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**SOIL PARAMETERS AND CONFIRMATION SOIL
SAMPLING INVESTIGATION REPORT**

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

Project No. 029

January 31, 2005

Brunsing Associates, Inc.



**Soil Parameters and Confirmation Soil Sampling
Investigation Report**

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1.0 INTRODUCTION

Brunsing Associates, Inc. (BAI) has prepared this investigation report, for the property located at 1735 24th Street, Oakland, California (Plate 1). This report presents the results of the soil and groundwater confirmation sampling and soil parameter testing performed at the Pacific Supply Company site during July 2004. Additionally, this report compares the results of the confirmation sampling with the Oakland Urban Land Redevelopment Program: Guidance Document", dated January 1, 2000 (Oakland Guidance). The Oakland Guidance document provides Risk Based Corrective Action Standards (RBCAs) for qualifying sites in Oakland. The analytical results for the soil and groundwater confirmation data, and the most recent groundwater data were compared to Oakland Guidance Tier 2 site-specific target levels (SSTLs) based on the results of the soil parameter samples, and available boring logs.

This work was performed as proposed in BAI's document titled "Soil Parameters and Confirmation Soil Sampling Workplan and Sensitive Receptor Survey Report", dated January 29, 2004, and in accordance with the modifications requested by the Alameda County Health Care Services (ACHCS). The workplan was approved by the ACHCS in their letter dated April 9, 2004.

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). 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 underground storage tank (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. 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 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.

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. This report presents the results of these drilling activities.

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 SSTLs for BTEX, and the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) Gross Contamination Screening Levels for TPH as gasoline.

Plate 2 presents a site map that includes the boring and well locations. Boring logs for the July 2004 sampling event are presented in Appendix A. Appendix B presents the historical boring logs and well completion details for the site. Appendix C presents downloaded copies of USGS Geological Map of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties in California and a more detailed version for the site vicinity. The geotechnical report that provides the results of the soil parameter testing is presented in Appendix E.

3.0 DRILLING AND FIELD INVESTIGATION

The purpose of the confirmation soil and groundwater sample borings was to evaluate remaining contaminant levels after remedial activities at the site, and to use the results of the drilling activities to evaluate the current risks associated with the site, particularly from those areas that previously contained elevated petroleum hydrocarbons in soils. The purpose of the soil parameter testing was to aid in identifying the site soil type.

3.1 Drilling and Soil Sampling

Prior to drilling, a Drilling Permit Application was obtained from the Alameda County Public Works Agency, and Underground Service Alert was contacted to locate the underground utilities in the vicinity. Gregg Drilling and Testing, Inc. (Gregg Drilling), of Martinez, California, a C-57 licensed drilling contractor was retained to drill the borings using direct push methods. The drill rig was equipped with 2-inch diameter Enviro-Core samplers for the confirmation soil samples, and 2.5-inch diameter split-spoon samplers for the soil parameter borings. The borings were logged by a BAI geologist according to the Unified Soil Classification System (Appendix A). Drilling of fourteen exploratory borings occurred on July 21, 2004. Boring logs for the confirmation borings are provided in Appendix A. All soil samples were collected using a sampler lined with plastic Enviro-Core liner or brass tubes. After the physical characteristics were noted on the boring log the ends of the Enviro-Core liner or brass tubes were covered with Teflon and secured with plastic end caps.



An attempt was made to continuously sample all borings. Soil borings CB-1 through CB-10 were drilled to depths of 8 feet below ground surface (bgs) or 8.5 feet bgs. Soil borings CB-11 through CB-14 were drilled to depths of 7.5 feet, 8.0 feet, 7.0 feet, and 7.0 feet bgs, respectively.

The soil samples selected for laboratory analyses were collected based on the elevation of the historical contamination in the vicinity of the boring, or direction from the ACHCS. The samples collected for laboratory analyses were labeled and sealed, and stored in a cooled ice chest until delivery. Soil samples were collected for laboratory analyses from boreholes CB-1 and CB-2 at 7 feet bgs and 6.5 feet bgs, respectively. Laboratory analyses were performed on soil samples collected from boreholes CB-4 through CB-9 at depths of 8 feet, 7 feet, 7.5 feet, 7.5 feet, 8.0 feet, and 7.5 feet bgs, respectively. Soil samples were collected for laboratory analyses from borehole CB-10 at 7 feet bgs. BACE Analytical and Field Services (BAFS), a California-certified laboratory, analyzed all soil samples for TPH as gasoline and BTEX by EPA Test Methods CATPH-G and SW8021F, respectively.

Soil borings CB-11 through CB-14 were drilled for the purpose of evaluating soil parameters. Soil samples from boreholes CB-11 at 5.5 feet bgs, CB-13 at 6.5 feet bgs, and CB-14 at 5.0 feet bgs were submitted to BACE Geotechnical for testing of soil parameters, including dry density, organic content, soil moisture content, permeability, porosity, and grain size distribution.

All drilling equipment was cleaned prior to drilling and the sampling equipment was cleaned prior to each use with a laboratory detergent, followed by a de-ionized water rinse. No soil cuttings were generated during drilling. Cleaning of the equipment occurred at the Gregg Drilling facility, and wash water was processed through a recycling system. Sediments from the recycling process are analyzed and disposed of to an appropriate landfill.

3.2 Grab Groundwater Sampling and Analyses

A hydropunch grab groundwater sample was collected from boring CB-3 from 8 feet bgs to 10 feet bgs. The water sample was submitted to BAFS and analyzed for TPH as gasoline and BTEX by EPA Test Methods CATPH-G and SW8021F, respectively.

Upon completion of the sampling activities, all soil borings were backfilled using hydrated bentonite chips to approximately 2 feet below ground surface. A 5-percent bentonite grout was placed in the borings from 2 feet bgs to within 3 inches of the



ground surface. The top of the borings were completed to match the original surface finish. All soil borings were backfilled the day they were drilled.

4.0 INVESTIGATION RESULTS

4.1 Stratigraphy

The July 2004 confirmation borings were generally sampled down to approximately 8 feet bgs. The borings were drilled through asphalt and baserock down to 1 to 2 feet bgs. In general, silts and clays to depths up to approximately 5.5 feet bgs were present beneath the baserock, with the exception of borings CB-8 and CB-11. Silty sand and/or gravels were encountered beneath the silts and clays in most borings. Clays and/or silts were 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. Groundwater was encountered at approximately 7.5 to 8 feet bgs at most locations.

Boring logs for soil borings CB-1 through CB-14 are presented in Appendix A. Historical borings logs and well completion details for the site are presented in Appendix B. Plates 3 and 4 present the location of cross-section A-A' and cross-section A-A', respectively.

4.2 Soil Analytical Results

Due to the significant amount of analytical data obtained during this investigation, the following discussion will focus only on the results of the TPH as gasoline and benzene analyses. 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 ($\mu\text{g}/\text{kg}$) to 2,500 $\mu\text{g}/\text{kg}$. Table 3 provides the cumulative soil analytical results and the laboratory analytical report is provided in Appendix C.

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 7.0 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.

4.3 Grab Groundwater Analytical Results

One grab groundwater sample was collected during this 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 ($\mu\text{g/l}$) of benzene, 100 $\mu\text{g/l}$ of toluene, 590 $\mu\text{g/l}$ of ethylbenzene, and 2,500 $\mu\text{g/l}$ of xylenes.

5.0 COMPARISON OF SITE RESULTS TO SCREENING LEVELS

5.1 Proposed Soil Type Based on Oakland Guidance Document

According to the "USGS Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California", the site is located on historic artificial fill (af), west of the Merritt Sands area (Qms), as shown in Appendix D. The Merritt Sands designation does not appear to be appropriate for this site based on the USGS map and the lithologies encountered during drilling.

During the investigation, three soil samples (CB-11 at 5.5 feet bgs, CB-13 at 6.5 feet bgs, and CB-14 at 5.0 feet bgs) were analyzed for soil parameters: including dry density, organic content, soil moisture content, effective permeability, porosity, and grain size distribution, including hydrometer testing to determine percentages of clay and silt.

Based on the laboratory analyses, the soil sample from boring CB-11 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 2.2×10^{-7} centimeters per second (cm/sec), and a porosity of 0.202. The soil sample from boring CB-13 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 3.3×10^{-8} cm/sec, and a porosity of 0.301. The soil sample from boring CB-14 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 2.9×10^{-6} cm/sec, and a porosity of 0.205. The soil parameter testing results are presented in Appendix E.

As previously discussed in Section 4.1, the surficial soils at the site are primarily varying mixtures of silts, clays, and sands with some organics. The data in Appendix C indicates that the most appropriate soil type for the site based on the options provided in the Oakland Guidance document (Merritt sands, sandy silts, and clayey silts) is clayey silt.

5.2 Proposed Oakland Guidance Document Tier 2 SSTLs

Because the soils encountered beneath the site are primarily varying amounts of silts, clays, and sands and there is no obvious predominate soil types, the SSTLs for both clayey silts and sandy silts have been provided. As discussed in the previous section, the site geology indicates that clayey silts are the predominate unit at the site. Thus, Tables 7 and 8 of the Oakland Guidance document were used to determine the necessary risk based cleanup objectives. The table presents four physical mediums: surficial soils, subsurface soils, groundwater, and water used for recreation. Surficial soils are defined by the Oakland Guidance as the top one meter of soil; while subsurface soils are defined as all soil deeper than one meter and above groundwater.

As no soil contamination has been observed in the surficial soil (top one meter), and water used for recreation is not present these two mediums were disregarded. Subsurface soils and groundwater were retained as the significant site media impacted by contamination. Based on BAI's sensitive receptor survey, no groundwater or irrigation wells were identified in a 1,000-foot radius of the site, therefore ingestion of the shallow water was not considered as a realistic exposure pathway. Inhalation of indoor air vapors and inhalation of outdoor air vapors are the two retained exposure pathways. The inhalation of indoor air vapors risk based numbers are more protective than the outdoor air vapors, and were therefore selected as the exposure pathway. The site is in an industrial portion of Oakland and no change in land use is expected to occur, therefore a commercial/industrial land use scenario was utilized in the SSTL selection process.

The resulting Tier 2 SSTLs for clayey silts and sandy silts were selected for comparison of petroleum hydrocarbon concentrations in site groundwater samples and soil samples, and are presented with the groundwater and soil analytical data in Tables 1, 2, 3, and 6.



5.3 SFRWQCB Petroleum Hydrocarbon Standard in Groundwater

In correspondence dated November 6, 2004, the ACHCS indicated that the risk assessment for total petroleum hydrocarbons would be required in addition to the Oakland Guidance document risk based numbers. The ACHCS recommended that environmental screening levels (ESLs) in the San Francisco Regional Water Quality Control Board (SFRWQCB) document, "Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater, July 2003" might be used as a guide.

As requested, the total petroleum hydrocarbon ESLs provided in the SFRWQCB document were included in BAI's "Groundwater Monitoring Report, November 2003". The ESL for groundwater based on the recommended document was 0.5 mg/l. Further evaluation of this level indicated that it was not likely meant for use with the Oakland Guidance document, because allowable benzene concentrations in the Oakland Guidance document resulted in exceedances in the ESLs. As a result of this discrepancy, BAI contacted Mr. Roger Brewer, Ph.D. of the SFRWQCB for clarification. He indicated, in his correspondence dated November 1, 2004, that the 0.5 mg/l screening level was based on potential discharges to surface water bodies, and that in cases where surface water discharge is not an issue, the SFRWQCB uses 2.5 mg/l to 5.0 mg/l as a screening tool for gross contamination in groundwater. He also indicated that these levels are not necessarily cleanup levels, but may indicate areas where further remediation may be appropriate, as determined on a case-by-case basis.

The closest surface water source is the San Francisco Bay, which is located approximately 4,000 feet from the site. Furthermore, soil boring B-10, located approximately 50 feet from the site in the direction of the bay, contained no detectable petroleum hydrocarbons in soil at a depth of 6 feet bgs, and reported only low levels of petroleum hydrocarbon contamination (i.e. TPH as gasoline at 0.060 mg/l) in groundwater. Therefore, BAI proposes that discharge of contaminated groundwater to the bay from the site is unlikely, and has included the SFRWQCB screening range of 2.5 mg/l to 5.0 mg/l in Tables 1, 2, and 6.



5.4 Comparison of July 2004 Analytical Results To Historical Analytical Results in Adjacent Borings/Wells and Tier 2 SSTLs

The purpose of the July 2004 confirmation borings was to evaluate the effectiveness of the remediation system and determine the residual petroleum hydrocarbons in soil and groundwater. In the following sections, each confirmation boring is discussed with respect to the adjacent historical borings to evaluate changes in the site petroleum hydrocarbon concentrations.

5.4.1 Confirmation Boring CB-1

Confirmation boring CB-1 was drilled in the vicinity of historical boring MW-4. The TPH as gasoline, benzene, toluene, and organic xylenes concentrations in the soil sample collected from boring MW-4 at a depth of 8 feet bgs were 3,700 mg/kg, 3,700 µg/kg, 2,400 µg/kg, and 12,000 µg/kg, respectively. The soil sample collected from confirmation soil boring CB-1 contained no reportable TPH as gasoline or BTEX above the laboratory reporting limit. This area has shown a significant decrease in petroleum hydrocarbon concentrations in soil, and is below the Tier 2 SSTLs.

5.4.2 Confirmation Boring CB-2

Confirmation boring CB-2 was drilled near historical boring B-4 and vapor extraction well VRW-3. The petroleum hydrocarbon concentrations collected from the soil sample collected from the borehole for VRW-3 at a depth of 7.5 feet bgs reportedly contained 15 mg/kg of TPH as gasoline, 700 µg/kg of benzene, 90 µg/kg of toluene, 16 µg/kg of ethylbenzene, and 60 µg/kg of organic xylenes. Boring B-4 reportedly contained the highest concentration of petroleum hydrocarbons to date at the site. The concentrations of TPH as gasoline and BTEX reported in the soil sample collected from boring B-4 at a depth of 7 feet bgs were 7,000 mg/kg, 28,000 µg/kg, 17,000 µg/kg, 73,000 µg/kg, and 43,000 µg/kg. The soil sample from soil confirmation boring CB-2, collected at a depth of 6.5 feet bgs reportedly contained 9.3 mg/kg of TPH as gasoline, and 13 µg/kg of xylenes: all other constituents were reported below the laboratory reporting limit. Thus, this area has also shown a significant decrease in hydrocarbon concentrations in soil, and is below the Tier 2 SSTLs.

5.4.3 Confirmation Boring CB-3

Confirmation boring CB-3 was included at the request of the ACHCS, and per their instruction was only analyzed for groundwater concentrations. Boring CB-3 is located between the former tank area and well VRW-4. The highest concentration of petroleum



hydrocarbons in groundwater at the site has generally been found in water from well VRW-4. The grab groundwater sample from confirmation boring CB-3 reportedly contained 23 mg/l of TPH as gasoline, 1,100 µg/l of benzene, 100 µg/l of toluene, 590 µg/l of ethylbenzene, and 2,500 µg/l of xylenes. The grab groundwater sample from CB-3 is above the SFRWQCB gross contamination screening level of 2.5 mg/l to 5 mg/l for TPH as gasoline, however it is below the Oakland Tier 2 SSTLs for all BTEX constituents.

5.4.4 Confirmation Boring CB-4

Confirmation soil boring CB-4 was drilled between extraction wells VEW-1 and VRW-5. Two samples were collected from the borehole for well VEW-1; one soil sample collected at 4.5 feet bgs and the second sample collected at 8 feet bgs. The confirmation soil sample was collected a depth of 8 feet, therefore the 4.5-foot sample from VEW-1, which had lower concentrations than the 8-foot VEW-1 sample, will not be compared.

Petroleum hydrocarbon concentrations in the soil sample from extraction well VRW-5 reportedly contained TPH as gasoline and BTEX concentrations of 700 mg/kg, 7,300 µg/kg, 3,000 µg/kg, 5,300 µg/kg, and 3,600 µg/kg, respectively. The soil sample collected from extraction well VEW-1 at 8 feet bgs contained 780 mg/kg of TPH as gasoline, 23,000 µg/kg of benzene, 93,000 µg/kg of toluene, 60,000 µg/kg of ethylbenzene, and 170,000 µg/kg of xylenes. The analytical results for the soil sample collected from confirmation boring location CB-4 contained 1,700 mg/kg of TPH as gasoline, less than 2,500 µg/kg of benzene (not detected), 7,900 µg/kg of toluene, 25,000 µg/kg of ethylbenzene, and 37,000 µg/kg of xylenes.

This area has shown an increase in TPH as gasoline concentrations, but a significant reduction in benzene concentrations compared to both boring VRW-5 and VEW-1 data. The analytical results of soil boring CB-4 indicate that the concentrations are below the Oakland Tier 2 SSTLs.

5.4.5 Confirmation Boring CB-5

Confirmation boring CB-5 was drilled between extraction well VRW-7 and boring B-8. A 7-foot soil sample collected from the borehole for VRW-7 reportedly contained 1,100 mg/kg of TPH as gasoline, 1,300 µg/kg of benzene, 2,900 µg/kg of toluene, 2,600 µg/kg of ethylbenzene, and 6,000 µg/kg of xylenes. The soil sample collected from borehole B-8 was reported to contain 2,200 mg/kg of TPH as gasoline, 10,000 µg/kg of benzene, 41,000 µg/kg of toluene, 21,000 µg/kg of ethylbenzene, and 94,000 µg/kg of organic xylenes. The confirmation soil sample collected from borehole CB-5 at 7 feet bgs



contained no reportable concentrations of TPH as gasoline, benzene, toluene, and ethylbenzene, but did contain 5.1 µg/kg of xylenes. This area has also shown a significant decrease in hydrocarbon concentrations in soil, and the current concentrations are below the Tier 2 SSTLs.

5.4.6 Confirmation Boring CB-6

Confirmation boring CB-6 was drilled adjacent to monitoring well MW-3. The soil sample collected from monitoring well MW-3 at a depth of 8 feet bgs reportedly contained TPH as gasoline, benzene, toluene and organic xylenes at concentrations of 1,300 mg/kg, 530 µg/kg, 590 µg/kg, and 22,000, respectively. The confirmation soil sample from boring CB-6 reportedly contained TPH as gasoline, benzene, toluene, ethylbenzene, and xylenes concentrations at 430 mg/kg, less than 1,300 µg/kg (not detected), 1,700 µg/kg, 1,600 µg/kg, and 3,000 µg/kg, respectively. The analytical results from this boring indicate that the total mass of petroleum hydrocarbons has decreased, however the concentration of toluene has increased. The concentrations are below the Tier 2 SSTLs for all constituents.

5.4.7 Confirmation Boring CB-7

Confirmation boring CB-7 was drilled adjacent to extraction well VRW-6 and boring V-3. A 7-foot soil sample from boring V-3 was reported to contain 160 mg/kg of TPH as gasoline, 2,200 µg/kg of benzene, 4,000 µg/kg of toluene, and 12,000 µg/kg of organic xylenes. The soil sample collected from the borehole for well VRW-6 at 7.5 feet bgs contained the highest concentrations of benzene, toluene and xylenes observed at the site. The VRW-6 sample contained 3,800 mg/kg of TPH as gasoline, 41,000 µg/kg of benzene, 130,000 µg/kg of toluene, 53,000 µg/kg of ethylbenzene, and 270,000 µg/kg of organic xylenes.

The 7.5-foot soil confirmation sample collected from boring CB-7 reportedly contained 170 mg/kg of TPH as gasoline, 660 µg/kg of toluene, and 1,200 µg/kg of organic xylenes. Benzene and ethylbenzene were not detected at a reporting limit of 500 µg/kg.

5.4.8 Confirmation Boring CB-8

Confirmation boring CB-8 was drilled adjacent to monitoring well MW-2. An 8-foot soil sample collected from the borehole for monitoring well MW-2 reportedly contained 1,400 mg/kg of TPH as gasoline, 990 µg/kg of benzene, 700 µg/kg of toluene, and 1,100 µg/kg of xylenes. The soil sample collected from soil boring CB-8 at a depth of 8 feet bgs reportedly contained 5,700 mg/kg of TPH as gasoline, less than 2,500 µg/kg of



benzene (not detected), 54,000 µg/kg of toluene, 18,000 µg/kg of ethylbenzene, and 53,000 µg/kg of organic xylenes.

The soil sample from confirmation boring CB-8 contained the most elevated concentrations in soil observed during this investigation, and indicates an increase in petroleum hydrocarbon concentrations in soil in this location. However, the soil concentrations are below the Oakland Guidance Tier 2 SSTLs.

5.4.9 Confirmation Boring CB-9

Confirmation soil boring CB-9 is located in the vicinity of borings B-5, B-6 and extraction well VRW-8. Soil samples from boreholes B-6, B-7, VRW-8 and CB-9 were collected at depths of 7.0, 7.0, 7.5, and 7.5, respectively. TPH as gasoline concentrations in the soil samples from boreholes B-6, B-7, VRW-8 and CB-9 contained 10 mg/kg, 10 mg/kg, 30 mg/kg, and 540 mg/kg, respectively. Benzene concentrations reported in the soil samples collected from boreholes B-6, B-7, VRW-8 and CB-9 were 71 µg/kg, 30 µg/kg, 220 µg/kg, and less than 500 µg/kg (not detected), respectively. The soil samples collected from boreholes B-6, B-7, VRW-8 and CB-9 reportedly contained 38 µg/kg, 42 µg/kg, 120 µg/kg, and 2,500 µg/kg of toluene, respectively. Ethylbenzene concentrations reported in the soil samples collected from boreholes B-6, B-7, VRW-8 and CB-9 were 78 µg/kg, 30 µg/kg, 400 µg/kg, and 1,300 µg/kg, respectively. Xylenes concentrations reported in the soil samples collected from boreholes B-6, B-7, VRW-8 and CB-9 were 100 µg/kg, 110 µg/kg, 670 µg/kg, and 4,600 µg/kg, respectively.

The analytical results for the sample from soil confirmation boring CB-9 indicate increased petroleum hydrocarbon concentrations in that area. However, the concentrations are below the Tier 2 SSTLs.

5.4.10 Confirmation Boring CB-10

Soil confirmation boring CB-10 was drilled in the vicinity of vapor extraction well VRW-9. A 7-foot soil sample collected from the borehole for VRW-9 reportedly contained 370 mg/kg of TPH as gasoline, 2,300 µg/kg of benzene, 2,200 µg/kg of toluene, 620 µg/kg of ethylbenzene, and 2,300 µg/kg of xylenes. The CB-10 confirmation soil sample collected at 7 feet bgs reportedly contained all petroleum hydrocarbon concentrations below the laboratory reporting limits (not detected). Therefore, CB-10 indicates that a significant decrease of petroleum hydrocarbon concentrations has occurred in this area.



6.0 SUMMARY AND CONCLUSIONS

Based on the results of the investigation, the petroleum hydrocarbon concentrations in soils appear to have decreased significantly over the majority of the site, however two areas (in the vicinity of CB-8 and CB-9) did show increases in soil concentrations. Despite the increases in concentrations in the vicinity of borings CB-8 and CB-9, the soil samples did not contain petroleum hydrocarbon contamination exceeding the Oakland Tier 2 SSTLs for either clayey silts or sandy silts.

The grab groundwater sample collected from boring CB-3 contained petroleum hydrocarbon concentrations above the SFRWQCB gross contamination concerns for TPH as gasoline, however the reported benzene, toluene, ethylbenzene, and xylenes concentrations were below the Oakland Guidance Tier 2 SSTLs. As shown in Tables 1 and 2, the groundwater analytical data for monitoring wells and vapor extraction wells which are still sampled, have not exceeded either the Oakland Guidance Tier 2 SSTLs or the SFRWQCB gross contamination concerns in the past three sampling events, except wells MW-2, VRW-4, VRW-5, and VRW-8. Concentrations reported in samples from wells MW-2, VRW-4, VRW-5, and VRW-8 have exceeded the SFRWQCB gross contamination concerns, during the past three sampling events. Of the four wells that have exceeded the SFRWQCB gross contamination concerns level, only VRW-4 and the grab groundwater sample from CB-3 have exceeded the upper end of the range (5 mg/l).

Therefore, it appears that some residual petroleum hydrocarbon contamination in groundwater and likely soil still exists in a limited area in the immediate vicinity of the former tank. However, concentrations in the remaining area of the site appear to have been sufficiently reduced.



7.0 DISTRIBUTION

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

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1 Copy



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	-	-
MW-1	6/23/2004	7.49	3.98	0.37	<1.0	<1.0	<1.0	<1.0	-	-
Oakland Tier 2 SSTLs for Sandy Silts					53,000	>Sol	>Sol	>Sol	NA	>Sol
Oakland Tier 2 SSTLs for Clayey Silts					89,000	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB Cross Contamination Concerns				2.5-5	-	-	-	-	-	-



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 ^(U)	8/9/2000	7.14	1.00	3.5	120	16	<5	28	-	5.09
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	-	-
Oakland Tier 2 SSTLs for Sandy Silts					53,000	>Sol	>Sol	>Sol	NA	>Sol
Oakland Tier 2 SSTLs for Clayey Silts					89,000	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB Gross Contamination Concerns				2.5-5	-	-	-	-	-	-



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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	-	-
MW-3	6/23/2004	7.65	4.11	<0.05	<1.0	<1.0	<1.0	<1.0	-	-
Oakland Tier 2 SSTLs for Sandy Silts					53,000	>Sol	>Sol	>Sol	NA	>Sol
Oakland Tier 2 SSTLs for Clayey Silts					89,000	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB Gross Contamination Concerns				2.5-5	-	-	-	-	-	-



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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 2 SSTLs for Sandy Silts					53,000	>Sol	>Sol	>Sol	NA	>Sol
Oakland Tier 2 SSTLs for Clayey Silts					89,000	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB Gross Contamination Concerns				2.5-5	-	-	-	-	-	-



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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 (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (ug/L)	Lead (mg/L)	MTBE (ug/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 2 SSTLs for Sandy Silts					53,000	>Sol	>Sol	>Sol	NA	>Sol
Oakland Tier 2 SSTLs for Clayey Silts					89,000	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB Gross Contamination Concerns				2.5-5	-	-	-	-	-	-



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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 2 SSTLs for Sandy Silts					53,000	>Sol	>Sol	>Sol	NA	>Sol
Oakland Tier 2 SSTLs for Clayey Silts					89,000	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB Gross Contamination Concerns				2.5-5	-	-	-	-	-	-



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 2 SSTLs for Sandy Silts					53,000	>Sol	>Sol	>Sol	NA	>Sol
Oakland Tier 2 SSTLs for Clayey Silts					89,000	>Sol	>Sol	>Sol	NA	>Sol
SFRWQCB Gross Contamination Concerns				2.5-5	-	-	-	-	-	-

MTBE = methyl tertiary butyl ether. TPH = total petroleum hydrocarbons. TBA = tert-butanol
 (1)=Organic Lead, (2)=Total Lead, and (3)=chromatographic peak array does not match gasoline standard.
 (4) TBA was also reported in well MW-2 on 8/29/2000 at a concentration of 102 µg/L.
 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 SSTLs are based on a groundwater media for inhalation of indoor air vapors risk scenario at a commercial/industrial site.

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.

SFRWQCB Gross Contamination Concerns is based on correspondence with R. Brewer at SFRWQCB.



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)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Other Oxygenates & Lead Scavengers (µg/l)
VRW-1	11/3/1993	-	-	-	3	1,600	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	<0.50	<0.50	3.36	-	-
Oakland Tier 2 SSTLS for Sandy Silts					-	53,000	>Sol	>Sol	>Sol	>Sol	-
Oakland Tier 2 SSTLS for Clayey Silts					-	89,000	>Sol	>Sol	>Sol	>Sol	-
SFRWQCB Gross Contamination Concerns					2.5-5	-	-	-	-	-	-
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	-	-
Oakland Tier 2 SSTLS for Sandy Silts					-	53,000	>Sol	>Sol	>Sol	>Sol	-
Oakland Tier 2 SSTLS for Clayey Silts					-	89,000	>Sol	>Sol	>Sol	>Sol	-
SFRWQCB Gross Contamination Concerns					2.5-5	-	-	-	-	-	-
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	-	-
Oakland Tier 2 SSTLS for Sandy Silts					-	53,000	>Sol	>Sol	>Sol	>Sol	-
Oakland Tier 2 SSTLS for Clayey Silts					-	89,000	>Sol	>Sol	>Sol	>Sol	-
SFRWQCB Gross Contamination Concerns					2.5-5	-	-	-	-	-	-
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	611.0	739	1,170	-	-
Oakland Tier 2 SSTLS for Sandy Silts					-	53,000	>Sol	>Sol	>Sol	>Sol	-
Oakland Tier 2 SSTLS for Clayey Silts					-	89,000	>Sol	>Sol	>Sol	>Sol	-
SFRWQCB Gross Contamination Concerns					2.5-5	-	-	-	-	-	-



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 (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	Other Oxygenates & Lead Scavengers (ug/l)
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	-	-
Oakland Tier 2 SSTLS for Sandy Silts					-	53,000	>Sol	>Sol	>Sol	>Sol	-
Oakland Tier 2 SSTLS for Clayey Silts					-	89,000	>Sol	>Sol	>Sol	>Sol	-
SFRWQCB Gross Contamination Concerns					2.5-5	-	-	-	-	-	-
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	-	-
Oakland Tier 2 SSTLS for Sandy Silts					-	53,000	>Sol	>Sol	>Sol	>Sol	-
Oakland Tier 2 SSTLS for Clayey Silts					-	89,000	>Sol	>Sol	>Sol	>Sol	-
SFRWQCB Gross Contamination Concerns					2.5-5	-	-	-	-	-	-
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	-	-
Oakland Tier 2 SSTLS for Sandy Silts					-	53,000	>Sol	>Sol	>Sol	>Sol	-
Oakland Tier 2 SSTLS for Clayey Silts					-	89,000	>Sol	>Sol	>Sol	>Sol	-
SFRWQCB Gross Contamination Concerns					2.5-5	-	-	-	-	-	-
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	-	-
Oakland Tier 2 SSTLS for Sandy Silts					-	53,000	>Sol	>Sol	>Sol	>Sol	-
Oakland Tier 2 SSTLS for Clayey Silts					-	89,000	>Sol	>Sol	>Sol	>Sol	-
SFRWQCB Gross Contamination Concerns					2.5-5	-	-	-	-	-	-



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)	Ethylbenzene (µg/l)	Xylenes (µg/l)	MTBE (µg/l)	Other Oxygenates & Lead Scavengers (µg/l)
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	<0.50	5.55	-	-
Oakland Tier 2 SSTLS for Sandy Silts					-	53,000	>Sol	>Sol	>Sol	>Sol	-
Oakland Tier 2 SSTLS for Clayey Silts					-	89,000	>Sol	>Sol	>Sol	>Sol	-
SFRWQCB Gross Contamination Concerns					2.5-5	-	-	-	-	-	-

mg/l = milligrams per kilogram

µg/l = micrograms per kilogram

Oakland SSTLS are based on a groundwater media for inhalation of indoor air vapors risk scenario at a commercial/industrial site.

There are no RBSLs for Total Petroleum Hydrocarbons.

SFRWQCB Gross Contamination Concerns is based on correspondence with R. Brewer at SFRWQCB.

The City of Oakland BTEX standards are provided in lieu of the SFRWQCB ESLs due to the location of the site.

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

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 commercial/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. GRAB 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)	Ethylbenzene (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
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 I.

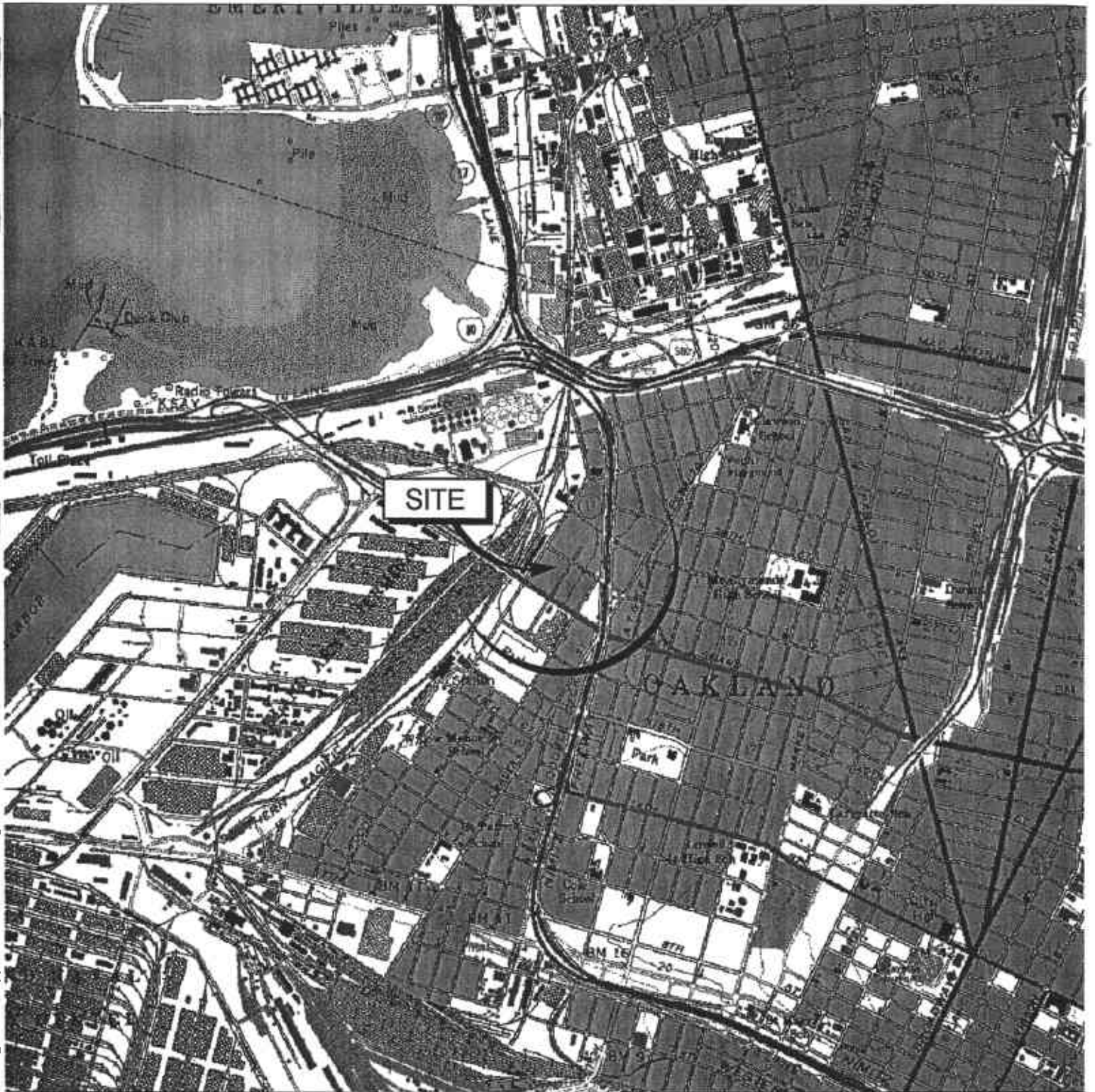
(2) The City of Oakland BTEX standars are provided in lieu of the SFRWQCB ESLs due to the location of the site.

na = not analyzed.

ND = not detected above laboratory reporting limits.

>Sol = RBSL exceeds solubility of chemical in water.





© 1999 DeLorme Yacouath, NEE 0496 Source Data: USGS 780 ft Scale: 1 : 24,000 Detail: E-4 Datum: NAD27



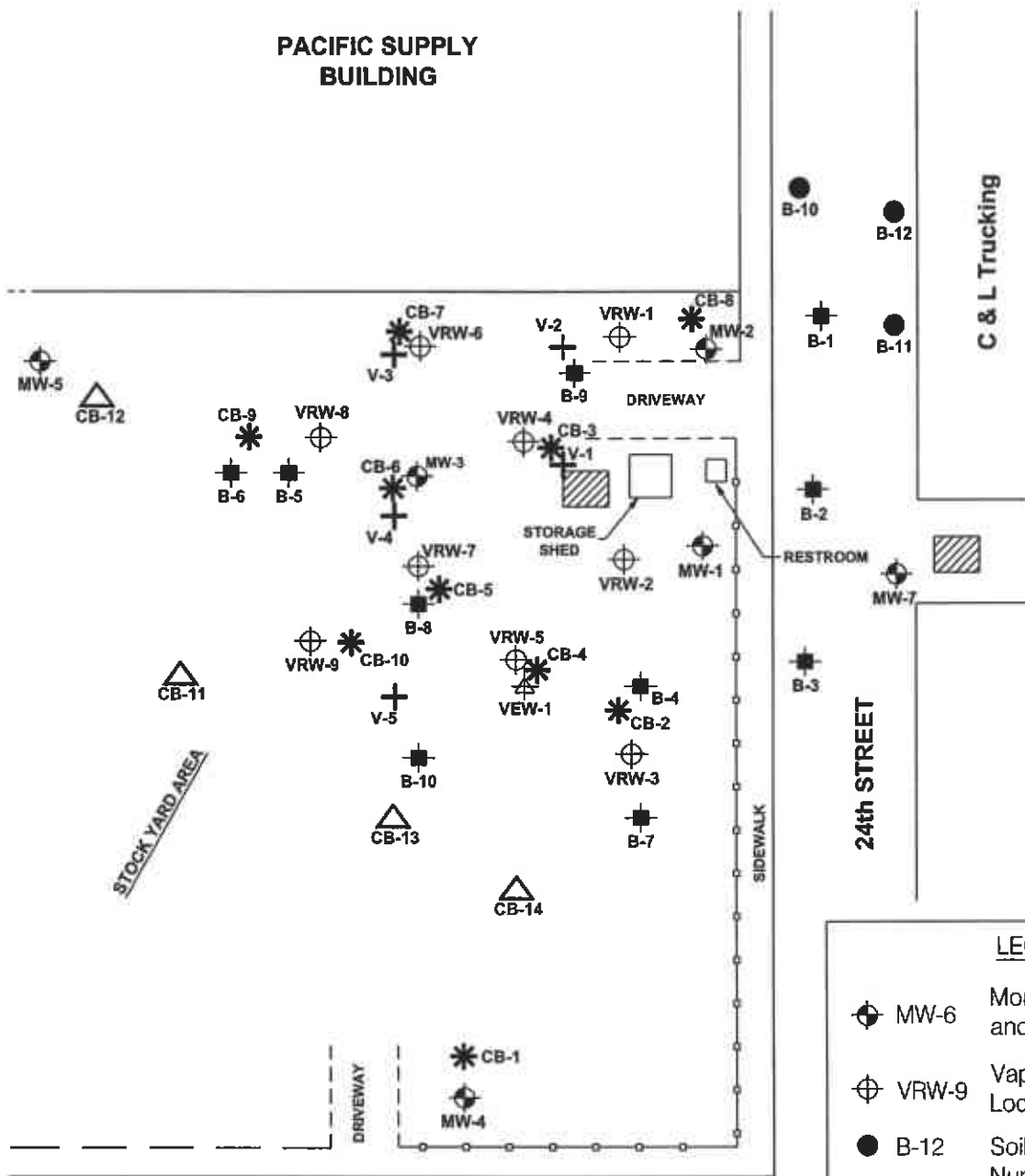
Brunsing Associates, Inc.
 5803 Skylane Blvd., Suite A
 Windsor, California 95492
 Tel: (707) 838-3027

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

VICINITY MAP
PACIFIC SUPPLY COMPANY
 Oakland, California

PLATE
1

PACIFIC SUPPLY BUILDING



C & L Trucking

24th STREET

WILLOW STREET

LEGEND

- MW-6 Monitoring Well Location and Number
- VRW-9 Vapor Recovery Well Location and Number
- B-12 Soil Boring Location and Number (August 2000)
- B-10 Soil Boring Location and Number (March 1993)
- VEW-1 Vapor Extraction Well Location and Number
- V-5 Soil Gas Sampling Location and Number
- CB-10 Soil Confirmation Boring Location and Number (July 2004)
- CB-14 Soil Parameters Sample Location and Number (July 2004)
- Former UST Locations

Yellow Cab



APPROXIMATE SCALE (FEET)



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

Job No.: 29

Appr.: *[Signature]*

Date: 12/7/04

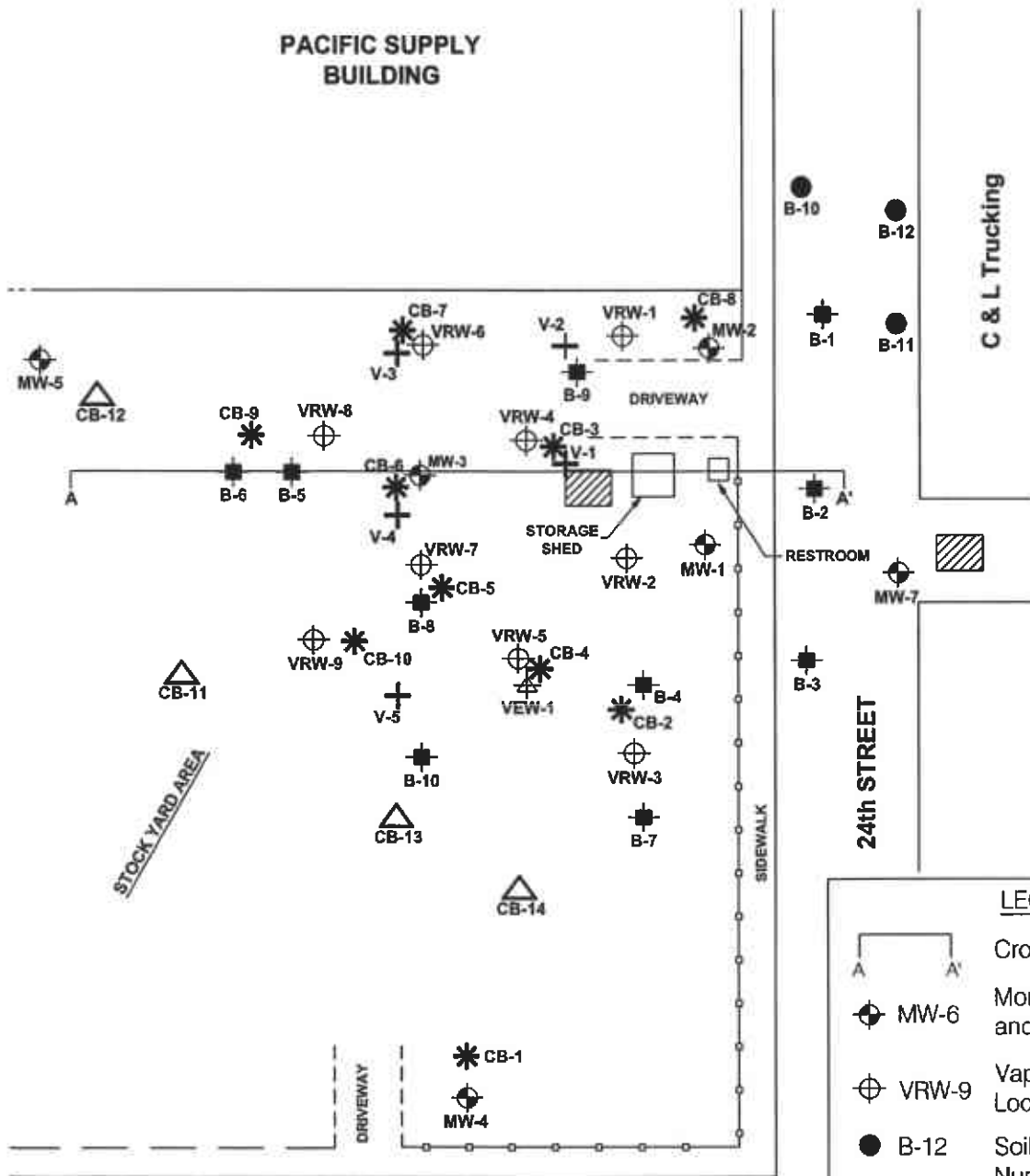
SITE MAP
PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE

2

PACIFIC SUPPLY BUILDING

C & L Trucking



STOCK YARD AREA

24th STREET

WILLOW STREET

LEGEND

- Cross Section Location
- MW-6 Monitoring Well Location and Number
- VRW-9 Vapor Recovery Well Location and Number
- B-12 Soil Boring Location and Number (August 2000)
- B-10 Soil Boring Location and Number (March 1993)
- VEV-1 Vapor Extraction Well Location and Number
- V-5 Soil Gas Sampling Location and Number
- CB-10 Soil confirmation Boring Location and Number (July 2004)
- CB-14 Soil Parameters Sample Location and Number (July 2004)
- Former UST Locations

Yellow Cab



APPROXIMATE SCALE (FEET)



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

Job No.: 29

Appr.: *Dmd*

Date: 12/7/04

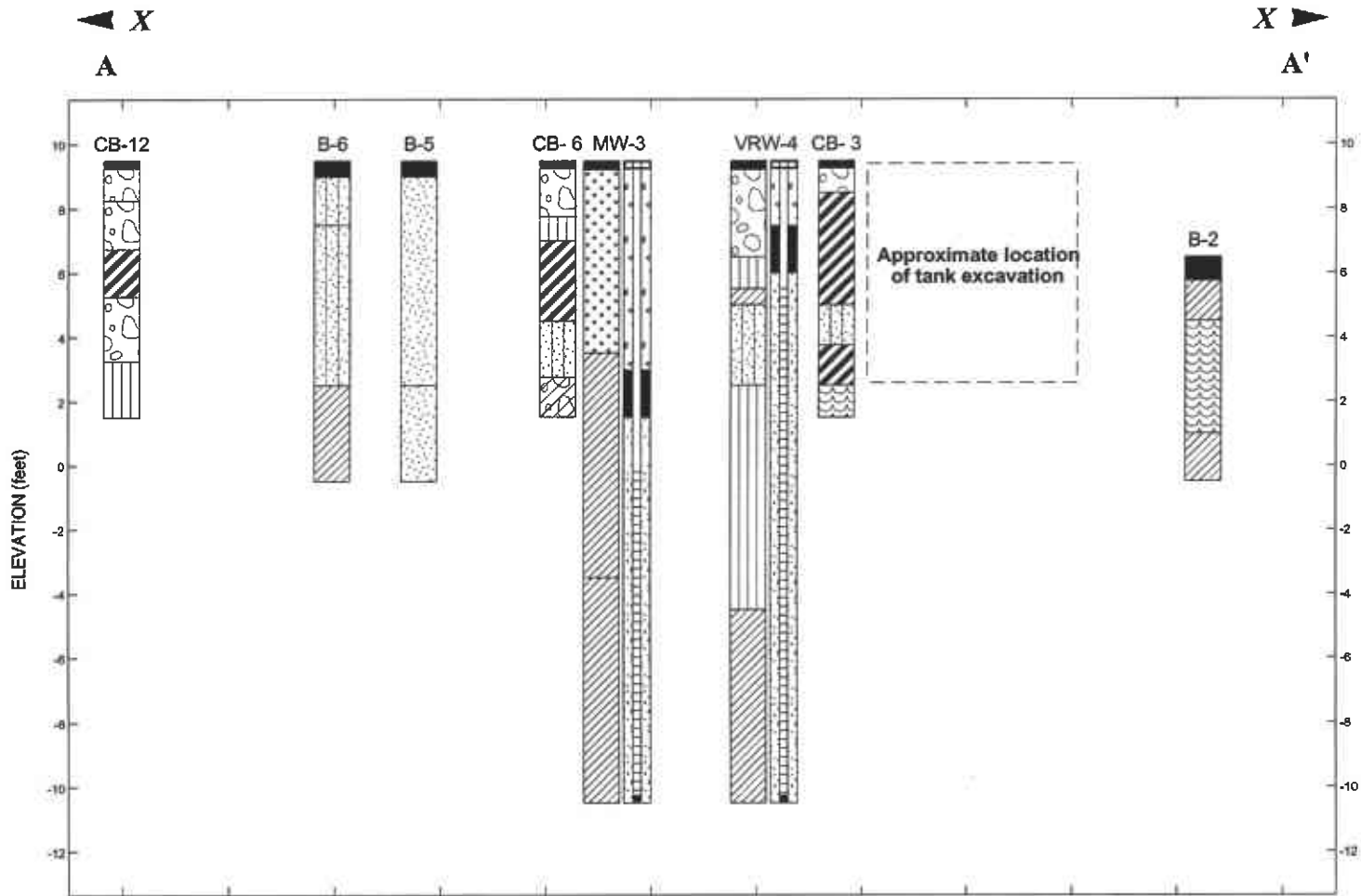
CROSS SECTION LOCATION MAP

PACIFIC SUPPLY COMPANY
1734 24th Street
Oakland, California

PLATE

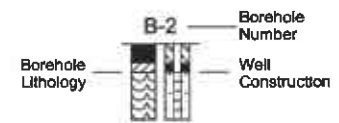
3

ENVIRO CROSSSECTION_029.GPJ_FANWNL01.GDT 1/27/05



Site Map Scale 1 inch equals 125 feet

Explanation



Lithology Graphics

- | | | | |
|--------------------|---------------------------|---|-------------------------|
| Asphalt | USCS Low Plasticity Clay | USCS High Plasticity Organic silt or clay | USCS Poorly-graded Sand |
| USCS Silty Sand | USCS Poorly-graded Gravel | USCS High Plasticity Clay | USCS Silt |
| USCS Clayey Gravel | USCS Well-graded Sand | | |

Well Graphics

- Cement grout
- Bentonite
- Filter Pack
- Well Screen
- Cement Backfill
- Stuff Backfill

Brusing Associates

Cross-Section A-A'

Pacific Supply Co.
Oakland, Ca.

JOB NUMBER	PLATE NUMBER
029	Plate 4

APPENDIX A

July 2004 Boring Logs



UNIFIED SOIL CLASSIFICATION SYSTEM

	MAJOR DIVISIONS		SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
	SAND AND SANDY SOILS	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
				SM	SILTY SANDS, SAND - SILT MIXTURES
FINE GRAINED SOILS	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

 <p>Brunsing Associates, Inc. 5803 Skylane Blvd., Suite A Windsor, California 95492 Tel: (707) 838-3027</p>	<p>Job No.: 029</p> <p>Appr.: <i>EMD</i></p> <p>Date: 12/6/04</p>	<p>UNIFIED SOIL CLASSIFICATION CHART</p> <p>PACIFIC SUPPLY COMPANY 1735 24th Street Oakland, California</p>	<p>PLATE A-1</p>
--	---	--	-----------------------------

BRUNSG ASSOCIATES, INC.
P.O. BOX 588
Windsor, CA. 95492
Telephone: (707) 838-3027
Fax: (707) 838-4420

BORING NO.: **CB-1** SHEET 1 OF 1
PROJECT: **PACIFIC SUPPLY COMPANY**
LOCATION: **Oakland, California**
PROJECT NO.: **029**
LOGGED BY: **WHHC**

COORDINATES:
SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GP) fill			
						GRAY-GREEN SANDY CLAY (CH) moist, medium stiff			
						BLACK SANDY CLAY (CH) moist, medium stiff, some gravel at 3.5'			
					0.0	GRAY-GREEN SILTY SAND (SM) moist, medium dense			5
5						BLACK SILTY SAND (SM) saturated, medium dense, some weed fibres			5
					0.0			▽	

DRILLING CONTRACTOR: Gregg
DRILLING METHOD: Envirocore
DRILLING EQUIPMENT: Rhino
DRILLING STARTED: 7/21/04 ENDED: 7/21/04

REMARKS
See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029 GPJ BACE GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029
Appr.: *[Signature]*
Date: 1/27/05

LOG OF BORING CB-1
PACIFIC SUPPLY COMPANY
1735 24th Street
Oakland, California

PLATE
A-2

BRUNSG ASSOCIATES, INC.
P.O. BOX 588
Windsor, CA. 95492
Telephone: (707) 838-3027
Fax: (707) 838-4420

BORING NO.: **CB-2** SHEET 1 OF 1
PROJECT: **PACIFIC SUPPLY COMPANY**
LOCATION: **Oakland, California**
PROJECT NO.: **029**
LOGGED BY: **WHHC**

COORDINATES:
SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL AND CONCRETE (GP)			
						BROWN SANDY CLAY (CH) moist, medium stiff, ~30% fine to medium-grained sand			
					0.0	BLACK SANDY CLAY (CH) moist, medium stiff			
						BROWN SANDY CLAY (CH) moist, medium stiff, ~20% fine-grained sand			5
5						GRAY-GREEN SANDY GRAVEL (GP) moist, loose			5
						BLACK SANDY SILT (OH) with heavy organics, plant fibers			

DRILLING CONTRACTOR: **Gregg**
DRILLING METHOD: **Envirocore**
DRILLING EQUIPMENT: **Rhino**
DRILLING STARTED: **7/21/04** ENDED: **7/21/04**

REMARKS
See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION G029.GPJ BACE.GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029
Appr.: *Dmd*
Date: 1/27/05

LOG OF BORING CB-2
PACIFIC SUPPLY COMPANY
1735 24th Street
Oakland, California

PLATE
A-3

BRUNSG ASSOCIATES, INC.
 P.O. BOX 588
 Windsor, CA. 95492
 Telephone: (707) 838-3027
 Fax: (707) 838-4420

BORING NO.: **CB-3** SHEET 1 OF 1
 PROJECT: **PACIFIC SUPPLY COMPANY**
 LOCATION: **Oakland, California**
 PROJECT NO.: **029**
 LOGGED BY: **WHHC**

COORDINATES: N 54.7 E 70.0
 SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GP) dry, dense			
						BLACK SANDY CLAY (CH) moist, medium stiff, some green discoloration at 3'			
5						GRAY-GREEN SILTY SAND (SM) moist, medium dense, fine to medium-grained sand			5
						BLACK SANDY CLAY (CH) moist, medium stiff, ~20% fine to very fine-grained sand			
					0.0	BLACK SANDY SILT (OH) saturated, soft, organics			

DRILLING CONTRACTOR: Gregg
 DRILLING METHOD: Envirocore
 DRILLING EQUIPMENT: Rhino
 DRILLING STARTED: 7/21/04 ENDED: 7/21/04

REMARKS:
 See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029 GP, BACE GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029

Appr.: *[Signature]*

Date: 1/27/05

LOG OF BORING CB-3
PACIFIC SUPPLY COMPANY
 1735 24th Street
 Oakland, California

PLATE

A-4

BRUNSG ASSOCIATES, INC.
P.O. BOX 588
Windsor, CA. 95492
Telephone: (707) 838-3027
Fax: (707) 838-4420

BORING NO.: **CB- 4** SHEET 1 OF 1
PROJECT: **PACIFIC SUPPLY COMPANY**
LOCATION: **Oakland, California**
PROJECT NO.: **029**
LOGGED BY: **WHHC**

COORDINATES:
SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GP) dry, medium dense			
						BROWN SANDY CLAY (CH) moist, medium stiff			
5						GRAY-GREEN SILTY SAND (SM) moist, loose, ~80% medium-grained sand, ~20% coarse-grained sand at 5.5'			5
						BROWN SANDY CLAY (CH) moist, medium stiff			
						GRAY-GREEN SANDY CLAY (CH) moist, medium stiff, ~20% fine to medium-grained sand			
						BLACK SANDY SILT (OH) heavy organics			

DRILLING CONTRACTOR: Gregg
DRILLING METHOD: Envirocore
DRILLING EQUIPMENT: Rhino
DRILLING STARTED: 7/21/04 ENDED: 7/21/04

REMARKS
See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029.GPJ BACE.GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029
Appr.: *DML*
Date: 1/27/05

LOG OF BORING CB- 4
PACIFIC SUPPLY COMPANY
1735 24th Street
Oakland, California

PLATE
A-5

BRUNSG ASSOCIATES, INC.
 P.O. BOX 588
 Windsor, CA. 95492
 Telephone: (707) 838-3027
 Fax: (707) 838-4420

BORING NO.: **CB- 5** SHEET 1 OF 1
 PROJECT: **PACIFIC SUPPLY COMPANY**
 LOCATION: **Oakland, California**
 PROJECT NO.: **029**
 LOGGED BY: **WHHC**

COORDINATES:
 SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GP) fill			
						Gravel in shoe, no recovery			
						GRAY-GREEN, BROWN SILTY SAND (SM) moist, medium dense, some gravel at 6'			5
						BROWN SILTY SAND (SM) moist, medium dense, very little organics			5

DRILLING CONTRACTOR: Gregg
 DRILLING METHOD: Envirocore
 DRILLING EQUIPMENT: Rhino
 DRILLING STARTED: 7/21/04 ENDED: 7/21/04

REMARKS No groundwater encountered

See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029 GPJ BACE.GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029

Appr.: *EMD*

Date: 1/27/05

LOG OF BORING CB- 5
 PACIFIC SUPPLY COMPANY
 1735 24th Street
 Oakland, California

PLATE

A-6

BRUNSG ASSOCIATES, INC.
 P.O. BOX 588
 Windsor, CA. 95492
 Telephone: (707) 838-3027
 Fax: (707) 838-4420

BORING NO.: **CB-6** SHEET 1 OF 1
 PROJECT: **PACIFIC SUPPLY COMPANY**
 LOCATION: **Oakland, California**
 PROJECT NO.: **029**
 LOGGED BY: **WHHC**

COORDINATES: N 43.0 E 20.0
 SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GP) dry, dense			
						GRAY-GREEN SANDY SILT (ML) moist, medium dense			
						GRAY-GREEN SANDY CLAY (CH) moist, medium stiff			
5						BROWN, GRAY-GREEN SILTY SAND (SM) moist, medium dense, some gravel			5
						BROWN, GRAY-BROWN CLAYEY GRAVEL (GC) wet, medium dense			

DRILLING CONTRACTOR: **Gregg**
 DRILLING METHOD: **Envirocore**
 DRILLING EQUIPMENT: **Rhino**
 DRILLING STARTED: **7/21/04** ENDED: **7/21/04**

REMARKS
 See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029.GPJ BACE.GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029
 Appr.: *RMD*
 Date: 1/27/05

LOG OF BORING CB-6
PACIFIC SUPPLY COMPANY
 1735 24th Street
 Oakland, California

PLATE
A-7

BRUNSG ASSOCIATES, INC.
P.O. BOX 588
Windsor, CA. 95492
Telephone: (707) 838-3027
Fax: (707) 838-4420

BORING NO.: **CB-7** SHEET 1 OF 1
PROJECT: **PACIFIC SUPPLY COMPANY**
LOCATION: **Oakland, California**
PROJECT NO.: **029**
LOGGED BY: **WHHC**

COORDINATES:
SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GC)			
						BROWN SANDY SILT (ML) dry, loose			
						BLACK SANDY CLAY (CH) moist, medium stiff			
						GRAY-GREEN SILTY SAND (SM) moist, medium dense			5
5						GRAY-GREEN SANDY CLAY (CH) moist, medium stiff			5
						BLACK SANDY SILT (OH) wet, dense, with organics			

DRILLING CONTRACTOR: Gregg
DRILLING METHOD: Envirocore
DRILLING EQUIPMENT: Rhino
DRILLING STARTED: 7/21/04 ENDED: 7/21/04

REMARKS
See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029.GPJ BACE.GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029
Appr.: *[Signature]*
Date: 1/27/05

LOG OF BORING CB-7
PACIFIC SUPPLY COMPANY
1735 24th Street
Oakland, California

PLATE

A-8

BRUNSG ASSOCIATES, INC.
 P.O. BOX 588
 Windsor, CA, 95492
 Telephone: (707) 838-3027
 Fax: (707) 838-4420

BORING NO.: **CB- 8** SHEET 1 OF 1
 PROJECT: **PACIFIC SUPPLY COMPANY**
 LOCATION: **Oakland, California**
 PROJECT NO.: **029**
 LOGGED BY: **WHHC**

COORDINATES:
 SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Paver stones sidewalk			
						3" Asphaltic concrete			
						BROWN SAND (SW) moist, dense			
						BROWN SANDY CLAY (CH) moist, medium stiff			
						TAN, BROWN GRAVELLY CLAY (CH) moist, medium stiff, some orange staining			
5						BROWN, ORANGE-BROWN SANDY CLAY (CH) moist, medium stiff, fine to medium-grained sand			5
						DARK BROWN, BLACK SANDY CLAY (CH) moist, medium stiff			
						BLACK SANDY SILT (OH) wet, organic fibres			

DRILLING CONTRACTOR: **Gregg**
 DRILLING METHOD: **Envirocore**
 DRILLING EQUIPMENT: **Rhino**
 DRILLING STARTED: **7/21/04** ENDED: **7/21/04**

REMARKS
 See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 008.GPJ BACE.GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029
 Appr.: *[Signature]*
 Date: 1/27/05

LOG OF BORING CB- 8
 PACIFIC SUPPLY COMPANY
 1735 24th Street
 Oakland, California

PLATE
A-9

BRUNSG ASSOCIATES, INC.
 P.O. BOX 588
 Windsor, CA. 95492
 Telephone: (707) 838-3027
 Fax: (707) 838-4420

BORING NO.: **CB-9** SHEET 1 OF 1
 PROJECT: **PACIFIC SUPPLY COMPANY**
 LOCATION: **Oakland, California**
 PROJECT NO.: **029**
 LOGGED BY: **WHHC**

COORDINATES:
 SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GP) moist, dense			
						BROWN SILTY GRAVEL (GM) dry, medium dense			
						BROWN SANDY CLAY (CH) moist, medium stiff, ~20% fine to medium-grained sand			
5						BLACK SANDY CLAY (CH) moist, medium stiff			5
						GRAY-GREEN SILTY SAND (SM) moist, medium dense			
								▽	

DRILLING CONTRACTOR: **Gregg**
 DRILLING METHOD: **Envirocore**
 DRILLING EQUIPMENT: **Rhino**
 DRILLING STARTED: **7/21/04** ENDED: **7/21/04**

REMARKS
 See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029.GPJ BACE.GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029
 Appr.: *[Signature]*
 Date: 1/27/05





LOG OF BORING CB-9
PACIFIC SUPPLY COMPANY
 1735 24th Street
 Oakland, California

PLATE
A-10

BRUNSING ASSOCIATES, INC.
 P.O. BOX 588
 Windsor, CA. 95492
 Telephone: (707) 838-3027
 Fax: (707) 838-4420

BORING NO.: **CB-10** SHEET 1 OF 1
 PROJECT: **PACIFIC SUPPLY COMPANY**
 LOCATION: **Oakland, California**
 PROJECT NO.: **029**
 LOGGED BY: **WHHC**

COORDINATES:
 SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY GRAVEL (GW) moist, dense			
						BROWN SANDY SILT (ML) moist, medium dense			
						GRAY-GREEN SILTY SAND (SM) moist, medium dense, ~20% fine to medium-grained sand			5
5						BLACK SANDY SILT (OH) wet, medium dense, with organics		▽	5

DRILLING CONTRACTOR: Gregg
 DRILLING METHOD: Envirocore
 DRILLING EQUIPMENT: Rhino
 DRILLING STARTED: 7/21/04 ENDED: 7/21/04

REMARKS
 See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 005.GPJ BACE.ODT 1/27/05



BRUNSING ASSOCIATES, INC.

Job No.: 029
 Appr.: *DML*
 Date: 1/27/05

LOG OF BORING CB-10
 PACIFIC SUPPLY COMPANY
 1735 24th Street
 Oakland, California

PLATE
A-11

BRUNSING ASSOCIATES, INC.
P.O. BOX 588
Windsor, CA. 95492
Telephone: (707) 838-3027
Fax: (707) 838-4420

BORING NO.: **CB-11** SHEET 1 OF 1
PROJECT: **PACIFIC SUPPLY COMPANY**
LOCATION: **Oakland, California**
PROJECT NO.: **029**
LOGGED BY: **WHHC**

COORDINATES:
SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GP) dry, dense			
						BROWN GRAVELLY SILT (ML) dry, dense			
						GRAY-GREEN SANDY CLAY (CH) moist, medium stiff			
5						BROWN GRAVELLY SILT (ML) dry, medium dense			5
						LIGHT GRAY GRAVELLY SILT (ML) dry, dense			
						DARK BROWN-BLACK GRAVELLY SILT (ML) dry, dense			
						BLACK SANDY SILT (OH) wet, medium dense, with organics			

DRILLING CONTRACTOR: Gregg
DRILLING METHOD: Envirocore
DRILLING EQUIPMENT: Rhino
DRILLING STARTED: 7/21/04 ENDED: 7/21/04

REMARKS
See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029.GPJ BACE.GDT 1/27/05



BRUNSING ASSOCIATES, INC.

Job No.: 029
Appr.: *[Signature]*
Date: 1/27/05

LOG OF BORING CB-11
PACIFIC SUPPLY COMPANY
1735 24th Street
Oakland, California

PLATE
A-12

BRUNSG ASSOCIATES, INC.
 P.O. BOX 588
 Windsor, CA. 95492
 Telephone: (707) 838-3027
 Fax: (707) 838-4420

BORING NO.: **CB-12** SHEET 1 OF 1
 PROJECT: **PACIFIC SUPPLY COMPANY**
 LOCATION: **Oakland, California**
 PROJECT NO.: **029**
 LOGGED BY: **WHHC**

COORDINATES: N 68.5 W Abs(-60.6)

SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GP) dry, medium dense			
						ORANGE-BROWN SANDY GRAVEL (GP)			
						DARK BROWN SANDY CLAY (CH) moist, medium stiff			
5						BROWN CLAYEY GRAVEL (GP) fill, dry, medium dense, brick and pipe debris 4.5 to 5'			5
						BLACK SANDY SILT (ML) moist, medium dense, wood and plant fibres			

DRILLING CONTRACTOR: **Gregg**
 DRILLING METHOD: **Direct push**
 DRILLING EQUIPMENT: **Rhino**
 DRILLING STARTED: **7/21/04** ENDED: **7/21/04**

REMARKS:
 See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029.GPJ BACE.GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029
 Appr.: *[Signature]*
 Date: 1/27/05

LOG OF BORING CB-12
PACIFIC SUPPLY COMPANY
 1735 24th Street
 Oakland, California

PLATE
A-13

BRUNSG ASSOCIATES, INC.
 P.O. BOX 588
 Windsor, CA. 95492
 Telephone: (707) 838-3027
 Fax: (707) 838-4420

BORING NO.: **CB-13** SHEET 1 OF 1
 PROJECT: **PACIFIC SUPPLY COMPANY**
 LOCATION: **Oakland, California**
 PROJECT NO.: **029**
 LOGGED BY: **WHHC**

COORDINATES:
 SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GP) dry, medium dense			
						DARK GREEN-GRAY CLAY (CH) moist, stiff			
						DARK GREEN-BLACK SANDY SILT (ML) moist, dense			
5						GRAY-GREEN SILTY SAND (SM) moist, very dense, some orange staining at 4.5'			5

DRILLING CONTRACTOR: **Gregg**
 DRILLING METHOD: **2.5" Diameter Split spoon**
 DRILLING EQUIPMENT: **Rhino**
 DRILLING STARTED: **7/21/04** ENDED: **7/21/04**

REMARKS **No groundwater encountered**
 See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029.GPJ BACE GDT 1/27/05



BRUNSG ASSOCIATES, INC.

Job No.: 029
 Appr: *[Signature]*
 Date: 1/27/05

LOG OF BORING CB-13
PACIFIC SUPPLY COMPANY
 1735 24th Street
 Oakland, California

PLATE

A-14

BRUNSG ASSOCIATES, INC.
 P.O. BOX 588
 Windsor, CA. 95492
 Telephone: (707) 838-3027
 Fax: (707) 838-4420

BORING NO.: **CB-14** SHEET 1 OF 1
 PROJECT: **PACIFIC SUPPLY COMPANY**
 LOCATION: **Oakland, California**
 PROJECT NO.: **029**
 LOGGED BY: **WHHC**

COORDINATES:
 SURFACE ELEVATION: 9.5 DATUM:

SAMPLE INFORMATION						DESCRIPTION	STRATA	WELL CONSTRUCTION DETAIL	ELEVATION FEET
DEPTH FEET	LAB SAMPLE	SAMPLE TYPE	BLOW COUNTS	Recovery (%)	PID (ppm)				
						3" Asphaltic concrete			
						GRAY SANDY GRAVEL (GP) moist, medium dense			
						DARK BROWN, BLACK SANDY SILT (ML) moist, very dense, some concrete debris			
						BROWN SANDY SILT (SM) dry, dense			
5						DARK BROWN SANDY SILT (ML) moist, dense, ~30% fine to medium-grained sand, some gravels and charcoal debris			5
						GRAY-GREEN SILTY SAND (SM) moist, dense			
						DARK GRAY-GREEN SANDY CLAY (CH) moist, stiff, ~20% very fine-grained sand			

DRILLING CONTRACTOR: Gregg
 DRILLING METHOD: 2.5" Diameter Split spoon
 DRILLING EQUIPMENT: Rhino
 DRILLING STARTED: 7/21/04 ENDED: 7/21/04

REMARKS No groundwater encountered
 See key sheet for symbols and abbreviations used above.

ENVIRONMENTAL BORING LOG AND WELL COMPLETION 029.GPJ BACE.GDT 1/27/05



BRUNSG ASSOCIATES, INC.
 Job No.: 029
 Appr.: *[Signature]*
 Date: 1/27/05

LOG OF BORING CB-14
 PACIFIC SUPPLY COMPANY
 1735 24th Street
 Oakland, California

PLATE
A-15

APPENDIX B

Historical Boring Logs and Well Completion Details





BRUNSGING ASSOCIATES
Consulting Engineers

Project Name PACIFIC SUPPLY

Project No. 029

Boring Location MW-1 1735 24th Street, Oakland

Surface Elevation 9.11 feet Driller ASE Date 9/13/88

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer		
						No.	Type	Interval		0			6	12
								From	To	6			12	18
	asphalt first 3 inches base aggregate	o o o o												
5	green loose silty sand with abundant quartz grains; moist; marsh gas odor?	o o o o	SW			1	SS	3.0	4.5			18		
	green soft clay; very plastic; moist; strong SO4 odor	diagonal lines	CL		6.0									
	black soft silty clay; very moist to wet, very abundant grass, etc.	diagonal lines	CL		7.5									
10	green, soft clay; very plastic, very moist abundant grass, clams, etc.	diagonal lines	CL		8.5									
15	brown-black; very soft, very plastic clay; very moist; abundant grass, roots, clamshells, etc. strong SO4 odor.	diagonal lines			15.0	5	SS	15.0	16.5	2	3	3	18	
20	Bottom of Boring at 20 feet													
25														
30														
35														



Boring Location MW-2 1735 24th Street, Oakland

Surface Elevation 8.14 feet

Driller ASE

Date 9/13/88

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer		
						No.	Type	Interval		0			6	12
								From	To	6			12	18
	asphalt first 3 inches													
5	green loose silty sand; predominantly quartz, well-rounded, well-sorted grains. Heavy "marsh gas" odor	o o o o o	SW			1	SS	3.0	4.5	2	3	2	14	
	light green, very plastic soft clay; abundant roots and miscellaneous organic material; very strong SO4 odor	diagonal lines	CL		6.0	2	SS	5.0	6.5	1	2	1	18	
	black soft silty clay; very plastic; very wet abundant debris: glass fragments, roots, etc.; v. strong SO4 odor	diagonal lines	CL		7.5	3	SS	6.5	8.0				18	
10	green very plastic soft clay; wet; abundant clamshells, grasses, roots, etc. very strong SO4 odor	diagonal lines	CL		9.5 to 13.5	4	SS	8.0	9.5	3	3	1	4	
15						5	SS	13.5	15.0	1	1	1	18	
20	brown very plastic soft clay; very moist; very abundant grassy material; strong SO4 odor	diagonal lines	CL		18.5	6	SS	18.5	20.0	1	1	1	18	
25	Bottom of Boring at 20 feet													
30														
35														



Boring Location MW-3 1735 24th Street, Oakland

Surface Elevation 9.49 feet

Driller ASE

Date 9/13/88

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer		
						No.	Type	Interval		0			6	12
								From	To	6			12	18
	asphalt first 3 inches													
5	green, loose sand; moist; some organic material (i.e. roots). predominantly quartz, well-rounded grains	o o	SW			1	SS	3.0	4.5			12		
	black, soft silty clay; very moist; strong hydrocarbon odor; extreme abundant grasses, leaves, etc. - Major fraction = organic debris. No hydrocarbon odor detected at greater than 9.0 feet		CL			2	SS	6.5	8.0			18		
						3	SS	8.0	9.5			18		
								9.5	11.0			18		
10														
						4	SS	14.5	16.0			18		
15	green soft, very plastic clay; very moist; abundant clam shells, grasses, roots.		CL		14.5									
20	Bottom of Boring at 20 feet													
25														
30														
35														



Boring Location MW-4 1735 24th Street, Oakland

Surface Elevation 9.30 feet Driller ASE Date 9/14/88

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer		
						No.	Type	Interval		0			6	12
								From	To	6			12	18
	3" asphalt cover													
5	green, fine to medium grained, well-sorted sand; moist; abundant quartz; well-rounded; green color the result of chlorite? NO ODOR	o o o o o	SW			1	SS	4.0	5.5	1	1	2	12	
	dark brown/black silty sandy clay; wet; very abundant organic debris (i.e. peachpit?, leaves, grass, etc.). NO ODOR	diagonal lines	CL			2	SS	7.0	8.5	2	1	1	4	
10	dark brown/black extremely organic silt? (resembles sphagnum moss, i.e. marsh deposit?). no odor wet	wavy lines	PI			3	SS	9.5	11.0	1	2	1	4	
15	light green, soft clay; very plastic, wet; abundant organic debris - clam shells, grass, etc. SO4 odor.	diagonal lines	CL			4	SS	14.5	16.0	1	3	2	18	
20	black soft clay; very plastic; wet, abundant grass. SO4 odor.	diagonal lines	CL			5	SS	19.5	21.0				18	
	Bottom of Boring at 21.0 feet													
25														
30														
35														



BRUNSGING ASSOCIATES
Consulting Engineers

Project Name PACIFIC SUPPLY

Project No. 029

Boring Location MW-5 1735 24th Street, Oakland

Surface Elevation 9.31 feet

Driller ASE

Date 9/14/88

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer			
						No.	Type	Interval		0			6	12	
								From	To	6			12	18	
	3" asphalt cover														
5	highly variable fill and base aggregate: sand, gravel, clay... some organic debris	[Hatched Pattern]	CL			1	SS	4.0	5.5	1	1	3	12		
	dark brown/black silt with very abundant organic material; wood, clamshells, grass; very wet; no odor							2	SS	6.5	8.0	1	1	1	12
10								3	SS	8.0	9.5	1	1	1	0
15	black-gray clay; very plastic, very wet abundant organic debris (grass, shells, etc.)							4	SS	14.5	16.0	1	1	1	18
20	as above							5	SS	19.5	21				18
	Bottom of boring at 21 feet		CL												
25															
30															
35															



BRUNSING ASSOCIATES, INC.

Project Name PACIFIC SUPPLY COMPANY
1735 24TH STREET, OAKLAND, CALIFORNIA

Project No. 029.2

Boring Location MW-6; Yellow Cab Co. Driveway, Willow Street

Surface Elevation 6.13 feet Driller Aqua Science Engineers Date December 19, 1989

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer		
						No.	Type	Interval		0			6	12
								From	To	6			12	18
5.0	Asphalt													
	Black/green/brown/grey mottled soft clayey sand and sandy clay; abundant brick, glass, and organic debris; moist; oily odor		SC	< 0.5		1	ss	2.0	3.5	2	2	2	4	
	As above, but saturated with abundant water and oily substance; heavy hydrocarbon or solvent odor.		SC	< 0.5		2	ss	4.5	6.0	2	2	2	8	
10.0	Black clayey slurry; very abundant oily substance; heavy has or solvent odor; abundant debris					3	ss	6.0	7.5	1	1	1	2	
	Grey/green soft clayey silt; trace organic material; Hydrogen sulfide odor		ML	< 0.5		4	ss	10.0	11.5	2	3	3	18	
15.0	Grey/green/brown soft clayey silt; abundant mollusc fragments; hydrogen sulfide odor		ML	< 0.5		5	ss	15.0	16.5	1	1	1	18	
20.0	Bottom of boring @ 17.0 ft.													
	<i>Sampled collected for chemical analysis</i>													
	MW-6 / 3.5 ft.													
	MW-6 / 5.0 ft.													
	MW-6 / 5.5 ft.													



BRUNGING ASSOCIATES, INC.

Project Name

PACIFIC SUPPLY COMPANY

1735 24TH STREET, OAKLAND, CALIFORNIA

Project No.

029.2

Boring Location **MW-7: C & L Trucking, Inc. Driveway, 24th Street**

Surface Elevation **5.03 feet**

Driller **Aqua Science Engineers**

Date **December 19, 1989**

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer		
						No.	Type	Interval		0			6	12
								From	To	6			12	18
5.0	Asphalt													
	Green slightly dense quartz-rich sand inter-fingered with thin veins of black, highly organic clayey material; moist; no odor		SC			1	ss	2.0	3.5	7	7	6	12	
5.0	Black/grey mottled soft clay; highly organic; abundant grasses and roots; hydrogen sulfide odor; wet		CL	< 0.5		2	ss	4.5	6.0	2	2	2	18	
	Grey/green soft clayey silt; some organic matter; grasses and roots; wet		ML	< 0.5		3	ss	10.0	11.5	2	5	7	18	
15.0	Grey/black stiff clayey silt; some organic matter (grasses and roots); trace of mollusc shells; moist; hydrogen sulfide odor		ML	3.0		4	ss	15.0	16.5	7	7	8	18	
20.0	Tan/brown stiff silty clay; no organic material; mottled white/green/tan zones; moist; no odor		CL	3.5		5	ss	18.0	19.5	5	7	9	18	
Bottom of boring @ 20.0 ft.														
<i>Sampled collected for chemical analysis</i>														
MW-7 / 3.5 ft.														
MW-7 / 5.5 ft.														
MW-7 / 11.5 ft.														
MW-7 / 16.5 ft.														



BRUNGING ASSOCIATES, INC.

Project Name Pacific Supply Company

Project No. 29.6

Boring Location 65' northing and 185' westing of the north and east property lines

Surface Elevation ~10 feet Driller Bayland Drilling Date 6/6/92

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT				Recovery In Inches		
						No.	Type	Interval		0	6		12	18
								From	To	6	12		18	24
0'0"	Asphalt surface cover													
0'6"	Base rock													
1'0"	Medium stiff green clay, moist, slight petroleum odor		CL			1	SS	1'0"	1'9"	6	6	6	-	9
2'6"	Medium stiff green clay, moist, slight petroleum odor					2	SS	2'6"	3'6"	4	5	7	-	12
4'0"	Medium stiff green clay, moist, slight petroleum odor					3	SS	4'6"	5'0"	5	16	14	-	16
5'0"	Very stiff black clay, moist, slight petroleum odor					4	SS	5'6"	6'6"	5	4	5	-	12
5'6"	Loose green silty sand, moist, slight petroleum odor		SM											
7'0"	Loose green silty sand, wet, slight petroleum odor													
8'4"	Soft black and green mottled clay, saturated, strong petroleum odor		CL			5	SS	8'0"	8'6"	2	2	2	-	2
8'6"	Bottom of Boring													
<p><u>Note:</u> Converted into Vapor Extraction Well VEW-1</p>														



BACE Environmental
a Division of
Brunsing Associates, Inc.

Project Name Pacific Supply Company
1735 24th Street, Oakland, Ca

Project No. 029.9

Boring Location 21' North and 13' West of NW corner of driveway

Surface Elevation 5 feet MSL (approx.) Driller Precision Sampling Date 3-5-93

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE				BLOW COUNT			Recovery In Inches	Piezometer
						No.	Type	Interval		0	6	12		
								From	To	6	12	18		
0'	Asphalt	[Solid Black]												
9"	Soft grey fine sand with gravel. Dry.	[Dotted Pattern]	SP			1								
2'	Grades to medium stiff grey silty clay. Dry.	[Diagonal Hatching]	CL			2								
3'	Very soft black organic clay. Moist to wet. No Recovery	[Cross-hatching]	OH											
3.5'						1	CR	2.5	3.0	—	—	—		
						4								
						5								
						6								
7'	Bottom of Boring					7								
						8								
						9								

Note: Boring continuously cored
with a driven double wall sampler



BACE Environmental
a Division of
Brunsing Associates, Inc.

Project Name Pacific Supply Company
1735 24th Street, Oakland, Ca

Project No. 029.9

Boring Location 21.5' North and 42.5' East of NW corner of driveway

Surface Elevation 5 feet MSL (approx.) Driller Precision Sampling Date 3-5-93

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer		
						No.	Type	Interval		0			6	12
								From	To	6			12	18
0'	Asphalt													
9"	Soft to medium stiff grey silty clay with some gravel. Dry.		CL		1									
2'	Very soft black organic clay. Moist.		OH		2									
3'	No Recovery				3									
					4									
					5									
5.5'	Soft grey clay. Moist.		CL		6	1	CR	6.0	6.5	—	—	—		
7	Bottom of Boring				7									
					8									
					9									

Note: Boring continuously cored with a driven double wall sampler



BACE Environmental
a Division of
Brunsing Associates, Inc.

Project Name Pacific Supply Company
1735 24th Street, Oakland, Ca

Project No. 029.9

Boring Location 21' North and 88' East of NW corner of driveway

Surface Elevation 5 feet MSL (approx.) Driller Precision Sampling Date 3-5-93

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE				BLOW COUNT			Recovery In Inches	Piezometer
						No.	Type	Interval		0	6	12		
								From	To	6	12	18		
0'	Asphalt													
6'	Soft to medium stiff dark grey silty clay with sand. Slightly moist. Gravel layer observed.		CL			1								
2'	Medium stiff dark grey clay and organic material. Slightly moist.		OH			2								
3'	Very soft to soft grey clay. Moist.		CL			3								
4'	No Recovery					4								
5'						5								
6.5'	Soft dark grey to black clay and organic material. Wet.		OH			6								
7'	No Recovery					7								
8'	Soft to Medium stiff grey clay. Moist.		CL			8	1 CR	8.0	8.5	—	—	—		
9'	Bottom of Boring					9								
Note: Boring continuously cored with a driven double wall sampler														



BACE Environmental
a Division of
Brunsing Associates, Inc.

Project Name Pacific Supply Company
1735 24th Street, Oakland, Ca

Project No. 029.9

Boring Location 27' South and 93' East of NW corner of driveway

Surface Elevation 8 feet MSL (approx.) Driller Precision Sampling Date 3-5-93

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE				BLOW COUNT			Recovery In Inches	Piezometer
						No.	Type	Interval		0	6	12		
								From	To	6	12	18		
0'	Asphalt													
6"	Medium stiff silty clay with trace gravel (base rock). Dry		CL											
2'	No Recovery. Gravel blocked sampler.													
4'	Medium stiff to soft grey-green clay. Gravel at top of core. Mottled patches of silt and sand. Slightly moist.		CL											
5'	Loose to medium dense green fine sand with HC odor (1,000 ppm PID). Slightly Moist.		SP											
5.5'	No Recovery													
7'	Soft grey-green clay with black silt and organic material at bottom of core. Slightly moist.		CL											
8'	No Recovery													
10'	Bottom of Boring													

Note: Boring continuously cored with a driven double wall sampler



BACE Environmental
a Division of
Brunsing Associates, Inc.

Project Name Pacific Supply Company
1735 24th Street, Oakland, Ca

Project No. 029.9

Boring Location 99' South and 32' East of NW corner of driveway

Surface Elevation 8 feet MSL (approx.) Driller Precision Sampling Date 3-5-93

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE				BLOW COUNT			Recovery In. Inches	Piezometer
						No.	Type	Interval		0	6	12		
								From	To	6	12	18		
0'	Asphalt													
6"	Medium stiff light grey sand with some gravel (base rock at top). Green mottling in places. Dry.		SP			1								
2.3'	No Recovery					2								
4'	As above.		SP			4								
4.3'	No Recovery					5								
7'	Loose green-grey fine sand. Slightly moist.		SP			7	1 CR	7.0	7.5	—	—	—		
7.5'	No Recovery					8								
10'	Bottom of Boring					9								

Note: Boring continuously cored with a driven double wall sampler



BACE Environmental
a Division of
Brunsing Associates, Inc.

Project Name Pacific Supply Company
1735 24th Street, Oakland, Ca

Project No. 029.9

Boring Location 125' South and 32' East of NW corner of driveway

Surface Elevation 8 feet MSL (approx.) Driller Precision Sampling Date 3-5-93

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE				BLOW COUNT			Recovery In Inches	Piezometer
						No.	Type	Interval		0	6	12		
								From	To	6	12	18		
0'	Asphalt													
6"	Medium stiff brown sandy silt with some gravel (base rock at top). Dry		SM		1									
2'	Medium stiff grey-green silty sand and some mottled red clay. No HC odor. Dry.				2									
					3									
4'	HC odor.				4									
					5									
6'	No Recovery				6									
7'	Soft green silty clay. Black silt and organic material at the bottom. HC odor (1,000 ppm PID). Wet.		CL		7	1	CR	7.0	7.5	—	—	—		
7.8'	No Recovery				8									
					9									
10'	Bottom of Boring													

Note: Boring continuously cored with a driven double wall sampler



BACE Environmental
a Division of
Brunsing Associates, Inc.

Project Name Pacific Supply Company
1735 24th Street, Oakland, Ca

Project No. 029.9

Boring Location 27' South and 130' East of NW corner of driveway

Surface Elevation 8 feet MSL (approx.) Driller Precision Sampling Date 3-5-93

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.s Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer		
						No.	Type	Interval		0			6	12
								From	To	6			12	18
0'	Asphalt													
6"	Medium stiff brown silty clay with some gravel (base rock). Dry		CL											
2'	Loose green fine sand. HC odor. Dry.		SP											
3.5'	No Recovery													
4'	Soft-medium stiff black silt, organic material. Wet at bottom.		OH											
5.2'	No Recovery													
7'	Soft-medium stiff brown clayey silt with gravel. Wet.		ML			1	CR	7.0	7.5	—	—	—		
8'	No recovery													
10'	Bottom of Boring													

Note: Boring continuously cored with a driven double wall sampler



BACE Environmental
a Division of
Brunsing Associates, Inc.

Project Name Pacific Supply Company
1735 24th Street, Oakland, Ca

Project No. 029.9

Boring Location 71' South and 69' East of NW corner of driveway

Surface Elevation 8 feet MSL (approx.) Driller Precision Sampling Date 3-5-93

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer		
						No.	Type	Interval		0			6	12
								From	To	6			12	18
0'	Asphalt													
6'	Medium stiff brown silty clay with some gravel (base rock at top). Dry		CL											
4'	Medium dense to loose green fine sand, HC odor (240 ppm PID). Dry.		SP											
6'	No Recovery													
7'	As above with soft black silt, dry. Wet organic material at bottom.		SP			1	CR	7.0	7.5	—	—	—		
8'	No Recovery		OH											
10'	Bottom of Boring													

Note: Boring continuously cored with a driven double wall sampler



BACE Environmental
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Brunsing Associates, Inc.

Project Name Pacific Supply Company
1735 24th Street, Oakland, Ca

Project No. 029.9

Boring Location 37.5' South and 8' East of NW corner of driveway

Surface Elevation 8 feet MSL (approx.) Driller Precision Sampling Date 3-5-93

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE				BLOW COUNT			Recovery In Inches	Piezometer
						No.	Type	Interval		0	6	12		
								From	To	6	12	18		
0'	Asphalt													
6"	Medium stiff brown silt and sand with some gravel (base rock at top). Dry		SM			1								
2.5'	No Recovery					2								
4'	Soft grey clay with bands of organic material with green mottling, HC odor at 6' (1,000 ppm PID). Slightly moist.		OH			4								
6'	No Recovery					6								
7'	Soft grey organic clay, HC odor at 8' (350 ppm PID). Wet.		OH			7								
9'	Soft black organic clay, wet.					9								
9.5'	No Recovery													
10'	Bottom of Boring													
						1	CR	8.5	9.0	—	—	—		

Note: Boring continuously cored with a driven double wall sampler



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a Division of
Brunsing Associates, Inc.

Project Name Pacific Supply Company
1735 24th Street, Oakland, Ca

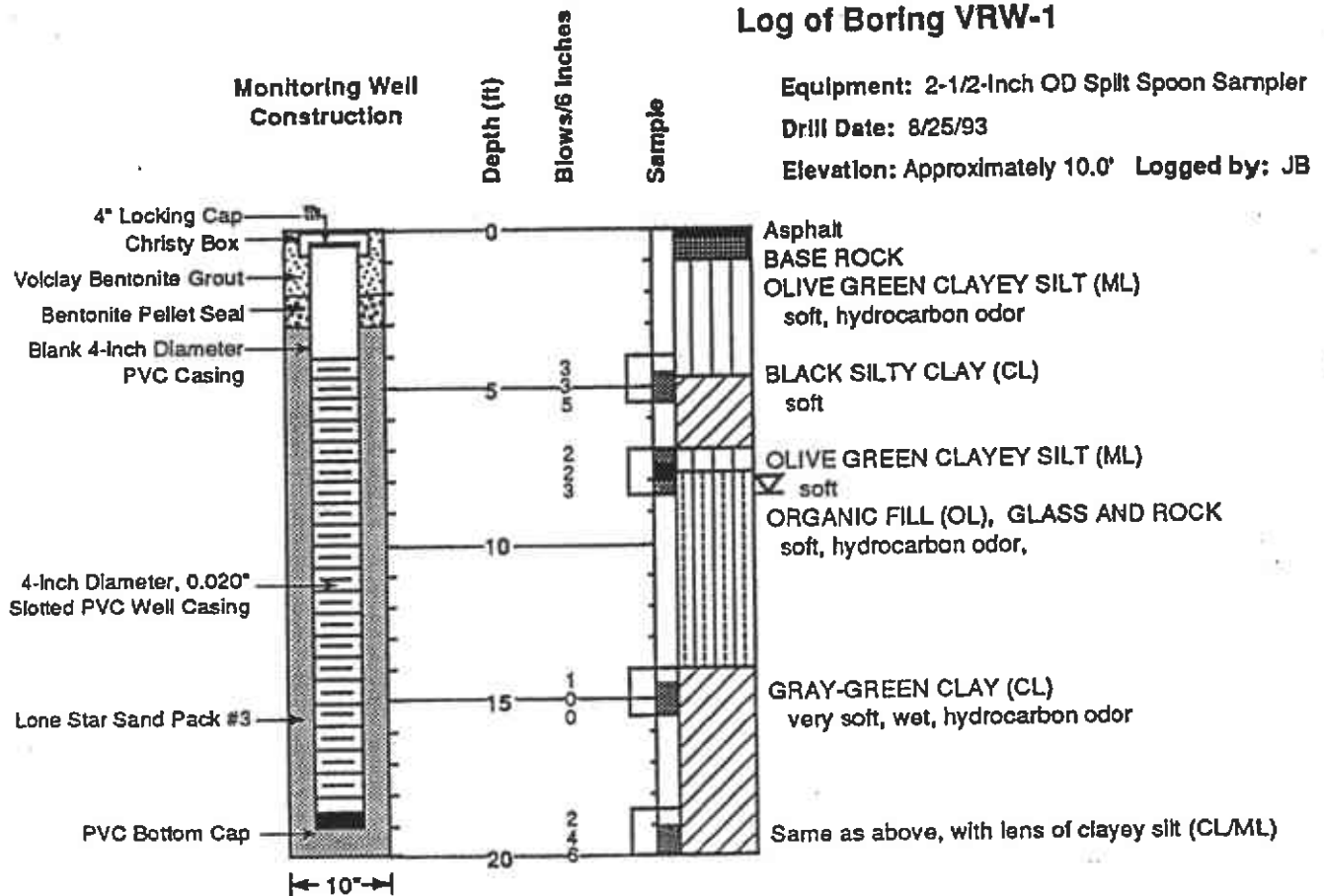
Project No. 029.9

Boring Location 71' South and 105.5' East of NW corner of driveway

Surface Elevation 8 feet MSL (approx.) Driller Precision Sampling Date 3-5-93

Depth	SOIL DESCRIPTION AND REMARKS	Lithology	U.S.C.S Soil Type	qu TSF	Contact Depth	SAMPLE		BLOW COUNT			Recovery In Inches	Piezometer		
						No.	Type	Interval		0			6	12
								From	To	6			12	18
0'	Asphalt													
6"	Soft to medium stiff grey-black silty clay with some gravel (base rock at top). Dry		CL											
1														
2														
3.8'	Medium dense green fine sand. HC odor. Dry.		SP											
4.5'	No Recovery													
6'	Medium dense to loose green fine sand. Wet.		SP			1	CR	6.0	6.5	—	—	—		
6.8'	Soft black organic clay. Moist.		OH											
7'	No Recovery													
8'	Bottom of Boring													
	Note: Boring continuously cored with a driven double wall sampler													

Log of Boring VRW-1



LEGEND:



PROJECT NO.: 29.11

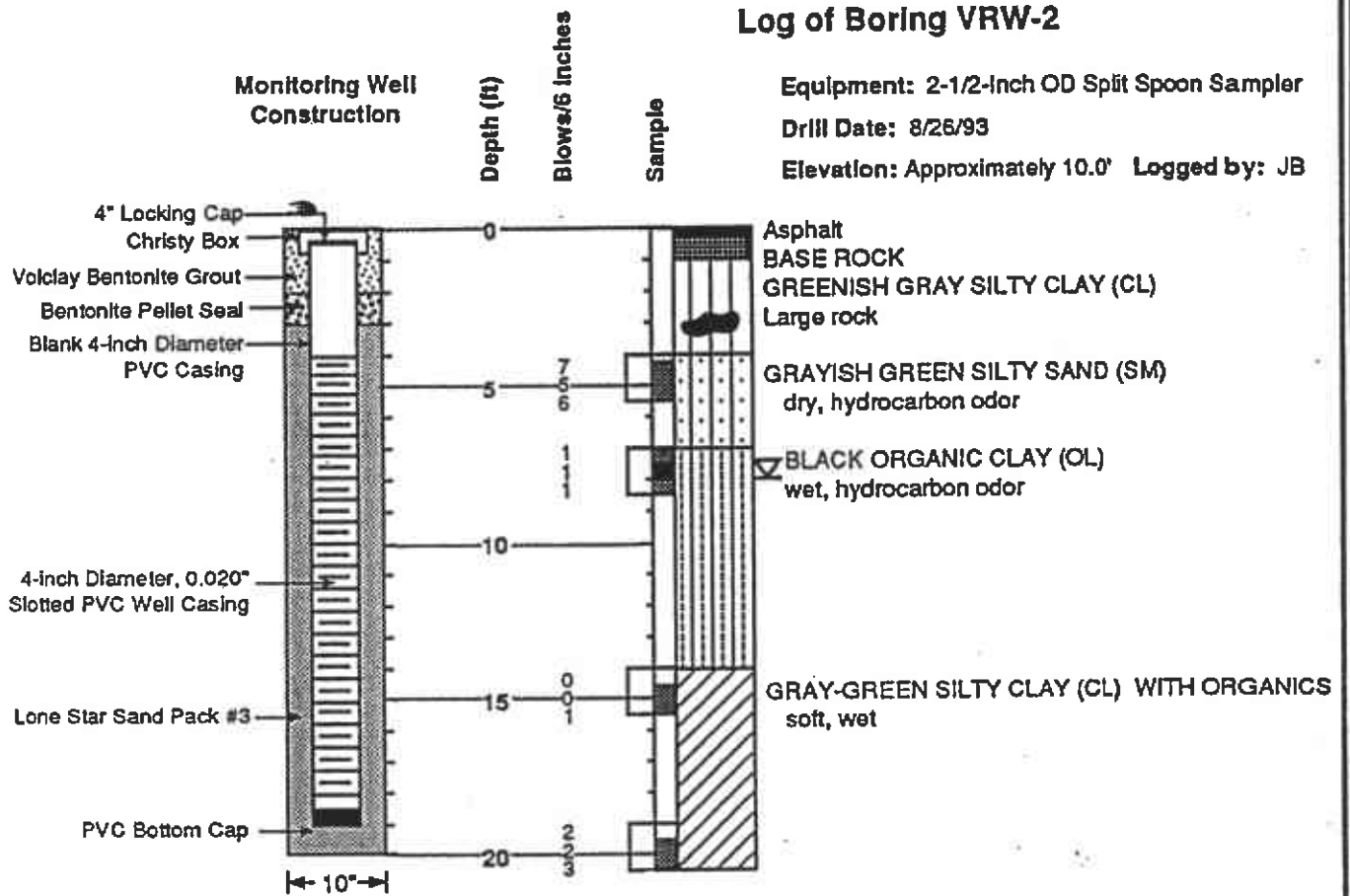
DRAWN BY: DD 11/15/93

APPROVED BY: JB 12/14/93

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PLATE 1
 LOG AND WELL
 CONSTRUCTION DETAILS, VRW-1
 Pacific Supply
 1735 24th Street
 Oakland, California

Log of Boring VRW-2



LEGEND:

- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JB	12/1/93

BACE Environmental
A Division Of
Brunsing Associates, Inc.

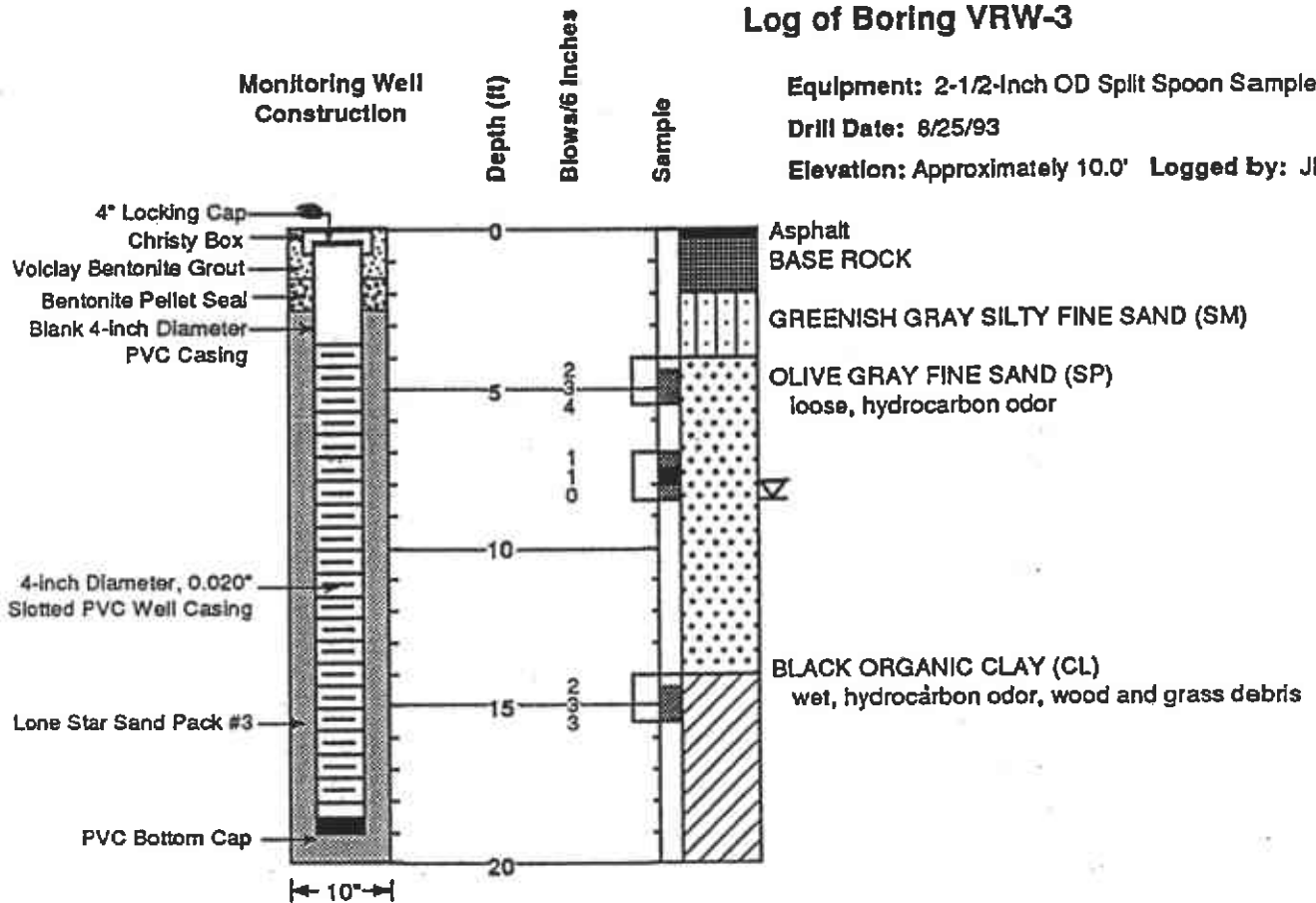
PLATE 2
LOG AND WELL
CONSTRUCTION DETAILS, VRW-2
 Pacific Supply
 1735 24th Street
 Oakland, California

Log of Boring VRW-3

Equipment: 2-1/2-Inch OD Split Spoon Sampler

Drill Date: 8/25/93

Elevation: Approximately 10.0' Logged by: JB



LEGEND:

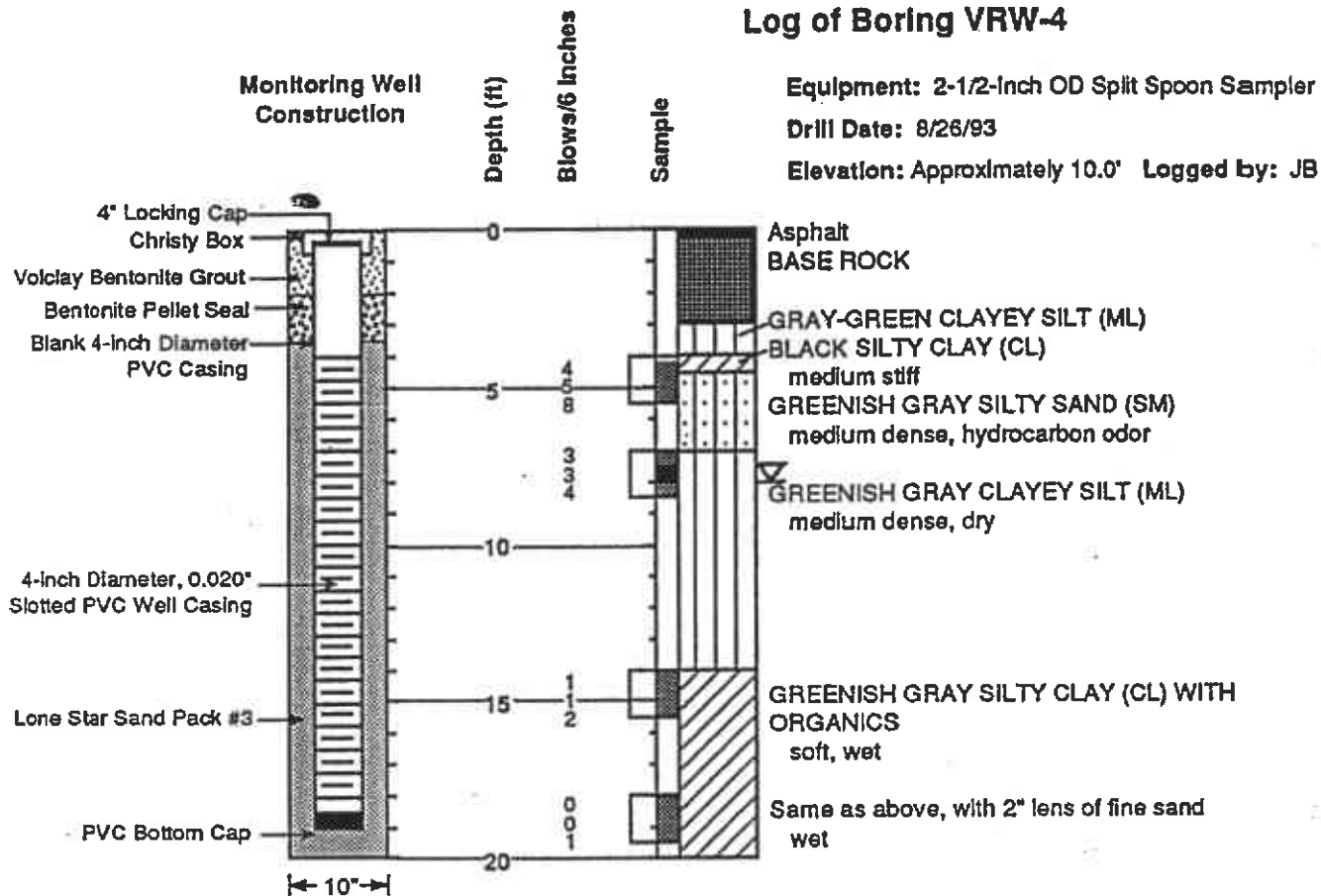
- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.:	29.11	
DRAWN BY:	DD	11/15/93
APPROVED BY:	JB	12/14/93

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE 3
LOG AND WELL
CONSTRUCTION DETAILS, VRW-3
Pacific Supply
1735 24th Street
Oakland, California

Log of Boring VRW-4



Equipment: 2-1/2-Inch OD Split Spoon Sampler
 Drill Date: 8/26/93
 Elevation: Approximately 10.0' Logged by: JB

LEGEND:

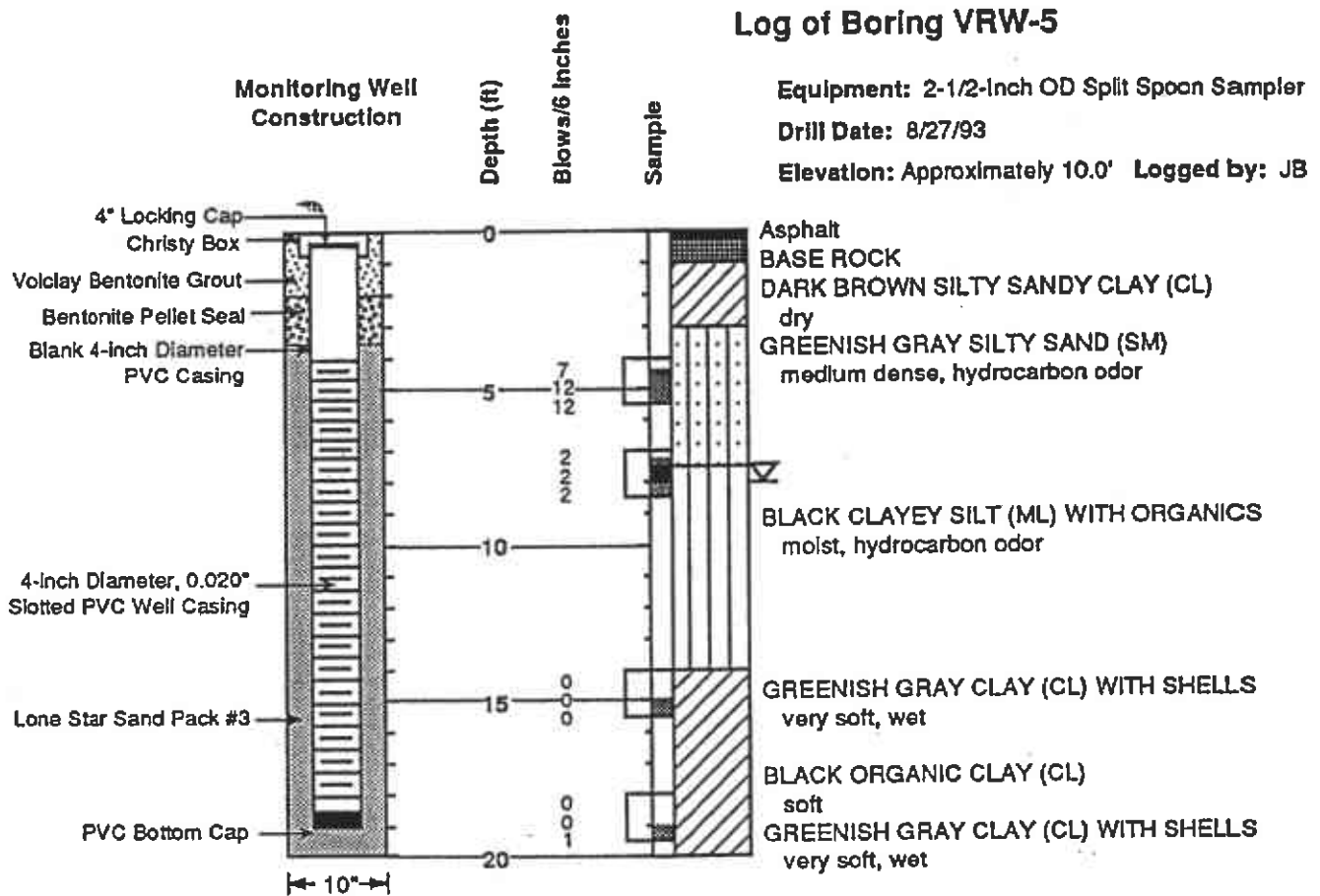
- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JB	12/14/93

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE 4
LOG AND WELL
CONSTRUCTION DETAILS, VRW-4
 Pacific Supply
 1735 24th Street
 Oakland, California

Log of Boring VRW-5

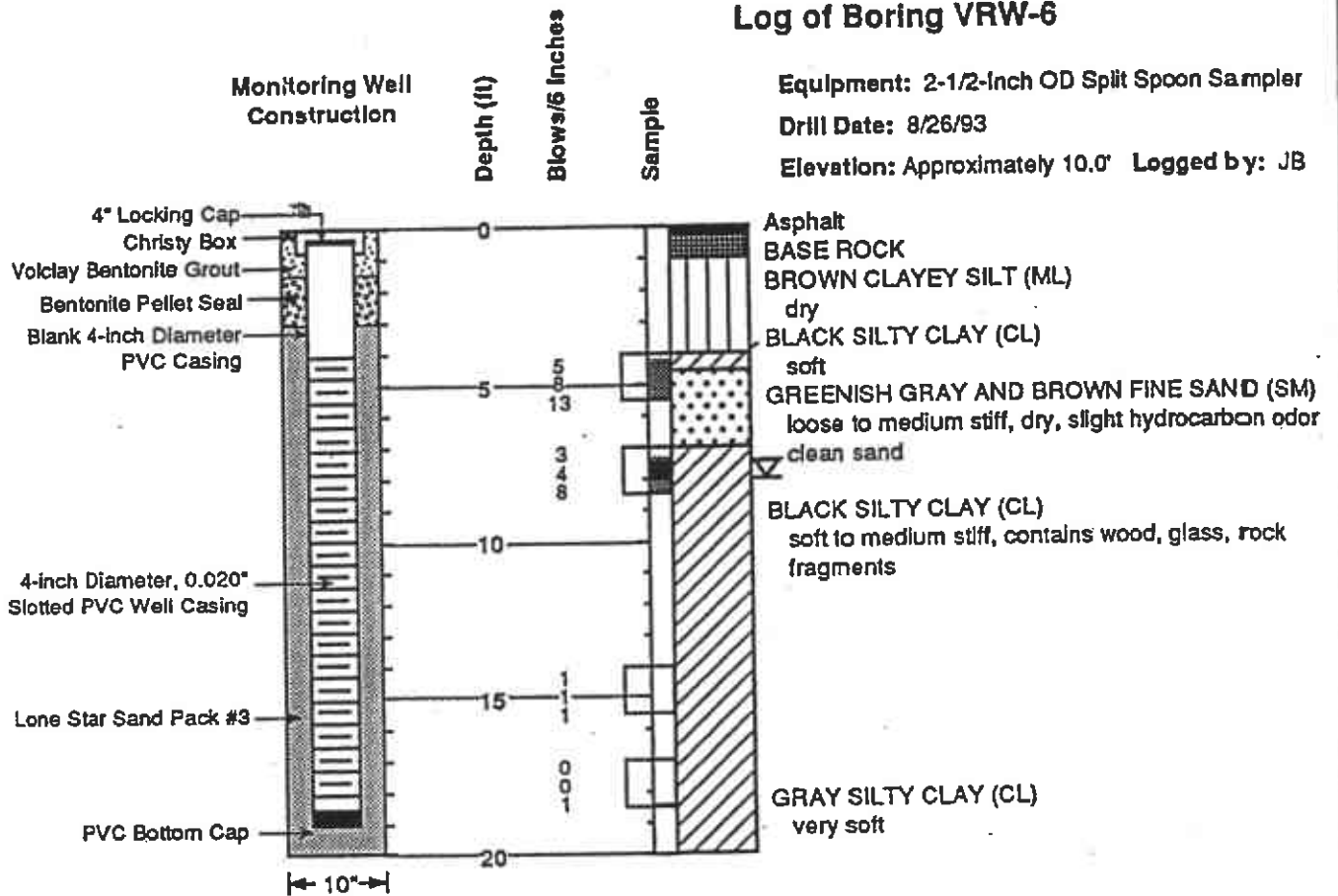


LEGEND:



PROJECT NO.: 29.11			BACE Environmental <i>A Division Of</i> Brunsing Associates, Inc.	PLATE 5 LOG AND WELL CONSTRUCTION DETAILS, VRW-5 Pacific Supply 1735 24th Street Oakland, California
DRAWN BY:	DD	11/15/93		
APPROVED BY:	JB	12/14/93		

Log of Boring VRW-6



LEGEND:

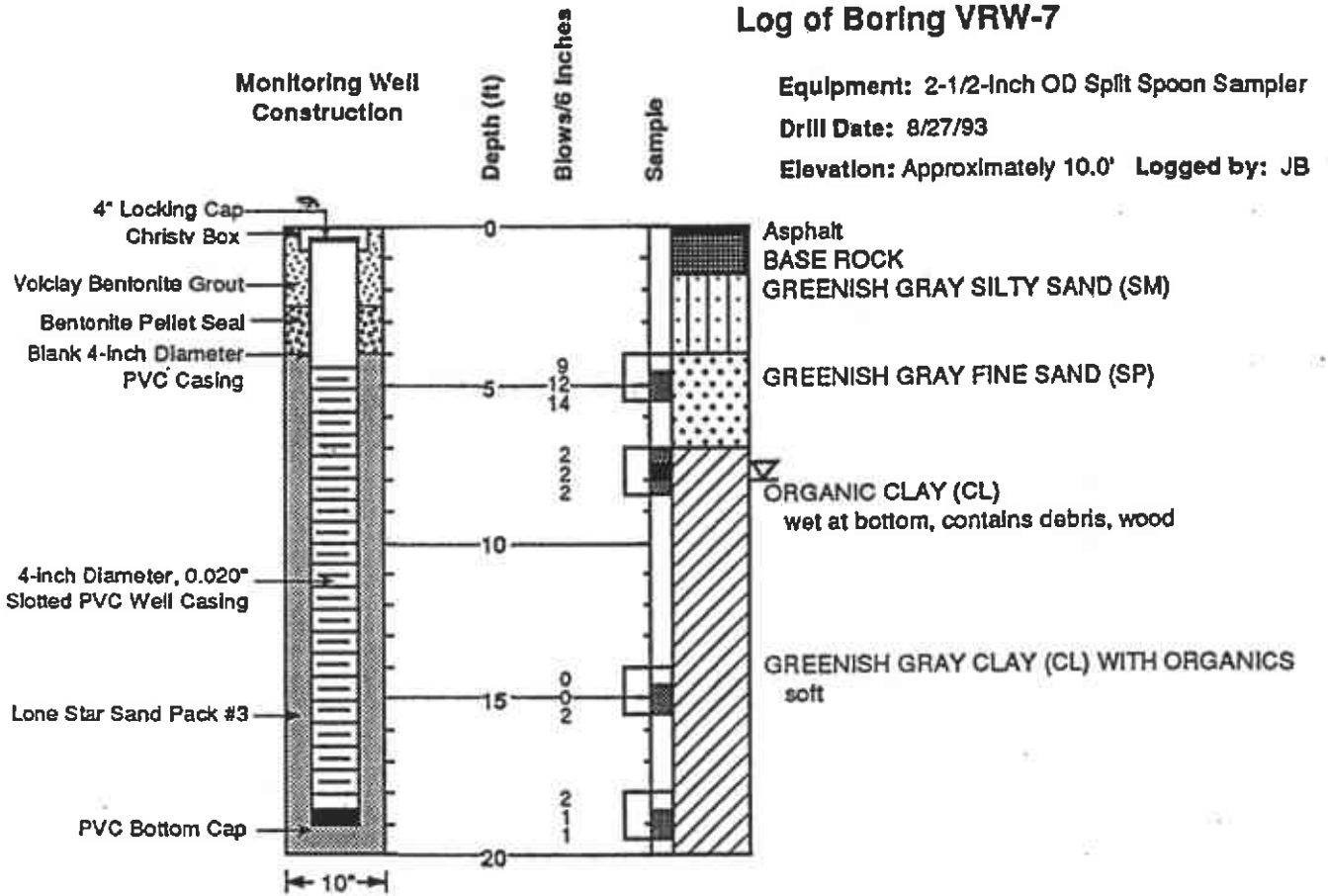


PROJECT NO.: 29.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JB	12/14/93

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A Division Of
Brunsing Associates, Inc.

PLATE 6
LOG AND WELL
CONSTRUCTION DETAILS, VRW-6
 Pacific Supply
 1735 24th Street
 Oakland, California

Log of Boring VRW-7



LEGEND:

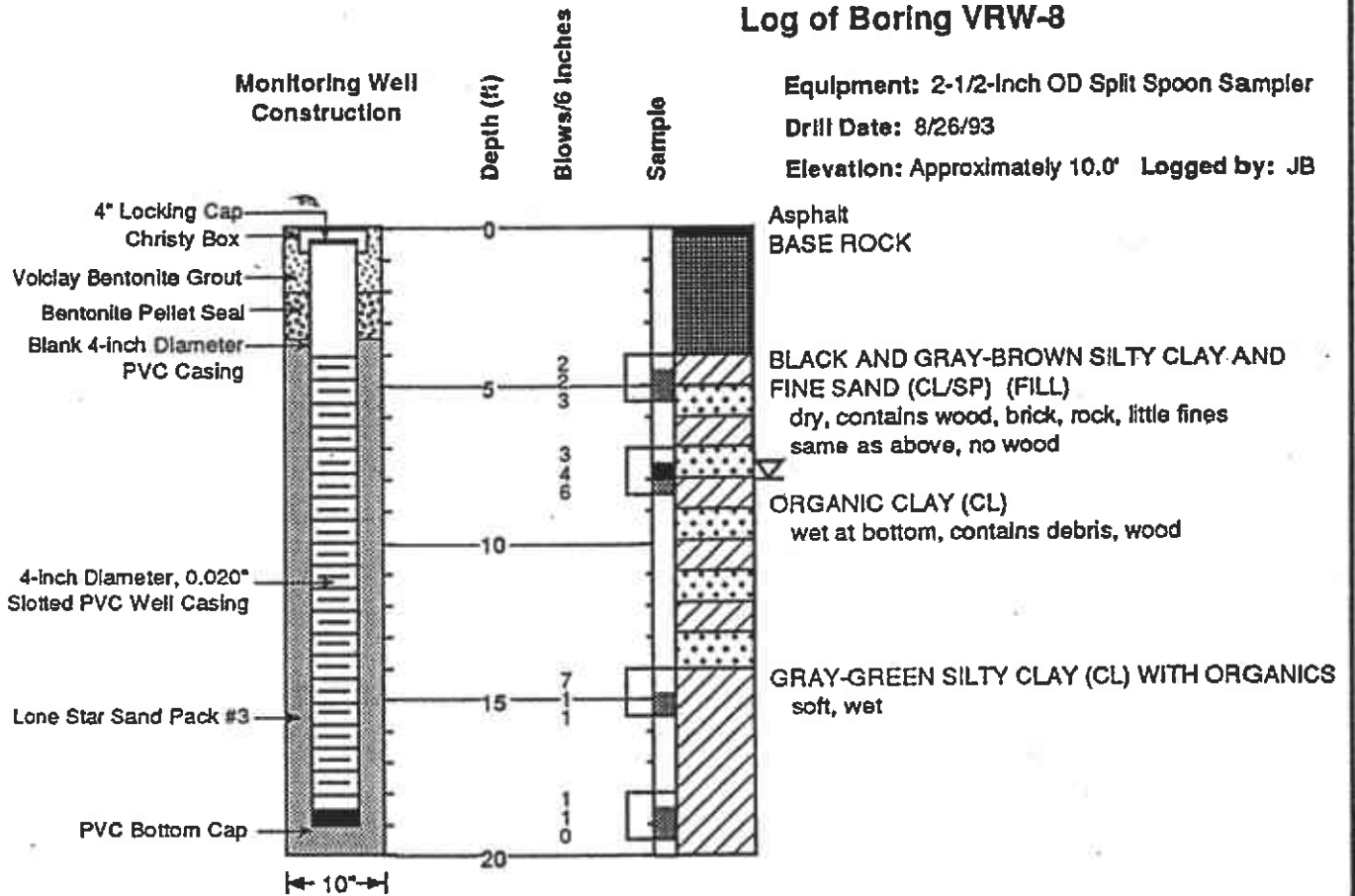
- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JB	12/14/93

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PLATE 7
LOG AND WELL
CONSTRUCTION DETAILS, VRW-7
 Pacific Supply
 1735 24th Street
 Oakland, California

Log of Boring VRW-8



LEGEND:

- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JB	12/14/93

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE 8
LOG AND WELL
CONSTRUCTION DETAILS, VRW-8
 Pacific Supply
 1735 24th Street
 Oakland, California

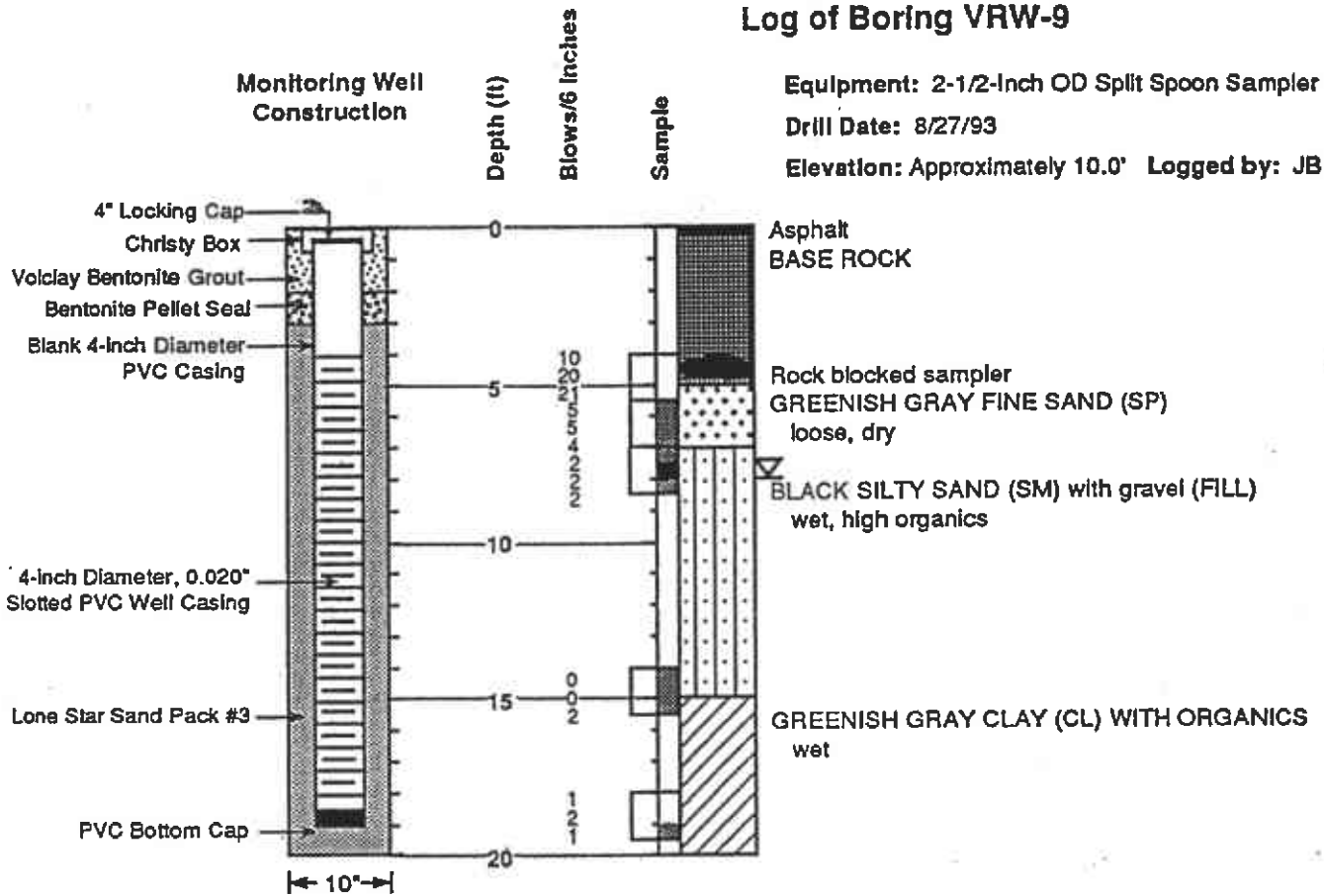
Log of Boring VRW-9

Monitoring Well Construction

Equipment: 2-1/2-Inch OD Split Spoon Sampler

Drill Date: 8/27/93

Elevation: Approximately 10.0' Logged by: JB



LEGEND:

- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11

DRAWN BY: DD 11/15/93

APPROVED BY: JB 12/14/93

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PLATE 9
LOG AND WELL
CONSTRUCTION DETAILS, VRW-9
Pacific Supply
1735 24th Street
Oakland, California

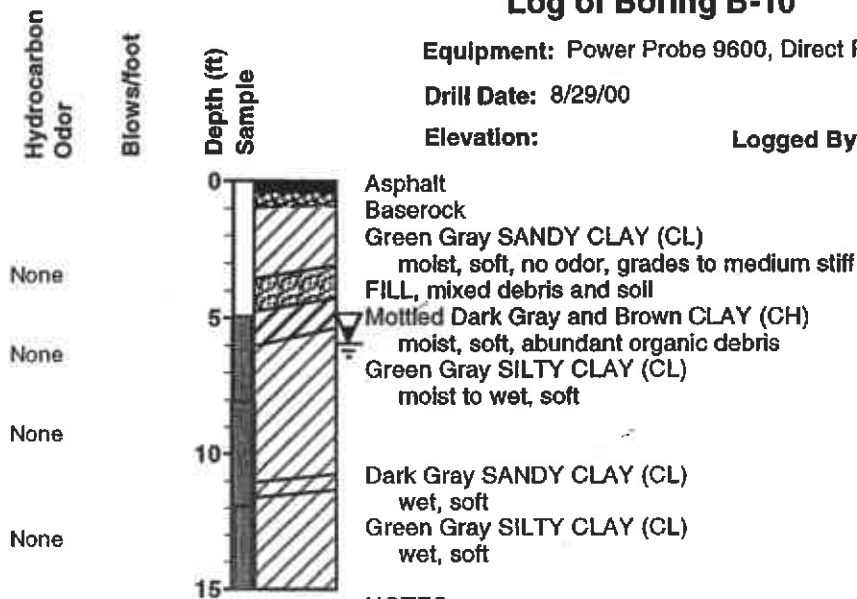
Log of Boring B-10

Equipment: Power Probe 9600, Direct Push

Drill Date: 8/29/00

Elevation:

Logged By: CES



NOTES:

- 1) Hand auger through first five feet for utility clearance.
- 2) Water enters boring slowly.
- 3) Set temporary well casing before collecting groundwater sample.
- 4) Abandoned boring with bentonite chips and tremie grouting.

LEGEND:

- Sample Recovered
- Sample Retained
- No Recovery
- Length Of Drive
- Bulk Sample

Equivalent "Standard Penetration" blow counts

Water encountered

PROJECT NO.: 029		
DRAWN BY:	CES	10/24/00
CHECKED BY:		
APPROVED BY:		
REVISED BY:		

BACE Environmental
A Division Of
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PLATE C2
Log of Boring B-10
Pacific Coast Building Products
1735 24th Street
Oakland, California

Log of Boring B-11

Equipment: Power Probe 9600, Direct Push

Drill Date: 8/29/00

Elevation:

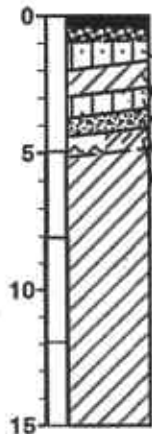
Logged By: CES

Hydrocarbon
Odor

Blows/foot

None

Depth (ft)
Sample



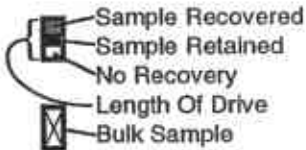
Asphalt
Baserock
Orange Brown SILTY SAND (SM)
moist, loose, orange mottling
Green Gray SANDY CLAY (CL)
moist, medium stiff, abundant roots
Green Gray SILTY SAND (SM)
wet, loose, trace clay, clay increasing with depth
Brown SAND (SW)
wet, loose
Dark Gray PEAT AND CLAY (Pt/OH)

No recovery from 5 feet to 15 feet, soft clay observed on drill rods

NOTES:

- 1) Hand auger through first five feet for utility clearance.
- 2) Set temporary well casing before collecting groundwater sample.
- 3) Abandoned boring with bentonite chips and tremie grouting.

LEGEND:



* Equivalent "Standard Penetration" blow counts

Water encountered

PROJECT NO.: 029		
DRAWN BY:	CES	10/24/00
CHECKED BY:		
APPROVED BY:		
REVISED BY:		

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE C3
Log of Boring B-11
Pacific Coast Building Products
1735 24th Street
Oakland, California

Log of Boring B-12

Equipment: Power Probe 9600, Direct Push

Drill Date: 8/29/00

Elevation:

Logged By: CES

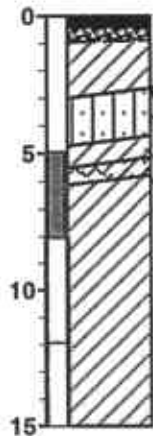
Hydrocarbon
Odor

Blows/foot

Depth (ft)
Sample

None

None



Asphalt
Baserock
Dark Green Gray SILTY CLAY (CL)
moist, medium stiff
Dark Gray SILTY SAND (SM)
wet, medium dense, trace clay
Gray Green SANDY CLAY (CL)
moist, medium stiff, <10% sand
Dark Gray PEAT AND CLAY (P/OH)
saturated, loose
Gray Green SILTY CLAY (CL)
moist, soft, abundant roots

No recovery from 8 to 15 feet, soft clay (Bay Mud) observed on drill rods

NOTES:

- 1) Hand auger through first five feet for utility clearance.
- 2) Set temporary well casing before collecting groundwater sample.
- 3) Abandoned boring with bentonite chips and tremie grouting.

LEGEND:

- Sample Recovered
- Sample Retained
- No Recovery
- Length Of Drive
- Bulk Sample

equivalent "Standard Penetration" blow counts

Water encountered

PROJECT NO.: 029

DRAWN BY:	CES	10/24/00
CHECKED BY:		
APPROVED BY:		
REVISED BY:		

BACE Environmental
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Brunsing Associates, Inc.

PLATE C4

Log of Boring B-12
Pacific Coast Building Products
1735 24th Street
Oakland, California

WELL COMPLETION DETAIL

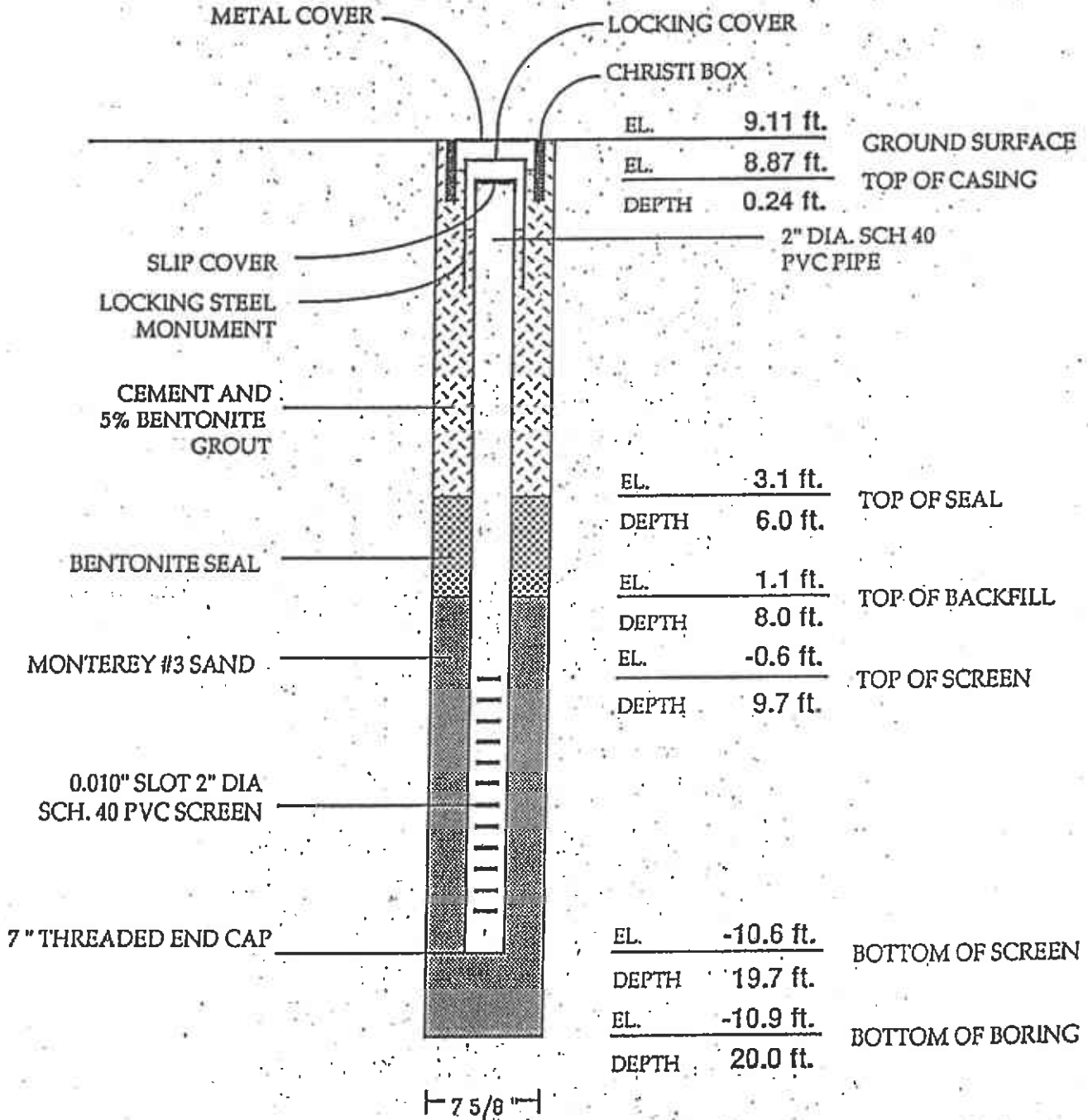
PROJECT NAME: PACIFIC SUPPLY COMPANY

PROJECT NO. 029

BORING LOCATION: MW-1

DATE: 9/13/88

BY: GE



WELL COMPLETION DETAIL

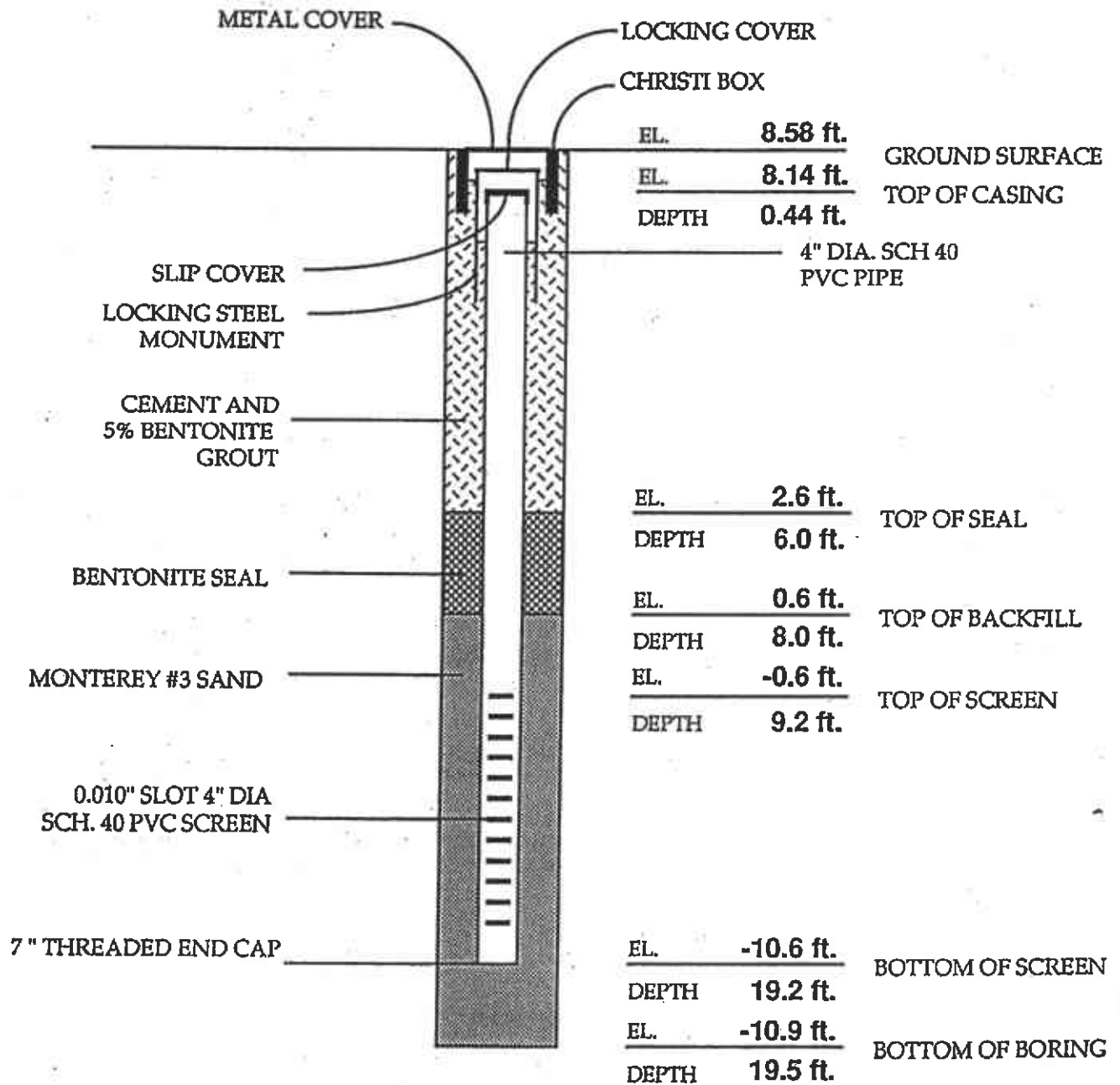
PROJECT NAME: PACIFIC SUPPLY COMPANY

PROJECT NO. 029

BORING LOCATION: MW-2

DATE: 9/13/88

BY: GE

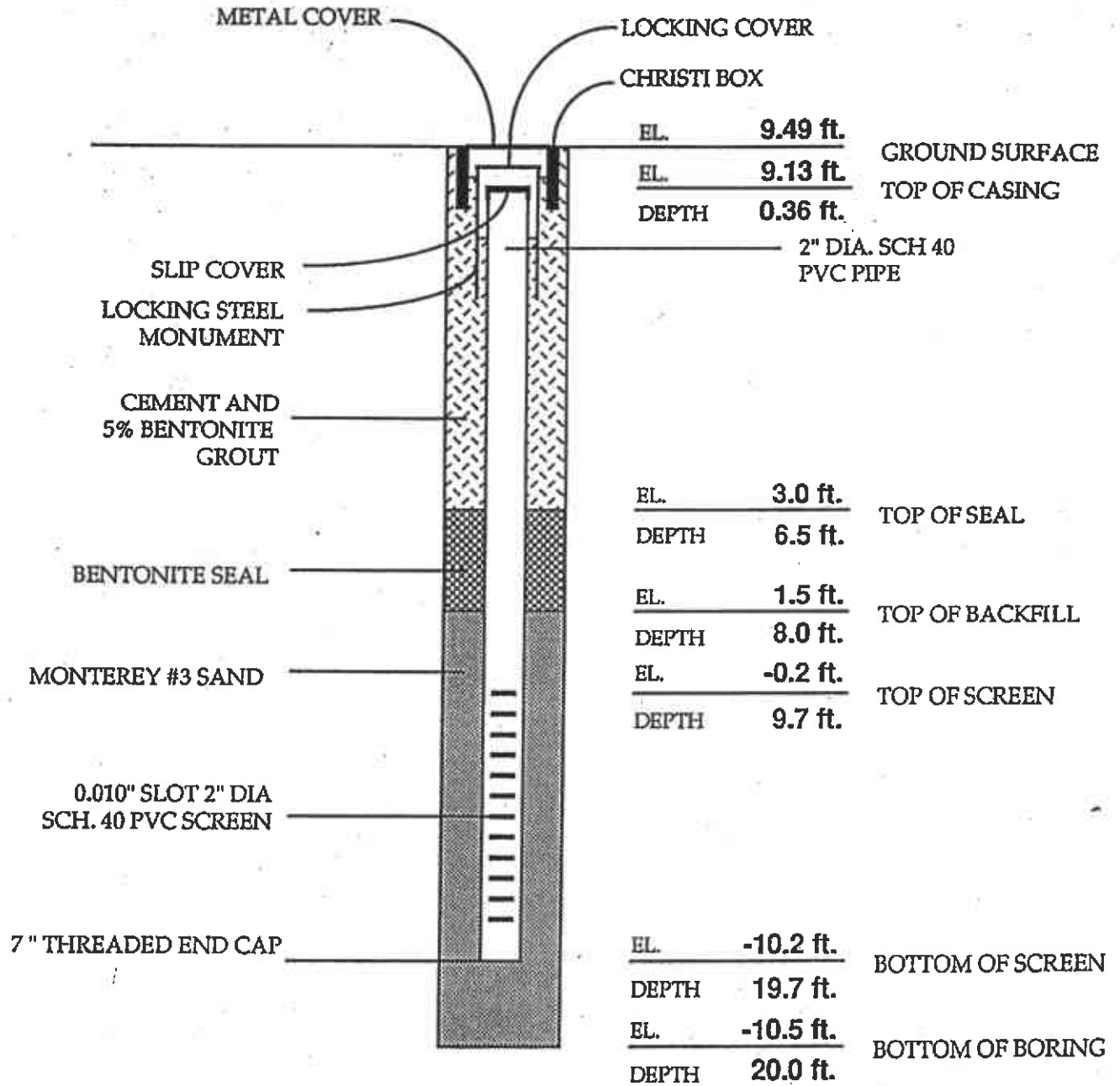


| 10" |

WELL COMPLETION DETAIL

PROJECT NAME: PACIFIC SUPPLY COMPANY PROJECT NO. 029

BORING LOCATION: MW-3 DATE: 9/13/88 BY: GE



7 5/8"

WELL COMPLETION DETAIL

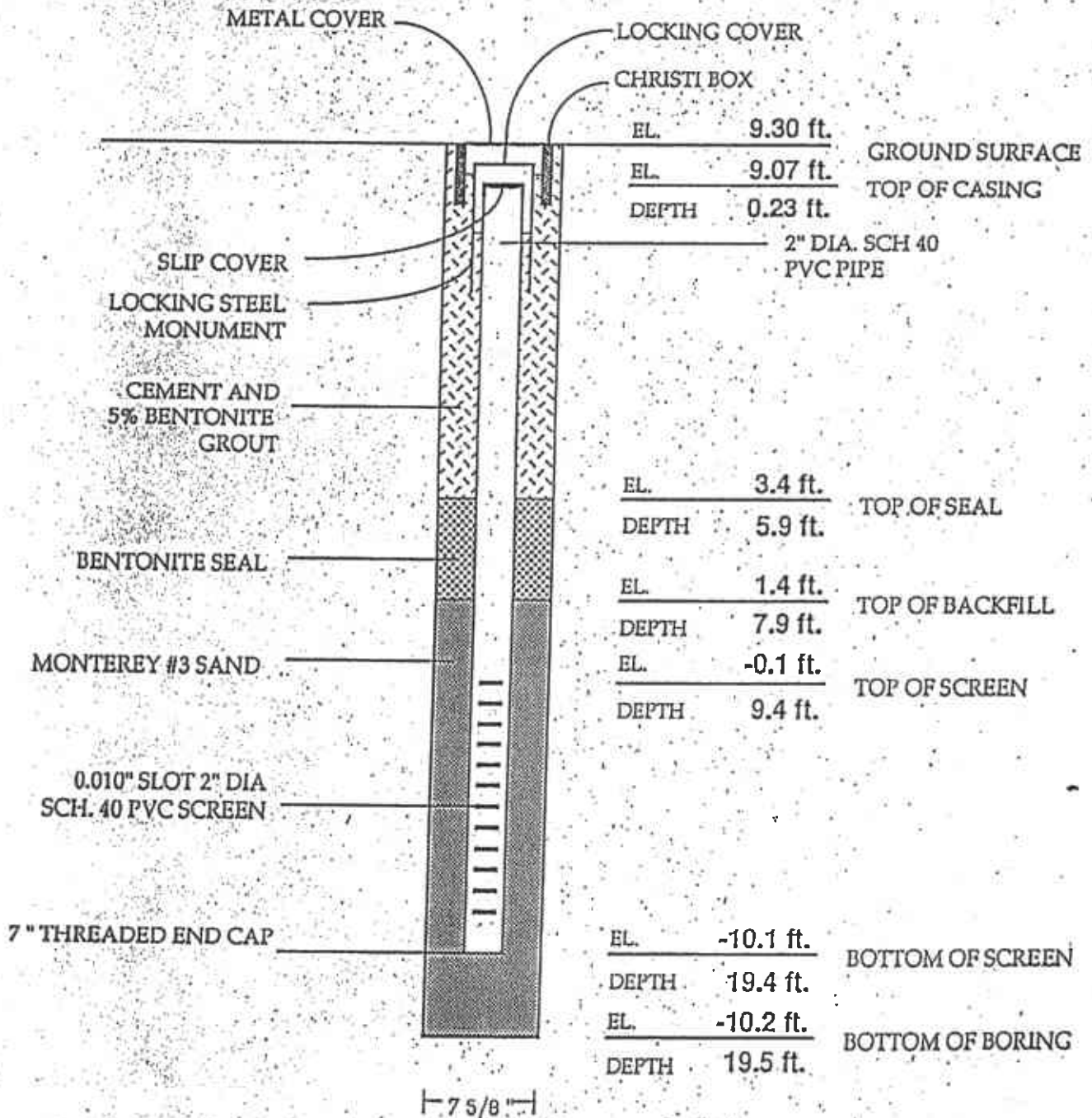
PROJECT NAME: PACIFIC SUPPLY COMPANY

PROJECT NO. 029

BORING LOCATION: MW-4

DATE: 9/13/88

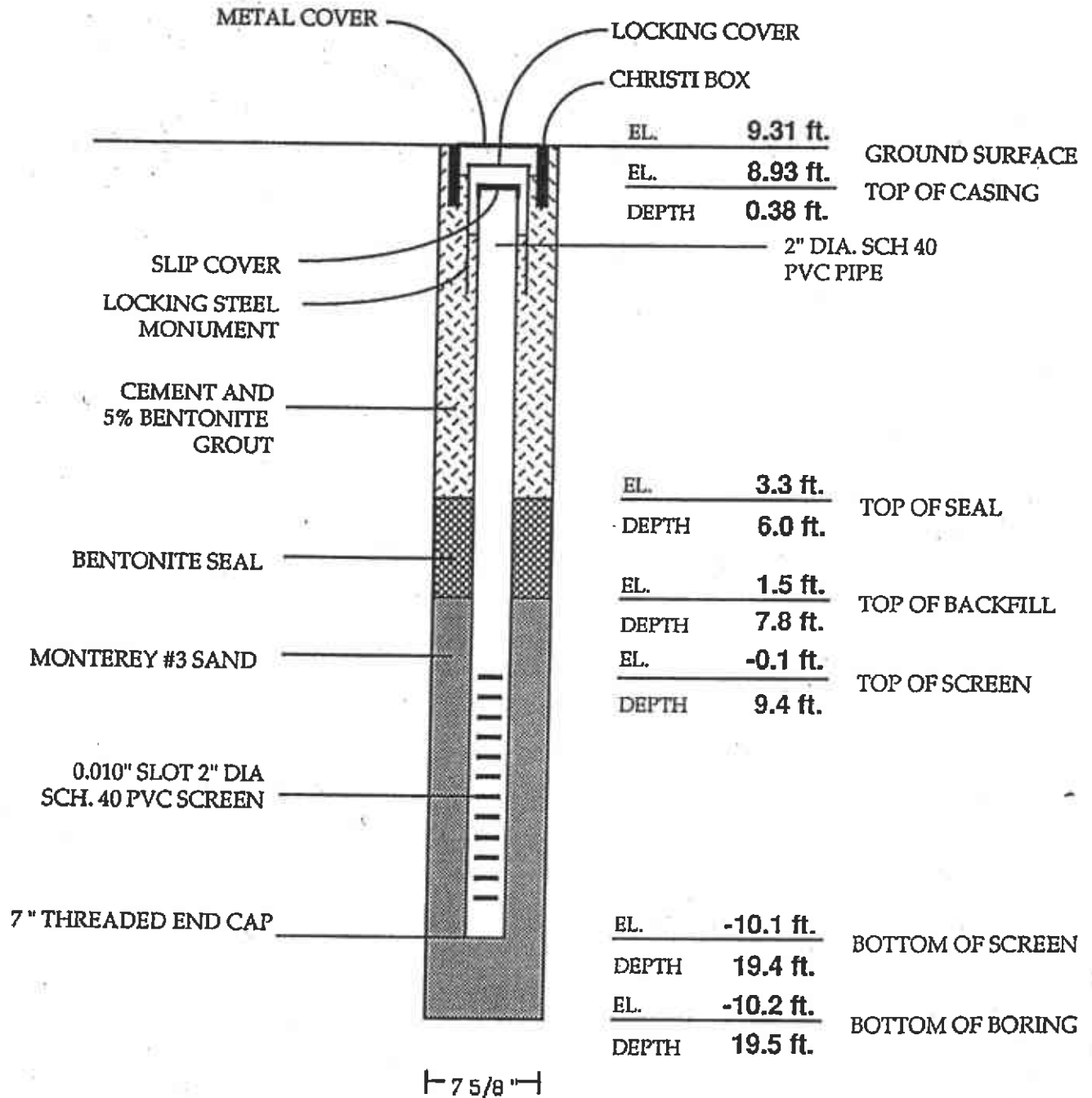
BY: GE



WELL COMPLETION DETAIL

PROJECT NAME: PACIFIC SUPPLY COMPANY PROJECT NO. 029

BORING LOCATION: MW-5 DATE: 9/13/88 BY: GE



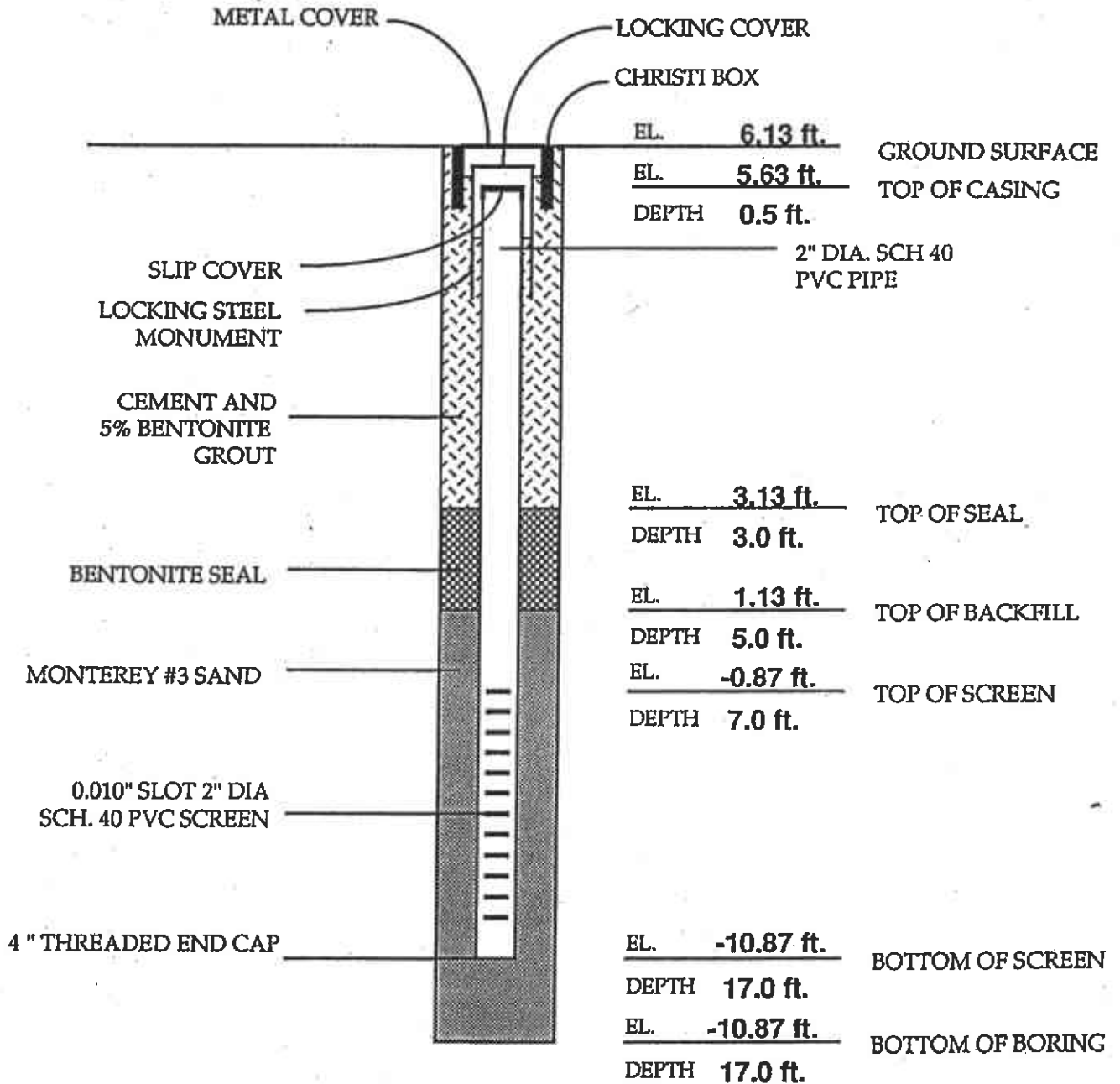
WELL COMPLETION DETAIL

PROJECT NAME: PACIFIC SUPPLY CO.
1735 24th STREET,
OAKLAND, CALIFORNIA

PROJECT NO. 029.2

BORING LOCATION: MW-6

DATE: December 19, 1989 BY: G. Eiche



┆ 5 7/8" ┆

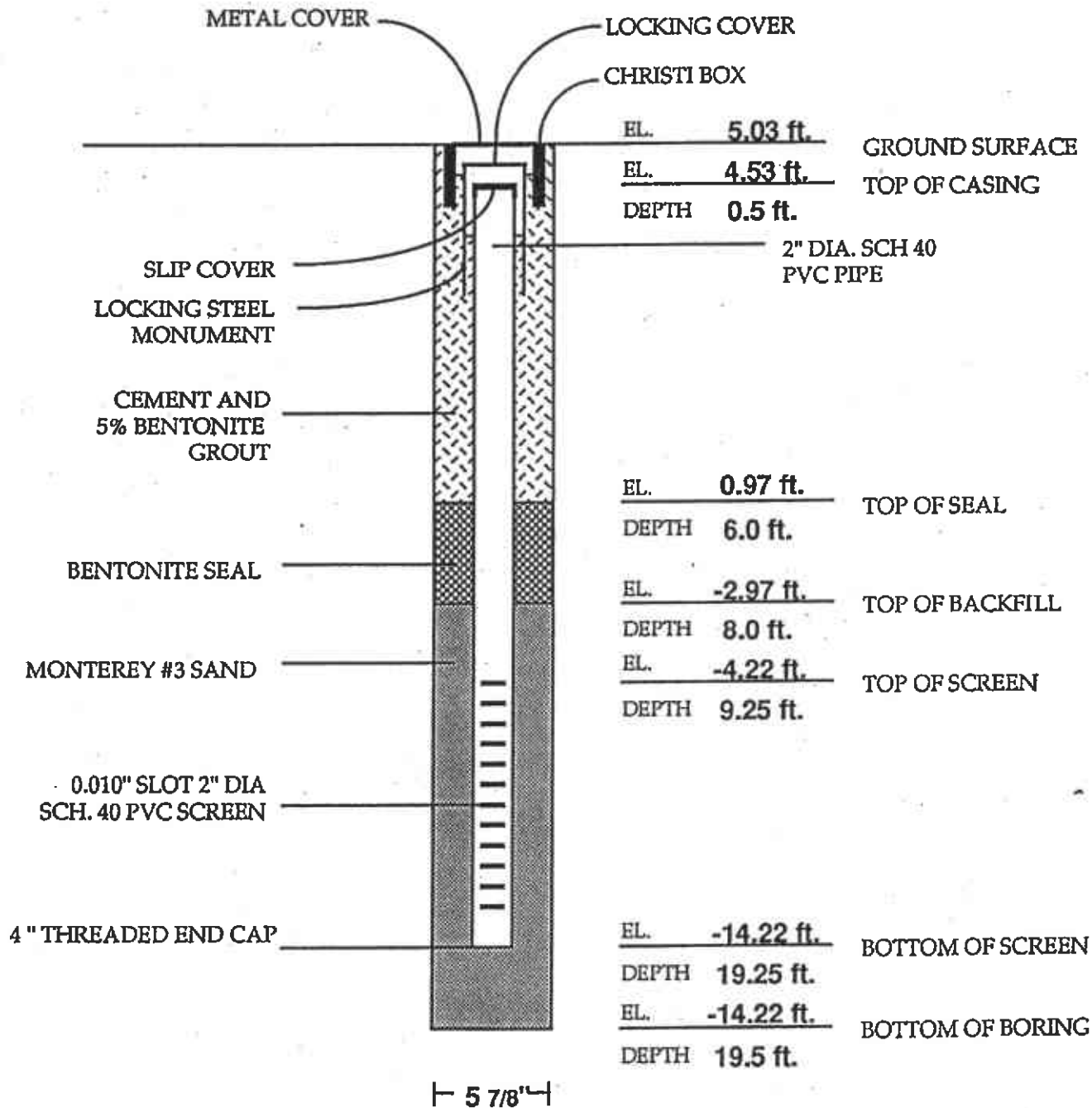
WELL COMPLETION DETAIL

PROJECT NAME: PACIFIC SUPPLY CO.
1735 24th STREET,
OAKLAND, CALIFORNIA

PROJECT NO. 029.2

BORING LOCATION: MW-7

DATE: December 19, 1989 BY: G. Eiche

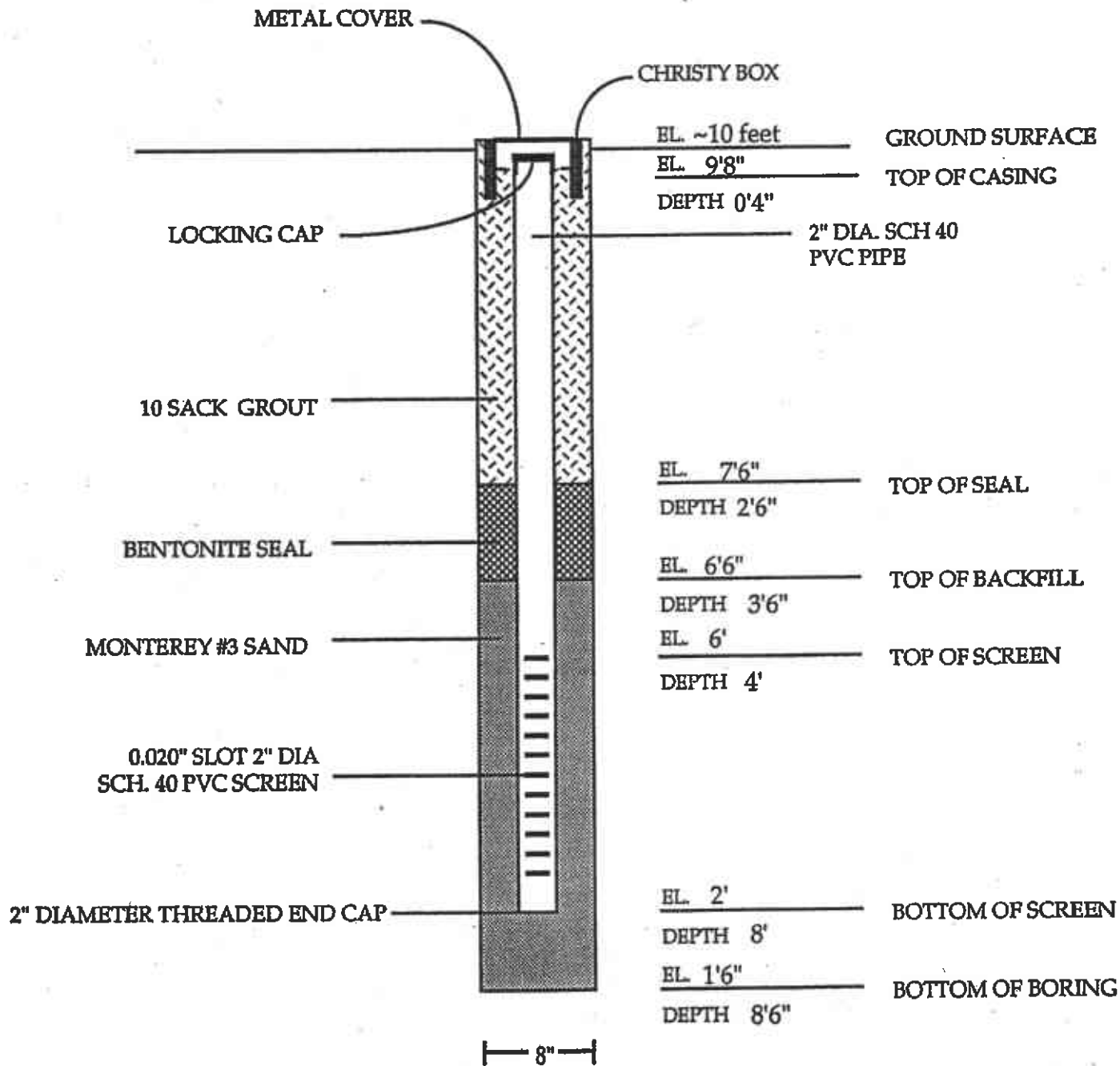


WELL COMPLETION DETAIL

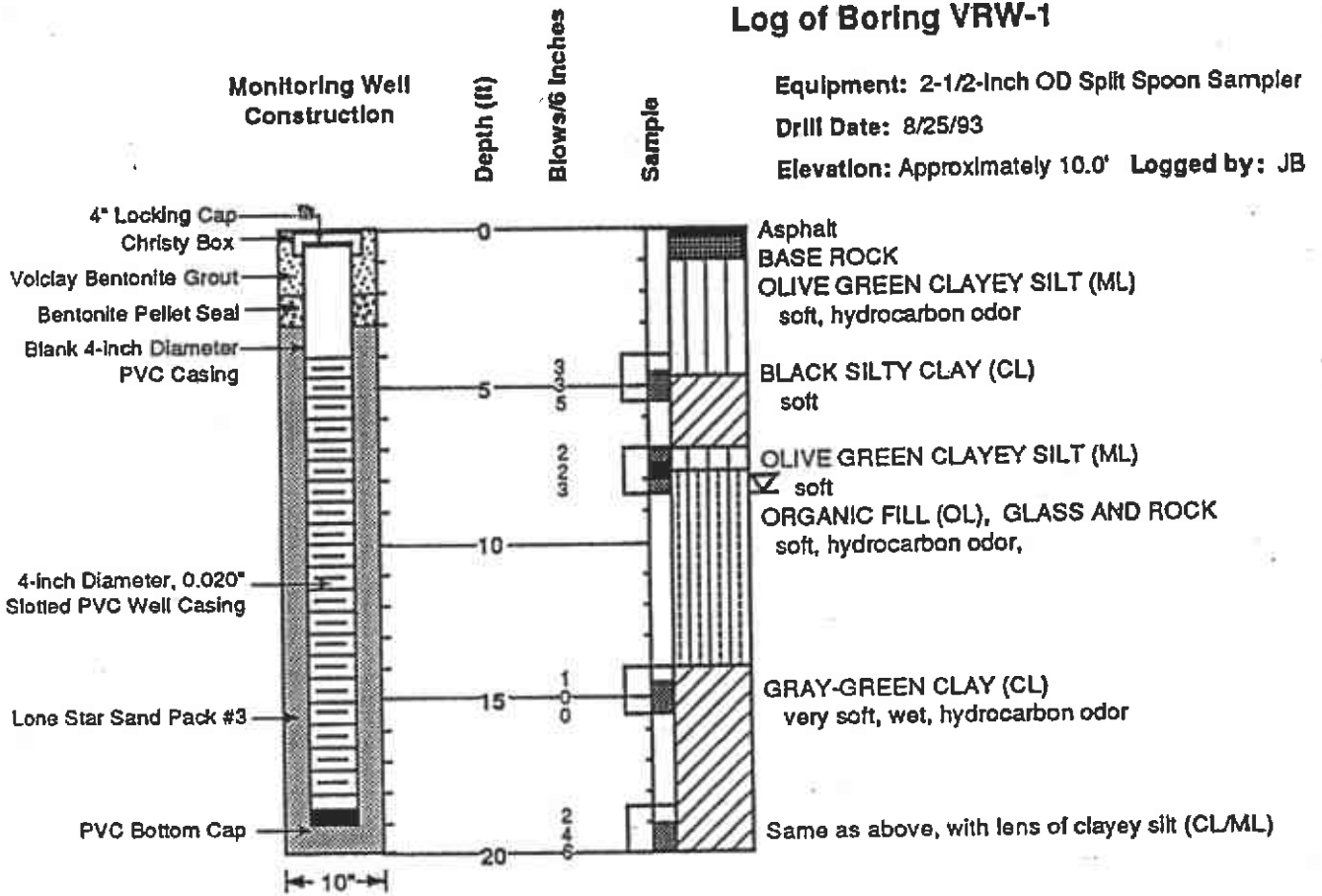
PROJECT NAME: Pacific Supply Company PROJECT NO. 29.6

BORING LOCATION: 65' northing and 185' westing of the north & east property lines

WELL NUMBER: VEW-1 DATE: 6/6/92 BY: Jeff Stivers



Log of Boring VRW-1



LEGEND:

- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JB	12/14/93

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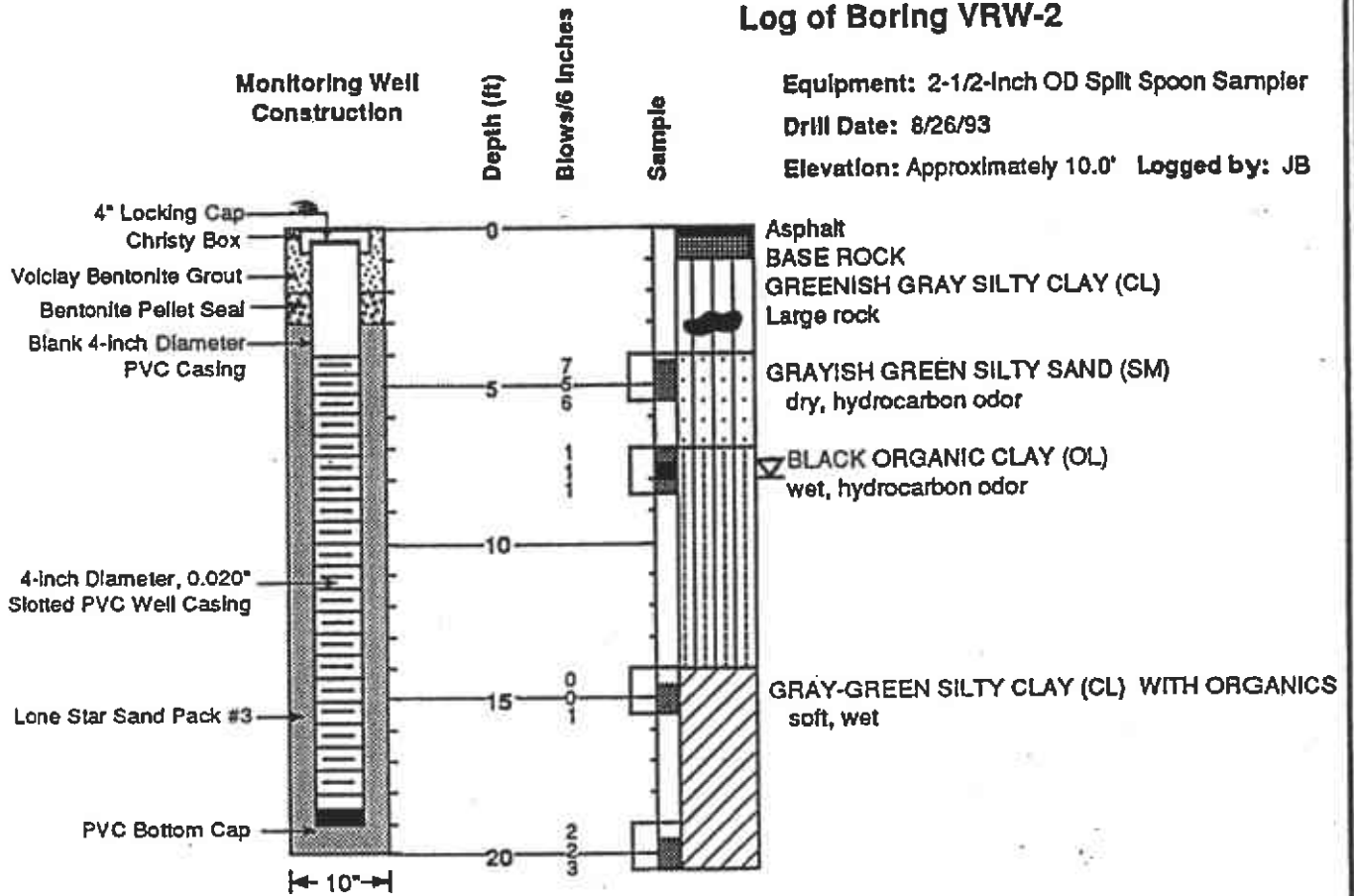
PLATE 1
LOG AND WELL
CONSTRUCTION DETAILS, VRW-1
 Pacific Supply
 1735 24th Street
 Oakland, California

Log of Boring VRW-2

Equipment: 2-1/2-Inch OD Split Spoon Sampler

Drill Date: 8/26/93

Elevation: Approximately 10.0' Logged by: JB



LEGEND:

- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11

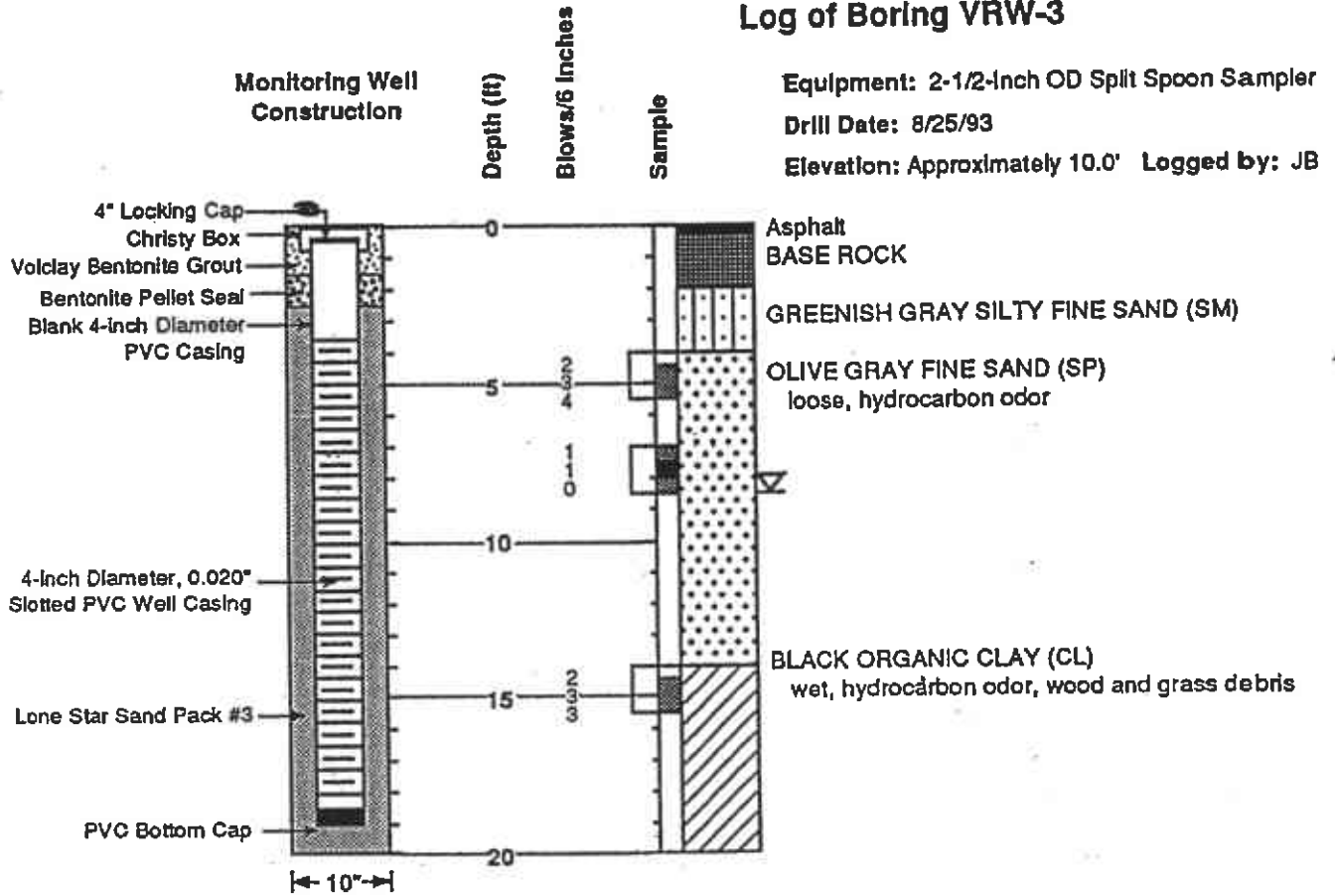
DRAWN BY: DD 11/15/93

APPROVED BY: JB 12/1/93

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE 2
LOG AND WELL
CONSTRUCTION DETAILS, VRW-2
Pacific Supply
1735 24th Street
Oakland, California

Log of Boring VRW-3



LEGEND:



PROJECT NO.: 29.11

DRAWN BY: DD 11/15/93

APPROVED BY: JB 12/14/13

BACE Environmental
A Division Of
Brunsing Associates, Inc.

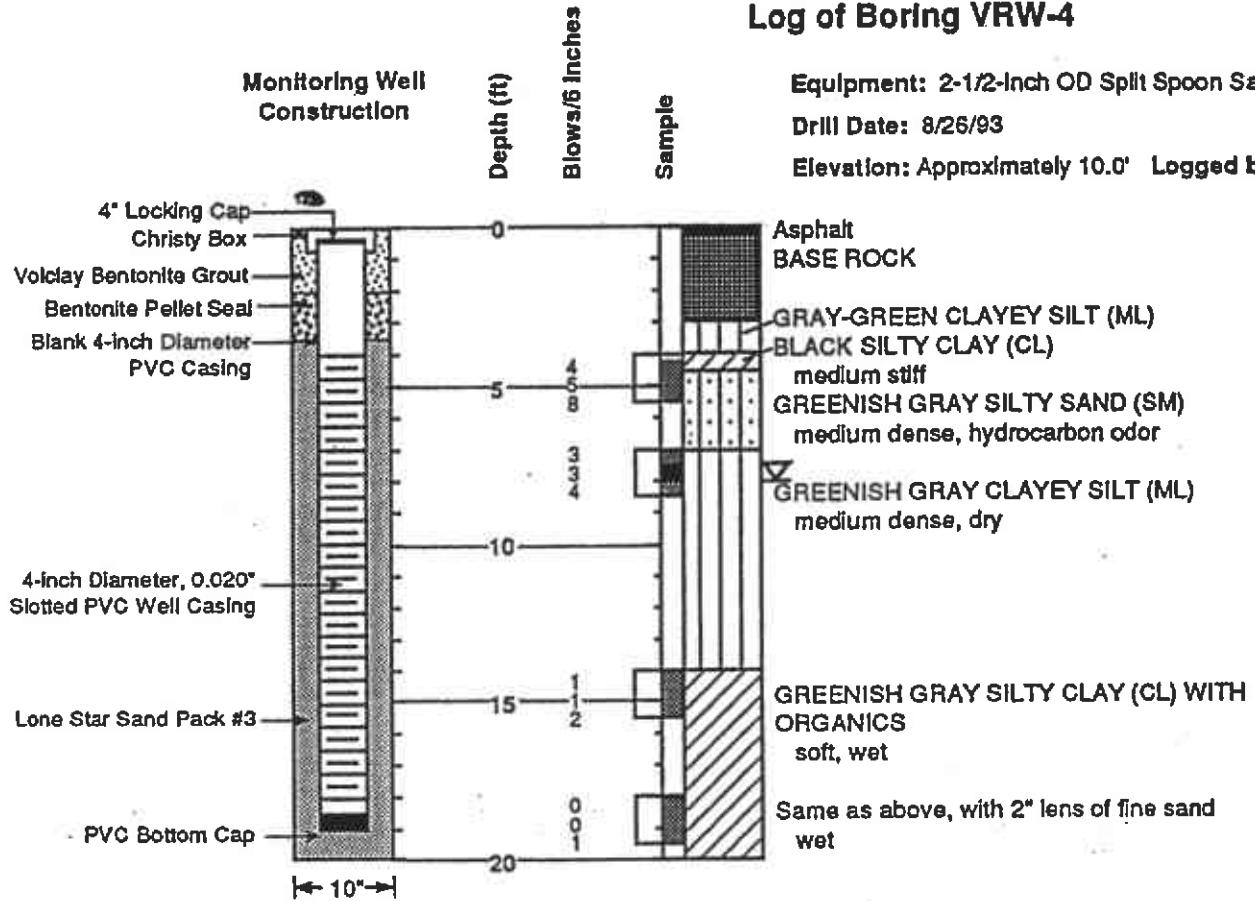
PLATE 3
LOG AND WELL
CONSTRUCTION DETAILS, VRW-3
 Pacific Supply
 1735 24th Street
 Oakland, California

Log of Boring VRW-4

Equipment: 2-1/2-Inch OD Split Spoon Sampler

Drill Date: 8/26/93

Elevation: Approximately 10.0' Logged by: JB



LEGEND:

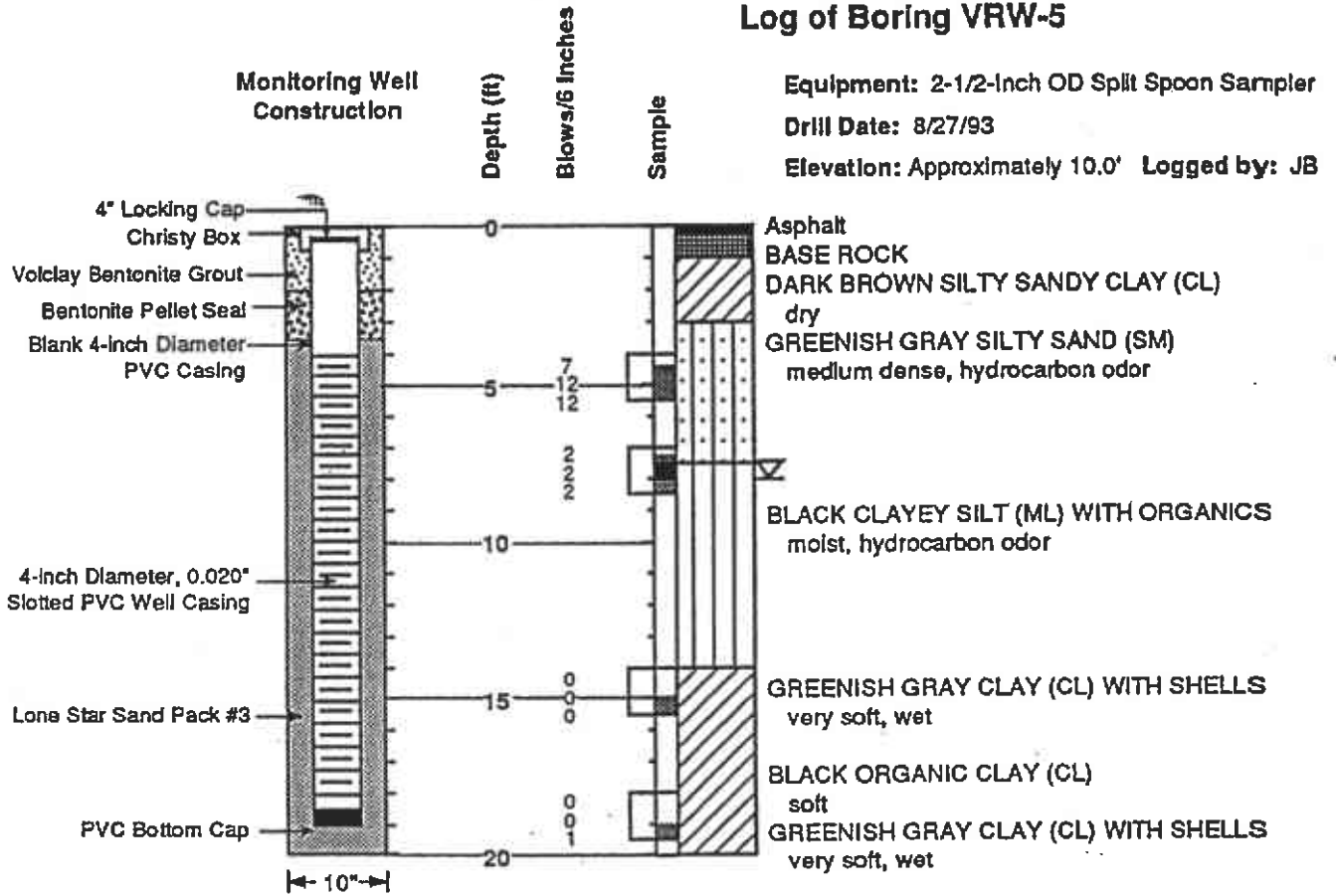
- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 28.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JB	12/14/93

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE 4
LOG AND WELL
CONSTRUCTION DETAILS, VRW-4
Pacific Supply
1735 24th Street
Oakland, California

Log of Boring VRW-5



LEGEND:

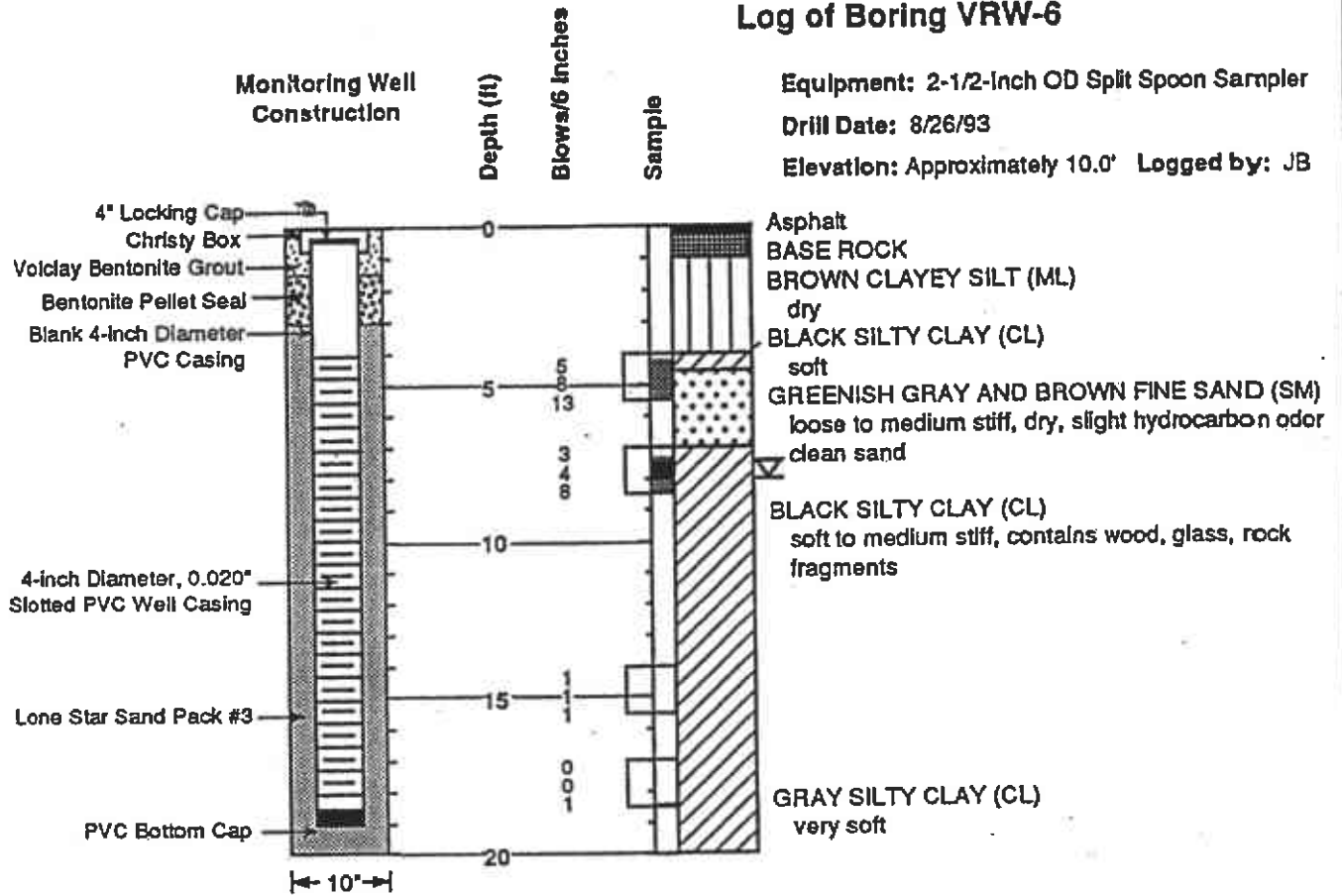
- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JG	12/14/93

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE 5
LOG AND WELL
CONSTRUCTION DETAILS, VRW-5
Pacific Supply
1735 24th Street
Oakland, California

Log of Boring VRW-6



LEGEND:

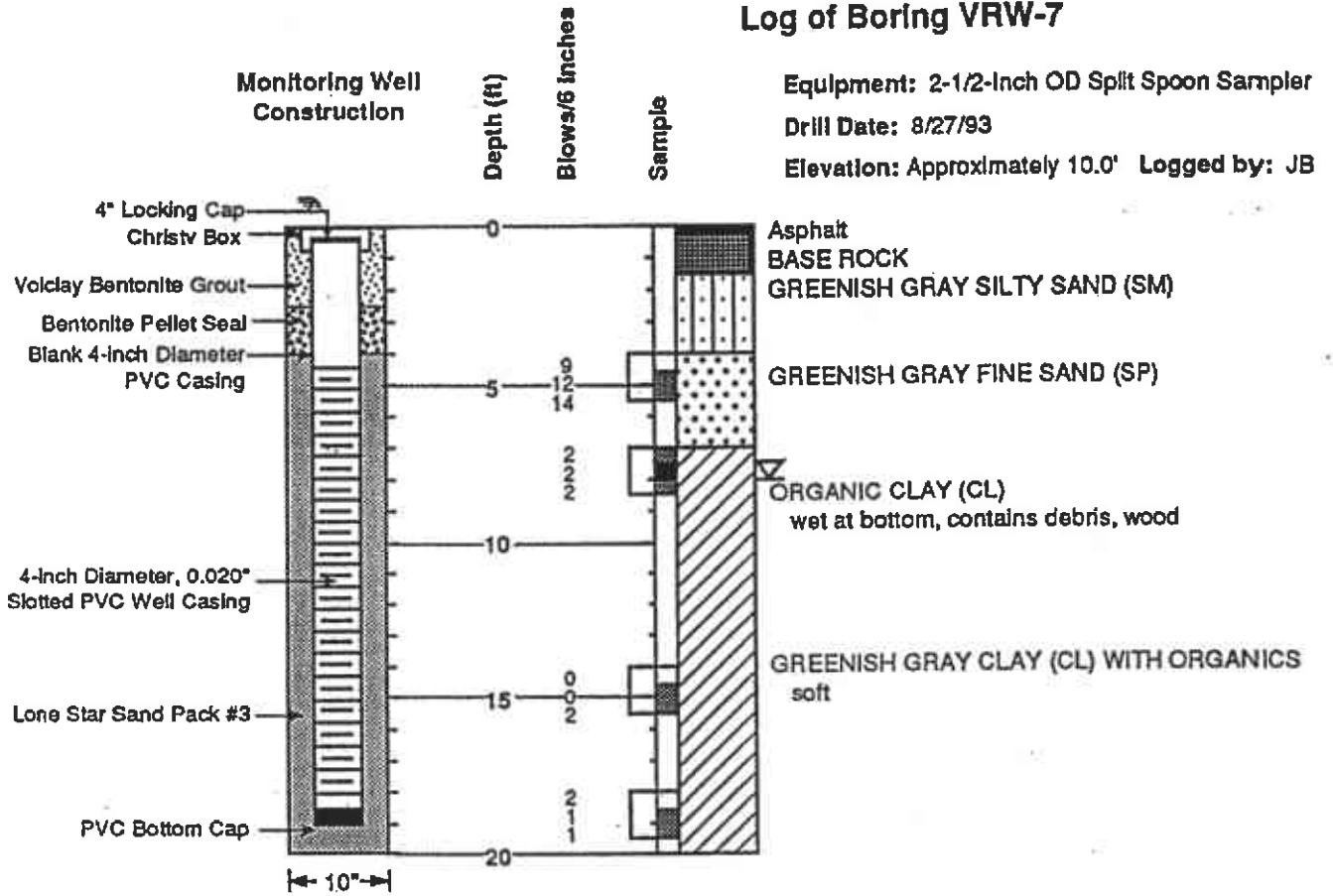
- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JG	12/14/93

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE 6
LOG AND WELL
CONSTRUCTION DETAILS, VRW-6
 Pacific Supply
 1735 24th Street
 Oakland, California

Log of Boring VRW-7



LEGEND:

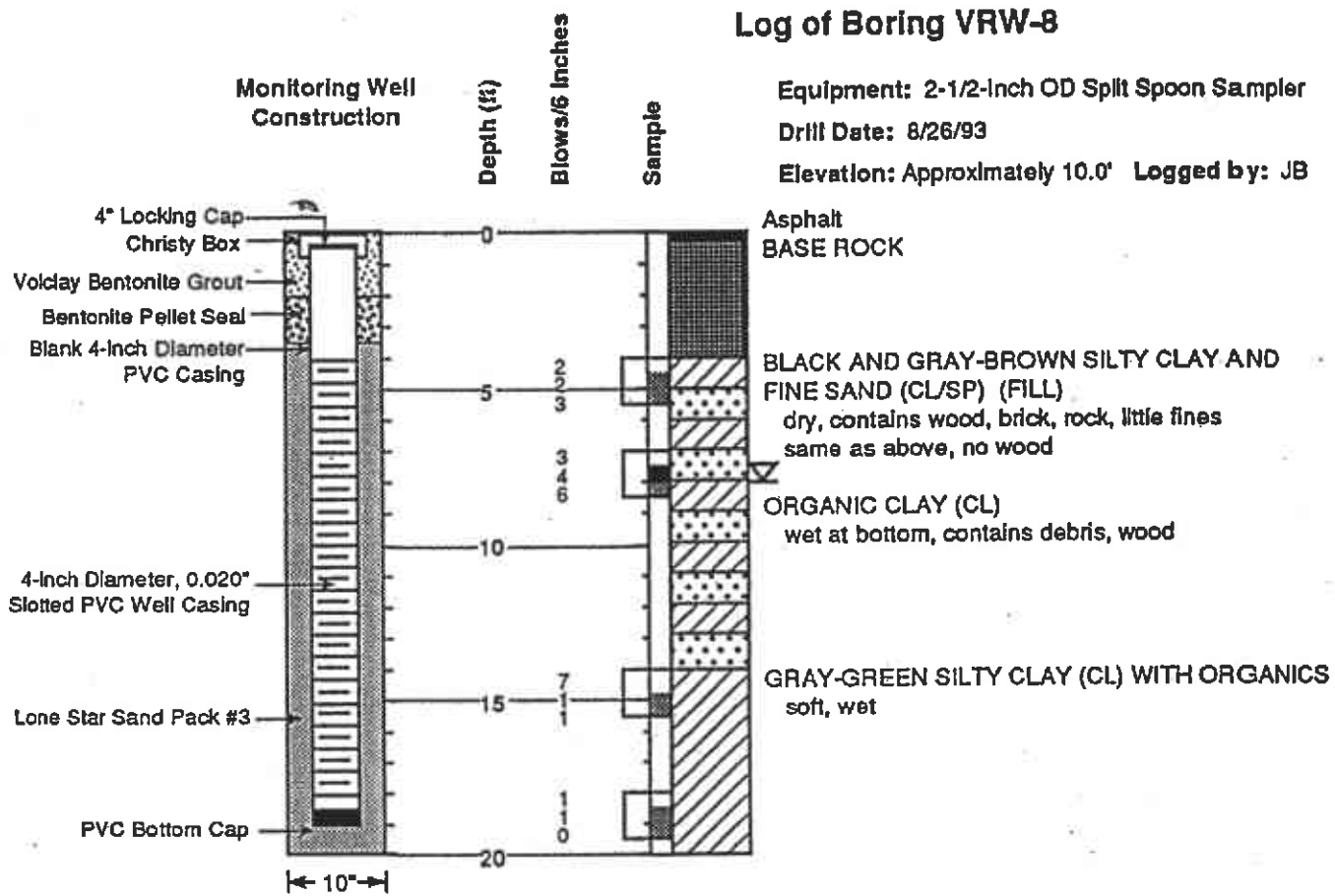
- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JB	12/14/93

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE 7
LOG AND WELL
CONSTRUCTION DETAILS, VRW-7
 Pacific Supply
 1735 24th Street
 Oakland, California

Log of Boring VRW-8

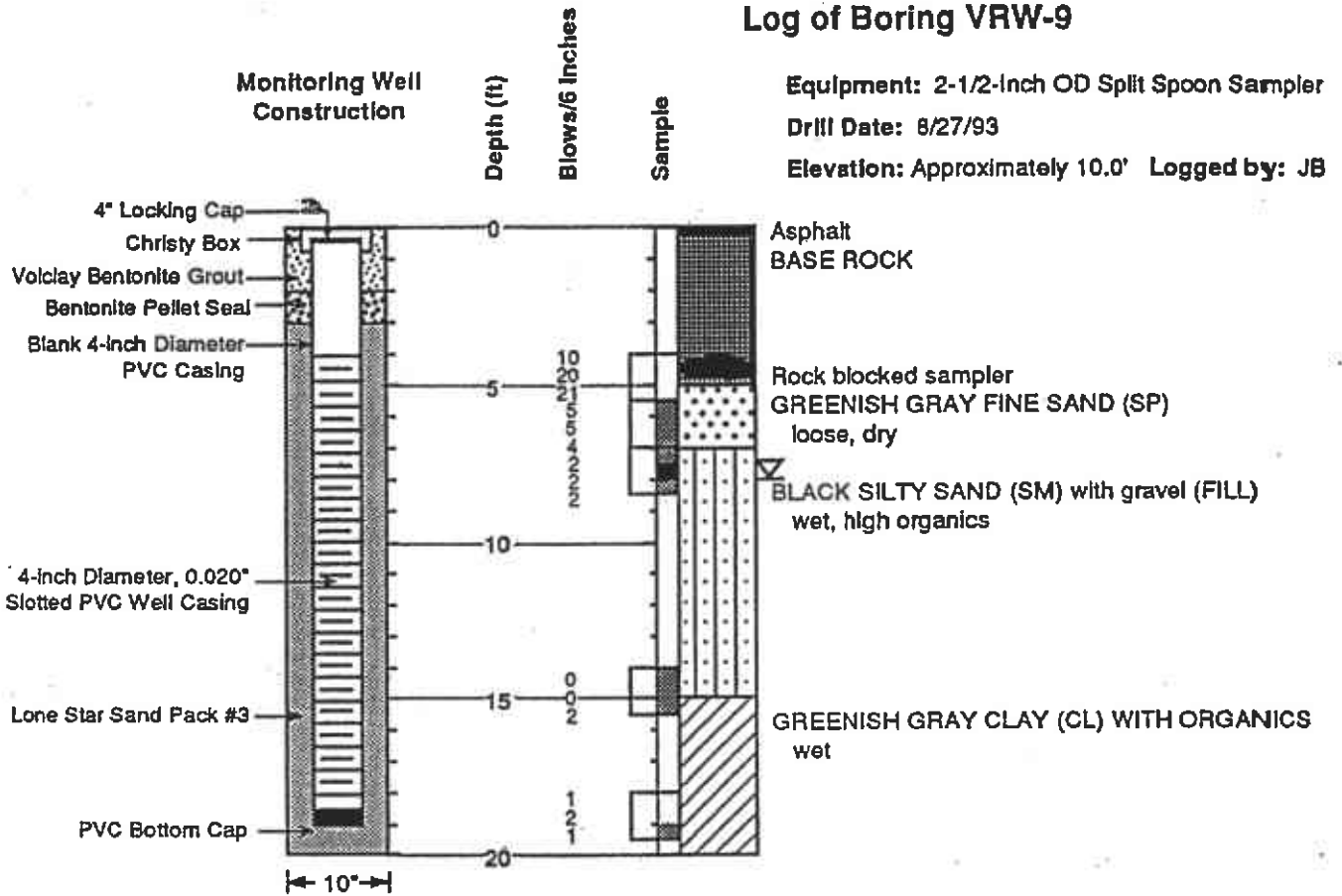


LEGEND:

- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11			BACE Environmental <i>A Division Of</i> Brunsing Associates, Inc.	PLATE 8 LOG AND WELL CONSTRUCTION DETAILS, VRW-8 Pacific Supply 1735 24th Street Oakland, California
DRAWN BY:	DD	11/15/93		
APPROVED BY:	JB	12/14/93		

Log of Boring VRW-9



LEGEND:

- Length Of Drive
- Sample Recovered
- Sample Retained

PROJECT NO.: 29.11		
DRAWN BY:	DD	11/15/93
APPROVED BY:	JB	12/14/93

BACE Environmental
A Division Of
Brunsing Associates, Inc.

PLATE 9
LOG AND WELL
CONSTRUCTION DETAILS, VRW-9
 Pacific Supply
 1735 24th Street
 Oakland, California

APPENDIX C

Analytical Report From Drilling Activities





Laboratory Report Project Overview

EDF 1.2a

Laboratory:	Bace Analytical, Windsor, CA
Lab Report Number:	4368
Project Name:	PACIFIC SUPPLY
Work Order Number:	29.32
Control Sheet Number:	NA

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Labiocfl	Run	Sub
4368	CB1-7-8'	4368-1	SO	CS	CATPH-G	SW5035	07/21/200	07/26/200	07/26/200	07262004C	7	
							4	4	4			
4368	CB1-7-8'	4368-1	SO	CS	SW8021F	SW5035	07/21/200	07/26/200	07/26/200	07262004C	7	
							4	4	4			
4368	CB10-7-8'	4368-10	SO	CS	CATPH-G	SW5035	07/21/200	07/26/200	07/26/200	07262004C	15	
							4	4	4			
4368	CB10-7-8'	4368-10	SO	CS	SW8021F	SW5035	07/21/200	07/26/200	07/26/200	07262004C	15	
							4	4	4			
4368	CB2-6.5'	4368-2	SO	CS	CATPH-G	SW5035	07/21/200	07/26/200	07/26/200	07262004C	14	
							4	4	4			
4368	CB2-6.5'	4368-2	SO	CS	SW8021F	SW5035	07/21/200	07/26/200	07/26/200	07262004C	14	
							4	4	4			
4368	CB3-8-10'	4368-3	W	CS	CATPH-G	SW5030B	07/21/200	07/26/200	07/26/200	07262004B	16	
							4	4	4			
4368	CB3-8-10'	4368-3	W	CS	SW8021F	SW5030B	07/21/200	07/26/200	07/26/200	07262004B	16	
							4	4	4			
4368	CB4-8'	4368-4	SO	CS	CATPH-G	SW5035	07/21/200	07/26/200	07/26/200	07262004C	5	
							4	4	4			
4368	CB4-8'	4368-4	SO	CS	SW8021F	SW5035	07/21/200	07/26/200	07/26/200	07262004C	5	
							4	4	4			
4368	CB5-7.0'	4368-5	SO	CS	CATPH-G	SW5035	07/21/200	07/26/200	07/26/200	07262004C	13	
							4	4	4			
4368	CB5-7.0'	4368-5	SO	CS	SW8021F	SW5035	07/21/200	07/26/200	07/26/200	07262004C	13	
							4	4	4			
4368	CB6-7.5'	4368-6	SO	CS	CATPH-G	SW5035	07/21/200	07/26/200	07/26/200	07262004C	9	
							4	4	4			
4368	CB6-7.5'	4368-6	SO	CS	SW8021F	SW5035	07/21/200	07/26/200	07/26/200	07262004C	9	
							4	4	4			
4368	CB7-7.5'	4368-7	SO	CS	CATPH-G	SW5035	07/21/200	07/26/200	07/26/200	07262004C	6	
							4	4	4			
4368	CB7-7.5'	4368-7	SO	CS	SW8021F	SW5035	07/21/200	07/26/200	07/26/200	07262004C	6	
							4	4	4			
4368	CB8-8.0'	4368-8	SO	CS	CATPH-G	SW5035	07/21/200	07/26/200	07/26/200	07262004C	11	
							4	4	4			
4368	CB8-8.0'	4368-8	SO	CS	SW8021F	SW5035	07/21/200	07/26/200	07/26/200	07262004C	11	
							4	4	4			
4368	CB9-7.5'	4368-9	SO	CS	CATPH-G	SW5035	07/21/200	07/26/200	07/26/200	07262004C	3	
							4	4	4			
4368	CB9-7.5'	4368-9	SO	CS	SW8021F	SW5035	07/21/200	07/26/200	07/26/200	07262004C	3	

08/24/200

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run	Sub
							4	4	4			
		072604MS	W	NC	CATPH-G	SW5030B	//	07/26/200	07/26/200	07262004B	1	
								4	4			
		072604MS	W	NC	SW8021F	SW5030B	//	07/26/200	07/26/200	07262004B	1	
								4	4			
		4368MB	SO	LB1	SW8021F	SW5035	//	07/26/200	07/26/200	07262004C	1	
								4	4			
		4368MB	W	LB1	CATPH-G	SW5030B	//	07/26/200	07/26/200	07262004B	1	
								4	4			
		4368MB	W	LB1	SW8021F	SW5030B	//	07/26/200	07/26/200	07262004B	1	
								4	4			
		4368MS	SO	LB1	CATPH-G	SW5035	//	07/26/200	07/26/200	07262004C	1	
								4	4			
		4368MS	SO	MS1	CATPH-G	SW5035	//	07/26/200	07/26/200	07262004C	17	
								4	4			
		4368MS	SO	MS1	SW8021F	SW5035	//	07/26/200	07/26/200	07262004C	17	
								4	4			
		4368MS	W	MS1	CATPH-G	SW5030B	//	07/26/200	07/26/200	07262004B	21	
								4	4			
		4368MS	W	MS1	SW8021F	SW5030B	//	07/26/200	07/26/200	07262004B	23	
								4	4			
		4368SD	SO	SD1	CATPH-G	SW5035	//	07/26/200	07/26/200	07262004C	18	
								4	4			
		4368SD	SO	SD1	SW8021F	SW5035	//	07/26/200	07/26/200	07262004C	18	
								4	4			
		4368SD	W	SD1	CATPH-G	SW5030B	//	07/26/200	07/26/200	07262004B	22	
								4	4			
		4368SD	W	SD1	SW8021F	SW5030B	//	07/26/200	07/26/200	07262004B	24	
								4	4			

Project Name: PACIFIC SUPPLY		Analysis: CA LUFT Method for Gasoline Range Organics				
Project No: 29.32		Method: CATPH-G				
		Prep Meth: SW5035				
Field ID: CB1-7-8'	Lab Samp ID: 4368-1					
Descr/Location: CB1-7-8'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1000	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.5	1.0 PQL		ND	MG/KG	1

Approved by: William H. Potts

Date: 8/24/04

Project Name: PACIFIC SUPPLY	Analysis: CA LUFT Method for Gasoline Range Organics
Project No: 29.32	Method: CATPH-G
	Prep Meth: SW5035
Field ID: CB10-7-8'	Lab Samp ID: 4368-10
Descr/Location: CB10-7-8'	Rec'd Date: 07/23/2004
Sample Date: 07/21/2004	Prep Date: 07/26/2004
Sample Time: 1347	Analysis Date: 07/26/2004
Matrix: Soil	QC Batch: 07262004C
Basis: Wet	Notes:

Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.5	1.0	PQL	ND	MG/KG	1

Approved by: _____

William H. Potts

Date: _____

8/24/04

Project Name: PACIFIC SUPPLY		Analysis: CA LUFT Method for Gasoline Range Organics				
Project No: 29.32		Method: CATPH-G				
		Prep Meth: SW5035				
Field ID: CB2-6.5'	Lab Samp ID: 4368-2					
Descr/Location: CB2-6.5'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1022	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	1.	2.0	PQL	9.3	MG/KG	2

Approved by: William H. Gatz

Date: 8/24/04

Lab Report No.: 4368 Date: 08/23/2004

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Project Name: PACIFIC SUPPLY		Analysis: CA LUFT Method for Gasoline Range Organics				
Project No: 29.32		Method: CATPH-G				
		Prep Meth: SW5035				
Field ID: CB4-8'	Lab Samp ID: 4368-4					
Descr/Location: CB4-8'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1120	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	300.	500.	PQL	1700.	MG/KG	500

Approved by: William H. Pate

Date: 8/24/04

Lab Report No.: 4368 Date: 08/23/2004

Page: 5

Project Name: PACIFIC SUPPLY		Analysis: CA LUFT Method for Gasoline Range Organics				
Project No: 29.32		Method: CATPH-G				
		Prep Meth: SW5035				
Field ID: CB5-7.0'	Lab Samp ID: 4368-5					
Descr/Location: CB5-7.0'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1137	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.5	1.0 PQL		ND	MG/KG	1

Approved by:

William H. Gatz

Date:

8/24/04

Lab Report No.: 4368 Date: 08/23/2004

Page: 6

Project Name: PACIFIC SUPPLY	Analysis: CA LUFT Method for Gasoline Range Organics
Project No: 29.32	Method: CATPH-G
	Prep Meth: SW5035
Field ID: CB6-7.5'	Lab Samp ID: 4368-6
Descr/Location: CB6-7.5'	Rec'd Date: 07/23/2004
Sample Date: 07/21/2004	Prep Date: 07/26/2004
Sample Time: 1217	Analysis Date: 07/26/2004
Matrix: Soil	QC Batch: 07262004C
Basis: Wet	Notes:

Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	100.	250.	PQL	430.	MG/KG	250

Approved by: William R. Gatz

Date: 8/24/04

Lab Report No.: 4368 Date: 08/23/2004

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Project Name: PACIFIC SUPPLY		Analysis: CA LUFT Method for Gasoline Range Organics				
Project No: 29.32		Method: CATPH-G				
		Prep Meth: SW5035				
Field ID: CB7-7.5'	Lab Samp ID: 4368-7					
Descr/Location: CB7-7.5'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1228	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	50.	100.	PQL	170.	MG/KG	100

Approved by: William H. Gatz

Date: 8/24/04

Project Name: PACIFIC SUPPLY		Analysis: CA LUFT Method for Gasoline Range Organics				
Project No: 29.32		Method: CATPH-G				
		Prep Meth: SW5035				
Field ID: CB8-8.0'	Lab Samp ID: 4368-8					
Descr/Location: CB8-8.0'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1250	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	300.	500.	PQL	5700.	MG/KG	500

Approved by: _____

William H. Gatz

Date: _____

8/24/04

Project Name: PACIFIC SUPPLY	Analysis: CA LUFT Method for Gasoline Range Organics					
Project No: 29.32	Method: CATPH-G					
	Prep Meth: SW5035					
Field ID: CB9-7.5'	Lab Samp ID: 4368-9					
Descr/Location: CB9-7.5'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1305	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	100.	200.	PQL	540.	MG/KG	200

Approved by: William H. Pate

Date: 8/24/04

Project Name: PACIFIC SUPPLY	Analysis: Volatiles by GC/Gasoline Range Organics					
Project No: 29.32	Method: SW8021F					
	Prep Meth: SW5035					
Field ID: CB1-7-8'	Lab Samp ID: 4368-1					
Descr/Location: CB1-7-8'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1000	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	1.8	5.0	PQL	ND	UG/KG	1
Toluene	2.0	5.0	PQL	ND	UG/KG	1
Ethylbenzene	2.0	5.0	PQL	ND	UG/KG	1
Xylenes	2.0	5.0	PQL	ND	UG/KG	1
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130	SLSA	90%		1

Approved by: William H. Pate

Date: 8/24/04

Project Name: PACIFIC SUPPLY	Analysis: Volatiles by GC/Gasoline Range Organics					
Project No: 29.32	Method: SW8021F					
	Prep Meth: SW5035					
Field ID: CB10-7-8'	Lab Samp ID: 4368-10					
Descr/Location: CB10-7-8'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1347	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	1.8	5.0	PQL	ND	UG/KG	1
Toluene	2.0	5.0	PQL	ND	UG/KG	1
Ethylbenzene	2.0	5.0	PQL	ND	UG/KG	1
Xylenes	2.0	5.0	PQL	ND	UG/KG	1
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130	SLSA	89%		1

Approved by: William H. Potts

Date: 8/24/04

Project Name: PACIFIC SUPPLY		Analysis: Volatiles by GC/Gasoline Range Organics				
Project No: 29.32		Method: SW8021F				
		Prep Meth: SW5035				
Field ID: CB2-6.5'	Lab Samp ID: 4368-2					
Descr/Location: CB2-6.5'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1022	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	3.6	10.	PQL	ND	UG/KG	2
Toluene	4.0	10.	PQL	DX	UG/KG	2
Ethylbenzene	4.0	10.	PQL	ND	UG/KG	2
Xylenes	4.0	10.	PQL	13.	UG/KG	2
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130	SLSA	95%		1
DX: Value < lowest standard (MQL), but > than MDL						

Approved by: William H. Potts

Date: 8/24/04

Project Name: PACIFIC SUPPLY	Analysis: Volatiles by GC/Gasoline Range Organics					
Project No: 29.32	Method: SW8021F					
	Prep Meth: SW5035					
Field ID: CB4-8'	Lab Samp ID: 4368-4					
Descr/Location: CB4-8'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1120	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	900.	2500.	PQL	ND	UG/KG	500
Toluene	1000.	2500.	PQL	7900.	UG/KG	500
Ethylbenzene	1000.	2500.	PQL	25000.	UG/KG	500
Xylenes	1000.	2500.	PQL	37000.	UG/KG	500
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130	SLSA	117%		1

Approved by: William H. Gotsch Date: 8/24/04

Project Name: PACIFIC SUPPLY	Analysis: Volatiles by GC/Gasoline Range Organics					
Project No: 29.32	Method: SW8021F					
	Prep Meth: SW5035					
Field ID: CB5-7.0'	Lab Samp ID: 4368-5					
Descr/Location: CB5-7.0'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1137	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	1.8	5.0	PQL	ND	UG/KG	1
Toluene	2.0	5.0	PQL	ND	UG/KG	1
Ethylbenzene	2.0	5.0	PQL	ND	UG/KG	1
Xylenes	2.0	5.0	PQL	5.1	UG/KG	1
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130	SLSA	78%		1

Approved by: _____

William H. Gotsch

Date: _____

8/24/04

Project Name: PACIFIC SUPPLY		Analysis: Volatiles by GC/Gasoline Range Organics	
Project No: 29.32		Method: SW8021F	
		Prep Meth: SW5035	
Field ID: CB6-7.5'	Lab Samp ID: 4368-6		
Descr/Location: CB6-7.5'	Rec'd Date: 07/23/2004		
Sample Date: 07/21/2004	Prep Date: 07/26/2004		
Sample Time: 1217	Analysis Date: 07/26/2004		
Matrix: Soil	QC Batch: 07262004C		
Basis: Wet	Notes:		

Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	450.	1300.	PQL	ND	UG/KG	250
Toluene	500.	1300.	PQL	1700.	UG/KG	250
Ethylbenzene	500.	1300.	PQL	1600.	UG/KG	250
Xylenes	500.	1300.	PQL	3000.	UG/KG	250

SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130	SLSA		102%	1

Approved by: William H. Pate

Date: 8/24/04

Project Name: PACIFIC SUPPLY	Analysis: Volatiles by GC/Gasoline Range Organics					
Project No: 29.32	Method: SW8021F					
	Prep Meth: SW5035					
Field ID: CB7-7.5'	Lab Samp ID: 4368-7					
Descr/Location: CB7-7.5'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1228	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	180.	500.	PQL	ND	UG/KG	100
Toluene	200.	500.	PQL	660.	UG/KG	100
Ethylbenzene	200.	500.	PQL	ND	UG/KG	100
Xylenes	200.	500.	PQL	1200.	UG/KG	100
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130	SLSA	94%		1

Approved by:

William H. Gotsch

Date:

8/24/04

Project Name: PACIFIC SUPPLY	Analysis: Volatiles by GC/Gasoline Range Organics					
Project No: 29.32	Method: SW8021F					
	Prep Meth: SW5035					
Field ID: CB8-8.0'	Lab Samp ID: 4368-8					
Descr/Location: CB8-8.0'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1250	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	900.	2500.	PQL	ND	UG/KG	500
Toluene	1000.	2500.	PQL	54000.	UG/KG	500
Ethylbenzene	1000.	2500.	PQL	18000.	UG/KG	500
Xylenes	1000.	2500.	PQL	53000.	UG/KG	500
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130	SLSA	81%		1

Approved by: William H. Gatz

Date: 8/24/04

Project Name: PACIFIC SUPPLY	Analysis: Volatiles by GC/Gasoline Range Organics					
Project No: 29.32	Method: SW8021F					
	Prep Meth: SW5035					
Field ID: CB9-7.5'	Lab Samp ID: 4368-9					
Descr/Location: CB9-7.5'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1305	Analysis Date: 07/26/2004					
Matrix: Soil	QC Batch: 07262004C					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	180.	500.	PQL	ND	UG/KG	100
Toluene	200.	500.	PQL	2500.	UG/KG	100
Ethylbenzene	200.	500.	PQL	1300.	UG/KG	100
Xylenes	200.	500.	PQL	4600.	UG/KG	100
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130	SLSA	110%		1

Approved by: William H. Potts

Date: 8/24/04

Project Name: PACIFIC SUPPLY	Analysis: CA LUFT Method for Gasoline Range Organics					
Project No: 29.32	Method: CATPH-G					
	Prep Meth: SW5030B					
Field ID: CB3-8-10'	Lab Samp ID: 4368-3					
Descr/Location: CB3-8-10'	Rec'd Date: 07/23/2004					
Sample Date: 07/21/2004	Prep Date: 07/26/2004					
Sample Time: 1103	Analysis Date: 07/26/2004					
Matrix: Water	QC Batch: 07262004B					
Basis: Wet	Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	1.00	2.50 PQL		23	MG/L	50
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130	SLSA	116%		1

Approved by: William H. Gatz Date: 8/24/04

Project Name: PACIFIC SUPPLY	Analysis: Volatiles by GC/Gasoline Range Organics
Project No: 29.32	Method: SW8021F
	Prep Meth: SW5030B

Field ID: CB3-8-10'	Lab Samp ID: 4368-3
Descr/Location: CB3-8-10'	Rec'd Date: 07/23/2004
Sample Date: 07/21/2004	Prep Date: 07/26/2004
Sample Time: 1103	Analysis Date: 07/26/2004
Matrix: Water	QC Batch: 07262004B
Basis: Wet	Notes:

Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	10.	30.	PQL	1100.	UG/L	50
Toluene	10.	30.	PQL	100.	UG/L	50
Ethylbenzene	10.	30.	PQL	590.	UG/L	50
Xylenes	10.	30.	PQL	2500.	UG/L	50

Approved by: _____

William H. Potts

Date: _____

8/24/04

QA/QC Report Method Blank Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4368 Date: 08/23/2004

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QC Batch: 07262004B Matrix: Water Lab Samp ID: 4368MB Analysis Date: 07/26/2004 Basis: Not Filtered	Analysis: CA LUFT Method for Gasoline Range Method: CATPH-G Prep Meth: SW5030B Prep Date: 07/26/2004 Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.020	0.050 PQL		ND	MG/L	1
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130 SLSA		94%		1

QA/QC Report Method Blank Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4368 Date: 08/23/2004

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QC Batch: 07262004B	Analysis: Volatiles by GC/Gasoline Range Organics
Matrix: Water	Method: SW8021F
Lab Samp ID: 4368MB	Prep Meth: SW5030B
Analysis Date: 07/26/2004	Prep Date: 07/26/2004
Basis: Not Filtered	Notes:

Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	0.2	0.5 PQL		ND	UG/L	1
Toluene	0.2	0.5 PQL		ND	UG/L	1
Ethylbenzene	0.2	0.5 PQL		ND	UG/L	1
Xylenes	0.2	0.5 PQL		ND	UG/L	1

QA/QC Report
Matrix Spike/Duplicate Matrix Spike Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4368 Date: 08/23/2004

Page: 23

QC Batch: 07262004B Matrix: Water Lab Samp ID: 4368MS Basis: Not Filtered	Project Name: Lab Generated or Non COE Sample Project No.: Lab Generated or Non COE Sample Field ID: Lab Generated or Non COE Sample Lab Ref ID: 072604MS
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Analyte	Analysis Method	Spike Level		Sample Result	Spike Result		Units	% Recoveries			Acceptance Criteria		
		MS	DMS		MS	DMS		MS	DMS	RPD	% Rec	MSA	RPD
Gasoline Range Organics (C5-C12)	CATPH-G	1.00	1.00	ND	0.91	0.98	MG/L	91.0	98.0	7.4	130-70	MSA	20MSP
Benzene	SW8021F	40.0	40.0	ND	39.1	39.8	UG/L	97.8	99.5	1.7	125-75	MSA	20MSP
Ethylbenzene	SW8021F	40.0	40.0	ND	36.0	38.2	UG/L	90.0	95.5	5.9	125-75	MSA	20MSP
Toluene	SW8021F	40.0	40.0	ND	43.7	40.3	UG/L	109	101	7.6	125-75	MSA	20MSP
Xylenes	SW8021F	120.	120.	ND	115.	121.	UG/L	95.8	101	5.3	125-75	MSA	20MSP
Trifluorotoluene	CATPH-G	100.	100.	94.	93.	93.	PERCENT	93.0	93.0	0.00	130-70	SLSA	20SLSP

QA/QC Report Method Blank Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4368 Date: 08/23/2004

Page: 24

QC Batch: 07262004C	Analysis: CA LUFT Method for Gasoline Range
Matrix: Soil	Method: CATPH-G
Lab Samp ID: 4368MS	Prep Meth: SW5035
Analysis Date: 07/26/2004	Prep Date: 07/26/2004
Basis: Wet	Notes:

Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Gasoline Range Organics (C5-C12)	0.5	1.0	PQL	ND	MG/KG	1

QA/QC Report Method Blank Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4368 Date: 08/23/2004

Page: 25

QC Batch: 07262004C Matrix: Soil Lab Samp ID: 4368MB Analysis Date: 07/26/2004 Basis: Wet	Analysis: Volatiles by GC/Gasoline Range Organics Method: SW8021F Prep Meth: SW5035 Prep Date: 07/26/2004 Notes:					
Analyte	Det Limit	Rep Limit	Note	Result	Units	Pvc Dil
Benzene	1.8	5.0 PQL		ND	UG/KG	1
Toluene	2.0	5.0 PQL		ND	UG/KG	1
Ethylbenzene	2.0	5.0 PQL		ND	UG/KG	1
Xylenes	2.0	5.0 PQL		ND	UG/KG	1
SURROGATE AND INTERNAL STANDARD RECOVERIES:						
Trifluorotoluene		70-130 SLSA		94%		1

QA/QC Report
Matrix Spike/Duplicate Matrix Spike Summary

Bace Analytical, Windsor, CA

Lab Report No.: 4368 Date: 08/23/2004

Page: 26

QC Batch: 07262004C Matrix: Soil Lab Samp ID: 4368MS Basis: Wet	Project Name: PACIFIC SUPPLY Project No.: 29.32 Field ID: CB1-7-8' Lab Ref ID: 4368-1
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Analyte	Analysis Method	Spike Level		Sample Result	Spike Result		Units	% Recoveries			Acceptance Criteria		
		MS	DMS		MS	DMS		MS	DMS	RPD	% Rec	RPD	
Gasoline Range Organics (C5-C12)	CATPH-G	2.00	2.00	ND	1.80	1.64	MG/KG ww	90.0	82.0	9.3	130-70	MSA	20MSP
Benzene	SW8021F	80.0	80.0	ND	74.4	80.2	UG/KG ww	93.0	100	7.3	130-72	MSA	20MSP
Ethylbenzene	SW8021F	80.0	80.0	ND	68.9	74.1	UG/KG ww	86.1	92.6	7.3	130-72	MSA	20MSP
Toluene	SW8021F	80.0	80.0	ND	73.3	79.1	UG/KG ww	91.6	98.9	7.7	130-72	MSA	20MSP
Xylenes	SW8021F	240.	240.	ND	230.	244.	UG/KG ww	95.8	102	6.3	130-74	MSA	20MSP
Trifluorotoluene	SW8021F	100.	100.	90.	90.	96.	PERCENT ww	90.0	96.0	6.5	130-70	SLSA	20SLSP

Chain-of Custody Form

Project #		Project Name			No. of Containers	Analysis										C.O.C. No.		
L.P. No.		Sampler's Signature				TPH											Remarks:	
Date Sampled	Sample I.D.	Time (24 Hour)	Sample Type															
29.32	Pacific Supply, Inc																11919	Continued from COC 11920
	W. H. H. Coast																	
7/21/04	CB-1 e 3' to 4'	0955	Soil	1														
	CB-1 e 7 to 8'	1000			X													
	CB-2 e 3 to 4'	1020																
	CB-2 e 6.5 to 7.0'	1022			X													
	CB-3 e 6.5'	1050																
	CB-3 e 8 to 10'	1103	Water	7 Uols	X													4 samples. 3 pres w/ organic
	CB-4 e 8.0'	1120	Soil	1	X													
	CB-5 e 7.0'	1137			X													
	CB-6 e 7.5'	1217			X													
	CB-7 e 7.5'	1228			X													
	CB-8 e 8.0'	1250			X													
	CB-9 e 7.5'	1305			X													
	CB-10 e 7 to 8'	1347			X													
	CB-11 e 5.0'	1407																
	CB-11 e 5.5'	1407																
	CB-11 e 6.5'	1412																
	CB-11 e 7.0'	1412																
	CB-12 e 5.0'	1433																
	CB-12 e 7.5'	1435																
Laboratory: BARS					Preservation: A - HCL; B - H2SO4; C - NaOH; D - HNO3; <u>E</u> - Ice; F - (specify)													
Relinquished by: (signed) W. H. H. Coast		Date/Time 7/21/04 1800		Received by: (signed) [Signature]		Date/Time 7/23/04 840		Remarks: Box by 802										
Relinquished by: (signed)		Date/Time		Received by: (signed)		Date/Time												
Relinquished by: (signed)		Date/Time		Received for Laboratory by: (signed)		Date/Time												
													Brusing Associates, Inc. P.O. Box 588 5803 Skylane Blvd., Suite A Windsor, CA 95492 (707) 838-3027 (707) 838-4420 fax					
													Page 1 of 2					

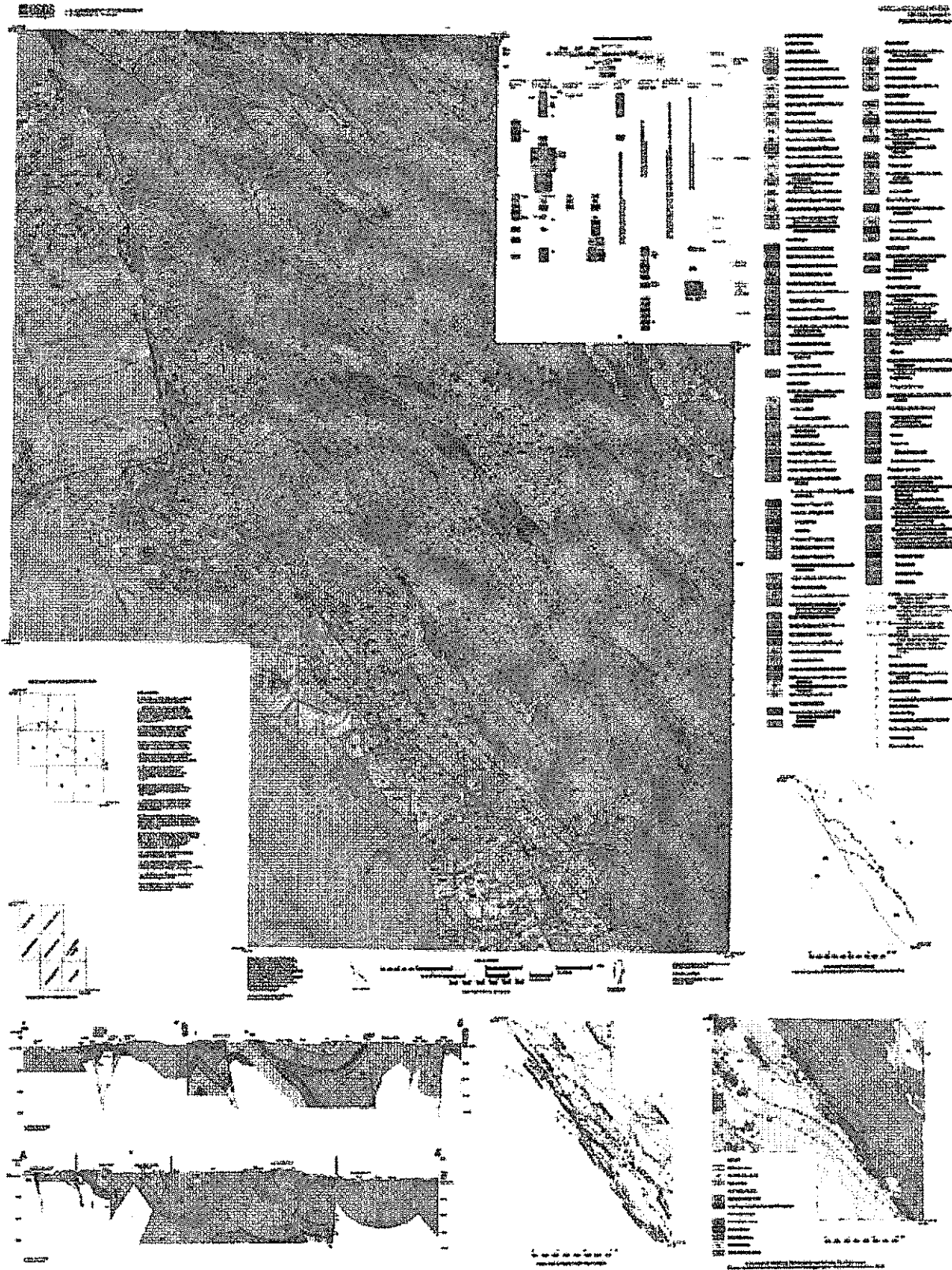
Chain-of Custody Form

Project #	Project Name			No. of Con- tainers	Analysis										C.O.C. No.	11920	
L.P. No.	Sampler's Signature				1											Remarks: Continue from coc 11/9/9	
Date Sampled	Sample I.D.	Time (24 Hour)	Sample Type														
7/23/04	CB-13 e 5.0'	✓ 1501	Soil	1													
	CB-13 e 6.0'	✓ 1503															
	CB-13 e 6.5'	✓ 1503															
	CB-14 e 4.5'	✓ 1530															
	CB-14 e 5.0'	✓ 1530															
	CB-14 e 6.0'	✓ 1538															
	CB-14 e 6.5'	✓ 1538															
Laboratory: BATS					Preservation: A - HCL; B - H2SO4; C - NaOH; D - HNO3; E - Ice; F - (specify)												
Relinquished by: (signed)	Date/Time		Received by:											Remarks: BTEX by 8021		Brunsing Associates, Inc. P.O. Box 588 5803 Skylane Blvd., Suite A Windsor, CA 95492 (707) 838-3027 (707) 838-4420 fax	
Relinquished by: (signed)	Date/Time		Received by: (signed)														
Relinquished by: (signed)	Date/Time		Received for Laboratory by: (signed)														
					Page 2 of 2												

APPENDIX D

**USGS Geologic Map and Map Database
of the Oakland Metropolitan Area, Alameda, Contra Costa, and
San Francisco Counties, California**





GEOLOGIC MAP AND MAP DATABASE OF THE OAKLAND METROPOLITAN AREA, ALAMEDA, CONTRA COSTA, AND SAN FRANCISCO COUNTIES, CALIFORNIA

by
G.W. Cooper
in

Map Symbols
Legend
Scale
North Arrow



- Af= Artificial Fill (Historic)
- Qms= Merritt Sand (Holocene and Pleistocene)
- Qhb= Basin Deposits (Holocene)
- Qmt= Marine Terrace Deposit (Pleistocene)
- Qpaf= Alluvial fan & Fluvial deposits
- Qhl= Natural Levee deposit

Reference: Geologic Map and Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, CA by R.W. Graymer

APPENDIX E

Geotechnical Report





BACE Geotechnical
a division of
Bruning Associates, Inc.
(707) 838-0780

Job No.: W29.32
Appr.:
Date: 01/26/05

**SUMMARY OF FLEXIBLE WALL PERMEABILITY
AND LABORATORY TEST DATA**

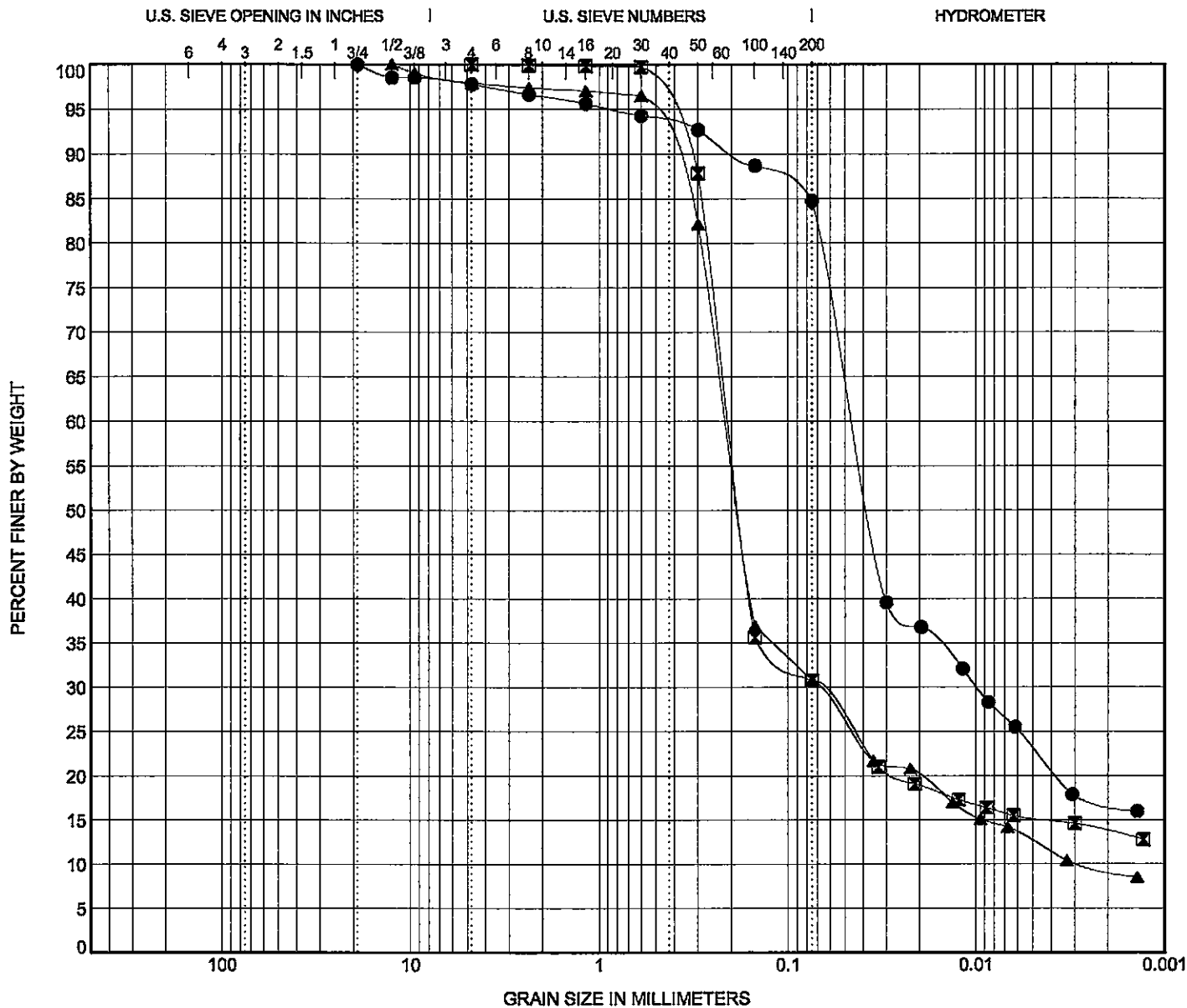
PACIFIC SUPPLY
1734 24th Street
Oakland, California

PLATE
E.1

SAMPLE SOURCE	CLASSIFICATION	DRY DENSITY (pcf)	MOISTURE CONTENT (%)	FINAL MOISTURE CONTENT (%)	(2) PERMEABILITY (cm/sec.)	ORGANIC CONTENT (%)	SPECIFIC GRAVITY (G)	POROSITY (n)
CB-11 @ 5.5 feet	GREEN-BROWN SANDY CLAYEY SILT (ML)	123	5.4	21.3	2.2×10^{-7}	0.4	2.46	0.202
CB-13 @ 6.5 feet	GRAY CLAYEY SILTY SAND (SM)	115	12.6	12.6	3.3×10^{-8}	0.2	2.64	0.301
CB-14 @ 5.0 feet	BROWN CLAYEY SILTY SAND (SM)	122	0.2	17.4	2.9×10^{-6}	0.5	2.45	0.205

NOTES:


(1) Permeability tests performed in accordance with ASTM D-5084.



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

Specimen Identification	Classification	LL	PL	PI	Cc	Cu
● CB-11 5.5 ft	GREEN-BROWN SANDY CLAYEY SILT (ML)					
☒ CB-13 6.5 ft	GRAY CLAYEY SILTY SAND (SM)					
▲ CB-14 5.0 ft	BROWN CLAYEY SILTY SAND (SM)				8.36	77.54

Specimen Identification	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● CB-11 5.5 ft	19	0.045	0.01		2.2	13.0	61.6	23.1
☒ CB-13 6.5 ft	4.75	0.207	0.07		0.0	69.3	15.5	15.2
▲ CB-14 5.0 ft	12.5	0.214	0.07	0.003	2.1	67.1	18.2	12.6

	BACE Geotechnical division of Brunsing Associates, Inc. (707) 838-0780	Job No.: W29.32 Appr.: Date: 12/02/04	GRAIN SIZE DISTRIBUTION PACIFIC SUPPLY 1734 24th Steet Oakland, California	PLATE E.2
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