PACIFIC COAST
companies, inc.

RECEIVED

9:14 am, Sep 18, 2012

Alameda County
Environmental Health

September 11, 2012

Mr. Keith Nowles
Alameda County Environmental Health Services Agency
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

RE: December 20, 2010 Preferential Pathway Study
Pacific Supply Oakland
1735 24th Street
Oakland, CA 94607

Dear Mr. Keith Nowles:

Attached is the Preferential Pathway Study dated December 20, 2010 required by Mr. Paresh Khatri of Alameda County Health Care Services Agency Environmental Protection at the above address performed by Brunsing Associates.

I declare under penalty of perjury that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

If you have any questions regarding this report, please contact William Coset of Brunsing Associates at (707) – 838 -3027, myself at (916) 645 -2568 (direct line) or (916)835 -6207 (cell number).

Sincerely,

Normita G. Callison

Normita G. Callison, REM
Environmental Consultant
For: PCCI and Subsidiaries

Enclosure:
Preferential Pathway Study, December 20, 2010

10600 White Road, Rancho Cordova, CA 95670
Tel No. (916) 631 – 6559 ▪ Mobile No. (916) 835 -6207

PREFERENTIAL PATHWAY STUDY

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

Project No. 029

December 20, 2010

Brunsing Associates, Inc.

Preferential Pathway Study

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

Prepared for:

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

Prepared by:

Brunsing Associates, Inc.
P.O. Box 588
Windsor, California 95492
(707) 838-3027

Project No. 029

December 20, 2010

Author:

David E. Conley, P.G
Senior Geologist

PROFESSIONAL GEOLOGIST
DAVID E. CONLEY
No. 4795
STATE OF CALIFORNIA

Reviewer:

William H. H. Coset
Project Geologist

TABLE OF CONTENTS

1.0 INTRODUCTION

Brunsing Associates, Inc. (BAI) has prepared this report, for the property located at 1735 24th Street, Oakland, California (Plate 1). This report presents the results of a preferential pathway study performed at the Pacific Supply Company site. This work was performed at the request of the Alameda County Health Care Services (ACHCS) in their letter dated April 29, 2010.

2.0 BACKGROUND

In May 1987, efforts were initiated to abandon a 1,000-gallon underground storage tank (UST) for gasoline 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). 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 potential soil and groundwater contamination 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 borings and well locations are shown 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 UST.

The Pacific Supply Company initiated quarterly groundwater monitoring at the request of the ACHCS 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 ACHCS 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. 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 (Plate 2) 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. 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 and ACHCS. 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 ACHCS.

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 down-gradient direction from the former UST location. Grab groundwater samples were collected to evaluate whether off-site migration of hydrocarbon contamination in groundwater was occurring. The groundwater sample collected for boring B-10, adjacent to the site, was reported to contain low levels of TPH as gasoline, BTEX, and petroleum oxygenates. In the groundwater samples collected from borings B-11 and B-12, which were farther from the source, all analytes were below their

respective reporting limits. The results of the field investigation are presented in BAI's "Groundwater Investigation and Monitoring Report," dated December 14, 2000.

As requested by the ACHCS, BAI prepared a workplan to evaluate the effectiveness of the vapor extraction system, and prepared a sensitive receptor survey; BAI's report was titled "Soil Parameters and Confirmation Soil Sampling Workplan and a Sensitive Receptor Survey Report" dated January 29, 2004. The drilling activities were performed on July 21, 2004 to determine the effectiveness of the vapor extraction system and to collect soil samples for physical properties to aid in the evaluation of risk based cleanup scenarios. The results of the investigation were reported in BAI's "Soil Parameters and Confirmation Soil Sampling Investigation Report", dated January 31, 2005.

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 the soil analytical data. Table 4 presents a summary of historic vapor analytical data. Tables 5 and 6 provide the grab groundwater analytical results for the off-site and on-site borings drilled in August 2000 and July 2004, respectively. Tables 1, 2, and 3 also provide the Oakland Tier 2 site specific target levels (SSTLs) for BTEX, and the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Gross Contamination Screening Levels for TPH as gasoline.

3.0 SITE CONCEPTUAL MODEL

3.1 Stratigraphy

The study site is covered with asphaltic concrete (AC) and concrete foundation buildings, which are underlined with a gravel baserock. The ground surface elevation of the northwestern portion of the site is approximately 3 feet above the surface elevation of the intersection of 24th Street and Wood Street.

Based on the subsurface data reported to date, the thickness of the baserock reported in the borings located on the study site varies from approximately 0.5 foot thick up to 4 feet thick (VRW-8 and –9). In general, silts and clays to depths up to approximately 5.5 feet bgs are present beneath the baserock. Silty sand and/or gravels were encountered beneath the silts and clays in most borings, with lenses of organics interspersed throughout the site (MW-2, MW-3, MW-5, B-2, B-4, B-7, and B-9). Clays and/or silts are generally present beneath the sandy silts and gravels at most locations. In borings CB-8 and CB-11 silts and clays were encountered beneath the baserock down to the bottom of the borings (approximately 8 ft bsg). Groundwater was encountered at approximately 7.5 to 8 feet bgs at most locations. Plates 3 presents the locations of cross-section A-A' (Plate 4) and cross-section B-B' (Plate 5), respectively.

3.1.1 Soil Types and Site Hydrogeologic Setting

BAI previously performed grain size distribution tests and flexible wall permeability tests on selected soil samples from the July 2004 confirmation boring CB-1 through CB-14. The results

of the physical and analytical tests of the July 2004 confirmation boring samples were presented in BAI's "Soil Parameters and Confirmation Soil Sampling Investigation Report", dated January 31, 2005. The following is a summary of physical tests:

- The soil sample from boring CB-11 at 5.5 feet bsg was classified as a green-brown sandy clayey silt (ML) composed of 2.2% gravel, 13.0% sand, 61.6% silt, and 23.1% clay. Soil sample CB-11 had a dry density of 123 pounds per cubic foot (pcf), an organic content of 0.4%, a soil moisture content of 5.4%, a permeability of 2.2 x 10^{-7} centimeters per second (cm/sec), and a porosity of 0.202.

- The soil sample from boring CB-13 at 6.5 was classified as a gray clayey silty sand (SM) composed of 69.3% sand, 15.5% silt, and 15.2% clay. Soil sample CB-13 had a dry density of 115 pcf, an organic content of 0.2%, a soil moisture content of 12.6%, a permeability of 3.3 x 10^{-8} cm/sec, and a porosity of 0.301.

- The soil sample from boring CB-14 5.0 feet bgs was classified as a brown clayey silty sand (SM) composed of 2.1% gravel, 67.1% sand, 18.2% silt, and 12.6% clay. Soil sample CB-14 had a dry density of 122 pcf, an organic content of 0.5%, a soil moisture content of 0.2%, a permeability of 2.9 x 10^{-6} cm/sec, and a porosity of 0.205.

The results of the grain distribution test classified both the sampled from CB-13 at 6.5 feet bgs and CB-14 at 5.0 feet bgs as a silty sand (SM) with 69.3 and 67.1 percent sand, respectively. The results of the flexible wall permeability test (ASTM D-5084) of the sample from CB-11 at 5.5 feet bsg, CB-13 at 6.5 feet bgs, and CB-14 5.0 feet bgs indicated a permeabilities of 2.2x10-7, 3.3 x 10^{-8}, and 2.9 x 10^{-6} centimeters per second, respectively. This indicates a very low relative permeability silty sand, based on Terzaghi and Peck.

A review of previously submitted field logs from past groundwater monitoring events indicate that after purging activities, different wells recover at different rates, further suggesting the low permeability of the soil at the subject site. The predominant groundwater flow direction has been calculated to the north.

3.1.2 Depth to Groundwater Measurements

The reported groundwater gradients at the study site have been consistently shallow. Based on this, a comparison of the range of the depth to water measurements from monitoring well MW-1 and well MW-7 is presented. Monitoring well MW-1 is located on the north western portion of the study site and well MW-7 is located off-site, on the north side of 24th Street. The depth to water measurements obtained from the groundwater monitoring well MW-1 range from 7.99 feet below top of casing (btc) on 10/14/88 to 6.27 feet btc on 12/10/04 and that the depth to water measurements in well MW-7 range from 7.47 feet btc on 1/28/00 to 15.28 feet btc on 1/26/98. The location of the monitoring wells is shown on Plate 2. A range of depth to water measurements for selected wells is shown on cross section A – A' (Plate 4) and cross section B-B' (Plate 5).

3.2 Post Remediation Contamination Distribution

3.2.1 Soil Contamination Distribution

Because of the soil and groundwater remediation activities from December 1993 through June 1996, the following discussion will focus only on the results of the TPH as gasoline and benzene analyses that were reported in the soil samples collected from the August 2000 soil borings (B-10, B-11, and B-12) in 24th Street and the July 2004 confirmation borings (CB-1 through CB-14). No benzene was reported above the reporting limits in any of the soil samples collected, however several of the benzene reporting limits were elevated. The benzene reporting limits for the soil samples ranged from 5.0 micrograms per kilogram (µg/kg) to 2,500 µg/kg. The cumulative soil analytical results are presented in Table 3.

No benzene or TPH as gasoline were reported above the laboratory reporting limits in the soil samples collected from boreholes CB-1 at 7 feet bgs, CB-5 at 7 feet bgs, and CB-10 at 7 feet bgs. Soil samples collected from borings CB-2 at 6.5 feet bgs, CB-6 at 7.5 feet bgs, CB-7 at 7.5 feet bgs, and CB-9 at 7.5 feet bgs contained 9.3 mg/kg, 430 mg/kg, 170 mg/kg, and 540 mg/kg of TPH as gasoline, respectively.

The most elevated concentrations of TPH as gasoline were reported in the soil samples collected from borings CB-4 and CB-8 at depths of 8 feet bgs located north and southeast of the former tank. The soil sample collected from CB-4 at 8 feet bgs contained 1,700 mg/kg of TPH as gasoline. The soil sample collected from boring CB-8 at 8 feet bgs reportedly contained TPH as gasoline at 5,700 mg/kg.

3.2.2 Groundwater Contamination Distribution

The predominant groundwater flow direction at the site is to the north, generally in the direction from the former UST location towards monitoring well MW-2. This is illustrated by persistently higher hydrocarbon concentrations in well MW-2 compared to the other groundwater monitoring wells. Plates 6 and 7 show the distribution of TPH as gasoline and benzene in groundwater in February 2010. Although the distribution pattern of TPH as gasoline is elongated in the direction of groundwater flow, TPH as gasoline occurs as far upgradient as wells VRW-8 and VRW-9. This suggests that the contamination plume may be moving radially from the former UST location, and not moving off site to any significant degree. The low permeabilities and the slow recovery characteristics noted in the groundwater monitoring wells discussed in Section 3.1.1 is a factor the impediment of groundwater contamination migrating further.

One grab groundwater sample was collected during 2004 investigation. The sample was collected from boring CB-3, near the vicinity of the former tank. The groundwater sample collected from boring CB-3 contained 23 milligrams per liter (mg/l) of TPH as gasoline, 1,100 micrograms per liter (µg/l) of benzene, 100 µg/l of toluene, 590 µg/l of ethylbenzene, and 2,500 µg/l of xylenes. Grab groundwater analytical results are summarized in Table 5 and 6.

Concentration vs time graphs for wells MW-2 (Appendix A) show a steady decline in concentration of both gasoline and benzene over time. This suggests that the remediation

activities at the site have largely retained the contaminant plume on site and reduced the contaminant concentrations. Soil borings B-10, B-11, and B-12, were drilled in August 2000 in 24th Street, down-gradient from the site. Borings B-10 and B-12 are directly down-gradient from well MW-2 and boring B-11 is cross gradient. Analysis of groundwater samples from the borings reported low concentrations of petroleum hydrocarbons in the sample from boring B-10 and non-detectable concentrations from the samples collected from borings B-11 and B-12.

Bay mud and low permeable soils encountered in most borings at the site suggest that groundwater is not migrating downward to a deeper aquifer. Because the predominant migration direction is to the north, shallow groundwater is moving towards San Francisco Bay. It is unlikely that the shallow groundwater at the site is, or will be, connected to a groundwater aquifer that can produce significant quantities of potable water.

4.0 PREFERENTIAL PATHWAY STUDY

4.1 Local Subsurface Utilities

Public utilities in the area of 24th Street and Wood Street, adjacent to the north and west of the study site contain the following:

- City of Oakland sanitary sewer and stormwater sewer
- East Bay Municipal Utiltiy District (EBMUD) water transmission line
- Pacific Gas and Electric (PG&E) Natural Gas and Electric lines

The sanitary sewer and stormwater sewer subsurface located on the north side of 24th Street utilities connect with the larger subsurface utilities located in Wood Street. Based on a telephone conference with Mr. Loren Little of the City of Oakland Public Works Department (OPW), Mr. Little indicated that the depth to bottom of the stormwater sewer drain manhole at the corner of 24th Street and Wood Street was 7.0 feet below the manhole rim and that the approximate depth of sanitary sewer in the same area was 5 feet beneath the street surface grade. Based on the depths of pipes, and that there can be up to one foot of bedding material in the bottom of the utility trench, it is reasonable to assume that the bottom of the stormwater sewer utility trench is at approximately 8 feet below the street grade and that the bottom of the sanitary sewer utility trench is at approximately 6 feet below the street grade. Mr. Little further stated that there was an abandoned sewer line on the west side of Wood Street, however the construction details of the abandoned line were unknown.

The electric and natural gas line utility trenches are located on the east side of Wood Street. Based on a telephone conference with Ms. Carol Franklin, PG&E, Ms. Little indicated that while there were no as-built construction notes for that area, the depth to bottom of both the electric and natural gas line utility trenches in the vicinity of the corner of 24th Street and Wood Street was most likely approximately 5 feet below the street surface.

The EBMUD water line utility trench is located on the west side of Wood Street. Based on a telephone conference with Mr. Robert Gonzales, EBMUD, Mr. Gonzales indicated that the depth

to bottom of the water transmission utility trench in the vicinity of the corner of 24th Street and Wood Street was most likely approximately 5 feet below the street surface.

4.2 Off-site Contamination Migration Potential

To date, the off-site drilling has been in 24th Street. A review of the off-site groundwater analytical data indicates non-detectable concentrations of petroleum hydrocarbons in the groundwater samples collected from well MW-7 (Table 1), and from the grab groundwater samples collected from borings B-11 and B-12 (Table 5). The analytical test results of the grab groundwater sample collected from boring B-10 in 24th Street indicated low levels of TPH as gasoline, benzene, toluene, xylenes, and MTBE. A summary of the analytical test results and their respective laboratory reporting limits are presented in Table 5.

Plate 3 shows the locations of soil borings B-10, B-11, and B-12 in relation to the underground utilities in 24th Street, down-gradient of the site. While it appears that utility trenches in 24th Street intersects the potential flow path from well MW-2 to borings B-10 and B-12 locations, the depth to groundwater measurements reported in well MW-7 compared to the estimated depth of the sanitary sewer and stormwater sewer utility trenches indicate that only in the highest of groundwater conditions does the shallow groundwater table intersect the utility trenches.

It is not unreasonable to assume from these subsurface conditions that the utility trenches can act as a preferential pathway for offsite contamination migration, however, the conditions for the shallow groundwater table to enter the utility trenches does not appear to occur often. The high and low depth to water measurements are shown next to the appropriate well boring logs on Cross Section A to A' (Plate 4) and Cross Section B to B' (Plate 5). Also included on Plate 4 are the approximate locations and depths of the subsurface utilities located in 24th Street along with high and low depth to water measurements for well MW-7. A summary of the depth to water measurements from monitoring wells MW-1 through MW-7 are in Table 1. A summary of the depth to water measurements from vapor extraction wells VRW-1 through VRW-9 are in Table 2.

5.0 CONCLUSIONS AND RECOMMENTATIONS

5.1 Data Gap

The detectable concentrations of petroleum hydrocarbons in MW-2 and B-10 indicated that the extent of the groundwater contamination north of the site has not been completely characterized. The nondetectable concentrations of petroleum hydrocarbons reported in the grab groundwater samples collected from borings B-11 and B-12 suggests that area of boring B-10 represents the extent of the off-site groundwater contamination. Based on the discussion presented in this report, it is possible that the petroleum hydrocarbons reported in well MW-2 and boring B-10 groundwater samples may have reached the sewer utility trenches located on the north side of 24th Street under high water conditions. Therefore, BAI recommends that a monitoring well be installed in 24th Street between utility trench and the boring B-10 location. Data from this well

will determine if petroleum hydrocarbons have migrated to the north beyond the B-10 location, and evaluate any decline in petroleum hydrocarbon concentration over time.

6.0 DISTRIBUTION

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

Mr. Paresh C. Khatri — 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

TABLES

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

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

Well Name	Depth to Groundwater 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	–	–
MW-1	6/23/2004	7.49	3.98	**0.37**	<1.0	<1.0	<1.0	<1.0	–	–

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

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

Well Name	Depth to Groundwater 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	12/10/2004	6.27	5.20	<0.050	<0.5	<0.5	<0.5	<0.5	–	–
MW-1	7/21/2005	7.41	4.06	<0.05	<0.50	<0.50	<0.50	<0.50	–	–
MW-1	1/18/2006	6.28	5.19	<0.05	<0.50	<0.50	<0.50	<0.50	–	–
MW-1	1/26/2007	7.47	4.00	<0.050	<0.50	<0.50	<0.50	<0.50	–	<1.0
MW-1	6/28/2007	7.53	3.94	<0.050	<0.50	<0.50	<0.50	<0.50	–	<1.0
MW-1	1/31/2008	6.54	4.93	0.1	<0.50	<0.50	<0.50	<0.50	–	<1.0
MW-1	7/1/2008	7.56	3.91	0.056	<0.50	<0.50	<0.50	<0.50	–	<1.0
MW-1	1/28/2009	7.12	4.35	0.10	<0.50	<0.50	<0.50	<0.50	–	<1.0
MW-1	7/22/2009	7.57	3.90	<0.05	<0.50	<0.50	<0.50	<0.50	–	<1.0
MW-1	2/2/2010	6.58	4.89	<0.05	<0.50	<0.50	<0.50	<0.50	–	<1.0
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	–	–

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

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

Well Name	Depth to Groundwater 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	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	–	–
MW-2	6/23/2004	6.96	3.84	1.1	6.30	2.36	<1.0	7.41	–	–
MW-2	12/9/2004	6.54	4.26	3.0	13.0	13.0	<0.5	24	–	–
MW-2	7/22/2005	6.89	3.91	2.7	5.84	<2.5	<2.5	5.81	–	–
MW-2	1/19/2006	6.33	4.47	3.6	15.0	<2.5	<2.5	11.2	–	–
MW-2	1/26/2007	6.99	3.81	0.29	2.65	<2.5	<2.5	3.00	–	<5.0
MW-2	6/29/2007	7.00	3.80	1.9	6.69	2.44	<0.50	6.24	–	1.72
MW-2	1/31/2008	6.36	4.44	0.7	1.83	<1.0	<1.0	<1.0	–	<2.0
MW-2	7/1/2008	6.95	3.85	1.4	2.72	2.26	<1.0	4.66	–	2.14
MW-2	1/28/2009	6.76	4.04	0.70	5.31	2.78	<0.50	5.92	–	<1.0
MW-2	2/2/2010	6.42	4.38	2.2	8.64	<2.5	<2.5	4.53	–	<5.0
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)	–

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

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

Well Name	Depth to Groundwater 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	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	–	–
MW-3	6/23/2004	7.65	4.11	<0.05	<1.0	<1.0	<1.0	<1.0	–	–
MW-3	12/8/2004	7.53	4.23	<0.050	<0.5	<0.5	<0.5	<0.5	–	–
MW-3	7/20/2005	7.62	4.14	<0.10	<1.0	<1.0	<1.0	<1.0	–	–
MW-3	1/19/2006	6.76	5.00	<0.05	<0.50	<0.50	<0.50	**0.71**	–	–
MW-3	1/25/2007	7.54	4.22	**0.15**	<0.50	<0.50	<0.50	<0.50	–	<1.0
MW-3	6/29/2007	7.70	4.06	**0.075**	<0.50	<0.50	<0.50	<0.50	–	**(A)**
MW-3	2/1/2008	6.87	4.89	**0.72**	<0.50	<0.50	<0.50	<0.50	–	**(A)**
MW-3	7/2/2008	7.79	3.97	**0.081**	<0.50	<0.50	<0.50	<0.50	–	**(B)**
MW-3	1/29/2009	7.53	4.23	**0.15**	<0.50	<0.50	<0.50	<0.50	–	<1.0
MW-3	7/23/2009	7.80	3.96	**0.18**	<0.50	<0.50	<0.50	<0.50	–	**1.00 (C)**
MW-3	2/1/2010	6.96	4.80	**0.25**	<0.50	<0.50	<0.50	<0.50	–	**1.30 (D)**

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

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

Well Name	Depth to Groundwater 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	7.02	2.05	0.072	<0.5	<0.5	<0.5	<0.5	–	<5.0
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)	–

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

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

Well Name	Depth to Groundwater 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	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	7.17	1.76	<0.05	<0.5	<0.5	<0.5	<0.5	–	<5.0
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	–	–	–	–	–	–	–

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

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

Well Name	Depth to Groundwater 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	7.47	-2.44	<0.05	<0.5	<0.5	<0.5	<0.5	–	<5.0

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA FOR MONITORING WELLS

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

Well Name	Depth to Groundwater 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)

MTBE = methyl tertiary butyl ether. TPH = total petroleum hydrocarbons.
(1)=Organic Lead, (2)=Total Lead, and (3)=chromatographic peak array does not match gasoline standard.
ND = not detected at laboratory reporting limit. <= less than given laboratory reporting limit.
µg/L = micrograms per liter. mg/L = milligrams per liter. – = not requested.
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').
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.
June 2004 water levels were measured on June 22, 2004.
December 2004 water levels were measured on December 8, 2004.
' = Removed from sampling program.
(A) = concentrations of tert-Butyl alcohol (TBA) reported at 120 µg/l.
(B) = concentrations of tert-Butyl alcohol (TBA) reported at 151 µg/l.
(C) = concentrations of tert-Butyl alcohol (TBA) reported at 122 µg/l.
(D) = concentrations of tert-Butyl alcohol (TBA) reported at 135 µg/l.

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

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

Sample ID	Depth to Groundwater 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	-	-
VRW-1	6/22/2004	7.32	11.18	3.86	0.32	3.23	<1.0	<1.0	3.36	-	-
VRW-1	12/9/2004	6.93	11.18	4.25	0.32	8.0	<3	<3	3.7	-	-
VRW-1	7/22/2005	7.25	11.18	3.93	0.69	5.35	1.27	<0.50	3.66	-	-
VRW-1	1/19/2006	6.63	11.18	4.55	0.53	6.98	1.41	<0.50	3.18	-	-
VRW-1	1/25/2007	7.34	11.18	3.84	0.32	260	0.97	<0.50	2.43	1.31	-
VRW-1	6/28/2007	7.30	11.18	3.88	0.17	2.19	0.76	<0.50	1.83	1.26	-
VRW-1	1/31/2008	6.67	11.18	4.51	0.77	20.5	3.75	<0.50	6.82	2.45	-
VRW-1	7/1/2008	7.35	11.18	3.83	0.75	11.8	3.73	<0.50	6.41	1.13	(B)
VRW-1	1/28/2009	7.14	11.18	4.04	<0.050	1.12	1.26	<0.50	1.56	<1.0	
VRW-1	7/22/2009	7.40	11.18	3.78	0.38	1.06	0.69	<0.50	1.11	1.33	(E)
VRW-1	2/2/2010	6.70	11.18	4.48	0.90	8.95	2.42	<1.0	4.76	<2.0	
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	-	-
VRW-2	6/25/2004	7.00	11.08	4.08	0.24	274	4.10	4.11	8.22	-	-
VRW-2	12/9/2004	6.45	11.08	4.63	<0.050	9.6	4.2	2.5	4.3	-	-
VRW-2	7/21/2005	6.93	11.08	4.15	2.1	102	1.43	0.84	3.81	-	-
VRW-2	1/18/2006	5.83	11.08	5.25	3.8	280	<2.5	3.81	7.54	-	-
VRW-2	1/25/2007	6.94	11.08	4.14	1.0	62.3	<2.5	<2.5	3.56	<5.0	-
VRW-2	6/28/2007	7.02	11.08	4.06	0.45	41.0	<2.5	<2.5	3.83	<5.0	-
VRW-2	1/31/2008	6	11.08	5.08	1.4	80.1	2.31	1.25	3.57	1.87	-
VRW-2	7/1/2008	7.15	11.08	3.93	1.5	73.2	2.04	<1.0	4.52	2.15	-
VRW-2	1/28/2009	6.71	11.08	4.37	0.54	46.2	2.10	<0.50	3.76	<1.0	-
VRW-2	7/22/2009	7.10	11.08	3.98	1.1	12.7	1.06	<1.0	2.79	2.38	-
VRW-2	2/2/2010	6.06	11.08	5.02	1.9	62.8	<2.5	<2.5	<2.5	<5.0	-
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	-	-
VRW-3	6/25/2004	7.58	11.62	4.04	0.12	2.00	<0.50	<0.50	1.00	-	-
VRW-3	12/10/2004	6.34	11.62	5.28	0.22	27	3.7	1.0	3.1	-	-
VRW-3	7/22/2005	7.50	11.62	4.12	0.11	<1.0	<1.0	<1.0	2.02	-	-
VRW-3	1/18/2006	6.37	11.62	5.25	0.18	230	<0.50	<0.50	1.46	-	-
VRW-3	1/26/2007	7.50	11.62	4.12	0.071	1.68	<0.50	<0.50	<0.50	<1.0	-

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

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

Sample ID	Depth to Groundwater 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-3	6/28/2007	7.60	11.62	4.02	<0.050	<0.50	<0.50	<0.50	<0.50	<1.0	-
VRW-3	1/31/2008	6.50	11.62	5.12	<0.050	1.01	<0.50	<0.50	<0.50	<1.0	-
VRW-3	7/1/2008	7.66	11.62	3.96	0.10	<0.50	<0.50	<0.50	<0.50	<1.0	-
VRW-3	1/28/2009	7.19	11.62	4.43	<0.050	<0.50	<0.50	<0.50	2.26	<1.0	-
VRW-3	7/22/2009	7.64	11.62	3.98	0.26	<0.50	<0.50	<0.50	1.16	<1.0	-
VRW-3	2/2/2010	6.45	11.62	5.17	0.28	<0.50	<0.50	<0.50	<0.50	<1.0	(L)
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	-	-
VRW-4	6/22/2004	7.20	11.33	4.13	14	4,540	611	739	1,170	-	-
VRW-4	12/8/2004	6.99	11.33	4.34	2.7	780	68	90	160	-	-
VRW-4	7/20/2005	7.12	11.33	4.21	19	3,740	381	480	643	-	-
VRW-4	1/19/2006	6.29	11.33	5.04	7.8	1,670	196	270	324	-	-
VRW-4	1/26/2007	7.06	11.33	4.27	1.4	163	<25	<25	25.2	<50	-
VRW-4	6/28/2007	6.99	11.33	4.34	0.62	60.8	3.81	3.72	18.7	<5.0	-
VRW-4	1/31/2008	6.20	11.33	5.13	0.75	26.0	3.21	<2.5	15.6	<5.0	-
VRW-4	7/1/2008	7.32	11.33	4.01	0.77	16.8	2.86	<0.50	13.3	<1.0	-
VRW-4	1/29/2009	7.02	11.33	4.31	0.89	45.5	3.16	1.75	13.2	<1.0	-
VRW-4	7/22/2009	7.26	11.33	4.07	0.91	16.1	2.42	<1.0	12.4	<2.0	(F)
VRW-4	2/1/2010	6.40	11.33	4.93	2.5	481	26.2	45.2	61.1	<10	
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	-	-
VRW-5	6/23/2004	7.47	11.56	4.09	0.72	40.5	<1.0	1.17	8.04	-	-
VRW-5	12/10/2004	7.11	11.56	4.45	0.72	60	10	<3	33	-	-
VRW-5	7/21/2005	7.38	11.56	4.18	1.6	102	3.83	4.62	12.4	-	-
VRW-5	1/19/2006	6.29	11.56	5.27	1.8	65.4	<2.5	31.4	33.4	-	-
VRW-5	1/25/2007	7.40	11.56	4.16	NA	NA	NA	NA	NA	NA	NA
VRW-5	6/29/2007	7.50	11.56	4.06	0.69	35.4	2.55	<2.5	5.62	<5.0	NA
VRW-5	2/1/2008	6.49	11.56	5.07	0.87	33.7	<2.5	15.2	10.5	<5.0	NA
VRW-5	1/28/2009	7.17	11.56	4.39	0.72	110	3.53	5.00	9.00	<1.0	NA
VRW-5	7/23/2009	7.54	11.56	4.02	1.6	11.8	<1.0	<1.0	3.93	<2.0	(G)

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

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

Sample ID	Depth to Groundwater 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-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	-	-
VRW-6	6/23/2004	7.36	11.43	4.07	0.42	43.4	3.60	1.69	13.0	-	-
VRW-6	12/9/2004	6.71	11.43	4.72	0.14	8.0	21	<0.5	3.6	-	-
VRW-6	7/21/2005	7.32	11.43	4.11	0.33	18.3	1.13	0.95	5.05	-	-
VRW-6	1/19/2006	5.85	11.43	5.58	0.13	3.96	<0.50	<0.50	1.25	-	-
VRW-6	1/25/2007	7.28	11.43	4.15	0.20	13.5	0.72	0.56	2.67	<1.0	-
VRW-6	6/28/2007	7.41	11.43	4.02	0.081	7.37	<0.50	<0.50	1.32	<1.0	(A)
VRW-6	2/1/2008	NM	11.43	NM	1.8	212	10.2	8.05	17.7	<2.0	(A)
VRW-6	7/2/2008	7.51	11.43	3.92	0.18	4.80	<0.50	<0.50	1.72	<1.0	(C)
VRW-6	7/23/2009	NM	11.43	NM	0.21	<0.50	<0.50	<0.50	<0.50	<1.0	(H)
VRW-6	2/1/2010	6.65	11.43	4.78	0.32	7.97	<0.50	<0.50	1.26	<1.0	(M)
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	-	-
VRW-7	6/22/2004	7.61	11.70	4.09	1.3	130	8.06	9.81	15.9	-	-
VRW-7	12/9/2004	7.54	11.70	4.16	0.34	28	<3	<3	5.0	-	-
VRW-7	7/21/2005	7.54	11.70	4.16	1.7	48.1	2.76	2.56	6.94	-	-
VRW-7	1/19/2006	6.70	11.70	5.00	1.6	86.8	3.63	6.89	9.04	-	-
VRW-7	1/25/2007	7.46	11.70	4.24	NA	NA	NA	NA	NA	NA	NA
VRW-7	6/28/2007	7.62	11.70	4.08	NA	NA	NA	NA	NA	NA	NA
VRW-7	2/1/2008	6.70	11.70	5.00	0.47	21.3	<5.0	<5.0	<5.0	<10	NA
VRW-7	7/2/2008	7.70	11.70	4.00	0.38	2.13	<0.50	<0.50	2.60	<1.0	(D)
VRW-7	1/29/2009	7.47	11.70	4.23	0.44	8.67	<0.50	<0.50	2.30	<1.0	
VRW-7	7/23/2009	7.69	11.70	4.01	0.51	2.87	<0.50	<0.50	<0.50	<1.0	(I)
VRW-7	2/1/2010	6.82	11.70	4.88	0.62	31.6	1.67	2.52	3.18	<2.0	

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

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

Sample ID	Depth to Groundwater 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	-	-
VRW-8	6/23/2004	7.56	11.62	4.06	2.1	115	11.8	<5.0	18.2	-	-
VRW-8	12/9/2004	7.41	11.62	4.21	1.3	30	9.0	<3	7.6	-	-
VRW-8	7/21/2005	7.49	11.62	4.13	4.1	24.8	3.44	<2.5	7.34	-	-
VRW-8	1/19/2006	6.73	11.62	4.89	4.8	18.1	4.26	<2.5	8.30	-	-
VRW-8	1/25/2007	7.41	11.62	4.21	1.3	10.7	<2.5	<2.5	6.70	<5.0	-
VRW-8	6/29/2007	7.60	11.62	4.02	0.64	4.76	<2.5	<2.5	3.85	<5.0	-
VRW-8	2/1/2008	6.85	11.62	4.77	3.1	15.1	2.9	<2.5	9.77	<5.0	-
VRW-8	7/2/2008	7.73	11.62	3.89	2.0	11.6	<2.5	<2.5	<2.5	<5.0	-
VRW-8	1/29/2009	7.43	11.62	4.19	0.84	7.73	2.04	<0.50	7.52	<1.0	-
VRW-8	7/23/2009	7.71	11.62	3.91	2.4	22.2	<1.0	<1.0	8.18	<2.0	(J)
VRW-8	2/1/2010	6.90	11.62	4.72	1.8	4.03	2.02	<1.0	5.08	<2.0	(N)
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	-	-
VRW-9	6/22/2004	7.76	11.87	4.11	0.61	<1.0	1.35	<1.0	5.55	-	-
VRW-9	12/9/2004	7.51	11.87	4.36	0.57	8.8	10	<0.5	5.5	-	-
VRW-9	7/21/2005	7.71	11.87	4.16	0.66	<1.0	<1.0	<1.0	2.83	-	-
VRW-9	1/19/2006	6.94	11.87	4.93	1.0	2.04	<1.0	<1.0	4.91	-	-
VRW-9	1/26/2007	7.65	11.87	4.22	0.52	<1.0	1.01	<1.0	3.53	<2.0	-
VRW-9	6/29/2007	7.81	11.87	4.06	0.38	<0.50	<0.50	<0.50	2.27	<1.0	-
VRW-9	7/2/2008	7.93	11.87	3.94	0.53	<0.50	<0.50	<0.50	1.85	<1.0	-
VRW-9	1/29/2009	7.60	11.87	4.27	0.24	1.53	1.03	<0.50	4.04	<1.0	-
VRW-9	7/23/2009	7.91	11.87	3.96	0.80	<0.50	<0.50	<0.50	1.60	<1.0	(K)
VRW-9	2/1/2010	7.01	11.87	4.86	0.95	1.71	1.13	<1.0	4.00	<2.0	

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

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

Sample ID	Depth to Groundwater 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)

mg/L = milligrams per liter
µg/L = micrograms per liter
na = not analyzed.
ND = not detected above laboratory reporting limits.
MSL = Mean Sea Level
< = less than the specified laboratory reporting limit
June 2004 groundwater elevations were collected on June 22, 2004.
December 2004 groundwater elevations were collected on December 8, 2004.
(A) = concentrations of tert-Butyl alcohol reported at 51.2 µg/l.
(B) = concentrations of tert-Butyl alcohol reported at 53.3 µg/l.
(C) = concentrations of tert-Butyl alcohol reported at 54.3 µg/l.
(D) = concentrations of tert-Butyl alcohol reported at 90.4 µg/l.
(E) = concentrations of tert-Butyl alcohol reported at 42.5 µg/l.
(F) = concentrations of tert-Butyl alcohol reported at 33.7 µg/l.
(G) = concentrations of tert-Butyl alcohol reported at 35.2 µg/l.
(H) = concentrations of tert-Butyl alcohol reported at 28.6 µg/l.
(I) = concentrations of tert-Butyl alcohol reported at 89.5 µg/l.
(J) = concentrations of tert-Butyl alcohol reported at 62.6 µg/l.
(K) = concentrations of tert-Butyl alcohol reported at 62.1 µg/l.
(L) = concentrations of tert-Butyl alcohol reported at 41.8 µg/l.
(M) = concentrations of tert-Butyl alcohol reported at 48.8 µg/l.
(N) = concentrations of tert-Butyl alcohol reported at 57.5 µg/l.

TABLE 3. SUMMARY OF SOIL ANALYTICAL DATA

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

Boring Location	Sample Date	Sample 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											

TABLE 3. SUMMARY OF SOIL ANALYTICAL DATA

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

Boring Location	Sample Date	Sample 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)
CB-1	7/21/2004	7	<1.0	–	–	<5.0	<5.0	<5.0	<5.0	–	–
CB-2	7/21/2004	6.5	**9.3**	–	–	<10	<10	<10	**13**	–	–
CB-4	7/21/2004	8.0	**1,700**	–	–	<2,500	**7,900**	**25,000**	**37,000**	–	–
CB-5	7/21/2004	7.0	<1.0	–	–	<5.0	<5.0	<5.0	**5.1**	–	–
CB-6	7/21/2004	7.5	**430**	–	–	<1,300	**1,700**	**1,600**	**3,000**	–	–
CB-7	7/21/2004	7.5	**170**	–	–	<500	**660**	<500	**1,200**	–	–
CB-8	7/21/2004	8.0	**5,700**	–	–	<2,500	**54,000**	**18,000**	**53,000**	–	–
CB-9	7/21/2004	7.5	**540**	–	–	<500	**2,500**	**1,300**	**4,600**	–	–
CB-10	7/21/2004	7	<1.0	–	–	<5.0	<5.0	<5.0	<5.0	–	–
Oakland Tier 2 SSTLs for Sandy Silts						**17,000**	**>Sat**	**>Sat**	**>Sat**	–	**>Sat**
Oakland Tier 2 SSTLs for Clayey Silts						**30,000**	**>Sat**	**>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.

SSTLs are based on subsurface soil inhalation of indoor air vapors, for the specified soil type and for commerical/industrial site use.

>Sat = SSTLs exceeds saturation soil concentration of chemical.

There are no SSTLs for total petroleum hydrocarbons.

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.

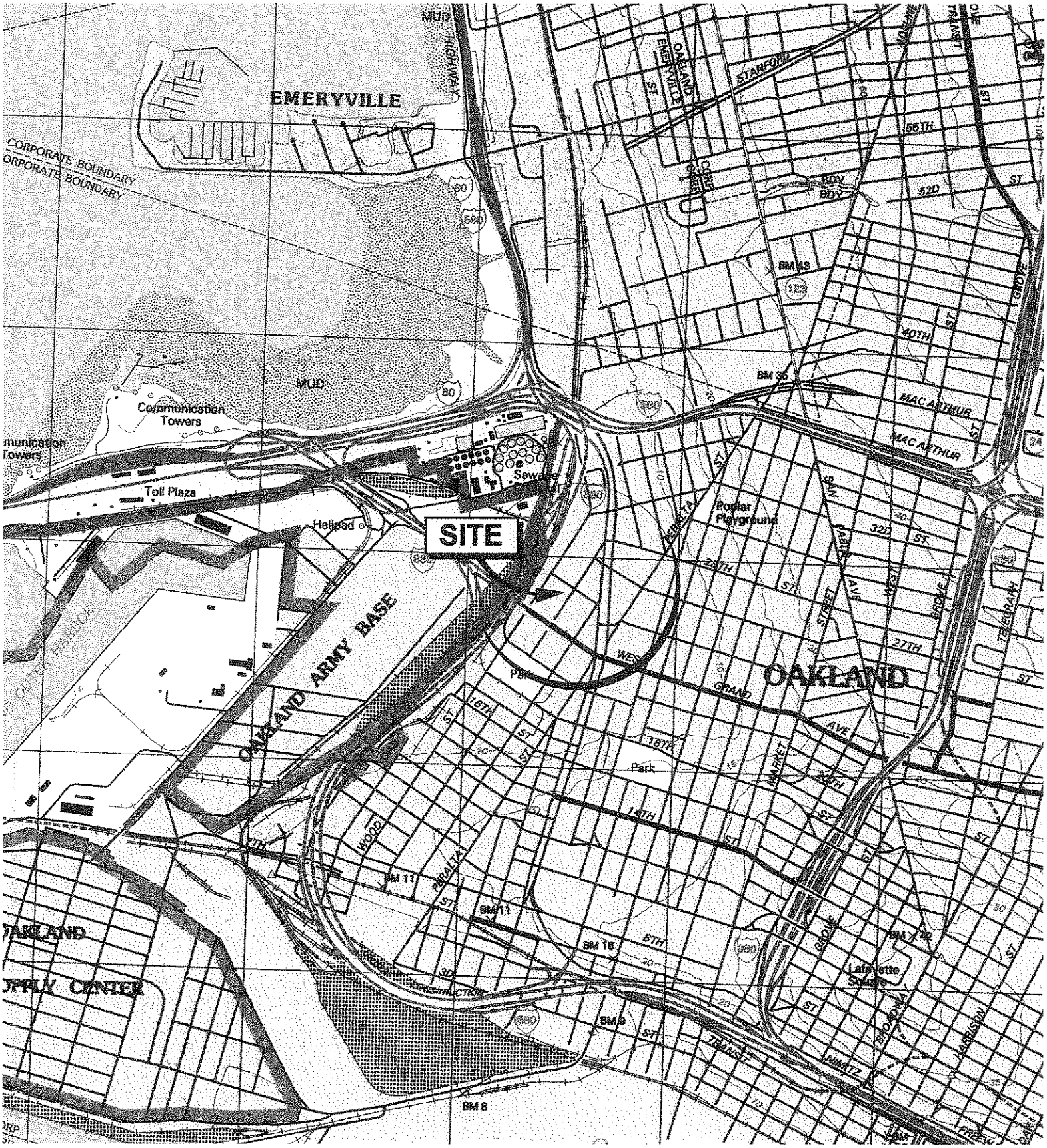
TABLE 6. GRAB GROUNDWATER ANALYTICAL RESULTS, 7/21/04

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

Sample Location	Sample Date	Sample Depth (feet bgs)	TPH as gasoline (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)
CB-3	7/21/2004	8 to 10	23	1,100	100	590	2,500
Oakland Tier 2 SSTLs for Sandy Silts			-	53,000	>Sol	>Sol	>Sol
Oakland Tier 2 SSTLs for Clayey Silts			-	89,000	>Sol	>Sol	>Sol
SFRWQCB Gross Contamination Concerns[1]			2.5-5	-	-	-	-

mg/l = milligrams per liter
µg/l = micrograms per liter
Oakland SSTLs are based on a groundwater media for inhalation of indoor air vapors risk scenerio at a commerical/industrial site.
There are no SSTLs for Total Petroleum Hydrocarbons.
(1) Per correspondence with SFRWQCB and Table F-1b in Appendix 1.
(2) The City of Oakland BTEX standars 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.

PLATES



REFERENCE:
Oakland West Quadrangle Calfifornia
7.5-Minute Series (Topographic), 1993

NORTH

APPROXIMATE SCALE (FEET)

0 1000 2000 4000

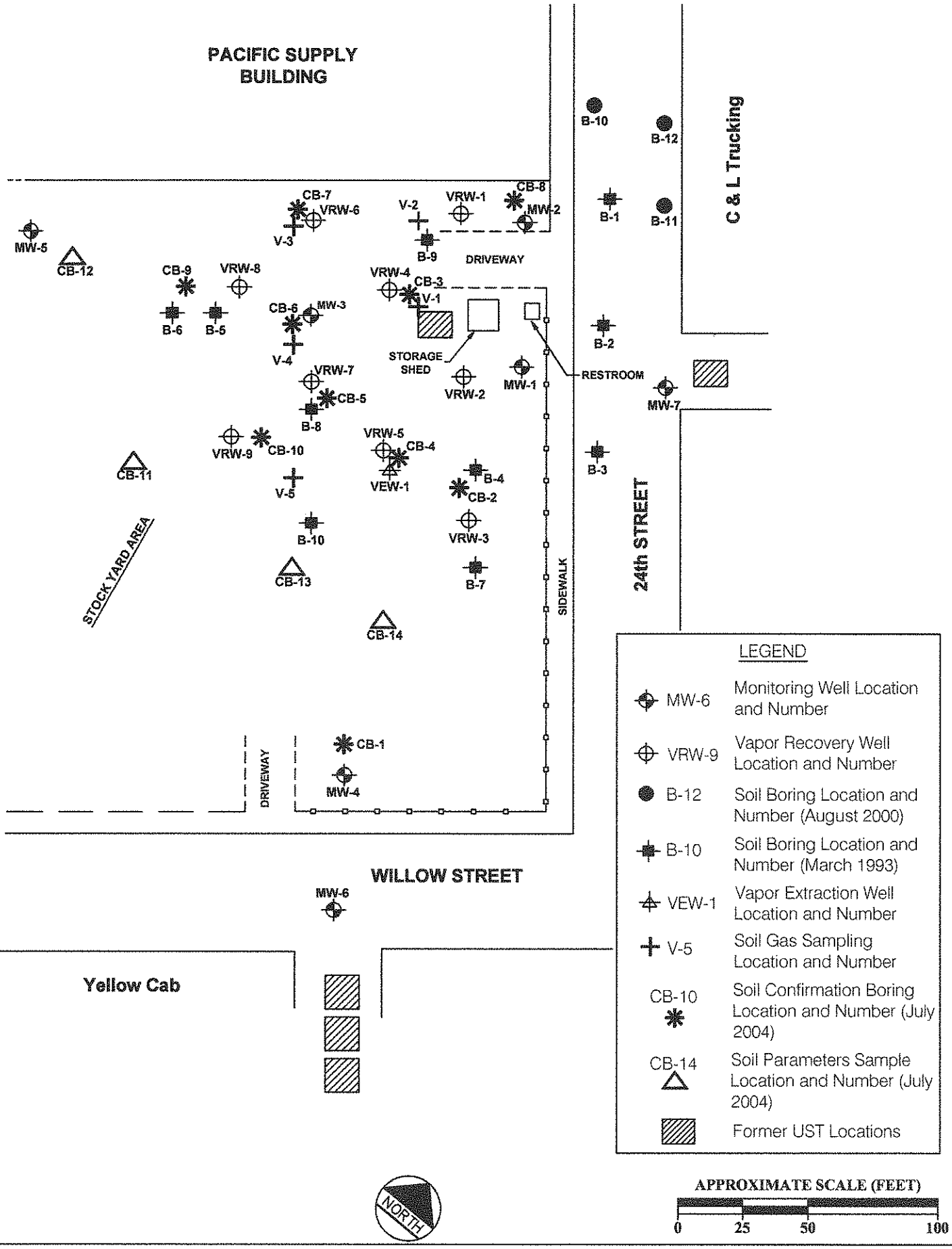
Brunsing Associates, Inc.
5468 Skylane Blvd., Suite 201
Santa Rosa, California 95403
Tel: (707) 838-3027

Job No.: 029
Appr.:
Date: 12/20/10

VICINITY MAP

PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE
1



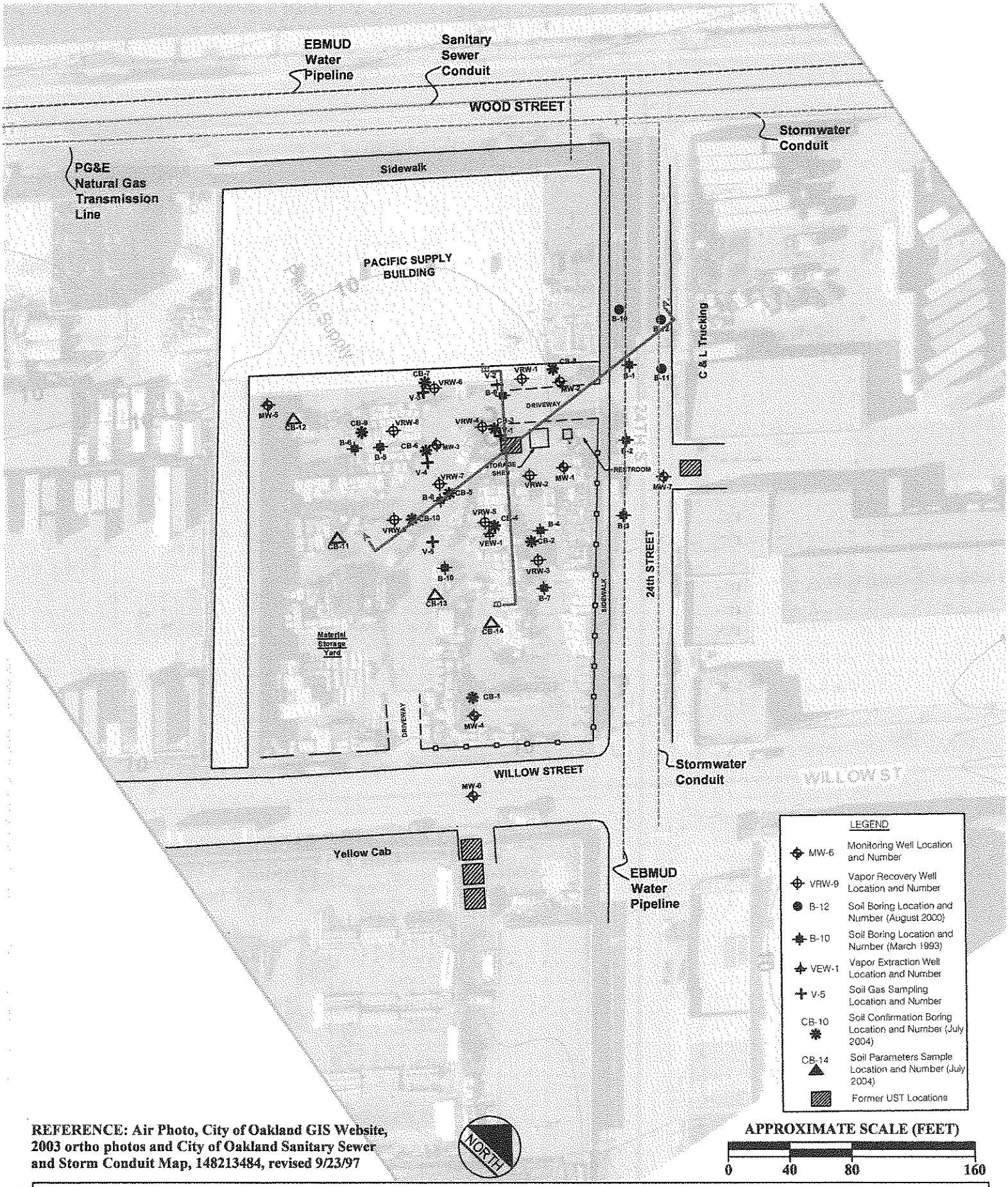
Brunsing Associates, Inc.
5468 Skylane Blvd., Suite 201
Santa Rosa, California 95403
Tel: (707) 838-3027

Job No.: 029
Appr.:
Date: 12/20/10

SITE MAP

PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE
2



REFERENCE: Air Photo, City of Oakland GIS Website, 2003 ortho photos and City of Oakland Sanitary Sewer and Storm Conduit Map, 148213484, revised 9/23/97

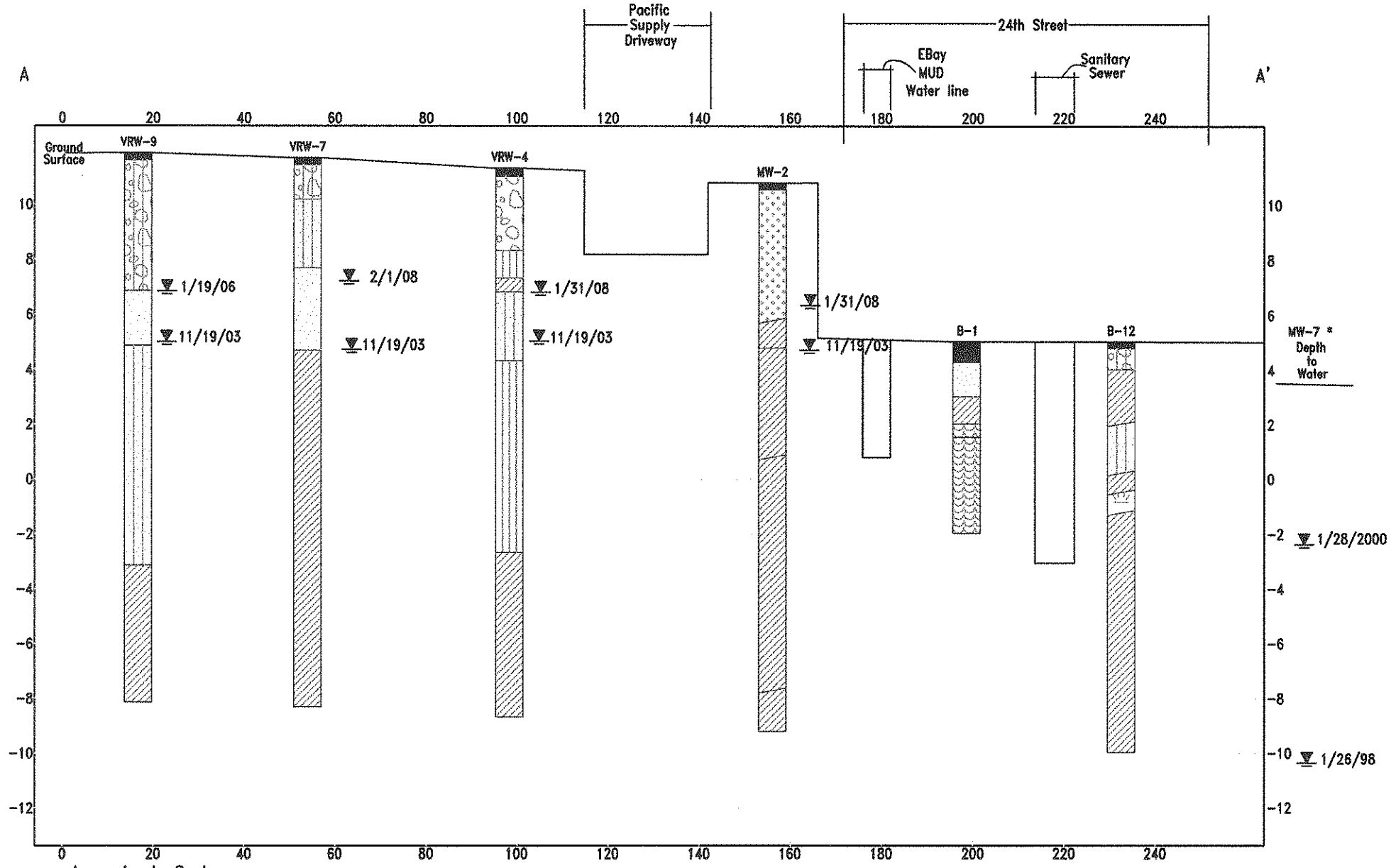
Brunsing Associates, Inc.
5468 Skylane Blvd., Suite 201
Santa Rosa, California 95403
Tel: (707) 838-3027

Job No.: 029
Appr.:
Date: 12/20/10

CROSS SECTION LOCATION MAP and UNDERGROUND UTILITIES LOCATIONS

PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE 3

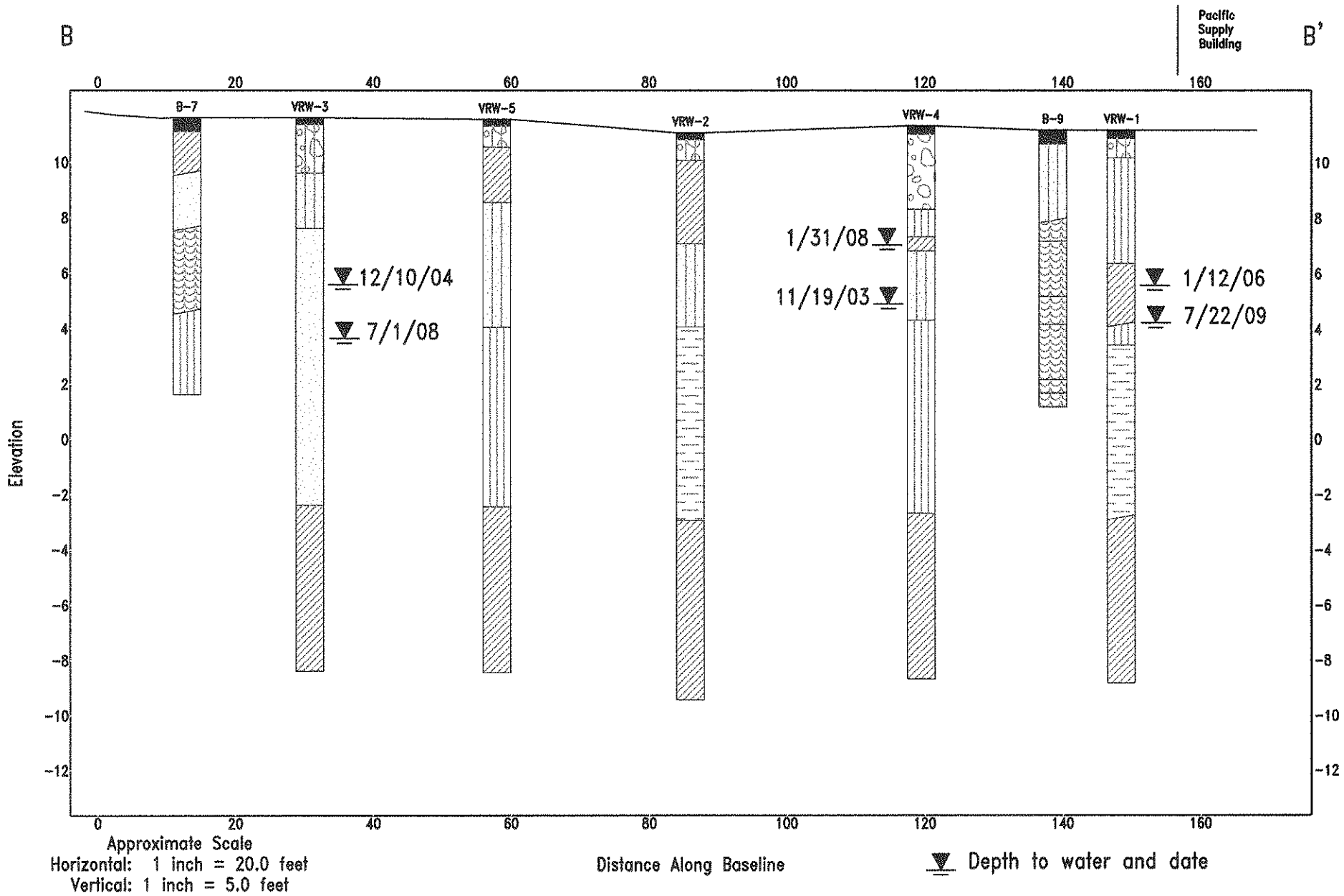


Brunsing Associates, Inc.
5468 Skylane Blvd., Suite 201
Santa Rosa, California 95403
Tel: (707) 838-3027

Job No.: 029
Appr.:
Date: 12/20/10

CROSS SECTION A - A'
PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE
4



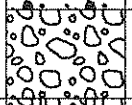
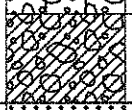
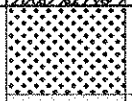
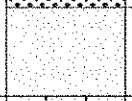
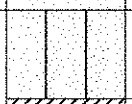
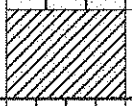
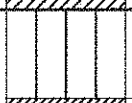
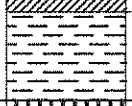
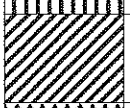
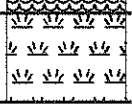
Brunsing Associates, Inc.
5468 Skylane Blvd., Suite 201
Santa Rosa, California 95403
Tel: (707) 838-3027

Job No.: 29
Appr.:
Date: 12/20/10

CROSS SECTION B - B'
PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE
5

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS — MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS — MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS — MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS — LIQUID LIMIT LESS THAN 50			ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS — LIQUID LIMIT GREATER THAN 50			MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

RELATIVE CONSISTENCY CLASSIFICATION

GRANULAR	COHESIVE
Silts, Sands, and Gravels	Clays and Clayey Silts
VERY LOOSE	SOFT
LOOSE	MEDIUM STIFF
MEDIUM DENSE	STIFF
DENSE	VERY STIFF
VERY DENSE	HARD

Relative Moisture Contents
DRY
DAMP
MOIST
WET
SATURATED

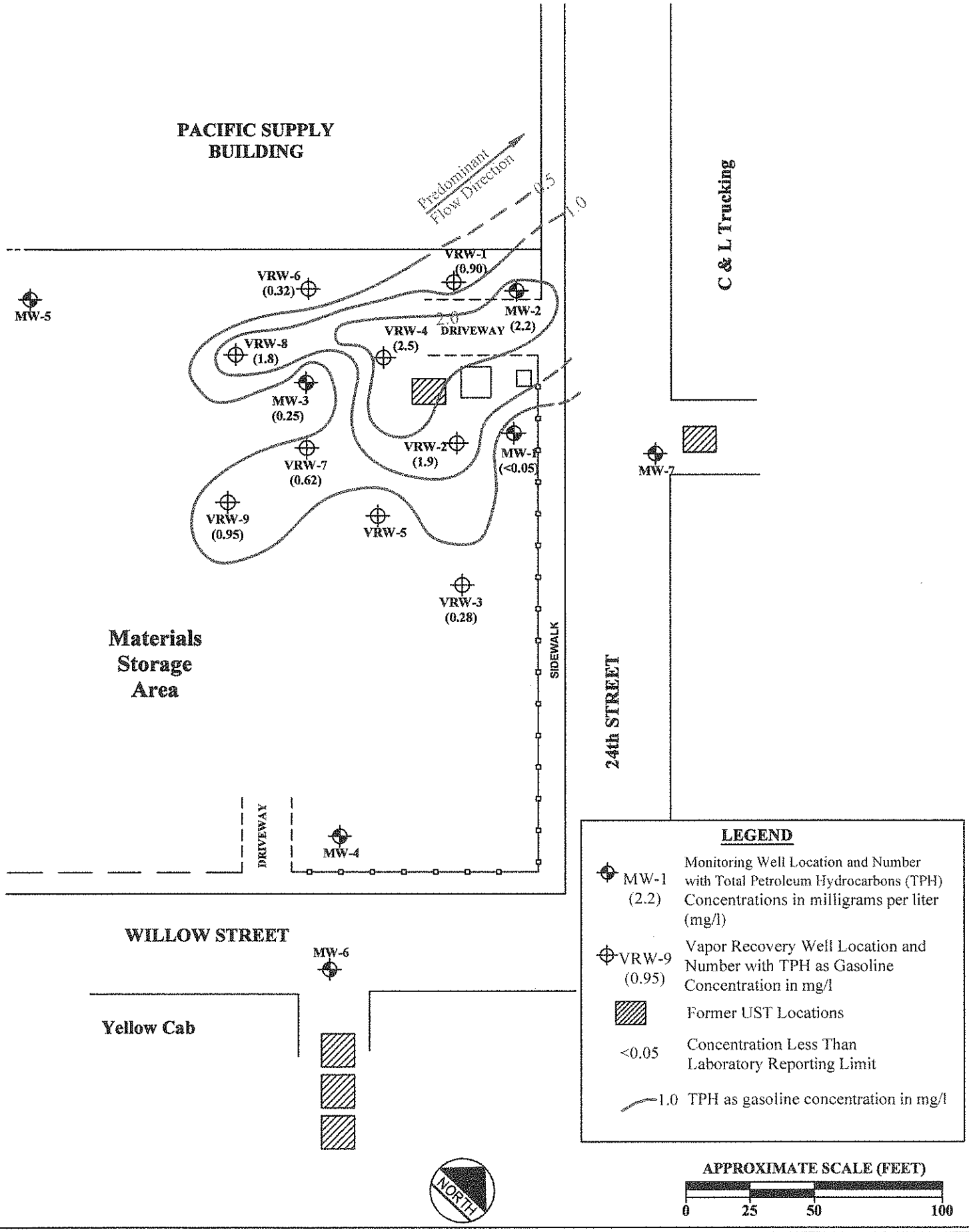
■ - Undisturbed sample retained ▨ - Recovered, not retained ⊠ - Bulk Sample ▽ - Depth to water

Brunsing Associates, Inc.
5468 Skylane Blvd., Suite 201
Santa Rosa, California 95403
Tel: (707) 838-3027

Job No.: 029
Appr.:
Date: 12/20/10

UNIFIED SOIL CLASSIFICATION CHART
PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE 6

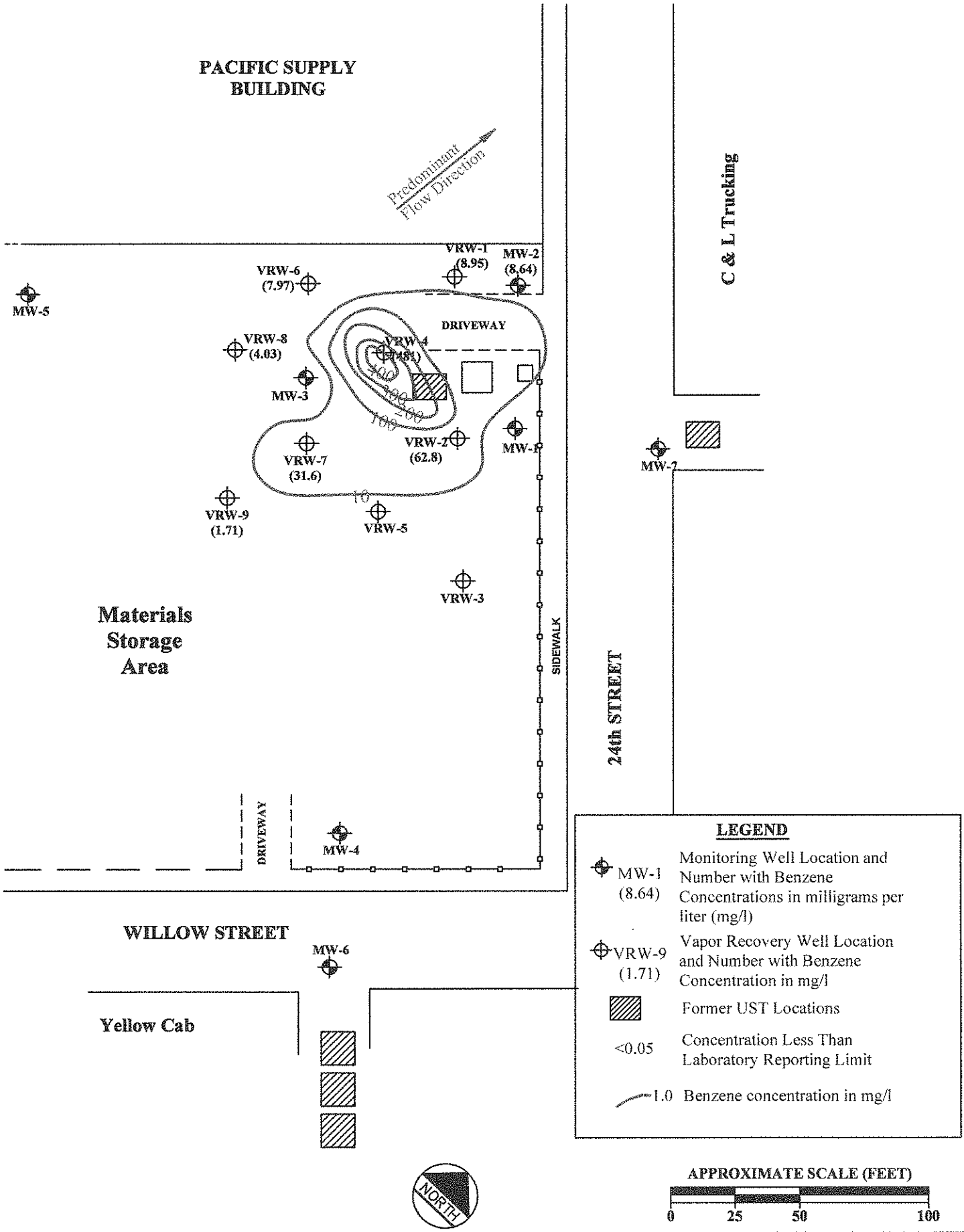


Brunsing Associates, Inc.
5468 Skylane Blvd., Suite 201
Santa Rosa, California 95403
Tel: (707) 838-3027

Job No.: 029
Appr.:
Date: 12/20/10

GASOLINE IN GROUNDWATER
February 2010
PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE
7



Brunsing Associates, Inc.
5468 Skylane Blvd., Suite 201
Santa Rosa, California 95403
Tel: (707) 838-3027

Job No.: 029
Appr.:
Date: 12/20/10

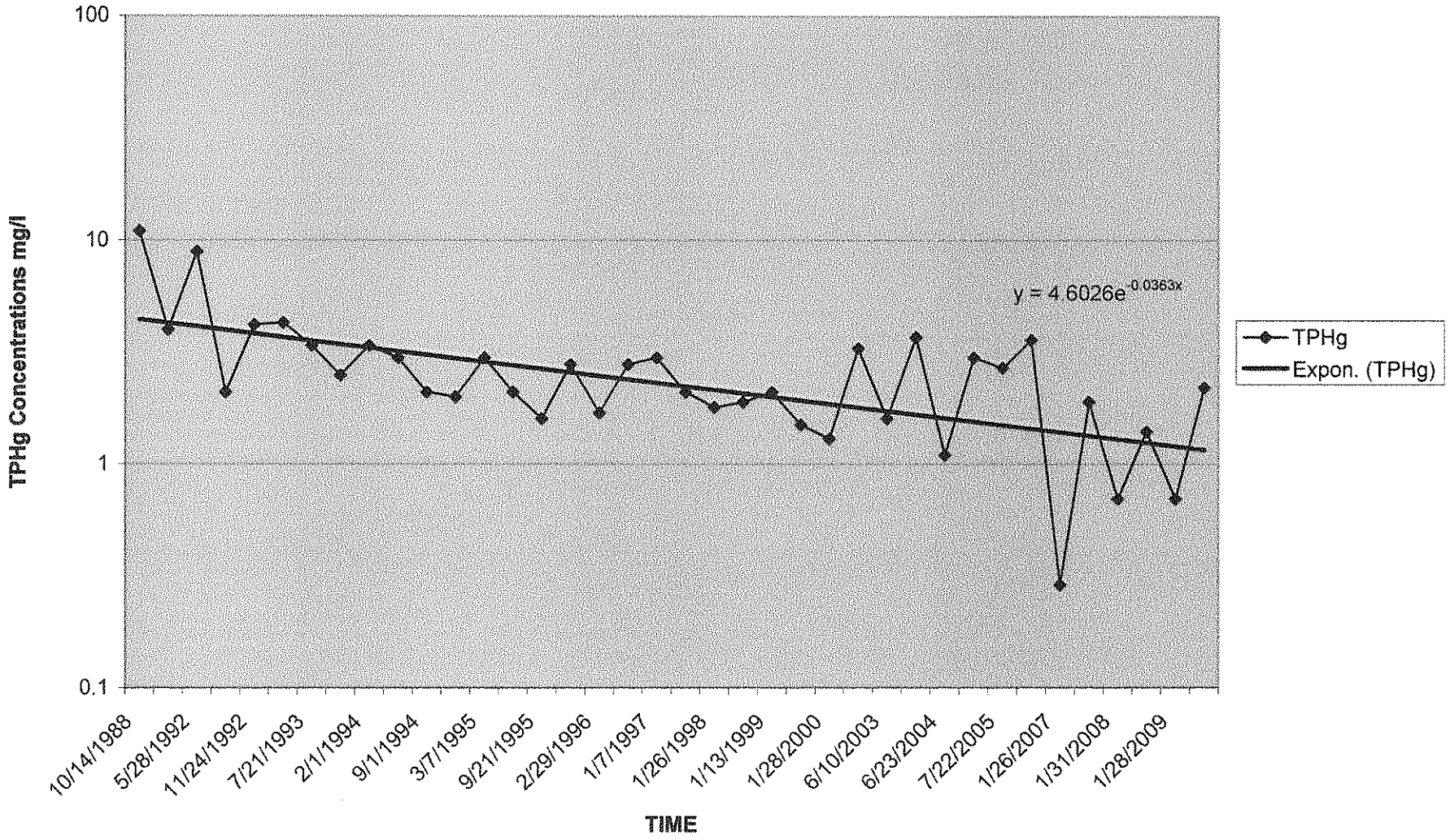
BENZENE IN GROUNDWATER
February 2010
PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

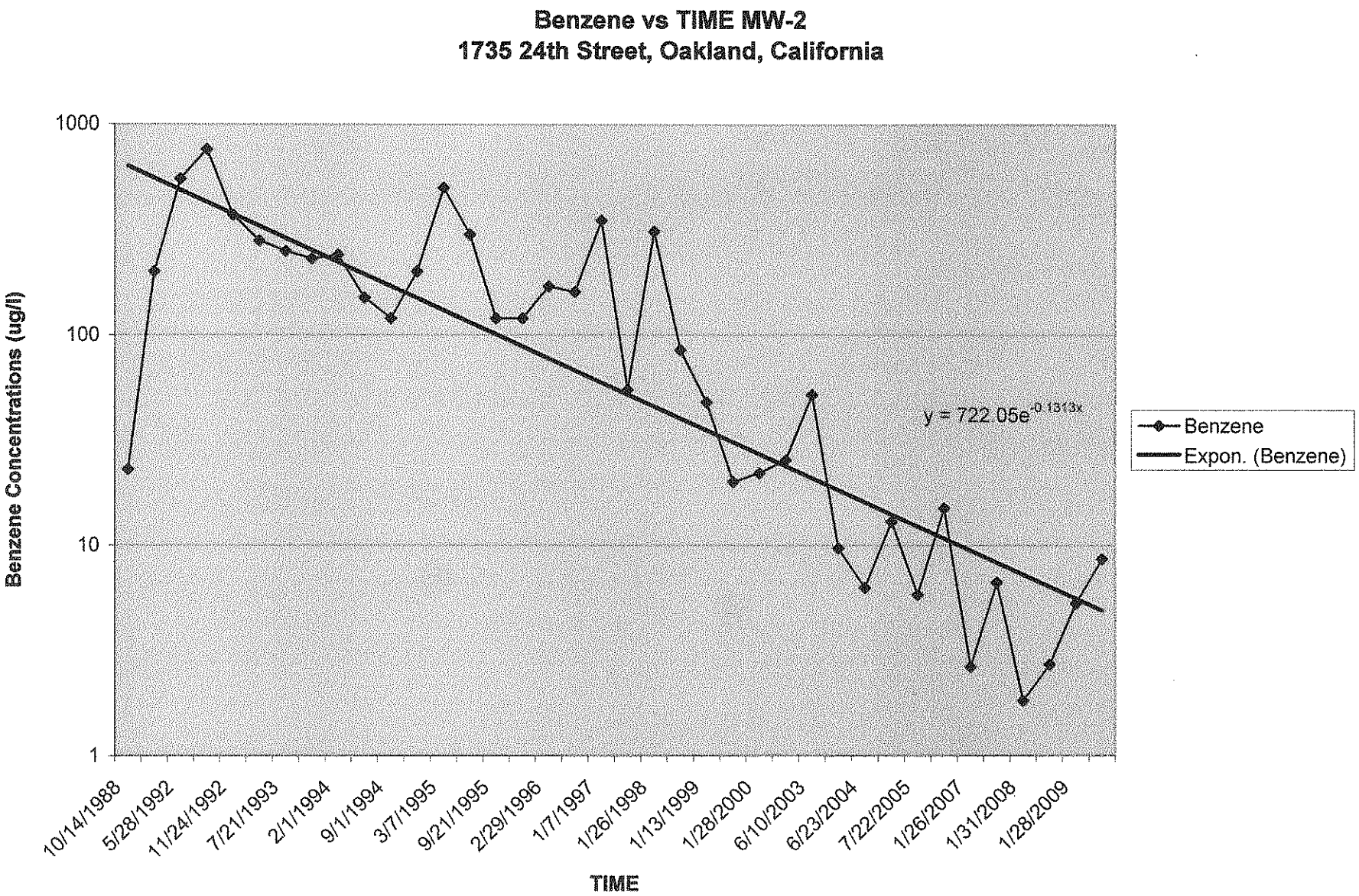
PLATE
8

APPENDIX A

Time vs Concentration Graphs

TPHg vs Time - MW-2
1735 24th Street, Oakland, California




Benzene vs TIME MW-2
1735 24th Street, Oakland, California
Benzene Concentrations (ug/l)
1000
100
10
1
y = 722.05e-0.1313x
Benzene
Expon. (Benzene)
10/14/1988
5/28/1992
11/24/1992
7/21/1993
2/1/1994
9/1/1994
3/7/1995
9/21/1995
2/29/1996
1/7/1997
1/26/1998
1/13/1999
1/28/2000
6/10/2003
6/23/2004
7/22/2005
1/26/2007
1/31/2008
1/28/2009
TIME