6 (Gals.) X 3 = 34.8 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. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0826	66.4	7.2	1380	31	11.6	STRONG ODOR
0829	69.2	6.8	1264	14	23.2	"
0831	69.0	6.9	1255	15	34.8	"

Did well dewater? Yes (No)	Gallons actually evacuated: 34.8
Sampling Date: 10/ 7 /10 Sampling Time: 0840	Depth to Water: 10.62
Sample I.D.: ~~IW~~ IW EW-1	Laboratory: **Curtis & Tompkins**
Analyzed for: **TPH-G, BTEX, (7)Fuel Oxygenates**	Other: SEE COC
EB I.D. (if applicable): @ Time	Duplicate I.D. (if applicable):
Analyzed for:	Other:
D.O. (if req'd): Pre-purge:	mg/L Post-purge: mg/L
O.R.P. (if req'd): Pre-purge:	mV Post-purge: mV

WELL MONITORING DATA SHEET

BTS #: 101006-IW2	Client: **PES Enviornmental**
Sampler: IW	Date: ~~10/6/2010~~ 10/7/10
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 23.75	Depth to Water (DTW): 10.36
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.04	

Purge Method:
- X Bailer
- Disposable Bailer
- Postive Air Displacement
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- Bailer
- X Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

2.2 (Gals.) X 3 = 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	radius ^{2} * 0.163

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
0857	66.5	7.82	1210	71000	2.2	STRONG ODOR
0901	68.0	7.5	1218	71000	4.4	"
0905	68.2	7.5	1220	71000	6.6	"

Did well dewater? Yes (No)		Gallons actually evacuated:	6.6
Sampling Date: 10/ 7 /10	Sampling Time: 0910	Depth to Water:	10.65
Sample I.D.: MW-2		Laboratory: **Curtis & Tompkins**	
Analyzed for: **TPH-G, BTEX, (7)Fuel Oxygenates**		Other: SEE COC	
EB I.D. (if applicable): @ Time		Duplicate I.D. (if applicable):	
Analyzed for:		Other:	
D.O. (if req'd): Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd): Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

BTS #: 101006-IW2	Client: **PES Enviornmental**
Sampler: IW	Date: ~~10/6/2010~~ IW 10/7/10
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 18.18	Depth to Water (DTW): 8.41
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.37	

Purge Method: Bailer; Disposable Bailer; Postive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

6.4 (Gals.) X	3	=	19.2 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. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0703	66.4	7.6	2293	25	6.4	ODOR
0705	WELL	DEWATERED @		10.0 GALLONS	10.0	DTW = 14.25
0940	67.1	7.8	2311	48	GRAB	

Did well dewater? (Yes) No — Gallons actually evacuated: 10.0

Sampling Date: 10/ 7 /10 — Sampling Time: 0940 — Depth to Water: WAITED 10.08

Sample I.D.: MW-3 — Laboratory: **Curtis & Tompkins**

Analyzed for: **TPH-G, BTEX, (7)Fuel Oxygenates** — Other: SEE COC

EB I.D. (if applicable): @ Time — Duplicate I.D. (if applicable):

Analyzed for: — Other:

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

WELL MONITORING DATA SHEET

BTS #: 101006-IW2	Client: **PES Enviornmental**
Sampler: IW	Date: ~~10/6/2010~~ 10/7/10
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 15.89	Depth to Water (DTW): 8.03
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.61	

Purge Method: Bailer; Disposable Bailer; Postive Air Displacement; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: ____

5.2 (Gals.) X 3 = 15.6 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	radius ^{2} * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
0619	71.6	8.2	9,062	154	5.2	BLACK, ODOR
0620	WELL	DEWATERED @		9.0 GALLONS	9.0	DTW= 9.75
0625	70.1	8.6	10,590	72	GRAB	

Did well dewater? (Yes) No — Gallons actually evacuated: 9.0

Sampling Date: 10/ 7 /10 — Sampling Time: 0625 — Depth to Water: 9.32

Sample I.D.: MW-4 — Laboratory: **Curtis & Tompkins**

Analyzed for: **TPH-G, BTEX, (7)Fuel Oxygenates** — Other: see coc

EB I.D. (if applicable): @ Time — Duplicate I.D. (if applicable):

Analyzed for: — Other:

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

WELL MONITORING DATA SHEET

BTS #: 101006 - IW2	Client: **PES Enviornmental**
Sampler: IW	Date: ~~10/6/2010~~ IW 10/7/10
Well I.D.: MW-6	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 18.82	Depth to Water (DTW): 8.19
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.32	

Purge Method:
- Bailer
- Disposable Bailer
- Postive Air Displacement
- X Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other_____

Sampling Method:
- Bailer
- X Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

7.0 (Gals.) X 3 = 21.0 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. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
0746	66.9	7.6	3596	79	7.0	ODOR
0748	WELL	DEWATERED @	10.0 GALLONS		10.0	DTW = 15.51
0920	65.2	6.4	9465	164	GRAB	

Did well dewater? (Yes) No — Gallons actually evacuated: 10.0

Sampling Date: 10/ 7 /10 — Sampling Time: 0920 — Depth to Water: WAITED 10.30

Sample I.D.: MW-6 — Laboratory: **Curtis & Tompkins**

Analyzed for: TPH-G, BTEX, (7)Fuel Oxygenates — Other: SEE COC

EB I.D. (if applicable): @ Time — Duplicate I.D. (if applicable):

Analyzed for: — Other:

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

WELL MONITORING DATA SHEET

BTS #: 101006 -IW2	Client: **PES Enviornmental**
Sampler: IW	Date: **10/6/2010**
Well I.D.: MW-8	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 25.10	Depth to Water (DTW): 10.85
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.70	

Purge Method: Bailer; X Disposable Bailer; Postive Air Displacement; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: Bailer; X Disposable Bailer; Extraction Port; Dedicated Tubing; Other: _____

2.3 (Gals.) X 3 = 6.9 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 (^{0}F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1702	66.4	7.4	1722	>1000	2.3	BLACK, ODOR
1706	66.2	7.2	1699	>1000	4.6	BLACK, ODOR
1710	66.1	7.2	1692	>1000	6.9	BLACK, ODOR DTW= 14.23

Did well dewater? Yes (No) Gallons actually evacuated: 6.9

Sampling Date: 10/ 6 /10 Sampling Time: 1720 Depth to Water: 13.66

Sample I.D.: MW-8 Laboratory: **Curtis & Tompkins**

Analyzed for: TPH-G, BTEX, (7)Fuel Oxygenates Other: SEE COC

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

Analyzed for: Other:

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

APPENDIX D

GROUNDWATER SAMPLES – LABORATORY ANALYTICAL REPORT AND CHAIN OF CUSTODY DOCUMENTATION


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Job Number 223028
ANALYTICAL REPORT

PES Environmental, Inc.	Project : STANDARD
1682 Novato Boulevard	Location : Emery Bay Plaza Site
Novato, CA 94947	Level : II

Sample ID	Lab ID
EW-1	223028-001
MW-2	223028-002
MW-3	223028-003
MW-4	223028-004
MW-6	223028-005
MW-8	223028-006

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

Signature: Desiree N. Tetreault Date: 10/14/2010
Project Manager

NELAP # 01107CA

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**223028**
Client:	**PES Environmental, Inc.**
Location:	**Emery Bay Plaza Site**
Request Date:	**10/07/10**
Samples Received:	**10/07/10**

This data package contains sample and QC results for six water samples, requested for the above referenced project on 10/07/10. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):
No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

223028

BLAINE
TECH SERVICES, INC.

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

CHAIN OF CUSTODY BTS # 101006-IW2

CLIENT: PES

SITE: Emery Bay Plaza Site
1650 65th Street
Emeryville, CA

CONDUCT ANALYSIS TO DETECT

LAB: Curtis & Tompkins DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA ☐ RWQCB REGION ____
☐ LIA
☐ OTHER

SPECIAL INSTRUCTIONS

Invoice and Report to : **PES Environmental, Inc.**
Attn: Chris Baldassari Ph#415-899-1600
cbaldassari@pesenv.com

	SAMPLE I.D.	DATE	TIME	MATRIX S=SOIL W=H_2O	CONTAINERS TOTAL		C = COMPOSITE ALL CONTAINERS	TPH-G (8015M)	BTEX (8260B)	7 Fuel Oxygenates (8260B)	ADD'L INFORMATION	STATUS	CONDITION	LAB SAMPLE #
1	EW-1	10/7/10	0840	W	6	HCL VOAS		X	X	X				
2	MW-2	10/7/10	0910		6			X	X	X				
3	MW-3	10/7/10	0940		6			X	X	X				
4	MW-4	10/7/10	0625		6			X	X	X				
5	MW-6	10/7/10	0920		6			X	X	X				
6	MW-8	10/6/10	1720	↓	6	↓		X	X	X				

SAMPLING COMPLETED: DATE 10/7/10 TIME 0940
SAMPLING PERFORMED BY: IAN WILLIAMS

RESULTS NEEDED NO LATER THAN: **Standard TAT / As Contracted**

RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	10/7/10		Pat Montagh	10/7/10	10:58
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME
RELEASED BY	DATE	TIME	RECEIVED BY	DATE	TIME

Note(s): (7) Fuel Oxygenates to Include: MTBE, ETBE, DIPE, TBA, EDB, 1,2-DCA, TAME (8260B)

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 223028 Date Received 10-7-10 Number of coolers 1
Client PES Project Emery Bay Plaza
Date Opened 10-7-10 By (print) S. Evans (sign)
Date Logged in By (print) (sign)

1. Did cooler come with a shipping slip (airbill, etc) YES NO
Shipping info
2A. Were custody seals present? ... ☐ YES (circle) on cooler on samples ☒ NO
How many Name Date
2B. Were custody seals intact upon arrival? YES NO N/A
3. Were custody papers dry and intact when received? YES NO
4. Were custody papers filled out properly (ink, signed, etc)? YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe)

☒ Bubble Wrap ☐ Foam blocks ☒ Bags ☐ None
☐ Cloth material ☐ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation:

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

☒ Samples Received on ice & cold without a temperature blank

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

8. Were Method 5035 sampling containers present? YES NO
If YES, what time were they transferred to freezer?
9. Did all bottles arrive unbroken/unopened? YES NO
10. Are samples in the appropriate containers for indicated tests? YES NO
11. Are sample labels present, in good condition and complete? YES NO
12. Do the sample labels agree with custody papers? YES NO
13. Was sufficient amount of sample sent for tests requested? YES NO
14. Are the samples appropriately preserved? YES NO N/A
15. Are bubbles > 6mm absent in VOA samples? YES NO N/A
16. Was the client contacted concerning this sample delivery? YES NO
If YES, Who was called? By Date:

COMMENTS

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	167831
Units:	ug/L	Received:	10/07/10
Diln Fac:	1.000		

Field ID: EW-1 Sampled: 10/07/10
Type: SAMPLE Analyzed: 10/12/10
Lab ID: 223028-001

Analyte	Result	RL
Gasoline C7-C12	1,200	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	88	70-140

Field ID: MW-2 Sampled: 10/07/10
Type: SAMPLE Analyzed: 10/12/10
Lab ID: 223028-002

Analyte	Result	RL
Gasoline C7-C12	6,100	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	89	70-140

Field ID: MW-3 Sampled: 10/07/10
Type: SAMPLE Analyzed: 10/12/10
Lab ID: 223028-003

Analyte	Result	RL
Gasoline C7-C12	110	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	88	70-140

Field ID: MW-4 Sampled: 10/07/10
Type: SAMPLE Analyzed: 10/12/10
Lab ID: 223028-004

Analyte	Result	RL
Gasoline C7-C12	52	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	85	70-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Total Volatile Hydrocarbons

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	167831
Units:	ug/L	Received:	10/07/10
Diln Fac:	1.000		

Field ID:	MW-6	Sampled:	10/07/10
Type:	SAMPLE	Analyzed:	10/12/10
Lab ID:	223028-005		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	84	70-140

Field ID:	MW-8	Sampled:	10/06/10
Type:	SAMPLE	Analyzed:	10/12/10
Lab ID:	223028-006		

Analyte	Result	RL
Gasoline C7-C12	2,900	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	80	70-140

Type:	BLANK	Analyzed:	10/11/10
Lab ID:	QC563836		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	86	70-140

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC563835	Batch#:	167831
Matrix:	Water	Analyzed:	10/11/10
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	1,000	952.0	95	73-127

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	91	70-140

Curtis & Tompkins, Ltd.

Batch QC Report

Total Volatile Hydrocarbons

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
MSS Lab ID:	223040-006	Batch#:	167831
Matrix:	Water	Sampled:	10/07/10
Units:	ug/L	Received:	10/08/10

Type: MS Analyzed: 10/11/10
Lab ID: QC563837

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	9.851	2,000	1,912	95	68-120

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	98	70-140

Type: MSD Analyzed: 10/12/10
Lab ID: QC563838

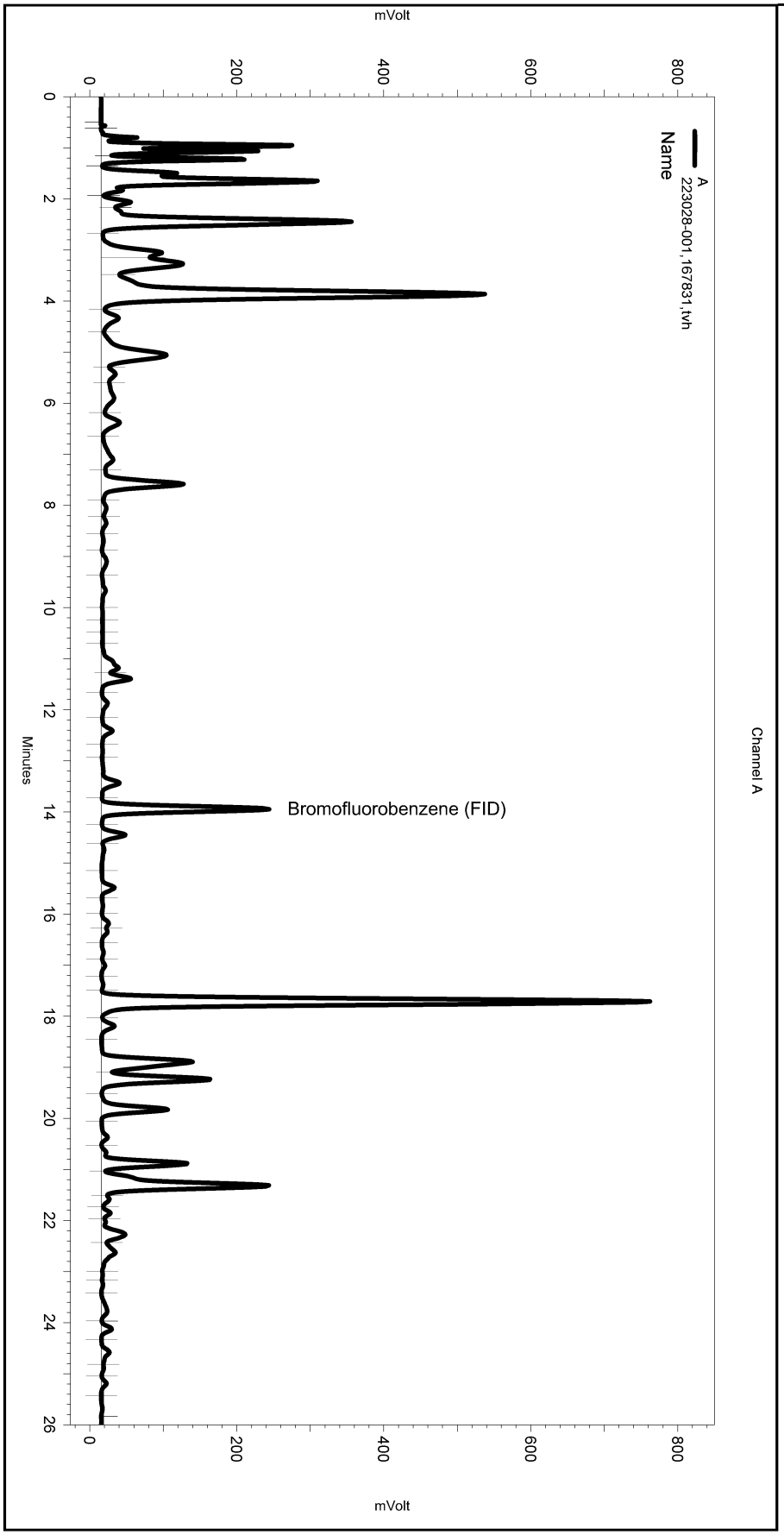
Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,834	91	68-120	4	20

Surrogate	%REC	Limits
Bromofluorobenzene (FID)	93	70-140

RPD= Relative Percent Difference

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\284.seq**
Sample Name: **223028-001,167831,tvh**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\284-018**
Instrument: GC19 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/12/2010 1:07:34 AM
Analysis Date: 10/12/2010 1:36:41 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: c



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Integration Events

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

Manual Integration Fixes

Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10050\284-018_C462.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

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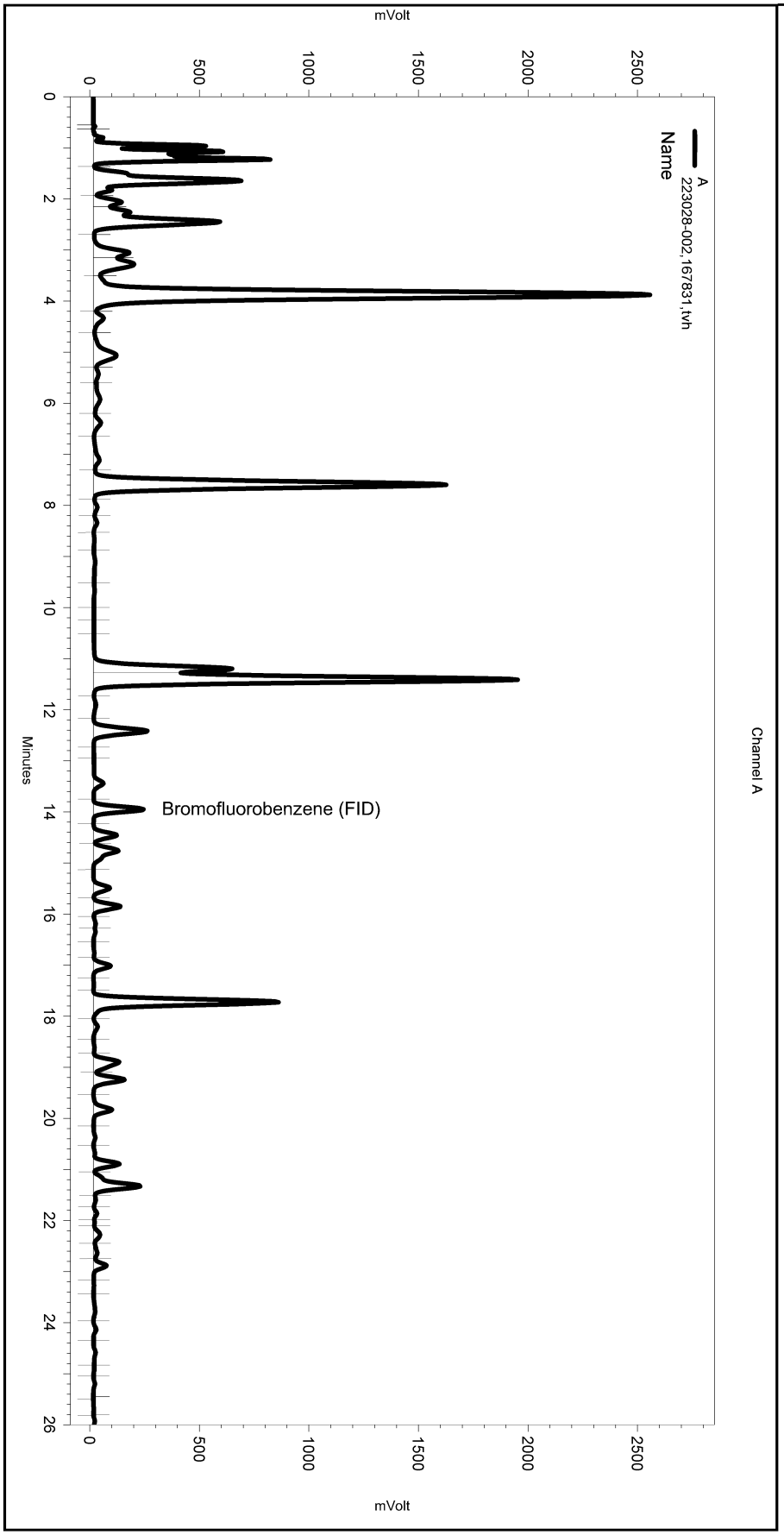
Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\284.seq**
Sample Name: **223028-002,167831,tvh**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\284-022**
Instrument: GC19 Vial: N/A Operator: lims2k3\tvh3
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/12/2010 3:38:05 AM
Analysis Date: 10/12/2010 4:07:13 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: f



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Integration Events

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

Manual Integration Fixes

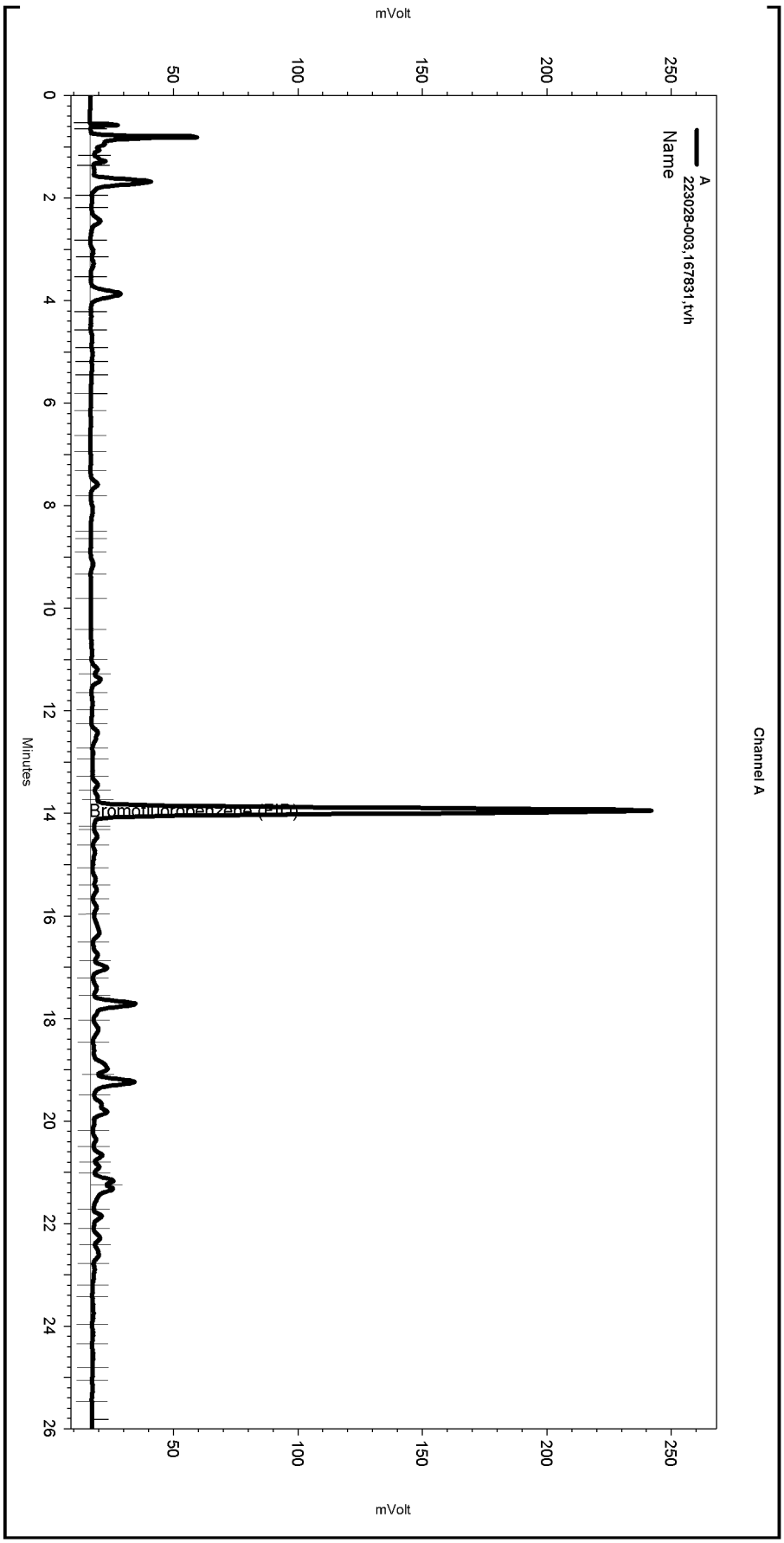
Data File: C:\Documents and Settings\All Users\Application Data\ChromatographySystem\Recovery Data\Instrument.10050\284-022_C466.tmp

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value

None

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\284.seq**
Sample Name: **223028-003,167831,tvh**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\284-024**
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/12/2010 4:53:14 AM
Analysis Date: 10/12/2010 1:38:59 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: f



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No items selected for this section

Integration Events

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

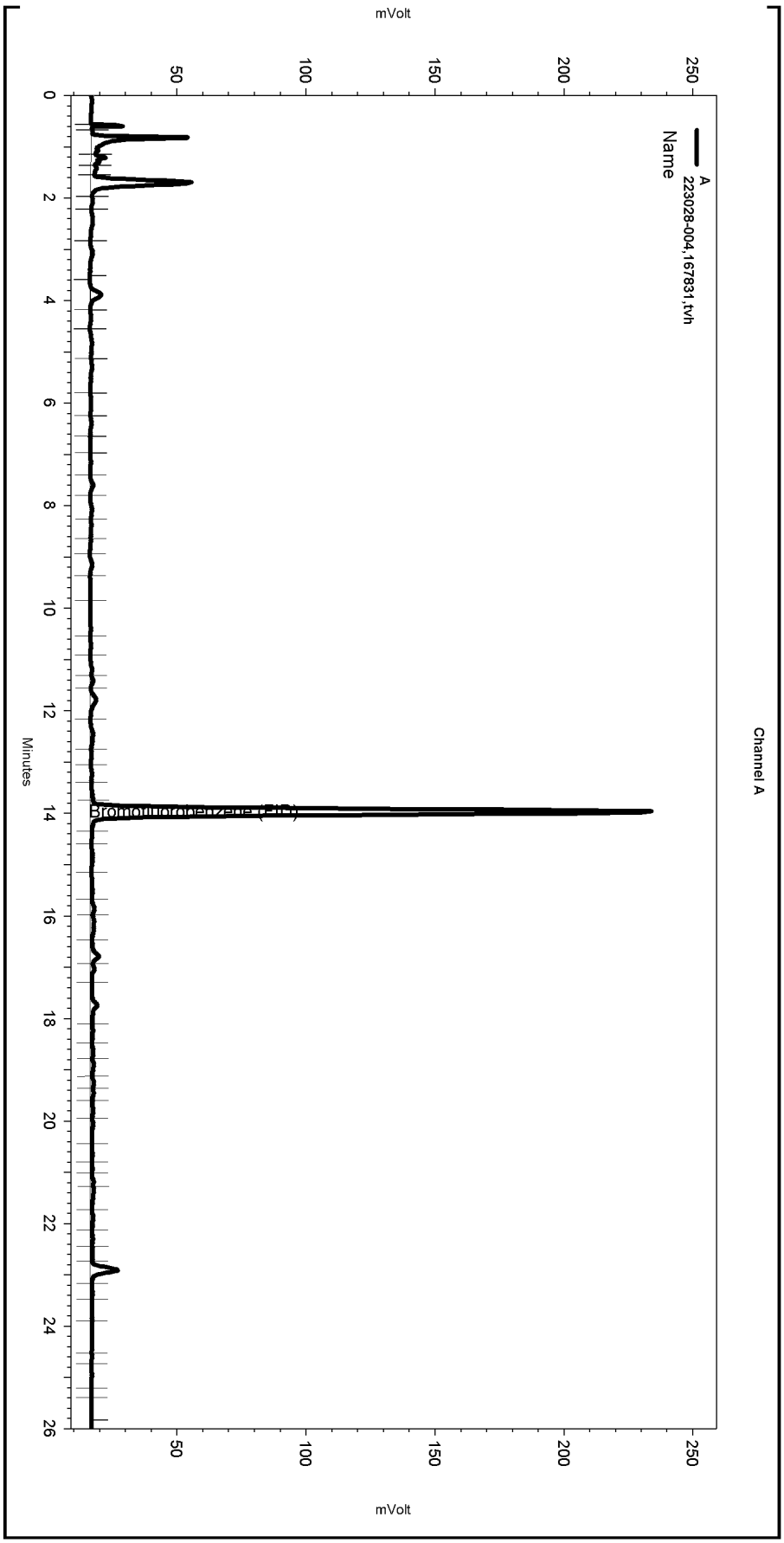
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\284-024

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	8.932	25.84	0
Yes	Split Peak	13.741	0	0
Yes	Split Peak	14.258	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\284.seq**
Sample Name: **223028-004,167831,tvh**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\284-025**
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/12/2010 5:30:46 AM
Analysis Date: 10/12/2010 2:08:10 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: d



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Integration Events

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

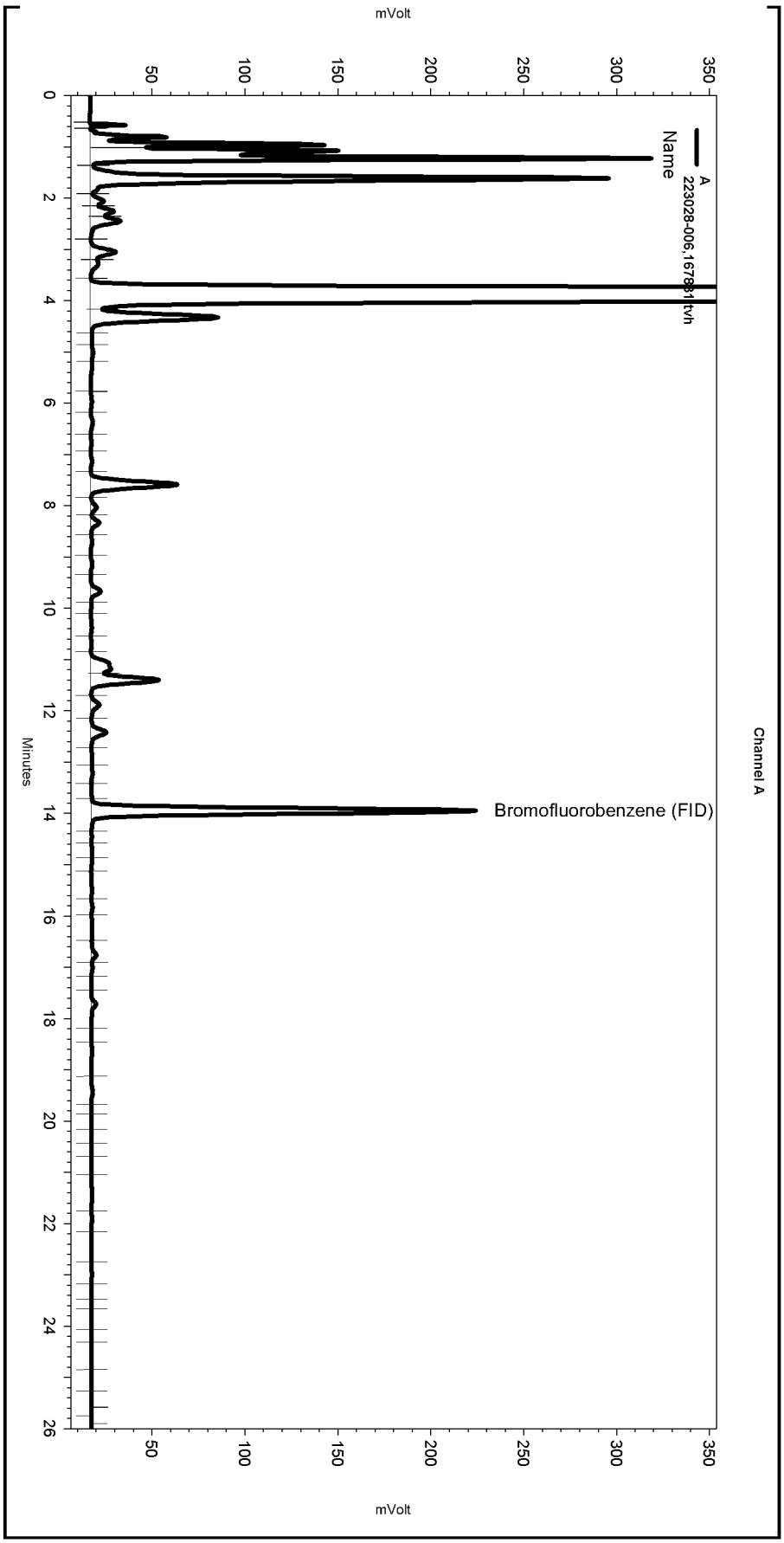
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\284-025

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Horizontal Baseline	8.967	25.834	0
Yes	Split Peak	13.745	0	0
Yes	Split Peak	14.358	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\284.seq**
Sample Name: **223028-006,167831,tvh**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\284-028**
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/12/2010 7:23:29 AM
Analysis Date: 10/12/2010 1:43:04 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: c



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No items selected for this section

Integration Events

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

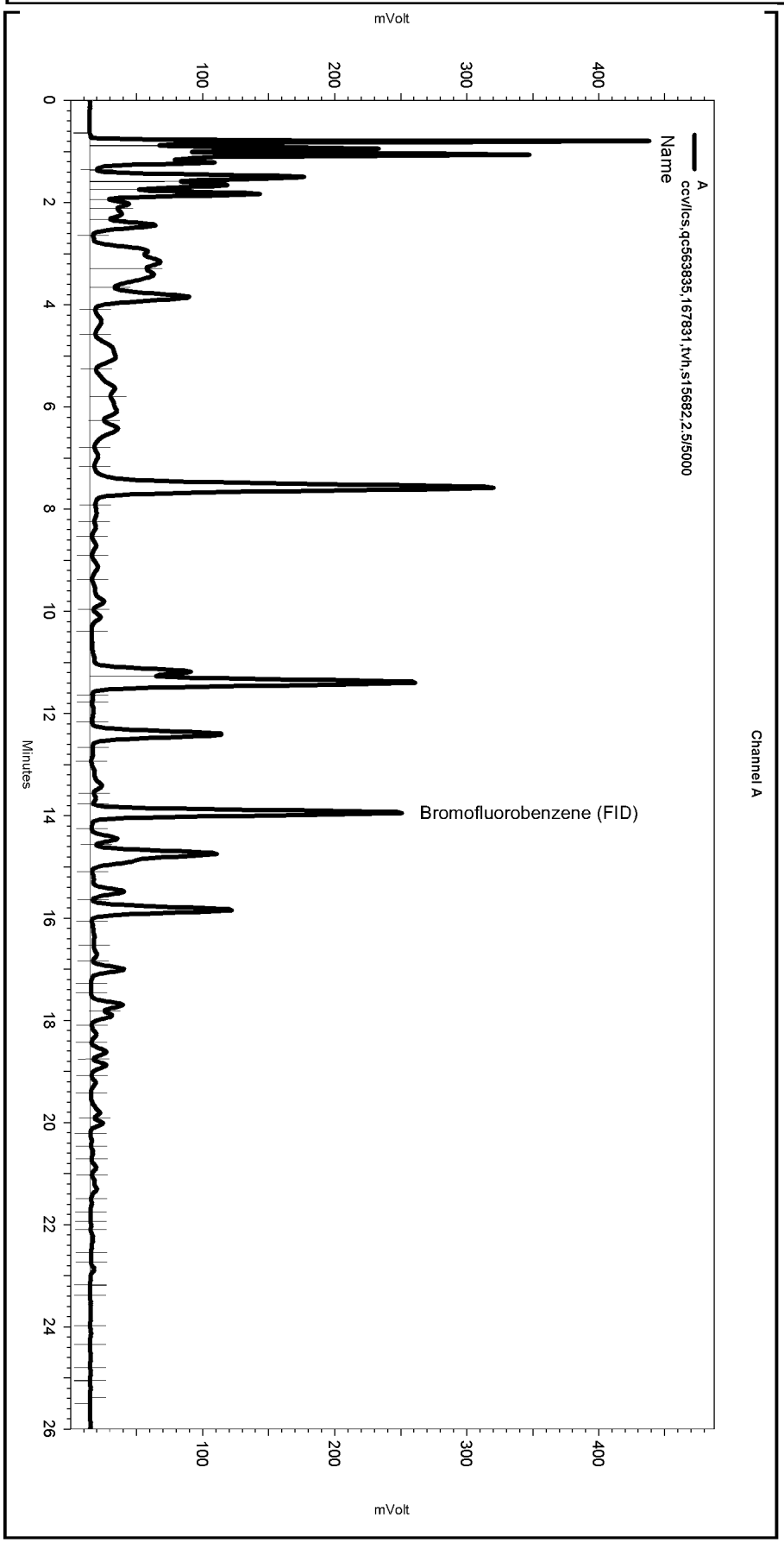
Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\284-028

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	13.72	0	0

Sequence File: **\\Lims\gdrive\ezchrom\Projects\GC19\Sequence\284.seq**
Sample Name: **ccv/lcs,qc563835,167831,tvh,s15682,2.5/5000**
Data File: **\\Lims\gdrive\ezchrom\Projects\GC19\Data\284-006**
Instrument: GC19 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC19\Method\tvhbtxe277.met

Software Version 3.1.7
Run Date: 10/11/2010 3:25:04 PM
Analysis Date: 10/12/2010 12:51:43 PM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

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

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC19\Data\284-006

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

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	EW-1	Batch#:	167897
Lab ID:	223028-001	Sampled:	10/07/10
Matrix:	Water	Received:	10/07/10
Units:	ug/L	Analyzed:	10/13/10
Diln Fac:	2.500		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	25
MTBE	ND	1.3
Isopropyl Ether (DIPE)	ND	1.3
Ethyl tert-Butyl Ether (ETBE)	ND	1.3
1,2-Dichloroethane	ND	1.3
Benzene	170	1.3
Methyl tert-Amyl Ether (TAME)	ND	1.3
Toluene	36	1.3
1,2-Dibromoethane	ND	1.3
Ethylbenzene	6.5	1.3
m,p-Xylenes	12	1.3
o-Xylene	4.2	1.3

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-122
1,2-Dichloroethane-d4	102	71-140
Toluene-d8	97	80-120
Bromofluorobenzene	96	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-2	Units:	ug/L
Lab ID:	223028-002	Sampled:	10/07/10
Matrix:	Water	Received:	10/07/10

Analyte	Result	RL	Diln Fac	Batch#	Analyzed
tert-Butyl Alcohol (TBA)	ND	10	1.000	167785	10/10/10
MTBE	ND	0.5	1.000	167785	10/10/10
Isopropyl Ether (DIPE)	ND	0.5	1.000	167785	10/10/10
Ethyl tert-Butyl Ether (ETBE)	ND	0.5	1.000	167785	10/10/10
1,2-Dichloroethane	ND	0.5	1.000	167785	10/10/10
Benzene	700	5.0	10.00	167801	10/11/10
Methyl tert-Amyl Ether (TAME)	ND	0.5	1.000	167785	10/10/10
Toluene	510	5.0	10.00	167801	10/11/10
1,2-Dibromoethane	ND	0.5	1.000	167785	10/10/10
Ethylbenzene	190	5.0	10.00	167801	10/11/10
m,p-Xylenes	560	5.0	10.00	167801	10/11/10
o-Xylene	81	5.0	10.00	167801	10/11/10

Surrogate	%REC	Limits	Diln Fac	Batch#	Analyzed
Dibromofluoromethane	88	80-122	1.000	167785	10/10/10
1,2-Dichloroethane-d4	92	71-140	1.000	167785	10/10/10
Toluene-d8	96	80-120	1.000	167785	10/10/10
Bromofluorobenzene	88	80-121	1.000	167785	10/10/10

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-3	Batch#:	167801
Lab ID:	223028-003	Sampled:	10/07/10
Matrix:	Water	Received:	10/07/10
Units:	ug/L	Analyzed:	10/11/10
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	1.4	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	4.2	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	0.9	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	0.8	0.5
m,p-Xylenes	1.1	0.5
o-Xylene	0.7	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-122
1,2-Dichloroethane-d4	97	71-140
Toluene-d8	97	80-120
Bromofluorobenzene	98	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-4	Batch#:	167801
Lab ID:	223028-004	Sampled:	10/07/10
Matrix:	Water	Received:	10/07/10
Units:	ug/L	Analyzed:	10/11/10
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	14	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	1.5	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-122
1,2-Dichloroethane-d4	97	71-140
Toluene-d8	92	80-120
Bromofluorobenzene	104	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-6	Batch#:	167785
Lab ID:	223028-005	Sampled:	10/07/10
Matrix:	Water	Received:	10/07/10
Units:	ug/L	Analyzed:	10/10/10
Diln Fac:	1.000		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	1.7	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	1.0	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	0.9	0.5
m,p-Xylenes	1.6	0.5
o-Xylene	0.7	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-122
1,2-Dichloroethane-d4	109	71-140
Toluene-d8	96	80-120
Bromofluorobenzene	90	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Field ID:	MW-8	Batch#:	167851
Lab ID:	223028-006	Sampled:	10/06/10
Matrix:	Water	Received:	10/07/10
Units:	ug/L	Analyzed:	10/12/10
Diln Fac:	20.00		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	200
MTBE	ND	10
Isopropyl Ether (DIPE)	ND	10
Ethyl tert-Butyl Ether (ETBE)	ND	10
1,2-Dichloroethane	ND	10
Benzene	1,500	10
Methyl tert-Amyl Ether (TAME)	ND	10
Toluene	15	10
1,2-Dibromoethane	ND	10
Ethylbenzene	ND	10
m,p-Xylenes	10	10
o-Xylene	ND	10

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-122
1,2-Dichloroethane-d4	102	71-140
Toluene-d8	97	80-120
Bromofluorobenzene	97	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC563670	Batch#:	167785
Matrix:	Water	Analyzed:	10/10/10
Units:	ug/L		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	91	80-122
1,2-Dichloroethane-d4	109	71-140
Toluene-d8	96	80-120
Bromofluorobenzene	91	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	167785
Units:	ug/L	Analyzed:	10/10/10
Diln Fac:	1.000		

Type: BS Lab ID: QC563671

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	100.0	122.7	123	45-152
MTBE	20.00	18.30	92	66-120
Isopropyl Ether (DIPE)	20.00	18.17	91	56-134
Ethyl tert-Butyl Ether (ETBE)	20.00	18.62	93	60-124
1,2-Dichloroethane	20.00	22.52	113	70-135
Benzene	20.00	20.78	104	80-122
Methyl tert-Amyl Ether (TAME)	20.00	20.05	100	66-120
Toluene	20.00	21.49	107	80-120
1,2-Dibromoethane	20.00	21.31	107	80-120
Ethylbenzene	20.00	21.49	107	80-123
m,p-Xylenes	40.00	44.27	111	80-126
o-Xylene	20.00	22.32	112	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-122
1,2-Dichloroethane-d4	108	71-140
Toluene-d8	97	80-120
Bromofluorobenzene	90	80-121

Type: BSD Lab ID: QC563672

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	100.0	116.3	116	45-152	5	30
MTBE	20.00	17.01	85	66-120	7	20
Isopropyl Ether (DIPE)	20.00	17.12	86	56-134	6	20
Ethyl tert-Butyl Ether (ETBE)	20.00	17.85	89	60-124	4	20
1,2-Dichloroethane	20.00	22.05	110	70-135	2	20
Benzene	20.00	20.02	100	80-122	4	20
Methyl tert-Amyl Ether (TAME)	20.00	19.65	98	66-120	2	20
Toluene	20.00	20.40	102	80-120	5	20
1,2-Dibromoethane	20.00	21.10	105	80-120	1	20
Ethylbenzene	20.00	20.96	105	80-123	3	20
m,p-Xylenes	40.00	42.43	106	80-126	4	20
o-Xylene	20.00	21.44	107	80-122	4	20

Surrogate	%REC	Limits
Dibromofluoromethane	89	80-122
1,2-Dichloroethane-d4	109	71-140
Toluene-d8	97	80-120
Bromofluorobenzene	89	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	167801
Units:	ug/L	Analyzed:	10/11/10
Diln Fac:	1.000		

Type: BS Lab ID: QC563735

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	97.76	78	45-152
MTBE	25.00	21.20	85	66-120
Isopropyl Ether (DIPE)	25.00	19.08	76	56-134
Ethyl tert-Butyl Ether (ETBE)	25.00	22.83	91	60-124
1,2-Dichloroethane	25.00	25.20	101	70-135
Benzene	25.00	25.42	102	80-122
Methyl tert-Amyl Ether (TAME)	25.00	21.01	84	66-120
Toluene	25.00	27.39	110	80-120
1,2-Dibromoethane	25.00	24.04	96	80-120
Ethylbenzene	25.00	27.99	112	80-123
m,p-Xylenes	50.00	56.62	113	80-126
o-Xylene	25.00	27.79	111	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-122
1,2-Dichloroethane-d4	97	71-140
Toluene-d8	98	80-120
Bromofluorobenzene	100	80-121

Type: BSD Lab ID: QC563736

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	108.5	87	45-152	10	30
MTBE	25.00	22.39	90	66-120	5	20
Isopropyl Ether (DIPE)	25.00	19.53	78	56-134	2	20
Ethyl tert-Butyl Ether (ETBE)	25.00	23.79	95	60-124	4	20
1,2-Dichloroethane	25.00	24.30	97	70-135	4	20
Benzene	25.00	24.99	100	80-122	2	20
Methyl tert-Amyl Ether (TAME)	25.00	21.57	86	66-120	3	20
Toluene	25.00	26.07	104	80-120	5	20
1,2-Dibromoethane	25.00	23.70	95	80-120	1	20
Ethylbenzene	25.00	26.41	106	80-123	6	20
m,p-Xylenes	50.00	53.49	107	80-126	6	20
o-Xylene	25.00	26.85	107	80-122	3	20

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-122
1,2-Dichloroethane-d4	98	71-140
Toluene-d8	96	80-120
Bromofluorobenzene	99	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC563737	Batch#:	167801
Matrix:	Water	Analyzed:	10/11/10
Units:	ug/L		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-122
1,2-Dichloroethane-d4	96	71-140
Toluene-d8	100	80-120
Bromofluorobenzene	103	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	167851
Units:	ug/L	Analyzed:	10/12/10
Diln Fac:	1.000		

Type: BS Lab ID: QC563927

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	145.0	116	45-152
MTBE	25.00	26.86	107	66-120
Isopropyl Ether (DIPE)	25.00	26.54	106	56-134
Ethyl tert-Butyl Ether (ETBE)	25.00	26.06	104	60-124
1,2-Dichloroethane	25.00	25.72	103	70-135
Benzene	25.00	26.80	107	80-122
Methyl tert-Amyl Ether (TAME)	25.00	24.78	99	66-120
Toluene	25.00	26.70	107	80-120
1,2-Dibromoethane	25.00	24.88	100	80-120
Ethylbenzene	25.00	26.53	106	80-123
m,p-Xylenes	50.00	55.46	111	80-126
o-Xylene	25.00	26.80	107	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-122
1,2-Dichloroethane-d4	100	71-140
Toluene-d8	98	80-120
Bromofluorobenzene	94	80-121

Type: BSD Lab ID: QC563928

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	158.3	127	45-152	9	30
MTBE	25.00	25.71	103	66-120	4	20
Isopropyl Ether (DIPE)	25.00	24.87	99	56-134	7	20
Ethyl tert-Butyl Ether (ETBE)	25.00	24.33	97	60-124	7	20
1,2-Dichloroethane	25.00	25.14	101	70-135	2	20
Benzene	25.00	24.92	100	80-122	7	20
Methyl tert-Amyl Ether (TAME)	25.00	24.32	97	66-120	2	20
Toluene	25.00	24.00	96	80-120	11	20
1,2-Dibromoethane	25.00	24.67	99	80-120	1	20
Ethylbenzene	25.00	24.65	99	80-123	7	20
m,p-Xylenes	50.00	50.48	101	80-126	9	20
o-Xylene	25.00	24.57	98	80-122	9	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-122
1,2-Dichloroethane-d4	101	71-140
Toluene-d8	95	80-120
Bromofluorobenzene	97	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC563929	Batch#:	167851
Matrix:	Water	Analyzed:	10/12/10
Units:	ug/L		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-122
1,2-Dichloroethane-d4	102	71-140
Toluene-d8	100	80-120
Bromofluorobenzene	94	80-121

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	167897
Units:	ug/L	Analyzed:	10/13/10
Diln Fac:	1.000		

Type: BS Lab ID: QC564094

Analyte	Spiked	Result	%REC	Limits
tert-Butyl Alcohol (TBA)	125.0	141.9	114	45-152
MTBE	25.00	25.70	103	66-120
Isopropyl Ether (DIPE)	25.00	25.80	103	56-134
Ethyl tert-Butyl Ether (ETBE)	25.00	25.35	101	60-124
1,2-Dichloroethane	25.00	24.72	99	70-135
Benzene	25.00	26.39	106	80-122
Methyl tert-Amyl Ether (TAME)	25.00	24.38	98	66-120
Toluene	25.00	25.29	101	80-120
1,2-Dibromoethane	25.00	24.15	97	80-120
Ethylbenzene	25.00	26.39	106	80-123
m,p-Xylenes	50.00	52.17	104	80-126
o-Xylene	25.00	26.33	105	80-122

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-122
1,2-Dichloroethane-d4	102	71-140
Toluene-d8	95	80-120
Bromofluorobenzene	95	80-121

Type: BSD Lab ID: QC564095

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
tert-Butyl Alcohol (TBA)	125.0	164.2	131	45-152	15	30
MTBE	25.00	27.40	110	66-120	6	20
Isopropyl Ether (DIPE)	25.00	27.06	108	56-134	5	20
Ethyl tert-Butyl Ether (ETBE)	25.00	25.00	100	60-124	1	20
1,2-Dichloroethane	25.00	26.38	106	70-135	7	20
Benzene	25.00	26.73	107	80-122	1	20
Methyl tert-Amyl Ether (TAME)	25.00	25.46	102	66-120	4	20
Toluene	25.00	25.76	103	80-120	2	20
1,2-Dibromoethane	25.00	24.84	99	80-120	3	20
Ethylbenzene	25.00	26.11	104	80-123	1	20
m,p-Xylenes	50.00	52.80	106	80-126	1	20
o-Xylene	25.00	25.79	103	80-122	2	20

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-122
1,2-Dichloroethane-d4	105	71-140
Toluene-d8	97	80-120
Bromofluorobenzene	95	80-121

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

BTXE & Oxygenates

Lab #:	223028	Location:	Emery Bay Plaza Site
Client:	PES Environmental, Inc.	Prep:	EPA 5030B
Project#:	STANDARD	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC564096	Batch#:	167897
Matrix:	Water	Analyzed:	10/13/10
Units:	ug/L		

Analyte	Result	RL
tert-Butyl Alcohol (TBA)	ND	10
MTBE	ND	0.5
Isopropyl Ether (DIPE)	ND	0.5
Ethyl tert-Butyl Ether (ETBE)	ND	0.5
1,2-Dichloroethane	ND	0.5
Benzene	ND	0.5
Methyl tert-Amyl Ether (TAME)	ND	0.5
Toluene	ND	0.5
1,2-Dibromoethane	ND	0.5
Ethylbenzene	ND	0.5
m,p-Xylenes	ND	0.5
o-Xylene	ND	0.5

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-122
1,2-Dichloroethane-d4	101	71-140
Toluene-d8	98	80-120
Bromofluorobenzene	97	80-121

ND= Not Detected
RL= Reporting Limit

APPENDIX E

GROUNDWATER DATA TABLES FROM APRIL 2001 GROUNDWATER MONITORING REPORT

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

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

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

Well Number	Date	Measured by	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-3	28-May-91	ES	12.43	9.03	3.40
Cont.	1-Aug-91	ES	12.43	NA	NA
	27-Jan-92	PES	12.43	9.44	2.99
	28-Feb-92	PES	12.43	8.80	3.63
	28-May-92	PES	12.43	8.80	3.63
	27-Aug-92	PES	12.43	9.18	3.25
	10-Nov-92	PES	12.43	9.44	2.99
	18-Feb-93	PES	12.43	7.59	4.84
	20-May-93	PES	12.43	8.21	4.22
	19-Aug-93	PES	12.43	8.71	3.72
	15-Nov-93	PES	12.43	9.09	3.34
	14-Feb-94	PES	12.43	8.84	3.59
	16-May-94	PES	12.43	8.18	4.25
	10-Aug-94	PES	12.43	8.72	3.71
	3-Nov-94	PES	12.43	8.13	4.30
	9-Feb-95	PES	12.43	6.86	5.57
	9-May-95	PES	12.43	7.16	5.27
	10-Aug-95	PES	12.43	8.00	4.43
	13-Nov-95	PES	12.43	8.44	3.99
	2-Mar-96	PES	12.43	7.31	5.12
	9-May-96	PES	12.43	7.72	4.71
	8-Aug-96	PES	12.43	8.22	4.21
	11-Nov-96	PES	12.43	8.67	3.76
	14-Feb-97	PES	12.43	7.18	5.25
	14-May-97	PES	12.43	8.03	4.40
	12-Aug-97	PES	12.43	7.39	5.04
	12-Nov-97	PES	12.43	8.53	3.90
	4-Feb-98	PES	12.43	7.39	5.04
	18-May-98	PES	12.43	7.31	5.12
	11-Aug-98	PES	12.43	7.95	4.48
	17-Dec-98	PES	12.43	8.58	3.85
	7-Oct-99	PES	12.43	8.25	4.18
	12-Oct-00	**PES**	**12.43**	**8.22**	**4.21**
MW-4	21-Feb-90	ES	12.24	8.63	3.61
	25-May-90	ES	12.24	8.58	3.66
	29-Aug-90	ES	12.24	8.50	3.74
	29-Nov-90	ES	12.24	8.74	3.50
	1-Mar-91	ES	12.24	8.65	3.59
	28-May-91	ES	12.24	8.57	3.67
	1-Aug-91	ES	12.24	NA	NA
	27-Jan-92	PES	12.24	8.62	3.62
	28-Feb-92	PES	12.24	8.52	3.72
	28-May-92	PES	12.94	8.35	3.89

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

Well Number	Date	Measured by	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-4 Cont.	27-Aug-92	PES	12.24	9.00	3.24
	10-Nov-92	PES	12.24	8.85	3.39
	18-Feb-93	PES	12.24	8.17	4.07
	20-May-93	PES	12.24	8.21	4.03
	19-Aug-93	PES	12.24	8.20	4.04
	15-Nov-93	PES	12.24	8.33	3.91
	14-Feb-94	PES	12.24	8.30	3.94
	16-May-94	PES	12.24	8.20	4.04
	10-Aug-94	PES	12.24	8.14	4.10
	3-Nov-94	PES	12.24	8.30	3.94
	9-Feb-95	PES	12.24	8.11	4.13
	9-May-95	PES	12.24	7.76	4.48
	10-Aug-95	PES	12.24	7.91	4.33
	13-Nov-95	PES	12.24	7.95	4.29
	2-Mar-96	PES	12.24	7.89	4.35
	9-May-96	PES	12.24	7.64	4.60
	8-Aug-96	PES	12.24	7.76	4.48
	11-Nov-96	PES	12.24	8.00	4.24
	14-Feb-97	PES	12.24	7.63	4.61
	14-May-97	PES	12.24	7.78	4.46
	12-Aug-97	PES	12.24	7.71	4.53
	12-Nov-97	PES	12.24	7.84	4.40
	4-Feb-98	PES	12.24	7.11	5.13
	18-May-98	PES	12.24	7.35	4.89
	11-Aug-98	PES	12.24	7.52	4.72
	17-Dec-98	PES	12.24	7.99	4.25
	7-Oct-99	PES	12.24	7.82	4.42
	12-Oct-00	**PES**	**12.24**	**7.97**	**4.27**
MW-5	21-Feb-90	ES	12.81	6.91	5.90
	25-May-90	ES	12.81	7.58	5.23
	29-Aug-90	ES	12.81	7.75	5.06
	29-Nov-90	ES	12.81	8.17	4.64
	1-Mar-91	ES	12.82	8.11	4.71
	28-May-91	ES	12.82	7.39	5.43
	1-Aug-91	ES	12.82	NA	NA
	27-Jan-92	PES	12.82	7.90	4.92
	28-Feb-92	PES	12.82	7.73	5.09
	28-May-92	PES	12.82	7.18	5.64
	27-Aug-92	PES	12.82	7.54	5.28
	10-Nov-92	PES	12.82	7.90	4.92
	18-Feb-93	PES	12.82	6.58	6.24
	20-May-93	PES	12.82	6.29	6.53
	19-Aug-93	PES	12.82	6.89	5.93

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

Well Number	Date	Measured by	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-5 Cont.	15-Nov-93	PES	12.82	7.43	5.39
	14-Feb-94	PES	12.82	7.16	5.66
	16-May-94	PES	12.82	6.50	6.32
	10-Aug-94	PES	12.82	6.98	5.84
	3-Nov-94	PES	12.82	7.36	5.46
	9-Feb-95	PES	12.82	5.68	7.14
	9-May-95	PES	12.82	5.36	7.46
	10-Aug-95	PES	12.82	6.29	6.53
	13-Nov-95	PES	12.82	6.89	5.93
	2-Mar-96	PES	12.82	7.26	5.56
	9-May-96	PES	12.82	6.00	6.82
	8-Aug-96	PES	12.82	6.67	6.15
	11-Nov-96	PES	12.82	6.69	6.13
	14-Feb-97	PES	12.82	5.88	6.94
	14-May-97	PES	12.82	6.25	6.57
	12-Aug-97	PES	12.82	6.77	6.05
	12-Nov-97	PES	12.82	7.21	5.61
	4-Feb-98	PES	12.82	6.81	6.01
	18-May-98	PES	12.82	4.81	8.01
	11-Aug-98	PES	12.82	6.38	6.44
	17-Dec-98	PES	12.82	7.00	5.82
	7-Oct-99	PES	12.82	7.23	5.59
	12-Oct-00	**PES**	**12.82**	**7.30**	**5.52**
MW-6	1-Mar-91	ES	12.03	8.59	3.44
	28-May-91	ES	12.03	8.35	3.68
	1-Aug-91	ES	12.03	NA	NA
	27-Jan-92	PES	12.03	8.32	3.71
	28-Feb-92	PES	12.03	8.08	3.95
	28-May-92	PES	12.03	8.04	3.99
	27-Aug-92	PES	12.03	8.48	3.55
	10-Nov-92	PES	12.03	8.52	3.51
	18-Feb-93	PES	12.03	8.14	3.89
	20-May-93	PES	12.03	8.46	3.57
	19-Aug-93	PES	12.03	8.61	3.42
	15-Nov-93	PES	12.03	8.30	3.73
	14-Feb-94	PES	12.03	8.09	3.94
	16-May-94	PES	12.03	7.82	4.21
	10-Aug-94	PES	12.03	8.46	3.57
	3-Nov-94	PES	12.03	8.16	3.87
	9-Feb-95	PES	12.03	7.66	4.37
	9-May-95	PES	12.03	8.57	3.46
	10-Aug-95	PES	12.03	7.72	4.31
	13-Nov-95	PES	12.03	8.15	3.88

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

Well Number	Date	Measured by	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-6 Cont.	2-Mar-96	PES	12.03	8.02	4.01
	9-May-96	PES	12.03	7.64	4.39
	8-Aug-96	PES	12.03	7.53	4.50
	11-Nov-96	PES	12.03	8.45	3.58
	14-Feb-97	PES	12.03	7.58	4.45
	14-May-97	PES	12.03	8.62	3.41
	12-Aug-97	PES	12.03	7.62	4.41
	12-Nov-97	PES	12.03	8.56	3.47
	4-Feb-98	PES	12.03	6.56	5.47
	18-May-98	PES	12.03	7.29	4.74
	11-Aug-98	PES	12.03	7.25	4.78
	17-Dec-98	PES	12.03	8.42	3.61
	7-Oct-99	PES	12.03	7.62	4.41
	12-Oct-00	**PES**	**12.03**	**8.05**	**3.98**
MW-7	1-Mar-91	ES	12.9	7.51	5.39
	28-May-91	ES	12.9	7.07	5.83
	1-Aug-91	ES	12.9	NA	NA
	27-Jan-92	PES	12.9	7.28	5.62
	28-Feb-92	PES	12.9	7.04	5.86
	28-May-92	PES	12.9	6.81	6.09
	27-Aug-92	PES	12.9	7.12	5.78
	10-Nov-92	PES	12.9	7.80	5.10
	18-Feb-93	PES	12.9	6.54	6.36
	20-May-93	PES	12.9	6.17	6.73
	19-Aug-93	PES	12.9	6.60	6.30
	15-Nov-93	PES	12.9	6.89	6.01
	14-Feb-94	PES	12.9	6.50	6.40
	17-May-94	PES	12.9	6.07	6.83
	10-Aug-94	PES	12.9	6.34	6.56
	3-Nov-94	PES	12.9	6.18	6.72
	9-Feb-95	PES	12.9	5.57	7.33
	9-May-95	PES	12.9	5.15	7.75
	10-Aug-95	PES	12.9	5.72	7.18
	13-Nov-95	PES	12.9	5.98	6.92
	2-Mar-96	PES	12.9	6.02	6.88
	9-May-96	PES	12.9	6.11	6.79
	8-Aug-96	PES	12.9	6.87	6.03
	11-Nov-96	PES	12.9	6.39	6.51
	14-Feb-97	PES	12.9	5.97	6.93
	14-May-97	PES	12.9	5.89	7.01
	12-Aug-97	PES	12.9	6.56	6.34
	12-Nov-97	PES	12.9	6.76	6.14
	4-Feb-98	PES	12.9	5.94	6.96

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

Well Number	Date	Measured by	Top of Casing (feet MSL)	Depth to Water (feet)	Groundwater Elevations (feet MSL)
MW-7	18-May-98	PES	12.9	4.19	8.71
Cont.	11-Aug-98	PES	12.9	6.21	6.69
	17-Dec-98	PES	12.9	6.80	6.10
	7-Oct-99	PES	12.9	NM	NM
	12-Oct-00	**PES**	**12.9**	**7.18**	**5.72**
MW-8	3-Nov-94	PES	15.01	11.06	3.95
	9-Feb-95	PES	15.01	10.23	4.78
	9-Feb-95	PES	15.01	10.48	4.53
	10-Aug-95	PES	15.01	10.74	4.27
	13-Nov-95	PES	15.01	11.02	3.99
	2-Mar-96	PES	15.01	10.11	4.90
	9-May-96	PES	15.01	10.50	4.51
	8-Aug-96	PES	15.01	10.04	4.97
	11-Nov-96	PES	15.01	10.55	4.46
	14-Feb-97	PES	15.01	9.95	5.06
	14-May-97	PES	15.01	10.08	4.93
	12-Aug-97	PES	15.01	10.63	4.38
	12-Nov-97	PES	15.01	10.13	4.88
	4-Feb-98	PES	15.01	10.17	4.84
	18-May-98	PES	15.01	9.49	5.52
	11-Aug-98	PES	15.01	10.57	4.44
	17-Dec-98	PES	15.01	10.52	4.49
	7-Oct-99	PES	15.01	NM	NM
	12-Oct-00	**PES**	**15.01**	**10.15**	**4.86**

NOTES:

Ft MSL = feet above Mean Sea Level
ES = Engineering-Science, Inc.
PES = PES Environmental, Inc.
BLAINE = Blaine Tech Services, Inc.
NA = Information not available at this date.
NM = Well was inaccessible due to parked cars

Table 2. Summary of Analytical Results for Groundwater Samples Through October 2000
Emery Bay Plaza
1650 65th Street, Emeryville, California

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

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene MCL = 0.001	Toluene DAL = 0.1	Ethyl-Benzene MCL = 0.68	Total Xylenes MCL = 1.75	Purgeable Halocarbons	Lead MCL = 0.005
MW-2	Nov-89	ES	100	NA	NA	8.4	7.4	2.4	13	0.015 *	0.05
	Feb-90	ES	54	NA	NA	7.8	5.6	1.6	8.4	0.032 *	0.021
	May-90	ES	40	NA	NA	7.8	7.5	1.6	7.6	0.076 *	0.025
	Aug-90	ES	49	4.6	NA	9	8	ND	8.9	0.040 *	0.0059
	Nov-90	ES	73	3.5	NA	6.9	5.9	1.4	7.4	NA	NA
	Mar-91	ES	72	1.8	NA	5.5	6.6	1	7.7	NA	NA
	May-91	ES	31	ND	NA	8.4	4.7	1.7	6.3	NA	NA
	Aug-91	ES	47	ND	NA	7.6	1.6	7.3	7.8	NA	NA
	29-Jan-92	PES	77.000	NA	NA	10.000	8.700	2.000	7.600	NA	NA
	28-Feb-92	PES	70.000	NA	NA	9.100	6.400	0.530	7.400	NA	NA
	28-May-92	PES	54.000	NA	NA	8.000	4.800	2.400	6.200	NA	NA
	27-Aug-92	PES	47.000	NA	NA	2.700	2.900	3.400	9.200	NA	NA
	10-Nov-92	PES	45.000	<20	NA	6.600	4.000	2.000	5.800	<0.050	NA
	18-Feb-93	PES	14.000	NA	NA	2.300	0.810	0.670	1.400	NA	NA
	20-May-93	PES	43.000	NA	NA	7.300	5.200	1.500	5.500	NA	NA
	19-Aug-93	PES	45.000	NA	NA	4.900	3.700	1.300	3.400	NA	NA
	15-Nov-93	PES	97.000	NA	NA	6.100	1.700	1.700	4.100	NA	NA
	14-Feb-94	PES	27.000	NA	NA	5.000	0.830	1.200	3.100	NA	NA
	16-May-94	PES	77.000	NA	NA	6.800	1.100	1.400	3.300	NA	NA
	10-Aug-94	PES	25	NA	NA	5.600	0.750	1.400	1.700	NA	NA
	3-Nov-94	PES	24	NA	NA	7.200	0.500	1.500	1.600	NA	NA
	9-Feb-95	PES	12	NA	NA	2.200	0.100	0.480	0.940	NA	NA
	9-May-95	PES	7.8	NA	NA	1.300	0.078	0.340	0.480	NA	NA
	10-Aug-95	PES	5.3	NA	NA	1.300	0.150	0.240	0.270	NA	NA
	13-Nov-95	PES	8.5	NA	NA	2.100	0.250	0.430	0.440	NA	NA
	13-Feb-96	PES	5.2	NA	NA	1.500	0.190	0.210	0.290	NA	NA
	9-May-96	PES	1.7	NA	NA	0.370	0.130	0.060	0.090	NA	NA
	8-Aug-96	PES	4.5	NA	NA	1.200	0.490	0.160	0.380	NA	NA
	11-Nov-96	PES	6.0	NA	NA	2.100	0.920	0.200	0.590	NA	NA
	14-Feb-97	PES	3.8	NA	NA	1.500	0.056	0.240	0.040	NA	NA
	14-May-97	PES	3.6	NA	NA	2.000	0.100	0.160	0.220	NA	NA
	12-Aug-97	PES	7.3	NA	NA	3.200	0.330	0.290	0.420	NA	NA
	12-Nov-97	PES	8.9	NA	NA	3.000	1.300	0.330	0.750	NA	NA
	4-Feb-98	PES	7.6	NA	NA	2.800	0.190	0.410	0.150	NA	NA

Table 2. Summary of Analytical Results for Groundwater Samples Through October 2000
Emery Bay Plaza
1650 65th Street, Emeryville, California

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

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
						MCL = 0.001	DAL = 0.1	MCL = 0.68	MCL = 1.75		MCL = 0.005
MW-2	18-May-98	PES	2.2	NA	NA	1.300	0.240	0.078	0.120	NA	NA
Cont.	11-Aug-98	PES	11	NA	NA	2.3	0.42	0.29	0.77	NA	NA
	17-Dec-98	PES	14	NA	<0.2	3.5	0.49	0.49	0.58	NA	NA
	7-Oct-99	PES	11	NA	<0.5	4.8	1.5	0.81	1.6	NA	NA
	7-Oct-00	**PES**	**16**	**NA**	**<0.010**	**3.8**	**1.3**	**0.73**	**1.8**	**NA**	**NA**
MW-3	Nov-89	ES	0.13	NA	NA	0.0022	ND	ND	0.003	ND	ND
	Feb-90	ES	ND	NA	NA	0.0025	ND	ND	ND	NA	0.011
	May-90	ES	ND	ND	NA	0.002	ND	ND	ND	ND	NA
	Aug-90	ES	ND	0.8	NA	0.0044	0.0029	ND	0.0054	NA	NA
	Nov-90	ES	0.9	0.8	NA	0.0034	ND	ND	ND	NA	NA
	Mar-91	ES	ND	ND	NA	0.025	0.025	0.0053	0.32	NA	NA
	May-91	ES	ND	ND	NA	0.0026	ND	ND	ND	NA	NA
	Aug-91	ES	ND	ND	NA	0.0019	ND	ND	ND	NA	NA
	29-Jan-92	PES	0.092	NA	NA	0.0024	<0.0003	0.0006	<0.0003	NA	NA
	28-Feb-92	PES	0.160***	NA	NA	0.0028	<0.0003	0.0007	0.0005	NA	NA
	28-May-92	PES	<0.050	NA	NA	0.0025	<0.0005	<0.0005	<0.0005	NA	NA
	27-Aug-92	PES	0.370	NA	NA	0.0040	<0.001	<0.0005	<0.0005	NA	NA
	10-Nov-92	PES	0.240	<0.100	NA	0.0042	<0.0003	<0.0003	<0.0006	<0.0003	NA
	18-Feb-93	PES	0.140	NA	NA	0.0018	<0.0005	<0.0005	<0.0005	NA	NA
	20-May-93	PES	0.072	NA	NA	0.0031	<0.0005	<0.0005	<0.0005	NA	NA
	19-Aug-93	PES	<0.050	NA	NA	0.0032	<0.0005	<0.0005	0.0007	NA	NA
	15-Nov-93	PES	0.070	NA	NA	0.0023	0.0007	<0.0005	0.0015	NA	NA
	14-Feb-94	PES	0.120	NA	NA	0.0053	0.0023	0.0012	0.0042	NA	NA
	16-May-94	PES	0.120	NA	NA	0.0031	<0.0005	<0.0005	0.0017	NA	NA
	10-Aug-94	PES	0.1	NA	NA	0.003	< 0.0005	0.0005	<0.002	NA	NA
	3-Nov-94	PES	0.1	NA	NA	0.003	< 0.0005	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	0.1	NA	NA	0.002	<0.0005	<0.0005	<0.002	NA	NA
	9-May-95	PES	0.1	NA	NA	0.003	<0.0005	0.0005	<0.002	NA	NA
	10-Aug-95	PES	0.1	NA	NA	0.003	<0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	<0.05	NA	NA	0.003	<0.0005	<0.0005	<0.002	NA	NA

Table 2. Summary of Analytical Results for Groundwater Samples Through October 2000
Emery Bay Plaza
1650 65th Street, Emeryville, California

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

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
						MCL = 0.001	DAL = 0.1	MCL = 0.68	MCL = 1.75		MCL = 0.005
MW-4	Nov-89	ES	0.2	NA	NA	0.0023	ND	ND	ND	ND	ND
	Feb-90	ES	ND	NA	NA	ND	ND	ND	ND	NA	0.006
	May-90	ES	ND	ND	NA	0.001	ND	ND	ND	ND	NA
	Aug-90	ES	ND	0.8	NA	0.0089	0.0071	ND	0.0094	NA	NA
	Nov-90	ES	ND	0.7	NA	0.0027	ND	ND	ND	NA	NA
	Mar-91	ES	NA	ND	NA	0.003	ND	ND	ND	NA	NA
	May-91	ES	NA	ND	NA	0.0024	ND	ND	ND	NA	NA
	Aug-91	ES	NA	ND	NA	0.0015	ND	ND	ND	NA	NA
	29-Jan-92	PES	<0.050	NA	NA	0.0022	0.0004	<0.0003	0.0007	NA	NA
	28-Feb-92	PES	<0.050	NA	NA	0.0016	<0.0003	<0.0003	0.0003	NA	NA
	28-May-92	PES	<0.050	NA	NA	0.0015	<0.0005	<0.0005	<0.0005	NA	NA
	27-Aug-92	PES	0.080	NA	NA	0.003	<0.001	<0.0005	0.0005	NA	NA
	10-Nov-92	PES	0.180	<0.100	NA	0.060	0.0009	<0.0003	<0.0006	<0.0003	NA
	18-Feb-93	PES	0.060	NA	NA	0.0017	<0.0005	<0.0005	<0.0005	NA	NA
	20-May-93	PES	<0.050	NA	NA	0.0022	<0.0005	<0.0005	<0.0005	NA	NA
	19-Aug-93	PES	<0.050	NA	NA	0.0020	0.0006	<0.0005	0.0005	NA	NA
	15-Nov-93	PES	<0.050	NA	NA	0.0020	0.0005	<0.0005	0.0009	NA	NA
	14-Feb-94	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	16-May-94	PES	<0.050	NA	NA	0.0017	0.0009	<0.0005	0.0011	NA	NA
	10-Aug-94	PES	<0.05	NA	NA	0.002	<0.0005	<0.0005	<0.002	NA	NA
	3-Nov-94	PES	0.06	NA	NA	0.002	<0.0005	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	0.06	NA	NA	0.002	0.0006	<0.0005	<0.002	NA	NA
	9-May-95	PES	0.07	NA	NA	0.001	<0.0005	<0.0005	<0.002	NA	NA
	10-Aug-95	PES	<0.05	NA	NA	0.001	<0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	<0.05	NA	NA	0.003	<0.0005	<0.0005	<0.002	NA	NA
	13-Feb-96	PES	<0.05	NA	NA	0.0013	<0.0005	<0.0005	<0.002	NA	NA
	9-May-96	PES	<0.05	NA	NA	0.0009	<0.0005	<0.0005	<0.002	NA	NA
	8-Aug-96	PES	<0.05	NA	NA	0.0009	<0.0005	<0.0005	<0.002	NA	NA
	11-Nov-96	PES	<0.05	NA	NA	0.0013	0.0006	<0.0005	<0.002	NA	NA
	14-Feb-97	PES	<0.05	NA	NA	0.0006	<0.0005	<0.0005	<0.002	NA	NA
	14-May-97	PES	<0.05	NA	NA	0.0009	<0.0005	<0.0005	<0.002	NA	NA
	12-Aug-97	PES	<0.05	NA	NA	0.0009	<0.0005	<0.0005	<0.002	NA	NA
	12-Nov-97	PES	<0.05	NA	NA	0.0013	<0.0005	<0.0005	<0.002	NA	NA
	4-Feb-98	PES	0.05	NA	NA	0.0019	0.0018	0.0011	0.004	NA	NA

Table 2. Summary of Analytical Results for Groundwater Samples Through October 2000
Emery Bay Plaza
1650 65th Street, Emeryville, California

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

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
						MCL = 0.001	DAL = 0.1	MCL = 0.68	MCL = 1.75		MCL = 0.005
MW-4 Cont.	18-May-98	PES	<0.05	NA	NA	0.00091	<0.0005	<0.0005	0.0011	NA	NA
	11-Aug-98	PES	<0.05	NA	NA	0.00063	<0.0005	<0.0005	<0.0005	NA	NA
	17-Dec-98	PES	<0.1	NA	<0.01	<0.001	<0.001	<0.001	<0.001	NA	NA
	7-Oct-99	PES	<0.05	NA	<0.005	0.0015	<0.0005	<0.0005	<0.0005	NA	NA
	7-Oct-00	**PES**	**<0.05**	**NA**	**<0.0005**	**0.0013**	**<0.0005**	**<0.0005**	**<0.0005**	**NA**	**NA**
MW-5	Nov-89	ES	ND	NA	NA	0.074	ND	ND	0.0042	ND	ND
	Feb-90	ES	ND	NA	NA	0.2	ND	ND	ND	NA	0.012
	May-90	ES	ND	ND	NA	0.11	ND	ND	ND	ND	NA
	Aug-90	ES	ND	0.7	NA	0.066	0.0022	ND	0.0038	NA	NA
	Nov-90	ES	0.6	0.9	NA	0.069	ND	ND	ND	NA	NA
	Mar-91	ES	ND	1.1	NA	0.066	0.0023	ND	ND	NA	NA
	May-91	ES	ND	ND	NA	0.11	ND	ND	ND	NA	NA
	Aug-91	ES	ND	ND	NA	0.078	0.0021	ND	ND	NA	NA
	29-Jan-92	PES	0.190	NA	NA	0.090	0.0005	<0.0003	0.0006	NA	NA
	28-Feb-92	PES	0.230***	NA	NA	0.110	0.0009	<0.0003	0.0005	NA	NA
	28-May-92	PES	0.130	NA	NA	0.100	<0.0005	<0.0005	<0.0005	NA	NA
	27-Aug-92	PES	0.520	NA	NA	0.083	0.002	<0.0005	<0.0005	NA	NA
	10-Nov-92	PES	0.240	<0.100	NA	0.074	0.0010	<0.0003	<0.0006	<0.0003	NA
	18-Feb-93	PES	0.190	NA	NA	0.056	0.0006	<0.0005	<0.0005	NA	NA
	20-May-93	PES	<0.200	NA	NA	0.056	<0.002	<0.002	<0.002	NA	NA
	19-Aug-93	PES	0.170	NA	NA	0.050	0.0007	<0.0005	<0.0005	NA	NA
	15-Nov-93	PES	0.220	NA	NA	0.049	0.001	<0.001	<0.001	NA	NA
	14-Feb-94	PES	0.140	NA	NA	0.062	<0.0005	<0.0005	<0.0005	NA	NA
	16-May-94	PES	0.310	NA	NA	0.140	0.003	<0.003	<0.003	NA	NA
	12-Aug-94	PES	0.5	NA	NA	0.095	0.034	0.004	0.014	NA	NA
	3-Nov-94	PES	0.4	NA	NA	0.079	0.0006	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	0.3	NA	NA	0.074	0.0008	<0.0005	<0.0002	NA	NA
	9-May-95	PES	0.2	NA	NA	0.047	0.0005	<0.0005	<0.002	NA	NA
	10-Aug-95	PES	0.2	NA	NA	0.046	0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	0.3	NA	NA	0.048	0.0007	<0.0005	<0.002	NA	NA

Table 2. Summary of Analytical Results for Groundwater Samples Through October 2000
Emery Bay Plaza
1650 65th Street, Emeryville, California

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

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene MCL = 0.001	Toluene DAL = 0.1	Ethyl-Benzene MCL = 0.68	Total Xylenes MCL = 1.75	Purgeable Halocarbons	Lead MCL = 0.005
MW-6	May-90	ES	NA	ND	NA	ND	ND	ND	ND	ND	ND**
	Aug-90	ES	NA	ND	NA	NA	NA	NA	NA	NA	ND**
	Nov-90	ES	1.2	1.4	NA	0.0012	ND	ND	ND	0.0012	NA
	Mar-91	ES	ND	ND	NA	ND	ND	ND	ND	NA	NA
	May-91	ES	ND	ND	NA	ND	ND	ND	ND	NA	NA
	Aug-91	ES	ND	ND	NA	ND	ND	ND	ND	NA	NA
	29-Jan-92	PES	<0.050	NA	NA	<0.0003	<0.0003	<0.0003	<0.0003	NA	NA
	28-Feb-92	PES	<0.050	NA	NA	<0.0003	<0.0003	<0.0003	<0.0003	NA	NA
	28-May-92	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	27-Aug-92	PES	<0.050****	NA	NA	<0.0005	<0.001	<0.0005	<0.0005	NA	NA
	10-Nov-92	PES	<0.050	<0.100	NA	<0.0003	<0.0003	<0.0003	<0.0006	<0.0003	NA
	18-Feb-93	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	20-May-93	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	19-Aug-93	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	15-Nov-93	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	14-Feb-94	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	16-May-94	PES	<0.050	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	10-Aug-94	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	3-Nov-94	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	9-May-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	10-Aug-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
MW-7	May-90	ES	NA	0.6	NA	0.24	ND	ND	ND	0.24	ND**
	Aug-90	ES	ND	ND	NA	0.081	0.0018	ND	ND	0.0844	ND**
	Nov-90	ES	ND	0.8	NA	0.054	ND	ND	ND	0.054	NA
	Mar-91	ES	ND	ND	NA	0.1	0.0036	ND	ND	NA	NA
	May-91	ES	ND	ND	NA	0.12	0.0027	ND	ND	NA	NA
	Aug-91	ES	ND	ND	NA	0.074	0.0033	ND	ND	NA	NA
	29-Jan-92	PES	0.270	NA	NA	0.025	0.0005	<0.0003	0.0008	NA	NA
	28-Feb-92	PES	0.100***	NA	NA	0.033	0.0007	<0.0003	0.0007	NA	NA
	28-May-92	PES	0.150	NA	NA	0.021	<0.0005	<0.0005	<0.0005	NA	NA
	27-Aug-92	PES	0.440	NA	NA	0.011	0.001	<0.0005	<0.0005	NA	NA

Table 2. Summary of Analytical Results for Groundwater Samples Through October 2000
Emery Bay Plaza
1650 65th Street, Emeryville, California

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

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
						MCL = 0.001	DAL = 0.1	MCL = 0.68	MCL = 1.75		MCL = 0.005
MW-7	10-Nov-92	PES	0.370	<0.100	NA	0.031	0.0012	<0.0003	0.0012	<0.0003	NA
Cont.	18-Feb-93	PES	0.270	NA	NA	0.077	0.0013	<0.0005	0.0014	NA	NA
	20-May-93	PES	0.300	NA	NA	0.150	0.003	<0.002	0.003	NA	NA
	19-Aug-93	PES	0.110	NA	NA	0.040	0.0010	<0.0005	0.0011	NA	NA
	15-Nov-93	PES	0.120	NA	NA	0.015	0.0006	<0.0005	0.0023	NA	NA
	14-Feb-94	PES	0.120	NA	NA	0.038	<0.0005	<0.0005	<0.0005	NA	NA
	17-May-94	PES	<0.300	NA	NA	0.061	<0.003	<0.003	<0.003	NA	NA
	10-Aug-94	PES	0.1	NA	NA	0.009	<0.0005	<0.0005	<0.002	NA	NA
	3-Nov-94	PES	0.1	NA	NA	0.003	<0.0005	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	0.2	NA	NA	0.050	0.0006	<0.0005	<0.002	NA	NA
	9-May-95	PES	0.3	NA	NA	0.120	0.001	<0.0005	<0.002	NA	NA
	10-Aug-95	PES	<0.05	NA	NA	0.007	<0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	0.09	NA	NA	0.003	<0.0005	<0.0005	<0.002	NA	NA
MW-8	3-Nov-94	PES	<0.05	NA	NA	0.001	<0.0005	<0.0005	<0.002	NA	NA
	9-Feb-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	9-May-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	10-Aug-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	13-Nov-95	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	13-Feb-96	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	9-May-96	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	8-Aug-96	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	11-Nov-96	PES	<0.05	NA	NA	<0.0005	0.0009	<0.0005	<0.002	NA	NA
	14-Feb-97	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	14-May-97	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	12-Aug-97	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.002	NA	NA
	12-Nov-97	PES	<0.05	NA	NA	0.0033	0.0023	<0.0005	<0.002	NA	NA
	4-Feb-98	PES	<0.05	NA	NA	0.0011	<0.0005	<0.0005	<0.002	NA	NA
	18-May-98	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	11-Aug-98	PES	<0.05	NA	NA	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	17-Dec-98	PES	<0.05	NA	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
	7-Oct-99	PES	NS	NS	NS	NS	NS	NS	NS	NA	NA
	12-Oct-00	**PES**	**<0.05**	**NA**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**<0.0005**	**NA**	**NA**

Table 2. Summary of Analytical Results for Groundwater Samples Through October 2000
Emery Bay Plaza
1650 65th Street, Emeryville, California

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

Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
						MCL = 0.001	DAL = 0.1	MCL = 0.68	MCL = 1.75		MCL = 0.005
EW-1	May-90	ES	20	ND	NA	7.5	4.5	1	6.3	0.068	ND**
	Aug-90	ES	NA	3.5	NA	6	4.2	ND	4.6	0.016 *	ND**
	Nov-90	ES	47	3.1	NA	6	3.4	1	4.7	NA	NA
	17-Dec-90	ES	NA	NA	NA	11	7.9	2.2	10	NA	NA
	19-Dec-90	ES	NA	NA	NA	3.7	2.5	ND	2.3	NA	NA
	21-Dec-90	ES	NA	NA	NA	3.2	2.2	ND	1.7	NA	NA
	27-Dec-90	ES	NA	NA	NA	2.9	2.1	0.16	1.5	NA	NA
	4-Jan-91	ES	NA	NA	NA	3.2	2.8	ND	ND	NA	NA
	11-Jan-91	ES	NA	NA	NA	3	2.4	0.2	1.8	NA	NA
	6-Feb-91	ES	NA	NA	NA	0.47	0.23	0.011	0.39	NA	NA
	13-Feb-91	ES	NA	NA	NA	1.2	0.28	ND	0.36	NA	NA
	15-Mar-91	ES	NA	NA	NA	0.13	0.085	0.006	0.17	NA	NA
	3-Jul-91	ES	NA	NA	NA	1.3	0.95	0.22	1.4	NA	NA
	1-Aug-91	ES	NA	NA	NA	0.22	0.19	0.013	0.27	NA	NA
	16-Aug-91	ES	NA	NA	NA	0.17	0.16	0.013	0.19	NA	NA
	13-Nov-91	ES	NA	NA	NA	3.1	0.27	0.04	0.22	NA	NA
	29-Jan-92	PES	2.700	NA	NA	0.570	0.150	0.0070	0.260	NA	NA
	26-Mar-92	PES	25.000	NA	NA	3.600	2.600	0.530	2.600	NA	NA
	28-May-92	PES	16.000	NA	NA	3.300	3.200	0.750	2.600	NA	NA
	29-Jun-92	PES	7.000	NA	NA	2.200	3.100	0.270	1.400	NA	NA
	21-Jul-92	PES	1.600	NA	NA	0.220	0.017	<0.0005	0.100	NA	NA
	27-Aug-92	PES	NS	NS	NA	NS	NS	NS	NS	NS	NS
	23-Sep-92	PES	5.200	NA	NA	1.100	0.590	0.100	1.000	NA	NA
	27-Oct-92	PES	1.300	NA	NA	0.220	0.061	0.0053	0.110	NA	NA
	24-Nov-92	PES	7.100	NA	NA	1.400	1.100	0.120	0.890	NA	NA
	18-Feb-93	PES	7.200	NA	NA	1.400	0.930	0.210	1.000	NA	NA
	09-Mar-93	PES	4.600	NA	NA	0.990	0.750	0.062	0.840	NA	NA
	21-Apr-93	PES	4.900	NA	NA	0.270	0.180	0.020	0.190	NA	NA
	13-May-93	PES	2.600	NA	NA	0.520	0.110	0.023	0.330	NA	NA
	28-Jun-93	PES	9.500	NA	NA	1.900	0.460	0.230	1.000	NA	NA
	11-Aug-93	PES	1.300	NA	NA	<0.002	<0.002	<0.002	0.400	NA	NA
	15-Nov-93	PES	46.000	NA	NA	2.900	0.380	0.500	1.700	NA	NA
	14-Feb-94	PES	21.000	NA	NA	4.500	0.860	1.000	2.800	NA	NA
	16-May-94	PES	19.000	NA	NA	7.300	0.930	1.300	3.300	NA	NA

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Well Number	Sample Date	Sampled by	TPH as Gasoline	TPH as Diesel	MTBE	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	Purgeable Halocarbons	Lead
						MCL = 0.001	DAL = 0.1	MCL = 0.68	MCL = 1.75		MCL = 0.005
EW-1 Cont.	10-Aug-94	PES	19	NA	NA	4.200	0.490	1.100	1.500	NA	NA
	3-Nov-94	PES	20	NA	NA	6.000	0.230	1.400	1.400	NA	NA
	9-Feb-95	PES	8.7	NA	NA	1.800	0.110	0.380	0.740	NA	NA
	9-May-95	PES	6.6	NA	NA	1.100	0.051	0.270	0.380	NA	NA
	10-Aug-95	PES	2.6	NA	NA	0.410	0.016	0.110	0.097	NA	NA
	13-Nov-95	PES	14	NA	NA	2.900	0.110	0.550	0.440	NA	NA
	13-Feb-96	PES	3.7	NA	NA	1.000	0.220	0.170	0.280	NA	NA
	9-May-96	PES	0.97	NA	NA	0.230	0.050	0.039	0.047	NA	NA
	8-Aug-96	PES	0.74	NA	NA	0.200	0.063	0.025	0.049	NA	NA
	11-Nov-96	PES	0.64	NA	NA	0.340	0.110	0.034	0.090	NA	NA
	14-Feb-97	PES	4.20	NA	NA	1.600	0.043	0.260	0.040	NA	NA
	14-May-97	PES	2.2	NA	NA	0.940	0.011	0.064	0.068	NA	NA
	12-Aug-97	PES	3.2	NA	NA	1.400	0.028	0.086	0.110	NA	NA
	12-Nov-97	PES	2.0	NA	NA	0.790	0.045	0.028	0.090	NA	NA
	4-Feb-98	PES	7.2	NA	NA	2.600	0.190	0.310	0.140	NA	NA
	18-May-98	PES	1.5	NA	NA	0.820	0.019	0.071	0.067	NA	NA
	11-Aug-98	PES	5.1	NA	NA	1.2	0.0065	0.075	0.21	NA	NA
	17-Dec-98	PES	5.9	NA	0.04	2.2	0.16	0.0035	0.31	NA	NA
	7-Oct-99	PES	11	NA	<0.5	3.1	0.098	0.49	0.89	NA	NA
	12-Oct-00	**PES**	**7.7**	**NA**	**<0.010**	**3.0**	**0.056**	**0.38**	**0.20**	**NA**	**NA**

NOTES:

* = 1,2-Dichlorethane concentration (only 1,2-Dichloroethane detected).
** = Organic Lead
*** = TPH quantified as gasoline but chromatogram pattern was not typical of gasoline.
ES = Engineering-Science, Inc.
PES = PES Environmental, Inc.
BLAINE = Blaine Tech Services, Inc.
NA = Not analyzed
ND = Not detected above method detection limit.
NS = Not sampled.
<0.0005 = Not detected above indicated laboratory reporting limit.
MCL = California Maximum Contaminant level, current as of January 1991.
DAL = Department of Health Services Action Levels, current as of January 1991.
TPH = Total Petroleum Hydrocarbons
MTBE = Methyl tert butyl ether

APPENDIX F

DWR WATER WELL LOGS
(ON CD-ROM)