R0514

SOIL PARAMETERS AND CONFIRMATION SOIL SAMPLING WORKPLAN AND SENSITIVE RECEPTOR SURVEY REPORT

Pacific Supply Company, LLC
1735 24th Street
Oakland, California

Project No. 029

January 29, 2004

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Brunsing Associates, Inc.

Soil Parameters and Confirmation Soil Sampling Workplan
And
Sensitive Receptor Survey Report

Pacific Supply Company, LLC
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1.0 INTRODUCTION

Brunsing Associates, Inc. (BAI) has prepared this workplan, for the property located at 1735 24th Street, Oakland, California (Plate 1), to address the need for soil type analyses and confirmation soil sampling to evaluate the effectiveness of the remediation activities performed at the Pacific Supply Company site. Additionally, this document presents the results of the sensitive receptor survey, performed in December 2003 and January 2004. The workplan and sensitive receptor survey were performed at the request of the Alameda County Health Care Services Agency (ACHCSA) in their correspondence dated November 6, 2003. The proposed scope of work covered in this workplan consists of drilling seven shallow soil borings for the purpose of soil confirmation. Confirmation soil samples will be collected at the same depth as the original boring. Additionally, three soil borings will also be continuously bored to a depth of 5 feet below ground surface (bgs) to evaluate soil types and soil parameters.

2.0 SITE BACKGROUND

In May 1987, efforts were initiated to abandon a 1,000-gallon underground gasoline storage tank at Pacific Supply Company's West Oakland site. Soil and associated vapor samples from exploratory boreholes at the site were analyzed by gas chromatography carried out by CHIPS Environmental Consultants and Anatec Laboratories (Plate 2 and Tables 3 and 4). The results indicated that soil in the vicinity of the tank was contaminated with gasoline and raised the possibility that gasoline may have reached groundwater below the site. During subsequent removal of the tank by Erickson Industrial Services, substantial deterioration of the tank body was documented. Gasoline odors were also detected during tank removal operations.

In order to assess the extent of soil and groundwater quality below and immediately adjacent to the Pacific Supply Company site and the potential for migration of contaminants from off-site sources, BAI carried out a two-phase soil and groundwater investigation. Monitoring wells MW-1 through MW-5 were constructed in September 1988 as the first phase of a soil and groundwater investigation. Monitoring wells MW-6 and MW-7 were constructed on December 19, 1989 during Phase II of the same investigation. The soil analytical results for these sampling events are presented in Table 3 and their locations are provided on Plate 2. The construction and sampling of the wells is documented in BAI's Report of Findings, dated March 23, 1990. The results of the Phase I and II investigations indicated that light petroleum hydrocarbons had migrated beyond the immediate vicinity of the former underground storage tank (UST).

The Pacific Supply Company initiated quarterly groundwater monitoring at the request of the ACHCSA in May 1992. Initially, only on-site wells were monitored for total petroleum hydrocarbons (TPH) as gasoline, benzene, toluene, ethylbenzene and xylenes (BTEX), and lead. Later, the five on-site and the two off-site wells were monitored quarterly.

A vapor extraction pilot study was performed in June 1992 to evaluate the feasibility of using vapor extraction technology as an insitu corrective action to remove volatile petroleum hydrocarbons from the shallow subsurface soils. A two-inch diameter vapor extraction well (VEW-1) was installed at the location indicated on Plate 2 to an approximate depth of eight feet bgs. The results of the 4-day pilot study indicated that the lithology at the site permitted the flow of air through the soils at a sufficient rate so as to volatilize hydrocarbon constituents in the soil. The radius of influence was determined in the field by measuring the relative pressure at several probe locations positioned at various radial distances away from the extraction well. The results indicated that the estimated radius of influence from a two-inch diameter extraction well was approximately 30 feet at a relatively low pressure of less than 50 inches of water, as discussed in BAI's report titled "Vapor Extraction Remedial Design Report and Specification," dated May 24, 1993.

In response to an ACHCSA December 1992 request, BAI performed an additional investigation. Ten soil borings (B-1 through B-10) were drilled as part of this investigation to a depth of approximately seven to ten feet bgs (Plate 2). From each boring, one soil sample was retained from a depth of approximately seven to eight feet bgs for analytical testing of TPH as gasoline and BTEX (Table 3). The results of this investigation were provided in BAI's report titled "Vapor Extraction Remedial Design Report and Specification," dated May 24, 1993.

Vapor recovery wells VRW-1 through VRW-9 were constructed in August 1993 as part of a vapor recovery system. During installation of the extraction wells, soil samples were collected for chemical analysis in the borings at the depth where first groundwater occurred, at approximately seven feet bgs. The analytical results for these soil samples are presented in Table 3, and their locations are provided on Plate 2. Installation of these wells were documented in a February 7, 1994 report. A vapor extraction system was installed in the fall of 1993 as an interim remedial action. The system began operation on December 26, 1993. The system consisted of an internal combustion engine with a spray aeration tank for treatment of groundwater, and an activated carbon treatment polishing step prior to groundwater discharge. The internal combustion unit and spray aeration unit was manufactured by Remediation Service

International (RSI), under the trade name Spray Aeration Vapor Extraction (SAVE) system.

On June 28, 1996, the treatment system was shut down with the concurrence of Pacific Supply Company. Prior to shut down, the system had destroyed an estimated 6,550 pounds of petroleum hydrocarbons since start of operations on December 26, 1993. After shut down, the water in the water tank was treated and discharged to the sanitary sewer under the existing permit and the inside of the tank was cleaned on July 15, 1996.

The permit with the Bay Area Air Quality Management District (BAAQMD) expired on September 1, 1996, and was not renewed. The water discharge permit was discontinued on July 31, 1996. The total volume of water discharged to the sanitary sewer was 151,089 gallons. In December 1996, the shut down and decommissioning of the system was authorized by Jennifer Eberle of the ACHCSA.

Groundwater monitoring continued following shut down of the vapor extraction system. In August 2000, BAI supervised the drilling of 3 soil borings (B-10, B-11, and B-12) in 24th Street, on the north side of the Pacific Supply Company building in a downgradient direction from the former UST location. Grab groundwater samples were collected to evaluate whether off-site migration of hydrocarbon contamination in groundwater was occurring. One of the three groundwater samples was reported to contain low levels of TPH as gasoline, BTEX, and petroleum oxygenates. The results of the field investigation are presented in BAI's "Groundwater Investigation and Monitoring Report," dated December 14, 2000.

Tables 1 and 2 present a summary of groundwater analytical data and groundwater elevations for the monitoring wells and vapor recovery wells, respectively. Table 3 presents a summary of historical soil analytical. Tables 1, 2 and 3 also provide the Oakland Tier 1 Risk Based Screening Levels (RBSLs) for BTEX, and the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Environmental Screening Level (ESL) for TPH as gasoline. Table 4 presents a summary of historic vapor analytical data. Table 5 provides groundwater analytical results for the off-site borings drilled in August 2000. Plate 2 presents a site map that includes the historical boring and sampling locations. Plate 3 presents the proposed soil boring locations. A site health and safety plan is included in Appendix A. Appendix B presents the field reports, telephone logs, and maps for the sensitive receptor survey.

3.0 SENSITIVE RECEPTOR SURVEY

BAI attempted to identify potential groundwater receptors within a 1,000-foot radius of the site by:

- performing a door-to-door survey, which included leaving letters for those property owners who were not present during the survey, and
- reviewing well driller's logs at the Department of Water Resources (DWR).

Additional information was collected about public groundwater wells within a ½-mile radius by contacting the East Bay Municipal Utility District (EBMUD). BAI also evaluated the presence of nearby surface waters and subsurface structures during the door-to-door survey.

3.1 Door-to-Door Survey

BAI personnel conducted a door-to-door field survey on January 21, 2004 within a 1,000-foot radius of the site. If the occupant of the property was not present during the survey, a letter was left stating the purpose of the survey with an attached pre-paid postcard to send to BAI indicating whether or not they had a well on the property, or a basement or below grade crawlspace. BAI personnel contacted 26 properties either in person or by leaving the letter dated January 21, 2004 on their door. The door-to-door field notes, and a copy of the letter left at properties where the occupants were not present are included as Appendix B. The results from the survey found no groundwater or irrigation wells in a 1,000-foot radius. # responded?

3.2 Well Drillers Logs

On December 17, 2003, BAI personnel visited the Department of Water Resources in Sacramento to perform a search of available well drillers logs within a 1,000-foot radius of 1734 24th Street, Oakland. The survey did not identify any irrigation or drinking water wells within 1,000 feet. However, several monitoring wells were present in the general vicinity of the site.

3.3 Municipal Well Survey

EBMUD is the primary municipal water supply company for the Oakland area. On January 20, 2004, BAI contacted EBMUD to verify that no municipal wells or public drinking water supply wells were within a ½-mile radius from the site. According to

Mike Goldberg, Senior Civil Engineer for EBMUD, there are no water supply wells located within a ½-mile radius from the site.

3.4 Surface Water Receptors

The site is located approximately 1-mile east of the San Francisco Bay. During the door-to-door survey, no surface water areas were observed within 1,000 feet of the site.

3.5 Utilities/Preferential Pathway

A map of the storm water and sanitary sewer systems was obtained from the City of Oakland on January 21, 2004. The City of Oakland stormwater and sanitary system map is provided in Appendix B. The map indicates the presence of underground stormwater pipes adjacent to the facility in the general northeast/southwest direction along Wood Street and Willow Street in the vicinity of the site. An underground stormwater pipe is also present one block south of the site in the general westerly/easterly direction along 22nd Street. The map shows that underground sanitary pipes exist in the general westerly/easterly direction along 24th Street and in the general northeast/southwest direction along Wood Street.

Several utilities, including: gas & electric, water, and telephone, were contacted as part of the sensitive receptor survey. Utility maps were not obtained from Pacific Gas & Electric Company (PG&E) despite several attempts to obtain them. The utility appeared to have concerns regarding the liability or possible improper use of the map. The telephone company, SBC California and EBMUD provided maps of their underground lines in the vicinity. The SBC California map shows that underground lines exist primarily along West Grand Avenue. The EBMUD map shows that no water lines exist along 24th Street between Wood and Willow Streets. Water lines exist in the general northeast/southwest direction along Wood Street and Willow Street, and along Willow Street from 24th Street to West Grand Avenue. The SBC California and the EBMUD maps have not been included in this document, except as a reference, at the request of SBC California and EBMUD. By visual inspection during the door-to-door survey, telephone lines and power lines appear to be located aboveground in the vicinity of the site.

No basements were identified during the sensitive receptor survey. However, the northeast corner of the Pacific Supply Company building appears to extend approximately 2 to 3 feet bgs.

4.0 PROPOSED SOIL PARAMETERS AND CONFIRMATION SOIL BORINGS

BAI proposes that one boring be drilled at each location where the existing soil analytical data exceeded the SFRWQCB ESL or the Oakland Tier 2 SSTLs listed in Table 3. In accordance with an email from the ACHCSA, borings have not been proposed near borings B-5 and B-9 because these borings are located within 30 feet (estimated radius of influence for vapor extraction) of vapor extraction wells VRW-8 and VRW-1, respectively, and a boring is already proposed within 30 feet of wells VRW-1 and VRW-8. Based on the above criteria, seven borings are proposed to evaluate the effectiveness of the remediation system, and current soil concentrations. Three additional borings will be drilled outside of the anticipated impacted area to provide soil parameters. We anticipate that one soil sample will be collected from all 10 borings for analytical testing or physical testing.

4.1 Soil Borings and Sample Collection

A C-57 licensed drilling contractor with a drill rig equipped with hollow-stem augers for completion of the soil borings. Soil cuttings generated from drilling activities will be placed onsite in labeled 55-gallon drums, pending analytical characterization and arrangements for proper disposal. The borings will be logged by a qualified geologist using the Unified Soil Classification System.

Soil samples will be collected for lithologic purposes at a minimum of 5-foot intervals using a split-spoon sampler lined with brass sample tubes. Confirmation soil samples will be collected at the approximate depth where the original soil sample was collected. We anticipate that the borings drilled to collect confirmation soil samples will not extend deeper than 8 feet bgs. Plate 3 presents the soil boring sampling locations, and the anticipated sample collection depth for each soil confirmation sample.

The three soil borings that will be drilled for the purpose of determining soil parameters will be continuously sampled. Based on historical groundwater levels at the site, one vadose zone soil sample will be collected for analysis of soil parameters at an approximate depth of 5 feet bgs in each of the three borings.

The sample tubes will be sealed with plastic caps and labeled using a waterproof marker to designate the location, date, name of person doing the sampling, depth at which that sample was taken, and sample ID. The samples will be sealed in a zip-lock bag, placed in a cooled ice chest, and submitted to a state-certified analytical laboratory for analysis. A chain-of-custody form will be completed and included with all samples.

When transferring samples, the relinquishing and receiving individuals will sign, date, and note the time on the chain-of-custody form.

The borings will be backfilled using cement/bentonite grout or hydrated bentonite chips. Asphalt or clean soil will be placed at ground surface to match the nearby existing surface grade.

4.2 Sample Analyses

BAI proposes to analyze the seven confirmation soil samples for TPH as gasoline by EPA Test Method (EPA) 8015, and BTEX by EPA 8020. As requested by the ACHCSA, BAI proposes to follow the soil parameter sampling recommendations provided in the *Advisory-Active Soil Gas Investigations*, prepared by the California Regional Water Quality Control Board, Los Angeles Region and the Department of Toxic Substances Control. Therefore, the three soil samples collected for evaluating soil parameters will be tested for: (1) density, (2) organic carbon content of the soil, (3) soil moisture, (4) effective permeability, (5) porosity, and (6) grain size distribution (curve) and evaluation of fine-grained soil content to determine percent clay, silt, and sand.

4.3 Equipment Decontamination Procedures

Drill augers and sampling equipment will be steam cleaned before use and after each boring. A steam cleaning area will be constructed to contain rinseate liquids. Sampling equipment will be decontaminated prior to use and between sample drives to prevent cross-contamination. Rinseate from all cleaning operations will be stored onsite in 55-gallon drums until proper disposal can be arranged. Soil cuttings from all borings will also be placed in labeled 55-gallon drums. Arrangement for appropriate drum disposal will be made following receipt of analytical reports for the samples collected for this site investigation. Following disposal, documentation will be forwarded to the ACHCSA.

4.4 Utilities and Permits

Prior to drilling, the boring locations will be marked and Underground Service Alert will be contacted. Any borings to be completed in the area of aboveground electrical lines will maintain standard minimum distances between the electrical lines and the drill rig mast to prevent electrical arcing. Prior to drilling, a drilling permit application will be submitted to the ACHCSA.

5.0 SITE HEALTH AND SAFETY PLAN

A site health and safety plan for the study site is provided in Appendix A, and will be used when completing this phase of site investigation. A copy of the health and safety plan will be accessible to all site workers involved with the field activities, and a health and safety meeting will be held onsite before commencing field activities.

6.0 REPORT AND SCHEDULE

A report presenting the results of this investigation will be prepared and submitted to the ACHCSA for review. The report will be signed by a registered geologist or professional engineer and will include the following:

- Site History
- Summary of Work Performed and Conditions Encountered
- Analytical Data Summary Tables and Laboratory Reports
- Site Vicinity Map
- Site Map with Boring and Well Locations and Relevant Site Features
- Drafted Boring Logs with Field Screening and Analytical Results
- Conclusions and Recommendations.

After this workplan has been approved by the ACHCSA, a drilling permit application will be submitted to the ACHCSA. The drilling will be performed within one month of receipt of the drilling permit, contingent upon drilling subcontractor availability.

7.0 DISTRIBUTION

Copies of this workplan have been distributed to the organizations and individuals listed below.

Mr. Barney Chan — Original Copy
Alameda County Health Care Services Agency
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Ms. Normita Callison — 1 Copy
Corporate Environmental Specialist
Pacific Coast Companies, Inc.
Environmental Services
5550 Roseville Road
North Highlands, California 95660

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Lead (mg/L)	MTBE (µg/L)
MW-1	10/14/1988	7.99	0.88	1.1	1.1	ND	–	ND	–	–
MW-1	12/29/1989	7.74	1.13	ND	ND	ND	ND	ND	ND (1)	–
MW-1	5/28/1992	7.81	1.06	ND	ND	ND	ND	ND	0.003(2)	–
MW-1	9/3/1992	7.90	0.97	ND	ND	ND	ND	ND	0.12 (2)	–
MW-1	11/24/1992	7.90	0.97	ND	ND	ND	ND	ND	0.017 (2)	–
MW-1	3/9/1993	7.38	1.49	ND	ND	ND	ND	ND	ND (1)	–
MW-1	7/21/1993	7.68	1.19	ND	ND	ND	ND	ND	ND (1)	–
MW-1	11/3/1993	7.83	1.04	ND	ND	ND	ND	ND	ND (1)	–
MW-1	2/1/1994	7.30	1.57	ND	ND	ND	ND	ND	ND (1)	–
MW-1	6/2/1994	7.43	1.44	ND	ND	ND	ND	ND	ND (1)	–
MW-1	9/1/1994	7.70	1.17	ND	ND	ND	ND	ND	ND (1)	–
MW-1	12/13/1994	6.90	1.97	ND	ND	ND	ND	ND	–	–
MW-1	3/7/1995	7.30	1.57	0.06	3.8	ND	ND	ND	–	–
MW-1	6/9/1995	7.87	1.00	0.09	12	0.8	0.5	1.3	–	–
MW-1	9/21/1995	7.67	1.20	ND	4.1	ND	ND	ND	–	–
MW-1	12/18/1995	7.15	1.72	ND	ND	ND	ND	ND	–	–
MW-1	2/29/1996	6.74	2.13	0.09	1.4	0.5	ND	0.8	–	–
MW-1	7/15/1996	7.76	1.11		–	–	–	–	–	–
MW-1	1/7/1997	6.80	2.07	0.06	0.6	<0.5	<0.5	<0.5	–	–
MW-1	7/12/1997	7.67	1.20	–	–	–	–	–	–	–
MW-1	1/26/1998	6.93	1.94	<0.05	<0.5	<0.5	<0.5	1.1	–	–
MW-1	7/3/1998	7.51	1.36	–	–	–	–	–	–	–
MW-1	1/13/1999	7.63	1.24	<0.05	<0.5	<0.5	<0.5	<0.5	–	–
MW-1	9/27/1999	7.77	1.10	–	–	–	–	–	–	–
MW-1	1/28/2000	6.85	2.02	<0.05	<0.5	<0.5	<0.5	<0.5	–	<5.0
MW-1	5/16/2002	7.45	1.42	0.35	<0.5	<0.5	<0.5	<0.5	–	<1.0
MW-1	6/10/2003	7.32	4.15	<0.05	<0.5	<0.5	<0.5	<0.5	–	–
MW-1	11/19/2003	7.30	4.17	<0.050	<0.30	<0.30	<0.50	<0.50	–	–
Oakland Tier 1 RBSLs					1,800	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB ESLs Table B-Groundwater (4)				0.5	-	-	-	-	-	-

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Lead (mg/L)	MTBE (µg/L)
MW-2	10/14/1988	7.29	0.85	11	23	20	–	16	–	–
MW-2	12/29/1989	6.87	1.27	4	200	6.7	ND	ND	0.22 (1)	–
MW-2	5/28/1992	6.92	1.22	8.9	550	48	ND	13	ND (2)	–
MW-2	9/3/1992	7.26	0.88	2.1	760	6.2	1.8	5.1	0.006 (2)	–
MW-2	11/24/1992	7.28	0.86	4.2	370	15	3.4	9.5	ND (2)	–
MW-2	3/9/1993	6.73	1.41	4.3	280	14	3.7	7.1	ND (1)	–
MW-2	7/21/1993	7.02	1.12	3.4	250	9.6	2.5	11	ND(1)	–
MW-2	11/4/1993	7.22	0.92	2.5	230	7.8	2.1	9.9	ND(1)	–
MW-2	2/1/1994	6.93	1.21	3.4	240	17	ND	15	ND(1)	–
MW-2	6/2/1994	6.86	1.28	3.0	150	9.8	3.0	10	ND(1)	–
MW-2	9/1/1994	7.10	1.04	2.1	120	9.8	2.0	9.6	ND(1)	–
MW-2	12/13/1994	6.58	1.56	2.0	200	10	2.7	11	–	–
MW-2	3/7/1995	6.69	1.45	3.0	500	15	5.8	16	–	–
MW-2	6/9/1995	7.00	1.14	2.1	300	14	5.8	13	–	–
MW-2	9/21/1995	6.91	1.23	1.6	120	9.6	ND	15	–	–
MW-2	12/18/1995	6.73	1.41	2.8	120	16	5.2	19	–	–
MW-2	2/29/1996	6.36	1.78	1.7	170	15	2.9	17	–	–
MW-2	7/15/1996	7.11	1.03	2.8	160	22	3.5	17	–	–
MW-2	1/7/1997	6.40	1.74	3.0	350	25	8.1	24	–	–
MW-2	7/12/1997	6.98	1.16	2.1	55	11	<2.5	18	–	–
MW-2	1/26/1998	6.45	1.69	1.8	310	29	5.0	15	–	–
MW-2	7/3/1998	6.91	1.23	1.9	85	9.3	1.8	17	–	–
MW-2	1/13/1999	7.07	1.07	2.1	48	33	2.0	16	–	–
MW-2	9/27/1999	7.22	0.92	1.5	20	6.8	2.6	11	–	–
MW-2	1/28/2000	6.61	1.53	1.3	22	6.4	1.5	11	–	<5.0
MW-2	5/17/2002	6.95	1.19	3.3	25.4	<5.0	<5.0	<5.0	–	<10
MW-2	6/10/2003	6.71	4.09	1.6	52	2.3	32	9.1	–	–
MW-2	11/19/2003	6.95	3.85	3.7	9.7	<1.1	<1.1	7.5	–	–
Oakland Tier 1 RBSLs					1,800	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB ESLs Table B-Groundwater (4)				0.5	-	-	-	-	-	-

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Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Lead (mg/L)	MTBE (µg/L)
MW-3	10/14/1988	8.25	0.88	3.4	ND	ND	–	2.8	–	–
MW-3	12/29/1989	7.79	1.34	ND	ND	ND	ND	ND	0.205 (1)	–
MW-3	5/28/1992	7.83	1.30	ND	0.8	0.5	ND	ND	0.016 (2)	–
MW-3	9/3/1992	8.22	0.91	ND	ND	ND	ND	ND	0.033 (2)	–
MW-3	11/24/1992	8.29	0.84	ND	ND	ND	ND	ND	0.011 (2)	–
MW-3	3/9/1993	7.30	1.83	0.1	1.8	ND	ND	ND	ND(1)	–
MW-3	7/21/1993	7.87	1.26	ND	ND	ND	ND	ND	ND(1)	–
MW-3	11/4/1993	8.23	0.90	0.07	0.6	0.5	ND	ND	ND(1)	–
MW-3	2/1/1994	7.56	1.57	ND	ND	ND	ND	ND	ND(1)	–
MW-3	6/2/1994	7.46	1.67	0.06	ND	ND	ND	ND	ND(1)	–
MW-3	9/1/1994	7.83	1.30	0.07	1.7	0.9	ND	ND	ND(1)	–
MW-3	12/13/1994	7.07	2.06	0.06	1.4	ND	ND	ND	–	–
MW-3	3/8/1995	7.27	1.86	0.06	1.5	ND	ND	ND	–	–
MW-3	6/9/1995	7.79	1.34	0.10	5.7	ND	ND	ND	–	–
MW-3	9/21/1995	7.87	1.26	ND	1.5	ND	ND	ND	–	–
MW-3	12/18/1995	7.30	1.83	ND	1.3	ND	ND	ND	–	–
MW-3	2/29/1996	6.84	2.29	ND	2.1	0.6	ND	0.7	–	–
MW-3	7/15/1996	7.79	1.34	–	–	–	–	–	–	–
MW-3	1/7/1997	6.62	2.51	0.05	1.0	<0.5	<0.5	<0.5	–	–
MW-3	7/12/1997	7.83	1.30	–	–	–	–	–	–	–
MW-3	1/26/1998	6.60	2.53	<0.05	0.8	<0.5	<0.5	<0.5	–	–
MW-3	7/3/1998	7.48	1.65	–	–	–	–	–	–	–
MW-3	1/13/1999	7.63	1.50	<0.05	<0.5	<0.5	<0.5	<0.5	–	–
MW-3	9/27/1999	7.94	1.19	–	–	–	–	–	–	–
MW-3	1/28/2000	7.12	2.01	<0.05	<0.5	<0.5	<0.5	<0.5	–	<5.0
MW-3	6/5/2003	7.53	4.23	<0.05	<0.5	<0.5	<0.5	<0.5	–	–
MW-3	11/19/2003	7.83	3.93	0.16	<0.54	<0.54	<0.55	<1.6	–	–
Oakland Tier 1 RBSLs					1,800	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB ESLs Table B-Groundwater (4)				0.5	-	-	-	-	-	-

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Lead (mg/L)	MTBE (µg/L)
MW-4	10/14/1988	8.33	0.74	4.6	1.2	ND	–	2.2	–	–
MW-4	12/29/1989	8.08	0.99	0.5	0.7	ND	ND	ND	ND (1)	–
MW-4	5/28/1992	8.19	0.88	0.27	8.8	1	ND	3.2	0.030 (2)	–
MW-4	9/3/1992	8.37	0.70	0.20	4.5	4.4	ND	1.9	0.022 (2)	–
MW-4	11/24/1992	8.28	0.79	0.14	3.2	3.2	ND	1.0	0.005 (2)	–
MW-4	3/9/1993	7.98	1.09	0.47	10	ND	ND	2.5	ND (1)	–
MW-4	7/21/1993	8.17	0.90	0.28	4.4	5.9	ND	ND	ND(1)	–
MW-4	11/4/1993	8.14	0.93	0.08	1.3	1.6	ND	ND	ND(1)	–
MW-4	2/1/1994	7.79	1.28	0.08	ND	ND	ND	ND	ND(1)	–
MW-4	6/2/1994	7.53	1.54	0.30	3.1	2.9	ND	0.8	ND(1)	–
MW-4	9/1/1994	7.69	1.38	0.12	1.6	ND	ND	ND	ND(1)	–
MW-4	12/13/1994	6.70	2.37	ND	ND	ND	ND	ND	–	–
MW-4	3/8/1995	6.83	2.24	0.09	ND	ND	ND	ND	–	–
MW-4	6/9/1995	7.66	1.41	0.19	ND	ND	ND	ND	–	–
MW-4	9/21/1995	7.93	1.14	0.09	ND	ND	ND	ND	–	–
MW-4	12/18/1995	6.98	2.09	–	–	–	–	–	–	–
MW-4	2/29/1996	6.54	2.53	0.14	1.6	1.0	ND	0.6	–	–
MW-4	7/15/1996	7.74	1.33	–	–	–	–	–	–	–
MW-4	1/7/1997	6.46	2.61	0.09	1.0	0.5	<0.5	<0.5	–	–
MW-4	7/12/1997	7.82	1.25	–	–	–	–	–	–	–
MW-4	1/26/1998	6.67	2.40	0.09	1.1	0.8	<0.5	<0.5	–	–
MW-4	7/3/1998	7.45	1.62	–	–	–	–	–	–	–
MW-4	1/13/1999	7.51	1.56	0.12	1.1	0.62	<0.5	0.57	–	–
MW-4	9/27/1999	7.88	1.19	–	–	–	–	–	–	–
MW-4	1/28/2000	6.73	2.34	0.072	<0.5	<0.5	<0.5	<0.5	–	<5.0
Oakland Tier 1 RBSLs					1,800	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB ESLs Table B-Groundwater (4)				0.5	-	-	-	-	-	-

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Lead (mg/L)	MTBE (µg/L)
MW-5	10/14/1988	8.04	0.89	**3.2**	ND	ND	–	ND	–	–
MW-5	12/29/1989	7.40	1.53	ND	ND	ND	ND	ND	ND (1)	–
MW-5	5/28/1992	7.53	1.40	ND	ND	ND	ND	ND	**0.008 (2)**	–
MW-5	9/3/1992	8.02	0.91	ND	ND	ND	ND	ND	**0.034 (2)**	–
MW-5	11/24/1992	7.75	1.18	ND	ND	ND	ND	ND	**0.011 (2)**	–
MW-5	3/9/1993	6.91	2.02	ND	ND	ND	ND	ND	ND (1)	–
MW-5	7/21/1993	7.57	1.36	ND	ND	ND	ND	ND	ND(1)	–
MW-5	11/4/1993	7.77	1.16	ND	ND	ND	ND	ND	ND(1)	–
MW-5	2/1/1994	7.05	1.88	ND	ND	ND	ND	ND	ND(1)	–
MW-5	6/2/1994	7.18	1.75	ND	ND	ND	ND	ND	ND(1)	–
MW-5	9/1/1994	7.53	1.40	ND	ND	ND	ND	ND	–	–
MW-5	3/8/1995	6.67	2.26	ND	ND	ND	ND	ND	–	–
MW-5	6/9/1995	7.33	1.60	ND	ND	ND	ND	ND	–	–
MW-5	9/21/1995	7.67	1.26	ND	ND	ND	ND	ND	–	–
MW-5	12/18/1995	6.62	2.31	–	–	–	–	–	–	–
MW-5	2/29/1996	6.16	2.77	ND	ND	ND	ND	ND	–	–
MW-5	7/15/1996	7.47	1.46	–	–	–	–	–	–	–
MW-5	1/7/1997	6.11	2.82	<0.05	<0.5	<0.5	<0.5	<0.5	–	–
MW-5	7/12/1997	7.61	1.32	–	–	–	–	–	–	–
MW-5	1/26/1998	6.17	2.76	<0.05	<0.5	<0.5	<0.5	<0.5	–	–
MW-5	7/3/1998	7.23	1.70	–	–	–	–	–	–	–
MW-5	1/13/1999	7.27	1.66	<0.05	<0.5	<0.5	<0.5	<0.5	–	–
MW-5	9/27/1999	7.76	1.17	–	–	–	–	–	–	–
MW-5	1/28/2000	6.43	2.50	<0.05	<0.5	<0.5	<0.5	<0.5	–	<5.0
Oakland Tier 1 RBSLs				–	1,800	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB ESLs Table B-Groundwater (4)				0.5	–	–	–	–	–	–

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Lead (mg/L)	MTBE (µg/L)
MW-6	12/29/1989	5.02	1.11	1.1	5.4	4.5	ND	ND	ND (1)	–
MW-6	3/9/1993	5.10	1.03	2.3	2.3	2.8	ND	3.1	ND (1)	–
MW-6	7/21/1993	5.23	0.90	0.59	ND	7.6	ND	ND	ND(1)	–
MW-6	11/4/1993	5.25	0.88	1.5	ND	1.2	ND	0.7	ND(1)	–
MW-6	2/1/1994	5.05	1.08	1.9	2.5	3.9	1.6	1.1	ND(1)	–
MW-6	6/2/1994	4.49	1.64	1.3	ND	1	ND	ND	ND(1)	–
MW-6	9/1/1994	4.53	1.60	2.2	ND	1.7	ND	ND	ND(1)	–
MW-6	12/13/1994	4.27	1.86	0.66 (3)	ND	ND	ND	ND	–	–
MW-6	3/8/1995	3.37	2.76	1.0 (3)	ND	ND	ND	ND	–	–
MW-6	6/9/1995	4.40	1.73	1.5	ND	3.3	ND	ND	–	–
MW-6	9/21/1995	4.69	1.44	0.28	ND	ND	ND	ND	–	–
MW-6	12/18/1995	4.42	1.71	–	–	–	–	–	–	–
Oakland Tier 1 RBSLs					1,800	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB ESLs Table B-Groundwater (4)				0.5	-	-	-	-	-	-

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

Pacific Supply Company, 1735 24th Street, Oakland, California

Well Name	Sampling Date	Depth to Groundwater (feet)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Lead (mg/L)	MTBE (µg/L)
MW-7	12/29/1989	8.35	-3.32	ND	ND	ND	ND	ND	0.235 (1)	-
MW-7	3/9/1993	13.60	-8.57	ND	ND	ND	ND	ND	ND (1)	-
MW-7	7/21/1993	12.59	-7.56	ND	ND	ND	ND	ND	ND(1)	-
MW-7	11/4/1993	9.84	-4.81	ND	ND	ND	ND	ND	ND(1)	-
MW-7	2/1/1994	10.38	-5.35	ND	ND	ND	ND	ND	ND(1)	-
MW-7	6/2/1994	10.10	-5.07	ND	ND	ND	ND	ND	ND(1)	-
MW-7	9/1/1994	9.63	-4.60	ND	ND	ND	ND	ND	ND(1)	-
MW-7	12/13/1994	11.27	-6.24	ND	ND	ND	ND	ND	-	-
MW-7	3/7/1995	9.68	-4.65	ND	ND	ND	ND	ND	-	-
MW-7	6/9/1995	9.37	-4.34	ND	ND	ND	ND	ND	-	-
MW-7	9/21/1995	9.43	-4.40	ND	ND	ND	ND	ND	-	-
MW-7	12/18/1995	13.28	-8.25	-	-	-	-	-	-	-
MW-7	2/29/1996	11.70	-6.67	ND	ND	ND	ND	ND	-	-
MW-7	7/15/1996	11.12	-6.09	-	-	-	-	-	-	-
MW-7	1/7/1997	14.35	-9.32	<0.05	<0.5	<0.5	<0.5	<0.5	-	-
MW-7	7/12/1997	15.12	-10.09	-	-	-	-	-	-	-
MW-7	1/26/1998	15.28	-10.25	<0.05	<0.5	<0.5	<0.5	<0.5	-	-
MW-7	7/3/1998	14.10	-9.07	-	-	-	-	-	-	-
MW-7	1/13/1999	14.55	-9.52	<0.05	<0.5	<0.5	<0.5	<0.5	-	-
MW-7	9/27/1999	14.03	-9.00	-	-	-	-	-	-	-
MW-7	1/28/2000	10.91	-5.88	<0.05	<0.5	<0.5	<0.5	<0.5	-	<5.0
Oakland Tier 1 RBSLs					1,500	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB ESLs Table B-Groundwater (4)				0.5	-	-	-	-	-	-

MTBE = methyl tertiary butyl ether. TPH = total petroleum hydrocarbons.
>Sol = RBSL exceeds solubility of chemical in water
NA = not available.
ND = not detected at laboratory reporting limit. <= less than given laboratory reporting limit.
µg/L = micrograms per liter. mg/L = milligrams per liter. - = not analyzed.
MSL = mean seal level.
Groundwater elevations prior to 2003 based on the following well casing elevations in feet above MSL:
MW-1 (8.87'), MW-2 (8.14'), MW-3 (9.13'), MW-4 (9.07'), MW-5 (8.93'), MW-6 (6.13') and MW-7 (5.03').
Oakland RBSLs are based on a groundwater media for inhalation of indoor air vapors risk scenerio at a commerical/industrial site.
(1)=Organic Lead, (2)=Total Lead, and (3)=chromatographic peak array does not match gasoline standard.
(4) SFRWQCB ESLs are taken from Table B of the SFRWQCB document, *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater, July 2003*. Table B provides the ESLs for shallow soils where groundwater is not a current or potential source of drinking water.
The City of Oakland BTEX standards are provided in lieu of the SFRWQCB ESLs due to the location of the site.
New survey data was obtained on June 23, 2003 by Phelps and Associates Land Surveyors.
June 2003 water levels were measured on June 5, 2003.

TABLE 2. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR VAPOR EXTRACTION WELLS

Pacific Supply Company, 1735 24th Street, Oakland, California

Sample ID	Sample Collection Date	Depth to Groundwater (feet)	Top of Casing Elevation (feet, MSL)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Other Oxygenates & Lead Scavengers (µg/l)
VRW-1	11/3/1993	-	-	-	3	1600	19	1.1	16	-	-
VRW-1	6/10/2003	7.31	11.18	3.87	0.44	5.9	<0.5	<0.5	1.9	-	-
VRW-1	11/19/2003	7.33	11.18	3.85	1.2	19	<0.54	<0.55	6.3	-	-
SFRWQCB ESLs Table B-Groundwater (1)					0.5	-	-	-	-	-	
Oakland Tier 1 RBSLs-Inhalation of Indoor Air Vapors, Commerical/Industrial Site						1,800	>Sol	>Sol	>Sol	>Sol	
VRW-2	11/4/1993	-	-	-	7.2	3,300	600	2.4	870	-	-
VRW-2	5/17/2002	-	-	-	2.8	471	<10	<10	<10	<20	<10 to <20
VRW-2	6/9/2003	6.87	11.08	4.21	0.47	38	2.8	<1.0	<1.0	-	-
VRW-2	11/19/2003	7.00	11.08	4.08	1.3	51	<0.54	<0.55	4.0	-	-
SFRWQCB ESLs Table B-Groundwater (1)					0.5	-	-	-	-	-	
Oakland Tier 1 RBSLs-Inhalation of Indoor Air Vapors, Commerical/Industrial Site						1,800	>Sol	>Sol	>Sol	>Sol	
VRW-3	11/4/1993	-	-	-	5.7	120	41	1.1	380	-	-
VRW-3	5/17/2002	-	-	-	0.42	10.9	<0.5	<0.5	1.07	<1.0	<0.50 to <1.0
VRW-3	6/9/2003	7.41	11.62	4.21	0.061	4.8	<0.5	<0.5	<0.5	-	-
VRW-3	11/19/2003	7.48	11.62	4.14	0.16	1.7	<0.54	<0.55	2.7	-	-
SFRWQCB ESLs Table B-Groundwater (1)					0.5	-	-	-	-	-	
Oakland Tier 1 RBSLs-Inhalation of Indoor Air Vapors, Commerical/Industrial Site						1,800	>Sol	>Sol	>Sol	>Sol	
VRW-4	11/4/1993	-	-	-	9.0	4,400	900	5.4	990	-	-
VRW-4	5/15/2002	-	-	-	11	4,270	741	512	1,130	<50	<25 to <50
VRW-4	6/5/2003	7.01	11.33	4.32	2.2	1,200	100	12	89	-	-
VRW-4	11/19/2003	7.44	11.33	3.89	1.7	210	2.4	<2.2	36	-	-
SFRWQCB ESLs Table B-Groundwater (1)					0.5	-	-	-	-	-	
Oakland Tier 1 RBSLs-Inhalation of Indoor Air Vapors, Commerical/Industrial Site						1,800	>Sol	>Sol	>Sol	>Sol	
VRW-5	11/4/1993	-	-	-	0.90	68	33	2.5	32	-	-
VRW-5	5/16/2002	-	-	-	0.87	44.3	<5.0	<5.0	<5.0	<10	<5.0 to <10
VRW-5	6/9/2003	7.33	11.56	4.23	0.93	90	<1.0	14	0.16	-	-
VRW-5	11/19/2003	7.53	11.56	4.03	2.9	250	<1.1	24	41	-	-
SFRWQCB ESLs Table B-Groundwater (1)					0.5	-	-	-	-	-	
Oakland Tier 1 RBSLs-Inhalation of Indoor Air Vapors, Commerical/Industrial Site						1,800	>Sol	>Sol	>Sol	>Sol	
VRW-6	11/4/1993	-	-	-	0.41	6.6	1.0	ND	31	-	-
VRW-6	5/15/2002	-	-	-	0.73	178	4.58	1.41	6.10	<1.0	<0.50 to <1.0
VRW-6	6/6/2003	7.21	11.43	4.22	<0.05	<0.5	<0.5	<0.5	<0.5	-	-
VRW-6	11/19/2003	7.39	11.43	4.04	0.21	13	<0.54	1.0	2.5	-	-
SFRWQCB ESLs Table B-Groundwater (1)					0.5	-	-	-	-	-	
Oakland Tier 1 RBSLs-Inhalation of Indoor Air Vapors, Commerical/Industrial Site						1,800	>Sol	>Sol	>Sol	>Sol	
VRW-7	11/4/1993	-	-	-	0.10	ND	ND	ND	ND	-	-
VRW-7	5/16/2002	-	-	-	1.6	28.9	0.980	<0.50	<0.50	<1.0	<0.50 to <1.0
VRW-7	6/6/2003	7.47	11.70	4.23	0.36	19	1.3	<0.5	2.2	-	-
VRW-7	11/19/2003	7.78	11.70	3.92	1.1	14	<0.54	1.7	5.6	-	-
SFRWQCB ESLs Table B-Groundwater (1)					0.5	-	-	-	-	-	
Oakland Tier 1 RBSLs-Inhalation of Indoor Air Vapors, Commerical/Industrial Site						1,800	>Sol	>Sol	>Sol	>Sol	

TABLE 2. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR VAPOR EXTRACTION WELLS

Pacific Supply Company, 1735 24th Street, Oakland, California

Sample ID	Sample Collection Date	Depth to Groundwater (feet)	Top of Casing Elevation (feet, MSL)	Groundwater Elevation (feet, MSL)	TPH as gasoline (mg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Other Oxygenates & Lead Scavengers (µg/l)
VRW-8	11/4/1993	-	-	-	5.9	460	54	ND	53	-	-
VRW-8	5/16/2002	-	-	-	3.3	248	16.0	<10	<10	<20	<10 to <20
VRW-8	6/6/2003	7.42	11.62	4.20	1.8	70	10	11	6.1	-	-
VRW-8	11/19/2003	7.85	11.62	3.77	3.6	36	<2.7	<2.7	4.3	-	-
SFRWQCB ESLs Table B-Groundwater (1)					0.5	-	-	-	-	-	
Oakland Tier 1 RBSLs-Inhalation of Indoor Air Vapors, Commerical/Industrial Site						1,800	>Sol	>Sol	>Sol	>Sol	
VRW-9	11/4/1993	-	-	-	0.47	36	18	ND	1.0	-	-
VRW-9	5/16/2002	-	-	-	0.080	0.990	2.00	<0.50	5.93	<1.0	<0.50 to <1.0
VRW-9	6/6/2003	7.67	11.87	4.20	0.58	10	4.4	4.9	<0.50	-	-
VRW-9	11/19/2003	8.01	11.87	3.86	0.86	<1.1	<1.1	<1.1	5.5	-	-
SFRWQCB ESLs Table B-Groundwater (1)					0.5	-	-	-	-	-	
Oakland Tier 1 RBSLs-Inhalation of Indoor Air Vapors, Commerical/Industrial Site						1,800	>Sol	>Sol	>Sol	>Sol	

mg/l = milligrams per kilogram.
µg/l = micrograms per kilogram.
Oakland RBSLs are based on a groundwater media for inhalation of indoor air vapors risk scenario at a commerical/industrial site.
There are no RBSLs for Total Petroleum Hydrocarbons.
(1) SFRWQCB ESLs are taken from Table B of the SFRWQCB document, Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater, July 2003. Table B provides the ESLs for shallow soils where groundwater is not a current or potential source of drinking water. The City of Oakland BTEX standards are provided in lieu of the SFRWQCB ESLs due to the location of the site.
na = not analyzed.
ND = not detected above laboratory reporting limits.
>Sol = RBSL exceeds solubility of chemical in water.

TABLE 3. SUMMARY OF SOIL ANALYTICAL DATA

Pacific Supply Company, 1735 24th Street, Oakland, California

Sample Location	Sample Date	Soil Depth (feet)	TPH as Gasoline (mg/kg)	TPH as Diesel (mg/kg)	TPH as Motor Oil (mg/kg)	Benzene (µg/kg)	Toluene (µg/kg)	Ethylbenzene (µg/kg)	Xylenes (µg/kg)	Lead (mg/kg)	MTBE (µg/kg)
V-3	5/11/1987	7	160	–	–	2,200	4,000	–	12,000	–	–
V-7	5/11/1987	7	8	–	–	410	250	–	810	–	–
MW-1	9/13/1988	8	26	–	–	<2.5	220	–	850	–	–
MW-2	9/13/1988	8	1,400	–	–	990	700	–	1,100	–	–
MW-3	9/13/1988	8	1,300	–	–	530	590	–	22,000	–	–
MW-4	9/13/1988	8	3,700	–	–	3,700	2,400	–	12,000	–	–
MW-6[a]	12/19/1989	5.5	370	–	–	<500	<500	<500	<500	1.5	–
MW-7	12/19/1989	5.5	<2.5	<1.0	160	<5	<5	<5	<5	1.7	–
VEW-1	6/6/1992	4.5	100	–	–	9,100	830	1,300	21,000	–	–
VEW-1	6/6/1992	8	780	–	–	23,000	93,000	60,000	170,000	–	–
B-1	3/5/1993	2.5	<1	–	–	<5	<5	<5	<5	–	–
B-2	3/5/1993	6.0	<1	–	–	<5	<5	<5	<5	–	–
B-3	3/5/1993	8.0	<1	–	–	<5	<5	<5	<5	–	–
B-4	3/5/1993	7.0	7,000	–	–	28,000	17,000	73,000	43,000	–	–
B-5	3/5/1993	7.0	900	–	–	1,600	2,400	10,000	6,200	–	–
B-6	3/5/1993	7.0	10	–	–	71	38	78	100	–	–
B-7	3/5/1993	7.0	10	–	–	30	42	30	110	–	–
B-8	3/5/1993	7.0	2,200	–	–	10,000	41,000	21,000	94,000	–	–
B-9	3/5/1993	8.5	910	–	–	1,200	1,500	3,700	6,700	–	–
B-10	3/5/1993	6.0	<1	–	–	<5	5	<5	<5	–	–
VRW-1	8/25/1993	7.5	1.5	–	–	14	<5	<5	<5	–	–
VRW-2	8/26/1993	7	27	–	–	110	200	46	190	–	–
VRW-3	8/25/1993	7.5	15	–	–	700	90	16	60	–	–
VRW-4	8/26/1993	7	5.5	–	–	410	120	110	490	–	–
VRW-5	8/27/1993	7.5	700	–	–	7,300	3,000	5,300	3,600	–	–
VRW-6	8/26/1993	7.5	3,800	–	–	41,000	130,000	53,000	270,000	–	–
VRW-7	8/27/1993	7	1,100	–	–	1,300	2,900	2,600	6,000	–	–
VRW-8	8/26/1993	7.5	30	–	–	220	120	400	670	–	–
VRW-9	8/27/1993	7	370	–	–	2,300	2,200	620	2,300	–	–
Soil Vapor Extraction System Implemented from December 1993 to June 1996											
SFRWQCB ESLs Table B-Commercial			400	–	–	380	–	–	–	–	–
Oakland Tier 2 SSTLs for Sandy Silts-Commercial						17,000	>Sat	>Sat	>Sat	–	–
Oakland Tier 2 SSTLs for Clayey Silts-Commercial						30,000	>Sat	>Sat	>Sat	–	–

(a) This sample was also analyzed for volatile organic compounds (VOCs) by Method 8010 and semi-volatile compounds (SVOCs) by Method 625.
No compounds were detected above reporting limit of 250 µg/kg for VOCs and 50 µg/kg for SVOCs.
>Sat = RBSL exceeds saturation soil concentration of chemical.
The Oakland Tier 2 SSTLs are based on the risk scenario of inhalation of indoor air.
Oakland RBSLs are based on a groundwater media for inhalation of indoor air vapors risk scenario at a commerical/industrial site. The Oakland RBSLs for benzene are based on the carcinogenic risk assessment factor.
SFRWQCB ESLs are taken from Table B of the SFRWQCB document, *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater, July 2003. Table B provides the ESLs for shallow soils where groundwater is not a current or potential source of drinking water.*
The City of Oakland BTEX standards are provided in lieu of the SFRWQCB ESLs due to the location of the site.

TABLE 4. SUMMARY OF VAPOR ANALYTICAL DATA

Pacific Supply Company, 1735 24th Street, Oakland, California

Sample Location	Sample Date	TPH as gasoline (ppm)
Tank Area (West)	4/28/1987	1,400
Tank Area (East)	4/28/1987	2,000
V-1	5/11/1987	3,700
V-2	5/11/1987	2,200
V-3	5/11/1987	2,500
V-4	5/11/1987	1,800
V-5	5/11/1987	2,300

ppm = parts per million

TABLE 5. GROUNDWATER ANALYTICAL RESULTS, 8/29/00

Pacific Supply Company, 1735 24th Street, Oakland, California

Sample ID	TPH as gasoline (mg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	TAME (µg/l)	TBA (µg/l)	Other Oxygenates & Scavengers (µg/l)
B-10W	**0.060**	**1.4**	**1.4**	ND	**1.0**	**0.660**	**4.03**	**58.3**	ND
B-11W	ND	ND	ND	ND	ND	<2.5	<10	<500	<10
B-12W	ND	ND	ND	ND	ND	<1.25	<5	<250	<5
MW-2	**3.5**	**120**	**16**	<5	**28**	**5.09**	ND	**102**	ND
Method Reporting Limit	0.05 mg/l	0.5 µg/l	0.5 µg/l	0.5 µg/l	0.5 µg/l	0.5 µg/l	2.0 µg/l	100 µg/l	2.00 µg/l

mg/l = milligrams per liter.
µg/l = micrograms per liter.
ND = Not detected at the method reporting limit.
< = Not detected at the indicated reporting limit.

© 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: NAD27

NORTH

APPROXIMATE SCALE (FEET)

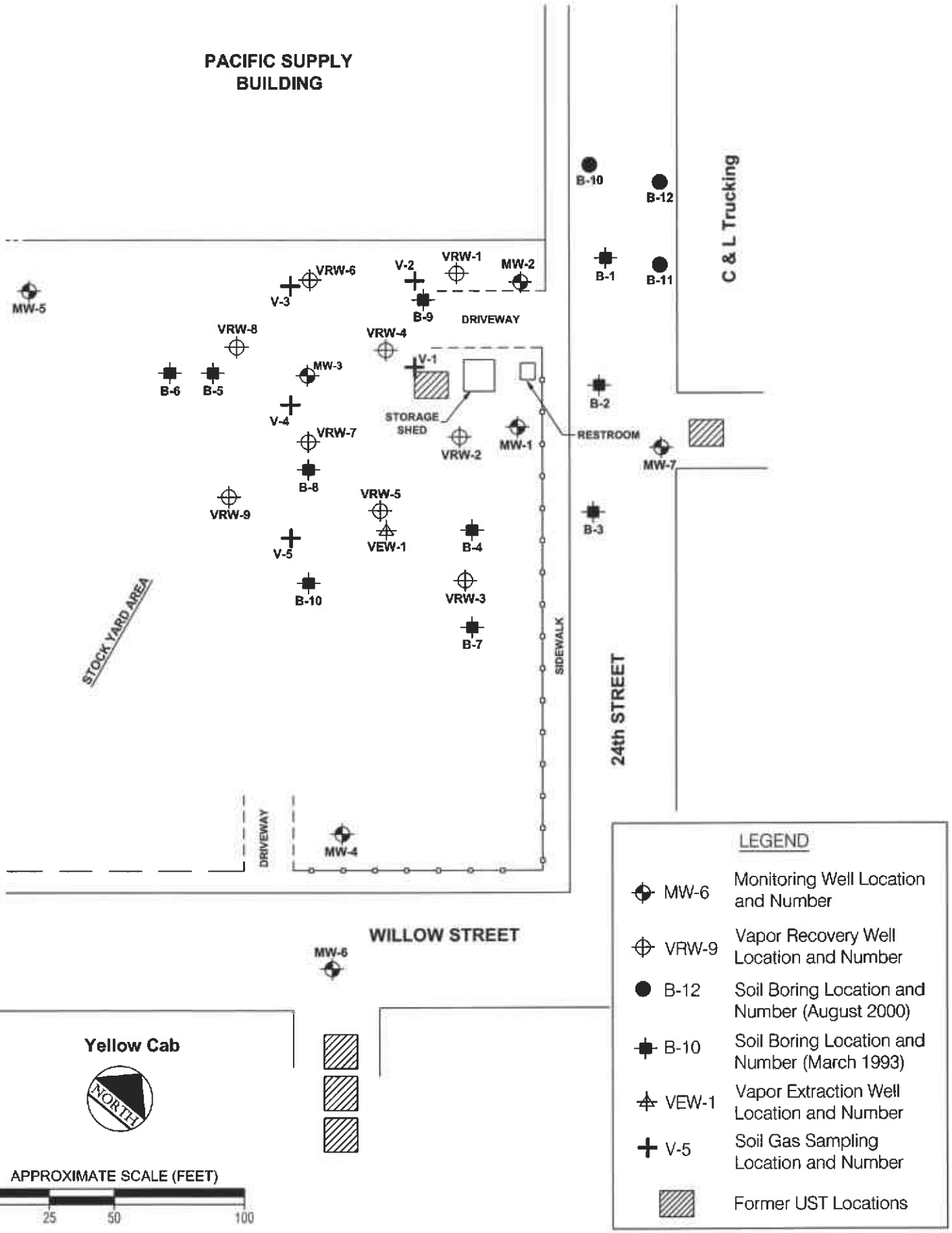
0 1000 2000 4000

Brunsing Associates, Inc.
5803 Skylane Blvd., Suite A
Windsor, California 95492
Tel: (707) 838-3027

Job No.: 029.2
Appr.:
Date: 1/8/04

VICINITY MAP
PACIFIC SUPPLY COMPANY
Oakland, California

PLATE
1

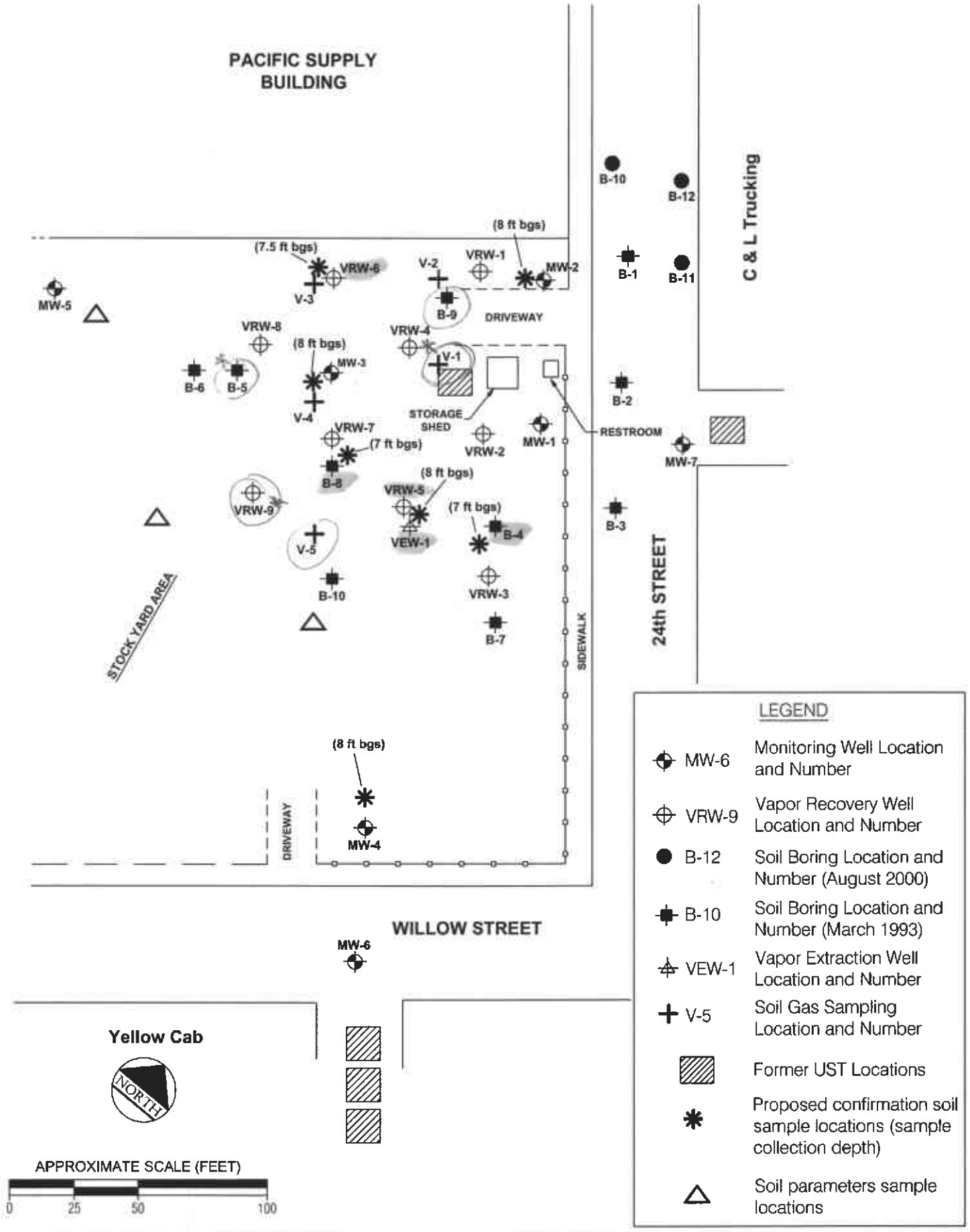


Brunsing Associates, Inc.
5803 Skylane Blvd., Suite A
Windsor, California 95492
Tel: (707) 838-3027

Job No.: 29
Appr.:
Date: 7/24/03

SITE MAP
PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE
2



Brunsing Associates, Inc.
5803 Skylane Blvd., Suite A
Windsor, California 95492
Tel: (707) 838-3027

Job No.: 29
Appr.:
Date: 1/27/04

PROPOSED SOIL BORING LOCATIONS
PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE
3

APPENDIX A

SITE HEALTH AND SAFETY PLAN

SITE HEALTH AND SAFETY PLAN

1735 24TH STREET
OAKLAND, CALIFORNIA

Brunsing Associates, Inc.
P. O. Box 588
Windsor, California
(707) 838-3027

Project No. 029

January 29, 2004

SITE HEALTH AND SAFETY PLAN

1735 24TH STREET
OAKLAND, CALIFORNIA

Prepared by:

Michelle Floyd Frederick
Project Engineer

Reviewed by:

Diana M. Dickerson, R.G., R.E.A.
Principal Geologist

TABLE OF CONTENTS

1.0 INTRODUCTION

This Site Health and Safety Plan (Plan), outlines recommended health and safety procedures to be followed by personnel during environmental work conducted at the subject site. This Plan is designed in accordance with the requirements of OSHA Title 29, CFR 1910.120, "Hazardous Waste Operations and Emergency Response". The Plan is intended to accomplish the following:

- Assure that both project personnel and public health and safety concerns are properly addressed,
- Provide site management with sufficiently detailed information to implement all health and safety functions at the site,
- Provide site workers with appropriate specific health and safety guidelines,
- Be useful in training workers in the hazards specific to the remediation project.

The procedures presented herein are intended to serve as guidelines; they are not a substitute for the sound judgment of on-site personnel. As work progresses, appropriate revisions will be made by the Site Safety Officer, Project Engineer, Project Manager, and/or Field Manager as warranted. All subcontractors that work within the exclusion zone will be ultimately responsible for the health and safety of their employees on this project and will be expected to provide a task specific Health and Safety Plan to supplement this plan.

2.0 KEY PERSONNEL

The key supervisory personnel that may work on the project are named below. Each of these individuals has completed a minimum of 40 hours of hazardous waste site operations training and yearly eight hour refresher training.

Diana M. Dickerson, Brunsing Associates, Inc., Program Manager
Michelle Floyd Frederick, Brunsing Associates, Inc., Project Manager
Bill Coset, Brunsing Associates, Inc., Project Geologist/Site Safety Officer
Dave Conley, Brunsing Associates, Inc., Project Geologist/Site Safety Officer
Steve Silva, Brunsing Associates, Inc., Staff Geologist/Site Safety Officer

3.0 PROJECT HAZARD ANALYSIS

The following discussion provides information about the physical and health hazards that may be encountered on this project. The main physical hazards will be associated with one or more of the following: drilling and excavation operations, movement and operation of heavy equipment, underground and overhead utilities, potential slip, trip and fall hazards, and noise hazards. The main chemical hazard will be exposure to petroleum products, which may be encountered in soils and/or groundwater at a range of concentrations. Not all of the tasks listed below will need to be performed to complete the project.

3.1 Potential Site Safety Hazards

3.1.1 Drill Rig Safety Hazards

The operation of a drill rig is recognized as a hazardous activity given the nature of the equipment and the field environment in which the drill rig will operate. The principal hazards associated with drill rig operation will include:

- Striking underground and overhead utilities.
- Exposure to petroleum products.
- Noise exposure.
- Falling, slipping, and tripping.
- Breathing in cement dust during grouting operations. To avoid this physical safety hazard, the drilling firm employed as a subcontractor will instruct their staff of the safety procedures to follow in operating the equipment. The remaining workers on the project will stay upwind of the drilling operation whenever possible and maintain a safe distance from the drilling activities at all times.
- Pinch points and guarding. To avoid this physical safety hazard, all drill rigs must be equipped with guards on all gears, pulleys and rotating shafts. The drilling firm employed as a subcontractor will comply with OSHA and industry standards as a condition of work.
- Overhead work and cable handling. To avoid falling equipment and cable handling risks, drillers will be required to maintain equipment in safe condition and conduct daily inspections of the equipment. Hardhats will be required for all personnel working on or around drill rigs.

Drilling contractor employees will be required to meet the 29 CFR 1910.120 requirements for 40 hours of safety training. Drilling employees will be required to follow safe work

practices including: not wearing loose clothing, wearing hardhats, safety glasses and steel toed boots, wearing gloves when handling contaminated soils and maintaining awareness of drill rig operations.

3.1.2 Soil Handling and Excavation Hazards

The operation of heavy earthmoving and excavating equipment in a construction environment is potentially hazardous. The following are specific hazards associated with such operations:

- Striking underground utilities.
- Exposure to petroleum products.
- Noise exposures.
- Falling, slipping, and tripping.
- Entering trenches/excavations.
- Heavy equipment and excavation equipment hazards. These hazards are primarily related to maintenance, the condition of and proper operation of the equipment. The excavation contractor will be required to have heavy equipment safety programs in place, including inspections and maintenance, and will be expected to meet all applicable safety equipment requirements. Operators will be required to operate equipment in a cautious manner consistent with industry standards and have specialized training in hazardous waste site work pursuant to 29 CFR 1910.120

3.2 Mitigation of Potential Hazards

3.2.1 Striking Underground and Overhead Utilities

The potential for striking utilities, especially gas and electric, will be a concern throughout drilling and excavating operations. The following rules will govern all drilling/excavation tasks:

- Prior to drilling/excavating, contact all underground utility companies to have locations of utility lines marked and identified.

- All elevated equipment must be kept no less than 20 feet from any overhead utility lines, unless prior approval is given by utility companies or special conditions are met.

3.2.2 Exposure to Petroleum Products and Chemical Hazards

Prior testing at the site has identified petroleum hydrocarbon contamination. The fuel constituents that may be encountered and the potential exposure pathways are described below.

- Constituents of diesel that may be encountered include:
  Benzene, toluene, ethylbenzene, and xylenes

- Constituents of gasoline that may be encountered include:
  Benzene, toluene, ethylbenzene, and xylenes.

- Constituents can enter the body through:
  Inhalation, ingestion, and absorption through the skin.

- The result from exposures can include:
  Eye/nose/throat/skin irritation, headache, fatigue, nausea, dizziness, dermatitis, nervousness, weakness, insomnia, and constipation.

The primary method for avoiding exposure to petroleum products on the project, will be establishing a monitoring program and assigning the appropriate personal protective equipment (PPE).

Work will commence with personnel in Level D PPE, consisting of hard hats, safety glasses/goggles, long pants and shirts, gloves and steel-toed boots. Site workers will be required to upgrade to Level C PPE, consisting of respirators with organic vapor and dust cartridges, and/or tyvek coveralls, and chemical resistant gloves as warranted by site conditions. If gasoline is a potential contaminant, a photoionization detector (PID) will be used to monitor concentrations of volatile organic compounds in work areas as described below.

3.2.2.1 Inhalation

Breathing a gas, vapor, mist, fume, or dust is the most common accidental form of exposure; this route of entry is the most likely to cause systemic illness. Half-face respirators with the appropriate cartridges or dust filters may be required while conducting sampling, excavating, construction, drilling, or well development operations. No excessive facial hair, which interferes with a satisfactory fit of the mask-to-face seal, will be allowed on personnel required to wear respiratory protective equipment.

Listed below are threshold limit values which will be used in determining when exposure to organic gasoline vapors is sufficient to require use of respirators by on- site personnel. Two exposure indices are given: The Time Weighted Average (TWA) defined as the average concentration for a normal eight-hour workday and a forty-hour work week, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect; and the Short-Term Exposure Limit (STEL) defined as a fifteen minute TWA exposure which should not be exceeded at any time during a workday and should not be reached more than four times in a work day with a minimum of one hour between exposures. The values shown below represent published values as determined by either the American Conference of Governmental Industrial Hygienists or the Occupational Safety and Health Administration guidelines.

Individual Hazard Evaluation Parameters

- Gasoline: TWA = 300 ppm or 890 mg/m^3
  STEL = 500 ppm or 1,480 mg/m^3
- Benzene: TWA = 1 ppm or 3 mg/m^3
  STEL = 5 ppm or 15 mg/m^3
- Toluene: TWA = 100 ppm or 377 mg/m^3
  STEL = 150 ppm or 560 mg/m^3
- Ethylbenzene: TWA = 100 ppm or 434 mg/m^3
  STEL = 125 ppm or 543 mg/m^3
- Xylenes: TWA = 100 ppm or 434 mg/m^3
  STEL = 150 ppm or 651 mg/m^3

Notes: ppm= parts per million; mg/m^3= milligrams per cubic meter

Photoionization detectors read total organic vapors (TOVs), which include all constituents of gasoline and other volatile compounds. Because of the low TWA and STEL limits for benzene, this gasoline constituent is of the most concern for worker exposure. In general, the maximum amount of benzene in gasoline is less than 4%. Based on this data, it appears that a conservative estimate of the percentage of benzene which may be in organic vapors measured with the PID would be 10%.

Based on the assumption that the maximum amount of benzene possible in the TOV readings is 10%, a reading of 10 ppm on the PID would give an estimated 1 ppm of benzene, which is the TWA level for benzene. Therefore, it will be assumed that the site specific TWA threshold for benzene will be reached when TOV levels measured with the PID reach 10 ppm, and the STEL threshold for benzene will be reached when TOV levels reach 50 ppm. Respirators will be donned as described below.

- Respirators will be donned when TOV readings in the breathing zone reach 50 ppm for at least 5 minutes or at any time that TOV readings exceed 50 ppm.

- Respirators will be donned when TOV readings in the breathing zone reach 10 ppm for periods exceeding 15 minutes.

Half face respirators are generally considered to provide a 10x protection factor. To be conservative with the health and safety of on-site personnel, should TOVs in the breathing zone exceed 5 times the STEL (250 ppm) at any time, or 5 times the TWA (50 ppm) for periods exceeding 15 minutes, personnel will stop work and evacuate the area until concentrations return to less than these threshold levels.

3.2.2.2 Skin Absorption

Skin exposure to hazardous materials may result in skin irritation or penetration. Skin penetration is probably the second most common accidental means of entry of chemicals into the body. The following precautions may be required when performing any on-site activities described in this plan.

- Ensure that all skin areas that may be contacted are protected during site work by wearing rubber boots and gloves.
- Disposable coveralls should be donned whenever site work brings the outer clothing of any personnel in contact with contaminated soils, liquids or surfaces.
- After completing the day's work, remove and dispose of contaminated coveralls; care should be taken to avoid skin contact with these items.
- Unnecessary contact with potentially contaminated surfaces should be avoided; whenever possible, personnel should avoid walking through mud, puddles, and other discolored surfaces; kneeling on the ground; leaning, sitting, or placing equipment on drums, other containers, vehicles, or the ground.

3.2.2.3 Ingestion

Hazardous materials may be carried to the mouth by hand when eating, drinking, chewing gum or tobacco, or smoking. These activities are therefore prohibited during and after work until contaminated clothing has been removed. In addition, liquids will not be pipetted or syphoned by mouth under any circumstances. Hands and face must be thoroughly washed upon leaving the work area and before eating, drinking, or any other ingestion occurs.

Medically prescribed drugs used by personnel during field activities where the potential for inhalation, absorption, or ingestion of toxic substances exists should be used only after consultation with a qualified physician.

3.2.2.4 Eye Contact

The eyes may be harmed by chemicals in solid, liquid, or vapor form. Irritant effects vary in degree from mild to severe. The following precautions to avoid eye injury will be taken when at the site:

- Do not wear contact lenses when working or while wearing contaminated gloves or other contaminated clothing.
- Do not rub eyes while working.
- Safety goggles or glasses (without side perforations) may be required by the Site Health & Safety Officer.

3.2.3 Noise Exposure

Drilling and excavation equipment presents potentially high noise level exposures. Excessive noise interferes with communication, disorients workers and can result in hearing loss. Ideally, personnel who do not need to be near noisy equipment will stay as far away as possible to lower risk of hearing loss. Personnel who must work near noisy equipment shall wear hearing protection such as ear plugs or muffs.

3.2.4 Falling, Slipping and Tripping

The ground around the work area may be cluttered with pieces of equipment. This situation may cause workers to trip and fall. Project personnel shall reduce the risk of falling, slipping, and tripping by performing good housekeeping and arranging the work

area in a manner that reduces the necessity of workers to step over equipment whenever possible.

3.2.5 Entering Trenches/Excavations

These areas present serious potential hazards due to the possible accumulation of hazardous atmospheres, insufficient oxygen content, and cave-ins or collapse of trench walls. With respect to trenches/excavations entered by workers exceeding five feet in depth, specific regulatory requirements appear in Subpart P of 29 CFR Part 1928. If a trench/excavation greater than five feet deep must be entered, the trench/excavation wall must be either shored or a protective box placed in the trench to avoid wall collapses. Vehicles and other equipment near excavations shall remain at a safe distance. Barriers may have to be used to prevent encroachment. Stockpiling of soil removed from excavations shall be done in a manner which minimizes the risk of cave-ins.

Prior to entering any trench/excavation, a PID will be used to monitor concentrations of organic compounds in the trench/excavation. PID readings will be taken for every 10 to 15 feet of trench by the Site Health & Safety Officer or another qualified user. Should organic concentrations in the trench/excavation exceed 50 ppm, or 10 ppm for periods of 15 minutes or more, anyone entering the trench/excavation shall be required to wear respirators with organic vapor and dust cartridges. Should concentrations of organic compounds in the trench exceed 250 ppm, or 50 ppm for periods of 15 minutes or more, personnel will stop work and evacuate the area until concentrations return to below these threshold values.

3.2.6 Heat Stress

Incidents of heat stress depend upon a variety of factors. For workers wearing impermeable and semi-permeable clothing, or respirators, as required with Level C PPE, physiological monitoring will be instituted. The monitoring will begin when the work period is anticipated to exceed one hour and the work required involves significant physical activity in Level C PPE. Workers will be monitored by measuring the heart rate. If the heart rate exceeds 110 beats per minute, the next work cycle will be shortened by one-third. A worker will not be permitted to wear impermeable or semi-permeable clothing and work in a Level C environment if the worker's heart rate continues to exceed 110 beats per minute at the beginning of a rest period even after reducing the length of the work period by two-thirds. Workers will also be required to take breaks as required in OSHA 29 CFR Part 1910.120. All subcontractors will be required to supply their personnel with personal protective equipment, as necessary.

4.0 WORK ZONES AND SECURITY MEASURES

Measures will be taken to prevent access to persons unauthorized to enter a particular work zone. This shall be accomplished by limiting the movement of individuals and equipment between work zones and establishing access control points, as necessary. Three zones (the construction zone, contamination reduction zone, and exclusion zone) will be established during on-site work.

5.0 DECONTAMINATION PROCEDURES

Prior to leaving the contamination reduction zone, personnel will decontaminate themselves, as deemed necessary to avoid transferring contamination to clean areas of the site. Decontamination will include the following steps, as applicable:

1) Deposit equipment exposed to contaminants (tools, sampling devices, etc.) on plastic drop cloths or in plastic garbage bags within the contamination reduction zone if the equipment is not to be immediately cleaned.

2) Scrub outer boots and gloves (if worn) with decontamination solution or detergent. Rinse off with clean water.

3) Remove tyvek suits, outer boots, and gloves (if worn). Deposit in plastic garbage bags.

4) Upon leaving the contamination reduction zone, personnel must thoroughly wash all exposed skin surfaces before eating, drinking, chewing or smoking.

5) After daily work is completed, non-reusable protective equipment will be removed and placed in plastic garbage bags for disposal.

All equipment and tools exposed to contaminants will be thoroughly cleaned. The following decontamination procedures will be followed for all equipment.

1) Steam clean, or wash all contaminated parts with fresh water and a detergent such as Alconox or Liquinox.

2) Rinse washed equipment with fresh water.

3) Place decontaminated tools in clean plastic bags.

All subcontractors are responsible for the decontamination of their own equipment.

6.0 EMERGENCY RESPONSE INFORMATION

The following procedure will be observed in the event of physical injury or a serious health problem;

1) Immediately notify supervisor and Site Health and Safety Officer.

2) Shutdown construction operations.

3) Remove injured or exposed person(s) from immediate danger. This action may coincide with steps 1 and 2.

4) Perform First Aid as necessary.

5) In case of serious injury, call AMBULANCE AT 911 for transport to a local hospital.

6) Evacuate other on-site personnel to a safe place until the Site Health and Safety Officer determines that it is safe for work to resume.

7) Implement steps to prevent a recurrence of the accident.

The nearest hospital is Alta Bates Summit Medical Center located at 350 Hawthorne Avenue in Oakland, California. The location, address, and telephone number of the nearest medical facility is shown on Plate A-1. The emergency route map will be posted and made available to all subcontractors on-site.

Emergency Telephone Numbers:

EMERGENCY/AMBULANCE	911
Alta Bates Summit Medical Center	(510) 869-6600
Property Representative: Ms. Normita Callison	(916) 339-8128
Consultant: Brunsing Associates, Inc.	(707) 838-3027

7.0 HEALTH AND SAFETY MEETING

Prior to commencement of site activities, a safety orientation meeting shall be held to review this Site Health and Safety Plan. During this meeting, all field personnel and subcontractors will be required to have read this Plan, comply with its requirements, and sign a form agreeing to the information and directions set forth in the Plan. Subcontractors will be expected to provide their own Health and Safety Plan. Additional field safety meetings will be held on a weekly basis to accommodate subcontractors arriving to the project at a later date and to answer any questions, which may result from field activities. In the event of an injury or exposure, a safety meeting will be held to discuss the cause and how to avoid future problems.

The safety orientation meeting and field safety meetings will review the following information:

- Site hazards, particularly those associated with subcontractor tasks, and actions that can be taken to mitigate these hazards.
- Health hazards associated with petroleum substances that may be encountered during construction.
- Required personal protective equipment and instructions for use.
- Personnel and equipment decontamination procedures.
- Emergency response plan.

All subcontractors will be provided with a copy of this Site Health and Safety Plan prior to construction and will be expected to share it with their employees. A copy of this Plan will also be kept available on-site during construction activities.

ATTACHMENT A
Health and Safety Plan Signature Form

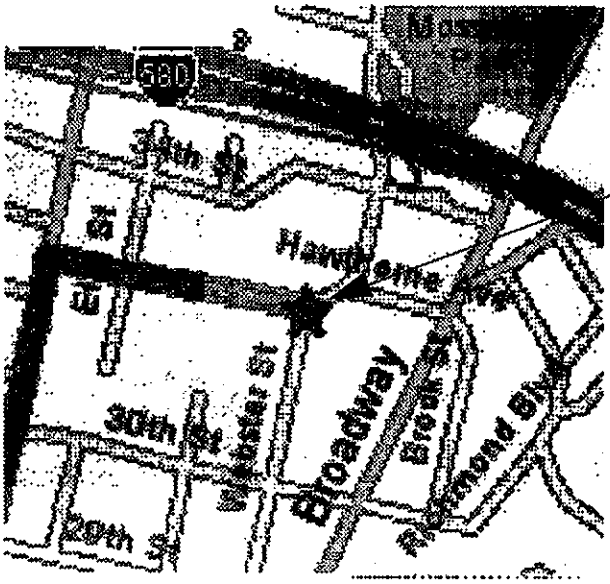
HEALTH AND SAFETY PLAN SIGNATURE FORM

PROJECT: 1735 24th Street, Oakland, California
PROJECT MANAGER: Michelle Floyd Frederick
SITE SAFETY OFFICER: William Coset, Dave Conley, Steve Silva

Prior to beginning field activities, I have been given an opportunity to read the contents of this Site Health and Safety Plan and to have my questions answered. By the presence of my signature below, I certify that I have received a copy of this Plan and understood the potential hazards at the site. I further certify that I am in full compliance with OSHA 29 CFR 1910.120.

SITE PERSONNEL:

Name	Signature	Date

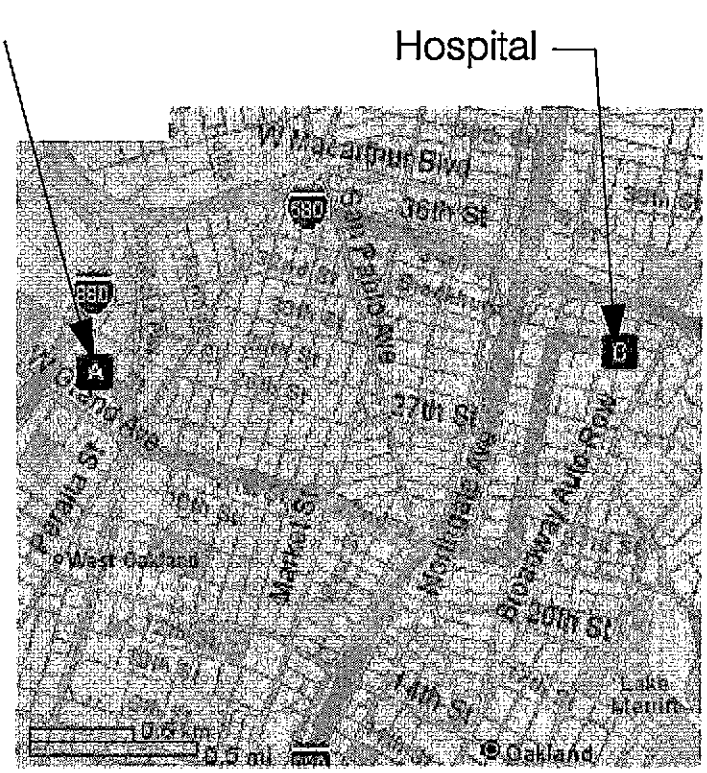


Alta Bates Summit Medical Center
350 Hawthorne Ave.
(510) 869-6600

Directions:

1. Turn Right on Mandela Pky.
2. Turn Left on West Grand Ave.
3. Turn Left on Telegraph Ave.
4. Turn Right on Hawthorne Ave.
5. Turn Right on Webster St.

Hospital Located at:
350 Hawthorne Ave.
Oakland, Ca. 94609



Brunsing Associates, Inc.
5803 Skylane Blvd., Suite A
Windsor, California 95492
Tel: (707) 838-3027

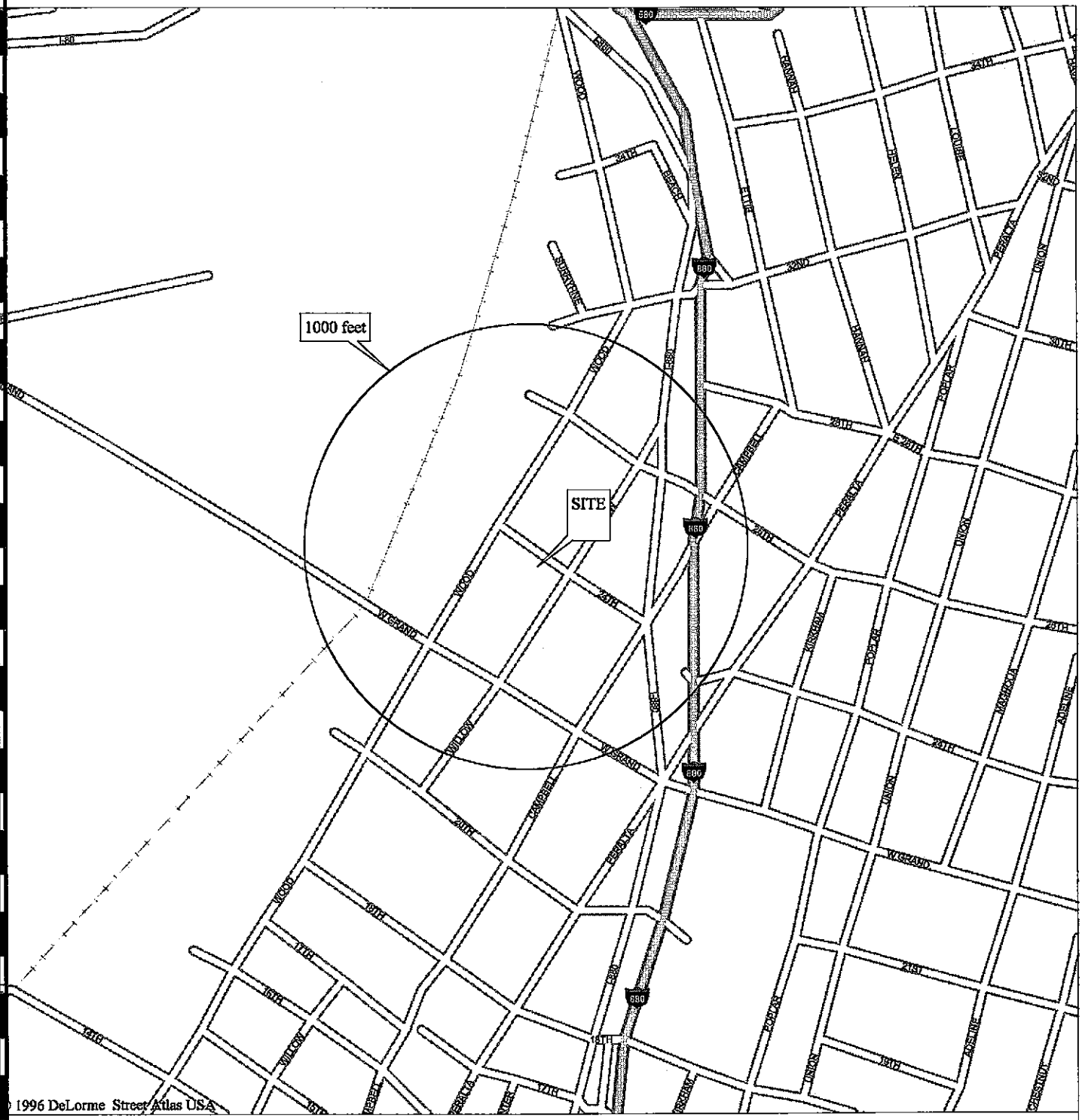
Job No.: 767
Appr.:
Date: 1/27/04

HOSPITAL ROUTE MAP
PACIFIC SUPPLY COMPANY, LLC
1734 24th Street
Oakland, California

PLATE
A-1

APPENDIX B

SENSITIVE RECEPTOR SURVEY FIELD DATA



Mag 16.00
Tue Jan 27 09:53 2004

Scale 1:7,812 (at center)
500 Feet

APPROXIMATE SCALE
(feet)

0 500 1000

PROJECT NO.:	029	
DRAWN BY:	DEC	1/27/04
CHECKED BY:		
APPROVED BY:	MJC	1/29/04
REVISED BY:		

Brunsing Associates, Inc.
P. O. Box 588
Windsor, California 95492

PLATE B -1
SENSITIVE RECEPTOR MAP
1735 24th Street
Oakland, California

TELEPHONE CALL RECORD

DATE 1/20/04 TIME 9:55 (AM) PM PROJECT NO. 029

PROJECT NAME _____ TELEPHONE NO. (510) 287-1210

TO: Mike Goldberg / Sr Civil Eng. OF: East Bay MUD

FROM: Michelle Frederick OF: _____

RE: (1) Does East bay mud use any water OR have any municipal wells in Oakland.

→ no current wells

(2) Does any one else supply water to Oakland

→ just east bay mud as municipal Supplier)

(3) How can I get copies of their utility lines at a specific location in Oakland?

Harvey Hanoian → (510) 287-1064
Senior

Bob [redacted] → (510) 287-1089
Lau

→ out this morning, back in afternoon

Fax: (510) 287-0790

TELEPHONE CALL RECORD

DATE 1/20/04 TIME 10:54 (AM)/PM PROJECT NO. 029

PROJECT NAME 1735 24th St. TELEPHONE NO. 800-7435000

TO: general # OF: PG&E

FROM: Michelle Frederick OF: BAI

RE: general # provided PG&E service planning dept. number for Oakland (510) 437-2233

upon calling service planning dept was not able to talk to an operator. left message, message not returned.

On Jan 21, 2004, visited Service planning department at 1801 Oakport Street in Oakland. Receptionist/ Security guard would not allow me to enter property with out an appointment. left my name and phone number and a copy of the Alameda Health Care letter with receptionist. She stated that I would be contacted the following day.

As of Jan 27, 2004 no return phone calls. Still unable to get operator at Service planning deptment.

BRUNSING ASSOCIATES, INC.

BACE Environmental
P. O. Box 588
Windsor, CA 95492
(707) 838-3027

BACE Geotechnical
P. O. Box 749
Windsor, CA 95492
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BACE Analytical & Field Services
P. O. Box 838
Windsor, CA 95492
(707) 838-8338

☒ ☐ ☐

FAX FOR ALL DIVISIONS (707) 838-4420

FACSIMILE COVER SHEET

Ref.: 549

TO:	Harvey Hanoian	FROM:	Michelle Floyd Frederick, Project Engineer
COMPANY:	EBMUD	DATE:	January 20, 2004
FAX NO.:	510-287-0790	PAGES:	3
SUBJECT:	Alameda Health Care letter and general area map		

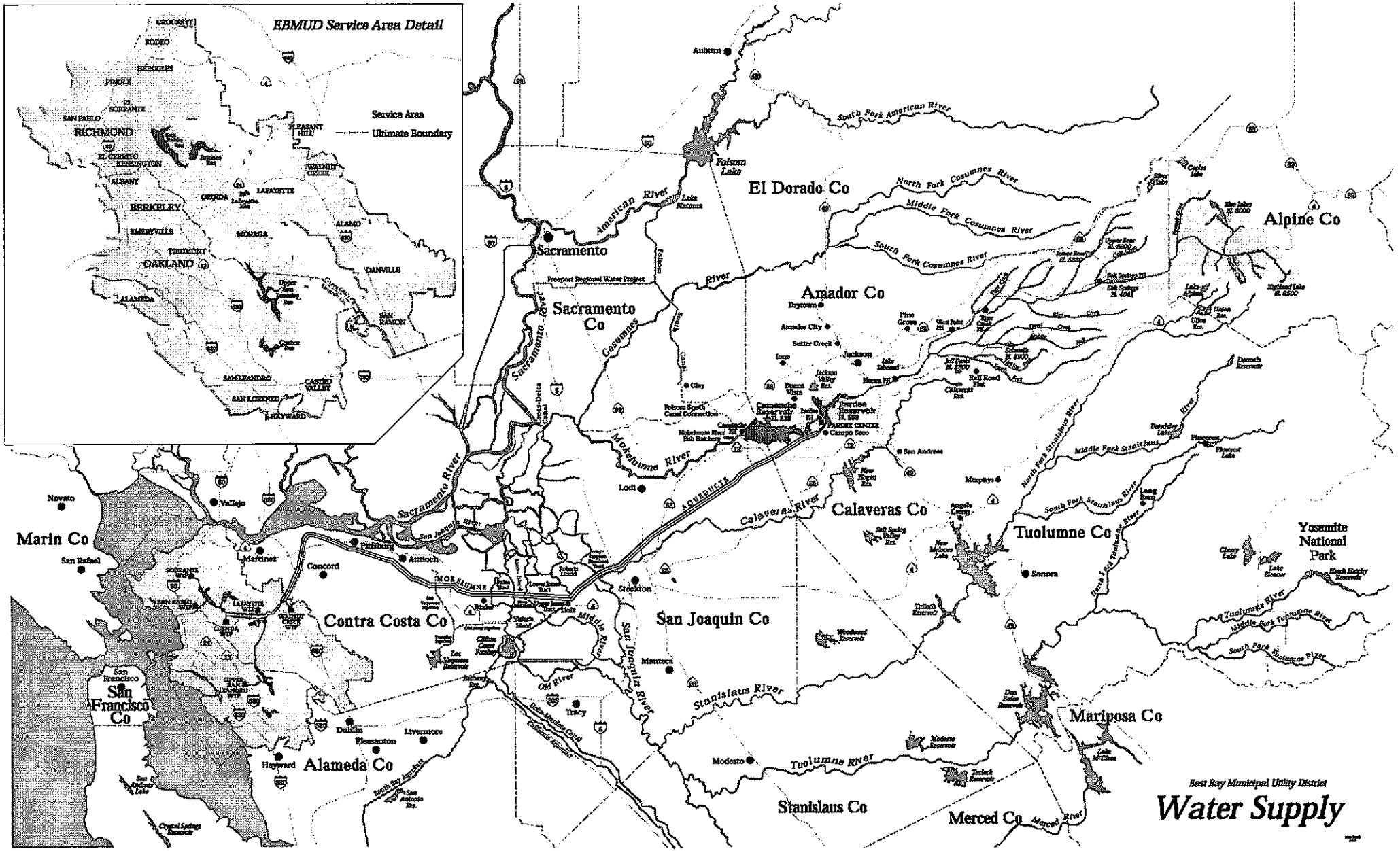
Confirmation of Receipt Requested ☐ *Yes* ☑ *No*

COMMENTS/MESSAGE

Dear Harvey,
Per our phone discussion, here is the letter from the Alameda County Health Care Services Agency requiring an utilities/preferential pathway survey (item number 5) for the site at 1735 24th Street in Oakland. As we discussed, the survey is necessary for a 1,000-foot radius. I have also included a simple area map with the property and an approximately 1,000-foot radius marked. Please note that our address is provided at the top of the fax coversheet.

I look forward from hearing back from you. Thank you in advance for your help.

Michelle


EBMUD Service Area Detail
Service Area
Ultimate Boundary
Sacramento
Folsom Lake
El Dorado Co
Alpine Co
Amador Co
Sacramento Co
Calaveras Co
Tuolumne Co
Yosemite National Park
Marin Co
Contra Costa Co
San Joaquin Co
San Francisco Co
Alameda Co
Stanislaus Co
Mariposa Co
Merced Co
American River
South Fork American River
North Fork Cosumnes River
Middle Fork Cosumnes River
South Fork Cosumnes River
Cosumnes River
Mokelumne River
Calaveras River
Stanislaus River
Tuolumne River
San Joaquin River
Middle River
Old River
Sacramento River
AQUEDUCTS
East Bay Municipal Utility District
Water Supply

BRUNSING ASSOCIATES, INC.

BACE Environmental
P. O. Box 588
Windsor, CA 95492
(707) 838-3027

BACE Geotechnical
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BACE Analytical & Field Services
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FAX FOR ALL DIVISIONS (707) 838-4420

FACSIMILE COVER SHEET

Ref.: 549

TO:	Alice	FROM:	Michelle Floyd Frederick, Project Engineer
COMPANY:	SBC/PacBell	DATE:	January 20, 2004
FAX NO.:	510-727-9631	PAGES:	4
SUBJECT:	Alameda Health Care letter and general area map		

Confirmation of Receipt Requested ☐ *Yes* ☑ *No*

COMMENTS/MESSAGE

Dear Alice,
Per our phone discussion, here is the letter from the Alameda County Health Care Services Agency requiring an utilities/preferential pathway survey (item number 5) for the site at 1735 24th Street in Oakland. As we discussed, the survey is necessary for a 1,000-foot radius from the site. I have also included a simple area map with the property and an approximately 1,000-foot radius marked. Please note that our address is provided at the top of the fax coversheet. I look forward from hearing back from you, I can be reached at (707) 838-3027. Thank you in advance for your help.

Michelle

SCALE 1 : 3,705

200 0 200 400 600

FEET

reduced
should be on 11x17

→ blue sanitary sewer
→ green storm system

Wednesday, January 21, 2004 11:14

Brunsing Associates, Inc.

January 21, 2004

Dear Owner/Facilities Manager:

As part of ongoing work at the location of a former underground storage tank (UST) site, the Alameda County Health Care Services Agency requested that Brunsing Associates, Inc. identify the location of any of the following in the vicinity of the former UST: (1) drinking water wells, (2) irrigation wells, or (3) buildings with basements or below ground crawlspaces. Your property is within the required radius of this survey. We will use the information we gather to assist in determining if any wells or subsurface areas need to be tested to ensure that petroleum constituents are not present, as a result of this underground storage tank. If it is determined that analytical testing is required at your facility as a precaution, the sample collection and laboratory analytical work would be done at no cost to you, and you would be provided a copy of the results.

To help us with this project we would appreciate it if you could return the attached postcard, including your return address, and indicate if there are any of the following on your property: (1) a drinking water well, (2) an irrigation well, or (3) a building with a basement or below ground crawlspace. If there are any of the above at your facility, please also write the name and phone number of a contact person on the postcard so that we may contact them for permission to sample the well(s), if necessary.

Thank you for your help. Feel free to contact me at (707) 838-3027, if you have any questions. You may also contact Barney Chan of the Alameda County Health Care Services at (510) 567-6700.

Sincerely,

Michelle Floyd Frederick

Michelle Floyd Frederick
Project Environmental Engineer

P.O. Box 588, Windsor, CA 95492 Phone: (707) 838-3027 Fax: (707) 838-4420

BAI DOOR-TO-DOOR WELL SURVEY

Completed By: MFF
Date: 1/21/04
Project No. 029

Property address: 2121 Peralta - several business in one building
Person interviewed:
How many wells on the property?:
Is there a basement on the property?:
Comments:
Unable to enter building, for leasing number (510) 763-7165 will call to verify

---

Property address: 2001 Peralta - Alliance Gas Products
Person interviewed: David
How many wells on the property?: no
Is there a basement on the property?: no
Comments:

Property address: 1700 18th / Park
Person interviewed: Courtney - field personnel City of Oakland
How many wells on the property?: N/
Is there a basement on the property?: No
Comments:

BAI DOOR-TO-DOOR WELL SURVEY

Completed By: MFF
Date: 1/29/04
Project No.

Property address: 1700 20th Street / Horizon Beverage Co.
Person interviewed: James
How many wells on the property?: no wells
Is there a basement on the property?: no basements
Comments: left letter for Denis, manager

Property address: 2001 Wood Street, EBI Aggr.
Person interviewed:
How many wells on the property?:
Is there a basement on the property?:
Comments: No office → will send letter

Property address: 1699 W. Grand, Primary Steel, Inc.
Person interviewed: Ray Bar
How many wells on the property?: no drink/irrigation
Is there a basement on the property?: no
Comments: had a well but it was abandoned when they purchased the property

BAI DOOR-TO-DOOR WELL SURVEY

Completed By: MFF
Date: 1/21/04
Project No. 029

Property address: 2240 Wood St. no company name
Person interviewed: - not available
How many wells on the property?:
Is there a basement on the property?:
Comments: left flyer in mail slot -

Property address: 2230 (?) Wood Street, Sound Wave Studios
Person interviewed: - no one available
How many wells on the property?:
Is there a basement on the property?:
Comments: left flyer in front of door w/rock

Property address: Mutual Express Company, 1700 W. Grand
Person interviewed: - no one available
How many wells on the property?:
Is there a basement on the property?:
Comments: left flyer under mat

BAI DOOR-TO-DOOR WELL SURVEY

Completed By: MFF
Date: 1/21/04
Project No. 029

Property address: 11696 West Grand, SKASOL Co.
Person interviewed: Brian Ford
How many wells on the property?: no
Is there a basement on the property?: no
Comments:

Property address: 2226 Campbell Lange
Person interviewed: Steve
How many wells on the property?: no
Is there a basement on the property?: no
Comments: has Seneca gas pumps

Property address: 2225 Campbell,
Person interviewed: Ed
How many wells on the property?: no
Is there a basement on the property?: no
Comments:

BAI DOOR-TO-DOOR WELL SURVEY

Completed By: MFF
Date: 1/21/04
Project No. 029

Property address: Lee Auto 1685 24th Street
Person interviewed: Lee
How many wells on the property?: no
Is there a basement on the property?: no (visual)
Comments: (Slight communication problems)

Property address: 1688 24th Street, Cereske Electric Cable Co.
Person interviewed: Jake
How many wells on the property?: no
Is there a basement on the property?: no
Comments:

Property address: 1700 24th Street
Person interviewed: locked no bell
How many wells on the property?:
Is there a basement on the property?: visual (no)
Comments:
Business: Ann's Transporation, REL Cargo Express, Albatross Trading Co, Trade Winds Import/Export, Inc.
left (2) flyers under door

entered other side — Sam no wells basements

BAI DOOR-TO-DOOR WELL SURVEY

Completed By: MFF
Date: 1/21/04
Project No. 029

Property address: 2570 Wood St. Pyro Minerals; Inc
Person interviewed: Terry Refractoriess Foundry Supplies.
How many wells on the property?: no
Is there a basement on the property?: no
Comments:
Previously had tank / chemical Co.

Property address: 2526 Wood St. - For Rent
Person interviewed: N/A
How many wells on the property?:
Is there a basement on the property?:
Comments:
left flyer in mail slot

Property address: 2515 Willow St.
Person interviewed: Wayne Johnson
How many wells on the property?: no
Is there a basement on the property?: no basement
Comments:

BAI DOOR-TO-DOOR WELL SURVEY

Completed By: MFF
Date: 1/21/04
Project No. 029

Property address: [redacted] 2537 Willow Street
Person interviewed: N/A
How many wells on the property?:
Is there a basement on the property?:
Comments: no one at this entrance left flyer

Property address: 2430 Willow/ East Bay Resources
Person interviewed: David
How many wells on the property?: no wells
Is there a basement on the property?: no basement
Comments:

Property address: 2607 Mandela Pkwy #3, Semolina Design
Person interviewed:
How many wells on the property?:
Is there a basement on the property?:
Comments: left flyer w/ tenant for retail manager who was currently out

BAI DOOR-TO-DOOR WELL SURVEY

Completed By: MFF
Date: 1/21/04
Project No. 029

Property address: 2653 Willow Street, Lightspann/Lenechan Glass
Person interviewed: Elmer
How many wells on the property?: no
Is there a basement on the property?: no basement
Comments:

Property address: 2855 Suite 1 same as above
Person interviewed:
How many wells on the property?:
Is there a basement on the property?:
Comments: left flyer in mail slot

Property address: 2857 Mandela Pkway, B Print
Person interviewed:
How many wells on the property?:
Is there a basement on the property?:
Comments: left flyer w/ [redacted] receptionist for manager

Property address: Western MacArthur Co. Wood St. · do not observe address ~2700
Person Sean Parneli
Wells - no well
Basement - no basement

BAI DOOR-TO-DOOR WELL SURVEY

Completed By: MFF
Date: 1/21/024
Project No. 029

Property address: 1747 24th Street
Person interviewed:
How many wells on the property?:
Is there a basement on the property?:
Comments: rang bell - no answer
appears unoccupied / no mailslot

Property address: Pacific Supply
Person interviewed: Theresa Spitzer
How many wells on the property?: only monitoring wells
Is there a basement on the property?: drop down @ approx. 3' in
Comments: northeast corner of property

Property address:
Person interviewed:
How many wells on the property?:
Is there a basement on the property?:
Comments: