Atlantic Richfield Company
(a BP affiliated company)

P.O. Box 1257
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26 August 2008

Re: Work Plan for Soil & Water Investigation
Atlantic Richfield Company Station No.608
17601 Hesperian Boulevard
San Lorenzo, California
ACEH Case No.RO0000255

"I declare, that to the best of my knowledge at the present time, that the information and/or recommendations contained in the attached document are true and correct."

Submitted by:

Paul Supple
Environmental Business Manager

Work Plan for Soil & Water Investigation
Atlantic Richfield Company Station No. 608
17601 Hesperian Boulevard, San Lorenzo, California
ACEHS Case No. RO0000255

Prepared for

Mr. Paul Supple
Environmental Business Manager
Atlantic Richfield Company
P.O. Box 1257
San Ramon, California 94583

Prepared by

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

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26 August 2008

Project No. 06-08-606

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BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL

26 August 2008

Project No. 06-08-606

Atlantic Richfield Company
P.O. Box 1257
San Ramon, CA 94583
Submitted via ENFOS

Attn.: Mr. Paul Supple

Re: Work Plan for Soil & Water Investigation, Atlantic Richfield Company Station No.608, 17601 Hesperian Boulevard, San Lorenzo, California; ACEH Case #RO0000255

Dear Mr. Supple:

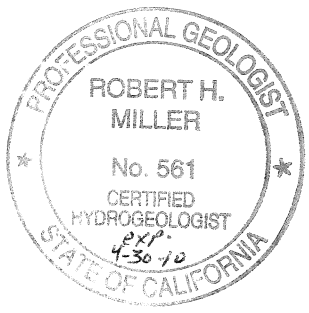
Broadbent & Associates, Inc. (BAI) is pleased to submit this *Work Plan for Soil & Water Investigation* for Atlantic Richfield Company Station No.608 (herein referred to as Station No.608) located at 17601 Hesperian Boulevard, San Lorenzo, California (Site). This work plan was prepared in response to a letter request from the Alameda County Environmental Health Services (ACEH) dated 27 June 2008. Specifically, ACEH technical comments within the 27 June 2008 letter requested a proposal to characterize residual hydrocarbon contamination within soils at the source area, and to determine the status and ground-water quality of the previously identified impacted private wells.

Should you have questions or require additional information, please do not hesitate to contact us at (530) 566-1400.

Sincerely,
BROADBENT & ASSOCIATES, INC.

Thomas A. Venus, P.E.
Senior Engineer

Robert H. Miller, P.G., C.HG.
Principal Hydrogeologist



Enclosures

cc: Mr. Paresh Khatri, Alameda County Environmental Health (Submitted via ACEH ftp site)
Electronic copy uploaded to GeoTracker

WORK PLAN FOR SOIL & WATER INVESTIGATION
Atlantic Richfield Company Station No. 608
17601 Hesperian Boulevard, San Lorenzo, California
ACEH Fuel Leak Case No. RO255

TABLE OF CONTENTS

ATTACHMENTS

APPENDICES

WORK PLAN FOR SOIL & WATER INVESTIGATION
Atlantic Richfield Company Station No. 608
17601 Hesperian Boulevard, San Lorenzo, California
ACEH Fuel Leak Case No. RO255

1.0 INTRODUCTION

On behalf of the Atlantic Richfield Company, RM – a BP affiliated company, Broadbent & Associates, Inc. (BAI) has prepared this Work Plan for Soil & Water Investigation for additional source area characterization at the Atlantic Richfield Company Station No. 608, located at 17601 Hesperian Boulevard, San Lorenzo, California (Site). This work plan was prepared in response to a letter request from the Alameda County Environmental Health Services (ACEH) dated 27 June 2008. A copy of this letter is provided in Appendix A. Specifically, ACEH technical comments within the 27 June 2008 letter requested a proposal to characterize residual hydrocarbon contamination within soils at the source area, and to determine the status and ground-water quality of the previously identified impacted private wells. This work plan includes discussions on the site background, previous investigations and remediation efforts, regional and Site geology and hydrogeology, the status of area private wells, the proposed scope of work, and proposed completion schedule.

2.0 SITE BACKGROUND

The Site is an active ARCO brand gasoline retail outlet located on the southwestern corner of Hesperian Boulevard and Hacienda Avenue in San Lorenzo, California (Drawing 1 and Drawing 2). The land use in the immediate vicinity of the Site is mixed commercial and residential. The Site consists of a service station building and three 12,000-gallon gasoline underground storage tanks (USTs) with associated piping and dispensers and one, used oil tank. The Site is covered with asphalt or concrete surfacing except for planters along the property boundaries containing shrubs and trees.

Subsurface Investigations

In January 1985, EMCON Associates (EMCON) drilled four on-site exploratory soil borings (A-A through A-D), installed one ground-water monitoring well (A-1), and collected soil samples for laboratory analysis as part of a pre-tank replacement investigation. Soil samples collected from borings drilled by EMCON, located adjacent to the UST complex, at depths ranging from 5.5 to 14 feet below ground surface (bgs), contained total volatile hydrocarbons calculated as gasoline (TVH-g) at concentrations ranging from 880 milligrams per kilogram (mg/kg) to 2,800 mg/kg. Two soil samples collected at depths of 8.5 and 12 feet bgs from a boring located adjacent to the used oil tank contained concentrations of oil and grease at 10,000 mg/kg and 9,500 mg/kg, respectively. TVH-g and Benzene concentrations of 32,000 micrograms per liter (µg/L) and 1,000 µg/L, respectively, were detected in the ground-water sample collected from well A-1.

In January 1988, Applied GeoSystems (AGS) drilled four on-site exploratory soil borings (B-1 through B-4), converted two of the borings (B-1 and B-2) to ground-water monitoring wells (MW-1 and MW-5, respectively), and collected soil samples for laboratory analysis. During field activities, AGS also discovered two additional, undocumented on-site wells and designated them as wells MW-3 and MW-4. Soil samples collected at depths of 5 to 11 feet bgs from borings drilled by AGS near the former UST complex contained TVH-g at concentrations

ranging from non-detectable levels to 10 mg/kg. TVH-g and total oil and grease were not detected above laboratory reporting limits in the soil sample collected from the boring for well MW-1 at a depth of 11 feet bgs.

In February 1989, Pacific Environmental Group (Pacific) conducted a soil gas survey at the Site. Nineteen soil gas probes were installed on and off-site at depth intervals ranging from seven to eight feet bgs and 10 to 11 feet bgs. Total hydrocarbons ranging from non-detectable levels to 130 parts per million (ppm) were reported from soil vapors collected from the probes. Concentrations of Benzene ranged from non-detectable levels to 390 ppm. The highest concentrations were observed in the northwest portion of the Site, extending off-site towards the west.

In November 1989, Pacific performed aquifer testing at the Site. A step discharge test was conducted in a previously installed eight inch diameter, corrugated steel cased well (MW-6/E-1). Based on the results of the step discharge test, it was estimated that the aquifer underlying the Site has a specific capacity of approximately 2.45 gallons per minute per foot (gpm/ft) and could sustain a yield of 17 gallons per minute (gpm) with 7 feet of drawdown. These values were approximate since well construction details were not known.

In July 1990, Pacific abandoned the undocumented on-site wells MW-3, MW-4, and MW-6/E-1. Between March 1990 and November 1991, Pacific installed the following wells: on-site ground-water extraction well E-1A (MW-12), on-site ground-water monitoring wells MW-7 and MW-13, and offsite ground-water monitoring wells MW-8 through MW-11, and MW-14 through MW-23. Soil samples were collected from the borings for wells MW-8 and MW-9 and submitted for laboratory analysis. Concentrations of Total Petroleum Hydrocarbons in the Gasoline Range (TPH-g) were below laboratory detection limits in the soil samples collected from the borings for wells MW-8 and MW-9 at depths of 11.5 and 10.5 feet bgs, respectively. Historic soil and ground-water data are provided in Appendix B.

On 26 March 1992, Gettler-Ryan, Inc. (GR) and EA Engineering, Science, and Technology, Inc. (EA) performed services during closure of an oil-water separator/clarifier (clarifier) located at the Site. The clarifier was formerly located within the service bay of the station building. Four soil samples were collected during the closure of the clarifier, and consisted of a concrete sample, concrete/soil interface sample, and soil samples from two and five feet bgs. Total recoverable petroleum hydrocarbons were detected in the concrete, concrete/soil interface and two foot samples at concentrations of 3,000 mg/kg, 1,000 mg/kg, and 3,300 mg/kg, respectively. Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), Toxicity Characteristic Leaching Procedures (TCLP – volatiles, metals, and semi-volatiles), and California Assessment Metals (CAM 17 metals) were not detected above laboratory reporting limits in the analyzed soil samples.

UST and Product Line Replacement Activities

In June 1988, four USTs and one used oil tank were removed and replaced at the Site. Pacific collected soil samples beneath the USTs and used oil tank and from each side wall of the excavations. In addition, three ground-water samples were collected from beneath the gasoline USTs. During tank removal activities, wells MW-1 and MW-2 were destroyed and another undocumented on-site ground-water monitoring well was found and designated well MW-6 and

later as well E-1. Three vadose monitoring wells (V-1 through V-3) were installed during tank replacement activities at the Site.

During tank removal activities, soil samples collected from beneath the USTs at depths ranging from 12 to 15 feet bgs contained TPH-g at concentrations ranging from 7.0 mg/kg to 2,800 mg/kg. Side wall soil samples collected each side of the UST excavation, at a depth of 8 feet bgs, contained TPH-g concentrations ranging from non-detectable to 350 mg/kg. Concentrations of TPH-g and Benzene in ground-water samples collected from beneath the USTs ranged from 8,200 µg/L to 22,000 µg/L, and 440 µg/L to 1,900 µg/L, respectively. Two soil samples collected from beneath the used oil tank at a depth of 9 feet bgs contained total oil and grease concentrations of 6,100 mg/kg and 13,000 mg/kg. In addition, five soil samples collected from the excavation sidewalls and bottom were analyzed for VOCs. Acetone was detected in the northeast and southwest sidewall samples at concentrations of 220 mg/kg and 54 mg/kg, respectively. No other VOCs were detected in the remaining soil samples analyzed. A soil sample collected from the bottom of the excavation, at a depth of 13 feet, contained total oil and grease at a concentration of 20 mg/kg. Sidewall soil samples collected at depths ranging from 8 to 9 feet bgs contained oil and grease concentrations ranging from 10 mg/kg to 200 mg/kg. High boiling hydrocarbons ranged from non-detectable levels to 30 mg/kg.

On 8 June 2001, Filner Construction, Inc. (Filner) removed the product dispenser islands and associated underground piping at the Site. Product piping was reported in good condition, with the exception of a loose secondary containment joint near sample location ST-7. IT Corporation conducted soil sampling activities following excavation operations. Three soil samples, designated ST-5, ST-6, and ST-7, were collected from below the product piping excavations on 19 June 2001. Soil samples ST-1 through ST-4, ST-8, and ST-9 were collected from the excavation under the product island dispensers. The highest concentrations of hydrocarbons were observed in sample ST-7 at 210 mg/kg total purgeable petroleum hydrocarbons (TPPH), 0.39 mg/kg Benzene, and 21 mg/kg Methyl Tert-Butyl Ether (MTBE). A summary of the analytical data obtained during this investigation along with a site map depicting the sampling locations are provided in Appendix B.

Domestic Irrigation Well Assessment

Pacific documented the location and use of 14 domestic irrigation wells downgradient of the Site (Drawing 1). Preliminary sampling of the domestic irrigation wells was performed by Pacific between September and November 1991. Additional sampling events were performed by Pacific in October and December 1992. During the 1991 and 1992 sampling events, several wells contained inoperable pumps or were inaccessible; therefore, no ground-water samples were collected from these wells. Based on the analytical results of the initial sampling event, Pacific performed a preliminary risk assessment to determine if a human health risk existed as a result of benzene observed in the ground-water.

Concentrations of TPH-g in ground-water samples collected from the domestic irrigation wells during the 1991 sampling event ranging from non-detectable levels to 780 µg/L. Benzene was detected in ground-water at concentrations ranging from non-detectable levels to 13 µg/L. During the 22 November, 1992 sampling event, TPH-g was detected at concentrations ranging from non-detectable levels to 2,200 µg/L. Benzene concentrations were observed between non-

detectable levels and less than 5.0 µg/L. During the December 1992 sampling event, TPH-g was detected at concentrations ranging from non-detectable levels to 1,500 µg/L. Benzene concentrations ranged from non-detectable levels to 14 µg/L. Results of the risk assessment indicate estimated human health risks due to ingestion and dermal absorption of ground-water were from 4.46×10^{-6} to 1.08×10^{-5} and 2.01×10^{-6} to 3.47×10^{-6}, respectively. Beginning in 1993, the private well owners were contacted to request authorization to collect quarterly ground-water samples from their domestic wells and agreement to discontinue operation of their domestic irrigation wells until the investigation had been completed. The majority of the well owners agreed to both requests.

Ground-Water Extraction and Treatment

In 1991, a ground-water extraction and treatment (GWET) system was installed at the Site. The ground-water remediation system began operation on 15 October 1991. The treatment system utilized three granular activated carbon (GAC) vessels to treat the influent ground-water stream before it was discharged into the sanitary sewer. The GAC vessels were arranged in series with valving to permit bed order rotation. This setup allowed for the primary vessel to become the secondary vessel after the carbon was renewed. Sample ports were located at the treatment system influent, effluent, the mid-point between the carbon vessels, and at each individual well head.

The GWET system operated from 15 October 1991 to 21 August 1995, when the system was approved for shutdown to allow natural transport of oxygen in the ground water. On 5 June 2000, the GWET system was restarted due to MTBE concentrations observed during previous sampling events. The system then operated until 5 December 2007, when the system was again approved for shutdown due to asymptotic conditions. While operational, the GWET system extracted a total of approximately 8,968,839 gallons and removed 7.56 pounds of GRO, 0.31 pounds of benzene, and 2.98 pounds of MTBE. A summary of the GWET system performance is provided in Appendix B.

Remedial Investigations

On 22 July 1992, Pacific performed additional data collection to supplement the previous risk assessment, as requested by ACEH in their letter dated 5 June 1992. Additional data collected included ground-water analysis for drinking water quality standards from domestic irrigation wells 17349 VM and 17203 VM, and air monitoring for volatile benzene concentrations from four selected locations and at the domestic irrigation well 17349 VM. Drinking water quality analyses were performed to determine if local shallow ground-water met California drinking water standards and air monitoring was performed to gain site-specific data on benzene occurrence in the atmosphere. Analysis of ground-water samples collected from domestic irrigation wells indicated odor at 50 units, color ranging between 5 and 20 units and turbidity ranging between 8.6 and 9.0 Nephelometric Turbidity Units. These values indicate that the ground water generally does not meet secondary drinking water standards. During air monitoring at selected locations across the Site and vicinity, volatile Benzene concentrations were found to range between 2.1 and 9.6 micrograms per cubic meter ($\mu g/m^3$). The highest concentrations were noted at the corner of Hacienda Avenue and Hesperian Boulevard (6.8 $\mu g/m^3$) and the corner of Hacienda Avenue and Via Magdalena (9.6 $\mu g/m^3$). These levels were

reported likely attributable to exhaust fumes from regional automobile traffic. For reference, the National Institute for Occupational Safety and Health (NIOSH) Threshold Limit Value-Time Weighted Average (TLV-TWA) for Benzene is 0.1 ppm, or 319 $\mu g/m^3$. This value represents the concentration for a normal 8-hour work day and 40-hour work week, to which most workers may be repeatedly exposed, day after day, without adverse effects.

As requested by ACEH, additional analyses for ground-water samples collected from well MW-8, including VOCs, SVOCs, and metals, were performed during the fourth quarter 1992 ground-water monitoring event. Well MW-8 is located approximately downgradient from the former used oil tank. Additional analyses conducted on ground-water samples collected from well MW-8 indicated non-detectable levels of VOCs. However, SVOCs including acenaphthene, dibenzofuran, fluorine, 2-methylnaphthalene, naphthalene, and phenanthrene were detected above laboratory reporting limits. Arsenic, barium, and zinc were also detected above laboratory reporting limits.

In March and April 1993, Pacific performed an exploratory soil boring program, which included the installation of nineteen on-site and twenty off-site soil borings. The borings were drilled to: (1) further define the lateral and vertical extent of the subsurface channel deposits, (2) define the lateral extent of petroleum hydrocarbon contamination in historical capillary fringe zones across the Site, (3) define the lateral and vertical extent of hydrocarbons in soils adjacent to the former oil-water clarifier and adjacent to the former used oil tank, and (4) collect soil samples for physical and biological testing pertinent to the risk assessment and remedial alternative portions of the remedial investigation. The following is a summary of the findings from the Pacific investigation:

- Soils encountered underlying the Site consisted primarily of surficial clays and silts to a depth of approximately 11 feet bgs. Clayey sand, silty sand, and sand deposits ranging in thickness from 0.5 feet to four feet were noted in most borings between the approximate depths of four to 15 feet bgs, underlain by clays to the total depth explored (22.5 feet bgs). The relatively coarser-grained deposits may represent channel deposits and apparently trend in an east-west direction, increasing in thickness from north to south. Cross-sections A-A' and B-B' (Appendix C) illustrate subsurface conditions.

- Organic vapor concentrations ranged from non-detectable levels to 190 ppm. The highest concentrations were noted within the historical capillary fringe zone (nine to 14 feet bgs) and in the vicinity of the former clarifier and former used oil tank.

- TPH-g was detected in the historical capillary fringe zone at concentrations ranging from 1.6 mg/kg in Boring B-17 to 650 mg/kg in Boring B-24. Benzene was detected in the capillary fringe zone at concentrations ranging from 0.010 mg/kg in Boring B-9 to 0.59 mg/kg in Boring SP-1/V-4. The highest concentrations of TPH-g (greater than 100 mg/kg) were observed in on-site soil borings located in the vicinity of the former clarifier, western product island adjacent to the station building, and west of the former UST complex. Boring locations and a summary of analytical data are provided in Appendix B.

- In the vicinity of the former clarifier, oil and grease, CAM metals, SVOCs, and halogenated volatile organic compounds (HVOCs) were detected above laboratory reporting limits. Oil and grease were detected at concentrations of 950 mg/kg between four and six feet bgs and 1,900 mg/kg between nine and 11 feet bgs but were not detected between 14 and 16 feet bgs. CAM metals including antimony, arsenic, barium, chromium, cobalt, copper, nickel, vanadium, and zinc were detected above laboratory reporting limits in soil samples submitted for analysis. SVOCs and HVOCs detected above laboratory reporting limits included: 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, 2-methylnaphthalene, naphthalene, and bis(2-ethylhexyl)phthalate. Detected concentrations were significantly below CCR Title 22 TTLC levels.

In March 1993, Pacific drilled and installed three ground-water monitoring wells (MW-24 through MW-26) to provide delineation of petroleum hydrocarbon impacted ground water in the upgradient (east) and crossgradient (north) directions and further define the lateral and vertical extent of the subsurface channel deposit. These wells were monitored on a quarterly basis. At the same time, two dual completion air sparging and soil vapor extraction wells (SP-1/V-4 and SP-2/V-5) were installed on and off-site to: (1) further define the lateral and vertical extent of the subsurface channel deposit, (2) collect sample for physical testing pertinent to the risk assessment portion of the remedial investigation, (3) provide vertical and lateral characterization of hydrocarbons in soils, and (4) provide installations to perform air sparging and soil vapor extraction (SVE) feasibility tests at the Site. The following is a summary of the conclusions ascertained from the Pacific investigation:

- The coarse-grained deposits consisting of clayey sands, silty sands, and sands are relatively thin and extensive and underlie a broad area across the Site. These coarse-grained deposits are interpreted as channel deposits and include the historical and present capillary fringe zone; they are defined to the north, but not as well defined to the south. Additionally, the channel deposits increase in thickness from north to south. Pacific concluded that these channel deposits were more extensive than hydrocarbon concentrations noted in soil and ground water, and therefore did not appear to define a preferential pathway for the downgradient transport of hydrocarbon contamination in ground water.

- The hydrocarbon plume in ground water extends off-site toward the west and was very localized in extent. The plume extended toward the domestic irrigation wells which have a history of pumping. Additionally, concentrations of hydrocarbons in ground water off-site in the area of the domestic irrigation wells were generally relatively low or non-detect.

- In the vicinity of the Site, the highest hydrocarbon concentrations in ground water were noted in wells MW-8 and MW-10, directly downgradient (west) of the Site.

- Based on the data, Pacific concluded that the sand channel was a factor in hydrocarbon migration, but that other factors also may have influenced hydrocarbon migration to the

current plume configuration. These factors may include local variations in channel thickness, depth, and permeability, and pumping of domestic irrigation wells.

Feasibility Studies

Aquifer Testing

During the week of 29 March 1993, Pacific performed aquifer testing at the Site to determine the hydraulic characteristics of the shallow water-bearing zone on and off-site. This testing was intended to update the previous aquifer testing by using wells with known construction and nearby observation wells. The testing consisted of step-discharge tests in wells E-1A and MW-10. In addition to the pumping tests, slug tests were performed in wells MW-14 and MW-23. The shallow, unconfined aquifer appeared to be capable of producing two to four gpm, or more, in the vicinity of the Site. A computer model was employed to determine the radius of ground-water capture for this Site. The model was called AqModel (O'Neill, 1990) and was distributed by WellWare of Davis, California. The time-dependent head distribution from which the capture zone was determined was based on the Theis analytical solution for flow to a pumping well. The capture zones thus determined had a radius of approximately 30 to 40 feet for well E-1A and approximately 70 to 80 feet for well MW-10.

Air Sparge Testing

Pacific conducted an off-site air sparge test on 4 May 1993 and an on-site air sparge test on 5 May 1993. The objective of conducting air sparge testing was to determine the feasibility of using this technology at the Site. Given the observed radius of sparge influence (less than 16 feet) and changes in VOCs, dissolved oxygen, and helium concentrations, Pacific concluded that the feasibility of using air sparge technology on or off-site was limited.

Soil Vapor Extraction Testing

Pacific conducted an off-site soil vapor extraction (SVE) test on 29 April 1993 and an on-site SVE test on 30 April 1993. The objective of conducting a SVE test was to determine the feasibility of using SVE technology as a means of remediation at the Site. The data for both tests indicated that the vacuum application limit was restricted to a radial boundary which did not encompass the nearest monitoring point. By fitting field data from the off-site test to the steady-state radial flow equation, the effective radius of influence was determined to be 9.5 feet. Given the estimated flow rate and extraction well spacing requirements, Pacific concluded that the feasibility of using SVE technology on or off site was limited.

In-Situ Soil Bioremediation Testing

Pacific initiated an off-site in-situ soil bioremediation feasibility test on 9 March 1993. The objective of testing was to evaluate the feasibility of using in-situ bioremediation technology at the Site. A description of results and conclusions is presented below.

- Ammonia and phosphate were not detected above laboratory reporting limits in the samples collected. Nitrate was detected above laboratory reporting limits in sample B-11

at a concentration of 2.4 mg/kg. Elevated concentrations of potassium, calcium, magnesium, and iron were detected in each sample.

- Moisture content and pH concentrations were within the normal range to support microbiological growth.

- Normal levels of heterotrophic plate count organisms should be in the 10^5 to 10^6 colony forming units per gram (CFU/g) range. The results of the heterotrophic plate counts showed levels that were below normal, which ranged from non-detect (less than 10^3) to 6.2×10^4 CFU/g.

- The fluorescent *Pseudomonas* and hydrocarbon degrader levels should be in the 10^3 and 10^5 CFU/g range, respectively, if natural biodegradation was occurring in soils. Fluorescent *Pseudomonas* were not detected in the samples. Hydrocarbon degraders were detected in sample B-11 at a concentration of 4.0×10^3 CFU/g.

Based on these results, insignificant natural bioremediation of hydrocarbons was reported to be taking place in the soils. However, the biodegradation rate may have been limited by the low concentrations of petroleum hydrocarbons. Bioremediation could be enhanced by nutrient addition. However, further column testing was not performed.

Ground-Water Monitoring

Ground-water monitoring of on-site wells began in January 1988. Ground-water monitoring of off-site wells began in April 1990 and in domestic irrigation wells within close proximity of the Site as early as September 1991. The recently modified ground-water monitoring schedule states that monitoring is be conducted in wells E-1A and MW-10 each quarter, in wells MW-5, MW-8, MW-15 and MW-25 on a semi-annual basis (first and third quarters), and in well MW-16 on an annual basis (third quarter). Historic water-level elevations (since 2002) have yielded potentiometric ground-water flow directions predominantly to the west and west-southwest at hydraulic gradients ranging from 0.001 ft/ft to 0.006 ft/ft.

The maximum on-site TPH-G concentration was detected in well MW-3 at 1,100,000 µg/L in March 1990. The maximum concentrations of Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) were detected in well MW-3 (March 1990) at 13,000 µg/L, 60,000 µg/L, 17,000 µg/L, and 91,000 µg/L, respectively. The maximum concentration of MTBE was detected in well MW-5 at 1,230 µg/L (March 2000). The on-site wells have shown a decreasing trend with respect to TPH-G, BTEX, and MTBE concentrations since initial monitoring began in 1988.

The maximum off-site TPH-g concentration was detected in well MW-9 at 12,000 µg/L in June 1990. The maximum concentrations of Benzene, Toluene, and Total Xylenes were detected in well MW-10 at 1,200 µg/L (December 1993), 21.90 µg/L (March 2001), and 210 µg/L (June 1990), respectively. The maximum concentrations of Ethylbenzene and MTBE were detected in well MW-8 at 450 µg/L (April 1990) and 4,160 µg/L (December 1999), respectively. The off-site wells have shown a decreasing trend with respect to TPH-G, BTEX, and MTBE concentrations since initial monitoring began in 1990.

The maximum domestic irrigation well TPH-g concentration was detected in well 17349 VM at 2,200 µg/L in October 1992. The maximum concentrations of Benzene and Ethylbenzene were detected in well 17349 VM at 20 µg/L (July 1998) and 7.9 µg/L (March 1995), respectively. The maximum concentrations of Toluene and Total Xylenes were detected in well 633 H at 11 µg/L (March 1996) and 140 µg/L (March 1996), respectively. The maximum concentration of MTBE was detected in well 17372 VM at 16,000 µg/L (June 1998). The domestic irrigation wells have shown a decreasing trend with respect to TPH-G, BTEX, and MTBE concentrations since initial monitoring began in 1991. Historic ground-water elevation and analytical data through Second Quarter 2008 are provided in Appendix B. Iso-concentration contour maps of Gasoline Range Organics (GRO) and MTBE, utilizing data from Third Quarter 2007, are provided in Drawings 3 and 4.

On-Site Soil Concentrations

Numerous soil samples have been collected on-site during exploratory investigations, well installations, and product line and UST removals, as previously discussed. The maximum concentration of TRPH was observed in sample SB1-2 approximately two feet bgs beneath the oil-water separator/clarifier, which was formerly operated within the station's automobile repair bay. The highest concentrations of gasoline recorded in on-site soils were observed at a concentration of 2,800 mg/kg in sample A-C, collected during an initial exploratory boring investigation in October 1985 near the existing waste oil tank, and sample E3-S, collected during UST removal activities in June 1988 in the southeastern portion of the UST complex. However, depth to ground water was approximately 12 feet bgs during the time each of these samples were collected. The observed concentration of gasoline within samples A-C and E3-S may not be representative of actual soil conditions due to the potential presence of hydrocarbon contaminated ground water within the saturated zone. The maximum concentrations of BTEX were also observed in sample E3-S at 6.0 mg/kg, 23 mg/kg, and 120 mg/kg (ethylbenzene and total xylenes combined), respectively. These BTEX concentrations may not reflect actual soil conditions at the time of sample collection due to the location within the saturation zone. The maximum concentration of total oil and grease was observed in sample WOS-SW, collected approximately nine feet bgs during the removal of the waste oil tank previously located on the southern portion of the Site adjacent to the station building, at a concentration of 13,000 mg/kg. Soil analytical data and site maps depicting sampling locations are provided in Appendix B.

3.0 SITE GEOLOGY AND HYDROGEOLOGY

According to the *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report* (California Regional Water Quality Control Board – San Francisco Bay Region/SFRWQCB, June 1999), the Site is located within the Oakland Sub-Area of the East Bay Plain of the San Francisco Basin. The Oakland Sub-Area contains a sequence of alluvial fans. The alluvial fill thickness ranges from 300 to 700 feet deep. There are no well-defined aquitards such as estuarine muds. The largest and deepest wells in this sub-area historically pumped one to two million gallons per day at depths greater than 200 feet. Overall, sustainable yields are low due in part to low recharge potential. The Merrit sand in West Oakland was an important part of the early water supply for the City of Oakland. It is shallow (up to 60 feet), but before the turn of the last century, septic systems contaminated the water supply wells.

Throughout most of the Alameda County portion of the East Bay Plain, from Hayward north to Albany, water level contours show that the general direction of ground-water flow is from east to west or from the Hayward Fault to the San Francisco Bay. Ground-water flow direction generally correlates to topography. Flow direction and velocity are also influenced by buried stream channels that typically are oriented in an east to west direction. In the southern end of the study area however, near the San Lorenzo Sub-Area, the direction of flow may not be this simple. According to information presented in *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report*, the small set of water level measurements available seemed to show that the ground water in the upper aquifers may be flowing south, with the deeper aquifers, the Alameda Formation, moving north. The nearest natural drainage is Claremont Creek, located approximately 1.2 miles west-northwest of the Site. Claremont Creek flows generally east to west near the Site vicinity.

The Site elevation is approximately 37 feet above mean sea level. The water table fluctuates seasonally. Historically, depth-to-water measurements have ranged from 7 to 12 feet bgs. Ground-water flow direction during the first quarter monitoring event on 10 March 2008 was to the west at a gradient of 0.004 ft/ft.

According to the *East Bay Plain Groundwater Basin Beneficial Use Evaluation Report*, the City of Oakland does not have "any plans to develop local ground-water resources for drinking water purposes, because of existing or potential saltwater intrusion, contamination, or poor or limited quantity." However, the RWQCB's Basin Plan denotes existing beneficial uses of municipal and domestic supply (MUN), industrial process supply (PROC), industrial service supply (IND), and agricultural supply (AGR) for the East Bay Plain ground-water basin.

Soils encountered underlying the Site consisted primarily of surficial clays and silts to a depth of approximately 11 feet bgs. Clayey sand, silty sand, and sand deposits ranging in thickness from 0.5 feet to four feet were noted in most borings between the approximate depths of four to 15 feet bgs, underlain by clays to the total depth explored (22.5 feet bgs). The relatively coarser-grained deposits may represent channel deposits and apparently trend in an east-west direction, increasing in thickness from north to south. Cross-sections A-A' and B-B' (Appendix C) illustrate subsurface conditions. Copies of the historic boring logs are provided in Appendix C.

4.0 STATUS OF AREA PRIVATE WELLS

According to the *Remedial Investigation / Feasibility Study* prepared by Pacific on 22 November 1994, a total of 14 downgradient, private wells were identified as potentially impacted as a result of ground-water contamination released at the Site. To determine the status of these private wells, BAI conducted a well search within a one-quarter mile radius of the property through the County of Alameda Public Works Agency Water Resources Section and the Department of Water Resources Central District. Unfortunately, neither agency search generated information relating to the construction or destruction of the wells listed in Table 1. A summary of each private well, including well identifications, addresses, historic maximum concentrations, and current status, is provided within Table 1 and below.

Well 590H, 590 Hacienda Avenue

- Toluene has been detected at a maximum concentration of 13 µg/L. No other hydrocarbon constituents have been detected above laboratory reporting limits in well 590H.
- Last sampled on 14 June 1999.
- According to the *Quarterly Groundwater Monitoring Report, Third Quarter 2000, ARCO Service Station 0608, 17601 Hesperian Boulevard at Hacienda Avenue, San Lorenzo, California* prepared by IT Corporation (9 November 2000), well 590H has been destroyed.

Well 633H, 633 Hacienda Avenue

- TPH-g has been detected in well 633H at a maximum concentration of 480 µg/L. BTEX has been detected at maximum concentrations of 10 µg/L, 11 µg/L, 2.9 µg/L, and 140 µg/L, respectively. MTBE has been detected at a maximum concentration of 77 µg/L.
- Last sampled on 13 June 2000.
- According to the *Quarterly Groundwater Monitoring Report, Third Quarter 2000, ARCO Service Station 0608, 17601 Hesperian Boulevard at Hacienda Avenue, San Lorenzo, California* prepared by IT Corporation (9 November 2000), well 633H has been destroyed.

Well 634H, 634 Hacienda Avenue

- Well 634H has reportedly not been sampled due to a blockage within the well.
- The current status of well 634H is unknown.

Well 642H, 642 Hacienda Avenue

- Hydrocarbon constituents have not been detected above laboratory reporting limits in well 642H.
- Last sampled on 4 December 2003. As late as 20 March 2006, the pump was reported not working.
- The current status of well 642H is unknown.

Well 675H, 675 Hacienda Avenue

- Hydrocarbon constituents have not been detected above laboratory reporting limits well 675H.

- Last sampled on 25 June 1997.
- According to the *Fourth Quarter 2004 Groundwater Monitoring and Remediation System Performance Report, ARCO Service Station #0608, 17601 Hesperian Boulevard, San Lorenzo, California* prepared by URS (28 January 2005), well 675H has been destroyed.

Well 17197 VM, 17197 Via Magdalena

- Hydrocarbon constituents have not been detected above laboratory reporting limits in well 17197 VM.
- Last sampled 19 September 2000.
- According to the *Second Quarter 2002 Groundwater Monitoring and Remediation Report, ARCO Service Station #608, 17601 Hesperian Boulevard, San Lorenzo, California* prepared by URS (28 January 2003), well 17197 VM has been destroyed.

Well 17200 VM, 17200 Via Magdalena

- TPH-g has been detected in well 17200 VM at a maximum concentration of 730 µg/L. Benzene, ethylbenzene, and total xylenes have been detected at maximum concentrations of 2.7 µg/L, 1.5 µg/L, and 1.8 µg/L, respectively. MTBE has been detected at a maximum concentration of 4.8 µg/L.
- Last sampled 27 May 1996.
- According to the *Quarterly Groundwater Monitoring Report, Fourth Quarter 2001, ARCO Service Station 0608, 17601 Hesperian Boulevard at Hacienda Avenue, San Lorenzo, California* prepared by IT Corporation (1 March 2002), well 17200 VM has been destroyed.

Well 17203 VM, 17203 Via Magdalena

- Total xylenes have been detected in well 17203 VM at a maximum concentration of 1.3 µg/L. No other hydrocarbon constituents have been detected above laboratory reporting limits in well 17203 VM.
- Last sampled 25 June 1997.
- According to the *Fourth Quarter 2004 Groundwater Monitoring and Remediation System Performance Report, ARCO Service Station #0608, 17601 Hesperian Boulevard, San Lorenzo, California* prepared by URS (28 January 2005), well 17203 VM has been destroyed.

Well 17302 VM, 17302 Via Magdalena

- TPH-g has been detected in well 17302 VM at a maximum concentration of 72 µg/L. Benzene and Ethylbenzene have been detected at maximum concentrations of 0.64 µg/L and 0.44 µg/L, respectively. No other hydrocarbon constituents have been detected above the laboratory reporting limits.
- Last sampled 31 March 1997.
- The current status of well 17302 VM is unknown.

17348 VE, 17348 Via Encinas

- Hydrocarbon constituents have not been detected above laboratory reporting limits in well 17348 VE.
- Last sampled 13 March 1996.
- The current status of well 17348 VE is unknown.

17349 VM, 17349 Via Magdalena

- TPH-g has been detected in well 17349 VM at a maximum concentration of 2,200 µg/L. BTEX has been detected at maximum concentrations of 30 µg/L, 21 µg/L, 7.9 µg/L, and 110 µg/L, respectively. MTBE has been detected at a maximum concentration of 267 µg/L.
- Last sampled 28 June 2002.
- According to the *Third Quarter 2002 Groundwater Monitoring and Remediation Report, ARCO Service Station #608, 17601 Hesperian Boulevard, San Lorenzo, California* prepared by URS (13 February 2003), well 17349 VM has been destroyed.

17371 VM, 17371 Via Magdalena

- TPH-g has been detected in well 17371 VM at a maximum concentration of 870 µg/L. BTEX has been detected at maximum concentrations of 9.0 µg/L, 1.0 µg/L, 3.9 µg/L, and 4.5 µg/L, respectively. MTBE concentrations have not been analyzed in well 17371 VM.
- Last sampled 16 March 1993.
- According to the *Fourth Quarter 2004 Groundwater Monitoring and Remediation System Performance Report, ARCO Service Station #0608, 17601 Hesperian Boulevard, San Lorenzo, California* prepared by URS (28 January 2005), well 17371 VM has been destroyed.

17372 VM, 17372 Via Magdalena

- TPH-g has been detected in well 17372 VM at a maximum concentration of 300 µg/L. BTEX has been detected at maximum concentrations of 5.5 µg/L, 1.3 µg/L, 1.3 µg/L, and 1.2 µg/L, respectively. MTBE has been detected at a maximum concentration of 16,000 µg/L.

- Last sampled 10 March 2005. As late as 22 September 2006, the pump was reported not working.
- The current status of well 17372 VM is unknown.

Well 17393 VM, 17393 Via Magdalena

- TPH-g has been detected at a maximum concentration of 31 µg/L. No other hydrocarbon constituents have been detected above laboratory reporting limits.

- Last sampled 26 November 1996.
- According to the *Quarterly Groundwater Monitoring Report and Remedial System Performance Evaluation, Second Quarter1997* prepared by Pacific (7 November 1997), the homeowner at 17373 Via Magdalena abandoned the irrigation well on his property during the second quarter 1997. The well was reportedly backfilled with gravel and capped with soil, and the area has been covered with base rock for garage construction and landscaping.

Proposed activities related to further analysis of area private wells are provided in Section 5.2.

5.0 PROPOSED SCOPE OF WORK

5.1 Soil Boring Activities

At the request of ACEH, the purpose of the proposed soil investigation is to characterize residual hydrocarbon contamination within soils at the source area. After extensive research of the Site's history, it has been determined that the source area consists of the former UST complex and waste oil tank pit. Soil on the south side of the UST complex had been characterized in a previous subsurface investigation conducted by Pacific on 10 March 1993. The results from this investigation indicated that very minor concentrations of hydrocarbons were present within the soil at boring B-17 (essentially as close as one could drill due to safety constraints to previous sample location E3-S and ESW-S). Analytical results and a site map depicting the boring locations for this investigation are provided in Appendix B.

Soils in the vicinity of the waste oil tank pit and north of the UST complex are still in need of characterization. BAI proposes advancing two direct-push technology (DPT) borings to evaluate potential, residual petroleum hydrocarbon impacts to soil. Boring B-1 is proposed in the general vicinity of sample WOS-SW, approximately fifteen feet north and ten feet west of the southwest corner of the station building, near the location of the former waste oil UST. Boring B-2 is proposed in the general vicinity of sample ST-7, approximately ten feet north of the UST

complex. The proposed boring locations are shown in Drawing 2. The actual locations may vary due to the potential presence of underground utility conflicts.

Prior to initiating field activities, Stratus Environmental Inc. (Stratus) will obtain the necessary drilling permits from Alameda County; prepare a site health and safety plan (HASP) for the proposed work, clear the Site for subsurface utilities, and provide 72-hour advance notification to ACEH prior to start of field activities. The utility clearance will include notifying Underground Service Alert (USA) of the pending work a minimum of 48 hours prior to initiating the field investigation, and securing the services of a private utility locating company to confirm the absence of underground utilities at the boring location. The borehole will be physically cleared to five feet bgs using hand auger or air knife methods.

The Site-specific HASP will be prepared for use by personnel implementing the work plan. A copy of the HASP will be available on-site during work. The subcontractor(s) performing field activities will be provided with a copy of the HASP prior to initiating work. A safety tailgate meeting will also be conducted daily to review potential hazards and scope of work.

A Stratus field geologist will observe a California-licensed drilling company advance the soil borings using a Geoprobe or similar DPT drilling rig to a total approximate depth of 12 feet bgs or the current depth of ground water. Depth to ground water will be measured in wells MW-13 (near B-1) and MW-25 (near B-2) prior to drilling activities to establish a baseline depth to water which will assist in determining the approximate total depth of the boring. Second Quarter 2008 monitoring activities indicated a recent depth to water measurement of 11.50 feet bgs in well MW-25, while well MW-13 has been removed from the monitoring program but may still be utilized to determine a current water level during drilling activities. Soils will be classified according to the Unified Soil Classification System (USCS), and will be examined using visual and manual methods for parameters including odor, staining, color, grain size, and moisture content. Soil samples will be collected at 1.5-foot intervals until ground water is encountered. The soil samples will be submitted to the laboratory for chemical analysis. Following sample collection, the boring will be grouted to the surface using neat cement, and the surface refinished to match the surrounding area.

The samples will be submitted under chain-of-custody protocol to Calscience Environmental Laboratories, Inc. (Garden Grove), a California State-certified environmental laboratory. The soil samples will be analyzed for the following: Gasoline Range Organics (GRO, C6-C12) using EPA Method 8015B, BTEX, MTBE, Ethyl tert-butyl ether (ETBE), tert-Amyl methyl ether (TAME), Di-isopropyl ether (DIPE), 1,2-Dichloroethane (1,2-DCA), 1,2-Dibromoethane (EDB), tert-Butyl alcohol (TBA), and ethanol using EPA Method 8260B.

Investigation-derived residuals will be temporarily stored onsite in 55-gallon, DOT-approved drums, pending characterization for proper management. Stratus will coordinate the removal and transportation of surplus soils and liquids to appropriate California-regulated facilities.

Upon completion of field activities and receipt of a certified field data package (including copies of permits, field data sheets, boring log, and the laboratory analytical report with chain-of-custody documentation), BAI will prepare an Soil and Ground-Water Investigation Report. The report will document the results of the investigation, field activities, copies of required permit(s), copies of field notes, soil boring logs, laboratory analytical report with chain-of-custody

documentation, discussion of findings, and conclusions. Deviations from the work plan or data inconsistencies will be discussed in the report.

5.2 Area Private Well Sampling

In order to further assess the ground-water quality of the previously impacted private wells within the vicinity of Station No. 608, BAI proposes to survey property owners regarding the functionality of their wells attempt a one-time ground-water sampling event which will include wells 634H, 642H, 17302 VM, 17348 VE, and 17372 VM. If the wells are currently plumbed, powered and otherwise operational, BAI proposes securing authorization to access the wells for a one-time round of private well sampling for the analysis of GRO using EPA Method 8015B, BTEX, MTBE, ETBE, TAME, DIPE, 1,2-DCA, EDB, TBA, and ethanol using EPA Method 8260B..

6.0 PROPOSED SCHEDULE

The schedule for the above-noted work shall proceed as follows:

- Soil and Water Investigation – Upon approval of this work plan and obtaining the necessary permits and property access;
- Soil and Water Investigation Report – Within 60 days after receipt of certified field data package following completion of fieldwork.

7.0 CLOSURE

The findings presented in this document are based upon: observation of field personnel from previous consultants, the points investigated, and results of laboratory tests performed by various laboratories. Our services were performed in accordance with the generally accepted standard of practice at the time this document was written. No other warranty, expressed on implied was made. This report has been prepared for the exclusive use of Atlantic Richfield Company. It is possible that variations in soil or ground-water conditions could exist beyond points explored in this investigation. Also changes in site conditions could occur in the future due to variations in rainfall, temperature, regional water usage, or other factors.

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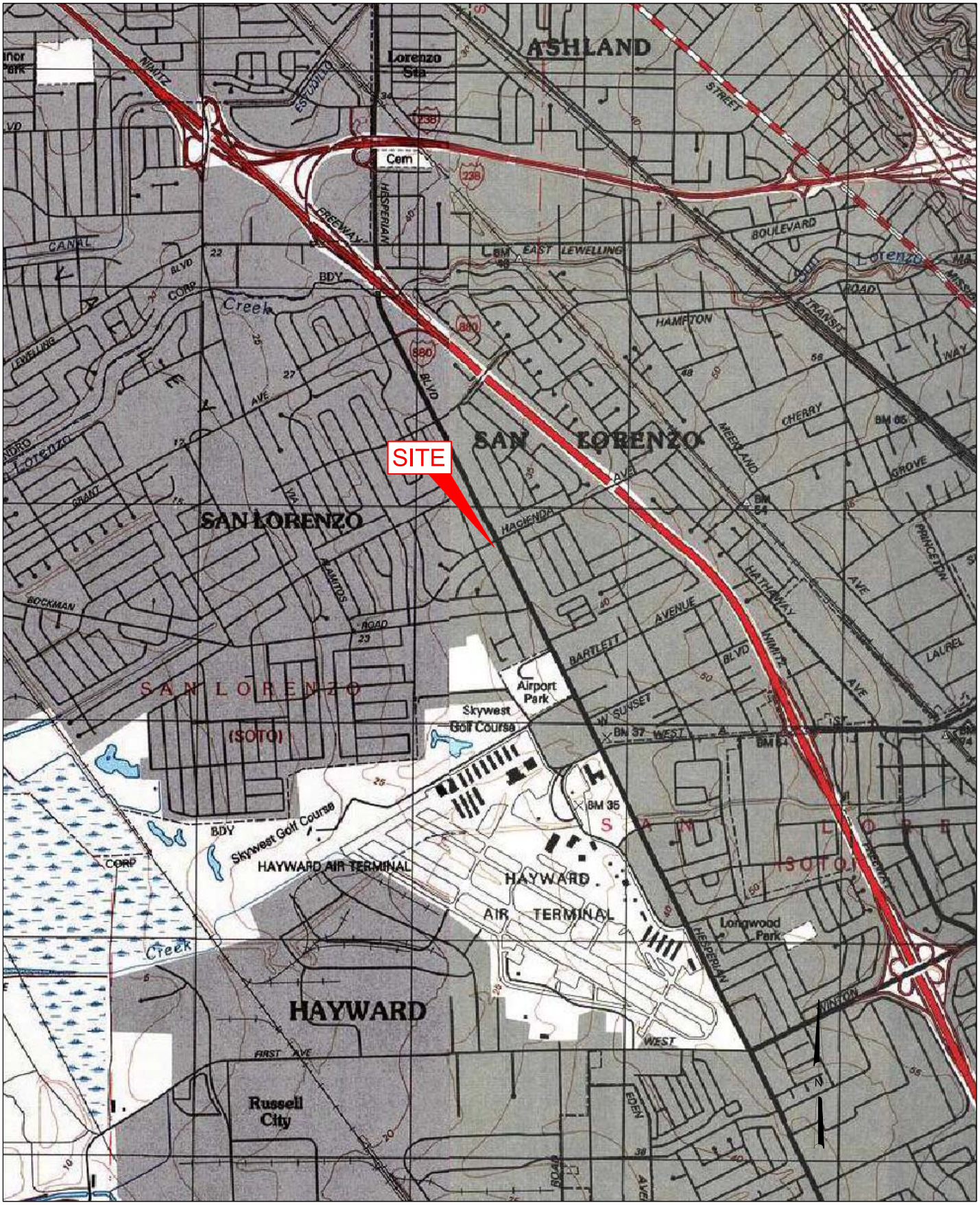
LIST OF DRAWINGS



BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California
Project No.: 06-08-606 Date: 8/25/08

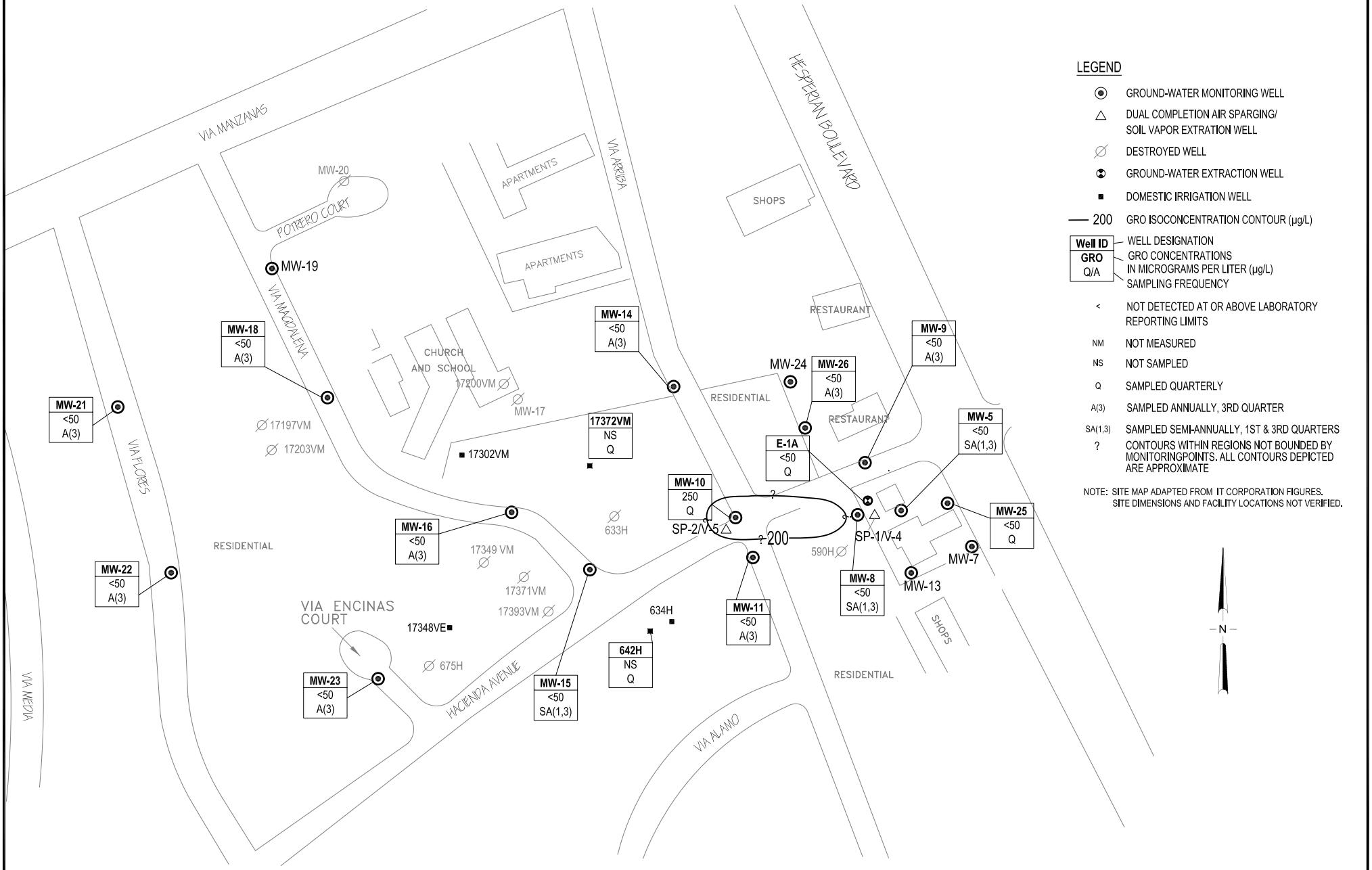
ARCO Service Station #608
17601 Hesperian Boulevard
San Lorenzo, California

Site Vicinity Map

Drawing
1

NOTE: SITE MAP ADAPTED FROM IT CORPORATION FIGURES.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

0 30 60 SCALE (ft)	BROADBENT & ASSOCIATES, INC. ENGINEERING, WATER RESOURCES & ENVIRONMENTAL 1324 Mangrove Ave. Suite 212, Chico, California 95926 Project No.: 06-08-606 Date: 8/25/08	ARCO Service Station #608 17601 Hesperian Boulevard San Lorenzo, California	Site Layout Plan with Soil Boring Locations Drawing 2



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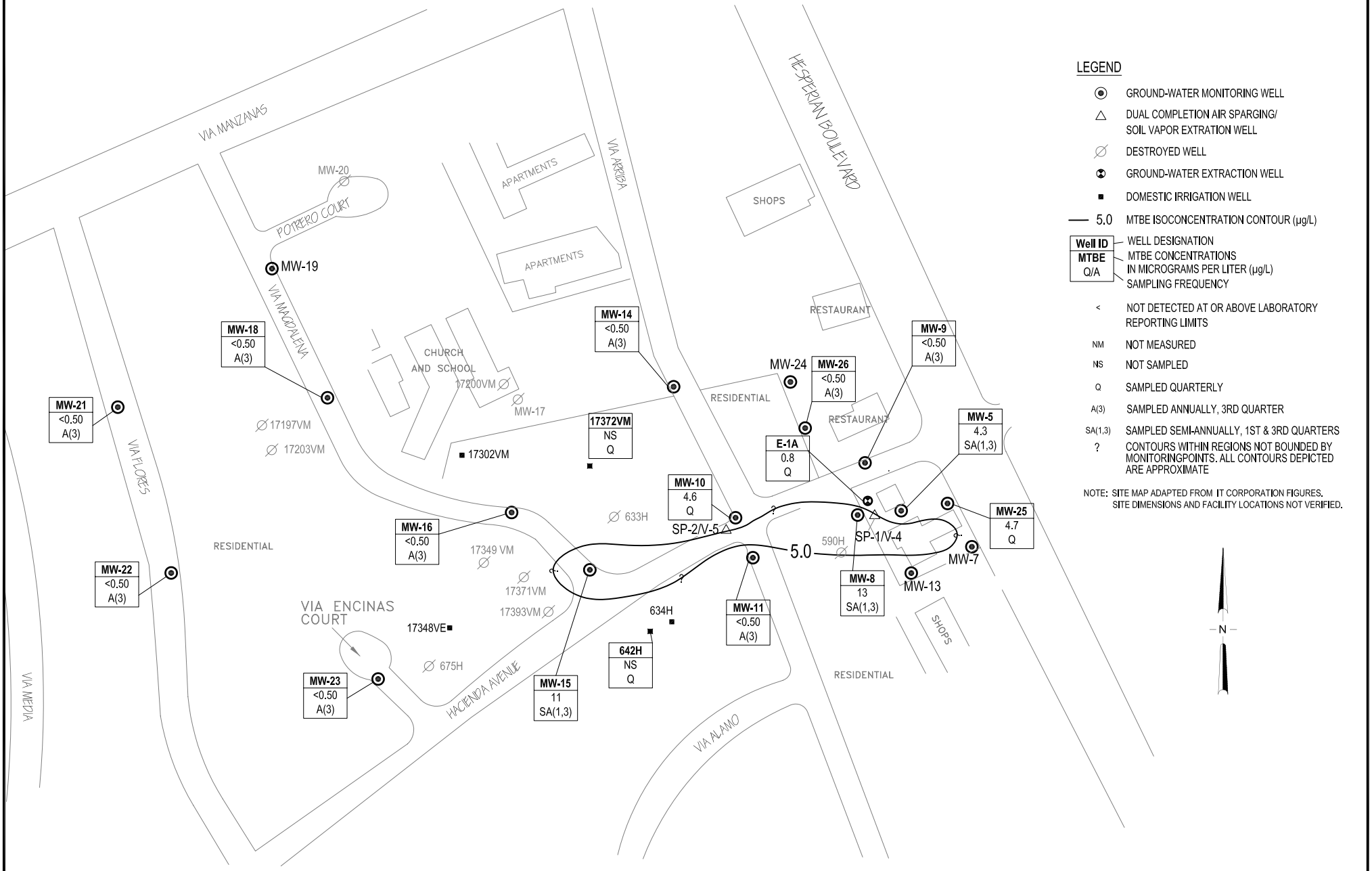
SCALE (ft)

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926
Project No.: 06-08-606 Date: 8/25/08

ARCO Service Station #608
17601 Hesperian Boulevard
San Lorenzo, California

GRO Iso-Concentration Contour Map
20 September 2007

Drawing
3



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SCALE (ft)

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave. Suite 212, Chico, California 95926

Project No.: 06-08-606 Date: 8/25/08

ARCO Service Station #608
17601 Hesperian Boulevard
San Lorenzo, California

MTBE Iso-Concentration Contour Map
20 September 2007

Drawing
4

Table 1. Private Well Survey Summary
Atlantic Richfield Company Station No. 608
17601 Hesperian Boulevard
San Lorenzo, California

Well ID	Well Address	Maximum Detected Concentrations (µg/L)						Current Status
		TPH-g	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	
590H	590 Hacienda Ave.	ND	ND	13	ND	ND	ND	Destroyed*
633H	633 Hacienda Ave.	480	10	11	2.9	140	77	Destroyed*
634H	634 Hacienda Ave.	NS	NS	NS	NS	NS	NS	Unknown
642H	642 Hacienda Ave.	ND	ND	ND	ND	ND	ND	Unknown
675H	675 Hacienda Ave.	ND	ND	ND	ND	ND	ND	Destroyed*
17197 VM	17197 Via Magdalena	ND	ND	ND	ND	ND	ND	Destroyed*
17200 VM	17200 Via Magdalena	730	2.7	ND	1.5	1.8	4.8	Destroyed*
17203 VM	17203 Via Magdalena	ND	ND	ND	ND	1.3	ND	Destroyed*
17302 VM	17302 Via Magdalena	72	0.64	ND	0.44	ND	ND	Unknown
17348 VE	17348 Via Encinas	ND	ND	ND	ND	ND	ND	Unknown
17349 VM	17349 Via Magdalena	2,200	30	21	7.9	110	267	Destroyed*
17371 VM	17371 Via Magdalena	870	9.0	1.0	3.9	4.5	NA	Destroyed*
17372 VM	17372 Via Magdalena	300	5.5	1.3	1.3	1.2	16,000	Unknown
17393 VM	17393 Via Magdalena	31	ND	ND	ND	ND	ND	Destroyed*

TPH-g = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tert-butyl ether
ND = Non-detect
NS = Reportedly not sampled due to blockage
NA = Not analyzed
* = Well has been reportedly destroyed according to previous environmental consultants.

APPENDIX A.

RECENT REGULATORY CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

June 27, 2008

Paul Supple
Atlantic Richfield Company
(A BP Affiliated Company)
P.O. Box 1257
San Ramon, CA 94583

Subject: Fuel Leak Case No. RO0000255 and Geotracker Global ID T0600100085, ARCO # 00608, 17607 Hesperian Boulevard, San Lorenzo, CA 94580

Dear Mr. Supple:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above-referenced site including the recently submitted document entitled, "Proposed Modifications to Ground-Water Monitoring and Sampling Schedule," dated May 22, 2008, which was prepared by Broadbent & Associates, Inc. (BAI) for the subject site. Based on a review of the above-mentioned submittal, the groundwater sampling schedule is acceptable and may be implemented immediately. However, a review of the case file indicates that elevated concentrations of hydrocarbons may currently be present on-site and the status of off-site private wells is unknown.

ACEH requests that you address the following technical comments and send us the technical reports requested below.

TECHNICAL COMMENTS

1. **Contaminant Source Area Characterization** – In June 1988, the underground storage tanks (USTs) at the site were removed and confirmation soil samples were collected. Total petroleum hydrocarbons (TPH) as gasoline (g) and benzene were detected at concentrations of 2,800 mg/kg and 6 mg/kg respectively, in soil samples E3-S collected from the excavation. TPH as motor oil (mo) was detected at 13,000 mg/kg in soil sample WOS-SW collected from the waste oil UST excavation. In June 2001, the product dispenser islands and associated piping were removed from the site. A loose secondary containment joint was identified near sample location ST-7. Soil sample analytical results detected 21 mg/kg MtBE in soil sample ST-7. Based on the analytical data, the contaminant source areas appear uncharacterized at this time. Please propose a scope of work to address the above-mentioned concerns and submit a work plan by the date specified below.

2. **Status of Private Wells** – Several off-site private wells were impacted as a result of the unauthorized release(s) that occurred at the subject site. In 1997, private well owners were requested not to use their wells. Although the groundwater contaminant plume appears defined currently, the status and groundwater quality of the previously identified impacted private wells is currently unknown. Please provide a scope of work to address the above-mentioned concerns and submit a work plan by the date specified below.

3. **Groundwater Contaminant Plume Monitoring** – BAI proposes to discontinue sample groundwater monitoring wells MW-9, MW-11, MW-14, MW-18, MW-21, MW-22, MW-23, MW-26, 642H, and 17372VM. Additionally, BAI proposes to reduce the sampling frequently for groundwater monitoring well MW-26 from quarterly to semi-annually. The proposed groundwater sampling schedule is approved provided that the integrity of the monitoring wells is maintained and all of the monitoring wells are gauged annually.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Paresh Khatri), according to the following schedule:

- **August 26, 2008** – Soil and Water Investigation Work Plan
- **October 30, 2008 -** Quarterly Monitoring Report (3rd Quarter 2008)
- **April 30, 2009 -** Quarterly Monitoring Report (1st Quarter 2009)

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

ACEH's Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of reports in electronic form. The electronic copy replaces paper copies and is expected to be used for all public information requests, regulatory review, and compliance/enforcement activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program FTP site are provided on the attached "Electronic Report Upload Instructions." Submission of reports to the Alameda County FTP site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for all groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitoring wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, these same reporting requirements were added to Spills, Leaks, Investigations, and Cleanup (SLIC) sites. Beginning July 1, 2005, electronic submittal of a complete copy of all reports for all sites is required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/electronic_submittal/report_rqmts.shtml.

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the

attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 777-2478 or send me an electronic mail message at paresh.khatri@acgov.org.

Sincerely,

Paresh C. Khatri
Hazardous Materials Specialist

Jerry Wickham, PG, CHG, CEG
Acting Supervising Hazardous Material Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Tom Venus, Broadbent & Associates, Inc., 1324 Mangrove Ave., Ste 212, Chico, CA 95926
Donna Drogos, ACEH
Paresh Khatri, ACEH
File

Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC)	**ISSUE DATE:** July 5, 2005
	REVISION DATE: December 16, 2005
	PREVIOUS REVISIONS: October 31, 2005
SECTION: Miscellaneous Administrative Topics & Procedures	**SUBJECT:** Electronic Report Upload (ftp) Instructions

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement activities.

REQUIREMENTS

- Entire report including cover letter must be submitted to the ftp site as **a single portable document format (PDF) with no password protection.** (Please do not submit reports as attachments to electronic mail.)
- It is **preferable** that reports be converted to PDF format from their original format, (e.g., Microsoft Word) rather than scanned.
- Signature pages and perjury statements **must** be included and have either original or electronic signature.
- **Do not password protect the document.** Once indexed and inserted into the correct electronic case file, the document will be secured in compliance with the County's current security standards and a password. **Documents with password protection will not be accepted.**
- Each page in the PDF document should be rotated in the direction that will make it easiest to read on a computer monitor.
- Reports must be named and saved using the following naming convention:
  RO#_Report Name_Year-Month-Date (e.g., RO#5555_WorkPlan_2005-06-14)

Additional Recommendations

- A separate copy of the tables in the document should be submitted by e-mail to your Caseworker in **Excel** format. These are for use by assigned Caseworker only.

Submission Instructions

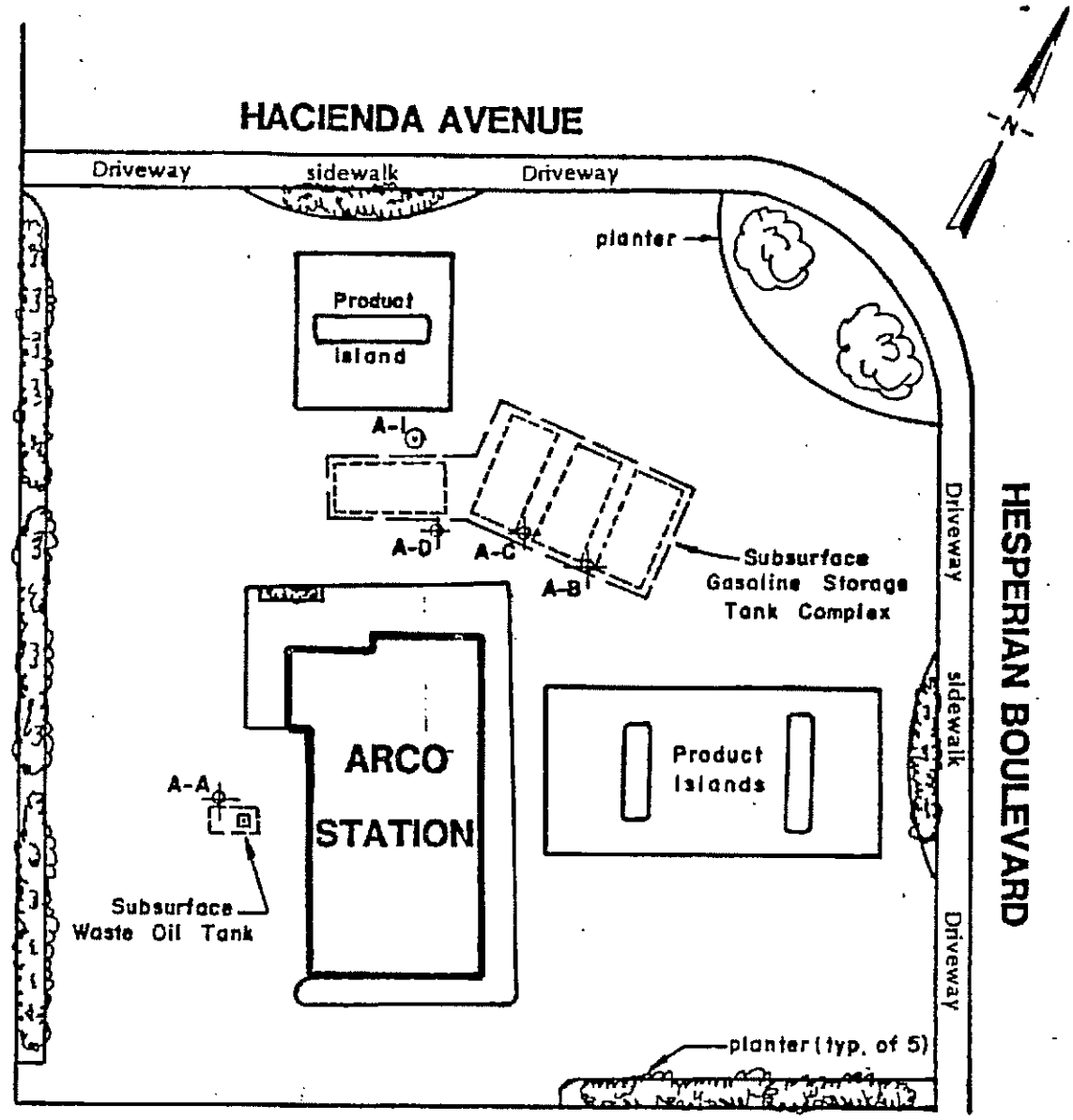
1) Obtain User Name and Password:
   a) Contact the Alameda County Environmental Health Department to obtain a User Name and Password to upload files to the ftp site.
      i) Send an e-mail to dehloptoxic@acgov.org
         or
      ii) Send a fax on company letterhead to (510) 337-9335, to the attention of Alicia Lam-Finneke.
   b) In the subject line of your request, be sure to include **"ftp PASSWORD REQUEST"** and in the body of your request, include the **Contact Information, Site Addresses**, and the **Case Numbers (RO# available in Geotracker) you will be posting for**.

2) Upload Files to the ftp Site
   a) Using Internet Explorer (IE4+), go to ftp://alcoftp1.acgov.org
      (i) Note: Netscape and Firefox browsers will not open the FTP site.
   b) Click on File, then on Login As.
   c) Enter your User Name and Password. (Note: Both are Case Sensitive.)
   d) Open "My Computer" on your computer and navigate to the file(s) you wish to upload to the **ftp** site.
   e) With both "My Computer" and the ftp site open in separate windows, drag and drop the file(s) from "My Computer" to the ftp window.

3) Send E-mail Notifications to the Environmental Cleanup Oversight Programs
   a) Send email to dehloptoxic@acgov.org notify us that you have placed a report on our ftp site.
   b) Copy your Caseworker on the e-mail. Your Caseworker's e-mail address is the entire first name then a period and entire last name at acgov.org. (e.g., firstname.lastname@acgov.org)
   c) The subject line of the e-mail must start with the RO# followed by **Report Upload**. (e.g., Subject: RO1234 Report Upload)

APPENDIX B.

HISTORIC SOIL AND GROUND-WATER DATA



Approximate Direction of Ground-water Flow

LEGEND

A-A — Soil boring location and designation

A-1 ⊙ — Ground-water monitoring well location and designation

Approx. Scale: 1" = 30'

EMCON Associates
San Jose, California

GETTLER-RYAN, INC.
SUBSURFACE HYDROGEOLOGIC INVESTIGATION
ARCO STATION, HESPERIAN BLVD AND HACIENDA AVE.
SAN LORENZO, CALIFORNIA

SOIL BORING AND MONITORING WELL LOCATION MAP

FIGURE 1

PROJECT NO. 738-63.01

November 11, 1985
Project 738-63.01

VERBAL RESULTS
IT STONER LABORATORIES

Boring	Depth	Gasoline Concentration (ppm)	Waste Oil Concentration (ppm)
A-A	7.0 to 8.5	---	10,000
	10.5 to 12.0	---	9,500
A-B	12.5 to 14.0	1,500	
A-C	4.0 to 5.5	880	
	7.0 to 8.5	1,900	
	12.5 to 14.0	2,800	
A-D	12.5 to 14.0	590	

EMCON ASSOCIATES • CHEMICAL LABORATORIES
Analysis • Consultation • Research • Environmental Studies
State Approved Water Laboratory

EMCO

CERTIFIED ANALYTICAL REPORT

Report to:

Gettler-Ryan
1992 National Ave
Hayward, CA 94545

Project Number: 738-

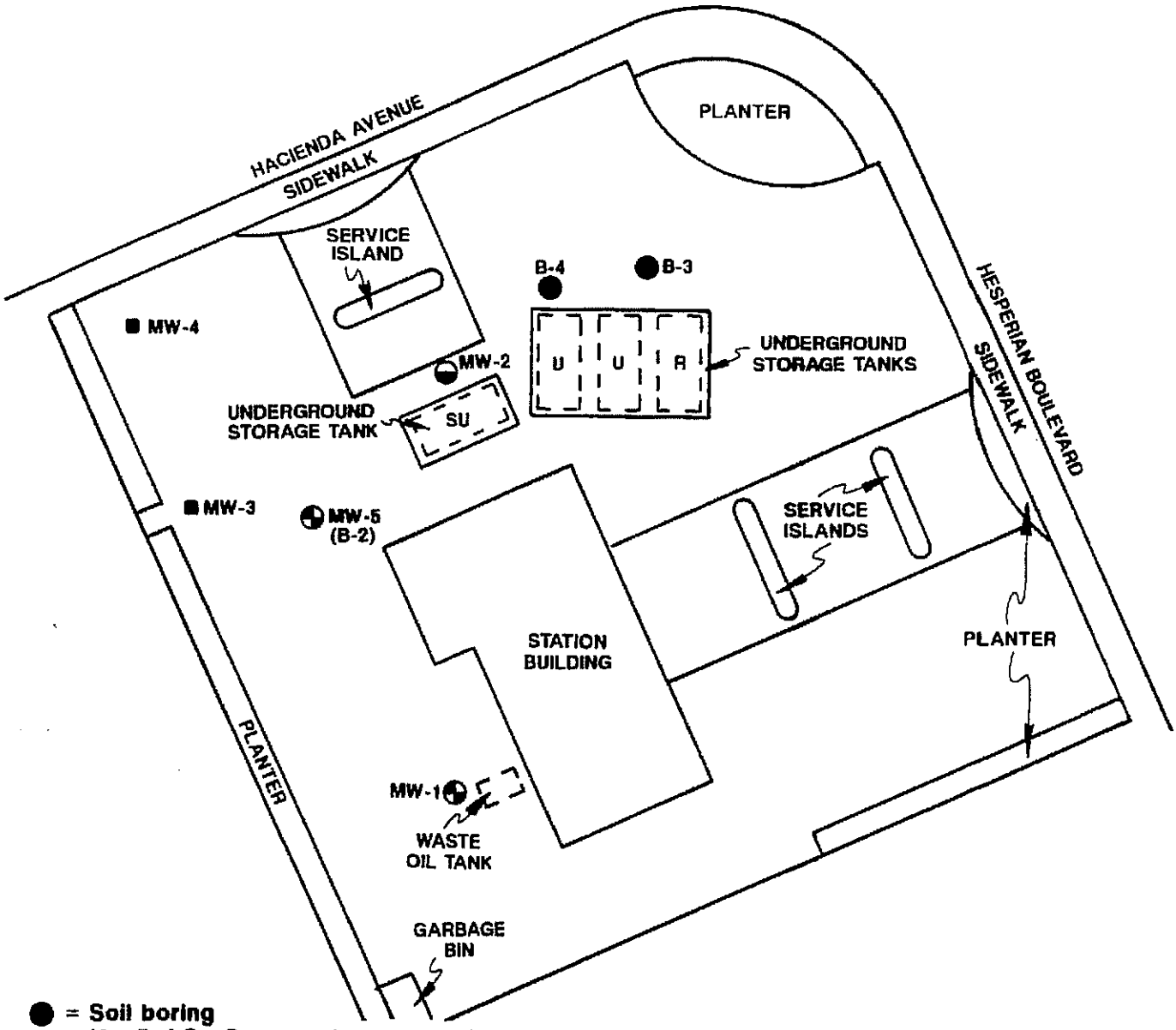
Location: ARCO

Sample Type: WATER
Units: ug/l

Sample Designation:	A1
Field Date:	10/07/85
Laboratory Number:	E85-0813
Benzene	1000
Toluene	690
Xylenes and Ethylbenzene	1500
Gasoline	32000

Reported by: Philip Murphy Date: 10-22-85

85 ARCHER STREET, SAN JOSE, CALIFORNIA 95112
TELEPHONE (408) 275-1444



● = Soil boring (Applied GeoSystems, January 1988)

◔ = Monitoring well (Applied GeoSystems, January 1988)

◒ = Monitoring well (Emcon Associates, November 1985)

■ = Monitoring well (unknown origin)

R = Regular gasoline

U = Unleaded gasoline

SU = Super Unleaded gasoline

Approximate Scale

30 15 0 30 60

feet

Source: Modified from plan supplied by ARCO

Applied GeoSystems

PROJECT NO. 87131-1

BORING AND MONITORING WELL LOCATONS
ARCO Service Station
17601 Hesperian Boulevard
San Lorenzo, California

PLATE

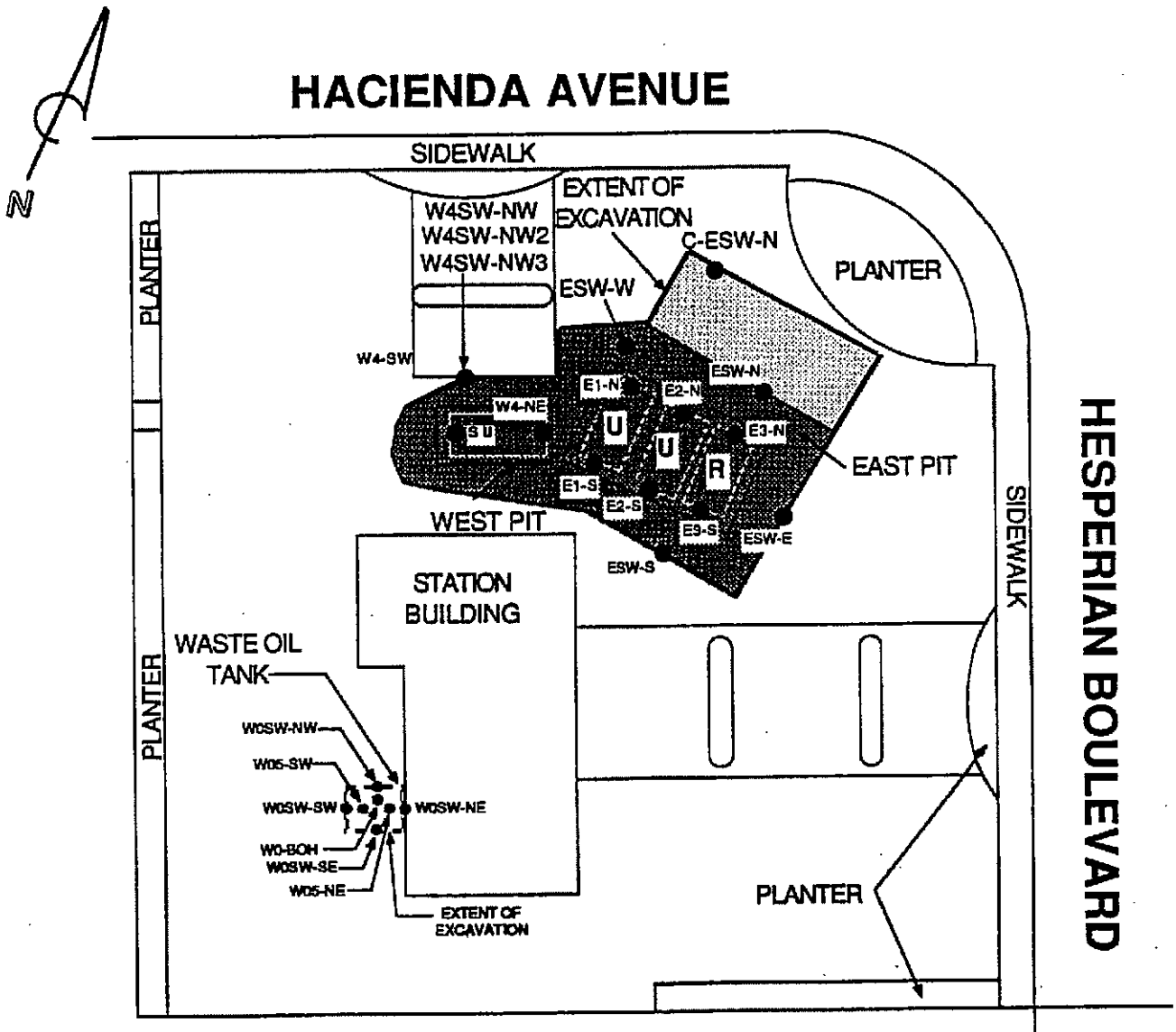
P - 5

TABLE 4
RESULTS OF ANALYSES OF SOIL AND WATER SAMPLES
ARCO Station No. 608
17601 Hesperian Boulevard
San Lorenzo, California

	B	T	E	X	TVH	TEH	TOG
SOIL							
	(0.200)	(0.200)	(0.200)	(0.200)	(5)	(10)	(30)
S-11-B1	<0.200	<0.200	<0.200	<0.200	<5	<10	<30
S-10-B2	0.600	<0.200	<0.200	<0.200	<5		
S-10-B3	0.400	<0.200	<0.200	<0.200	<5		
S-5-B4	0.800	0.500	4.100	1.200	10		
S-10-B4	0.400	0.200	1.000	1.000	5		
WATER							
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.05)	(10)
W-11-MW1	0.020	0.050	0.010	0.080	0.300	0.20	<10
W-11-MW2	0.804	0.115	0.168	0.166	3.300		
W-11-MW3	0.020	0.020	0.080	0.060	1.800		
W-11-MW4	2.700	7.900	0.850	5.200	62.000		
W-11-MW5	4.00*	2.70*	3.80*	5.50*	31.000		

Results are in parts per million (ppm)
BTEX = benzene, toluene, ethylbenzene, and total xylene isomers
TVH = total volatile hydrocarbons
TEH = total extractable hydrocarbons
TOG = total oil and grease
(0.001) = detection limit in ppm
* = detection limit of 0.05 ppm
Sample Designation = S-10-B1
- S-10-B1 — Borehole or well number
- S-10-B1 — Sample depth in feet
- S-10-B1 — Soil sample
- W = water sample

< = Result below detection limit for the selected method of analysis.



LEGEND

- ● SOIL SAMPLE LOCATION JUNE 1988
- R REGULAR GASOLINE
- U UNLEADED GASOLINE
- SU SUPER UNLEADED GASOLINE

PACIFIC ENVIRONMENTAL GROUP, INC.	**ARCO STATION #608** 17601 Hesperian Boulevard San Lorenzo, California **SAMPLE LOCATION MAP**	FIGURE: 2 PROJECT: 330-06.03

TABLE 1

Summary of Analytical Results
Soil and Groundwater Samples from beneath Fuel Tanks
Results in Parts per Million*

Soil Sample Identification	Depth	Gasoline	Benzene	Toluene	Xylenes and Ethylbenzene
E1-N	12.5'	60.	0.2	<0.3	2.
E1-S	NR	2,300.	3.	5.	20.
E2-N	12'	330.	1.6	6.	48.
E2-S	12'	370.	1.3	11.	45.
E3-N	NR	7.	1.0	0.1	0.6
E3-S	12'	2,800.	6.	23.	120.
W4-NE	NR	260.	1.2	2.	13.
W4-SW	15'	500.	3.5	6.	87.
Groundwater Sample Identification					
E1-S	NA	15.	1.4	2.3	4.7
E2-S	NA	22.	1.9	3.9	4.9
E3-N	NA	8.	0.44	1.1	2.3

* Soils report in parts per million on dry soil basis
Water reported in parts per million or milligrams per liter

NR - not recorded NA - not applicable

TABLE 2

Summary of Analytical Results
Soil Samples from Fuel Tank Excavation Side Walls
Results in Parts per Million - Dry Soil Basis

Sample Identification	Depth	Gasoline	Benzene	Toluene	Ethylbenzene and Xylenes
ESW-W	8′	9.	0.12	<0.1	0.4
ESW-N	8′	60.	0.10	<0.6	1.3
CESW-N	NR	<5.	0.06	<0.1	<0.4
ESW-E	8′	<5.	<0.05	<0.1	<0.4
ESW-S	8′	350.	1.2	5.	50.
W4SW-NW	8′	<5.	<0.05	<0.1	<0.4
W4SW-NW2	12.5′	730.	<3.	<6.	100.
W4SW-NW3	16.5′	<5.	<0.05	<0.1	<0.4

TABLE 3

Summary of Analytical Results
Soil Samples from Beneath Waste Oil Tank
Results in Parts per Million - Dry Soil Basis

Sample Identification	Depth	Polycholornated Biphenyls Aroclor Mixtures	Polycholornated Biphenyls Total	Total Oil and Grease
OS-SW	9'	None	<0.1	6,100.
WOS-SW	9'	None	<0.1	13,000.

TABLE 4

Summary of Analytical Results
Soil Sample from Waste Oil Tank Side Walls
Results in Parts per Million - Dry Soil Basis

Sample Identification	Depth	High Boiling Hydrocarbons	Oil and Grease
WOSW-NE	8'	<10	10.
WOSW-NW	9'	<10.	10.
WOSW-SE	8'	10.	60.
WOSW-SW	9'	30.	200.
WOSW-SW2	NR*	10.	20.
WO-BOH	13'	10.	20.

* NR - not reported

Table 1
Summary of Groundwater Analytical Results

Low-Boiling Hydrocarbons

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number (Elev.)	Sample Date	Groundwater Elevation (feet, MSL)	Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-1	01/11/88	NA	300	20	10	50	80
			Well Destroyed				
MW-2	07/05/85	NA	32,000	1,000	690	NA*	1,500*
	01/11/88	NA	3,300	804	115	168	166
			Well Destroyed				
MW-3	01/11/88	NA	1,800	20	20	80	60
(33.27)	03/07/89	21.31	150,000	4,600	5,200	5,600	13,000
	06/21/89	20.42	63,000	2,700	5,800	3,300	12,000
	12/12/89	19.81	Not Sampled--Insufficient Water Volume				
	03/29/90	20.06	1,100,000**	13,000	60,000	17,000	91,000
	05/08/90	20.04	NS	NS	NS	NS	NS
	06/22/90	NA	Not Sampled--Insufficient Water Volume				
	07/18/90		Well Destroyed				
MW-4	01/11/88	NA	62,000	2,700	7,900	850	5,200
(32.43)	09/12/88	NA	Not Sampled--Separate-Phase Hydrocarbon				
	03/07/89	21.67	84,000	2,400	3,400	2,500	7,600
	06/21/89	20.47	31,000	400	800	200	1,500
	12/12/89	NA	Not Sampled--Well Dry				
	03/29/90	20.71	Not Sampled-0.01 foot Separate-Phase Hydrocarbon				
	05/08/90	20.24	NS	NS	NS	NS	NS
	06/22/90	NA	Not Sampled--Well Dry				
	07/18/90	NA	Well Destroyed				
MW-5	01/11/88	NA	31,000	4,000	2,700	3,800	5,500
(33.99)	03/07/89	21.25	1,300	340	ND	140	50
	06/21/89	20.73	1,100	200	ND	130	40
	12/12/89	NA	Not Sampled--Well Dry				
	03/29/90	20.69	Not Sampled--Insufficient Water Volume				
	05/08/90	NA	NS	NS	NS	NS	NS
	06/22/90	20.47	Not Sampled--Insufficient Water Volume				
	09/19/90	20.00	Not Sampled--Well Dry				
	12/27/90	NA	Not Sampled--Well Dry				
	03/21/91	20.99	Not Sampled--Well Dry				
	06/26/91	20.74	Not Sampled--Well Dry				
	07/03/91	20.66	NS				
NS	NS	NS	NS				
	09/24/91	NA	Not Sampled--Well Dry				
	10/04/91	NA	Not Sampled--Well Dry				

Table 1 (continued)
Summary of Groundwater Analytical Results

Low-Boiling Hydrocarbons

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number (Elev)	Sample Date	Groundwater Elevation (feet, MSL)	Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-6	06/21/89	20.47	1,700	170	170	85	290
(E-1)	12/12/89	19.79	500	26	7	8	18
(32.95)	03/29/90	20.56	130	14	9	4	11
	05/08/90	20.02	NS	NS	NS	NS	NS
	06/22/90	20.01	150	15	5	4	13
	07/18/90		----------	----------	Well Destroyed	----------	----------
MW-7	04/13/90	NA	<50	<0.3	<0.3	<0.3	<0.3
(34.40)	05/08/90	20.42	NS	NS	NS	NS	NS
	06/22/90	20.49	<50	0.5	1	0.6	3
	09/19/90	19.31	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	19.73	69	<0.3	0.3	0.4	2
	03/21/91	21.52	<30	<0.30	<0.30	<0.30	<0.30
	06/26/91	20.55	<30	<0.30	<0.30	<0.30	<0.30
	07/03/91	20.45	NS	NS	NS	NS	NS
	09/24/91	18.86	<30	<0.30	<0.30	<0.30	<0.30
	10/04/91	18.80	NS	NS	NS	NS	NS
MW-8	04/13/90	NA	4,900	350	16	450	33
(32.79)	05/08/90	20.02	ND	NS	NS	NS	NS
	06/22/90	20.06	3,700	370	12	330	28
	09/19/90	18.84	140	4	3	3	3
	12/27/90	19.23	1,200	7	0.3	53	<0.3
	03/21/91	21.01	540	8.8	<6.0	21	9.6
	06/26/91	20.13	2,100	290	<6.0	56	<6.0
	07/03/91	20.04	NS	NS	NS	NS	NS
	09/24/91	18.82	260	51	0.34	7.9	<0.30
	10/04/91	18.78	NS	NS	NS	NS	NS
MW-9	04/13/90	NA	<50	<0.3	<0.3	<0.3	2
(32.11)	05/08/90	20.09	NS	NS	NS	NS	NS
	06/22/90	20.18	12,000	200	3	250	180
	09/19/90	18.93	<50	<0.3	<0.3	<0.3	0.6
	12/27/90	19.34	<50	<0.3	<0.3	<0.3	<0.3
	03/21/91	21.17	<30	<0.30	<0.30	<0.30	<0.30
	06/26/91	20.19	<30	<0.30	<0.30	<0.30	<0.30
	07/03/91	20.09	NS	NS	NS	NS	NS
	09/24/91	18.84	<30	<0.30	<0.30	<0.30	<0.30
	10/04/91	18.82	NS	NS	NS	NS	NS

Table 1 (continued)
Summary of Groundwater Analytical Results

Low-Boiling Hydrocarbons

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number (Elev)	Sample Date	Groundwater Elevation (feet, MSL)	Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-10	04/13/90	NA	10,000	150	4	280	200
(31.67)	05/08/90	19.51	NS	NS	NS	NS	NS
	06/22/90	19.57	9,700	28	<0.3	131	210
	09/19/90	18.26	1,800	<0.3	4	0.8	10
	12/27/90	18.00	5,700	7	3	95	61
	03/21/91	20.56	6,900	22	<15	92	33
	06/26/91	19.67	9,300	51	<0.30	59	34
	07/03/91	19.51	NS	NS	NS	NS	NS
	09/24/91	18.27	360	8.6	5.2	14	6.2
	10/04/91	18.17	NS	NS	NS	NS	NS
MW-11	04/13/90	NA	<50	<0.3	<0.3	<0.3	<0.3
(32.54)	05/08/90	19.70	NS	NS	NS	NS	NS
	06/22/90	19.72	63	0.4	0.9	0.7	3
	09/19/90	18.45	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	18.88	<50	<0.3	<0.3	<0.3	<0.3
	03/21/91	20.69	<30	<0.30	<0.30	<0.30	<0.30
	06/26/91	19.85	<30	<0.30	<0.30	<0.30	<0.30
	07/03/91	19.73	NS	NS	NS	NS	NS
	09/24/91	18.51	<30	<0.30	<0.30	<0.30	<0.30
	10/04/91	18.36	NS	NS	NS	NS	NS
E-1A	09/19/90	18.75	<50	7	0.9	1	2
(MW-12)	12/27/90	19.09	<50	3	0.5	1	1
(33.06)	03/21/91	20.95	<30	4.2	<0.30	1.1	0.89
	06/26/91	20.16	41	6.3	<0.30	1.2	0.59
	07/03/91	20.06	NS	NS	NS	NS	NS
	09/24/91	NA	NS	NS	NS	NS	NS
MW-13	07/03/91	20.23	<30	<0.30	<0.30	<0.30	<0.30
(35.42)	09/24/91	18.97	<30	<0.30	<0.30	<0.30	<0.30
MW-14	07/03/91	19.41	<30	<0.30	<0.30	<0.30	<0.30
(30.46)	09/24/91	18.16	<30	<0.30	<0.30	<0.30	<0.30
	10/04/91	18.08	NS	NS	NS	NS	NS
MW-15	07/03/91	18.98	570	1.8	1.0	1.0	2.2
(31.41)	09/24/91	17.72	<30	<0.30	<0.30	<0.30	<0.30
	10/04/91	17.61	NS	NS	NS	NS	NS
MW-16	07/03/91	18.47	2,700	31	6.9	4.6	3.1
(31.39)	09/24/91	17.29	430	1.8	1.3	1.9	1.5
	10/04/91	17.19	NS	NS	NS	NS	NS

Table 1 (continued)
Summary of Groundwater Analytical Results

Low-Boiling Hydrocarbons

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number (Elev)	Sample Date	Groundwater Elevation (feet, MSL)	Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Xylenes (ppb)
MW-17	07/03/91	18.68	1,200	12	1.9	28	40
(32.43)	09/24/91	17.45	150	2.7	0.50	3.9	0.59
	10/04/91	17.23	NS	NS	NS	NS	NS
MW-18 (29.70)	10/04/91	16.70	<30	<0.30	<0.30	<0.30	<0.30
MW-19 (29.02)	10/04/91	16.59	<30	<0.30	<0.30	<0.30	<0.30
MW-20 (29.54)	10/04/91	16.98	<30	<0.30	<0.30	<0.30	<0.30
MW-21 (28.72)	10/04/91	15.84	<30	<0.30	<0.30	<0.30	<0.30
MW-22 (29.29)	10/04/91	15.92	<30	<0.30	<0.30	<0.30	<0.30
MW-23 (30.99)	10/04/91	16.49	<30	<0.30	<0.30	<0.30	<0.30

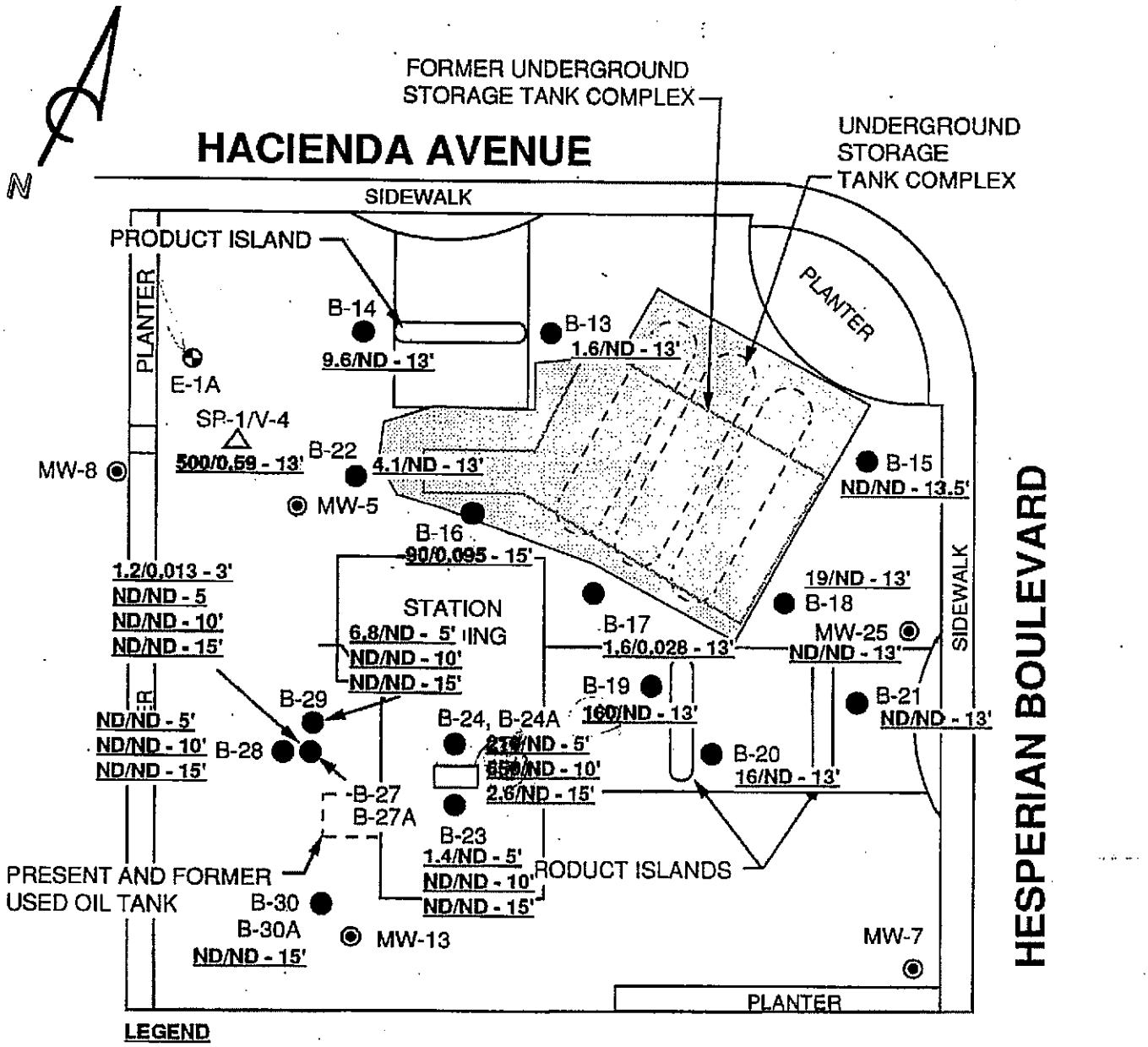
NA = Not available
ppb = Parts per billion
NS = Not sampled
* = Ethylbenzene and xylenes given as a combined value.
** = Well contained slight product sheen.

MW-1 and MW-2 destroyed prior to March 7, 1989 sampling event.
MW-3, MW-4, and MW-6 (E-1) destroyed June 18, 1990.

TABLE 1 CONCENTRATIONS (ppm) OF ANALYTES IN CONCRETE AND SOIL SAMPLES, ARCO FACILITY NO. 0608, SAN LORENZO, CALIFORNIA, 2 APRIL 1992

Analyte	Concrete Sample	Soil Sample SB1-0	Soil Sample SB1-2
Total Recoverable Petroleum Hydrocarbons	3,000	1,000	3,300
VOCs	ND	ND	ND
TCLP Metals	ND (Non-toxic)	ND (Non-toxic)	NA
TCLP Volatiles	ND (Non-toxic)	ND (Non-toxic)	NA
TCLP Semivolatiles	ND (Non-toxic)	ND (Non-toxic)	NA
PCBs	ND	ND	NA
CAM17 (Metals)	ND (Non-hazardous)	ND (Non-hazardous)	NA
96-hour Waste Bioassay	Non-hazardous	Non-hazardous	NA
Ignitability	>100°C	>100°C	NA

NA Not analyzed.
ND Not detected at concentrations greater than laboratory detection limits.



LEGEND

MW-25 ◉ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

E-1A ◉ GROUNDWATER EXTRACTION WELL LOCATION AND DESIGNATION

SP-1/V-4 △ DUAL COMPLETION AIR SPARGING/SOIL VAPOR EXTRACTION WELL LOCATION AND DESIGNATION

B-16 ● SOIL BORING LOCATION AND DESIGNATION

16/ND - 13' TPH-g/BENZENE CONCENTRATIONS IN SOIL, IN PARTS PER MILLION AT DEPTH INDICATED IN FEET

ND NOT DETECTED

Date? 1990

SCALE

0 30 60 FEET

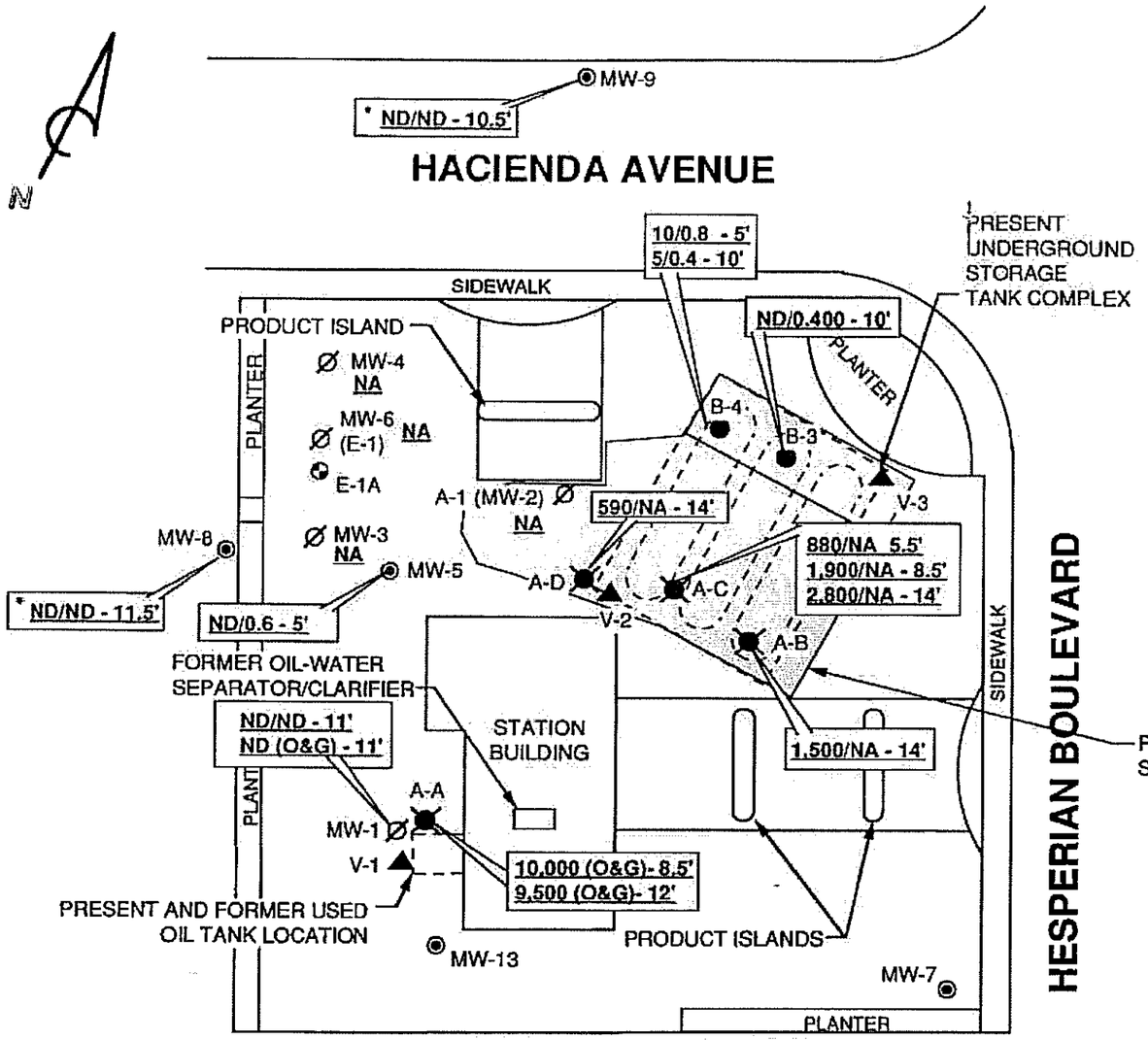
PACIFIC ENVIRONMENTAL GROUP, INC.

ARCO SERVICE STATION 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

ON-SITE SOIL ANALYTICAL RESULTS MAP

FIGURE: 5

PROJECT: 330-006.3C



LEGEND

- MW-5 ◉ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION
- MW-3 ⌀ DESTROYED WELLS LOCATION AND DESIGNATON
- E-1A ◉ EXTRACTION WELL LOCATION AND DESIGNATION
- B-3 ● SOIL BORING LOCATION AND DESIGNATION (AGS, 1988)
- A-A ✕ SOIL BORING LOCATION AND DESIGNATION (EMCON, 1985)
- V-1 ▲ VADOSE WELL LOCATION AND DESIGNATION
- 10/0.8 - 5' TVH-GASOLINE/BENZENE CONCENTRATION IN PARTS PER MILLION (ppm), AT DEPTH INDICATED IN FEET. (O&G) INDICATES OIL and GREASE CONCENTRATION IN ppm. * INDICATES TPH-GASOLINE/BENZENE CONCENTRATION IN ppm
- ND NOT DETECTED
- NA NOT ANALYZED

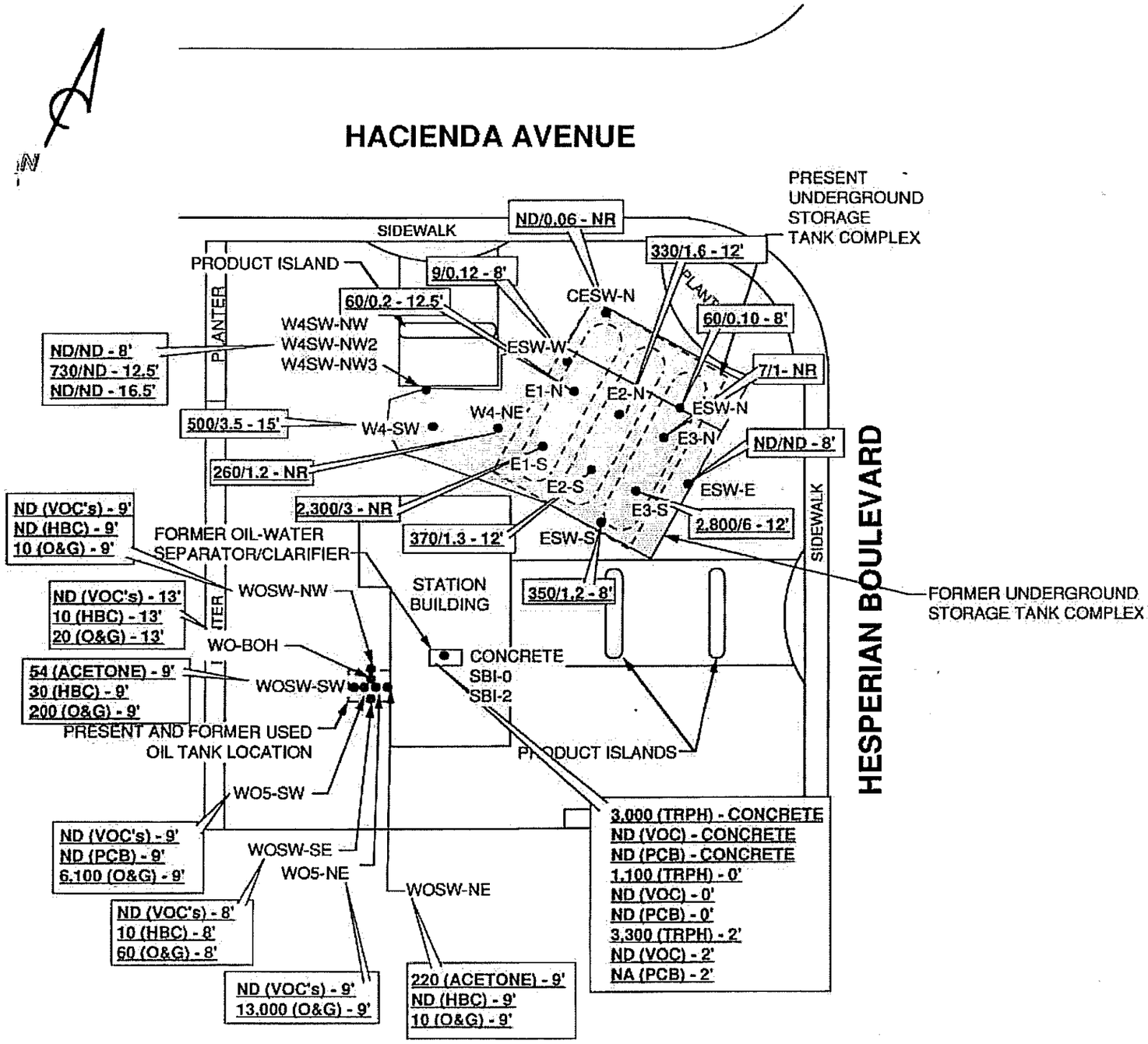
PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 30 60 FEET

ARCO SERVICE STATION 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

SOIL ANALYTICAL RESULTS MAP - SOIL BORINGS AND WELLS

FIGURE 3
PROJECT: 330-006.3C



LEGEND

E2-N ● SOIL SAMPLE LOCATION AND DESIGNATION

60/0.10 - 8' TPH-GASOLINE/BENZENE CONCENTRATON IN PARTS PER MILLION (ppm), AT DEPTH INDICATED IN FEET

(O&G) - INDICATES OIL and GREASE CONCENTRATION IN ppm
(HBC) - INDICATES HIGH BOILING HYDROCARBONS IN ppm
(PCB) - INDICATES POLYCHLORINATED BIPHENYLS IN ppm
(VOC's) - INDICATES VOLATILE ORGANIC COMPOUNDS IN ppm
(TRPH) - INDICATES TOTAL RECOVERABLE PETROLEUM HYDROCARBONS IN ppm.

ND NOT DETECTED

NR NOT RECORDED

Date: 6/88

PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 30 60 FEET

ARCO SERVICE STATION 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

SOIL ANALYTICAL RESULTS MAP - TANK EXCAVATION

FIGURE 4
PROJECT: 330-006.3C

Table 4
Groundwater Analytical Data
Volatile Organic Compounds, Semi-Volatile Organic Compounds, and Metals

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Analyses		MW-8 (10/22/92) (ppb)	MW-12/E-1A (12/28/90) (ppb)
Volatile Organic Compounds		(all ND)	
Benzene			3
Semi-Volatile Organic Compounds			(all ND)
Acenaphthene		2.7	
Dibenzofuran		1.2	
Fluorene		1.6	
2-Methylnaphthalene		14	
Naphthalene		34	
Phenanthrene		1.8	
Metals	STLC (ppm)	TTLC (ppm)	
Arsenic	ND	0.025	ND
Barium	ND	0.21	0.13
Zinc	ND	0.015	ND

ppb = Parts per billion
ppm = Parts per million
ND = Not detected
STLC = Soluble Threshold Limit Concentration
TTLC = Total Threshold Limit Concentration

Table 1
Groundwater Elevation Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-1	01/11/88	N/A	N/A	--	N/A
	06/14/88	----------	Well Destroyed	----------	
MW-2	07/05/85	N/A	N/A	--	N/A
	01/11/88	N/A	N/A	--	N/A
	06/14/88	----------	Well Destroyed	----------	
MW-3	01/11/88	33.27	N/A	--	N/A
	03/07/89		11.96	--	21.31
	06/21/89		12.85	--	20.42
	12/12/89		13.46	--	19.81
	03/29/90		13.21	--	20.06
	05/08/90		13.23	--	20.04
	06/22/90		N/A	--	N/A
	07/18/90	----------	Well Destroyed	----------	
MW-4	01/11/88	32.43	N/A	--	N/A
	09/12/88		N/A	--	N/A
	03/07/89		10.76	--	21.67
	06/21/89		11.96	--	20.47
	12/12/89		N/A	--	N/A
	03/29/90		11.72	0.01	20.71
	05/08/90		12.19	--	20.24
	06/22/90		N/A	--	N/A
	07/18/90	----------	Well Destroyed	----------	
MW-5	01/16/92	----------	Well Dry	----------	
	02/19/92	33.99	13.50	--	20.49
	03/17/92		11.90	--	22.09
	04/15/92		12.18	--	21.81
	05/14/92		12.78	--	21.21
	06/15/92	----------	Well Dry	----------	
	07/14/92	----------	Well Dry	----------	
	08/18/92	----------	Well Dry	----------	
	09/15/92	----------	Well Dry	----------	
	10/16/92	----------	Well Dry	----------	
	11/18/92	----------	Well Dry	----------	
	12/17/92		12.74	--	21.25
	01/19/93		10.92	--	23.07
	02/22/93		11.10	--	22.89
	03/15/93		11.13	--	22.86
	04/09/93		11.46	--	22.53
	05/13/93		12.19	--	21.80
	06/04/93		12.51	--	21.48
	06/15/93		12.59	--	21.40
	09/13/93		13.40	--	20.59
	12/28/93		13.25	--	20.74
	03/28/94		12.22	--	21.77
	06/13/94		12.54	--	21.45
	09/19/94		13.55	--	20.44
	12/19/94		12.43	--	21.56
	03/13/95		10.72	--	23.27
	05/30/95		11.88	--	22.11
	09/15/95		12.68	--	21.31
	11/27/95		13.00	--	20.99

Table 1 (continued)
Groundwater Elevation Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-6	06/21/89	32.95	12.48	--	20.47
(E-1)	12/12/89		13.16	--	19.79
	03/29/90		12.39	--	20.56
	05/08/90		12.93	--	20.02
	06/22/90		12.94	--	20.01
	07/18/90	---------- Well Destroyed ----------			
MW-7	01/16/92	34.40	13.33	--	21.07
	02/19/92		12.16	--	N/A
	03/17/92		11.86	--	22.54
	04/15/92		12.30	--	22.10
	05/14/92		13.04	--	21.36
	06/15/92		13.78	--	20.62
	07/14/92		14.20	--	20.20
	08/18/92		14.79	--	19.61
	09/15/92		15.12	--	19.28
	10/16/92		15.38	--	19.02
	11/18/92		15.10	--	19.30
	12/17/92		13.69	--	20.71
	01/19/93		10.92	--	23.48
	02/22/93		10.91	--	23.49
	03/15/93		11.13	--	23.27
	04/09/93		11.46	--	22.94
	05/13/93		12.22	--	22.18
	06/04/93		12.51	--	21.89
	06/15/93		12.66	--	21.74
	09/13/93		13.78	--	20.62
	12/28/93		13.43	--	20.97
	03/28/94		12.32	--	22.08
	06/13/94		12.70	--	21.70
	09/19/94		14.16	--	20.24
	12/19/94		12.32	--	22.08
	03/13/95		10.72	--	23.68
	05/30/95		11.68	--	22.72
	09/15/95		12.77	--	21.63
	11/27/95		13.01	--	21.39
MW-8	01/16/92	32.79	13.40	--	19.39
	02/19/92		11.26	--	21.53
	03/17/92		10.90	--	21.89
	04/15/92		11.35	--	21.44
	05/14/92		12.06	--	20.73
	06/15/92		12.83	--	19.96
	07/14/92		12.75	--	20.04
	08/18/92		13.83	--	18.96
	09/15/92		14.17	--	18.62
	10/16/92		14.51	--	18.28
	11/18/92		14.15	--	18.64
	12/17/92		12.68	--	20.11
	01/19/93		9.79	--	23.00
	02/22/93		9.95	--	22.84
	03/15/93		10.31	--	22.48
	04/09/93		10.47	--	22.32
	05/13/93		11.18	--	21.61
	06/04/93		11.47	--	21.32

Table 1 (continued)
Groundwater Elevation Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-8	06/15/93		11.62	--	21.17
(cont.)	09/13/93		12.70	--	20.09
	12/28/93		12.23	--	20.56
	03/28/94		11.28	--	21.51
	06/13/94		11.60	--	21.19
	09/19/94		13.07	--	19.72
	12/19/94		11.22	--	21.57
	03/13/95		9.66	--	23.13
	05/30/95		10.87	--	21.92
	09/15/95		11.67	--	21.12
	11/27/95		11.88	--	20.91
MW-9	01/16/92	32.11	12.45	--	19.66
	02/19/92		10.25	--	21.86
	03/17/92		10.01	--	22.10
	04/15/92		10.49	--	21.62
	05/14/92		11.19	--	20.92
	06/15/92		11.86	--	20.25
	07/14/92		12.28	--	19.83
	08/18/92		12.89	--	19.22
	09/15/92		13.28	--	18.83
	10/16/92		13.60	--	18.51
	11/18/92		13.24	--	18.87
	12/17/92		11.76	--	20.35
	01/19/93		8.99	--	23.12
	02/22/93		9.13	--	22.98
	03/15/93		9.48	--	22.63
	04/09/93		9.63	--	22.48
	05/13/93		10.35	--	21.76
	06/04/93		10.65	--	21.46
	06/15/93		10.81	--	21.30
	09/13/93		11.87	--	20.24
	12/28/93		11.61	--	20.50
	03/28/94		10.48	--	21.63
	06/13/94		10.80	--	21.31
	09/19/94		12.25	--	19.86
	12/19/94		10.40	--	21.71
	03/13/95		8.70	--	23.41
	05/30/95		10.01	--	22.10
	09/15/95		10.88	--	21.23
	11/27/95		11.13	--	20.98
MW-10	01/16/92	31.67	12.55	--	19.12
	02/19/92		10.50	--	21.17
	03/18/92		10.12	--	21.55
	04/15/92		10.59	--	21.08
	05/14/92		11.30	--	20.37
	06/15/92		11.93	--	19.74
	07/14/92		12.42	--	19.25
	08/18/92		13.03	--	18.64
	09/15/92		13.42	--	18.25
	10/16/92		13.74	--	17.93
	11/18/92		13.42	--	18.25
	12/17/92		11.94	--	19.73
	01/19/93		9.13	--	22.54

Table 1 (continued)
Groundwater Elevation Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-10	02/22/93		9.22	--	22.45
(cont.)	03/15/93		9.64	--	22.03
	04/09/93		9.75	--	21.92
	05/13/93		10.49	--	21.18
	06/04/93		10.78	--	20.89
	06/15/93		10.93	--	20.74
	09/13/93		12.01	--	19.66
	12/28/93		11.41	--	20.26
	03/28/94		10.60	--	21.07
	06/13/94		10.95	--	20.72
	09/19/94		12.37	--	19.30
	12/19/94		10.64	--	21.03
	03/13/95		8.93	--	22.74
	05/30/95		10.18	--	21.49
	09/15/95		11.05	--	20.62
	11/27/95		12.02	--	19.65
MW-11	01/16/92	32.54	13.28	--	19.26
	02/19/92		11.29	--	21.25
	03/17/92		10.81	--	21.73
	04/15/92		11.23	--	21.31
	05/14/92		11.96	--	20.58
	06/15/92		12.64	--	19.90
	07/14/92		13.08	--	19.46
	08/18/92		13.72	--	18.82
	09/15/92		14.13	--	18.41
	10/16/92		14.45	--	18.09
	11/18/92		14.11	--	18.43
	12/17/92		12.69	--	19.85
	01/19/93		9.91	--	22.63
	02/22/93		9.95	--	22.59
	03/15/93		10.30	--	22.24
	04/09/93		10.42	--	22.12
	05/13/93		11.16	--	21.38
	06/04/93		11.44	--	21.10
	06/15/93		11.59	--	20.95
	09/13/93		12.68	--	19.86
	12/28/93		12.05	--	20.49
	03/28/94		11.23	--	21.31
	06/13/94		11.62	--	20.92
	09/19/94		13.05	--	19.49
	12/19/94		11.45	--	21.09
	03/13/95		9.70	--	22.84
	05/30/95		10.89	--	21.65
	09/15/95		11.71	--	20.83
	11/27/95		12.70	--	19.84
E-1A	01/16/92	33.06	23.68	--	9.38
(MW-12)	02/19/92		18.71	--	14.35
	03/17/92		23.10	--	9.96
	04/15/92		20.54	--	12.52
	05/14/92		23.09	--	9.97
	06/15/92		23.72	--	9.34
	07/14/92		13.25	--	19.81
	08/18/92		23.73	--	9.33

Table 1 (continued)
Groundwater Elevation Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
E-1A	09/15/92		23.62	--	9.44
(MW-12)	10/16/92		23.78	--	9.28
(cont.)	11/18/92		23.80	--	9.26
	12/17/92		22.65	--	10.41
	01/19/93		23.65	--	9.41
	02/22/93		23.70	--	9.36
	03/15/93		22.92	--	10.14
	04/09/93		22.50	--	10.56
	05/13/93		20.40	--	12.66
	06/04/93		18.74	--	14.32
	06/15/93		20.00	--	13.06
	09/13/93		19.50	--	13.56
	12/28/93		20.35	--	12.71
	03/28/94		18.13	--	14.93
	06/13/94		11.60	--	21.46
	09/19/94		19.61	--	13.45
	12/19/94		19.80	--	13.26
	03/13/95		21.75	--	11.31
	05/30/95		17.38	--	15.68
	09/15/95		11.83	--	21.23
	11/27/95		13.20	--	19.86
MW-13	01/16/92	35.42	15.70	--	19.72
	02/19/92		13.60	--	21.82
	03/17/92		13.20	--	22.22
	04/15/92		13.64	--	21.78
	05/14/92		14.34	--	21.08
	06/15/92		15.13	--	20.29
	07/14/92		15.45	--	19.97
	08/18/92		16.15	--	19.27
	09/15/92		16.51	--	18.91
	10/16/92		16.81	--	18.61
	11/18/92		16.50	--	18.92
	12/17/92		15.07	--	20.35
	01/19/93		12.40	--	23.02
	02/22/93		12.35	--	23.07
	03/15/93		12.69	--	22.73
	04/09/93		12.85	--	22.57
	05/13/93		13.55	--	21.87
	06/04/93		13.83	--	21.59
	06/15/93		13.97	--	21.45
	09/13/93		15.09	--	20.33
	12/28/93		14.47	--	20.95
	03/28/94		13.64	--	21.78
	06/13/94		13.98	--	21.44
	09/19/94		15.45	--	19.97
	12/19/94		13.60	--	21.82
	03/13/95		12.06	--	23.36
	05/30/95		13.25	--	22.17
	09/15/95		14.04	--	21.38
	11/27/95		14.31	--	21.11
MW-14	01/16/92	30.46	11.34	--	19.12
	02/19/92		9.32	--	21.14
	03/17/92		9.04	--	21.42

Table 1 (continued)
Groundwater Elevation Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-14	06/15/92		10.83	--	19.63
(cont.)	09/15/92		12.27	--	18.19
	12/17/92		10.69	--	19.77
	03/15/93		8.70	--	21.76
	06/15/93		9.90	--	20.56
	09/13/93		10.89	--	19.57
	12/28/93		10.24	--	20.22
	03/28/94		9.55	--	20.91
	06/13/94		9.92	--	20.54
	09/19/94		11.25	--	19.21
	12/19/94		9.52	--	20.94
	03/13/95		7.77	--	22.69
	05/30/95		9.18	--	21.28
	09/15/95		10.00	--	20.46
	11/27/95		10.97	--	19.49
MW-15	01/16/92	31.41	12.80	--	18.61
	02/19/92		10.85	--	20.56
	03/18/92		10.41	--	21.00
	06/15/92		12.19	--	19.22
	09/15/92		13.69	--	17.72
	12/17/92		12.26	--	19.15
	03/15/93		10.05	--	21.36
	06/15/93		11.32	--	20.09
	09/13/93		12.35	--	19.06
	12/28/93		11.76	--	19.65
	03/28/94		10.95	--	20.46
	06/13/94		11.34	--	20.07
	09/19/94		12.68	--	18.73
	12/19/94		11.03	--	20.38
	03/13/95		9.32	--	22.09
	05/30/95		10.57	--	20.84
	09/15/95		11.44	--	19.97
	11/27/95		12.32	--	19.09
MW-16	01/16/92	31.39	13.09	--	18.30
	02/19/92		10.99	--	20.40
	03/18/92		10.85	--	20.54
	06/15/92		12.64	--	18.75
	09/15/92		14.07	--	17.32
	12/17/92		12.56	--	18.83
	03/15/93		10.60	--	20.79
	06/15/93		11.86	--	19.53
	09/13/93		12.83	--	18.56
	12/28/93		12.14	--	19.25
	03/28/94		11.46	--	19.93
	06/13/94		11.87	--	19.52
	09/19/94		13.15	--	18.24
	12/19/94		11.36	--	20.03
	03/13/95		9.60	--	21.79
	05/30/95		11.17	--	20.22
	09/15/95		11.97	--	19.42
	11/27/95		12.85	--	18.54

Table 1 (continued)
Groundwater Elevation Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-17	01/16/92	32.43	13.92	--	18.51
	02/19/92		11.65	--	20.78
	03/18/92		11.71	--	20.72
	06/15/92		13.50	--	18.93
	09/15/92		14.95	--	17.48
	12/17/92		13.34	--	19.09
	03/15/93		11.47	--	20.96
	06/15/93		12.69	--	19.74
	09/13/93		13.66	--	18.77
	12/28/93		12.96	--	19.47
	03/28/94		12.33	--	20.10
	06/13/94		12.71	--	19.72
	09/19/94		14.00	--	18.43
	12/19/94		12.27	--	20.16
	03/13/95		10.64	--	21.79
	05/30/95		12.02	--	20.41
	09/15/95		12.83	--	19.60
	11/27/95		13.00	--	19.43
MW-18	03/18/92	29.70	9.73	--	19.97
	06/15/92		11.50	--	18.20
	09/15/92		12.90	--	16.80
	12/17/92		11.21	--	18.49
	03/15/93		9.62	--	20.08
	06/15/93		10.85	--	18.85
	09/13/93		11.75	--	17.95
	12/28/93		11.06	--	18.64
	03/28/94		10.43	--	19.27
	06/13/94		10.80	--	18.90
	09/19/94		12.03	--	17.67
	12/19/94		10.30	--	19.40
	03/13/95		8.52	--	21.18
	05/30/95		10.21	--	19.49
	09/15/95		10.96	--	18.74
	11/27/95		11.77	--	17.93
MW-19	03/18/92	29.02	9.22	--	19.80
	06/15/92		10.94	--	18.08
	09/15/92		12.38	--	16.64
	12/17/92		10.51	--	18.51
	03/15/93		9.23	--	19.79
	06/15/93		10.28	--	18.74
	09/13/93		11.16	--	17.86
	12/28/93		10.58	--	18.44
	03/28/94		9.92	--	19.10
	06/13/94		10.26	--	18.76
	09/19/94		11.45	--	17.57
	12/19/94		9.72	--	19.30
	03/13/95		8.04	--	20.98
	05/30/95		9.76	--	19.26
	09/15/95		10.40	--	18.62
	11/27/95		11.22	--	17.80

Table 1 (continued)
Groundwater Elevation Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-20	03/18/92	29.54	9.49	--	20.05
	06/15/92		11.11	--	18.43
	09/15/92		12.50	--	17.04
	12/17/92		10.74	--	18.80
	03/15/93		9.44	--	20.10
	06/05/93		10.45	--	19.09
	10/11/93	----------	Well Destroyed	----------	
MW-21	03/18/92	28.72	9.55	--	19.17
	06/15/92		11.30	--	17.42
	09/15/92		12.78	--	15.94
	12/17/92		10.80	--	17.92
	03/15/93		9.59	--	19.13
	06/15/93		10.77	--	17.95
	09/13/93		11.63	--	17.09
	12/28/93		11.02	--	17.70
	03/28/94		10.30	--	18.42
	06/13/94		10.69	--	18.03
	09/19/94		11.89	--	16.83
	12/19/94		10.07	--	18.65
	03/13/95		8.34	--	20.38
	05/30/95		10.15	--	18.57
	09/15/95		10.88	--	17.84
	11/27/95		11.61	--	17.11
MW-22	03/17/92	29.29	10.05	--	19.24
	06/15/92		11.84	--	17.45
	09/15/92		13.27	--	16.02
	12/17/92		11.58	--	17.71
	03/15/93		10.03	--	19.26
	06/15/93		11.22	--	18.07
	09/13/93		12.17	--	17.12
	12/28/93		11.34	--	17.95
	03/28/94		10.78	--	18.51
	06/13/94		11.24	--	18.05
	09/19/94		12.43	--	16.86
	12/19/94		10.62	--	18.67
	03/13/95		8.78	--	20.51
	05/30/95		10.61	--	18.68
	09/15/95		11.40	--	17.89
	11/27/95		12.20	--	17.09
MW-23	03/17/92	30.99	11.20	--	19.79
	06/15/92		12.94	--	18.05
	09/15/92		14.40	--	16.59
	12/17/92		13.01	--	17.98
	03/15/93		11.01	--	19.98
	06/15/93		12.26	--	18.73
	09/13/93		13.23	--	17.76
	12/28/93		12.57	--	18.42
	03/28/94		11.86	--	19.13
	06/13/94		12.26	--	18.73
	09/19/94		13.55	--	17.44
	12/19/94		11.81	--	19.18
	03/13/95		10.05	--	20.94

Table 1 (continued)
Groundwater Elevation Data

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Gauged	Well Elevation (feet, MSL)	Depth to Liquid (feet, TOB)	SPH Thickness (feet)	Liquid Surface Elevation (feet, MSL)
MW-23	05/30/95		11.67	--	19.32
(cont.)	09/15/95		12.40	--	18.59
	11/27/95		13.24	--	17.75
MW-24	06/15/93	34.38	13.39	--	20.99
	09/13/93		14.38	--	20.00
	12/28/93		13.83	--	20.55
	03/28/94		13.02	--	21.36
	06/13/94		13.37	--	21.01
	09/19/94		14.72	--	19.66
	12/19/94		13.05	--	21.33
	03/13/95		11.10	--	23.28
	05/30/95		12.62	--	21.76
	09/15/95		13.47	--	20.91
	11/27/95		13.71	--	20.67
MW-25	04/09/93	34.12	11.18	--	22.94
	06/15/93		12.35	--	21.77
	09/13/93		13.45	--	20.67
	12/28/93		12.89	--	21.23
	03/28/94		12.02	--	22.10
	06/13/94		12.39	--	21.73
	09/19/94		13.82	--	20.30
	12/19/94		12.00	--	22.12
	03/13/95		10.30	--	23.82
	05/30/95		11.58	--	22.54
	09/15/95		12.42	--	21.70
	11/27/95		12.74	--	21.38
MW-26	06/15/93	33.71	12.66	--	21.05
	09/13/93		13.70	--	20.01
	12/28/93		13.06	--	20.65
	03/28/94		12.30	--	21.41
	06/13/94		12.65	--	21.06
	09/19/94		14.05	--	19.66
	12/19/94		12.39	--	21.32
	03/13/95		10.48	--	23.23
	05/30/95		11.93	--	21.78
	09/15/95		12.75	--	20.96
	11/27/95		13.00	--	20.71

SPH = Separate-phase hydrocarbons
MSL = Mean sea level
TOB = Top of box
N/A = Not available
Well elevations are measured from set mark at top of vault box.
For groundwater elevation data prior to January 1992, see previous groundwater monitoring reports.

Table 2
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled		TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-1	01/11/88		300	20	10	50	60
	06/14/88		Well Destroyed				
MW-2	07/05/85	a	32,000	1,000	690	N/A	1,500
	01/11/88		3,300	804	115	168	166
	06/14/88		Well Destroyed				
MW-3	01/11/88		1,800	20	20	80	60
	03/07/89		150,000	4,600	5,200	5,600	13,000
	06/21/89		63,000	2,700	5,800	3,300	12,000
	12/12/89		Well Dry				
	03/29/90	b	1,100,000	13,000	60,000	17,000	91,000
	06/22/90		Well Dry				
	07/18/90		Well Destroyed				
MW-4	01/11/88		62,000	2,700	7,900	850	5,200
	09/12/88		Separate-Phase Hydrocarbon Sheen				
	03/07/89		84,000	2,400	3,400	2,500	7,600
	06/21/89		31,000	400	800	200	1,500
	12/12/89		Well Dry				
	03/29/90		0.01 foot of Separate-Phase Hydrocarbon				
	06/22/90		Well Dry				
	07/18/90		Well Destroyed				
MW-5	01/11/88		31,000	4,000	2,700	3,800	5,500
	03/07/89		1,300	340	ND	140	50
	06/21/89		1,100	200	ND	130	40
	12/12/89		Well Dry				
	03/29/90		Well Dry				
	06/22/90		Well Dry				
	09/19/90		Well Dry				
	12/27/90		Well Dry				
	03/21/91		Well Dry				
	06/26/91		Well Dry				
	09/24/91		Well Dry				
	12/19/91		Well Dry				
	03/18/92		11,000	110	2	410	150
	06/15/92		Well Dry				
	09/16/92		Well Dry				
	12/22/92		960	220	6.5	4	2
	03/17/93		2,600	180	1.4	28	1.2
	06/17/93		2,500	450	7.5	55	<5
	09/17/93		1,400	230	<5.0	6.7	<5.0
	12/29/93		690	38	2.1	2.7	3.8
	03/30/94		1,400	30	<5	<5	<5
	06/14/94		1,700	42	<5	<5	<5
	09/20/94		500	18	<0.5	<0.5	0.52
	12/20/94		840	19	2.2	1.1	2.3
	03/14/95		2,300	16	<5.0	8.6	<5.0
	06/01/95		750	13	<0.50	1.1	<0.50
	09/15/95		550	11	<1.0	<1.0	<1.0
	11/28/95		Well Dry				

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-6	06/21/89	1,700	170	170	85	290
(E-1)	12/12/89	500	26	7	8	18
	03/29/90	130	14	9	4	11
	06/22/90	150	15	5	4	13
	07/18/90	---------- Well Destroyed ----------				
MW-7	04/13/90	<50	<0.3	<0.3	<0.3	<0.3
	06/22/90	<50	0.5	1	0.6	3
	09/19/90	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	69	<0.3	0.3	0.4	2
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/17/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/14/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/14/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
	09/15/95	<50	<0.50	<0.50	<0.50	<0.50
	11/28/95	<50	<0.50	<0.50	<0.50	<0.50
MW-8	04/13/90	4,900	350	16	450	33
	06/22/90	3,700	370	12	330	28
	09/19/90	140	4	3	3	3
	12/27/90	1,200	7	0.3	53	<0.3
	03/21/91	540	8.8	<6.0	21	9.6
	06/26/91	2,100	290	<6.0	56	<6.0
	09/24/91	260	51	0.34	7.9	<0.3
	12/19/91	5,300	300	<3.0	21	4.8
	03/17/92	9,200	370	3	48	4.9
	06/17/92	3,300	460	2.7	63	6.9
	09/16/92	1,500	58	<0.5	6.1	4.5
	12/22/92	3,600	410	56	62	4.4
	03/18/93	3,800	61	<0.5	11	1.2
	06/17/93	2,400	430	<5	11	<5
	09/14/93	1,900	36	1.4	32	8.6
	12/29/93	2,100	50	0.65	2.9	4.7
	03/29/94	1,900	220	<10	<10	<10
	06/14/94	2,800	340	<5	<5	<5
	09/20/94	2,100	46	<1.0	<1.0	<1.0
	12/20/94	1,800	120	<2.5	<2.5	<2.5
	03/14/95	840	17	<2.0	<2.0	<2.0

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled		TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-8	06/01/95	c	810	5.2	<0.50	0.69	0.71
(cont.)	09/15/95	c	850	30	<1.0	<1.0	<1.0
	11/28/95	c	1,200	39	<5.0	<5.0	<5.0
MW-9	04/13/90		<50	<0.3	<0.3	<0.3	2
	06/22/90		12,000	200	3	250	180
	09/19/90		<50	<0.3	<0.3	<0.3	0.6
	12/27/90		<50	<0.3	<0.3	<0.3	<0.3
	03/21/91		<30	<0.3	<0.3	<0.3	<0.3
	06/26/91		<30	<0.3	<0.3	<0.3	<0.3
	09/24/91		<30	<0.3	<0.3	<0.3	<0.3
	12/19/91		<30	<0.3	<0.3	<0.3	<0.3
	03/17/92		<30	<0.3	<0.3	<0.3	<0.3
	06/16/92		<30	<0.3	<0.3	<0.3	<0.3
	09/16/92		<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	c	75	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/15/93		<50	<0.5	<0.5	<0.5	<0.5
	09/14/93		<50	<0.5	<0.5	<0.5	<0.5
	12/29/93		<50	<0.5	<0.5	<0.5	<0.5
	03/29/94		<50	<0.5	<0.5	<0.5	<0.5
	06/14/94		<50	<0.5	<0.5	<0.5	<0.5
	09/20/94		<50	<0.5	<0.5	<0.5	<0.5
	12/20/94		<50	<0.5	<0.5	<0.5	<0.5
	03/14/95		<50	<0.50	<0.50	<0.50	<0.50
	06/01/95		<50	<0.50	<0.50	<0.50	<0.50
	09/15/95		<50	<0.50	<0.50	<0.50	<0.50
	11/28/95		<50	<0.50	<0.50	<0.50	<0.50
MW-10	04/13/90		10,000	150	4	280	200
	06/22/90		9,700	28	<0.3	131	210
	09/19/90		1,800	<0.3	4	0.8	10
	12/27/90		5,700	7	3	95	61
	03/21/91		6,900	22	<15	92	33
	06/26/91		9,300	51	<0.3	59	34
	09/24/91		360	8.6	5.2	14	6.2
	12/19/91		3,300	9.2	8.4	11	17
	03/18/92		4,700	14	<6.0	29	10
	06/16/92		4,800	0.46	0.34	7.4	3.8
	09/16/92		2,000	8.3	3	3.3	5.5
	12/22/92	c	2,700	6.2	<1.0	7.5	2.8
	03/16/93		4,100	340	2.4	58	54
	06/17/93		4,900	860	<10	540	92
	09/17/93		4,500	670	<10.0	240	7.2
	12/28/93	d	5,000	1,200	12	46	31
	03/29/94		4,700	470	<10	29	45
	06/14/94		3,700	370	<1.0	<1.0	<1.0
	09/20/94		2,600	79	<2.5	7.4	2.7
	12/20/94		3,000	150	<5.0	<5.0	<5.0
	03/13/95		2,500	18	<5.0	<5.0	<5.0
	06/01/95	c	1,100	<1.2	<1.2	<1.2	<1.2
	09/14/95	c	1,100	<2.0	<2.0	<2.0	<2.0
	11/28/95	c	840	<1.2	<1.2	<1.2	<1.2

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-11	04/13/90	<50	<0.3	<0.3	<0.3	<0.3
	06/22/90	63	0.4	0.9	0.7	3
	09/19/90	<50	<0.3	<0.3	<0.3	<0.3
	12/27/90	<50	<0.3	<0.3	<0.3	<0.3
	03/21/91	<30	<0.3	<0.3	<0.3	<0.3
	06/26/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/16/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	11/27/95	<50	<0.50	<0.50	<0.50	<0.50
E-1A	09/19/90	<50	7	0.9	1	2
(MW-12)	12/27/90	<50	3	0.5	1	1
	03/21/91	<30	4.2	<0.3	1.1	0.89
	06/26/91	41	6.3	<0.3	1.2	0.59
		---------- Converted to Extraction Well 8/91 ----------				
	03/28/94	120	4.8	<0.50	5.7	4.1
	06/14/94 *	230	12	<0.5	16	1.5
	09/20/94 *	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	2.4	<0.5	1.9	<0.5
	03/14/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	680	4.9	<0.50	18	2.4
	09/15/95	73	3.3	<0.50	2.3	<0.50
	09/15/95	73	3.3	<0.50	2.3	<0.50
	11/28/95	220	3.9	<0.50	6.2	<0.50
MW-13	07/03/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/17/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/14/94	<50	<0.5	<0.5	<0.5	<0.5

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-13	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
(cont.)	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/14/95 c	570	2.0	<0.50	3.9	7.9
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
	09/15/95	<50	<0.50	<0.50	<0.50	<0.50
	11/28/95	<50	<0.50	<0.50	<0.50	<0.50
MW-14	07/03/91	<30	<0.3	<0.3	<0.3	<0.3
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/16/92	<30	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	11/27/95	<50	<0.50	<0.50	<0.50	<0.50
MW-15	07/03/91	570	1.8	1	1	2.2
	09/24/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	360	<0.6	<0.6	0.64	<0.6
	03/18/92	730	0.74	0.98	1.8	0.68
	06/16/92	310	0.54	0.34	0.96	2.5
	09/16/92	100	1	<0.5	<0.5	<0.5
	12/22/92	130 c	<0.5	<0.5	<0.5	<0.5
	03/18/93	130 c	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/17/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	52	<0.5	<0.5	<0.5	1.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	11/27/95	<50	<0.50	<0.50	<0.50	<0.50
MW-16	07/03/91	2,700	31	6.9	4.6	3.1
	09/24/91	430	1.8	1.3	1.9	1.5
	12/19/91	75	<0.3	<0.3	<0.3	<0.3
	03/18/92	1,500	4	0.73	2.2	1.3
	06/16/92	80	<0.3	<0.3	<0.3	<0.3
	09/16/92	<50	<0.5	<0.5	<0.5	<0.5

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	TPPH as Gasoline (ppb)		Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-16	12/22/92	<50		<0.5	<0.5	<0.5	<0.5
(cont.)	03/18/93	380	c	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50		<0.5	<0.5	<0.5	<0.5
	09/17/93	<50		<0.5	<0.5	<0.5	<0.5
	12/28/93	<50		<0.5	<0.5	0.72	<0.5
	03/28/94	<50		<0.5	<0.5	<0.5	<0.5
	06/13/94	<50		<0.5	<0.5	<0.5	<0.5
	09/20/94	<50		<0.5	<0.5	<0.5	<0.5
	12/20/94	52		<0.5	<0.5	<0.5	<0.5
	03/13/95	<50		<0.50	<0.50	<0.50	<0.50
	05/31/95	52	c	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50		<0.50	<0.50	<0.50	<0.50
	11/27/95	<50		<0.50	<0.50	<0.50	<0.50
MW-17	07/03/91	1,200		12	1.9	28	40
	09/24/91	150		2.7	0.5	3.9	0.59
	12/19/91	370		2.6	<0.3	7.2	6.5
	03/18/92	470		3.1	<0.3	9.1	8.6
	06/16/92	310		1.7	0.56	12	9.6
	09/16/92	77		1.5	<0.5	1.2	1
	12/21/92	220		1.2	<0.5	9.8	9.4
	03/17/93	250		<0.5	<0.5	7.8	3.3
	06/17/93	90		0.92	<0.5	2.7	2.4
	09/16/93	140		<0.5	<0.5	5.4	3.9
	12/29/93	<50		<0.5	<0.5	<0.5	<0.5
	03/29/94	<50		<0.5	<0.5	<0.5	<0.5
	06/15/94	62		<0.5	<0.5	1.2	<0.90
	09/19/94	<50		<0.5	<0.5	<0.5	<0.5
	12/20/94	77		<0.5	<0.5	1.6	0.67
	03/13/95	110		<0.50	<0.50	2.9	1.2
	05/30/95	93		1.0	<0.50	1.2	<0.50
	09/14/95	63		<0.50	<0.50	1.1	0.51
	11/28/95	83		<0.50	<0.50	<0.50	<0.50
MW-18	10/04/91	<30		<0.3	<0.3	<0.3	<0.3
	12/19/91	<30		<0.3	<0.3	<0.3	<0.3
	03/18/92	<30		<0.3	<0.3	<0.3	<0.3
	06/15/92	<30		<0.3	<0.3	<0.3	<0.3
	09/15/92	<50		<0.5	<0.5	<0.5	<0.5
	12/21/92	<50		<0.5	<0.5	<0.5	<0.5
	03/17/93	<50		<0.5	<0.5	<0.5	<0.5
	06/16/93	<50		<0.5	<0.5	<0.5	<0.5
	09/16/93	<50		<0.5	<0.5	<0.5	<0.5
	12/28/93	<50		<0.5	<0.5	<0.5	<0.5
	03/28/94	<50		<0.5	<0.5	<0.5	<0.5
	06/13/94	<50		<0.5	<0.5	<0.5	<0.5
	09/20/94	<50		<0.5	<0.5	<0.5	<0.5
	03/13/95	<50		<0.50	<0.50	<0.50	<0.50
	05/30/95	<50		<0.50	<0.50	<0.50	<0.50
	09/14/95	<50		<0.50	<0.50	<0.50	<0.50
	11/27/95	<50		<0.50	<0.50	<0.50	<0.50

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-19	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/19/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	11/27/95	<50	<0.50	<0.50	<0.50	<0.50
MW-20	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	10/11/93	----------	Well Destroyed	----------		
MW-21	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/18/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/19/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	11/27/95	<50	<0.50	<0.50	<0.50	<0.50
MW-22	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-22	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
(cont.)	03/17/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/19/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	11/27/95	<50	<0.50	<0.50	<0.50	<0.50
MW-23	10/04/91	<30	<0.3	<0.3	<0.3	<0.3
	12/19/91	<30	<0.3	<0.3	<0.3	<0.3
	03/17/92	<30	<0.3	<0.3	<0.3	<0.3
	06/15/92	<30	<0.3	<0.3	<0.3	<0.3
	09/15/92	<50	<0.5	<0.5	<0.5	<0.5
	12/22/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/28/93	<50	<0.5	<0.5	<0.5	<0.5
	03/28/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/19/94	<50	<0.5	<0.5	<0.5	<0.5
	12/19/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	11/27/95	<50	<0.50	<0.50	<0.50	<0.50
MW-24	03/29/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
	09/15/95	<50	<0.50	<0.50	<0.50	<0.50
	11/28/95	<50	<0.50	<0.50	<0.50	<0.50
MW-25	03/29/93	<50	0.69	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5

Table 2 (continued)
Groundwater Analytical Data
Groundwater Monitoring Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
MW-25	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
(cont.)	03/14/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
	09/15/95	140	<0.50	<0.50	1.9	3.6
	11/28/95	<50	<0.50	<0.50	<0.50	<0.50
MW-26	03/29/93	<50	<0.5	<0.5	<0.5	<0.5
	06/15/93	<50	<0.5	<0.5	<0.5	<0.5
	09/14/93	<50	<0.5	<0.5	<0.5	<0.5
	12/29/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/13/94	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/13/95	<50	<0.50	<0.50	<0.50	<0.50
	06/01/95	<50	<0.50	<0.50	<0.50	<0.50
	09/15/95	<50	<0.50	<0.50	<0.50	<0.50
	11/28/95	<50	<0.50	<0.50	<0.50	<0.50

ppb = Parts per billion
N/A = Not available
ND = Not detected
a. Ethylbenzene and xylenes given as a combined value.
b. Well contained slight product sheen.
c. Non-typical gasoline chromatograph pattern.
d. Anomalous data point.
< = Denotes minimum laboratory detection limit. See certified analytical report for detection limits.
• = Value taken from system influent sampling.
Wells MW-1 and MW-2 destroyed prior to March 7, 1989 sampling event.
Wells MW-3, MW-4, and MW-6 (E-1) destroyed June 18, 1990.
Prior to June 1995, TPPH as gasoline was reported as TPH as gasoline.

Table 3
Groundwater Analytical Data
Total Methyl t-Butyl Ether

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Groundwater Monitoring Wells

Well Number	Date Sampled	Methyl t-Butyl Ether (ppb)
MW-5	09/15/95	660 *
MW-7	09/15/95	<2.5
MW-8	09/15/95	110
MW-9	09/15/95	<2.5
MW-10	09/14/95 11/28/95	630 720 *
MW-11	09/14/95	<2.5
E-1A (MW-12)	09/15/95	220
MW-13	09/15/95	<2.5
MW-14	09/14/95	<2.5
MW-15	09/14/95	9.4
MW-16	09/14/95	17
MW-17	09/14/95	<2.5
MW-18	09/14/95	<2.5
MW-19	09/14/95	<2.5
MW-21	09/14/95	<2.5
MW-22	09/14/95	<2.5
MW-23	09/14/95	<2.5
MW-24	09/15/95	<2.5
MW-25	09/15/95	<2.5
MW-26	09/15/95	<2.5

Domestic Irrigation Wells

Well Number	Date Sampled	Methyl t-Butyl Ether (ppb)
590 H	09/15/95	<2.5
633 H	09/14/95	<2.5
634 H	09/14/95	NS
642 H	09/14/95	NS
675 H	09/14/95	NS
17348 VE	09/14/95	<2.5
17197 VM	09/14/95	<2.5
17200 VM	09/14/95	4.8
17203 VM	09/14/95	<2.5
17302 VM	09/14/95	<2.5
17349 VM	09/15/95	32
17371 VM	09/15/95	NS
17372 VM	09/14/95	<2.5
17393 VM	09/15/95	<2.5

Methyl t-butyl ether analyzed according to EPA Method 8020.
* = Result confirmed by EPA Method 8240.

Table 4
Groundwater Analytical Data
Domestic Irrigation Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled		TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
590 H	11/13/91		<30	<0.3	<0.3	<0.3	<0.3
	10/14/92		<50	<0.5	<0.5	<0.5	<0.5
	12/21/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/17/93		<50	<0.5	<0.5	<0.5	<0.5
	09/16/93		<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	a	NS	NS	NS	NS	NS
	03/29/94		<50	<0.5	<0.5	<0.5	<0.5
	06/16/94		<50	<0.5	<0.5	<0.5	<0.5
	09/21/94		<50	<0.5	<0.5	<0.5	<0.5
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/26/95		<50	<0.50	<0.50	<0.50	<0.50
	09/15/95		<50	<0.50	13	<0.50	<0.50
	11/29/95	a	NS	NS	NS	NS	NS
633 H	09/11/91	b,d	NS	NS	NS	NS	NS
	10/14/92	a	NS	NS	NS	NS	NS
	12/21/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/17/93		<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	b,d	NS	NS	NS	NS	NS
	12/30/93	b,d	NS	NS	NS	NS	NS
	03/29/94	b,d	NS	NS	NS	NS	NS
	06/15/94	b,d	NS	NS	NS	NS	NS
	09/21/94	b,d	NS	NS	NS	NS	NS
	10/07/94		<50	<0.5	<0.5	<0.5	<0.5
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		250	5.1	9.8	0.65	46
	03/15/95	e	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95		<50	0.93	2.4	<0.50	14
	09/14/95		<50	0.64	1.2	<0.50	7.6
	11/28/95		<50	<0.50	0.89	<0.50	8.3
634 H	09/11/91	b,d	NS	NS	NS	NS	NS
	10/14/92	a	NS	NS	NS	NS	NS
	12/21/92	b,d	NS	NS	NS	NS	NS
	03/16/93	b,d	NS	NS	NS	NS	NS
	06/17/93	b,d	NS	NS	NS	NS	NS
	09/15/93	a	NS	NS	NS	NS	NS
	12/30/93	b,d	NS	NS	NS	NS	NS
	03/29/94	b,d	NS	NS	NS	NS	NS
	06/15/94		NS	NS	NS	NS	NS
	09/21/94	b,d	NS	NS	NS	NS	NS
	12/21/94	b,d	NS	NS	NS	NS	NS
	03/15/95	b,d	NS	NS	NS	NS	NS
	05/31/95	a	NS	NS	NS	NS	NS
	09/14/95	a	NS	NS	NS	NS	NS
	11/28/95	a	NS	NS	NS	NS	NS

Table 4 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled		TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
642 H	11/13/91		<30	<0.3	<0.3	<0.3	<0.3
	10/16/92		<50	<0.5	<0.5	<0.5	<0.5
	12/21/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/17/93		<50	<0.5	<0.5	<0.5	<0.5
	09/16/93		<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	a	NS	NS	NS	NS	NS
	03/30/94		<50	<0.5	<0.5	<0.5	<0.5
	06/15/94		NS	NS	NS	NS	NS
	09/21/94	b,d	NS	NS	NS	NS	NS
	12/21/94	b,d	NS	NS	NS	NS	NS
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/31/95	a	NS	NS	NS	NS	NS
	09/14/95	a	NS	NS	NS	NS	NS
	11/28/95	a	NS	NS	NS	NS	NS
675 H	09/11/91	b,d	NS	NS	NS	NS	NS
	10/14/92	a	NS	NS	NS	NS	NS
	12/21/92	b,d	NS	NS	NS	NS	NS
	03/16/93	b,d	NS	NS	NS	NS	NS
	06/17/93	b,d	NS	NS	NS	NS	NS
	09/15/93	a	NS	NS	NS	NS	NS
	12/30/93	a	NS	NS	NS	NS	NS
	03/29/94	a	NS	NS	NS	NS	NS
	06/15/94	a	NS	NS	NS	NS	NS
	09/22/94		<50	<0.5	<0.5	<0.5	<0.5
	12/21/94	b,d	NS	NS	NS	NS	NS
	03/15/95	b,d	NS	NS	NS	NS	NS
	05/31/95	b,d	NS	NS	NS	NS	NS
	09/14/95	b,d	NS	NS	NS	NS	NS
	11/28/95	a	NS	NS	NS	NS	NS
17197 VM	11/13/91		<30	<0.3	<0.3	<0.3	<0.3
	10/14/92		<50	<0.5	<0.5	<0.5	<0.5
	12/21/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/17/93		<50	<0.5	<0.5	<0.5	<0.5
	09/16/93		<50	<0.5	<0.5	<0.5	<0.5
	12/30/93		<50	<0.5	<0.5	<0.5	<0.5
	03/30/94		<50	<0.5	<0.5	<0.5	<0.5
	06/15/94		<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	a	NS	NS	NS	NS	NS
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/31/95		<50	<0.50	<0.50	<0.50	<0.50
	09/14/95		<50	<0.50	<0.50	<0.50	<0.50
	11/29/95		<50	<0.50	<0.50	<0.50	<0.50

Table 4 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
17200 VM	11/13/91	440	2.7	<0.3	<0.3	12
	10/14/92 a	NS	NS	NS	NS	NS
	12/18/92	160	1.4	<0.5	<0.5	3.4
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/29/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	<50	<0.5	<0.5	<0.5	<0.5
	12/20/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	510	<0.50	<0.50	3.1	3.4
	11/29/95	---------- Well Dry ----------				
17203 VM	11/13/91	<30	<0.3	<0.3	<0.3	<0.3
	10/16/92 a	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	1.3
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93	<50	<0.5	<0.5	<0.5	<0.5
	09/16/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94 a	NS	NS	NS	NS	NS
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	05/31/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	11/29/95	<50	<0.50	<0.50	<0.50	<0.50
17302 VM	10/21/91	72	0.64	<0.3	0.44	<0.3
	10/14/92 a	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/17/93 b,d	NS	NS	NS	NS	NS
	09/16/93	66	<0.5	<0.5	<0.5	<0.5
	12/30/93	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94 a	NS	NS	NS	NS	NS
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	11/29/95	<50	<0.50	<0.50	<0.50	<0.50

Table 4 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
17348 VE	11/13/91 b,d	NS	NS	NS	NS	NS
	10/14/92 a	NS	NS	NS	NS	NS
	12/21/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	<50	<0.5	<0.5	<0.5	<0.5
	06/16/93	<50	<0.5	<0.5	<0.5	<0.5
	09/15/93	<50	<0.5	<0.5	<0.5	<0.5
	12/30/93 b,d	NS	NS	NS	NS	NS
	03/30/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/21/94 a	NS	NS	NS	NS	NS
	12/21/94	<50	<0.5	<0.5	<0.5	<0.5
	03/15/95	<50	<0.50	<0.50	<0.50	<0.50
	05/30/95	<50	<0.50	<0.50	<0.50	<0.50
	09/14/95	<50	<0.50	<0.50	<0.50	<0.50
	11/29/95	<50	<0.50	<0.50	<0.50	<0.50
17349 VM	09/27/91	780	13	<3.0	<3.0	<3.0
	10/14/92	2,200	<50	<50	<50	110
	12/18/92	1,500	14	1.8	7.1	56
	03/16/93	1,100	16	4.2	1.8	1.8
	06/17/93	1,100	1.5	6.7	2.9	7.9
	09/16/93	1,200	13	21	3	10
	12/30/93 a	NS	NS	NS	NS	NS
	03/30/94	420	<1	<1	<1	5.3
	06/15/94	460	<0.5	<0.5	<0.5	1.8
	09/21/94	590	1.8	<0.5	1.1	7.6
	12/21/94	670	<0.5	<0.5	<0.5	1.8
	03/15/95	1,400	19	<5.0	7.9	48
	05/31/95	890	<2.0	<2.0	4.3	22
	09/15/95	610	3.9	<0.50	<0.50	<0.50
	11/29/95	790	<2.5	<2.5	3.8	11
17371 VM	11/13/91	870	9	1	2.1	4.5
	10/14/92	<50	<0.5	<0.5	<0.5	<0.5
	12/18/92	<50	<0.5	<0.5	<0.5	<0.5
	03/16/93	500	8.7	<0.5	3.9	3.1
	06/17/93 c	NS	NS	NS	NS	NS
	09/16/93 c	NS	NS	NS	NS	NS
	12/30/93 c	NS	NS	NS	NS	NS
	03/30/94 c	NS	NS	NS	NS	NS
	06/15/94 c	NS	NS	NS	NS	NS
	09/21/94 c	NS	NS	NS	NS	NS
	12/21/94 c	NS	NS	NS	NS	NS
	03/15/95 c	NS	NS	NS	NS	NS
	05/31/95 c	NS	NS	NS	NS	NS
	11/29/95 c	NS	NS	NS	NS	NS

Table 4 (continued)
Groundwater Analytical Data
Domestic Irrigation Wells
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled		TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)
17372 VM	09/27/91		300	5.5	<0.60	1.3	0.72
	10/14/92		220	<1.0	<1.0	<1.0	<1.0
	12/18/92		290	3.8	0.88	0.99	1.2
	03/16/93	*	110	<0.5	<0.5	<0.5	<0.5
	06/17/93		140	<0.5	1.3	0.63	1.1
	09/15/93		120	<0.5	1.1	0.62	1.2
	12/30/93		<50	<0.5	<0.5	<0.5	<0.5
	03/30/94		<50	<0.5	<0.5	<0.5	<0.5
	06/15/94		110	<0.5	<0.5	<0.5	<0.5
	09/21/94		55	<0.5	<0.5	<0.5	<0.5
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/31/95		60	<0.50	<0.50	<0.50	<0.50
	09/14/95		<50	<0.50	<0.50	<0.50	<0.50
	11/30/95		<50	<0.50	<0.50	<0.50	<0.50
17393 VM	11/13/91		31	<0.3	<0.3	<0.3	<0.3
	10/14/92	a	NS	NS	NS	NS	NS
	12/18/92		<50	<0.5	<0.5	<0.5	<0.5
	03/16/93		<50	<0.5	<0.5	<0.5	<0.5
	06/17/93		<50	<0.5	<0.5	<0.5	<0.5
	09/15/93		<50	<0.5	<0.5	<0.5	<0.5
	12/30/93	a	NS	NS	NS	NS	NS
	12/30/93		<50	<0.5	<0.5	<0.5	<0.5
	03/30/94		50	<0.5	<0.5	<0.5	<0.5
	06/15/94		<50	<0.5	<0.5	<0.5	<0.5
	09/21/94	a	NS	NS	NS	NS	NS
	12/21/94		<50	<0.5	<0.5	<0.5	<0.5
	03/15/95		<50	<0.50	<0.50	<0.50	<0.50
	05/31/95		<50	<0.50	<0.50	<0.50	<0.50
	09/15/95		<50	<0.50	<0.50	<0.50	<0.50
	11/30/95		<50	<0.50	<0.50	<0.50	<0.50

ppb = Parts per billion
H = Hacienda Avenue
< = Denotes laboratory detection limit
NS = Not sampled
VM = Via Magdalena
* = Non-typical chromatogram pattern; did not sample.
VE = Via Encinas
a. Owner not available to approve sampling access; well not sampled.
b. Pump not functioning; well not sampled.
c. Access denied by owner; well not sampled.
d. Pumping equipment obstructing sampling access; well not sampled.
e. Laboratory analyzed duplicate sample for confirmation. See certified analytical report.
Homeowners are contacted one week prior to sampling event.
Prior to June 1995, TPPH as gasoline was reported as TPH as gasoline.

Table 5
Soil Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Boring Number	Date Sampled	Sample Depth (feet)	TPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)
B-1	03/08/93	10 - 11	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-2	03/08/93	10 - 11	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-3	03/08/93	9 - 10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-4	03/08/93	8 - 9	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-5	03/08/93	10 - 11	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-6	03/08/93	12 - 13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-7	03/09/93	11 - 12	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-8	03/09/93	11 - 12	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-9	03/09/93	10 - 12	5.8	0.010	<0.0050	0.029	<0.0050
B-10	03/09/93	11 - 13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-11	03/09/93	11 - 13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-12	03/09/93	11 - 13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-13	03/10/93	12 - 13	1.6	<0.0050	<0.0050	<0.0050	<0.0050
B-14	03/10/93	12 - 13	9.6	<0.25*	<0.25*	0.39	0.94
B-15	03/10/93	12.5 - 13.5	<1.0	<0.0050	0.0070	<0.0050	<0.0050
B-16	03/11/93	14 - 15	90	0.095	0.25	0.76	0.46
B-17	03/10/93	12 - 13	1.6	0.028	<0.0050	0.032	0.0080
B-18	03/10/93	12 - 13	19	<0.025*	<0.025*	0.19	0.21
B-19	03/10/93	12 - 13	160	<0.25*	<0.25*	1.3	0.60
B-20	03/10/93	12 - 13	16	<0.010*	0.013	0.11	0.14
B-21	03/10/93	12 - 13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-22	03/11/93	12 - 13	4.1	<0.010*	<0.010*	<0.010*	<0.010*

Table 5 (continued)
Soil Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Boring Number	Date Sampled	Sample Depth (feet)	TPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)
B-23	03/11/93	4 - 5	1.4	<0.0050	<0.0050	<0.0050	<0.0050
		9 - 10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
		14 - 15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-24	03/11/93	4 - 5	**210**	<0.25*	<0.25*	<0.25*	2.0
		9 - 10	**650**	<0.5*	<0.5*	0.80	6.4
		14 - 15	2.6	<0.0050	<0.0050	<0.0050	<0.0050
B-25	03/11/93	12 - 14	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-26	03/11/93	12 - 14	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-27	03/11/93	2 - 3	1.2	0.013	0.024	0.025	0.041
		4 - 5	<1.0	<0.0050	0.0050	<0.0050	<0.0050
		9 - 10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
		14 - 15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-28	03/11/93	4 - 5	<1.0	<0.0050	0.0080	<0.0050	<0.0050
		9 - 10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
		14 - 15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-29	03/11/93	4 - 5	6.8	<0.010*	0.024	<0.010*	0.028
		9 - 10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
		14 - 15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-30	03/11/93	14 - 15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-31	03/13/93	12 - 13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-32	03/13/93	14 - 15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-33	03/13/93	13 - 14	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-34	03/13/93	13 - 14	**130**	<0.10*	<0.10*	0.12	0.28
B-35	03/13/93	12 - 13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
B-36	03/13/93	12 - 13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW-24	03/17/93	11 - 12	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW-25	03/17/93	12 - 13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
MW-26	03/19/93	15 - 16.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050

Table 5 (continued)
Soil Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline and BTEX Compounds)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Boring Number	Date Sampled	Sample Depth (feet)	TPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Xylenes (ppm)
SP-1/V-4	03/18/93	12 - 13	500	0.59	3.8	7.9	26
SP-2/V-5	03/18/93	12 - 13	<1.0	0.056	<0.0050	0.021	0.0080

ppm = Parts per million
< = Denotes minimum laboratory detection limit.
* Laboratory detection limits raised due to high analyte concentration requiring sample dilution.

Table 6
Soil Analytical Data
Total Recoverable Petroleum Oil
(Oil and Grease)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Boring Number	Date Sampled	Sample Depth (feet)	Concentration (ppm)
B-23	03/11/93	4 - 5	<50
		9 - 10	<50
		14 - 15	<50
B-24	03/11/93	4 - 5	500*
		9 - 10	550*
		14 - 15	<50
B-24A	04/06/93	4 - 6	950
		9 - 11	1,900
		14 - 16	<50
B-27	03/11/93	2 - 3	240*
		4 - 5	<50
		9 - 10	<50
		14 - 15	NA **
B-27A	04/06/93	14 - 16	<50
B-28	03/11/93	4 - 5	<50
		9 - 10	<50
		14 - 15	<50
B-29	03/11/93	4 - 5	<50
		9 - 10	<50
		14 - 15	<50
B-30	03/11/93	14 - 15	<330
B-30A	04/06/93	4 - 6	<50
		9 - 11	<50

ppm = Parts per million
< = Denotes minimum laboratory detection limit.
NA = Not analyzed
* Quantative result. Insufficient sample was available for representative quanitation.
** Not enough of this sample was available for this analysis.

Table 7
Soil Analytical Data
California Assessment Metals
(Inorganic Persistent and Bioaccumulative Toxic Substances)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Boring Number	Date Sampled	Sample Depth (feet)	Analyte	Sample Results (ppb)	TTLC Max. Limit (ppb)
B-23	03/11/93	4 - 5	Arsenic	27	500
			Barium	140	10,000
			Chromium	31	500
			Cobalt	7.4	8,000
			Copper	16	2,500
			Nickel	33	2,000
			Vanadium	32	2,400
			Zinc	880	5,000
	03/11/93	9 - 10	Arsenic	30	500
			Barium	130	10,000
			Chromium	36	500
			Cobalt	8.4	8,000
			Copper	15	2,500
			Nickel	43	2,000
			Vanadium	33	2,400
			Zinc	860	5,000
	03/11/93	14 - 15	Arsenic	33	500
			Barium	150	10,000
			Chromium	44	500
			Cobalt	9.0	8,000
			Copper	21	2,500
			Nickel	49	2,000
			Vanadium	29	2,400
			Zinc	190	5,000
B-24	03/11/93	4 - 5	Antimony	7.2	500
			Arsenic	31	500
			Barium	140	10,000
			Chromium	34	500
			Cobalt	7.4	8,000
			Copper	15	2,500
			Nickel	34	2,000
			Vanadium	33	2,400
			Zinc	300	5,000

Table 7 (continued)
Soil Analytical Data
California Assessment Metals
(Inorganic Persistent and Bioaccumulative Toxic Substances)

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Boring Number	Date Sampled	Sample Depth (feet)	Analyte	Sample Results (ppb)	TTLC Max. Limit (ppb)
B-24 (cont.)	03/11/93	9 - 10	Arsenic	3.0	500
			Barium	130	10,000
			Chromium	39	500
			Cobalt	7.2	8,000
			Copper	16	2,500
			Lead	49	1,000
			Nickel	41	2,000
			Vanadium	27	2,400
			Zinc	740	5,000
	03/11/93	14 - 15	Arsenic	32	500
			Barium	130	10,000
			Chromium	36	500
			Cobalt	7.0	8,000
			Copper	16	2,500
			Nickel	38	2,000
			Vanadium	38	2,400
			Zinc	1,200	5,000
B-27A	04/16/93	14 - 16	Arsenic	8.3	500
			Barium	82	10,000
			Chromium	22	500
			Cobalt	6.5	8,000
			Copper	9.3	2,500
			Nickel	29	2,000
			Vanadium	26	2,400
			Zinc	31	5,000
B-30	03/11/93	14 - 15	Arsenic	31	500
			Barium	s130	10,000
			Chromium	41	500
			Cobalt	7.1	8,000
			Copper	19	2,500
			Lead	11	1,000
			Nickel	44	2,000
			Vanadium	23	2,400
			Zinc	2,300	5,000

ppb = Parts per billion
TTLC = Total threshold level concentrations
Only detected compounds are listed.

Table 8
Soil Analytical Data
Semi-Volatile Organic Compounds

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Boring Number	Date Sampled	Sample Depth (feet)	Analyte	Sample Results (ppb)	Detection Limit (ppb)
B-23	03/11/93	4 - 5	2-Methylnaphthalene	100	100
			Naphthalene	140	100
		9 - 10	ND	ND	--
		14 - 15	ND	ND	--
B-24	03/11/93	4 - 5	1,4-Dichlorobenzene	150	100
			1,2-Dichlorobenzene	480	100
			2-Methylnaphthalene	710	100
			Naphthalene	570	100
		9 - 10	*Bis*(2-ethylhexyl)phthalate	500	500
			1,2-Dichlorobenzene	160	100
			2-Methylnaphthalene	1,100	100
			Naphthalene	760	100
		14 - 15	ND	ND	--
B-27	03/11/93	14 - 15	ND	ND	--
B-30	03/11/93	14 - 15	ND	ND	--

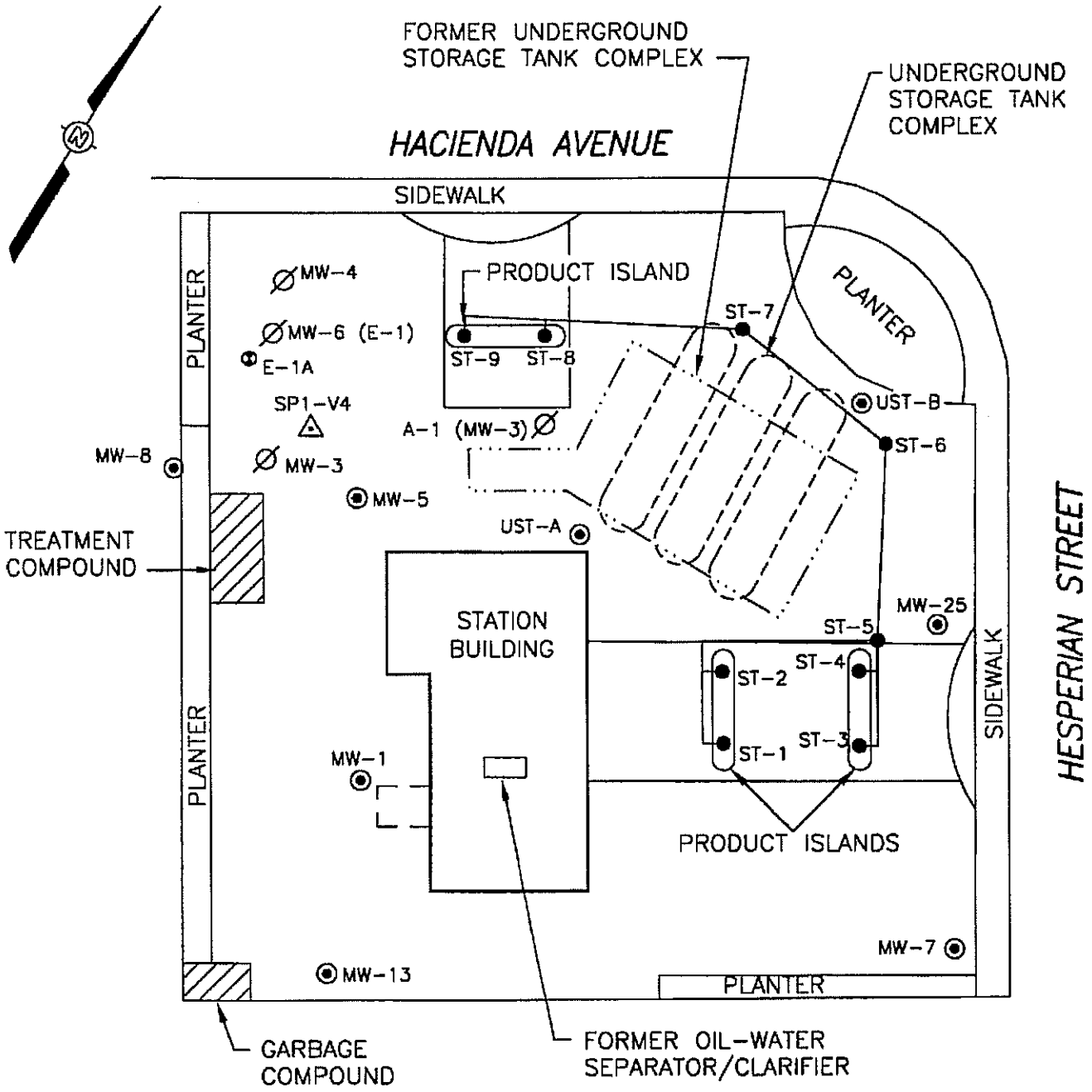
ppb = Parts per billion
ND = Not detected
Only detected compounds are listed.

Table 9
Soil Analytical Data
Halogenated Volatile Organic Compounds

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Boring Number	Date Sampled	Sample Depth (feet)	Analyte	Sample Results (ppb)	Detection Limit (ppb)
B-23	03/11/93	4 - 5	ND	ND	--
		9 - 10	ND	ND	--
		14 - 15	ND	ND	--
B-24	03/11/93	4 - 5	1,3-Dichlorobenzene	7.1	5.0
			1,4-Dichlorobenzene	45	5.0
			1,2-Dichlorobenzene	110	5.0
		9 - 10	ND	ND	--
		14 - 15	ND	ND	--
B-27	03/11/93	14 - 15	ND	ND	--
B-30	03/11/93	14 - 15	ND	ND	--

ppb = Parts per billion
ND = Not detected
Only detected compounds are listed.



PROJECT NUMBER 821803

DRAWN BY	CHECKED BY	APPROVED BY
L. Wahlgren 10-20-00	--	--

LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER EXTRACTION WELL
- DESTROYED GROUNDWATER MONITORING WELL
- DUAL VAPOR EXTRACTION/SPARSE WELL
- SAMPLE LOCATIONS SAMPLED 6/19/01

NOTE: UST-A AND UST-B ARE TANK-PIT OBSERVATION WELLS AND ARE NOT INCLUDED IN THE GROUNDWATER MONITORING PROGRAM

SCALE

0 30 60 FEET

IT CORPORATION

ARCO SERVICE STATION 0608

FIGURE 1
SITE MAP

17601 HESPERIAN BLVD at HACIENDA AVE
SAN LORENZO, CALIFORNIA

Table 1
Soil Analytical Data
TPPH as gasoline, BTEX compounds, MtBE, Total Lead, and TCLP Lead.
Product Piping Excavations
ARCO 608
17601 Hesperian Blvd.
San Lorenzo, California

Sample ID	Sample Depth (feet)	Date Sampled	TPPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-Benzene (ppm)	Total Xylenes (ppm)	MtBE (ppm)	Total Lead (ppm)	TCLP Lead (ppm)
ST-1	NA	6/19/01	13[1]	ND	ND	ND	0.0071	ND	25	ND
ST-2	NA	6/19/01	20[1]	0.0071	0.0093	0.042	0.36	0.2	9.2	ND
ST-3	NA	6/19/01	1.6	ND	ND	ND	ND	0.32	13	ND
ST-4	NA	6/19/01	1	ND	ND	ND	ND	ND	9.7	ND
ST-5	NA	6/19/01	ND	ND	ND	ND	ND	ND	7.6	ND
ST-6	NA	6/19/01	ND	ND	ND	ND	ND	ND	6.9	ND
ST-7	NA	6/19/01	210	0.39	21	4.7	24	21	9.8	ND
ST-8	NA	6/19/01	ND	ND	ND	ND	ND	ND	12	ND
ST-9	NA	6/19/01	6.7	0.014	0.012	0.022	0.33	0.7	13	ND

TPPH = Total purgeable petroleum hydrocarbons
TEPH = Total extractable petroleum hydrocarbons
MtBE = Methyl tert-butyl ether
ppm = Parts per million
ND = Not detected
NA = Not applicable
(1) = Chromatogram Pattern: Unidentified Hydrocarbons C6-C-12.
Detection limits are indicated in certified analytical reports.

Table 2
Soil Analytical Data
TPPH as gasoline, BTEX compounds, MtBE, and Total Lead
Soil Stockpile
ARCO 608
17601 Hesperian Blvd.
San Lorenzo, California

Sample ID	Sample Depth (feet)	Date Sampled	TPPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-Benzene (ppm)	Total Xylenes (ppm)	MtBE (ppm)	Total Lead (ppm)
SP (1-4)*	NA	7/3/01	ND	ND	ND	ND	ND	ND	31

TPPH = Total purgeable petroleum hydrocarbons
TEPH = Total extractable petroleum hydrocarbons
MtBE = Methyl tert-butyl ether
ppm = Parts per million
ND = Not detected
NA = Not applicable
* = Soil Samples SP-1 through SP-4 were composited into SP (1-4) by the laboratory.
Detection limits are indicated in certified analytical reports.

Table 2
Groundwater Elevation and Analytical Data
Groundwater Monitoring Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number		Date Sampled		Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-5	††	03/13,14/96		33.99	9.75	24.24	1,600	30	<10	13	<10	NA	NM
		05/28,29/96			11.48	22.51	240	2.4	<0.50	<0.50	<0.50	NA	NM
		08/28/96			12.58	21.41	250	210	8.0	<1.0	<1.0	210	NM
		11/25,26/96			12.07	21.92	<500	<5.0	<5.0	<5.0	<5.0	280	NM
		03/31/97	†		12.42	21.57	<50	<0.50	<0.50	<0.50	<0.50	41	NM
		06/25/97			12.64	21.35	NS	NS	NS	NS	NS	NS	NM
		09/09,10/97			12.75	21.24	<50	<0.50	<0.50	<0.50	<0.50	19	NM
		11/24,25/97			12.60	21.39	<50	0.9	<0.50	<0.50	<0.50	23	1.4
		03/19,20/98			10.43	23.56	61	1.0	0.56	0.55	<0.50	75	1.2
		06/04/98			11.24	22.75	150	<0.30	<0.30	0.32	0.74	20	1.4
		09/21,22/98			12.45	21.54	110	0.59	<0.50	<0.50	<0.50	25	1.8
		12/14,15/98			11.85	22.14	<200	<2.0	<2.0	<2.0	<2.0	600	1.2
		03/15,16/99			11.05	22.94	50.9	<0.50	<0.50	<0.50	<0.50	211	1.0
		06/14,15/99			12.25	21.74	211	<0.50	<0.50	<0.50	<0.50	212	1.2
		09/15,16/99			12.70	21.29	139	<0.50	<0.50	<0.50	<0.50	184	2.4
		12/08,09/99			12.56	21.43	87.4	<0.50	<0.50	<0.50	<0.50	197	1.2
		03/15/00			10.10	23.89	82.4	<0.50	0.710	<0.50	0.579	906	1.2
		03/15/00	a		--	--	--	--	--	--	--	1,230	--
		06/13/00	b		12.44	21.55	96.7	<0.50	<0.50	<0.50	<0.50	551	2.0
		9/19,20/00			12.45	21.54	<50.0	<0.50	<0.50	<0.50	<0.50	51	2.2
		12/14,15/00			12.03	21.96	152.0	1.33	0.56	<0.50	<0.50	<2.50	1.0
		3/8,9/01			10.81	23.18	<50.0	<0.50	<0.50	<0.50	<0.50	73.8	1.6
		06/14/01			12.25	21.74	<50.0	<0.50	<0.50	<0.50	<0.50	47.0	1.8
		09/26/01			12.83	21.16	<50.0	<0.50	<0.50	<0.50	<0.50	270.0	2.0
		12/29/01			10.97	23.02	<50.0	<0.50	<0.50	<0.50	0.95	370.0	2.4
MW-7		03/13,15/96		34.40	9.73	24.67	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		05/28,29/96			11.60	22.80	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		08/28,29/96			12.63	21.77	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		11/25,26/96			12.10	22.30	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		03/31-04/01/97			11.72	22.68	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		06/25/97			12.98	21.42	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		09/09,10/97			12.25	22.15	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
		11/24,25/97			12.57	21.83	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.0
		03/19,20/98			10.36	24.05	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.0
		06/04/98			11.30	23.10	<50	<0.30	<0.30	<0.30	<0.60	<10	0.7
		09/21,22/98			12.48	21.92	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.4
		12/14,15/98			11.90	22.50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.2
		03/15,16/99			11.10	23.30	<50	<0.50	<0.50	<0.50	<0.50	<	0.0
		06/14,15/99			Removed From Gauging and Sampling Program								
MW-8		03/13,14/96		32.79	8.90	23.89	670	6.1	<2.0	<2.0	<2.0	NA	NM
		05/28,29/96			10.58	22.21	490	<1.0	<1.0	0.91	0.91	NA	NM
		08/28/96			11.30	21.49	680	29	2.1	3.0	2.4	80	NM
		11/25/96			10.80	21.99	620	1.2	2.6	2.9	2.0	46	NM
		03/31-04/01/97			10.76	22.03	530	<1.0	1.7	2.0	3.8	380	NM
		06/25/97			11.65	21.14	460	6.7	0.69	0.8	0.71	88	NM
		09/09,10/97			11.67	21.12	570	57	<1.0	2.1	1.7	57	2.0
		09/09,10/97	a		--	--	--	--	--	--	--	48	--
		11/24,25/97			11.50	21.29	530	3.0	1.7	1.9	1.5	26	2.0
		03/19,20/98			9.40	23.39	440	1.4	<0.50	<0.50	3.7	140	2.2
		06/03/98			10.25	22.54	360	2.2	1.2	1.8	1.0	47	0.3
		09/21,22/98			11.37	21.42	380	<2.5	<2.5	<2.5	<2.5	620	0.0
		12/14,15/98			10.80	21.99	<50	<0.50	<0.50	<0.50	<0.50	1,600	0.0
		03/15,16/99			10.00	22.79	<500	<5.0	<5.0	<5.0	<5.0	625	0.0
		06/14,15/99			11.17	21.62	166	<0.50	<0.50	<0.50	<0.50	141	NM
		09/15,16/99			11.65	21.14	<500	<5.0	<5.0	<5.0	<5.0	2,380	2.4
		12/08,09/99			11.48	21.31	213	<0.50	<0.50	<0.50	<0.50	4,160	2.8
		03/15/00			9.38	23.41	133	<0.50	3.44	<0.50	0.648	1,350	2.2
		03/15/00	a		--	--	--	--	--	--	--	1,980	--
		06/13/00	b		11.93	20.86	227	<0.50	<0.50	<0.50	<0.50	657	1.0
		9/19,20/2000			11.46	21.33	191	1.7	3.2	<0.50	1.2	160	1.0
		12/14,15/00			10.97	21.82	243	<0.50	<0.50	<0.50	<0.50	243	2.0
		3/8,9/01			9.80	22.99	144	<0.50	<0.50	<0.50	<0.50	188	3.0
		06/14/01			11.22	21.57	150	3.2	0.75	<0.50	1.0	230	3.4
		09/26/01			10.80	21.99	140	<0.50	0.58	<0.50	1.9	170	0.6
		12/29/01			9.85	22.94	<50.0	<0.50	<0.50	<0.50	<0.50	560	4.2

Table 2
Groundwater Elevation and Analytical Data
Groundwater Monitoring Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number		Date Sampled		Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-9		03/13,15/96		32.11	7.65	24.46	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		05/28/96			9.67	22.44	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		08/28,29/96			10.78	21.33	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		11/25/96			10.24	21.87	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		03/31-04/01/97			9.95	22.16	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		06/25/97			10.86	21.26	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		09/09,10/97			10.87	21.24	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
		11/24,25/97			10.70	21.41	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
		03/19,20/98			8.63	23.48	<50	<0.50	<0.50	<0.50	<0.50	58	4.8
		06/04/98			9.35	22.76	<50	<0.30	<0.30	<0.30	<0.60	<10	2.0
		09/21,22/98			10.55	21.56	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
		12/14,15/98			9.98	22.13	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
		03/15,16/99			9.10	23.01	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.0
		06/14,15/99			10.32	21.79	<50	<0.50	<0.50	<0.50	<0.50	3.27	2.2
		09/15,16/99			10.83	21.28	<50	<0.50	<0.50	<0.50	<0.50	<5.0	3.2
		12/08,09/99			10.70	21.41	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.6
		03/15/00			8.58	23.53	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
		06/13/00	b		10.48	21.63	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
		9/19,20/00			10.53	21.58	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
		12/14,15/00			10.35	21.76	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
		3/8,9/01			9.05	23.06	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
		06/14/01			10.33	21.78	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
		09/26/01			10.82	21.29	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
		12/29/01			8.82	23.29	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
MW-10	††	03/13,14/96		31.67	7.78	23.89	870	35	<5.0	5.2	7.0	NA	NM
		05/29/96			10.00	21.67	800	<1.0	<1.0	<1.0	<1.0	NA	NM
		08/28/96			10.93	20.74	NS	NS	NS	NS	NS	NS	NM
		11/25,26/96			10.45	21.22	1,100	6.0	4.9	3.8	9.5	200	NM
		03/31/97	†		10.15	21.52	160	<0.50	<0.50	<0.50	<0.50	140	NM
		06/25/97			10.99	20.68	800	4.2	1.4	1.5	1.4	170	NM
		09/09,10/97			11.08	20.59	950	<1.2	3.3	2.5	3.7	240	2.0
		09/09,10/97	a		–	–	–	–	–	–	–	210	–
		11/24,25/97			10.85	20.82	920	5.7	6.7	<5.0	<5.0	160	2.4
		11/24,25/97			–	–	–	–	–	–	–	160	–
		03/19/98			8.78	22.89	330	1.7	<0.50	<0.50	<0.50	130	1.0
		06/04/98			9.59	22.08	680	<0.30	4.8	2.3	6.6	79	0.0
		09/21,22/98			10.77	20.90	650	<0.50	<0.50	3.5	1.3	99	0.0
		12/14/98			10.18	21.49	828	<1.0	<1.0	3.39	<1.0	152	0.4
		03/15,16/99			9.30	22.37	910	17.6	1.3	5.24	<1.0	268	0.0
		06/14,15/99			10.57	21.10	643	<0.50	0.761	1.13	1.35	232	NM
		09/15,16/99			11.03	20.64	655	<1.25	1.25	<1.25	<1.25	315	5.8
		12/08,09/99			10.88	20.79	898	5.7	1.29	<1.0	<1.0	236	5.6
		03/15/00			8.68	22.99	459	<1.0	<1.0	<1.0	<1.0	266	2.2
		03/15/00	a		–	–	–	–	–	–	–	342	–
		06/13/00	b		10.85	20.82	617	6.82	2.77	3.07	1.92	437	1.0
		9/19,20/00			10.70	20.97	527	<0.50	0.86	0.99	1.19	413	2.2
		12/14,15/00			10.35	21.32	456	10.50	1.01	0.60	<0.50	145	4.0
		3/8,9/01			9.12	22.55	509	<0.50	21.90	3.16	3.55	161	3.2
		06/14/01			10.55	21.12	710	9.20	2.60	<0.50	1.50	290	3.0
		09/26/01			10.98	20.69	580	<0.50	1.60	1.50	1.60	250	2.6
		12/29/01			9.06	22.61	410	<0.50	6.70	2.50	2.90	950	3.2
MW-11		03/13,14/96		32.54	8.60	23.94	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		05/28/96			10.55	21.99	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		08/28/96			11.52	21.02	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		11/25/96			11.00	21.54	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		03/31-04/01/97			10.88	21.66	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		06/25/97			11.65	20.89	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		09/09,10/97			11.75	20.79	80	<0.50	<0.50	<0.50	0.65	<2.5	2.0
		11/24,25/97			11.50	21.04	<50	<0.50	<0.50	<0.50	<0.50	3.8	2.4
		03/19/98			9.43	23.11	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
		06/03/98			10.27	22.27	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.8
		09/21,22/98			11.43	21.11	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
		12/14/98			10.85	21.69	<50	<0.50	<0.50	<0.50	<0.50	<2.0	1.4
		03/15,16/99			10.05	22.49	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.2

Table 2
Groundwater Elevation and Analytical Data
Groundwater Monitoring Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number		Date Sampled		Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-11		06/14,15/99			11.25	21.29	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.4
(cont.)		09/15/99			11.68	20.86	<50	<0.50	<0.50	<0.50	<0.50	<5.0	3.4
		12/08,09/99			11.53	21.01	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.0
		03/15/00			9.32	23.22	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.7
		06/13/00	b		11.05	21.49	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
		9/19,20/00			11.37	21.17	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
		3/8,9/01			11.00	21.54	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
		3/8,9/01			9.78	22.76	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
		06/14/01			11.23	21.31	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.4
		09/26/01			11.70	20.84	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.6
		12/29/01			9.91	22.63	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
E-1A	††	03/13,14/96		33.06	10.35	22.71	2,700	38	<5.0	130	6.2	NA	NM
(MW-12)		05/28,29/96			11.50	21.56	1,400	410	18	55	5.5	NA	NM
		08/28/96			11.70	21.36	NS	NS	NS	NS	NS	NS	NM
		11/25,26/96			11.18	21.88	4,300	13	<5.0	100	20	220	NM
		03/31/97	†		12.65	20.41	1,900	7.9	<2.0	62	3.5	140	NM
		06/26/97			11.82	21.24	4,900	21	<5.0	53	6.8	150	NM
		09/09,10/97			11.85	21.21	3,200	9.0	<5.0	45	<5.0	85	2.0
		09/09,10/97	a		--	--	--	--	--	--	--	70	--
		11/24,25/97			11.75	21.31	2,000	10	<2.5	42	2.8	65	1.0
		03/19,20/98			9.65	23.41	11,000	1,300	<0.50	550	380	220	6.2
		06/04/98	b		10.47	22.59	4,500	3.3	0.92	41	4.0	51	1.5
		09/21,22/98			11.60	21.46	3,300	1.7	<0.50	29	3.6	52	1.8
		12/14,15/98			11.10	21.96	3,100	21	6.7	28	<5.0	140	1.0
		03/15,16/99			10.25	22.81	3,900	24.5	<20	41.2	<20	296	1.0
		06/14,15/99			11.47	21.59	5,090	<5.0	<5.0	6.01	<5.0	234	1.4
		09/15,16/99			11.90	21.16	2,200	7.93	<5.0	10.50	<5.0	142	3.2
		12/08,09/99			11.75	21.31	1,490	6.57	1.36	9.21	<1.25	364	NM
		03/15/00			9.52	23.54	4,430	26.1	<10.0	16.3	<10.0	786	1.8
		03/15/00	a		--	--	--	--	--	--	--	908	--
		06/13/00	b		22.31	10.75	262	9.62	0.584	0.535	<0.5	534	3.4
		9/19,20/00			23.15	9.91	143	1.01	<0.50	<0.50	<0.50	76	2.8
		12/14,15/00			NA	NA	181	<0.50	<0.50	0.789	<0.50	100	1.4
		3/8,9/01			23.80	9.26	370	1.78	<0.50	0.765	<0.50	76	1.6
		06/14/01			21.10	11.96	180	<0.50	<0.50	0.54	<0.50	100	2.6
		09/26/01			19.95	13.11	<50.0	<0.50	<0.50	<0.50	<0.50	210	1.6
		12/29/01			22.40	10.66	<50.0	<0.50	<0.50	<0.50	<0.50	190	2.0
MW-13		03/13,15/96		35.42	10.90	24.52	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		05/28,29/96			12.90	22.52	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		08/28/96			13.89	21.53	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		11/25/96			13.41	22.01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		03/31-04/01/97			13.11	22.31	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		06/25/97			13.98	21.44	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		09/09,10/97			14.09	21.33	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
		11/24,25/97			13.90	21.52	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
		03/19,20/98			11.80	23.62	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.8
		06/04/98			12.63	22.79	<50	<0.30	<0.30	<0.30	<0.60	<10	1.3
		09/21,22/98			13.77	21.65	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
		12/14,15/98			13.28	22.14	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
		03/15,16/99	b		12.48	22.94	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.2
		06/14,15/99		---------- Removed From Gauging and Sampling Program ----------									
MW-14		03/13,15/96		30.46	6.63	23.83	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		05/28/96			8.83	21.63	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
		08/28/96			9.83	20.63	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		11/25/96			9.33	21.13	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		03/31-04/01/97			9.04	21.42	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		06/25/97			9.94	20.52	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
		09/09,10/97			10.08	20.38	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
		11/24,25/97			9.78	20.68	<50	<0.50	<0.50	<0.50	<0.50	2.9	2.6
		03/19/98			7.92	22.54	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
		06/03/98			8.52	21.94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.1
		09/21,22/98			9.72	20.74	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.8
		12/14/98			9.15	21.31	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.8
		03/15,16/99			8.20	22.26	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.6

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San Lorenzo, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-14	06/14,15/99		9.54	20.92	Well Sampled Annually						
(cont.)	09/15/99		9.98	20.48	Well Sampled Annually						
	12/08,09/99		9.84	20.62	Well Sampled Annually						
	03/15/00		7.78	22.68	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.6
	06/13/00 b		9.45	21.01	Well Sampled Annually						
	9/19,20/00		9.68	20.78	Well Sampled Annually						
	12/14,15/00		9.14	21.32	Well Sampled Annually						
	3/8,9/01		8.10	22.36	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	06/14/01		9.51	20.95	Well Sampled Annually						
	09/26/01		9.96	20.50	Well Sampled Annually						
	12/29/01		7.62	22.84	Well Sampled Annually						
MW-15	03/13,15/96	31.41	8.13	23.28	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28,29/96		10.30	21.11	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		11.30	20.11	<50	<0.50	<0.50	<0.50	<0.50	5.3	NM
	11/25/96		10.83	20.58	<50	<0.50	<0.50	<0.50	<0.50	12	NM
	03/31-04/01/97		10.45	20.96	<50	<0.50	<0.50	<0.50	<0.50	7.2	NM
	06/25/97		11.39	20.02	<50	<0.50	<0.50	<0.50	<0.50	7.0	NM
	09/09,10/97		11.50	19.91	Well Inaccessible						
	11/24,25/97				Well Inaccessible						
	03/19/98		9.15	22.26	<50	<0.50	<0.50	<0.50	<0.50	5.3	2.2
	06/04/98		NM		Well Inaccessible						
	09/21,22/98		NM		Well Inaccessible						
	12/14/98		10.63	20.78	<50	<0.50	<0.50	<0.50	<0.50	48.2	1.8
	03/15,16/99		NM		Well Inaccessible						
	06/14,15/99		NM		Well Inaccessible						
	09/15, 16/99		NM		Well Inaccessible						
	12/08,09/99		11.28	20.13	<50	<0.5	<0.5	<0.5	<0.5	167.0	NM
	03/15/00		9.03	22.38	<50	<0.5	<0.5	<0.5	<0.5	82.1	1.5
	03/15/00 a		--	--	--	--	--	--	--	105	--
	06/13/00 b		10.96	20.45	<50	<0.5	0.703	<0.5	0.870	69.8	2.0
	9/19,20/00		11.10	20.31	<50	<0.5	<0.5	<0.5	<0.5	156.0	2.2
	12/14,15/00		NM	NA	Well Inaccessible						
	3/8,9/01		9.48	21.93	<50	<0.5	<0.5	<0.5	<0.5	63.8	2.6
	06/14/01		10.95	20.46	<50	<0.5	<0.5	<0.5	<0.5	26.0	3.0
	09/26/01		11.38	20.03	<50	<0.5	<0.5	<0.5	<0.5	17.0	1.2
	12/29/01		9.41	22.00	<50	<0.5	<0.5	<0.5	<0.5	30.0	2.2
MW-16	03/13/96	31.39	8.62	22.77	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		10.90	20.49	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		11.84	19.55	<50	<0.50	<0.50	<0.50	<0.50	89	NM
	11/25/96		11.32	20.07	<50	<0.50	<0.50	<0.50	<0.50	66	NM
	03/31-04/01/97		11.06	20.33	<50	<0.50	<0.50	<0.50	<0.50	49	NM
	06/25/97		11.92	19.47	<50	<0.50	<0.50	<0.50	<0.50	59	NM
	09/09,10/97		12.03	19.36	<50	<0.50	<0.50	<0.50	<0.50	63	3.0
	09/09,10/97 a		--	--	--	--	--	--	--	66	--
	11/24,25/97		11.76	19.63	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	03/19/98		9.80	21.58	<50	<0.50	<0.50	<0.50	<0.50	8.4	3.0
	06/03/98		10.55	20.84	<50	<0.50	<0.50	<0.50	<0.50	22	1.6
	09/21,22/98		11.77	19.62	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.2
	12/14/98		11.20	20.19	<50	<0.50	<0.50	<0.50	<0.50	25	1.0
	03/15,16/99		10.30	21.09	<50	<0.50	<0.50	<0.50	<0.50	<5.0	3.5
	06/14,15/99		11.55	19.84	<50	<0.50	<0.50	<0.50	<0.50	3.13	3.4
	09/15/99		11.99	19.40	<50	<0.50	<0.50	<0.50	<0.50	8.70	3.8
	12/08,09/99		11.80	19.59	<50	<0.50	<0.50	<0.50	<0.50	10.1	2.4
	03/15/00		9.55	21.84	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	06/13/00 b		11.84	19.75	<50	<0.50	0.517	<0.50	0.603	6.29	1.0
	9/19,20/00		11.84	19.75	<50	<0.50	<0.50	<0.50	<0.50	5.01	2.0
	12/14,15/00		11.25	20.14	<50	<0.50	<0.50	<0.50	<0.50	5.14	2.0
	3/8,9/01		10.01	21.38	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	06/14/01		11.47	19.92	<50	<0.50	<0.50	<0.50	<0.50	2.5	2.6
	09/26/01		11.93	19.46	<50	<0.50	<0.50	<0.50	<0.50	3.8	1.8
	12/29/01		9.71	21.68	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
MW-17					Well Destroyed						
MW-18	03/13/96	29.70	7.53	22.17	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		9.88	19.82	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		10.82	18.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		10.18	19.52	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM

Table 2
Groundwater Elevation and Analytical Data
Groundwater Monitoring Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-18	03/31-04/01/97		10.14	19.56	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
(cont.)	06/25/97		10.94	18.76	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		11.00	18.70	<50	<0.50	<0.50	<0.50	<0.50	<2.5	4.0
	11/24,25/97		10.65	19.05	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.4
	03/19/98		8.95	20.75	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	06/03/98		9.57	20.13	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.8
	09/21,22/98		10.80	18.90	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	12/14/98		10.18	19.52	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.6
	03/15,16/99		9.20	20.50	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.0
	06/14,15/99		10.60	19.10	Well Sampled Annually						
	09/15/99		10.96	18.74	Well Sampled Annually						
	12/08,09/99		10.79	18.91	Well Sampled Annually						
	03/15/00		8.80	20.90	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/13/00 b		10.60	19.10	Well Sampled Annually						
	9/19,20/00		10.63	19.07	Well Sampled Annually						
	12/14,15/00		10.39	19.31	Well Sampled Annually						
	3/8,9/01		9.03	20.67	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.4
	06/14/01		10.40	19.30	Well Sampled Annually						
	09/26/01		10.91	18.79	Well Sampled Annually						
	12/29/01		8.24	21.46	Well Sampled Annually						
MW-19	03/13/96	29.02	7.06	21.96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		9.42	19.60	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		10.33	18.69	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		9.67	19.35	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		9.65	19.37	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		10.41	18.61	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		10.47	18.55	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	11/24,25/97		10.35	18.67	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.6
	03/19/98		8.67	20.35	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/03/98		9.15	19.87	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.2
	09/21,22/98		10.28	18.74	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	12/14/98		9.70	19.32	<50	<0.50	<0.50	0.588	0.647	<2.0	2.4
	03/15,16/99	Well Inaccessible									
	06/14,15/99	Removed From Gauging and Sampling Program									
MW-20		Well Destroyed									
MW-21	03/13/96	28.72	7.58	21.14	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28,29/96		9.85	18.87	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		10.75	17.97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		10.00	18.72	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		10.03	18.69	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		10.83	17.89	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		10.90	17.82	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	11/24,25/97		10.50	18.22	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	03/19/98		9.08	19.64	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.08
	06/03/98		9.57	19.15	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.6
	09/21,22/98		10.75	17.97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.4
	12/14/98		10.11	18.61	<50	<0.50	<0.50	<0.50	<0.50	<2.0	0.6
	03/15,16/99		9.10	19.62	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.0
	06/14,15/99		10.58	18.14	Well Sampled Annually						
	09/15/99		10.93	17.79	Well Sampled Annually						
	12/08,09/99		10.70	18.02	Well Sampled Annually						
	03/15/00		8.95	19.77	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.3
	06/13/00 b		10.97	17.75	Well Sampled Annually						
	9/19,20/00		10.66	18.06	Well Sampled Annually						
	12/14,15/00		10.30	18.42	Well Sampled Annually						
	3/8,9/01		9.00	19.72	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.4
	06/14/01		10.40	18.32	Well Sampled Annually						
	09/26/01		10.75	17.97	Well Sampled Annually						
	12/29/01		7.86	20.86	Well Sampled Annually						
MW-22	03/13/96	29.29	7.83	21.46	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		10.33	18.96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		11.28	18.01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		10.61	18.68	<50	<0.50	<0.50	<0.50	<0.50	3.0	NM
	12/30/96		10.61	18.68	NA	NA	NA	NA	NA	3.3	NM
	03/31-04/01/97		10.56	18.73	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		11.51	17.78	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		11.45	17.84	<50	<0.50	<0.50	<0.50	<0.50	3.4	1.0
	11/24,25/97		11.09	18.21	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.6
	03/19/98		9.40	19.89	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	06/03/98		10.00	19.29	<50	<0.50	<0.50	<0.50	<0.50	0.87	3.2
	09/21,22/98		11.27	18.02	<50	<0.50	<0.50	<0.50	<0.50	2.1	2.8
	12/14/98		10.65	18.64	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.4
	03/15,16/99		9.67	19.62	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.4
	06/14,15/99		11.06	18.23	<50	<0.50	<0.50	<0.50	<0.50	5.05	1.0
	09/15/99 a		11.46	17.83	<50	<0.50	<0.50	<0.50	<0.50	49.2	1.2
	12/08,09/99		11.25	18.04	<50	<0.50	<0.50	<0.50	<0.50	17.9	1.4

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17601 Hesperian Boulevard at Hacienda Avenue
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Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MIBE (ppb)	Dissolved Oxygen (ppm)
MW-22	03/15/00		9.20	20.09	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.1
(cont.)	06/13/00 b		11.06	18.23	<50	<0.50	<0.50	<0.50	<0.50	6.85	1.0
	9/19,20/00		11.12	18.17	<50	<0.50	<0.50	<0.50	<0.50	3.18	1.8
	12/14,15/00		10.85	18.44	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	3/8,9/01		9.43	19.86	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.8
	06/14/01		10.98	18.31	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	09/26/01		11.41	17.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	12/29/01		8.78	20.51	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
MW-23	03/13/96	30.99	9.13	21.86	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		11.37	19.62	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		12.31	18.68	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		11.76	19.23	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		11.56	19.43	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		12.39	18.60	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		12.53	18.46	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.0
	11/24,25/97		12.13	18.86	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	03/19/98		10.22	20.77	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.4
	06/03/98		11.03	19.96	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3
	09/21,22/98		12.31	18.68	<50	<0.50	0.54	1.9	<0.50	<2.5	2.2
	12/14/98		11.67	19.32	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.0
	03/15,16/99		10.82	20.17	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.6
	06/14,15/99		12.08	18.91	Well Sampled Annually						
	09/15/99		12.48	18.51	Well Sampled Annually						
	12/08,09/99		12.29	18.70	Well Sampled Annually						
	03/15/00		10.04	20.95	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	06/13/00 b		11.95	19.04	Well Sampled Annually						
	9/19,20/00		12.15	18.84	Well Sampled Annually						
	12/14,15/00		12.25	18.74	Well Sampled Annually						
	3/8,9/01		10.49	20.50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	06/14/01		11.97	19.02	Well Sampled Annually						
	09/26/01		12.40	18.59	Well Sampled Annually						
	12/29/01		10.42	20.57	Well Sampled Annually						
MW-24	03/13,15/96	34.38	10.10	24.28	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		12.25	22.13	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28/96		13.28	21.10	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		12.71	21.67	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31-04/01/97		12.50	21.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		13.38	21.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09,10/97		13.46	20.92	<50	<0.50	<0.50	<0.50	<0.50	<2.5	5.0
	11/24,25/97		13.25	21.13	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/19,20/98		11.32	23.06	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	06/04/98		12.00	22.38	<50	<0.30	<0.30	<0.30	<0.60	<10	0.8
	09/21,22/98		13.13	21.25	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.4
	12/14,15/98		12.53	21.85	<50	<0.50	<0.50	<0.50	<0.50	<2.5	0.2
	03/15,16/99		11.58	22.80	<50	<0.50	<0.50	<0.50	<0.50	<5.0	0.0
	06/14,15/99	Removed From Gauging and Sampling Program									
MW-25	03/13,14/96	34.12	9.61	24.51	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28,29/96		11.30	22.82	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28,29/96		12.32	21.80	<50	<0.50	<0.50	<0.50	<0.50	51	NM
	11/25/96		11.83	22.29	<50	<0.50	<0.50	<0.50	<0.50	110	NM
	03/31-04/01/97		11.55	22.57	<50	<0.50	<0.50	<0.50	<0.50	39	NM
	06/25/97		14.57	19.55	<50	<0.50	<0.50	<0.50	<0.50	49	NM
	09/09,10/97		12.45	21.67	<50	<0.50	<0.50	<0.50	<0.50	78	1.0
	09/09,10/97 a		--	--	--	--	--	--	--	79	--
	11/24,25/97		12.30	21.82	<50	<0.50	<0.50	<0.50	<0.50	130	0.0
	03/19,20/98		10.18	23.94	<50	<0.50	<0.50	<0.50	<0.50	96	1.8
	06/04/98		11.00	23.12	<50	<0.30	<0.30	<0.30	<0.60	44	0.6
	09/21,22/98		12.13	21.99	<50	<0.50	<0.50	<0.50	<0.50	150	0.4
	12/14,15/98		11.50	22.52	<50	<0.50	<0.50	<0.50	<0.50	44	1.0
	03/15,16/99		10.78	23.34	<50	<0.50	<0.50	<0.50	<0.50	26.6	2.0
	06/14,15/99		11.97	22.15	<50	<0.50	<0.50	<0.50	<0.50	98.9	2.2
	09/15,16/1999		12.34	21.78	<50	<0.50	<0.50	<0.50	<0.50	66.4	NM
	12/08,09/99		12.25	21.87	<50	<0.50	<0.50	<0.50	<0.50	55.5	0.0
	03/15/00		10.16	23.96	<50	<0.50	<0.50	<0.50	<0.50	154	1.0
	03/15/00 a		--	--	--	--	--	--	--	206	--
	06/13/00 b		11.72	22.40	<50	<0.50	<0.50	<0.50	<0.50	77.7	1.0
	9/19,20/00		12.09	22.04	<50	1	<0.50	<0.50	<0.50	192	1.2
	12/14,15/00		11.74	22.38	<50	<0.50	<0.50	<0.50	<0.50	134	4.0
	3/8,9/01		10.53	23.59	<50	<0.50	<0.50	<0.50	<0.50	140	2.6
	06/14/01		11.95	22.17	<50	<0.50	<0.50	<0.50	<0.50	150	2.6
	09/26/01		12.22	21.90	<50	<0.50	<0.50	<0.50	<0.50	84	1.0
	12/29/01 c	33.81	10.32	23.49	73	<0.50	<0.50	1	7	94	2.2
MW-26	03/13,15/96	33.71	9.38	24.33	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/28/96		11.57	22.14	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/28,29/96		12.55	21.16	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	11/25/96		12.03	21.68	<50	<0.50	<0.50	<0.50	<0.50	<2.6	NM
	03/31-04/01/97		11.84	21.87	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97		12.94	20.77	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM

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17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Number	Date Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOB)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
MW-26	09/09,10/97		12.77	20.94	<50	<0.50	<0.50	<0.50	<0.50	<2.5	5.0
(cont.)	11/24,25/97		12.55	21.16	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.6
	03/19,20/98		10.55	23.16	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	06/04/98		11.22	22.49	<50	<0.30	<0.30	<0.30	<0.60	<10	2.1
	09/21,22/98		12.45	21.26	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	12/14,15/98		11.83	21.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	03/15,16/99		10.86	22.85	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.0
	06/14,15/99		12.17	21.54	Well Sampled Annually						
	09/15/99		12.70	21.01	Well Sampled Annually						
	12/08,09/99		12.57	21.14	Well Sampled Annually						
	03/15/00		10.50	23.21	<50	<0.50	<0.50	<0.50	<0.50	6.55	1.4
	06/13/00	b	12.20	21.51	Well Sampled Annually						
	9/19,20/00		12.38	21.33	Well Sampled Annually						
	12/14,15/00		11.68	21.83	Well Sampled Annually						
	3/8,9/01		10.78	22.93	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.6
	06/14/01		12.17	21.54	Well Sampled Annually						
	09/26/01		12.70	21.01	Well Sampled Annually						
	12/29/01		10.41	23.30	Well Sampled Annually						

MtBE = Methyl tert-butyl ether
MSL = Mean sea level
TOB = Top of box
ppb = Parts per billion
ppm = Parts per million
< = Less than laboratory detection limit
† = Well sampled without purging.
†† = ORC program initiated September 21, 1995 and discontinued on May 15, 1997.

NA = Not analyzed
NM = Not measured
NS = Not sampled
a. = MtBE result confirmed by EPA Method 8260.
b. = Depths to water originally measured from TOC. Depth to water adjusted to reflect a TOB measurement by adding the average difference between TOB and TOC measurements over the last four gauging events.
c. = well elevation changed during station reconstruction. well resurveyed 11/6/2001

Please see certified analytical reports for laboratory notes and definitions.

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)		Dissolved Oxygen (ppm)
590 H	03/14/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	05/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	08/29/96 a	NS	NS	NS	NS	NS	NA		NM
	11/26/96	NS	NS	NS	NS	NS	NS		NM
	03/31/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	06/25/97 a	NS	NS	NS	NS	NS	NS		NM
	09/09/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.0
	11/24/97 a	NS	NS	NS	NS	NS	NS		NM
	03/19/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5		1.0
	06/03/98	<50	<0.50	<0.50	<0.50	<0.50	<0.50		3.8
	09/21/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5		3.2
	12/14/98	<50	<0.50	<0.50	<0.50	<0.50	<2.0		2.2
	03/15/99 a	NS	NS	NS	NS	NS	NS		NM
	06/14/99	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	09/15/99 a	NS	NS	NS	NS	NS	NS		NM
	12/08/99 a	NS	NS	NS	NS	NS	NS		NM
	03/15/00 a	NS	NS	NS	NS	NS	NS		NM
	06/13/00 a	NS	NS	NS	NS	NS	NS		NM
	Well Destroyed								
633 H	03/14/96	480	10	11	1.8	140	NA		NM
	05/13/96 b	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	3.70		NM
	12/30/96	--	--	--	--	--	4.9	c	NM
	03/31/97	NS	NS	NS	NS	NS	NS		NM
	06/25/97 a	NS	NS	NS	NS	NS	NS		NM
	09/10/97	<50	<0.50	<0.50	<0.50	0.66	<2.5		1.0
	11/24/97	110	2.0	2.1	1.0	4.2	<2.5	c	NM
	03/19/98	150	1.8	0.62	<0.50	28	77		NM
	03/19/98	--	--	--	--	--	<2.0	c	NM
	06/03/98	480	6.2	4.3	2.9	120	28		1.3
	09/21/98	<50	<0.50	<0.50	<0.50	0.66	<2.5		1.2
	12/14/98	<50	<0.50	<0.50	<0.50	2.21	11.7		NM
	03/15/99	<50	0.513	<0.50	<0.50	0.542	31		NM
	06/14/99	<50	<0.50	<0.50	<0.50	<0.50	7.93		NM
	09/15/99	<50	<0.50	<0.50	<0.50	<0.50	5.65		0.0
	12/08/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0		1.4
	03/15/00	<50	<0.50	<0.50	<0.50	<0.50	17.5		1.2
	06/13/00	240	5.03	1.01	2.39	63.8	10.5		NM
	Well Destroyed								
634 H	03/13/96 a	NS	NS	NS	NS	NS	NA		NM
	05/27/96 a	NS	NS	NS	NS	NS	NA		NM
	08/29/96 a	NS	NS	NS	NS	NS	NA		NM
	11/26/96	NS	NS	NS	NS	NS	NS		NM
	03/31/97	NS	NS	NS	NS	NS	NS		NM
	06/25/97 a	NS	NS	NS	NS	NS	NS		NM
	09/09/97 g	NS	NS	NS	NS	NS	NS		NM
	11/24/97 g	NS	NS	NS	NS	NS	NS		NM
	03/19/98 e	NS	NS	NS	NS	NS	NS		NM

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
634 H	06/03/98 e	NS	NS	NS	NS	NS	NS	NM
(cont.)	09/21/98 e	NS	NS	NS	NS	NS	NS	NM
	12/14/98 e	NS	NS	NS	NS	NS	NS	NM
	03/15/99 e	NS	NS	NS	NS	NS	NS	NM
	06/14/99 e	NS	NS	NS	NS	NS	NS	NM
	09/15/99 e	NS	NS	NS	NS	NS	NS	NM
	12/08/99 e	NS	NS	NS	NS	NS	NS	NM
	03/15/00 e	NS	NS	NS	NS	NS	NS	NM
	06/13/00 e	NS	NS	NS	NS	NS	NS	NM
	09/19/00 e	NS	NS	NS	NS	NS	NS	NM
	12/14/00 e	NS	NS	NS	NS	NS	NS	NM
	03/08/01 e	NS	NS	NS	NS	NS	NS	NM
	06/14/01 e	NS	NS	NS	NS	NS	NS	NM
	09/26/01 e	NS	NS	NS	NS	NS	NS	NM
	12/29/01 e	NS	NS	NS	NS	NS	NS	NM
642 H	03/15/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31/97	NS	NS	NS	NS	NS	NS	NM
	06/25/97	NS	NS	NS	NS	NS	NS	NM
	09/09/97 a	NS	NS	NS	NS	NS	NS	NM
	11/24/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/19/98 a	NS	NS	NS	NS	NS	NS	NM
	06/03/98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	NM
	09/21/98 a	NS	NS	NS	NS	NS	NS	NM
	12/14/98 a	NS	NS	NS	NS	NS	NS	NM
	03/15/99 a	NS	NS	NS	NS	NS	NS	NM
	06/14/99	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.0
	09/15/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.2
	12/08/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0	2.4
	03/15/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.8
	06/13/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/19/00 a	NS	NS	NS	NS	NS	NS	NM
	12/14/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	03/08/01 a	NS	NS	NS	NS	NS	NS	NM
	06/14/01 a	NS	NS	NS	NS	NS	NS	NM
	09/26/01 a	NS	NS	NS	NS	NS	NS	NM
	12/29/01 a	NS	NS	NS	NS	NS	NS	NM
675 H	03/13/96 a	NS	NS	NS	NS	NS	NA	NM
	05/27/96 a	NS	NS	NS	NS	NS	NA	NM
	08/29/96 d	NS	NS	NS	NS	NS	NA	NM
	11/26/96	NS	NS	NS	NS	NS	NS	NM
	03/31/97	NS	NS	NS	NS	NS	NS	NM
	06/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09/97 f	NS	NS	NS	NS	NS	NS	NM
	11/24/97 f	NS	NS	NS	NS	NS	NS	NM
	03/19/98 f	NS	NS	NS	NS	NS	NS	NM
	06/03/98 f	NS	NS	NS	NS	NS	NS	NM
	09/21/98 a,f	NS	NS	NS	NS	NS	NS	NM
	12/14/98 f	NS	NS	NS	NS	NS	NS	NM
	03/15/99 f	NS	NS	NS	NS	NS	NS	NM
	06/14/99 f	NS	NS	NS	NS	NS	NS	NM
	09/15/99 f	NS	NS	NS	NS	NS	NS	NM
	12/08/99 f	NS	NS	NS	NS	NS	NS	NM
	03/15/00 f	NS	NS	NS	NS	NS	NS	NM
	06/13/00 f	NS	NS	NS	NS	NS	NS	NM
	09/19/00 f	NS	NS	NS	NS	NS	NS	NM

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)	Dissolved Oxygen (ppm)
675 H	12/14/00 f	NS	NS	NS	NS	NS	NS	NM
(cont.)	03/08/01 f	NS	NS	NS	NS	NS	NS	NM
	06/14/01 f	NS	NS	NS	NS	NS	NS	NM
	09/26/01 f	NS	NS	NS	NS	NS	NS	NM
	12/29/01 f	NS	NS	NS	NS	NS	NS	NM
17197 VM	03/15/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	06/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	11/24/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.4
	03/19/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5	2.2
	06/03/98	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.2
	09/21/98	<50	<0.50	<0.50	<0.50	<0.50	<2.5	3.0
	12/14/98	<50	<0.50	<0.50	<0.50	<0.50	<2.0	2.4
	03/15/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.6
	06/14/99	<50	<0.50	<0.50	<0.50	<0.50	<2.5	1.8
	09/15/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0	1.0
	12/08/99 a	NS	NS	NS	NS	NS	NS	NM
	03/15/00 a	NS	NS	NS	NS	NS	NS	NM
	06/13/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/19/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	12/14/00 f	NS	NS	NS	NS	NS	NS	NM
	03/08/01 f	NS	NS	NS	NS	NS	NS	NM
	06/14/01 f	NS	NS	NS	NS	NS	NS	NM
	09/26/01 f	NS	NS	NS	NS	NS	NS	NM
	12/29/01 f	NS	NS	NS	NS	NS	NS	NM
17200 VM	03/15/96	730	<1.0	<1.0	1.5	1.7	NA	NM
	05/27/96	200	<0.50	<0.50	1.4	1.8	NA	NM
	08/29/96	Well Destroyed						
17203 VM	03/15/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	03/31/97 f	NS	NS	NS	NS	NS	NS	NM
	06/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NM
	09/09/97 f	NS	NS	NS	NS	NS	NS	NM
	11/24/97 f	NS	NS	NS	NS	NS	NS	NM
	03/19/98	Well Dry						
	06/03/98 f	NS	NS	NS	NS	NS	NS	NM
	09/21/98 f	NS	NS	NS	NS	NS	NS	NM
	12/14/98 f	NS	NS	NS	NS	NS	NS	NM
	03/15/99 f	NS	NS	NS	NS	NS	NS	NM
	06/14/99 f	NS	NS	NS	NS	NS	NS	NM
	09/15/99 f	NS	NS	NS	NS	NS	NS	NM
	12/08/99 f	NS	NS	NS	NS	NS	NS	NM
	03/15/00 f	NS	NS	NS	NS	NS	NS	NM
	06/13/00 f	NS	NS	NS	NS	NS	NS	NM
	09/19/00 f	NS	NS	NS	NS	NS	NS	NM
	12/14/00 f	NS	NS	NS	NS	NS	NS	NM
	03/08/01 f	NS	NS	NS	NS	NS	NS	NM
	06/14/01 f	NS	NS	NS	NS	NS	NS	NM
	09/26/01 f	NS	NS	NS	NS	NS	NS	NM
	12/29/01 f	NS	NS	NS	NS	NS	NS	NM
17302 VM	03/15/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA	NM

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)		Dissolved Oxygen (ppm)
17302 VM	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
(cont.)	03/31/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	09/09/97 f	NS	NS	NS	NS	NS	NS		NM
	11/24/97 f	NS	NS	NS	NS	NS	NS		NM
	03/19/98 f	NS	NS	NS	NS	NS	NS		NM
	06/03/98 f	NS	NS	NS	NS	NS	NS		NM
	09/21/98 f	NS	NS	NS	NS	NS	NS		NM
	12/14/98 f	NS	NS	NS	NS	NS	NS		NM
	03/15/99 f	NS	NS	NS	NS	NS	NS		NM
	06/14/99 f	NS	NS	NS	NS	NS	NS		NM
	09/15/99 f	NS	NS	NS	NS	NS	NS		NM
	12/08/99 f	NS	NS	NS	NS	NS	NS		NM
	12/08/99 f	NS	NS	NS	NS	NS	NS		NM
	03/15/00 f	NS	NS	NS	NS	NS	NS		NM
	06/13/00 f	NS	NS	NS	NS	NS	NS		NM
	09/19/00 f	NS	NS	NS	NS	NS	NS		NM
	12/14/00 f	NS	NS	NS	NS	NS	NS		NM
	03/08/01 f	NS	NS	NS	NS	NS	NS		NM
	06/14/01 f	NS	NS	NS	NS	NS	NS		NM
	09/26/01 f	NS	NS	NS	NS	NS	NS		NM
17348 VE	03/13/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	05/27/96	Well Dry							
	08/29/96	Well Dry							
	11/26/96	Well Dry							
	03/31/97	Well Dry							
	06/25/97	Well Inaccessible							
	09/09/97 g	NS	NS	NS	NS	NS	NS		NM
	11/24/97 g	NS	NS	NS	NS	NS	NS		NM
	03/19/98 a	NS	NS	NS	NS	NS	NS		NM
	06/03/98 a	NS	NS	NS	NS	NS	NS		NM
	09/21/98 a	NS	NS	NS	NS	NS	NS		NM
	12/14/98 a	NS	NS	NS	NS	NS	NS		NM
	03/15/99 a	NS	NS	NS	NS	NS	NS		NM
	06/14/99 f	NS	NS	NS	NS	NS	NS		NM
	09/15/99 f	NS	NS	NS	NS	NS	NS		NM
	12/08/99 f	NS	NS	NS	NS	NS	NS		NM
	03/15/00 a	NS	NS	NS	NS	NS	NS		NM
	06/13/00 f	NS	NS	NS	NS	NS	NS		NM
	09/19/00 f	NS	NS	NS	NS	NS	NS		NM
	12/14/00 f	NS	NS	NS	NS	NS	NS		NM
	03/08/01 f	NS	NS	NS	NS	NS	NS		NM
	06/14/01 f	NS	NS	NS	NS	NS	NS		NM
	09/26/01 f	NS	NS	NS	NS	NS	NS		NM
	12/29/01 f	NS	NS	NS	NS	NS	NS		NM
17349 VM	03/15/96	1,700	<2.0	<2.0	2.5	13	NA		NM
	05/27/96	320	4.2	1.3	0.95	0.71	NA		NM
	08/29/96	410	7.5	<0.50	<0.50	1.1	NA		NM
	11/26/96	300	<1.0	1.7	<1.0	2.1	55	*	NM
	03/31/97	430	<1.0	2.7	<1.0	1.0	57	c	NM
	06/25/97 **	2,100	30	<5.0	<5.0	6.7	140		NM
	08/18/97	320	2.0	<0.5	<0.5	<0.5	34		NM
	08/18/97	--	--	--	--	--	31	c	NM
	09/09/97	380	6.0	1.4	0.98	<0.50	38		3.0
	09/09/97	--	--	--	--	--	34	c	NM
	11/24/97	240	<1.0	1.1	<1.0	1.4	53		2.4
	11/24/97	--	--	--	--	--	33	c†	NM
	03/19/98	1,300	14	<0.50	<0.50	1.2	250		1.0
	03/19/98	--	--	--	--	--	27	c	NM

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells

ARCO Service Station 0508
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)		Dissolved Oxygen (ppm)
17349 VM	06/03/98	860	8.7	<0.50	0.7	8.0	38		4.9
(cont.)	07/29/98	860	20	2.1	<1.2	<1.2	27		NM
	07/29/98	--	--	--	--	--	25	c	NM
	09/21/98	200	<0.50	<0.50	<0.50	14	14		5.2
	12/14/98	254	<0.50	6.92	0.604	1.58	21.7		1.0
	03/15/99	172	1.35	<0.50	<0.50	<0.50	24.2		3.6
	06/14/99	91	<0.50	3.53	<0.50	<0.50	88.3		2.8
	09/15/99 a	133	<0.50	<0.50	<0.50	<0.50	184		2.2
	12/08/99	136	0.681	<0.50	<0.50	<0.50	267	c	2.4
	03/15/00	<50	<0.50	<0.50	<0.50	<0.50	82.1	c	2.8
	06/13/00	319	5.28	<0.5	<0.50	<0.50	97.1		NM
	06/13/00	--	--	--	--	--	85.1	c	NM
	09/19/00	106	<0.50	2	<0.50	<0.50	204.0		NM
	09/19/00	--	--	--	--	--	84.0	c	NM
	12/14/00	65.9	0.61	<0.50	<0.50	<0.50	188.0		1.8
	12/14/00	--	--	--	--	--	197.0	c	NM
	03/08/01	<50	<0.50	<0.50	<0.50	<0.50	91.8		1.8
	03/08/01	--	--	--	--	--	98.3	c	NM
	06/14/01	<50	<0.50	<0.50	<0.50	<0.50	68.0		2.8
	06/14/01	--	--	--	--	--	99.0	c	NM
	09/26/01	52	0.53	<0.50	<0.50	<0.50	49.0		1.8
	09/26/01	--	--	--	--	--	54.0	c	
	12/29/01	<50.0	<0.50	0.78	<0.50	<0.50	58.0		NM
	12/29/01	--	--	--	--	--	48.0	c	NM
17371 VM	03/13/96 e	NS	NS	NS	NS	NS	NA		NM
	05/27/96 e	NS	NS	NS	NS	NS	NA		NM
	08/29/96 e	NS	NS	NS	NS	NS	NA		NM
	11/26/96 e	NS	NS	NS	NS	NS	NS		NM
	03/31/97 e	NS	NS	NS	NS	NS	NS		NM
	06/25/97 e	NS	NS	NS	NS	NS	NS		NM
	09/09/97 e	NS	NS	NS	NS	NS	NS		NM
	11/24/97 e	NS	NS	NS	NS	NS	NS		NM
	03/19/98 e	NS	NS	NS	NS	NS	NS		NM
	06/03/98 e	NS	NS	NS	NS	NS	NS		NM
	09/21/98 e	NS	NS	NS	NS	NS	NS		NM
	12/14/98 e	NS	NS	NS	NS	NS	NS		NM
	03/15/99 e	NS	NS	NS	NS	NS	NS		NM
	06/14/99 e	NS	NS	NS	NS	NS	NS		NM
	09/15/99 e	NS	NS	NS	NS	NS	NS		NM
	12/08/99 f	NS	NS	NS	NS	NS	NS		NM
	03/15/00 f	NS	NS	NS	NS	NS	NS		NM
	06/13/00 f	NS	NS	NS	NS	NS	NS		NM
	09/19/00 f	NS	NS	NS	NS	NS	NS		NM
	12/14/00 f	NS	NS	NS	NS	NS	NS		NM
	03/08/01 f	NS	NS	NS	NS	NS	NS		NM
	06/14/01 f	NS	NS	NS	NS	NS	NS		NM
	09/26/01 f	NS	NS	NS	NS	NS	NS		NM
	12/29/01 f	NS	NS	NS	NS	NS	NS		NM
17372 VM	03/14/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	03/31/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	06/25/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	09/09/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		4.0
	11/24/97	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.0
	03/19/98	<50	<0.50	<0.50	<0.50	<0.50	1,200		1.8
	03/19/98	--	--	--	--	--	1,400	c	NM
	06/03/98	<50	<0.50	<0.50	<0.50	<0.50	16,000		1.8
	07/29/98	<200	<2.0	<2.0	<2.0	<2.0	940		NM

Table 3
Groundwater Analytical Data
Domestic Irrigation Wells

ARCO Service Station 0608
17601 Hesperian Boulevard at Hacienda Avenue
San Lorenzo, California

Well Address	Date Sampled	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	MtBE (ppb)		Dissolved Oxygen (ppm)
17372 VM	07/29/98	--	--	--	--	--	1,100	c	NM
(cont.)	09/21/98	<50	<0.50	<0.50	<0.50	<0.50	200		1.6
	09/21/98	--	--	--	--	--	360	c	NM
	12/14/98	<50	<0.50	0.823	<0.50	<0.50	20.1		3.8
	03/15/99	<50	<0.50	<0.50	<0.50	<0.50	6.66		4.6
	06/14/99	<50	<0.50	<0.50	<0.50	<0.50	3.33		4.0
	09/15/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0		2.0
	12/08/99	<50	<0.50	<0.50	<0.50	<0.50	<5.0		NM
	03/15/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5		1.6
	06/13/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	09/19/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	12/14/00	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.0
	03/08/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.4
	06/14/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.8
	09/26/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.2
	12/29/01	<50	<0.50	<0.50	<0.50	<0.50	<2.5		2.1
17393 VM	03/14/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	05/27/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
	08/29/96	<50	<0.50	<0.50	<0.50	<0.50	NA		NM
VM	11/26/96	<50	<0.50	<0.50	<0.50	<0.50	<2.5		NM
	03/31/97 a	NS	NS	NS	NS	NS	NS		NM
	06/25/97	Well Destroyed							

TPPH = Total purgeable petroleum hydrocarbons
MtBE = Methyl tert-butyl ether
NA = Not analyzed
NS = Not sampled
ppb = Parts per billion
H = Hacienda Avenue
VM = Via Magdalena
VE = Via Encinas
< = Less than laboratory detection limit stated to the right.
* = MtBE data maybe anamolous; unable to confirm with EPA Method 8260.
** = Concentration data are suspect due to inadequate purging. Well resampled on August 18, 1997 for confirmation purposes.
a. Owner not available to approve sampling access; well not sampled.
b. Well resampled to confirm data of March 14, 1996.
c. MtBE result confirmed by EPA Method 8260.
d. Pumping equipment obstructing sampling access; well not sampled.
e. Access denied by owner; well not sampled.
f. Pump on well does not work.
g. Well blocked and pump non-operational; well cannot be sampled.

Notes:
Homeowners are contacted 1 week prior to sampling event.
Please see certified analytical reports for laboratory notes and definitions

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE		
17349 VM															
3/13/2002	--	--	--	--	--	--	--	<50	1	<0.50	<0.50	<0.50	49	--	--
6/28/2002	--	l	--	--	--	--	--	66	0.50	<0.50	<0.50	<0.50	47/45	--	--
9/20/2002	--	k	--	--	--	--	--	--	--	--	--	--	--	--	--
17372 VM															
3/13/2002	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
6/28/2002	--		--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
9/20/2002	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
12/30/2002	--		--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
3/27/2003	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
9/15/2003	--		--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
12/04/2003	NP	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.7	7.2
03/10/2004	--	m	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
06/10/2004	NP	m	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.1	6.9
09/22/2004	NP	m	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.6	7.2
12/13/2004	NP	m	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.76	7.6
03/10/2005	NP	m	--	--	--	--	--	<100	<0.50	<0.50	<0.50	<4.0	<0.50	7.5	8.0
06/29/2005	--	o	--	--	--	--	--	--	--	--	--	--	--	--	--
09/14/2005	--	o	--	--	--	--	--	--	--	--	--	--	--	--	--
12/13/2005	--	o	--	--	--	--	--	--	--	--	--	--	--	--	--
03/20/2006	--	o	--	--	--	--	--	--	--	--	--	--	--	--	--
6/22/2006	--	o	--	--	--	--	--	--	--	--	--	--	--	--	--
9/22/2006	--	o	--	--	--	--	--	--	--	--	--	--	--	--	--
12/7/2006	--	j	--	--	--	--	--	--	--	--	--	--	--	--	--
642 H															
3/13/2002	--	j	--	--	--	--	--	--	--	--	--	--	--	--	--
6/28/2002	--		--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
9/20/2002	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
12/30/2002	--		--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
3/27/2003	--	--	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
642 H Cont.															
6/30/2003	--	j	--	--	--	--	--	--	--	--	--	--	--	--	--
9/15/2003	--		--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
12/04/2003	NP		--	--	--	14.75	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.2	7.1
06/10/2004	--	n	--	--	--	--	--	--	--	--	--	--	--	7.9	--
09/22/2004	--	o	--	--	--	--	--	--	--	--	--	--	--	--	--
12/13/2004	--	o	--	--	--	--	--	--	--	--	--	--	--	--	--
03/10/2005	--	n	--	--	--	--	--	--	--	--	--	--	--	--	--
06/29/2005	--	n	--	--	--	--	--	--	--	--	--	--	--	--	--
09/14/2005	--	n	--	--	--	--	--	--	--	--	--	--	--	--	--
12/13/2005	--	o	--	--	--	--	--	--	--	--	--	--	--	--	--
03/20/2006	--	o	--	--	--	--	--	--	--	--	--	--	--	--	--
6/22/2006	--	j	--	--	--	--	--	--	--	--	--	--	--	--	--
9/22/2006	--	j	--	--	--	--	--	--	--	--	--	--	--	--	--
12/7/2006	--	j	--	--	--	--	--	--	--	--	--	--	--	--	--
E-1A															
3/13/2002	--	a	33.06	--	--	21.75	11.31	200	<0.50	<0.50	<0.50	<0.50	310	--	--
6/28/2002	--	b	33.06	--	--	11.22	21.84	260	<0.50	11	1.2	1.2	150	--	--
9/20/2002	--		33.06	--	--	11.80	21.26	250	1.18	0.52	<0.5	<1.5	218	--	--
12/30/2002	--	c, e	33.06	--	--	16.33	16.73	190	<1.2	<1.2	<1.2	<1.2	190	--	--
3/27/2003	--	g	33.06	--	--	13.63	19.43	96	<0.50	<0.50	<0.50	<0.50	60	--	--
6/30/2003	P	h	33.06	--	--	9.60	23.46	140	<0.50	<0.50	<0.50	<0.50	37	--	--
9/15/2003	P	g	33.06	--	--	17.80	15.26	83	<0.50	<0.50	<0.50	<0.50	49	--	--
12/04/2003	NP	g	33.06	--	--	18.73	14.33	<50	<0.50	<0.50	<0.50	<0.50	19	4.3	7.0
03/10/2004	NP	g	34.30	--	--	16.78	17.52	<100	<1.0	<1.0	<1.0	<1.0	38	4.9	7.2
06/10/2004	NP	g, p	34.30	--	--	16.67	17.63	74	<0.50	<0.50	<0.50	<0.50	46	2.0	6.7
09/22/2004	NP		34.30	--	--	18.46	15.84	<50	<0.50	<0.50	<0.50	<0.50	17	--	7.0
12/13/2004	NP		34.30	--	--	17.56	16.74	<50	<0.50	<0.50	<0.50	<0.50	15	7.13	6.9
03/10/2005	NP		34.30	--	--	14.60	19.70	<100	<0.50	<0.50	<0.50	<4.0	22	6.6	8.0
06/29/2005	NP		34.30	--	--	15.13	19.17	<50	<0.50	0.91	<0.50	<0.50	14	6.73	7.3
09/14/2005	NP		34.30	--	--	16.90	17.40	<50	<0.50	<0.50	<0.50	<0.50	13	5.4	6.7

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
E-1A Cont.															
12/13/2005	NP		34.30	--	--	18.84	15.46	<50	<0.50	<0.50	<0.50	<0.50	12	8.3	7.1
03/20/2006	--	h	34.30	--	--	13.55	20.75	--	--	--	--	--	--	--	--
6/22/2006	NP		34.30	--	--	13.82	20.48	<50	<0.50	<0.50	<0.50	<0.50	13	5.2	7.5
9/22/2006	P		34.30	--	--	14.22	20.08	<50	<0.50	<0.50	<0.50	<0.50	12	2.65	7.7
12/7/2006	--	j	34.30	--	--	--	--	--	--	--	--	--	--	--	--
3/12/2007	P		34.30	--	--	11.72	22.58	61	<0.50	<0.50	<0.50	<0.50	5.6	--	--
6/20/2007	NP		34.30	--	--	18.71	15.59	<50	<0.50	<0.50	<0.50	<0.50	6.8	3.40	7.35
9/20/2007	NP		34.30	--	--	10.20	24.10	<50	<0.50	<0.50	<0.50	<0.50	0.80	1.21	7.47
12/14/2007	P		34.30	--	--	9.77	24.53	<50	<0.50	<0.50	<0.50	<0.50	2.0	2.87	7.27
3/10/2008	NP		34.30	--	--	9.00	25.30	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.43	7.11
3/26/2008	P	s	34.30	--	--	9.21	25.09	<50	<0.50	<0.50	<0.50	<0.50	0.89	4.20	7.26
6/13/2008	--	j	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-1															
3/15/1996	--		175.04	--	--	14.24	160.80	--	--	--	--	--	--	--	--
MW-5															
3/13/2002	--		33.99	--	--	11.46	22.53	530	<2.5	<2.5	<2.5	<2.5	230	--	--
6/28/2002	--	b	33.99	--	--	11.75	22.24	180	<1.0	2.6	<1.0	1.2	230	--	--
9/20/2002	--		33.99	--	--	12.15	21.84	<50	<0.50	<0.50	<0.50	<1.50	333	--	--
12/30/2002	--		33.99	--	--	9.73	24.26	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
3/27/2003	--		33.99	--	--	11.24	22.75	100	<0.50	<0.50	<0.50	<0.50	59	--	--
6/30/2003	--		33.99	--	--	11.62	22.37	91	<0.50	<0.50	<0.50	<0.50	58	--	--
9/15/2003	--		33.99	--	--	12.13	21.86	<250	<2.5	<2.5	<2.5	<2.5	61	--	--
12/04/2003	P		33.99	--	--	11.85	22.14	81	<0.50	<0.50	<0.50	<0.50	42	1.7	7.0
03/10/2004	P		35.97	--	--	10.34	25.63	<50	<0.50	<0.50	<0.50	<0.50	9.5	1.2	6.6
06/10/2004	P		35.97	--	--	11.65	24.32	55	<0.50	<0.50	<0.50	<0.50	31	1.3	7.0
09/22/2004	P		35.97	--	--	12.23	23.74	<50	<0.50	<0.50	<0.50	<0.50	15	0.8	6.8
12/13/2004	P		35.97	--	--	11.16	24.81	<50	<0.50	<0.50	<0.50	<0.50	5.4	3.76	6.8
03/10/2005	P		35.97	--	--	9.90	26.07	<100	<0.50	<0.50	<0.50	<4.0	3.3	2.6	7.7
06/29/2005	P		35.97	--	--	11.35	24.62	<50	<0.50	<0.50	<0.50	<0.50	6.7	0.93	6.6

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Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-5 Cont.															
09/14/2005	P		35.97	--	--	11.80	24.17	<50	<0.50	0.91	<0.50	0.68	13	0.8	6.9
12/13/2005	--		35.97	--	--	11.60	24.37	--	--	--	--	--	--	--	--
03/20/2006	P		35.97	--	--	10.04	25.93	<50	<0.50	<0.50	<0.50	<0.50	3.8	0.8	7.1
6/22/2006	--		35.97	--	--	11.33	24.64	--	--	--	--	--	--	--	--
9/22/2006	P		35.97	--	--	11.57	24.40	<50	<0.50	<0.50	<0.50	<0.50	12	1.12	7.1
12/7/2006	--		35.97	--	--	11.71	24.26	--	--	--	--	--	--	--	--
3/12/2007	P		35.97	--	--	10.86	25.11	<50	<0.50	0.60	<0.50	<0.50	5.8	2.55	7.17
6/20/2007	--		35.97	--	--	11.82	24.15	--	--	--	--	--	--	--	--
9/20/2007	NP		35.97	--	--	12.20	23.77	<50	<0.50	0.77	<0.50	<0.50	4.3	1.18	7.30
12/14/2007	--		35.97	--	--	12.27	23.70	--	--	--	--	--	--	--	--
3/10/2008	P		35.97	--	--	11.00	24.97	110	<0.50	<0.50	<0.50	<0.50	2.8	0.95	6.95
MW-8															
3/13/2002	--		32.79	--	--	10.30	22.49	500	<2.5	<2.5	<2.5	<2.5	1,100	--	--
6/28/2002	--	b	32.79	--	--	10.30	22.49	150	<0.50	2.9	0.54	1.5	130	--	--
9/20/2002	--		32.79	--	--	10.84	21.95	<50	<0.50	<0.50	<0.50	<1.50	273	--	--
12/30/2002	--		32.79	--	--	8.31	24.48	<50	<0.50	<0.50	<0.50	<0.50	5.5	--	--
3/27/2003	--		32.79	--	--	9.85	22.94	63	<0.50	<0.50	<0.50	<0.50	33	--	--
6/30/2003	--		32.79	--	--	10.20	22.59	<50	<0.50	<0.50	<0.50	<0.50	15	--	--
9/15/2003	--		32.79	--	--	10.69	22.10	59	<0.50	<0.50	<0.50	<0.50	41	--	--
12/04/2003	P		32.79	--	--	10.43	22.36	<50	<0.50	<0.50	<0.50	<0.50	24	1.0	7.0
03/10/2004	P		34.47	--	--	9.04	25.43	<50	<0.50	<0.50	<0.50	<0.50	2.4	0.9	6.8
06/10/2004	P		34.47	--	--	10.40	24.07	<50	<0.50	<0.50	<0.50	<0.50	2.1	0.6	7.0
09/22/2004	P		34.47	--	--	10.74	23.73	84	<0.50	<0.50	<0.50	<0.50	18	0.9	6.9
12/13/2004	P		34.47	--	--	9.73	24.74	<50	<0.50	<0.50	<0.50	<0.50	7.1	0.95	6.8
03/10/2005	P		34.47	--	--	8.17	26.30	<100	<0.50	<0.50	<0.50	<4.0	1.4	2.0	7.4
06/29/2005	P		34.47	--	--	9.93	24.54	<50	<0.50	<0.50	<0.50	<0.50	1.7	1.72	7.0
09/14/2005	P		34.47	--	--	10.35	24.12	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.9	7.0
12/13/2005	--		34.47	--	--	10.18	24.29	--	--	--	--	--	--	--	--
03/20/2006	P		34.47	--	--	8.65	25.82	<50	<0.50	<0.50	<0.50	<0.50	0.60	1.8	7.1
6/22/2006	--		34.47	--	--	9.91	24.56	--	--	--	--	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-8 Cont.															
9/22/2006	P		34.47	--	--	10.25	24.22	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.10	7.0
12/7/2006	--		34.47	--	--	10.21	24.26	--	--	--	--	--	--	--	--
3/12/2007	P		34.47	--	--	9.46	25.01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.96	7.54
6/20/2007	--		34.47	--	--	10.39	24.08	--	--	--	--	--	--	--	--
9/20/2007	P		34.47	--	--	10.75	23.72	<50	<0.50	<0.50	<0.50	<0.50	13	2.19	7.49
12/14/2007	--		34.47	--	--	10.71	23.76	--	--	--	--	--	--	--	--
3/10/2008	P		34.47	--	--	9.62	24.85	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.67	7.08
MW-9															
3/13/2002	--		32.11	--	--	9.49	22.62	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
6/28/2002	--		32.11	--	--	9.78	22.33	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
9/20/2002	--		32.11	--	--	10.29	21.82	<50	<0.50	<0.50	<0.50	<1.50	<0.500	--	--
12/30/2002	--		32.11	--	--	7.60	24.51	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
3/27/2003	--		32.11	--	--	9.14	22.97	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
6/30/2003	--	u	32.11	--	--	9.64	22.47	--	--	--	--	--	--	--	--
9/15/2003	--		32.11	--	--	10.12	21.99	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
12/04/2003	--	u	32.11	--	--	--	--	--	--	--	--	--	--	--	--
03/10/2004	P		34.00	--	--	8.46	25.54	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	7.3
06/10/2004	--	u	34.00	--	--	9.88	24.12	--	--	--	--	--	--	--	--
09/22/2004	P		34.00	--	--	10.05	23.95	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.0	7.0
12/13/2004	--	u	34.00	--	--	9.17	24.83	--	--	--	--	--	--	--	--
03/10/2005	P		34.00	--	--	8.17	25.83	<100	<0.50	<0.50	<0.50	<4.0	<0.50	2.2	7.7
06/29/2005	--		34.00	--	--	9.28	24.72	--	--	--	--	--	--	--	--
09/14/2005	P		34.00	--	--	9.70	24.30	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	6.8
12/13/2005	--		34.00	--	--	9.64	24.36	--	--	--	--	--	--	--	--
03/20/2006	--		34.00	--	--	8.23	25.77	--	--	--	--	--	--	--	--
6/22/2006	--		34.00	--	--	9.37	24.63	--	--	--	--	--	--	--	--
9/22/2006	P		34.00	--	--	9.74	24.26	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.38	7.2
12/7/2006	--		34.00	--	--	9.67	24.33	--	--	--	--	--	--	--	--
3/12/2007	--		34.00	--	--	8.93	25.07	--	--	--	--	--	--	--	--
6/20/2007	--		34.00	--	--	9.88	24.12	--	--	--	--	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-9 Cont.															
9/20/2007	P		34.00	--	--	10.21	23.79	<50	<0.50	<0.50	<0.50	<0.50	<0.50	10.67	7.25
12/14/2007	--		34.00	--	--	10.28	23.72	--	--	--	--	--	--	--	--
3/10/2008	--		34.00	--	--	9.10	24.90	--	--	--	--	--	--	--	--
MW-10															
3/13/2002	--		31.67	--	--	9.68	21.99	680	<5.0	<5.0	<5.0	<5.0	570	--	--
6/28/2002	--	b	31.67	--	--	9.84	21.83	820	<2.0	<2.0	<2.0	<2.0	1,200	--	--
9/20/2002	--		31.67	--	--	10.37	21.30	194	<0.50	<0.50	<0.50	<1.50	575	--	--
12/30/2002	--		31.67	--	--	7.70	23.97	<50	<0.50	<0.50	<0.50	<0.50	490	--	--
3/27/2003	--		31.67	--	--	9.33	22.34	530	<5.0	<5.0	<5.0	<5.0	330	--	--
6/30/2003	--		31.67	--	--	9.75	21.92	<1,000	<10	<10	<10	<10	750	--	--
9/15/2003	P		31.67	--	--	10.17	21.50	<500	<5.0	<5.0	<5.0	<5.0	430	--	--
12/04/2003	P		31.67	--	--	9.95	21.72	<250	<2.5	<2.5	<2.5	<2.5	110	--	6.9
03/10/2004	P		33.50	--	--	8.57	24.93	420	<2.5	<2.5	<2.5	<2.5	140	1.2	6.5
06/10/2004	--		33.50	--	--	9.95	23.55	600	<5.0	<5.0	<5.0	<5.0	410	--	6.9
09/22/2004	P		33.50	--	--	10.23	23.27	560	<0.50	<0.50	<0.50	<0.50	87	0.8	6.9
12/13/2004	P		33.50	--	--	9.28	24.22	290	<1.0	<1.0	<1.0	<1.0	110	1.6	6.5
03/10/2005	P		33.50	--	--	7.97	25.53	280	<0.50	<0.50	<0.50	<4.0	86	3.2	7.3
06/29/2005	P		33.50	--	--	9.45	24.05	<250	<2.5	<2.5	<2.5	<2.5	160	1.13	6.8
09/14/2005	P		33.50	--	--	9.92	23.58	340	<2.5	<2.5	<2.5	<2.5	140	0.7	6.9
12/13/2005	P		33.50	--	--	9.73	23.77	270	<0.50	<0.50	<0.50	<0.50	47	1.8	6.5
03/20/2006	P		33.50	--	--	8.17	25.33	270	<0.50	<0.50	<0.50	<0.50	34	1.1	6.9
6/22/2006	P		33.50	--	--	9.42	24.08	250	<0.50	<0.50	<0.50	<0.50	21	1.74	7.0
9/22/2006	P		33.50	--	--	9.88	23.62	270	<0.50	<0.50	<0.50	<0.50	11	1.39	7.0
12/7/2006	P		33.50	--	--	9.78	23.72	360	<0.50	<0.50	<0.50	<0.50	10	0.89	7.10
3/12/2007	P		33.50	--	--	9.00	24.50	300	<0.50	<0.50	<0.50	<0.50	18	0.98	7.25
6/20/2007	P		33.50	--	--	9.94	23.56	300	<0.50	<0.50	<0.50	<0.50	5.9	6.47	7.18
9/20/2007	P		33.50	--	--	10.24	23.26	250	<0.50	<0.50	<0.50	<0.50	4.6	2.46	7.29
12/14/2007	P		33.50	--	--	9.90	23.60	280	<0.50	<0.50	<0.50	<0.50	6.9	1.80	6.98
3/10/2008	P		33.50	--	--	9.18	24.32	330	<0.50	<0.50	<0.50	<0.50	13	0.27	6.88
6/13/2008	**P**		**33.50**	**--**	**--**	**10.05**	**23.45**	**410**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**5.8**	**0.79**	**7.15**

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Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-11															
3/13/2002	--		32.54	--	--	10.38	22.16	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
6/28/2002	--		32.54	--	--	10.74	21.80	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
9/20/2002	--		32.54	--	--	11.27	21.27	<50	<0.50	<0.50	<0.50	<1.50	<0.500	--	--
12/30/2002	--		32.54	--	--	8.73	23.81	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
3/27/2003	--		32.54	--	--	10.25	22.29	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
6/30/2003	--		32.54	--	--	10.65	21.89	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
9/15/2003	--		32.54	--	--	11.03	21.51	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
12/04/2003	P		32.54	--	--	10.84	21.70	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.5	7.0
03/10/2004	P		34.55	--	--	9.4J	25.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	6.9
06/10/2004	--		34.55	--	--	10.82	23.73	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	6.9
09/22/2004	P		34.55	--	--	11.10	23.45	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	6.9
12/13/2004	P		34.55	--	--	10.19	24.36	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.83	6.6
03/10/2005	P		34.55	--	--	8.87	25.68	<100	<0.50	<0.50	<0.50	<4.0	<0.50	2.3	7.7
06/29/2005	P		34.55	--	--	10.37	24.18	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.83	6.3
09/14/2005	P		34.55	--	--	10.78	23.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.8	6.9
12/13/2005	--		34.55	--	--	10.62	23.93	--	--	--	--	--	--	--	--
03/20/2006	--		34.55	--	--	9.04	25.51	--	--	--	--	--	--	--	--
6/22/2006	--		34.55	--	--	10.33	24.22	--	--	--	--	--	--	--	--
9/22/2006	P		34.55	--	--	10.75	23.80	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.53	7.2
12/7/2006	--		34.55	--	--	10.68	23.87	--	--	--	--	--	--	--	--
3/12/2007	--		34.55	--	--	9.89	24.66	--	--	--	--	--	--	--	--
6/20/2007	--		34.55	--	--	10.84	23.71	--	--	--	--	--	--	--	--
9/20/2007	P		34.55	--	--	11.15	23.40	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.32	7.26
12/14/2007	--		34.55	--	--	11.10	23.45	--	--	--	--	--	--	--	--
3/10/2008	--		34.55	--	--	10.05	24.50	--	--	--	--	--	--	--	--
MW-14															
3/13/2002	--		30.46	--	--	8.56	21.90	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
6/28/2002	--	q	30.46	--	--	9.12	21.34	--	--	--	--	--	--	--	--
9/20/2002	--	q	30.46	--	--	9.79	20.67	--	--	--	--	--	--	--	--
12/30/2002	--	q	30.46	--	--	7.13	23.33	--	--	--	--	--	--	--	--

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-14 Cont.															
3/27/2003	--		30.46	--	--	8.53	21.93	<50	<0.50	0.86	<0.50	<0.50	<0.50	--	--
6/30/2003	--	q	30.46	--	--	9.05	21.41	--	--	--	--	--	--	--	--
9/15/2003	--	q	30.46	--	--	9.47	20.99	--	--	--	--	--	--	--	--
12/04/2003	--	q	30.46	--	--	9.20	21.26	--	--	--	--	--	--	--	--
03/10/2004	--	q	32.61	--	--	7.90	24.71	--	--	--	--	--	--	--	--
06/10/2004	--	q	32.61	--	--	9.25	23.36	--	--	--	--	--	--	--	--
09/22/2004	P		32.61	--	--	9.55	23.06	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	--
12/13/2004	--		32.61	--	--	8.46	24.15	--	--	--	--	--	--	--	--
03/10/2005	--		32.61	--	--	7.32	25.29	--	--	--	--	--	--	--	--
06/29/2005	--		32.61	--	--	8.77	23.84	--	--	--	--	--	--	--	--
09/14/2005	P		32.61	--	--	9.20	23.41	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.9	6.9
12/13/2005	--		32.61	--	--	8.96	23.65	--	--	--	--	--	--	--	--
03/20/2006	--		32.61	--	--	7.51	25.10	--	--	--	--	--	--	--	--
6/22/2006	--		32.61	--	--	8.75	23.86	--	--	--	--	--	--	--	--
9/22/2006	P		32.61	--	--	9.19	23.42	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.70	7.2
12/7/2006	--		32.61	--	--	9.05	23.56	--	--	--	--	--	--	--	--
3/12/2007	--		32.61	--	--	8.35	24.26	--	--	--	--	--	--	--	--
6/20/2007	--		32.61	--	--	9.33	23.28	--	--	--	--	--	--	--	--
9/20/2007	P		32.61	--	--	9.60	23.01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.24	7.42
12/14/2007	--		32.61	--	--	9.53	23.08	--	--	--	--	--	--	--	--
3/10/2008	--		32.61	--	--	8.50	24.11	--	--	--	--	--	--	--	--
MW-15															
3/13/2002	--		31.41	--	--	10.03	21.38	<50	<0.50	<0.50	<0.50	<0.50	21	--	--
6/28/2002	--		31.41	--	--	10.41	21.00	<50	<0.50	<0.50	<0.50	<0.50	8.7	--	--
9/20/2002	--		31.41	--	--	11.00	20.41	<50	<0.50	<0.50	<0.50	<1.50	21.6	--	--
12/30/2002	--		31.41	--	--	8.33	23.08	<50	<0.50	<0.50	<0.50	<0.50	67	--	--
3/27/2003	--		31.41	--	--	9.85	21.58	<50	<0.50	<0.50	<0.50	<0.50	17	--	--
6/30/2003	--		31.41	--	--	10.00	21.41	<50	<0.50	<0.50	<0.50	<0.50	12	--	--
9/15/2003	--		31.41	--	--	10.67	20.74	<50	<0.50	<0.50	<0.50	<0.50	10	--	--
12/04/2003	P		31.41	--	--	10.47	20.94	<50	<0.50	<0.50	<0.50	<0.50	6.4	2.6	7.0

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-15 Cont.															
03/10/2004	P		33.49	--	--	9.09	24.40	<50	<0.50	<0.50	<0.50	<0.50	11	1.5	6.9
06/10/2004	P		33.49	--	--	10.50	22.99	<50	<0.50	<0.50	<0.50	<0.50	5.7	0.5	6.9
09/22/2004	--	r	33.49	--	--	--	--	--	--	--	--	--	--	--	--
12/13/2004	--	r	33.49	--	--	--	--	--	--	--	--	--	--	--	--
03/10/2005	P		33.49	--	--	8.50	24.99	<100	<0.50	<0.50	<0.50	<4.0	5.4	2.7	7.7
06/29/2005	--	r	33.49	--	--	--	--	--	--	--	--	--	--	--	--
09/14/2005	--	r	33.49	--	--	--	--	--	--	--	--	--	--	--	--
12/13/2005	--		33.49	--	--	10.16	23.33	--	--	--	--	--	--	--	--
03/20/2006	P		33.49	--	--	8.72	24.77	<50	<0.50	<0.50	<0.50	<0.50	15	3.1	7.3
6/22/2006	--		33.49	--	--	10.00	23.49	--	--	--	--	--	--	--	--
9/22/2006	--	j	--	--	--	--	--	--	--	--	--	--	--	--	--
12/7/2006	--		33.49	--	--	10.32	23.17	--	--	--	--	--	--	--	--
3/12/2007	--	j	33.49	--	--	9.60	23.89	--	--	--	--	--	--	--	--
6/20/2007	--		33.49	--	--	10.52	22.97	--	--	--	--	--	--	--	--
9/20/2007	P		33.49	--	--	10.83	22.66	<50	<0.50	<0.50	<0.50	<0.50	11	0.64	7.19
12/14/2007	--		33.49	--	--	10.78	22.71	--	--	--	--	--	--	--	--
3/10/2008	P		33.49	--	--	9.75	23.74	<50	<0.50	<0.50	<0.50	<0.50	19	0.72	6.88
MW-16															
3/13/2002	--		31.39	--	--	10.51	20.88	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
6/28/2002	--		31.39	--	--	10.96	20.43	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
9/20/2002	--		31.39	--	--	10.47	20.92	<50	<0.50	<0.50	<0.50	<1.50	1.67	--	--
12/30/2002	--		31.39	--	--	--	--	--	--	--	--	--	--	--	--
3/27/2003	--		31.39	--	--	10.28	21.11	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
6/30/2003	--	i, q	31.39	--	--	10.87	20.52	--	--	--	--	--	--	--	--
9/15/2003	--		31.39	--	--	11.25	20.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
12/04/2003	--	u	31.39	--	--	10.99	20.40	--	--	--	--	--	--	--	--
03/10/2004	P		33.41	--	--	9.66	23.75	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.1	6.5
06/10/2004	--		33.41	--	--	11.06	22.35	--	--	--	--	--	--	--	--
09/22/2004	P		33.41	--	--	11.40	22.01	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	7.0
12/13/2004	--		33.41	--	--	10.27	23.14	--	--	--	--	--	--	--	--

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Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-16 Cont.															
03/10/2005	P	--	33.41	--	--	9.03	24.38	<100	<0.50	<0.50	<0.50	<4.0	<0.50	3.9	7.0
06/29/2005	--		33.41	--	--	10.60	22.81	--	--	--	--	--	--	--	--
09/14/2005	P	--	33.41	--	--	11.02	22.39	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.9	7.0
12/13/2005	--		33.41	--	--	10.79	22.62	--	--	--	--	--	--	--	--
03/20/2006	--	--	33.41	--	--	9.25	24.16	--	--	--	--	--	--	--	--
6/22/2006	--	r	33.41	--	--	--	--	--	--	--	--	--	--	--	--
9/22/2006	P	--	33.41	--	--	10.95	22.46	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.69	7.3
12/7/2006	--	r	33.41	--	--	--	--	--	--	--	--	--	--	--	--
3/12/2007	--	--	33.41	--	--	10.18	23.23	--	--	--	--	--	--	--	--
6/20/2007	--		33.41	--	--	11.10	22.31	--	--	--	--	--	--	--	--
9/20/2007	P	--	33.41	--	--	11.44	21.97	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.55	7.30
12/14/2007	--		33.41	--	--	11.41	22.00	--	--	--	--	--	--	--	--
3/10/2008	--	--	33.41	--	--	10.35	23.06	--	--	--	--	--	--	--	--
MW-18															
3/13/2002	--	--	29.70	--	--	9.46	20.24	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
6/28/2002	--	q	29.70	--	--	10.05	19.65	--	--	--	--	--	--	--	--
9/20/2002	--	q	29.70	--	--	10.67	19.03	--	--	--	--	--	--	--	--
12/30/2002	--	q	29.70	--	--	7.98	21.72	--	--	--	--	--	--	--	--
3/27/2003	--	--	29.70	--	--	9.18	20.52	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
6/30/2003	--	q	29.70	--	--	9.68	20.02	--	--	--	--	--	--	--	--
9/15/2003	--	q	29.70	--	--	10.30	19.40	--	--	--	--	--	--	--	--
12/04/2003	--	q	29.70	--	--	9.99	19.71	--	--	--	--	--	--	--	--
03/10/2004	--	q	31.87	--	--	8.78	23.09	--	--	--	--	--	--	--	--
06/10/2004	--	q	31.87	--	--	10.12	21.75	--	--	--	--	--	--	--	--
09/22/2004	P	--	31.87	--	--	10.45	21.42	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	6.9
12/13/2004	--		31.87	--	--	9.25	22.62	--	--	--	--	--	--	--	--
03/10/2005	--	--	31.87	--	--	8.35	23.52	--	--	--	--	--	--	--	--
06/29/2005	--		31.87	--	--	9.65	22.22	--	--	--	--	--	--	--	--
09/14/2005	P	--	31.87	--	--	10.10	21.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	6.9
12/13/2005	--		31.87	--	--	9.90	21.97	--	--	--	--	--	--	--	--

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Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-18 Cont.															
03/20/2006	--		31.87	--	--	8.54	23.33	--	--	--	--	--	--	--	--
6/22/2006	--		31.87	--	--	9.68	22.19	--	--	--	--	--	--	--	--
9/22/2006	P		31.87	--	--	9.96	21.91	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.23	7.2
12/7/2006	--		31.87	--	--	--	--	--	--	--	--	--	--	--	--
3/12/2007	--		31.87	--	--	9.28	22.59	--	--	--	--	--	--	--	--
6/20/2007	--		31.87	--	--	10.15	21.72	--	--	--	--	--	--	--	--
9/20/2007	P		31.87	--	--	10.45	21.42	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.14	7.22
12/14/2007	--		31.87	--	--	10.47	21.40	--	--	--	--	--	--	--	--
3/10/2008	--		31.87	--	--	9.42	22.45	--	--	--	--	--	--	--	--
MW-21															
3/13/2002	--		28.72	--	--	9.40	19.32	<50	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
6/28/2002	--	q	28.72	--	--	9.80	18.92	--	--	--	--	--	--	--	--
9/20/2002	--	q	28.72	--	--	10.27	18.45	--	--	--	--	--	--	--	--
12/30/2002	--	q	28.72	--	--	7.70	21.02	--	--	--	--	--	--	--	--
3/27/2003	--		28.72	--	--	9.05	19.67	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
6/30/2003	--	q	28.72	--	--	9.48	19.24	--	--	--	--	--	--	--	--
9/15/2003	--	q	28.72	--	--	10.06	18.66	--	--	--	--	--	--	--	--
12/04/2003	--	q	28.72	--	--	9.69	19.03	--	--	--	--	--	--	--	--
03/10/2004	--	q	30.67	--	--	8.60	22.07	--	--	--	--	--	--	--	--
06/10/2004	--	q	30.67	--	--	9.85	20.82	--	--	--	--	--	--	--	--
09/22/2004	P		30.67	--	--	10.17	20.50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	6.9
12/13/2004	--		30.67	--	--	8.92	21.75	--	--	--	--	--	--	--	--
03/10/2005	--		30.67	--	--	8.10	22.57	--	--	--	--	--	--	--	--
06/29/2005	--		30.67	--	--	9.48	21.19	--	--	--	--	--	--	--	--
09/14/2005	P		30.67	--	--	9.88	20.79	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.8	6.9
12/13/2005	--		30.67	--	--	9.57	21.10	--	--	--	--	--	--	--	--
03/20/2006	--		30.67	--	--	8.26	22.41	--	--	--	--	--	--	--	--
6/22/2006	--		30.67	--	--	9.47	21.20	--	--	--	--	--	--	--	--
9/22/2006	P		30.67	--	--	9.83	20.84	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.88	5.9
12/7/2006	--		30.67	--	--	9.76	20.91	--	--	--	--	--	--	--	--

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-21 Cont.															
3/12/2007	--		30.67	--	--	9.08	21.59	--	--	--	--	--	--	--	--
6/20/2007	--		30.67	--	--	9.89	20.78	--	--	--	--	--	--	--	--
9/20/2007	P		30.67	--	--	10.20	20.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.28	7.56
12/14/2007	--		30.67	--	--	10.18	20.49	--	--	--	--	--	--	--	--
3/10/2008	--		30.67	--	--	9.23	21.44	--	--	--	--	--	--	--	--
MW-22															
3/13/2002	--		29.29	--	--	9.86	19.43	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
6/28/2002	--		29.29	--	--	10.65	18.64	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
9/20/2002	--		29.29	--	--	11.05	18.24	<50	<0.50	<0.50	<0.50	<1.50	<0.500	--	--
12/30/2002	--		29.29	--	--	8.28	21.01	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
3/27/2003	--		29.29	--	--	9.85	19.44	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
6/30/2003	--	i, q	29.29	--	--	10.20	19.09	--	--	--	--	--	--	--	--
9/15/2003	--		29.29	--	--	10.81	18.48	<500	<5.0	<5.0	<5.0	<5.0	<5.0	--	--
12/04/2003	--		29.29	--	--	10.49	18.80	--	--	--	--	--	--	--	--
03/10/2004	P		31.43	--	--	9.24	22.19	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3	6.6
06/10/2004	--		31.43	--	--	10.60	20.83	--	--	--	--	--	--	--	--
09/22/2004	P		31.43	--	--	10.94	20.49	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.9	7.0
12/13/2004	--		31.43	--	--	9.73	21.70	--	--	--	--	--	--	--	--
03/10/2005	P		31.43	--	--	8.65	22.78	<100	<0.50	<0.50	<0.50	<4.0	<0.50	3.3	7.4
06/29/2005	--		31.43	--	--	10.25	21.18	--	--	--	--	--	--	--	--
09/14/2005	P		31.43	--	--	10.65	20.78	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.0	7.0
12/13/2005	--		31.43	--	--	10.39	21.04	--	--	--	--	--	--	--	--
03/20/2006	--		31.43	--	--	8.89	22.54	--	--	--	--	--	--	--	--
6/22/2006	--		31.43	--	--	10.21	21.22	--	--	--	--	--	--	--	--
9/22/2006	P		31.43	--	--	10.62	20.81	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.13	7.2
12/7/2006	--		31.43	--	--	10.44	20.99	--	--	--	--	--	--	--	--
3/12/2007	--		31.43	--	--	9.75	21.68	--	--	--	--	--	--	--	--
6/20/2007	--		31.43	--	--	10.64	20.79	--	--	--	--	--	--	--	--
9/20/2007	P		31.43	--	--	10.95	20.48	<50	<0.50	<0.50	<0.50	<0.50	<0.50	10.88	7.40
12/14/2007	--		31.43	--	--	11.03	20.40	--	--	--	--	--	--	--	--

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-22 Cont.															
3/10/2008	--		31.43	--	--	9.90	21.53	--	--	--	--	--	--	--	--
MW-23															
3/13/2002	--		30.99	--	--	11.01	19.98	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
6/28/2002	--	q	30.99	--	--	11.59	19.40	--	--	--	--	--	--	--	--
9/20/2002	--	q	30.99	--	--	12.00	18.99	--	--	--	--	--	--	--	--
12/30/2002	--	q	30.99	--	--	9.42	21.57	--	--	--	--	--	--	--	--
3/27/2003	--		30.99	--	--	11.00	19.99	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
6/30/2003	--	q	30.99	--	--	11.47	19.52	--	--	--	--	--	--	--	--
9/15/2003	--	q	30.99	--	--	11.84	19.15	--	--	--	--	--	--	--	--
12/04/2003	--	q	30.99	--	--	11.61	19.38	--	--	--	--	--	--	--	--
03/10/2004	--	q	33.16	--	--	10.24	22.92	--	--	--	--	--	--	--	--
06/10/2004	--	q	33.16	--	--	11.60	21.56	--	--	--	--	--	--	--	--
09/22/2004	P		33.16	--	--	11.95	21.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	6.9
12/13/2004	--		33.16	--	--	10.88	22.28	--	--	--	--	--	--	--	--
03/10/2005	--		33.16	--	--	9.63	23.53	--	--	--	--	--	--	--	--
06/29/2005	--		33.16	--	--	11.28	21.88	--	--	--	--	--	--	--	--
09/14/2005	P		33.16	--	--	11.70	21.46	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.3	6.9
12/13/2005	--		33.16	--	--	11.44	21.72	--	--	--	--	--	--	--	--
03/20/2006	--		33.16	--	--	9.81	23.35	--	--	--	--	--	--	--	--
6/22/2006	--		33.16	--	--	11.25	21.91	--	--	--	--	--	--	--	--
9/22/2006	P		33.16	--	--	11.52	21.64	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.71	7.3
12/7/2006	--		33.16	--	--	11.50	21.66	--	--	--	--	--	--	--	--
3/12/2007	--		33.16	--	--	10.76	22.40	--	--	--	--	--	--	--	--
6/20/2007	--		33.16	--	--	11.68	21.48	--	--	--	--	--	--	--	--
9/20/2007	P		33.16	--	--	11.95	21.21	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.96	7.19
12/14/2007	--		33.16	--	--	12.05	21.11	--	--	--	--	--	--	--	--
3/10/2008	--		33.16	--	--	10.92	22.24	--	--	--	--	--	--	--	--
MW-25															
3/13/2002	--		33.81	--	--	10.99	22.82	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-25 Cont.															
6/28/2002	--		33.81	--	--	11.26	22.55	<50	<0.50	<0.50	<0.50	<0.50	36	--	--
9/20/2002	--		33.81	--	--	11.65	22.16	117	<0.50	<0.50	<0.50	<1.50	259	--	--
12/30/2002	--	d, f	33.81	--	--	9.33	24.48	95	13	<0.50	<0.50	<0.50	98	--	--
3/27/2003	--		33.81	--	--	10.82	22.99	150	<0.50	<0.50	<0.50	<0.50	90	--	--
6/30/2003	--		33.81	--	--	11.20	22.61	<500	<5.0	<5.0	<5.0	<5.0	130	--	--
9/15/2003	--		33.81	--	--	11.62	22.19	220	<1.0	<1.0	<1.0	<1.0	140	--	--
12/04/2003	P		33.81	--	--	11.41	22.40	81	<0.50	<0.50	<0.50	<0.50	36	1.2	7.0
03/10/2004	P		36.33	--	--	10.04	26.29	<50	<0.50	<0.50	<0.50	<0.50	14	1.2	6.7
06/10/2004	P		36.33	--	--	11.40	24.93	<50	<0.50	<0.50	<0.50	<0.50	17	0.8	7.1
09/22/2004	P		36.33	--	--	11.74	24.59	<50	<0.50	<0.50	<0.50	<0.50	29	1.1	7.0
12/13/2004	P		36.33	--	--	10.72	25.61	<50	<0.50	<0.50	<0.50	<0.50	44	1.22	6.9
03/10/2005	P		36.33	--	--	9.45	26.88	<100	<0.50	<0.50	<0.50	<4.0	7.4	2.0	7.7
06/29/2005	P		36.33	--	--	10.91	25.42	<50	<0.50	<0.50	<0.50	<0.50	20	0.97	6.9
09/14/2005	P		36.33	--	--	11.35	24.98	<50	<0.50	<0.50	<0.50	<0.50	8.0	1.2	6.9
12/13/2005	P		36.33	--	--	11.14	25.19	<50	<0.50	<0.50	<0.50	<0.50	13	0.8	6.8
03/20/2006	P		36.33	--	--	9.71	26.62	<50	<0.50	<0.50	<0.50	<0.50	5.4	1.0	6.9
6/22/2006	P		36.33	--	--	10.89	25.44	<50	<0.50	<0.50	<0.50	<0.50	3.5	1.62	7.0
9/22/2006	P		36.33	--	--	11.33	25.00	<50	<0.50	<0.50	<0.50	<0.50	18	1.22	7.1
12/7/2006	P		36.33	--	--	11.22	25.11	<50	<0.50	<0.50	<0.50	<0.50	14	0.71	7.20
3/12/2007	P		36.33	--	--	10.47	25.86	<50	<0.50	<0.50	<0.50	<0.50	7.3	2.77	7.28
6/20/2007	P		36.33	--	--	11.40	24.93	<50	<0.50	<0.50	<0.50	<0.50	2.8	0.66	7.24
9/20/2007	P		36.33	--	--	11.74	24.59	<50	<0.50	<0.50	<0.50	<0.50	4.7	1.94	7.29
12/14/2007	P		36.33	--	--	11.36	24.97	<50	<0.50	<0.50	<0.50	<0.50	5.2	1.61	6.98
3/10/2008	P		36.33	--	--	10.65	25.68	<50	<0.50	<0.50	<0.50	<0.50	6.0	1.03	6.94
6/13/2008	**P**		**36.33**	--	--	**11.50**	**24.83**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**2.2**	**0.77**	**7.15**
MW-26															
3/13/2002	--		33.71	--	--	11.27	22.44	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
6/28/2002	--	q	33.71	--	--	11.70	22.01	--	--	--	--	--	--	--	--
9/20/2002	--	q	33.71	--	--	12.10	21.61	--	--	--	--	--	--	--	--
12/30/2002	--	q	33.71	--	--	9.60	24.11	--	--	--	--	--	--	--	--

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	P/NP	Comments	TOC (feet msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	DTW (feet bgs)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	pH
								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-26 Cont.															
3/27/2003	--		33.71	--	--	11.15	22.56	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
6/30/2003	--	q	33.71	--	--	11.61	22.10	--	--	--	--	--	--	--	--
9/15/2003	--	q	33.71	--	--	12.01	21.70	--	--	--	--	--	--	--	--
12/04/2003	--	q	33.71	--	--	11.78	21.93	--	--	--	--	--	--	--	--
03/10/2004	--	q	35.70	--	--	10.45	25.25	--	--	--	--	--	--	--	--
06/10/2004	--	q	35.70	--	--	11.82	23.88	--	--	--	--	--	--	--	--
09/22/2004	P		35.70	--	--	12.05	23.65	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	7.0
12/13/2004	--		35.70	--	--	11.08	24.62	--	--	--	--	--	--	--	--
03/10/2005	--		35.70	--	--	9.80	25.90	--	--	--	--	--	--	--	--
06/29/2005	--		35.70	--	--	11.30	24.40	--	--	--	--	--	--	--	--
09/14/2005	P		35.70	--	--	11.55	24.15	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.0	6.8
12/13/2005	--		35.70	--	--	11.54	24.16	--	--	--	--	--	--	--	--
03/20/2006	--		35.70	--	--	10.06	25.64	--	--	--	--	--	--	--	--
6/22/2006	--		35.70	--	--	11.29	24.41	--	--	--	--	--	--	--	--
9/22/2006	P		35.70	--	--	11.63	24.07	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.10	7.2
12/7/2006	--		35.70	--	--	11.11	24.59	--	--	--	--	--	--	--	--
3/12/2007	--		35.70	--	--	10.87	24.83	--	--	--	--	--	--	--	--
6/20/2007	--		35.70	--	--	11.80	23.90	--	--	--	--	--	--	--	--
9/20/2007	P		35.70	--	--	12.13	23.57	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.59	7.21
12/14/2007	--		35.70	--	--	12.14	23.56	--	--	--	--	--	--	--	--
3/10/2008	--		35.70	--	--	11.05	24.65	--	--	--	--	--	--	--	--

SYMBOLS & ABBREVIATIONS:
-- = Not analyzed/applicable/measured/available
< = Not detected at or above laboratory reporting limit
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
ft bgs = feet below ground surface
ft MSL = feet above mean sea level
GRO = Gasoline range organics, range C4-C12
GWE = Groundwater elevation measured in ft MSL
mg/L = Milligrams per liter
MTBE = Methyl tert butyl ether
NP = Well not purged prior to sampling
P = Well purged prior to sampling
TOC = Top of casing measured in ft MSL
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter

NOTES:
a = Well elevation data obtained from Quarterly Groundwater Monitoring and Site Status Report, Fourth Quarter 1994.
b = GRO/TPH-g Chromatogram Pattern: Unidentified Hydrocarbons C6-C10
c = Hydrocarbon pattern for GRO/TPH-g is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
d = GRO/TPH-g Chromatogram Pattern: C6-C10
e = This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.
f = The continuing calibration was outside the acceptance criteria. This should be considered in evaluating the result for its intended purpose.
g = Groundwater extraction system pumping; inaccurate DTW.
h = Groundwater extraction system not pumping.
i = Sampling frequency changed from quarterly to annually per recommendations in first quarter 2003 groundwater monitoring report.
j = Well not accessible this quarter.
k = Well destroyed.
l = MTBE confirmed by EPA Method 8260B (Method 8260B result is the second value.)
m = No gauging port. Sample taken from spigot.
n = Well inaccessible as homeowner not available.
o = Pump not working or well dry.
p = Gauged with pump in well. Opened cam lock fitting at wellhead.
q = Well sampled annually.
r = Well inaccessible--car parked over well.
s = Well resampled on 3/26/2008; the initial sample on 3/10/2008 was meant to be purged.
u = Well sampled semi-annually.

NOTES:
Site surveyed to NAVD'88 datum on March 2, 2004.
Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g was changed to GRO. The resulting data may be impacted by the potential of non-TPH-g analytes within the requested fuel range resulting in a higher concentration being reported. Beginning in the second quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12
Values for DO and pH were obtained through field measurements.

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

Table 2. Summary of Fuel Additives Analytical Data

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
17372 VM									
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
9/15/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/04/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
03/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
06/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/13/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2005	<100	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
642 H									
3/13/2002	<100	<20	--	<0.50	<0.50	<0.50	--	--	
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
6/30/2003	--	--	--	--	--	--	--	--	a
9/15/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/04/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
E-1A									
3/27/2003	<100	<20	60	<0.50	<0.50	2.5	--	--	
6/30/2003	<100	<20	37	<0.50	<0.50	1.6	<0.50	<0.50	
9/15/2003	<100	<20	49	<0.50	<0.50	2.4	<0.50	<0.50	
12/04/2003	<100	<20	19	<0.50	<0.50	0.89	--	--	
03/10/2004	<200	<40	38	<1.0	<1.0	2.3	<1.0	<1.0	
06/10/2004	<100	<20	46	<0.50	<0.50	2.2	<0.50	<0.50	
09/22/2004	<100	<20	17	<0.50	<0.50	0.98	<0.50	<0.50	
12/13/2004	<100	<20	15	<0.50	<0.50	0.75	<0.50	<0.50	
03/10/2005	<100	<10	22	<0.50	<0.50	0.95	<0.50	<0.50	
06/29/2005	<100	<20	14	<0.50	<0.50	0.74	<0.50	<0.50	
09/14/2005	<100	<20	13	<0.50	<0.50	<0.50	<0.50	<0.50	c
12/13/2005	<100	<20	12	<0.50	<0.50	0.61	<0.50	<0.50	
6/22/2006	<300	<20	13	<0.50	<0.50	<0.50	<0.50	<0.50	
9/22/2006	<300	<20	12	<0.50	<0.50	<0.50	<0.50	<0.50	
3/12/2007	<300	<20	5.6	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
E-1A Cont.									
6/20/2007	<300	<20	6.8	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	0.80	<0.50	<0.50	<0.50	<0.50	<0.50	
12/14/2007	<300	<20	2.0	<0.50	<0.50	<0.50	<0.50	<0.50	c
3/10/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/26/2008	<300	<10	0.89	<0.50	<0.50	<0.50	<0.50	<0.50	d
MW-5									
3/27/2003	<100	24	59	<0.50	<0.50	2.2	--	--	
6/30/2003	<100	22	58	<0.50	<0.50	2.1	<0.50	<0.50	
9/15/2003	<500	<100	61	<2.5	<2.5	2.5	--	--	
12/04/2003	<100	<20	42	<0.50	<0.50	1.9	--	--	
03/10/2004	<100	<20	9.5	<0.50	<0.50	<0.50	<0.50	<0.50	
06/10/2004	<100	<20	31	<0.50	<0.50	1.0	<0.50	<0.50	
09/22/2004	<100	<20	15	<0.50	<0.50	<0.50	<0.50	<0.50	
12/13/2004	<100	<20	5.4	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2005	<100	<10	3.3	<0.50	<0.50	<0.50	<0.50	<0.50	b
06/29/2005	<100	<20	6.7	<0.50	<0.50	<0.50	<0.50	<0.50	
09/14/2005	<100	<20	13	<0.50	<0.50	<0.50	<0.50	<0.50	c
03/20/2006	<300	<20	3.8	<0.50	<0.50	<0.50	<0.50	<0.50	
9/22/2006	<300	<20	12	<0.50	<0.50	<0.50	<0.50	<0.50	
3/12/2007	<300	<20	5.8	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	4.3	<0.50	<0.50	<0.50	<0.50	<0.50	
3/10/2008	<300	<10	2.8	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-8									
3/27/2003	<100	<20	33	<0.50	<0.50	0.53	--	--	
6/30/2003	<100	<20	15	<0.50	<0.50	0.85	<0.50	<0.50	
9/15/2003	<100	<20	41	<0.50	<0.50	5.3	--	--	
12/04/2003	<100	<20	24	<0.50	<0.50	3.7	--	--	
03/10/2004	<100	<20	2.4	<0.50	<0.50	<0.50	<0.50	<0.50	
06/10/2004	<100	<20	2.1	<0.50	<0.50	<0.50	<0.50	<0.50	
09/22/2004	<100	<20	18	<0.50	<0.50	1.5	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-8 Cont.									
12/13/2004	<100	<20	7.1	<0.50	<0.50	0.78	<0.50	<0.50	
03/10/2005	<100	<10	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	b
06/29/2005	<100	<20	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	
09/14/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	c
03/20/2006	<300	<20	0.60	<0.50	<0.50	<0.50	<0.50	<0.50	
9/22/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
3/12/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	13	<0.50	<0.50	1.2	<0.50	<0.50	
3/10/2008	<300	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-9									
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	–	–	
9/15/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2005	<100	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
09/14/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	c
9/22/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-10									
3/27/2003	<1,000	<200	330	<5.0	<5.0	15	–	–	
6/30/2003	<2,000	<400	750	<10	<10	28	<10	<10	
9/15/2003	<1,000	<200	430	<5.0	<5.0	15	<5.0	<5.0	
12/04/2003	<500	<100	110	<2.5	<2.5	4.8	–	–	
03/10/2004	<500	120	140	<2.5	<2.5	<2.5	<2.5	<2.5	
06/10/2004	<1,000	<200	410	<5.0	<5.0	11	<5.0	<5.0	
09/22/2004	<100	54	87	<0.50	<0.50	3.8	<0.50	<0.50	
12/13/2004	<200	220	110	<1.0	<1.0	4.5	<1.0	<1.0	
03/10/2005	<100	50	86	<0.50	<0.50	2.2	<0.50	<0.50	
06/29/2005	<500	110	160	<2.5	<2.5	4.6	<2.5	<2.5	
09/14/2005	<500	300	140	<2.5	<2.5	3.5	<2.5	<2.5	c

Table 2. Summary of Fuel Additives Analytical Data

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-10 Cont.									
12/13/2005	<100	190	47	<0.50	<0.50	1.9	<0.50	<0.50	
03/20/2006	<300	72	34	<0.50	<0.50	0.85	<0.50	<0.50	
6/22/2006	<300	130	21	<0.50	<0.50	0.56	<0.50	<0.50	c
9/22/2006	<300	51	11	<0.50	<0.50	<0.50	<0.50	<0.50	
12/7/2006	<300	24	10	<0.50	<0.50	<0.50	<0.50	<0.50	
3/12/2007	<300	46	18	<0.50	<0.50	<0.50	<0.50	<0.50	
6/20/2007	<300	<20	5.9	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	4.6	<0.50	<0.50	<0.50	<0.50	<0.50	
12/14/2007	<300	<20	6.9	<0.50	<0.50	<0.50	<0.50	<0.50	c
3/10/2008	<300	22	13	<0.50	<0.50	<0.50	<0.50	<0.50	
6/13/2008	**<300**	**<10**	**5.8**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-11									
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	–	–	
6/30/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/15/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/04/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	–	–	
03/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
06/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
12/13/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2005	<100	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
06/29/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/14/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	c
9/22/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-14									
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	–	–	
03/10/2004	–	–	–	–	–	–	–	–	Not Sampled
09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/14/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-14 Cont.									
9/22/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-15									
3/27/2003	<100	<20	17	<0.50	<0.50	<0.50	--	--	
6/30/2003	<100	<20	12	<0.50	<0.50	<0.50	<0.50	<0.50	
9/15/2003	<100	<20	10	<0.50	<0.50	<0.50	<0.50	<0.50	
12/04/2003	<100	<20	6.4	<0.50	<0.50	<0.50	--	--	
03/10/2004	<100	<20	11	<0.50	<0.50	<0.50	<0.50	<0.50	
06/10/2004	<100	<20	5.7	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2005	<100	<10	5.4	<0.50	<0.50	<0.50	<0.50	<0.50	b
03/20/2006	<300	<20	15	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	11	<0.50	<0.50	<0.50	<0.50	<0.50	
3/10/2008	<300	<10	19	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-16									
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
9/15/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2005	<100	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
09/14/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/22/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-18									
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
03/10/2004	--	--	--	--	--	--	--	--	Not Sampled
09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/14/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/22/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-21									
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
03/10/2004	--	--	--	--	--	--	--	--	Not Sampled
09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/14/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/22/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-22									
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
9/15/2003	<1,000	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	
03/10/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/10/2005	<100	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	b
09/14/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/22/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-23									
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
03/10/2004	--	--	--	--	--	--	--	--	Not Sampled
09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/14/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/22/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-25									
3/27/2003	<100	<20	90	<0.50	<0.50	40	--	--	
6/30/2003	<1,000	<200	130	<5.0	<5.0	81	<5.0	<5.0	
9/15/2003	<200	<40	140	<1.0	<1.0	71	<1.0	<1.0	
12/04/2003	<100	<20	36	<0.50	<0.50	17	--	--	
03/10/2004	<100	<20	14	<0.50	<0.50	6.5	<0.50	<0.50	
06/10/2004	<100	<20	17	<0.50	<0.50	7.2	<0.50	<0.50	
09/22/2004	<100	<20	29	<0.50	<0.50	18	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #608, 17601 Hesperian Boulevard, San Lorenzo, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-25 Cont.									
12/13/2004	<100	45	44	<0.50	<0.50	1.8	<0.50	<0.50	
03/10/2005	<100	<10	7.4	<0.50	<0.50	2.3	<0.50	<0.50	b
06/29/2005	<100	<20	20	<0.50	<0.50	12	<0.50	<0.50	
09/14/2005	<100	<20	8.0	<0.50	<0.50	4.1	<0.50	<0.50	
12/13/2005	<100	<20	13	<0.50	<0.50	5.5	<0.50	<0.50	
03/20/2006	<300	<20	5.4	<0.50	<0.50	2.4	<0.50	<0.50	
6/22/2006	<300	<20	3.5	<0.50	<0.50	1.7	<0.50	<0.50	c
9/22/2006	<300	<20	18	<0.50	<0.50	7.3	<0.50	<0.50	
12/7/2006	<300	<20	14	<0.50	<0.50	6.1	<0.50	<0.50	
3/12/2007	<300	<20	7.3	<0.50	<0.50	2.9	<0.50	<0.50	
6/20/2007	<300	<20	2.8	<0.50	<0.50	1.3	<0.50	<0.50	
9/20/2007	<300	<20	4.7	<0.50	<0.50	1.9	<0.50	<0.50	
12/14/2007	<300	<20	5.2	<0.50	<0.50	1.8	<0.50	<0.50	c
3/10/2008	<300	<10	6.0	<0.50	<0.50	1.7	<0.50	<0.50	
6/13/2008	<300	<10	2.2	<0.50	<0.50	0.58	<0.50	<0.50	
MW-26									
3/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50			
03/10/2004	–	–	–	–	–	–	–	–	Not Sampled
09/22/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/14/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/22/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

SYMBOLS & ABBREVIATIONS:
-- = Not analyzed/applicable/measured/available
< = Not detected at or above the laboratory reporting limit.
1,2-DCA = 1,2-Dichloroethane
DIPE = Di-isopropyl ether
EDB = 1,2-Dibromoethane
ETBE = Ethyl tert-butyl ether
MTBE = Methyl tert-butyl ether
TAME = tert-Amyl methyl ether
TBA = tert-Butyl alcohol
µg/L = Micrograms per Liter

FOOTNOTES:
a = Well was not accessible this quarter.
b = Possible high bias due to CCV falling outside acceptance criteria for TBA.
c = Calibration verification was within method limits but outside the contract limits for ethanol.
d = Well resampled on 3/26/2008; the initial sample on 3/10/2008 was meant to be purged.

NOTES:
Well E-1A was previously named MW-12.

All volatile organic compounds analyzed using EPA Method 8260B.

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

APPENDIX C.

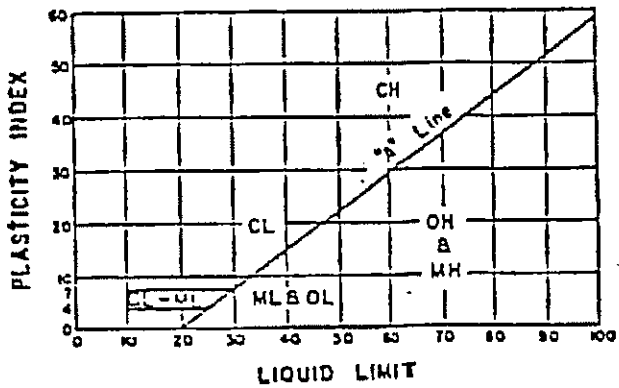
HISTORIC SOIL BORING / MONITORING WELL LOGS AND GEOLOGIC CROSS-SECTIONS

MAJOR DIVISIONS		SYMBOLS	TYPICAL SOIL DESCRIPTIONS
COARSE GRAINED SOILS (More than 1/2 of soil > no. 200 sieve size)	GRAVELS (More than 1/2 of coarse fraction > no. 4 sieve size)	GW	Well graded gravels or gravel-sand mixtures, little or no fines
		GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
		GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS (More than 1/2 of coarse fraction < no. 4 sieve size)	SW	Well graded sands or gravelly sands, little or no fines
		SP	Poorly graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE GRAINED SOILS (More than 1/2 of soil < no. 200 sieve size)	SILTS & CLAYS LL < 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 & CLAYS LL > 50	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silty clays, organic silts
HIGHLY ORGANIC SOILS		Pt	Peat and other highly organic soils

CLASSIFICATION CHART
(Unified Soil Classification System)

CLASSIFICATION	RANGE OF GRAIN SIZES	
	U.S. Standard Sieve Size	Grain Size in Millimeters
BOULDERS	Above 12"	Above 305
COBBLES	12" to 3"	305 to 76.2
GRAVEL	3" to No. 4	76.2 to 4.76
coarse	3" to 3/4"	76.2 to 19.1
fine	3/4" to No. 4	19.1 to 4.76
SAND	No. 4 to No. 200	4.76 to 0.074
coarse	No. 4 to No. 10	4.76 to 2.00
medium	No. 10 to No. 40	2.00 to 0.420
fine	No. 40 to No. 200	0.420 to 0.074
SILT & CLAY	Below No. 200	Below 0.074

GRAIN SIZE CHART



PLASTICITY CHART

METHOD OF SOIL CLASSIFICATION

NOTES: Logs of Exploratory Borings

2.5 YR 6/2 - Denotes color as field checked to Munsell Soil Color Charts (1975 Edition)

 Denotes undisturbed sample taken in 2-inch split-spoon sampler.

 Denotes disturbed sample (bag sample).

 Denotes first observation of ground water.

 Denotes static ground-water level.

Penetration - Sample drive hammer weight - 140 pounds, drop - 30 inches. Blows required to drive sampler 1 foot are indicated on the logs.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-63.01 BORING NO. A-A

PROJECT NAME Gettler-Ryan, Arco, Hesperian Blvd. & Hacienda Ave. PAGE 1 OF 1.
San Lorenzo

BY MGB DATE 10/1/85 SURFACE ELEV. 34'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
				0		SC	ASPHALT CLAYEY SAND; dark olive gray (5Y, 3/2); fine to coarse grained; very clayey; loose; moist; moderate product odor.
				5		CL	CLAY; black (5Y, 2.5/1); trace silt; stiff moist; faint product odor. @5': silty; trace fine sand; faint product odor. @6': dark olive gray (5Y, 3/2)
	1.75	23			1		@7': olive (5Y, 4/4); to very dark gray (5Y, 3/1); slightly silty; trace fine to coarse sand; stiff; damp; no product odor.
				10		SM	SILTY SAND; dark olive gray (5Y, 3/2); fine grained; very silty; medium dense; moist; moderate product odor.
		11	▽		2		
				15			@15': wet; loose; moderate product odo
		7			3		BOTTOM OF BORING AT 16½ FEET.
				20			

REMARKS Drilled by 5-inch continuous flight augers; samples collected with 2-inch Calfiornia modified split-spoon sampler; borehole backfilled with soil cuttings to ½ foot.; concrete to surface.

EMCON ASSOCIATES

PLATE A

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-63.01 BORING NO. A-B

PROJECT NAME Gettler-Ryan, Arco, Hesperian Blvd. & Hacienda Ave. PAGE 1 OF 1
San Lorenzo

BY MGB DATE 10/1/85 SURFACE ELEV. 34'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
				0			CONCRETE
						SC	CLAYEY SAND - Fill; olive brown (2.5Y, 4/4); to dark gray (5Y, 4/5); fine to coarse grained; clayey; 15% fine gravel; loose; damp; faint gasoli odor.
		Push		5	1		@4': moist; moderate gasoline odor.
		5			2	SW	SAND - Fill; dark olive gray (5Y, 3/2); fine to coarse grained; 15% clay; loose; moist; moderate gasoline odor.
			▽	10			
	1.2	14			3	CL	CLAY; black (5Y, 2.5/2) to dark olive gray (5Y, 3/2); silty; stiff; wet; moderate gasoline odor.
				15			BOTTOM OF BORING AT 14 FEET.
				20			

REMARKS Drilled by 8-inch continuous flight, hollow-stem auger; samples collected with 2-inch California modified split-spoon sampler; borehole backfilled with soil cuttings to ½foot ; concrete to surface.

EMCON ASSOCIATES

PLATE B

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-63.01 BORING NO. A-C

PROJECT NAME Gettler-Ryan, Arco, Hesperian Blvd. & Hacienda Ave, San Lorenzo PAGE 1 OF 1

BY MGB DATE 10/1/85 SURFACE ELEV. 34'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
				0			CONCRETE.
					SC		CLAYEY SAND - Fill; olive brown (2.5Y, 4/4) to dark gray (5Y, 4/1); fine to coarse grained; clayey; 15% fine gravel; loose; damp; faint gasolin odor.
		Push		5	1		@4': moderate gasoline odor.
		4			2		@6': 30% fine to coarse gravel; strong gasoline odor. @7': greenish gray; no gravel; 20% clay; loose; strong gasoline odor.
				10			
	1.25	9	▽		3	CL	CLAY; black (5Y, 2.5/2); slightly silty; stiff; wet; moderate gasoline odor.
				15			BOTTOM OF BORING AT 14 FEET
				20			

REMARKS Drilled by 8-inch continuous-flight, hollow-stem auger ; samples collected with 2-inch California modified split-spoon sampler; borehole backfilled with soil cuttings to-½ foot ; concrete to surface.

EMCON ASSOCIATES

PLATE C

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-63.01 BORING NO. A-D

PROJECT NAME Gettler-Ryan, Arco, Hesperian Blvd. & Hacienda Ave., San Lorenzo PAGE 1 OF 1.

BY MGB DATE 10/1/85 SURFACE ELEV. 34'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
				0		ML	ASPHALT. GRAVELLY SILT;-Fill; brown (10YR,4/3); 40% fine gravel; 10% fine to coarse sand; soft; damp; no gasoline odor.
						GW	
		Push		5	1		GRAVEL - Fill; multi-colored; fine grained 30%fine to coarse sand; 10% clay; loose damp; faint gasoline odor.
		5			2		@7': faint gasoline odor.
				10			
		Grab	▽		⊠		@12': faint gasoline odor. BOTTOM OF BORING AT 12½ FEET.
				15			
				20			

REMARKS Drilled by 5-inch continuous-flight auger; samples collected with 2-inch California modified split-spoon sampler; borehole backfilled with soil cuttings to ½ foot; concrete to surface.

EMCON ASSOCIATES

PLATE D

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-63.01 BORING NO. A-1

PROJECT NAME Gettler-Ryan, Arco, Hesperian Blvd. & Hacienda Ave. PAGE 1 OF 2
San Lorenzo

BY MGB DATE 10/1/85 SURFACE ELEV. 34'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
				0		ML	ASPHALT GRAVELLY SILT - Fill; brown (10YR, 4/3); 40% fine gravel; 10% fine to coarse sand; loose; damp; no gasoline odor.
						CL	CLAY: black (5Y, 2.5/2); 25% fine to coarse sand; firm; damp; faint gasoline odor.
				5			@4': very dark grayish brown (2.5Y, 3/2); silty; trace fine sand; damp; no gasoline odor.
				10			@9'; olive brown (2.5Y, 4/4); no sand; moist; no gasoline odor.
	1.6	12	▽		1		@12½': very dark gray (2.5Y, 3/0); no silt; stiff; wet; moderate gasoline odor.
				15			
	0.75	8			2		@17½': very silty; firm; no gasoline odor.
				20			

REMARKS Drilled by 8-inch continuous-flight, hollow-stem auger; samples collected with 2-inch California modified split-spoon sampler; borehole converted to 3-inch monitoring well as detailed on Plate G.

EMCON ASSOCIATES

PLATE

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-63.01

BORING NO. A-1

PROJECT NAME Gettler-Ryan, Arco, Hesperian Blvd. & Hacienda Ave. San Lorenzo

BY MGB DATE 10/1/85

SURFACE ELEV. 34'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/FT.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
	0	8		20	3	ML	CLAY; continued SANDY SILT; olive brown (2.5Y, 4/4); 40% fine sand; clayey; very soft; wet; no gasoline odor. BOTTOM OF BORING AT 24 FEET.
				25			
				30			
				35			
				40			

REMARKS

EMCON ASSOCIATES

PLATE F

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		LTR	DESCRIPTION	MAJOR DIVISIONS		LTR	DESCRIPTION
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW	Well-graded gravels or gravel sand mixtures, little or no fines.	FINE GRAINED SOILS	SILTS AND CLAYS LL<50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
		GP	Poorly-graded gravels or gravel sand mixture, little or no fines			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
		GM	Silty gravels, gravel-sand-clay mixtures.			OL	Organic silts and organic silt-clays of low plasticity.
		GC	Clayey gravels, gravel-sand-clay mixtures.		SILTS AND CLAYS LL<50	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
	SAND AND SANDY SOILS	SW	Well-graded sands or gravelly sands, little or no fines.			CH	Inorganic clays of high plasticity, fat clays.
		SP	Poorly-graded sands or gravelly sands, little or no fines.			OH	Organic clays of medium to high plasticity.
		SM	Silty sands, sand-silt mixtures.	HIGHLY ORGANIC SOILS		Pt	Peat and other highly organic soils.
		SC	Clayey sands, sand-clay mixtures.				


Depth through which sampler is driven


Relatively undisturbed sample


Missed sample


Ground water level observed in boring

S-10 Sample number


Sand pack


Bentonite annular seal

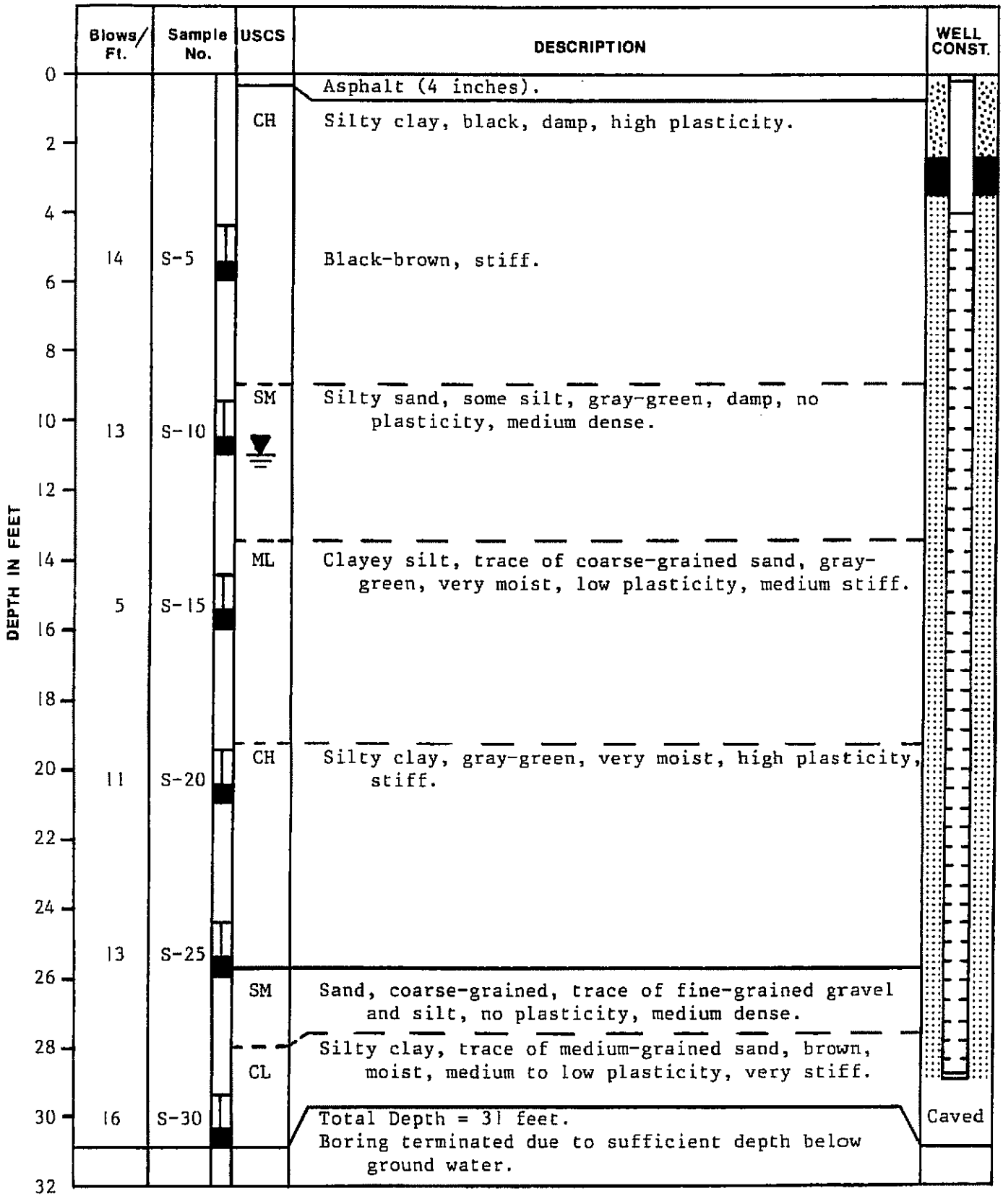

Neat cement annular seal


Blank PVC


Machine-slotted PVC

BLOW/FT. REPRESENTS THE NUMBER OF BLOWS OF A 140-POUND HAMMER FALLING 30 INCHES TO DRIVE THE SAMPLER THROUGH THE LAST 12 INCHES OF AN 18 INCH PENETRATION.

DASHED LINES SEPARATING UNITS ON THE LOG REPRESENT APPROXIMATE BOUNDARIES ONLY. ACTUAL BOUNDARIES MAY BE GRADUAL. LOGS REPRESENT SUBSURFACE CONDITIONS AT THE BORING LOCATION AT THE TIME OF DRILLING ONLY.



Applied GeoSystems

PROJECT NO. 87131-1

LOG OF BORING B-1/MW-1

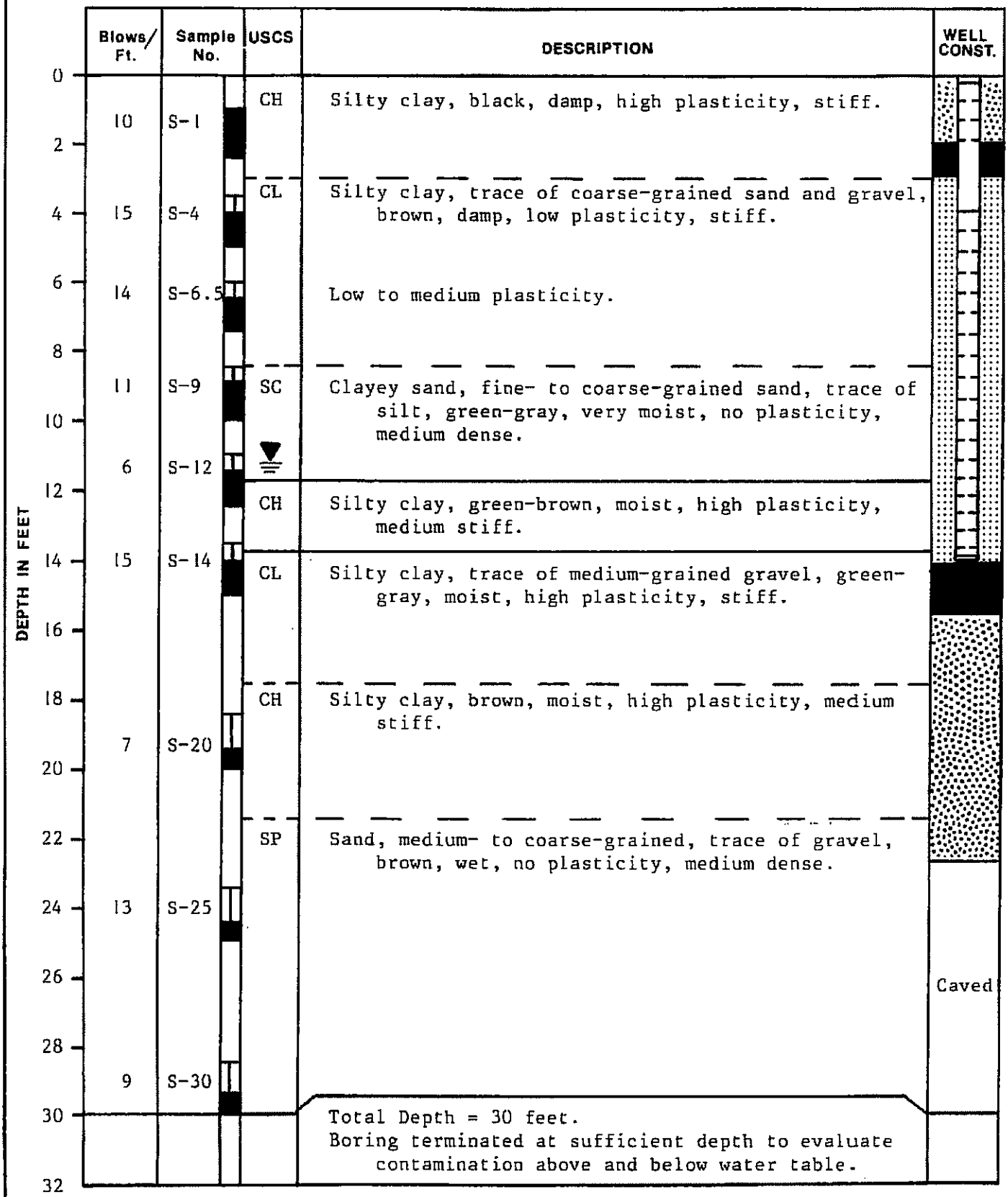
ARCO Station No. 608

17601 Hesperian Boulevard

San Lorenzo, California

PLATE

P - 7



Applied GeoSystems

PROJECT NO. 87131-1

LOG OF BORING B-2/MW-5

ARCO Station No. 608

17601 Hesperian Boulevard

San Lorenzo, California

PLATE

P - 8

DEPTH IN FEET	Blows/ Ft.	Sample No.	USCS	DESCRIPTION	WELL CONST.
0					
	11	S-2	CH	Silty clay, black, damp, high plasticity, stiff.	
2					
4	16	S-4	CL	Silty clay, trace of coarse-grained sand, brown, damp, low plasticity, stiff.	
6	14	S-7		Silty clay, medium plasticity.	
8	6	S-9	SM	Clayey silty sand, fine- to coarse-grained sand, green, very moist, no plasticity, loose.	
10	8	S-11	CH	Silty clay, gray-brown, moist, high plasticity, medium stiff.	
12					
14	10	S-14		Green-gray, stiff.	
16				Total depth = 15 feet.	

Applied GeoSystems

LOG OF BORING B - 3

ARCO Station No. 608

17601 Hesperian Boulevard

San Lorenzo, California

PLATE

P - 9

PROJECT NO. 87131-1

Blows/ Ft.	Sample No.	USCS	DESCRIPTION	WELL CONST.
6	S-2	SM	Sand, medium- to coarse-grained, green, dry, no plasticity, loose. (possibly fill).	
5	S-4			
6	S-7	SC	Sandy clay, some gravel, green with red mottling, damp, low plasticity, medium stiff. (possibly fill).	
5	S-9		Silty sandy clay, gray, moist, slight plasticity.	
8	S-12			
9	S-14	CH	Silty clay, gray-green, moist, high plasticity, medium stiff. Stiff.	
			Total Depth = 15 feet.	

DEPTH IN FEET: 0, 2, 4, 6, 8, 10, 12, 14, 16

Applied GeoSystems
[illegible] Fremont, CA 94539 (415) 651-1906

PROJECT NO. 87131-1

LOG OF BORING B - 4

ARCO Station No. 608
17601 Hesperian Boulevard
San Lorenzo, California

PLATE
P - 10

WELL LOG
KEY TO ABBREVIATIONS

Drilling Method
- HSA - Hollow stem auger
- CFA - Continuous flight auger
- Air - Reverse air circulation

Gravel Pack
- CA - Coarse aquarium sand

Sampling Method
- Cal. Mod. - California modified split-spoon sampler (2" inner diameter) driven 18" by a 140-pound hammer having a 30" drop. Where penetration resistance is designated "P," sampler was instead pushed by drill rig.
- Disturbed - Sample taken from drill-return materials as they surfaced.
- n/a - Not applicable.

Moisture Content
- Dr - Dry
- Dp - Damp
- Mst - Moist
- Wt - Wet
- Sat - Saturated

Sorting
- PS - Poorly sorted
- MS - Moderately sorted
- WS - Well sorted

Plasticity
- L - Low
- M - Moderate
- H - High

H-NU (ppm)
- ND - No detection

Symbols
- ▽ - First encountered ground water
- ▼ - Static ground water level

Density

Sands and gravels

0 - 4	- Very Loose
5 - 10	- Loose
11 - 30	- Medium dense
31 - 50	- Dense
over 50	- Very dense

Silts and clays

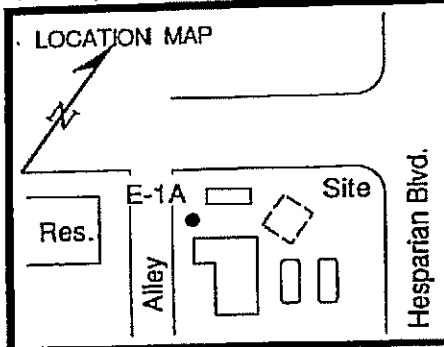
0 - 2	- Very Soft
3 - 4	- Soft
5 - 8	- Firm
9 - 16	- Stiff
17 - 32	- Very stiff
over 32	- Hard

GRAIN-SIZE SCALE

GRADE LIMITS U.S. Standard inches	sieve size	GRADE NAME
12.0		Boulders
3.0	3.0 in.	Cobbles
0.19	No. 4	Gravel
	coarse	
0.08	No. 10	Sand
	medium	
	No. 40	
	fine	
	No. 200	Silt
		Clay Size

PACIFIC ENVIRONMENTAL GROUP, INC.

LOCATION MAP



PACIFIC ENVIRONMENTAL GROUP, INC.

WELL / E-1A
BORING NO.
PAGE 1 OF 1

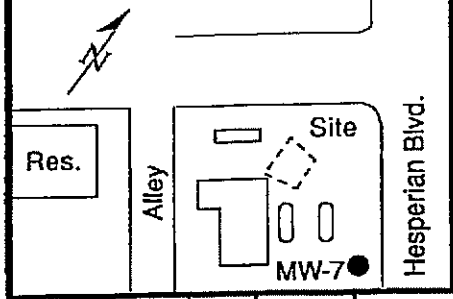
PROJECT NO. 330-06.08
LOGGED BY: JC
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 12 X 2 SAND

CLIENT: ARCO
DATE DRILLED: 7-18-90
LOCATION: San Lorenzo
HOLE DIAMETER: 12"
HOLE DEPTH: 27'
WELL DEPTH: 26'
WELL DIAMETER: 6"

WELL COMPLETION	MOISTURE CONTENT	H-NU READING (PPM)	PENETRATION RESISTANCE (BLOWS/FT)	DEPTH (FEET)	SAMPLE	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
CEMENT	Mst	1	37	2–6			CL	CLAY; black; moderate plasticity; 10-15% silt and fine sand; trace coarse sand; very stiff; no product odor. @3': brown. @5': medium brown; 10-20% silt and fine sand; light gray
BENTONITE	Mst	18	28	8–12			SM	SILTY SAND; light bluish gray; 15-20% silt; fine sand; trace coarse sand; 5-10% gravel; medium dense; no product odor.
SAND	V Mst	160	18	14–16			CL-CH	CLAY; bluish gray; moderate to high plasticity; 10-15% silt and fine sand; gray mottling; very stiff; faint product odor.
	Wt	0	15	18			SM-ML	SILTY SAND; medium brown; some clay; 30-40% silt; very fine sands; medium dense; no product odor.
	Mst	0	24	20–22			CL	CLAY; grayish brown; moderate plasticity; 10-20% silt and fine sand; iron oxide mottling; manganese oxide; stiff; no product odor.
	V Mst	0	PUSH	24				
	V Mst	0	17	26				@25.5': light grayish brown; moderate plasticity; 20-25% silt and fine sand.
				28–44				

BOTTOM OF BORING AT 27'

LOCATION MAP



PACIFIC ENVIRONMENTAL GROUP, INC.

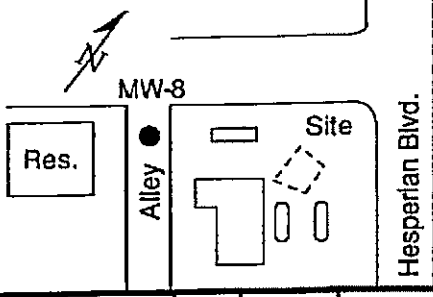
WELL / MW-7
BORING NO.
PAGE 1 OF 1

PROJECT NO. 330-06.06
LOGGED BY: DKU/JC
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 12 X 20 SAND

CLIENT: ARCO
DATE DRILLED: 3-29-90
LOCATION: San Lorenzo
HOLE DIAMETER: 8"
HOLE DEPTH: 22'
WELL DEPTH: 19'
WELL DIAMETER: 3"

WELL COMPLETION	MOISTURE CONTENT	H-NU READING (PPM)	PENETRATION RESISTANCE (BLOWS/FT)	DEPTH (FEET)	SAMPLE	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
CEMENT				2			SC	FILL; asphalt.
								CLAYEY SAND - FILL; medium to light brown; 20-30% fines; 20-40% sub-angular gravel; iron oxide staining; dense; no product odor.
				4			CH	CLAY; dark brown; 5-10% fine sand altered; very stiff; no product odor.
	Dp	29.0	21	6				@5.5': light yellowish brown; 10-20% fine sand; platy; shell fragments; very stiff; no product odor.
				8			ML	SILT; dark greenish gray; firm; no product odor.
BENTONITE	Mst	15.0	7	10				
SAND				12				
	Mst	13.0	12	14			CL	CLAY; yellowish brown; 20-40% fines sand; iron oxide black specks; mottled; rootholes; stiff; no product odor.
				16				
				18				
NATURAL CLAY	Dp	12.0	20	20			ML	SILT; as above.
	Wt	–	9	22			SM	SILTY SAND; medium brownish yellow; poorly graded; low to moderate plasticity; loose; no product odor.
				24				
				26				BOTTOM OF BORING AT 22'
				28				WELL ELEVATION 34.40' - MSL
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				

LOCATION MAP



PACIFIC ENVIRONMENTAL GROUP, INC.

WELL / MW-8
BORING NO.
PAGE 1 OF 1

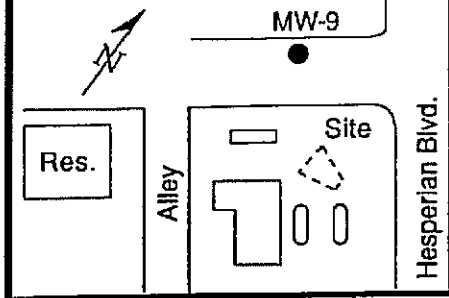
PROJECT NO. 330-06.06
LOGGED BY: DKU/JC
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 12 X 20 SAND

CLIENT: ARCO
DATE DRILLED: 3-29-90
LOCATION: San Lorenzo
HOLE DIAMETER: 8"
HOLE DEPTH: 21.5'
WELL DEPTH: 21.5'
WELL DIAMETER: 3"

WELL COMPLETION	MOISTURE CONTENT	H-NU READING (PPM)	PENETRATION RESISTANCE (BLOWS/FT)	DEPTH (FEET)	SAMPLE	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
CEMENT				2			SC	FILL; asphalt.
							CL	CLAYEY SAND - FILL; light brown; 30-45% gravel.
							CH	CLAY; dark brown.
				4				CLAY; yellowish brown to very dark brown; concretions; roots; .25" bed clayey sand;
	Dp	16.0	14	6				@4.5': shell fragments; light gray patches (3-5 mm); stiff; no product odor.
				8				
BENTONITE	Mst	21.0	10	10			SM	@10': 1/2" to 1" organic layers. SILTY SAND; medium greenish gray; 40% silt and clay; 50% fine sand; 10% medium sand; loose; no product odor.
				12				
	V. Mst	2.0	12	14				
SAND				16			CL	CLAY; greenish gray with brown clay; moderate plasticity; 30-40% fine sand; black specks; iron oxide stains; stiff; no product odor.
				18				
	V. Mst	12.0	17	20				@20': yellowish brown; moderate to high plasticity; 10-15% fine sand; black 3-5 mm specks; shell fragments; very stiff; no product odor.
				22				
				24				
				26				
				28				
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				

BOTTOM OF BORING AT 21.5'
WELL ELEVATION 32.79' - MSL

LOCATION MAP



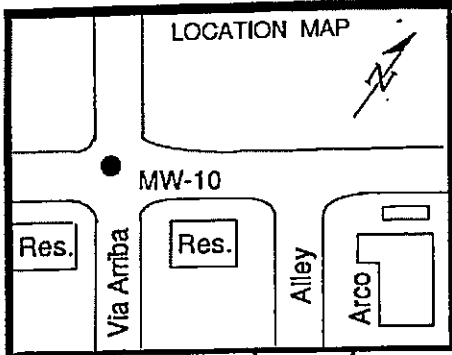
PACIFIC ENVIRONMENTAL GROUP, INC.

WELL / MW-9
BORING NO.
PAGE 1 OF 1

PROJECT NO. 330-06.06
LOGGED BY: JC/DKU
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 12 X 20 SAND

CLIENT: ARCO
DATE DRILLED: 4-5-90
LOCATION: San Lorenzo
HOLE DIAMETER: 8"
HOLE DEPTH: 22.0'
WELL DEPTH: 19.5'
WELL DIAMETER: 3"

WELL COMPLETION	MOISTURE CONTENT	H-NU READING (PPM)	PENETRATION RESISTANCE (BLOWS/FT)	DEPTH (FEET)	SAMPLE	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
CEMENT				2			CL	FILL; asphalt; very compacted gravel at 6". CLAY; very dark gray to black; moderate plasticity; 10-15% gravel; 15-30% fine to medium sand; stiff; no product odor.
	Mst	4.0	PUSH	4			CH	CLAY; dark yellowish brown; moderate to high plasticity; 20% fine sand; weak platy structure; vertical gray alteration; interbedded with black clay.
BENTONITE				6				
				8			SM	SILTY SAND; dark greenish gray; 10-20% silt and clay; loose; faint product odor.
SAND	Mst	3.0	6	10				
				12			CL	CLAY; yellowish brown; low to moderate plasticity; 20-40% fine sand and silt; 0.5-1.5 cm rootholes; wet with gray coating; black specks; firm; no product odor.
	Wt	0.0	8	14				
				16				
				18				@19': rootholes smaller; iron and mangenese oxide; trace of coarse sand; stiff; no product odor.
NATURAL CLAY	Wt	0.0	20	20				
				22			SM	SILTY SAND; yellowish brown.
				24				BOTTOM OF BORING AT 22'
				26				WELL ELEVATION 32.11' - MSL
				28				
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				



PACIFIC ENVIRONMENTAL GROUP, INC.

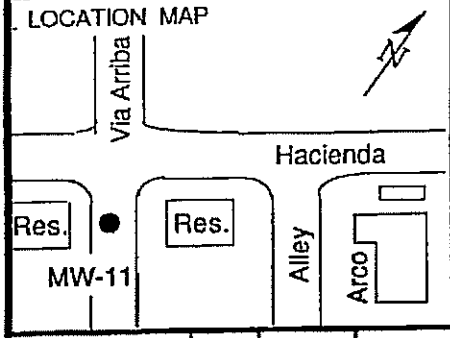
WELL / MW-10
BORING NO.
PAGE 1 OF 1

PROJECT NO. 330-06.06
LOGGED BY: JC
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 12 X 20 SAND

CLIENT: ARCO
DATE DRILLED: 4-5-90
LOCATION: San Lorenzo
HOLE DIAMETER: 8"
HOLE DEPTH: 25.5'
WELL DEPTH: 23.0'
WELL DIAMETER: 3"

WELL COMPLETION	MOISTURE CONTENT	H-NU READING (PPM)	PENETRATION RESISTANCE (BLOWS/FT)	DEPTH (FEET)	SAMPLE	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
CEMENT	Mst	0.0	PUSH	2			CL	FILL; asphalt. CLAY; dark brown to brown; moderate plasticity; 10-20% fine sand; trace of coarse sand; weak platy structure; rootholes; firm; no product odor.
				4				
				6				
				8				
	Mst	0.0	10	10				@9': fine to medium grained poorly graded sand; 6" sand layer; 10-20% silt; clay in sand layer.
				12			SM-ML	SILTY SAND to SILT; dark greenish gray; extensive iron oxide stain; rootholes.
SAND	Wt	8.0	12	14			ML	SILT; dark greenish gray; some clay; 30-40% fine sand; stiff; no product odor.
				16				
				18				
BENTONITE	Wt	1.0	6	20			CH	CLAY; medium brown to gray; high plasticity; 30-40% fine sand; vertical veins of gray silt - clay; firm; no product odor.
				22				
	Wt	0.0	12	24				@24': firm; black oxidation on sand grains; light brown colored zones.
				26			SM	SILTY SAND; brown; interbedded with clay; 10-20% silt and clay; iron oxide; medium dense; no product odor.
				28				
				30				BOTTOM OF BORING AT 25.5' WELL ELEVATION 31.67' - MSL
				32				
				34				
				36				
				38				
				40				
				42				
				44				

LOCATION MAP



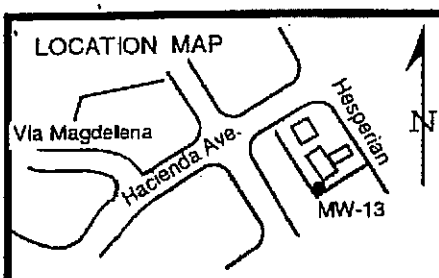
PACIFIC ENVIRONMENTAL GROUP, INC.

WELL / MW-11
BORING NO.
PAGE 1 OF 1

PROJECT NO. 330-06.06
LOGGED BY: JC
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 12 X 20 SAND

CLIENT: ARCO
DATE DRILLED: 4-5-90
LOCATION: San Lorenzo
HOLE DIAMETER: 8"
HOLE DEPTH: 20.5'
WELL DEPTH: 19.5'
WELL DIAMETER: 3"

WELL COMPLETION	MOISTURE CONTENT	H-NU READING (PPM)	PENETRATION RESISTANCE (BLOWS/FT)	DEPTH (FEET)	SAMPLE	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
CEMENT	Mst	0.0	PUSH	2			CL	FILL; asphalt. CLAY; yellowish brown; moderate plasticity; 10-25% fine sand; roots present; platy structure; trace coarse sand and gravel; scarce iron oxide alteration; firm; no product odor.
BENTONITE	Mst	0.0	7	10			SM	SILTY SAND; yellowish brown; 15-25% clay, silt and fine sand; trace oxidized black coarse sand; loose; no product odor.
SAND	Wt	1.0	3	14			CL ML	CLAY; very dark grayish brown; 30-40% silt and fine sand; moderate plasticity; very soft; no product odor. SILT; light brown; 10-25% clay; 20-30% fine sand; very stiff; no product odor.
NATURAL CLAY	Mst	0.0	19	20			CL	CLAY; brown; moderate plasticity; 10-15% silt and fine sand; 1-3 millimeter black specks; very stiff; no product odor.
				22				BOTTOM OF BORING AT 20.5' WELL ELEVATION 32.54' - MSL
				24				
				26				
				28				
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				



NORTHING EASTING ELEVATION
995.09 893.02 35.42 (TOB)

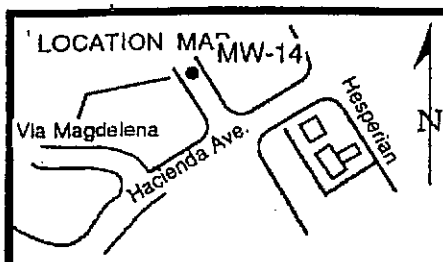
PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-13
PAGE 1 OF 1

PROJECT NO. 330-06.11
LOGGED BY: JC
DRILLER: WHM
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12

CLIENT: ARCO
DATE DRILLED: 06/25/91
LOCATION: 17601 Hesperian
HOLE DIAMETER: 8"
HOLE DEPTH: 25 1/2'
WELL DIAMETER: 3"
WELL DEPTH: 23'
CASING STICKUP: N/A

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				2				ASPHALT - FILL; road base very dense
	Mst	-	35	4			CL	CLAY; dark brown; low plasticity 10-15% fine to coarse sand; very stiff; no product odor.
				6				
	Mst	0	32	8			SC	CLAYEY SAND; medium brown; 35-45% clayey fines; fine sand; dense; no product odor.
BENTONITE				10				
	V. Mst	0	26	12			CL	CLAY; grayish brown; moderate plasticity; 10-15% fine sand; trace medium sand; trace coarse sand; very stiff; no product odor.
				14				
	V. Mst	0	16	16				@19': clay medium gray; low plasticity; iron oxide; very stiff; no product odor.
SAND				18				
				20				
Native Soil	V. Mst	0	26	22				@24': as above; very stiff; no product odor.
				24				
				26				BOTTOM OF BORING AT 25 1/2'
				28				
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				



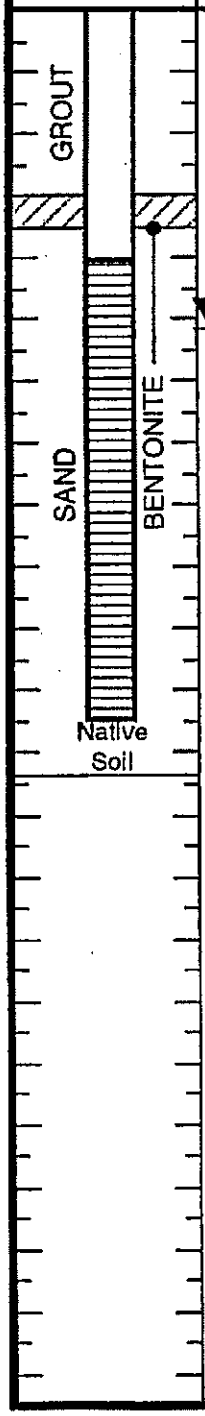
NORTHING	EASTING	ELEVATION
1390.95	708.71	30.46 (TOB)

PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-14
PAGE 1 OF 1

PROJECT NO. 330-06.11
LOGGED BY: JC
DRILLER: WHM
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12

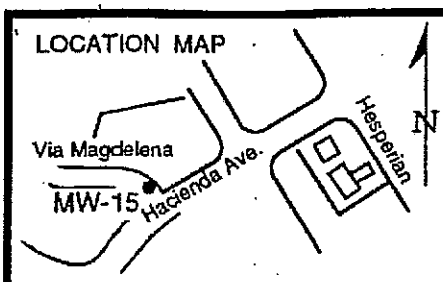
CLIENT: ARCO
DATE DRILLED: 06/25/91
LOCATION: Via Arriba San Loreno
HOLE DIAMETER: 8"
HOLE DEPTH: 24 1/2'
WELL DIAMETER: 3"
WELL DEPTH: 23'
CASING STICKUP: N/A



DEPTH (FEET)	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	SOIL TYPE	LITHOLOGY / REMARKS
0					ASPHALT - FILL
4	V. Mst	0	push	CL	CLAY; dark grayish brown; low plasticity; 10-15% fine sand; trace medium to coarse sand; soft; no product odor.
10	Mst	0	17		@9': as above with organic matter; weak paty; structure stiff; faint product odor.
14	V. Mst	10	33		@14': as above with maganese oxide.
20	V. Mst	0	28		@19': medium brown; moderate plasticity; 10-20% silt and very fine sand; very stiff; no product odor.
24	V. Mst.	0	22		@23': very stiff; no product odor.
					BOTTOM OF BORING AT 24 1/2"

RECOVERY
SAMPLE INTERVAL
GRAPHIC

LOCATION MAP



NORTHING	EASTING	ELEVATION
1224.65	471.07	31.39 (TOB)

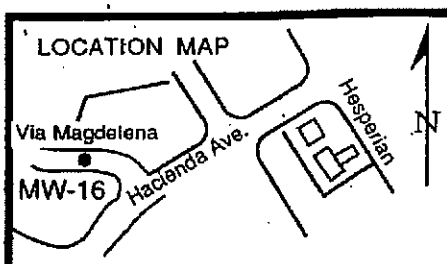
PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-15
PAGE 1 OF 1

PROJECT NO. 330-06.11
LOGGED BY: JC
DRILLER: WHM
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12

CLIENT: ARCO
DATE DRILLED: 06/25/91
LOCATION: Via Magdelena
HOLE DIAMETER: 8"
HOLE DEPTH: 24 1/2
WELL DIAMETER: 3"
WELL DEPTH: 23
CASING STICKUP: N/A

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				0		ASPHALT - FILL; road base
				2	CL	CLAY; strong brown; low plasticity; 20-30% silt; very fine sand; weak platy structure; stiff; no product odor.
	Mst	0	push	4		
				6		
				8		
	Mst	0	18	10	SM	SILTY SAND; strong brown; 20-25% silty fines; some clay; medium dense; no product odor.
				12	CL	CLAY; medium grayish brown; moderate plasticity; 15-20% silt; very fine sand; blue mottling; very stiff; moderate product odor.
BENTONITE	V. Mst	35	24	14		
				16		
SAND	V. Mst	0	31	18		
				20		@19': as above without blue mottling; very stiff; no product odor.
				22		
Native Soil	V. Mst	0	21	24		@23': as above; very stiff; no product odor.
				26		BOTTOM OF BORING AT 24 1/2'
				28		
				30		
				32		
				34		
				36		
				38		
				40		
				42		
				44		



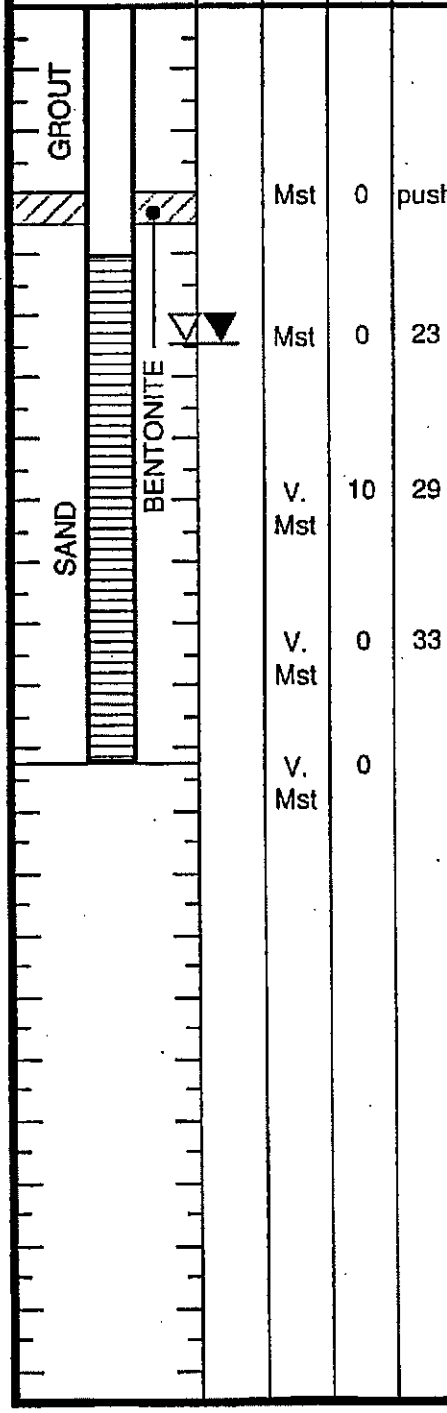
NORTHING	EASTING	ELEVATION
1357.73	371.65	31.39 (TOB)

PACIFIC ENVIRONMENTAL GROUP, INC.

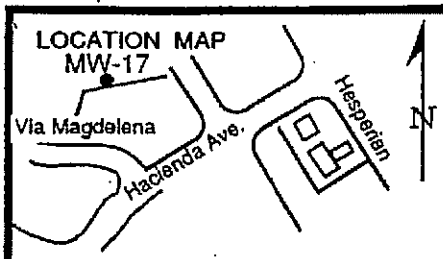
WELL NO. MW-16
PAGE 1 OF 1

PROJECT NO. 330-06.11
LOGGED BY: JC
DRILLER: WHM
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12

CLIENT: ARCO
DATE DRILLED: 06/25/91
LOCATION: Via Magdelena
HOLE DIAMETER: 8"
HOLE DEPTH: 24'
WELL DIAMETER: 2"
WELL DEPTH: 23'
CASING STICKUP: N/A



DEPTH (FEET)	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	SOIL TYPE	LITHOLOGY / REMARKS
					ASPHALT - FILL
2				SC	CLAYEY SAND; 30-35% clayey fines; fine sand.
4					
6	Mst	0	push		
8				CL	CLAY; medium brown; moderate plasticity; 10-15% fine to coarse sand.
10	Mst	0	23		
12					
14					@13.5': moderate product odor; blue mottling; very stiff; faint product odor.
16	V. Mst	10	29		
18					
20					@20': as above without blue mottling; very stiff; no product odor.
22	V. Mst	0	33		
24					@23-24': as above; no product odor.
26	V. Mst	0			
28					BOTTOM OF BORING AT 24 1/2'
30					
32					
34					
36					
38					
40					
42					
44					



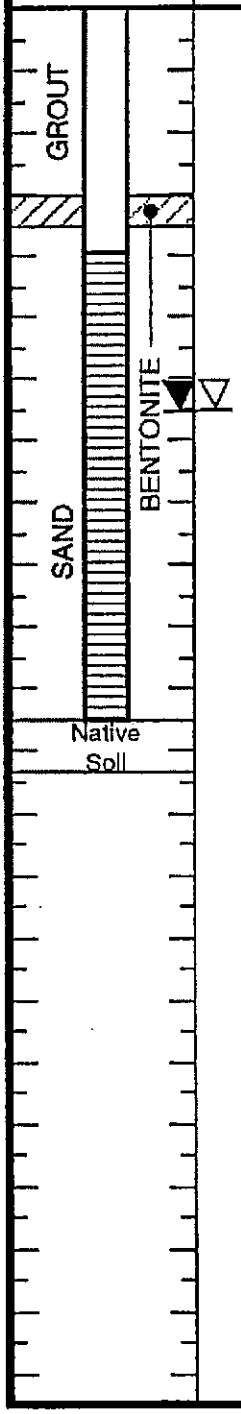
NORTHING EASTING ELEVATION
1470.84 457.05 32.43 (TOB)

PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-17
PAGE 1 OF 1

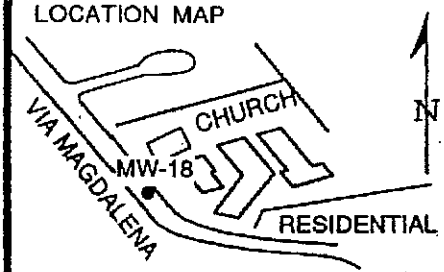
PROJECT NO. 330-06.11
LOGGED BY: JC
DRILLER: WHM
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12

CLIENT: ARCO
DATE DRILLED: 06/25/91
LOCATION: Via Madgelena
HOLE DIAMETER: 8"
HOLE DEPTH: 24 1/2'
WELL DIAMETER: 2"
WELL DEPTH: 23'
CASING STICKUP: N/A



MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
					ASPHALT - FILL, CLAYEY SAND
			2	CL	CLAY; black; low plasticity; 30-35% silt ; very fine sand; firm; no product odor.
Mst	0	push	4		
			6		
			8	SC	CLAYEY SAND; yellowish brown; 20-25% clayey fines; some silt; iron oxide; medium dense; no product odor; odor reported at 13'.
Mst	0	23	10		
			12		
V. Mst	50	19	14	CL	CLAY; yellowish brown (extensive blue discoloration along vertical zones); moderate plasticity; 10-15% fine to coarse sand; very stiff; moderate product odor.
			16		
			18		
V. Mst	0	23	20		@19': clay light yellowish brown; moderate plasticity; 5-10% fine to coarse sand; iron oxide; magnesium oxide; very stiff; no product odor.
			22		
V. Mst	0	16	24		@23': stiff; no product odor.
					BOTTOM OF BORING AT 24 1/2'
			26		
			28		
			30		
			32		
			34		
			36		
			38		
			40		
			42		
			44		

LOCATION MAP



NORTHING 1604.14 EASTING 235.37 ELEVATION 29.70 (TOB)

PACIFIC ENVIRONMENTAL GROUP, INC.

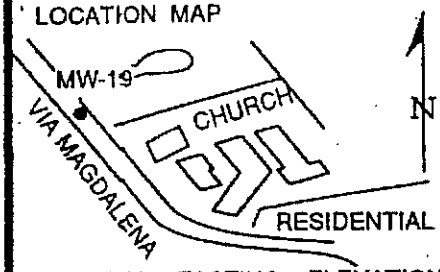
WELL NO. MW-18
PAGE 1 OF 1

PROJECT NO. 330-06.13
LOGGED BY: JC
DRILLER: Baylands
DRILLING METHOD: HSA
SAMPLING METHOD: STD PCU MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12 SAND

CLIENT: ARCO
DATE DRILLED: 10-3-91
LOCATION: 17200 Magdalena
HOLE DIAMETER: 8"
HOLE DEPTH: 24.5'
WELL DIAMETER: 3"
WELL DEPTH: 22'
CASING STICKUP:

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				0				ASPHALT; FILL
SOLID CASING				2			CL	CLAY; very dark gray; low plasticity; 10-15% silt and fine sand; firm; no product odor.
	Mst		push	4				@5': color change to yellowish brown; rootholes; caliche.
				6				
				8				
	Mst		push	10				@9': 25-35% silt and fine sand; firm; no product odor.
				12				
	V. Mst Sat		5	14				@14': saturated; stiff; no product odor.
				16				
	V. Mst Sat		7	18			CH	CLAY; very pale brown; high plasticity; 10-15% silt and fine sand; trace mud sand; iron oxide mottling; firm; no product odor.
				20				
NATIVE SOIL			5	22				@23': color change to strong brown.
				24				BOTTOM OF BORING AT 24.5'
SAND				26				
BENTONITE				28				
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				

LOCATION MAP



NORTHING EASTING ELEVATION
1798.26 235.49 29.02 (TOB)

PACIFIC ENVIRONMENTAL GROUP, INC.

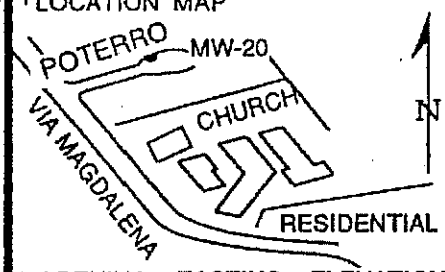
WELL NO. MW-19
PAGE 1 OF 1

PROJECT NO. 330-06.13
LOGGED BY: JC
DRILLER: Baylands
DRILLING METHOD: HSA
SAMPLING METHOD: STD PCU MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12 SAND

CLIENT: ARCO
DATE DRILLED: 10-3-91
LOCATION: 17105 Magdalena
HOLE DIAMETER: 8"
HOLE DEPTH: 24.5'
WELL DIAMETER: 3"
WELL DEPTH: 22'
CASING STICKUP:

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				0		ASPHALT; fill
SOLID CASING				2	CL	CLAY; very dark gray; low plasticity; 15-20% fine sand and silt; firm; no product odor.
	Mst	0	push	4		@5': color change to yellowish brown; firm; rootholes with roots; no product odor.
				6		
				8		
	Mst	0	push	10		@9-10': firm; no product odor.
				12		@12': dark grayish brown; 5-15% silt and fine sand; trace coarse sand; stiff; no product odor.
BENTONITE	V. Mst Sat	0	14	14		
				16		
				18		@17': very pale brown; moderate to high plasticity; 5-10% fine sand; trace medium to coarse sand; iron oxide; slight mottling; very stiff; no product odor.
	V. Mst	0	11	20		
SAND				22		@22': color change to yellowish brown; stiff; no product odor.
NATIVE SOIL	V. Mst	0	12	24		BOTTOM OF BORING AT 24.5'
				26		
				28		
				30		
				32		
				34		
				36		
				38		
				40		
				42		
				44		

LOCATION MAP



NORTHING EASTING ELEVATION
1869.52 358.86 29.54 (TOB)

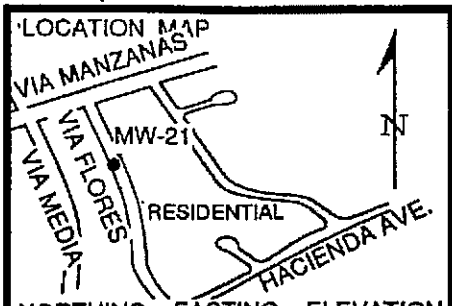
PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-20
PAGE 1 OF 1

PROJECT NO. 330-06.13
LOGGED BY: JC
DRILLER: Baylands
DRILLING METHOD: HSA
SAMPLING METHOD: STD PCU MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12 SAND

CLIENT: ARCO
DATE DRILLED: 10-3-91
LOCATION: 649 POTERRO
HOLE DIAMETER: 8"
HOLE DEPTH: 23.5'
WELL DIAMETER: 3"
WELL DEPTH: 22'
CASING STICKUP:

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				0				ASPHALT; fill
GROUT				2			CL	CLAY; very dark gray; moderate plasticity; 10-15% fine sand; rootlets; firm; no product odor.
SOLID CASING	Mst	0	push 200	4				@8': light olive brown; low plasticity; some silt; 5-10% fine sand; rootholes; caliche; firm; no product odor.
BENTONITE	Mst	0	push	6				
SAND	V. Mst Sat	0	6	8				@9-10': firm; no product odor.
	Sat	0	14	10				
NATIVE SOIL	Sat	0	6	12				@14': firm; no product odor.
				14				
				16				@17': very pale brown; moderate to low plasticity; some silt; 5-10% fine sand; trace coarse sand; stiff; no product odor.
				18				
				20				@21.5': yellowish brown; moderate plasticity; some silt; 20-30% fine sand; firm; no product odor.
				22				
				24				BOTTOM OF BORING AT 23.5'
				26				
				28				
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				



NORTHING 1764.48 | EASTING -34.22 | ELEVATION 28.72 (TOB)

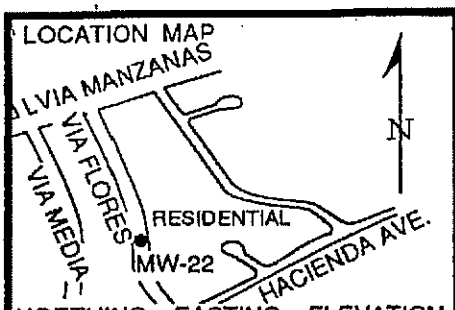
PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-21
PAGE 1 OF 1

PROJECT NO. 330-06.13
LOGGED BY: JC
DRILLER: Baylands
DRILLING METHOD: HSA
SAMPLING METHOD: STD PCU MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12 SAND

CLIENT: ARCO
DATE DRILLED: 10-2-91
LOCATION: 17127 VIA FLORES
HOLE DIAMETER: 8"
HOLE DEPTH: 25'
WELL DIAMETER: 3"
WELL DEPTH: 22'
CASING STICKUP:

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				0				ASPHALT; fill
SOLID CASING				2			CL	CLAY; very dark gray; low plasticity; 10-20% fine sand; stiff; no product odor.
	Mst		push 300 PSI	4				
				6				@5.5': color change to yellowish brown; caliche.
				8				
BENTONITE	Mst		push	10				@9-10.5': stiff; no product odor.
				12				
SAND	V. Mst		6	14				@14': firm; no product odor.
				16				
				18				
			5	20				@19': very pale brown; 0-5% sand; calcium carbonate; soft; no product odor.
NATIVE SOIL				22			SP	SAND; yellowish brown; 0-5% silt and clay; fine sand; medium dense; no product odor.
			14	24				
				26				BOTTOM OF BORING AT 25'
				28				
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				



NORTHING 1869.52 EASTING 358.86 ELEVATION 29.54 (TOB)

PACIFIC ENVIRONMENTAL GROUP, INC.

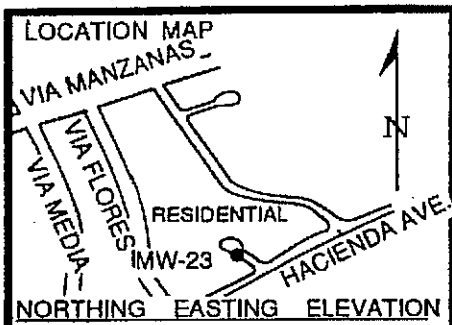
WELL NO. MW-22
PAGE 1 OF 1

PROJECT NO. 330-06.13
LOGGED BY: JC
DRILLER: Baylands
DRILLING METHOD: HSA
SAMPLING METHOD: STD PCU MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12 SAND

CLIENT: ARCO
DATE DRILLED: 10-2-91
LOCATION: 17238 VIA FLORES
HOLE DIAMETER: 8"
HOLE DEPTH: 23.5'
WELL DIAMETER: 3"
WELL DEPTH: 22'
CASING STICKUP:

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
GROUT						ASPHALT; fill.
				2	SP	SAND; yellowish brown; 5-10% clayey fines; fine sand; medium dense; no product odor.
SOLID CASING	Mst	0	push	4	CL	CLAY; dark yellowish brown; low plasticity; 15-20% fine sand; trace medium to coarse sand; firm; no product odor.
				6		
				8		
	Mst	0	push	10	SC	CLAYEY SAND; yellowish brown; 25-30% clayey fines; fine sand; medium dense; no product odor.
SAND				12		
BENTONITE	V. Mst	0	8	14	CH	CLAY; yellowish brown; moderate to high plasticity; 10-15% fine sand; firm; no product odor.
				16		
				18		
	V. Mst	0	11	20	CL	CLAY; very pale brown; moderate plasticity; 10-15% fine sand; calcium carbonate; stiff; no product odor.
NATIVE SOIL				22		@22-23': stiff; rare iron oxide; some silt.
	V. Mst	0	11	24		BOTTOM OF BORING AT 23.5'
				26		
				28		
				30		
				32		
				34		
				36		
				38		
				40		
				42		
				44		

RECOVERY / SAMPLE INTERVAL / GRAPHIC



NORTHING EASTING ELEVATION
1184.49 120.41 30.99 (TOB)

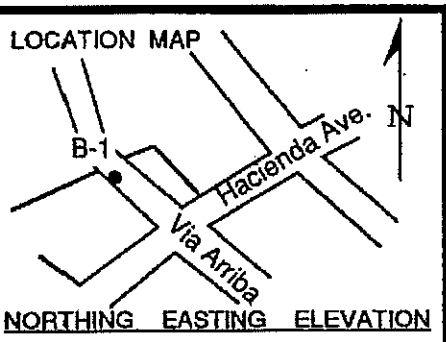
PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-23
PAGE 1 OF 1

PROJECT NO. 330-06.13
LOGGED BY: JC
DRILLER: Baylands
DRILLING METHOD: HSA
SAMPLING METHOD: STD PCU MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 x 12 SAND

CLIENT: ARCO
DATE DRILLED: 10-2-91
LOCATION: 17347 VIA MEDIA
HOLE DIAMETER: 8"
HOLE DEPTH: 23.5'
WELL DIAMETER: 3"
WELL DEPTH: 22'
CASING STICKUP:

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				0				ASPHALT; fill.
				2			SC	CLAYEY SAND; yellowish brown; 15-20% clay and silt.
SOLID CASING	Mst	0	push	4			CL	CLAY; strong brown; low plasticity; 20-25% silt and fine sand; iron oxide; no product odor.
				6				
				8				
	Mst	0	push	10				@9': firm; no product odor.
BENTONITE				12				
	V. Mst	1	10	14				@14': firm; no product odor.
SAND				16				
				18			CH	CLAY; very pale brown; high plasticity; 5-10% fine sand; trace medium to coarse sand; calcium carbonate; firm; no product odor.
	V. Mst	0	7	20				
NATIVE SOIL				22				@22.5': as above.
	V. Mst		5	24				
				26				BOTTOM OF BORING AT 23.5'
				28				
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				



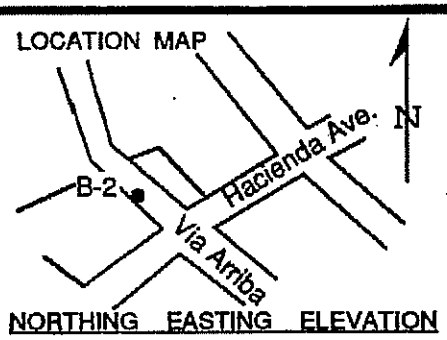
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-1
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-8-93
LOCATION: 17491 Via Arriba
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
						ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1	CL	CLAY: very dark greyish brown; low plasticity; 10% fine sand; firm; no product odor.
				2		
				3		@3': dark greyish brown; trace silt; soft; no product odor.
				4		
				5		
				6		
				7		
	Mst	0		8		@8-9': yellowish brown; soft; no product odor.
				9		
	Sat	0		10	SC	CLAYEY SAND: yellowish brown; 10% clay; fine sand; loose; no product odor.
				11	ML	SILT: yellowish brown; soft; no product odor.
				12		
				13	CL	CLAY: yellowish brown; moderate plasticity; <10% fine sand; mottled with black specks; soft; no product odor.
	Sat	0		14		
				15		BOTTOM OF BORING AT 15'
				16		
				17		
				18		
				19		
				20		
				21		
				22		



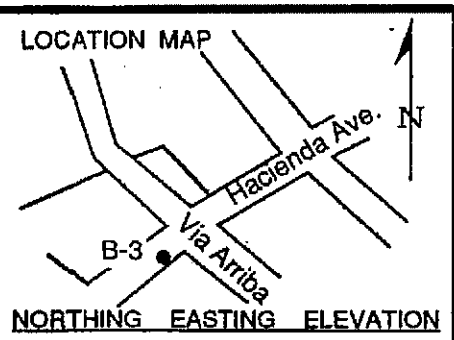
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-2
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-8-93
LOCATION: 17495 Via Arriba
HOLE DIAMETER: 1"
HOLE DEPTH: 11'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
				1		ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			2	CL	CLAY: very dark greyish brown; low plasticity; 10% fine sand; firm; no product odor.
				3		
				4		
				5		
				6		
				7		
	Mst	0		8	SP	SAND: yellowish brown; trace silt; fine sand; medium dense; no product odor.
				9		
	Sat	0		10	CL	CLAY: yellowish brown; moderate to high plasticity; 10% fine sand; rootholes; firm; no product odor.
				11		BOTTOM OF BORING AT 11'
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		
				21		
				22		



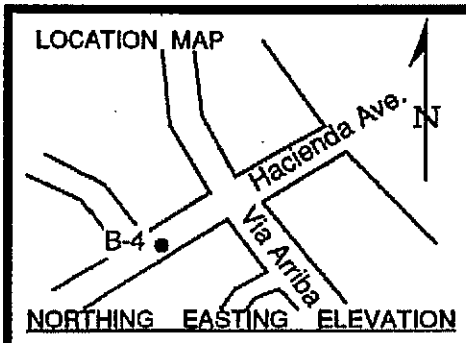
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-3
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-8-93
LOCATION: 622 Hacienda
HOLE DIAMETER: 1"
HOLE DEPTH: 12'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
								ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1–2			CL	CLAY: brown; low plasticity; 10-20% fine sand; firm; no product odor. @2': soft.
				3–8				
▽	Sat	1		9–10			SP	SAND: dark yellowish brown; fine sand; trace clay; 10% medium sand; loose; very faint product odor.
	Sat	0		11–12			CH	CLAY: light olive brown; high plasticity; 5% fine sand; soft; very faint product odor.
				13–22				BOTTOM OF BORING AT 12'



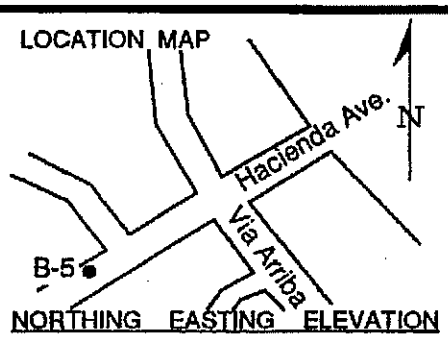
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-4
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-8-93
LOCATION: 642 Hacienda
HOLE DIAMETER: 1"
HOLE DEPTH: 11'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
				0		ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1–5	CL	CLAY: dark brown; moderate plasticity; firm; no product odor. @3': soft.
▽	Sat	1		8	SP	SAND: dark yellowish brown; <5% fines; fine sand; trace medium sand; loose; no product odor.
	Sat	0		10–11	CL	SILTY CLAY: dark yellowish brown; moderate plasticity; rootholes; soft; no product odor.
						BOTTOM OF BORING AT 11'



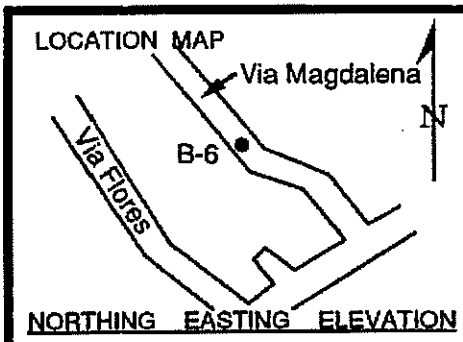
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-5
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-8-93
LOCATION: 659 Hacienda
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
						ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1–5	CL	CLAY: very dark greyish brown; low plasticity; 10% fine sand; firm; no product odor. @2': soft.
▽	Mst	0		8	ML	CLAYEY SILT: dark yellowish brown; low plasticity; soft; no product odor.
				9	CH	CLAY: dark yellowish brown; high plasticity; soft; no product odor.
	Sat	0		10–11	SP	SAND: brown; fine sand; <5% fines; up to 20% medium sand; loose; no product odor.
	Sat	0		12	SC	CLAYEY SAND: dark yellowish brown; fine sand; 10-20% clay; loose; no product odor.
				13	CH	CLAY: brown; high plasticity; trace silt and fine sand; firm; no product odor.
						BOTTOM OF BORING AT 13'



PACIFIC ENVIRONMENTAL GROUP, INC.

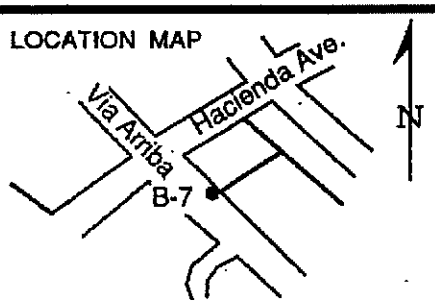
BORING NO. B-6
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-8-93
LOCATION: 17295 Via Magdelena
HOLE DIAMETER: 1"
HOLE DEPTH: 17'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
						ASPHALT AND BASEROCK.
Back Filled With Grout				1	CL	CLAY: very dark greyish brown; low plasticity; firm; no product odor.
				2		
				3		@3': soft; no product odor.
				4		
				5		
	Mst	0		6		@5-6': dark yellowish brown; low plasticity; 10-20% fine sand; rootholes; soft; no product odor.
				7		
				8		
				9		
				10	SM	SILTY SAND: brown; 10% fines; loose; no product odor.
	Sat	0		11	CL	SILTY CLAY: brown; moderate plasticity; soft; no product odor.
				12		@12-12.5': as above; no product odor.
	Sat	0		13	SM	SILTY SAND: dark yellowish brown; 10-20% fines; fine sand; medium dense; no product odor.
				14	SP	SAND: greyish brown; <5% fines; fine sand; medium dense; no product odor.
	Sat	0		15		
				16	CH	CLAY: greenish grey; high plasticity; firm; no product odor.
	Sat	0		17		BOTTOM OF BORING AT 17'
				18		
				19		
				20		
				21		
				22		

LOCATION MAP



NORTHING EASTING ELEVATION

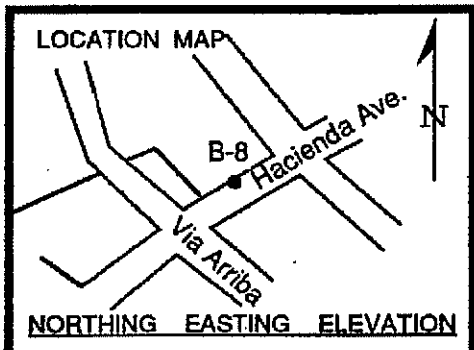
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-7
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-9-93
LOCATION: 17530 Via Arriba
HOLE DIAMETER: 1"
HOLE DEPTH: 14'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
						ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1–5	CL	CLAY: dark brown; low plasticity; 10-20% fine sand; firm; no product odor.
				6–8		@7': soft.
	Dp	0		9–10	CL	SILTY CLAY: dark yellowish brown; low plasticity; soft; no product odor.
	Sat	0		11–12	ML	CLAYEY SILT: brown; low plasticity; soft; no product odor.
	Sat	0		13–14	CL	CLAY: brown; moderate plasticity; trace fine sand; firm; no product odor.
				15–22		BOTTOM OF BORING AT 14'



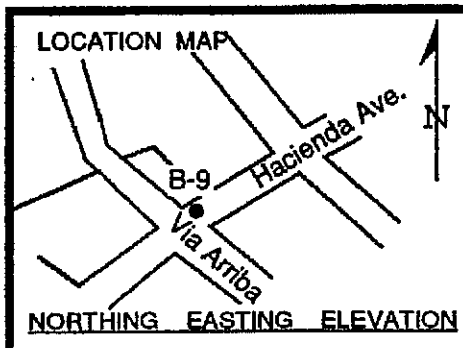
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO.- B-8
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-9-93
LOCATION: Hacienda Avenue
HOLE DIAMETER: 1"
HOLE DEPTH: 12'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				0				ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1–6			CL	CLAY: greyish brown; low to moderate plasticity; 10-20% fine sand; stiff; no product odor. @3': firm.
	Mst	0		7–8			ML	CLAYEY SILT: olive; soft; no product odor.
▽	Sat	0		9–10			CL / SP	CLAY: olive grey; low to moderate plasticity; 10-20% fine sand; rootholes; firm; no product odor. SAND: olive grey; fine sand; trace clay; medium dense; very faint product odor.
	Sat	0		11–12			CL	CLAY: dark greyish brown; moderate plasticity; firm; no product odor.
				13–22				BOTTOM OF BORING AT 12'



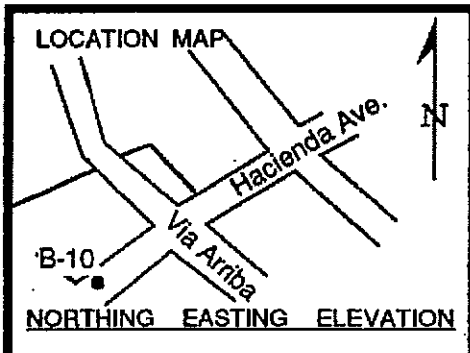
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-9
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-9-93
LOCATION: 17498 Via Arriba
HOLE DIAMETER: 1"
HOLE DEPTH: 14'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
						ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1–5	CL	CLAY: dark greyish brown; low plasticity; 10% fine sand; stiff; no product odor. @2': firm.
	Mst			8		
▽	Sat	110		9–10	ML	SANDY SILT: light olive brown; no plasticity; fine sandy silt; soft; moderate product odor.
	Sat	40		11	SM	SILTY SAND: 25% silt; fine sand; moderate product odor.
				11–12	CH	CLAY: greenish grey; high plasticity; soft; moderate product odor.
	Sat	8		13–14		@13-14': dark olive grey; faint product odor.
				14		BOTTOM OF BORING AT 14'
				15–22		



PACIFIC ENVIRONMENTAL GROUP, INC.

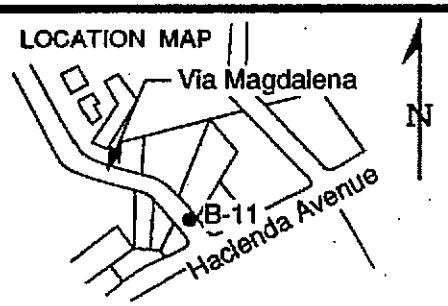
BORING NO. B-10
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-9-93
LOCATION: 621 Hacienda
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				0			ASPHALT AND ASPHALT.
Back Filled With Grout	Dp			1–7		CL	CLAY: dark greyish brown; low plastiicty; 10% fine sand; soft; no product odor.
				8–8.5			@8-8.5': dark yellowish brown; firm; no product odor.
				8.5–10		SP	SAND: dark yellowish brown; <5% fines; fine sand; medium dense; no product odor.
▽	Mst	0		10–11		CH	CLAY: olive; high plasticity; soft; no product odor.
	Sat	2		11–12			@11.5-13': dark greenish grey; firm; faint product odor.
	Sat	7		13			BOTTOM OF BORING AT 13'
				14–22			

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

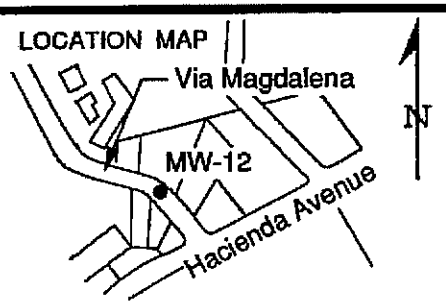
BORING NO. B-11
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-9-93
LOCATION: 17393 Via Magdalena
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
							ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1–4		CL	CLAY: dark brown; low plasticity; firm; no product odor.
	Dp	0		5–6			@5-6': dark yellowish brown; soft; no product odor.
				9			@9-9.5': soft; no product odor.
▽	Wt	0		10		SP	SAND: trace clay; fine sand; trace medium sand; loose; no product odor.
	Sat	3 2		11–12		CH	CLAY: dark greenish grey; high plasticity; stiff; very faint product odor.
				13			BOTTOM OF BORING AT 13'

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

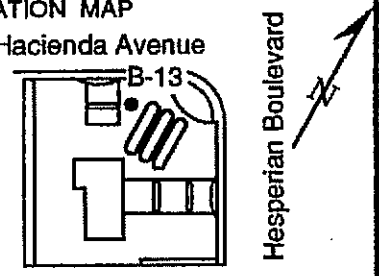
BORING NO. B-12
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-9-93
LOCATION: 17326 Via Magdalena
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
									ASPHALT AND BASEROCK.
Back Filled With Grout				1				CL	CLAY: dark greyish brown; low plasticity; soft; no product odor.
				2					
				3					
				4					
				5					
				6					
	Mst	0		7					@7-8': dark yellowish brown; moderate plasticity; trace medium sand and silt; rootholes; soft; no product odor.
				8					
	Wt	0		9				SP	SAND: yellowish brown; <10% fines; fine sand; <10% medium and coarse sand; trace fine gravel; loose; no product odor.
				10					
				11				CL	CLAY: dark greenish grey; moderate plasticity; stiff; very faint product odor.
	Sat	2		12				SP	SAND: <5% fines; fine sand; very faint product odor.
		1		13					
	Sat	1		14				CH	CLAY: dark greenish grey; high plasticity; stiff; no product odor.
				15					BOTTOM OF BORING AT 15'
				16					
				17					
				18					
				19					
				20					
				21					
				22					

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

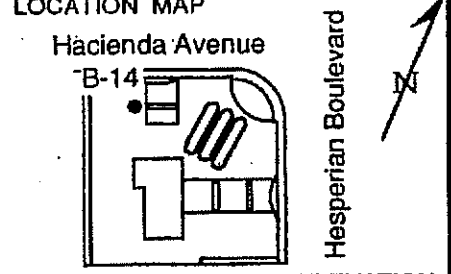
BORING NO. B-13
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-10-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
							ASPHALT AND BASEROCK.
Back Filled With Grout				1		CL	CLAY: dark greyish brown; 10-20% fine sand; firm; no product odor.
				2			
				3			
				4			
				5			
				6			
	Dp	0		7			@6-7': dark greenish grey; moderate plasticity; firm; rootholes; no product odor.
				8			
	Mst	0		9			@8-9': as above; no product odor.
▽				10		SM	SILTY SAND: greenish grey; 10-20% fines as silt; fine sand; medium dense; faint product odor.
	Sat	11		11			
				12		CH	CLAY: dark greenish grey; high plasticity; firm; rootholes; moderate product odor.
	Sat	45		13			
				14			BOTTOM OF BORING AT 13'
				15			
				16			
				17			
				18			
				19			
				20			
				21			
				22			

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-14
PAGE 1 OF 1

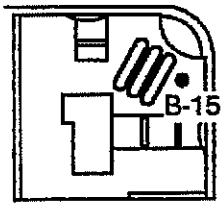
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-10-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
									ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1				CL	CLAY: black; low to moderate plasticity; <10% fine sand; firm; no product odor.
				2					
				3					
				4					
				5					@5-6': olive brown; low plasticity; 10-20% fine sand; trace medium sand; firm; no product odor.
	Dp	3		6					
				7					@7-8': dark greyish brown; firm; no product odor.
		13		8					
	Mst			9				ML	CLAYEY SILT; olive grey; low plasticity; trace fine sand; firm; faint product odor.
▽		17		10				SP	SAND: olive grey; fine sand; medium dense; sheen; strong product odor.
				11				CH	CLAY: olive grey; moderate to high plasticity; 5-10% silt; firm; sheen; strong product odor.
	Sat	50		12					@12-13': greenish grey; high plasticity; stiff; moderate product odor.
		40		13					BOTTOM OF BORING AT 13'
				14					
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					

LOCATION MAP

Hacienda Avenue



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

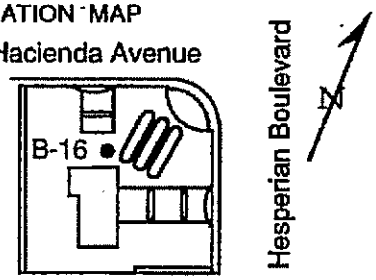
BORING NO. B-15
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-10-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 13.5'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
									ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1				FL	FILL: gravel.
				2				CL	CLAY: dark greyish brown; low plasticity; 10-20% fine sand; firm; no product odor.
				3					
				4					
				5					
				6					
				7					@7-8': dark greyish brown; firm; no product odor.
	Dp	0		8					@8-9': greenish grey; moderate plasticity; trace fine sand; stiff; no product odor.
				9					
				10					
	Mst	2		11				SM	SILTY SAND: dark greenish grey; fine sand; 40% silt; dense; very faint product odor.
								ML	SANDY SILT: dark greenish grey; 40% fine sand; very faint product odor.
	Sat	0		12					
				13				CL	CLAY: dark greenish grey; moderate plasticity; stiff; very faint product odor.
				14					BOTTOM OF BORING AT 13.5'
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-16
PAGE 1 OF 1

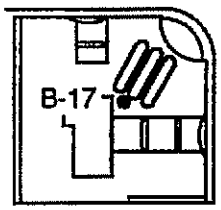
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-11-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Back Filled With Grout				1–4		FL	ASPHALT. FILL: angular gravel.
	Sat	11		14–15		CH	CLAY: dark greenish grey; high plasticity; firm; moderate product odor.
							BOTTOM OF BORING AT 15'

LOCATION MAP

Hacienda Avenue



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-17
PAGE 1 OF 1

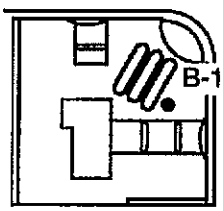
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-10-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
							ASPHALT AND BASEROCK.
Back Filled With Grout				1		FL	FILL: gravel.
	Dp			2		CL	CLAY: black; low plasticity; 10-20% fine sand; trace medium sand; stiff; no product odor.
				3			
				4			
				5			
				6			
				7			
				8			
	Mst	0		9			@8-9': brown; low plasticity; 10% fine to medium sand; stiff; no product odor.
				10		SP	SAND: brown; trace clay; fine sand; medium dense; no product odor.
	Mst	0		11			
				12			
▽	Sat	1		13		CH	CLAY: dark greenish grey; high plasticity; firm; strong product odor, sheen.
				14			BOTTOM OF BORING AT 13'
				15			
				16			
				17			
				18			
				19			
				20			
				21			
				22			

LOCATION MAP

Hacienda Avenue



Hesperian Boulevard

NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-18
PAGE 1 OF 1

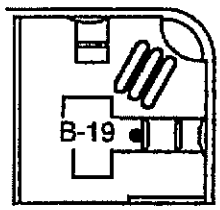
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-10-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
									ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1				FL	FILL: gravel.
				2				CL	CLAY: black; low plasticity; 20% silt and fine sand; trace medium sand; stiff; no product odor.
				3					
				4					
				5					
				6					
				7					
	Dp	0		8					@8-9': brown; moderate plasticity; <10% silt and fine sand with small white caliche nodules; stiff; no product odor.
				9					
				10				SP	SAND: yellowish brown; trace clay; iron oxide mottling; medium dense; no product odor.
▽	Mst	0		11					
				12				ML	CLAYEY SILT: dark greenish grey; low plasticity; firm; very faint product odor.
	Sat	6		13				CL	CLAY: dark greenish grey; moderate plasticity; firm; moderate product odor; sheen.
				14					BOTTOM OF BORING AT 13'
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					

LOCATION MAP

Hacienda Avenue



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-19
PAGE 1 OF 1

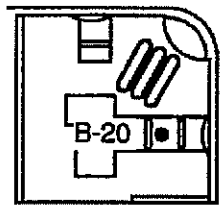
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-10-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				0					ASPHALT, CONCRETE AND BASEROCK.
Back Filled With Grout	Dp			1					
				2					
				3				CL	CLAY: black; low plasticity; 10% silt and fine sand; stiff; no product odor.
				4					
				5					
				6					
				7					
	Mst	1		8					@8-9': dark greenish grey; firm; very faint product odor.
				9					
	Mst	1		10				SP	SAND: dark greenish grey; trace clay; fine sand; very faint product odor.
▽				11					
	Sat	30		12					
				13				CL	CLAY: dark greenish grey; moderate plasticity; firm; moderate product odor.
				14					BOTTOM OF BORING AT 13'
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					

LOCATION MAP

Hacienda Avenue



Hesperian Boulevard

N

NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-20
PAGE 1 OF 1

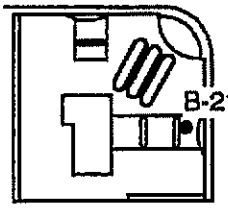
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-10-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
				1		ASPHALT, CONCRETE AND BASEROCK.
Back Filled With Grout	Dp			2		
				3	CL	CLAY: very dark brown; low to moderate plasticity; 10-20% fine sand and silt; stiff; no product odor.
				4		
				5		
				6		
				7		
	Dp	0		8		@8-9': dark brown; low to moderate plasticity; 10-20% fine sand and silt; firm; no product odor.
				9		
	Mst	3		10	SP	SAND: dark greenish grey; <5% silt; trace clay; medium dense; faint product odor.
▽				11		
	Sat	2		12	CH	CLAY: dark greenish grey; high plasticity; faint product odor.
				13		BOTTOM OF BORING AT 13'
				14		
				15		
				16		
				17		
				18		
				19		
				20		
				21		
				22		

LOCATION MAP

Hacienda Avenue



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-21
PAGE 1 OF 1

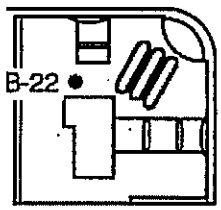
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-10-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				1					ASPHALT, CONCRETE AND BASEROCK.
Back Filled With Grout	Dp			2				CL	CLAY: very dark brown; moderate plasticity; 10% fine sand and silt; stiff; no product odor.
				3					
				4					
				5					
				6					
				7					@8-8.5': dark olive grey; moderate plasticity; trace silt; firm; very faint product odor.
	Dp	0		8					@8.5-9': low plasticity; increased silt content; very faint product odor.
				9				ML	SANDY SILT: dark greenish grey; low plasticity; 10-30% clay; 20% fine sand; firm; faint product odor.
	Mst	1		10					
				11				SM	SILTY SAND: dark greenish grey; 30% fines as silt; fine sand; dense; faint product odor.
▽	Sat	3		12				CH	CLAY: dark greenish grey; high plasticity; stiff; faint product odor.
				13					BOTTOM OF BORING AT 13'
				14					
				15					
				16					
				17					
				18					
				19					
				20					
				21					
				22					

LOCATION MAP

Hacienda Avenue



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

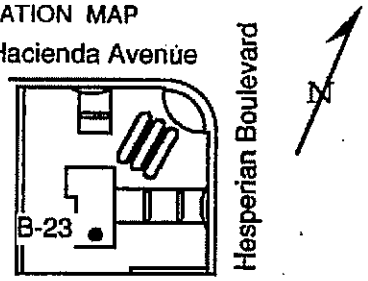
BORING NO. B-22
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-10-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
								ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1–3			CL	CLAY: black; low plasticity; 10-20% fine sand and silt; trace medium sand and coarse sand; stiff; no product odor.
	Dp	2		8–9				@8-9': olive brown; moderate plasticity; trace fine sand; firm; faint product odor.
	Mst	4		10–11			SP	@10-10.5': greenish grey; firm; faint product odor. SAND: greenish grey; fine sand; trace clay; medium dense; moderate product odor.
▽	Sat	85		12–13			CL	CLAY: greenish grey; moderate plasticity; moderate product odor.
								BOTTOM OF BORING AT 13'

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-23
PAGE 1 OF 1

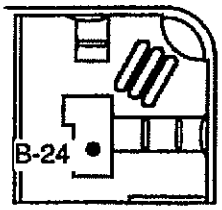
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-11-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				0					CONCRETE AND BASEROCK.
Back Filled With Grout				1					
				2				CL	CLAY: very dark grey to black; low plasticity; 10% silt and fine sand; stiff; faint to moderate product odor.
				3					
	Dp	120		4					@4-5': as above; moderate product odor.
				5					
				6					
				7					
				8					
	Dp	1		9					
				10					@9-10': olive brown; trace medium sand; caliche; stiff; faint product odor.
				11					
				12					
				13					
				14					
	Sat	2		15				CH	CLAY: dark greenish grey; high plasticity; stiff; faint product odor.
				16					BOTTOM OF BORING AT 15'
				17					
				18					
				19					
				20					
				21					
				22					

LOCATION MAP

Hacienda Avenue



Hesperian Boulevard

N

NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-24
PAGE 1 OF 1

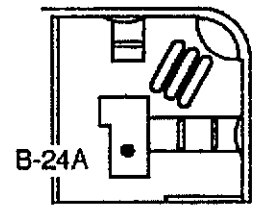
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-11-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
								CONCRETE AND BASEROCK.
Back Filled With Grout				1			CL	CLAY: very dark grey to black; low plasticity; 10-20% silt and fine sand; stiff; faint to moderate product odor.
				2				
				3				
				4				
	Dp	160		5				@4-5': as above; moderate product odor.
				6				
				7				
				8				
	Dp	2		9				@9-10': olive brown; trace medium sand; caliche; stiff; faint product odor.
				10			SP	SAND: dark greenish grey; fine sand; medium dense; moderate product odor.
				11				
				12				
				13				
				14			CH	CLAY: dark greenish grey; high plasticity; stiff; faint product odor.
	Sat	2		15				
				16				BOTTOM OF BORING AT 15'
				17				
				18				
				19				
				20				
				21				
				22				

LOCATION MAP

Hacienda Avenue



NORTHING EASTING ELEVATION

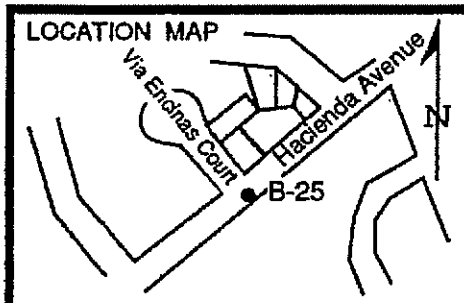
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-24A
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 4-6-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 16'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				1			CONCRETE AND BASEROCK.
Back Filled With Grout				2		CL	CLAY: black to dark olive grey; 10-20% silt and fine sand; stiff; moderate product odor.
	Mst	0		5			
				9			@9': as above; dark greenish grey; moderate product odor.
	Mst Wt	0		10		SP	SAND: dark greenish grey; fine sand; medium dense; moderate product odor.
				14		CH	CLAY: dark greenish grey mottled with trace dark yellowish brown; moderate to high plasticity; stiff; faint product odor.
	Sat	0		16			BOTTOM OF BORING AT 16'



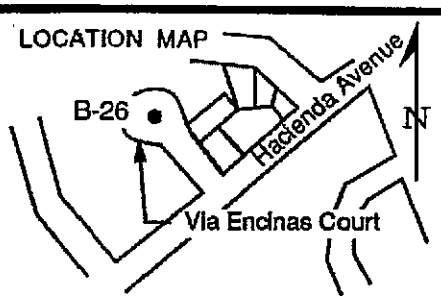
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-25
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-11-93
LOCATION: 690 Hacienda
HOLE DIAMETER: 1"
HOLE DEPTH: 14'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
				0		ASPHALT AND BASEROCK.
Back Filled With Grout				1	CL	CLAY: black; low plasticity; firm; no product odor.
				2		@2': soft.
				3		
				4		@4-5': as above; moderate product odor.
				5	SC	CLAYEY SAND: 20% fines as clay; fine sand; loose; no product odor.
	Dp	0		6		
				7	SP	SAND: dark yellowish brown; fine sand; 10-20% medium to coarse sand; loose; no product odor.
	Mst	0		8		
▽				9	ML	SANDY SILT: yellowish brown; 30% fine sand; trace clay; soft; no product odor.
	Sat	0		10	SP	SAND: dark yellowish brown; trace fines; loose; no product odor.
				11		
	Sat	0		12	CL	CLAY: dark yellowish brown; moderate plasticity; firm; no product odor.
	Sat	0		13		
	Sat	0		14		BOTTOM OF BORING AT 14'
				15		
				16		
				17		
				18		
				19		
				20		
				21		
				22		



PACIFIC ENVIRONMENTAL GROUP, INC.

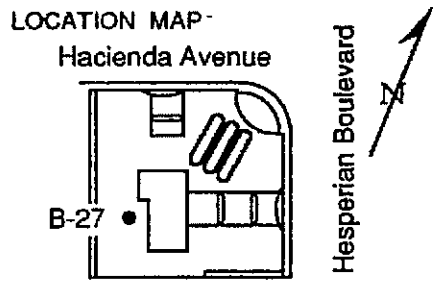
BORING NO. B-26
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-11-93
LOCATION: 17335 Via Encinas
HOLE DIAMETER: 1"
HOLE DEPTH: 14'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
						ASPHALT AND BASEROCK.
Back Filled With Grout				1	CL	CLAY: black; low plasticity; firm; no product odor.
				2		
				3		
				4		
				5		@5-6': low plasticity; fine to medium sand; <10% silt; soft; no product odor.
	Dp	0		6		
	Dp	0		7		@7-8': as above; no product odor.
				8		
▽	Wt	0		9	SP	SAND: dark yellowish brown; <5% fines; fine sand; <10% medium to coarse sand; medium dense; no product odor.
				10		
	Sat			11		
		0		12	CL	CLAY: dark yellowish brown; moderate plasticity; firm; no product odor.
		0		13		
		0		14		BOTTOM OF BORING AT 14'
				15		
				16		
				17		
				18		
				19		
				20		
				21		
				22		

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

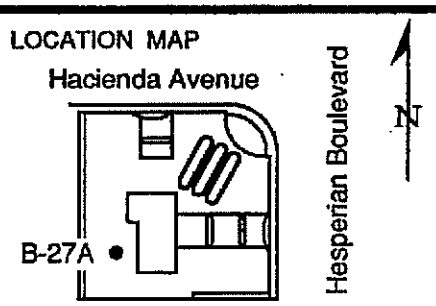
BORING NO. B-27
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-11-93
LOCATION: 17601 Hesperian
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
							ASPHALT AND BASEROCK.
Back Filled With Grout				1		SW	SAND - FILL: gravelly; mottled greyish green and bluish gray; trace fines; fine sand; 25-40% medium to coarse sand; loose; strong product odor.
	Wt	60		2			@2': strong product odor.
				3		CL	SANDY CLAY: dark greyish brown; low plasticity; 10% medium to coarse sand; trace medium to coarse sand; stiff; moderate product odor.
	Dp	1		4			
				5			
				6			
				7			
				8			
	Mst	4		9			@9-10': olive brown; trace medium sand; stiff; faint product odor.
				10			
				11			
				12			
				13			
	Sat	2		14			@14-15': as above dark greenish grey; moderate plasticity; stiff; faint product odor.
				15			
				16			BOTTOM OF BORING AT 15'
				17			
				18			
				19			
				20			
				21			
				22			

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

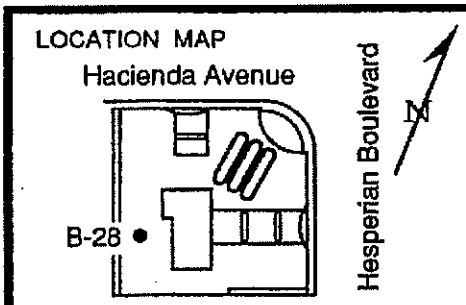
BORING NO. B-27A
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 4-6-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 16'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				0				ASPHALT AND BASEROCK.
Back Filled With Grout				1–3			SW	SAND - FILL: gravelly; mottled greyish green and bluish grey; fine sand; 25-40% medium to coarse sand; loose; strong product odor.
				3–4			CL	CLAY: dark greenish grey; moderate plasticity; stiff; no product odor.
				4–10				
▽				11				@11-13': easier drilling
				12–14				
	Sat	0		15			SP	SAND: dark yellowish brown; medium dense; no product odor.
				16				BOTTOM OF BORING AT 16'
				17–22				

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

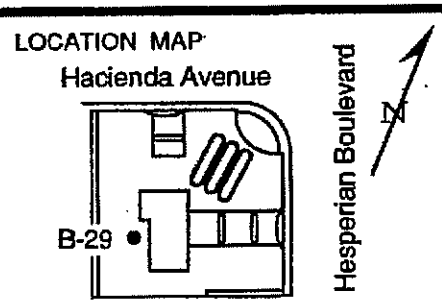
BORING NO. B-28
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-11-93
LOCATION: 17601 Hesperian
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
						ASPHALT AND BASEROCK.
Back Filled With Grout				1	SW	GRAVELLY SAND - FILL: greyish green; low plasticity; fine to coarse sand; loose; moderate product odor.
	Mst			2	CL	CLAY: dark greyish brown; low plasticity; 10-20% fine sand; trace medium to coarse sand; stiff; moderate product odor.
				3		
	Dp	4		4		@4-5': faint product odor.
				5		
				6		
				7		
				8		
	Mst	0		9		@9-10': olive brown; stiff; no product odor.
				10		
				11		
				12		
				13		
	Sat	2		14	CH	CLAY: dark greenish grey; high plasticity; stiff; no product odor.
				15		BOTTOM OF BORING AT 15'
				16		
				17		
				18		
				19		
				20		
				21		
				22		

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-29
PAGE 1 OF 1

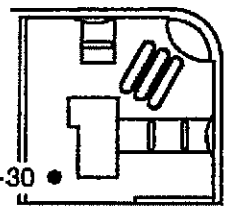
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-11-93
LOCATION: 17601 Hesperian
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
							ASPHALT AND BASEROCK.
Back Filled With Grout				1		SW	GRAVELLY SAND-FILL: greyish green; fine to coarse sand; loose; faint product odor.
				2		CL	CLAY: dark greyish brown; low plasticity; 10-20% fine sand; trace medium and coarse sand; stiff; faint product odor.
				3			
				4			
	Dp	1		5			@4-5': as above; very faint product odor.
				6			
				7			
				8			
	Mst	1		9			@9-10': olive brown; stiff; no product odor.
				10			
				11			
				12			
				13			
	Sat	0		14		CH	CLAY: dark greenish grey; high plasticity; firm; no product odor.
				15			
				16			BOTTOM OF BORING AT 15'
				17			
				18			
				19			
				20			
				21			
				22			

LOCATION MAP

Hacienda Avenue



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-30
PAGE 1 OF 1

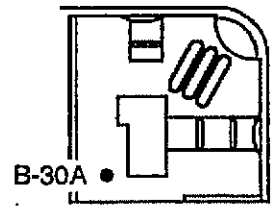
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-11-93
LOCATION: 17601 Hesperian
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
				1		ASPHALT, CONCRETE AND BASEROCK.
Back Filled With Grout				2		
				3	CL	CLAY: black; low plasticity; 10-15% fine sand; trace medium sand; stiff; no product odor.
	Dp	0		4		
				5		
				6		
				7		
				8		
	Mst	0		9		@9-10': olive brown; low plasticity; 10% silts and fine sand; stiff; no product odor.
				10	SM	SILTY SAND: dark greyish brown; trace of clay; 20% silt; fine sand; no product odor.
				11	SP	SAND: olive brown; trace clay and silt; fine sand; medium dense; no product odor.
	Wt	0		12		
				13	CH	CLAY: dark greenish grey; high plasticity; stiff; no product odor.
	Sat	0		14		
		0		15		BOTTOM OF BORING AT 15'
				16		
				17		
				18		
				19		
				20		
				21		
				22		

LOCATION MAP

Hacienda Avenue



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

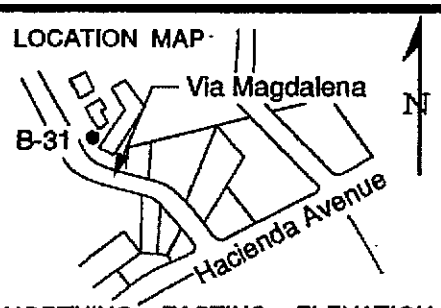
BORING NO. B-30A
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 4-6-93
LOCATION: 17601 Hesperian Blvd.
HOLE DIAMETER: 1"
HOLE DEPTH: 11'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				0			ASPHALT, CONCRETE AND BASEROCK.
Back Filled With Grout				1–2			
				3		CL	CLAY: black; low plasticity; 10-15% fine sand; trace medium sand; stiff; no product odor.
	Dp	0		4–5			
				6–8			@9-10': olive brown; 20% fine sand; no product odor.
	Mst	0		9			
▽	Wt			10		SM	SILTY SAND: dark greyish brown; 20% silt; fine sand; minor clay; medium dense; no product odor.
				11			BOTTOM OF BORING AT 11'
				12–22			

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-31
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-13-93
LOCATION: 17200 Via Magdalena
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
				0	SC	CLAYEY SAND: 30-40% fines; fine sand.
Back Filled With Grout	Dp			1	CL	CLAY: dark brown; low plasticity; 10% fine sand; no product odor.
				2		
				3		
				4		
				5		
				6		
				7		
	Dp Wt	0		8		@8-9': dark greyish brown; no product odor.
				9		
▽	Sat	0		10	SP	SAND: brown; <5% fines; fine sand; 10% medium and coarse sand; rootlets; no product odor.
				11		
	Sat	0		12	ML	CLAYEY SILT; dark yellowish brown; low plasticity; firm; no product odor.
				13		
	Sat	0		14	CH	CLAY: dark yellowish brown; high plasticity; no product odor.
				15		BOTTOM OF BORING AT 15'
				16		
				17		
				18		
				19		
				20		
				21		
				22		

LOCATION MAP

NORTHING EASTING ELEVATION

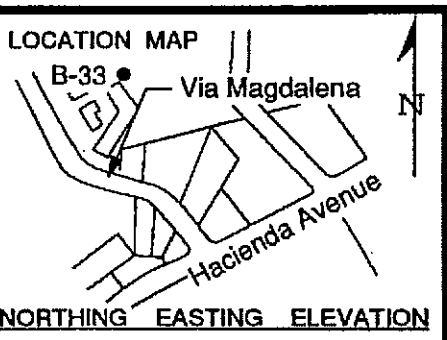
PACIFIC ENVIRONMENTAL GROUP, INC.

BORING NO. B-32
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-13-93
LOCATION: 17200 Via Magdalena
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				1			ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			2		CL	CLAY: black; low plasticity; 10% fine sand; firm; no product odor.
				3			
				4			
				5			
				6			
				7			
				8			
				9			
	Dp	0		10			@9-9.5': brown; firm; no product odor. @9.5-10': 20-30% fine sand; firm; no product odor.
				11		ML	CLAYEY SILT: dark yellowish brown; low plasticity; firm; no product odor.
▽	Wt	0		12		CL	CLAY: dark yellowish brown; low plasticity; 10-20% fine sand; trace black organic material; soft; no product odor.
				13		SP	SAND: dark yellowish brown; fine sand; medium dense; no product odor.
	Sat	0		14		CH	CLAY: very dark greyish brown; high plasticity; stiff; no product odor.
				15			
				16			BOTTOM OF BORING AT 15'
				17			
				18			
				19			
				20			
				21			
				22			



PACIFIC ENVIRONMENTAL GROUP, INC.

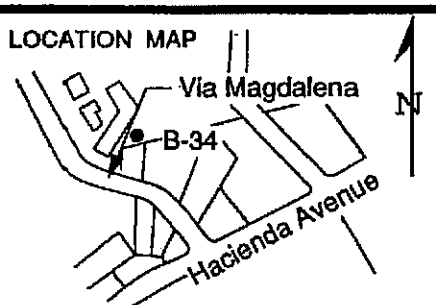
BORING NO. B-33
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-13-93
LOCATION: 17200 Via Magdalena
HOLE DIAMETER: 1"
HOLE DEPTH: 14'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				0				ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1–5			CL	CLAY: black; moderate plasticity; 10% fine sand; firm; no product odor.
	Dp	0		9–10				@9-10': olive brown; firm; no product odor.
▽	Sat	0		11–12				@11-12': olive brown; low plasticity; 5% fine and medium sand; soft; no product odor.
	Sat	0		13–14				@13-14': olive brown; low to moderate plasticity; firm; no product odor.
				14				BOTTOM OF BORING AT 14'

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

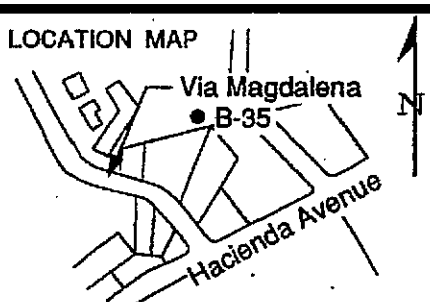
BORING NO. B-34
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-13-93
LOCATION: 17200 Via Magdalena
HOLE DIAMETER: 1"
HOLE DEPTH: 16'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
									ASPHALT AND BASEROCK.
Back Filled With Grout	Dp			1				CL	CLAY: black; low plasticity; 30% silt; trace medium sand; firm; no product odor.
				2					
				3					
				4					
				5					
				6					
				7					
				8					
				9					@9.5': brown; firm; no product odor.
	Dp	0							@9.5-10': brown; low plasticity; 30% fine sand; 15% silt; firm; no product odor.
	Mst			10				SC	CLAYEY SAND: brown; 30-40% clay; medium dense; no product odor.
	Wt	0		11					
				12				CH	CLAY: dark yellowish brown; high plasticity; mottled greenish grey; firm; faint product odor.
				13				SC	CLAYEY SAND: dark yellowish brown; discolored in vertical bands with dark greenish grey; 10-20% fines; fine sand; stiff; moderate product odor.
	Sat	13		14				SP	SAND: dark greenish grey; fine sand; 10 % medium sand; trace coarse sand; medium dense; strong product odor.
				15				CL	CLAY: dark greenish grey; moderate plasticity; stiff; moderate product odor.
	Sat	18		16					BOTTOM OF BORING AT 16'
				17					
				18					
				19					
				20					
				21					
				22					

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

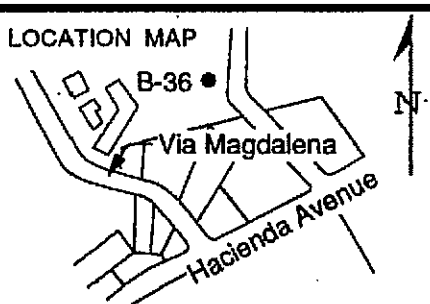
BORING NO. B-35
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-13-93
LOCATION: 17200 Via Magdalena
HOLE DIAMETER: 1"
HOLE DEPTH: 13'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL / GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Back Filled With Grout	Dp			1–5		CL	CLAY: very dark grey; low plasticity; 10-20% fine sand; 10% fine sand; firm; no product odor.
				6–9			
	Mst	0		10			@10-10.5': dark yellowish brown; low plasticity; trace medium sand; firm; no product odor.
▽				11		SC	CLAYEY SAND: yellowish brown; 10% clay; fine sand; medium dense; no product odor.
	Sat	0		12		ML	SILT: yellowish brown; soft; no product odor.
				13		CH	CLAY: high plasticity; stiff; no product odor.
				14–22			BOTTOM OF BORING AT 13'

LOCATION MAP



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

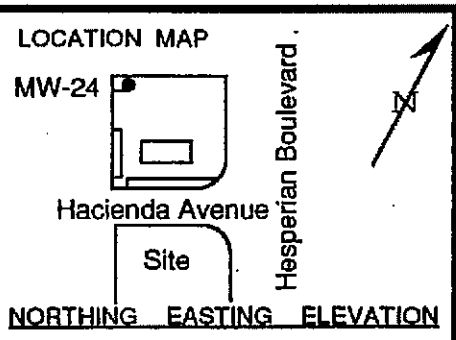
BORING NO. B-36
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: ECA
DRILLING METHOD: Pneumatic Drive
SAMPLING METHOD: SOIL CORE
CASING TYPE: NA
SLOT SIZE: NA
GRAVEL PACK: NA

CLIENT: ARCO
DATE DRILLED: 3-13-93
LOCATION: 17200 Via Magdalena
HOLE DIAMETER: 1"
HOLE DEPTH: 15'
WELL DIAMETER: NA
WELL DEPTH: NA
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Back Filled With Grout	Dp			1–5			CL	CLAY: very dark gray; low plasticity; 10-20% fine sand; firm; no product odor.
	Mst	0		10–11				@10-10.5': brown; firm; no product odor.
							ML	SILT: yellowish brown; 20% clay; 20% fine sand; soft; no product odor.
	Sat	0		12–13			SM	SILTY SAND: yellowish brown; 10% clay; 30% silt; fine sand; loose; no product odor.
		0		14–15			CH	CLAY: very dark greyish brown; high plasticity; very stiff; no product odor.
				16–22				BOTTOM OF BORING AT 15'

LOCATION MAP



PACIFIC ENVIRONMENTAL GROUP, INC.

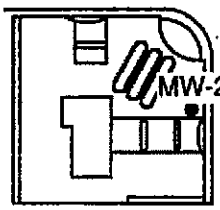
WELL NO. MW-24
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: WEST HAZMAT
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 X 12 SAND

CLIENT: ARCO
DATE DRILLED: 3-17-93
LOCATION: Hacienda Avenue
HOLE DIAMETER: 10"
HOLE DEPTH: 21'
WELL DIAMETER: 2"
WELL DEPTH: 21'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1	SM	SILTY SAND - FILL: 10% clay; 10% silt; fine to coarse sand; subrounded to angular gravel to 3" diameter; dense; no product odor.
	Dp			2	CL	CLAY: black; moderate plasticity; 5% medium sand; stiff; no product odor.
				3		
				4		
				5		
BENTONITE	Dp	0		6		@5.5': trace medium sand.
				7		@7': dark yellowish brown; low plasticity; 10% fine sand; stiff; no product odor.
	Sat	0		8		
				9		
	Dp			10		@10-10.5': as above; no product odor.
SAND				11	SC	CLAYEY SAND: dark yellowish brown; 10% clay; fine sand; loose; no product odor.
	Sat	3	8	12	SP	SAND: dark yellowish brown; fine sand; loose; no product odor.
				13	ML	CLAYEY SILT: yellowish brown; low plasticity; trace fine sand; firm; no product odor.
	Sat	0		14	CH	CLAY: olive brown; high plasticity; stiff; no product odor.
				15		
			32	16		
				17		
	Sat	0		18		
				19		
			27	20		
				21		BOTTOM OF BORING AT 21'
				22		

LOCATION MAP
Hacienda Avenue



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

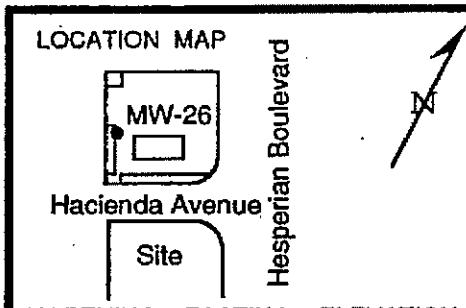
WELL NO. MW-25
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: WEST HAZMAT
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 X 12 SAND

CLIENT: ARCO
DATE DRILLED: 3-17-93
LOCATION: 17601 Hesperian
HOLE DIAMETER: 10"
HOLE DEPTH: 21'
WELL DIAMETER: 2"
WELL DEPTH: 21'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / BAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1			FL	ASPHALT FILL: baserock; clayey; angular gravel with debris; dense; no product odor.
	Dp	1		2				
				3			CL	SANDY CLAY: black; low plasticity; 10-20% fine to coarse sand; stiff; no product odor.
				4				
				5				@5.5': brown; mottled with black fingering; stiff; no product odor.
BENTONITE		1		6			SP	SAND: dark greenish grey; fine sand; medium dense; no product odor.
				7			CL	SANDY CLAY: dark greenish grey; low plasticity; 10% fine to coarse sand; stiff; no product odor.
				8				
				9				
	Dp	2		10			SC	CLAYEY SAND: dark greenish grey; fine sand; 30% clay; medium dense; very faint product odor.
	Mst			11			SP	SAND: dark green grey; fine sand; loose; no product odor.
			16	12			ML	CLAYEY SILT: yellowish brown; low plasticity; trace fine sand; firm; faint product odor.
	Sat			13			CH	CLAY: very dark grey; high plasticity; trace fine sand; stiff; no product odor.
	Sat	2	25	14			CL	CLAY: dark greyish brown; moderate plasticity; trace fine sand; stiff; no product odor.
SAND				15				
				16				
				17				
			24	18				
				19				
	Sat	0		20				
				21				BOTTOM OF BORING AT 21'
				22				

LOCATION MAP



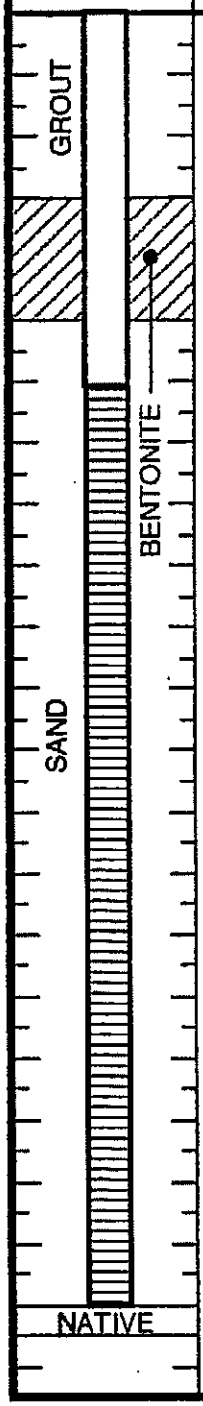
NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-26
PAGE 1 OF 1

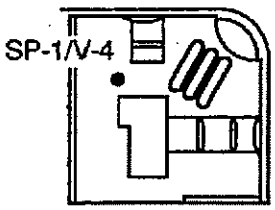
PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: WEST HAZMAT
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2 X 12 SAND

CLIENT: ARCO
DATE DRILLED: 3-19-93
LOCATION: Hacienda Avenue
HOLE DIAMETER: 8"
HOLE DEPTH: 21.5'
WELL DIAMETER: 2"
WELL DEPTH: 21'
CASING STICKUP: NA



MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
			1	CL	CLAY - FILL: reddish black; low plasticity; firm; no product odor.
			2	SP	SAND: <5% clay and silt; fine to coarse sand; subrounded to angular gravel to 3" diameter; dense; no product odor.
Dp			3	CL	SANDY CLAY: black; low plasticity; 10-20% fine sand; trace medium sand; stiff; no product odor.
Dp			4		
			5		@5-6.5': very stiff; no product odor.
	0	29	6		
			7		
			8		
			9		
Mst	0	36	10		@10-10.5': rootholes; trace fine gravel; no product odor. @10.5-11': brown; organic material; caliche present; very stiff; no product odor.
			11	SP	SAND: olive brown; fine sand; dense; no product odor.
			12		
			13		
			14		
			15	CL	CLAY: light olive brown; low plasticity; 10% fine sand; mottled with yellowish brown and black speckles along rootholes; very stiff; no product odor.
Sat	0	22	16		
			17	SC	CLAYEY SAND: silty; yellowish brown; medium dense; no product odor.
			18	CL	CLAY: yellowish brown; moderate plasticity; trace fine sand; very stiff; no product odor.
			19		
Sat	0	18	20		
			21		@21.5': increased silt and fine sand.
			22		BOTTOM OF BORING AT 21.5'

LOCATION MAP
Hacienda Avenue



NORTHING EASTING ELEVATION

PACIFIC ENVIRONMENTAL GROUP, INC.

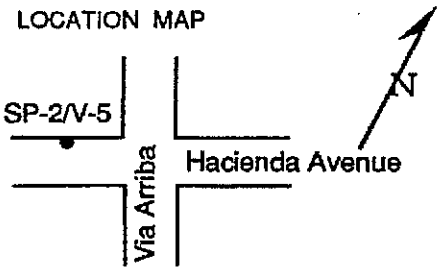
WELL NO. SP-1/V-4
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: WEST HAZMAT
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"/0.040"
GRAVEL PACK: 2 X 12 SAND/Aquarium Sand

CLIENT: ARCO
DATE DRILLED: 3-18-93
LOCATION: 17601 Hesperian
HOLE DIAMETER: 10"
HOLE DEPTH: 22.5'
WELL DIAMETER: 2"/2"
WELL DEPTH: 21'/15'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1		ASPHALT AND BASEROCK: clayey gravel (fill to 2')
	Dp	0		2	CL	CLAY: black; low plasticity; hard to very stiff; no product odor.
				3		
				4		
				5	CL	SANDY CLAY: dark yellowish brown; low plasticity; stiff; no product odor.
	Dp	0		6		
				7		
BENTONITE			30	8		
				9		@8.5-9': greenish grey; faint product odor.
SAND					SP	SAND: dark greenish grey; faint product odor.
	Mst	16		10	SC	CLAYEY SAND: dark greenish grey; fine sand; medium dense; faint product odor.
				11		
	Wt	190	11	12	CL	CLAY: very dark grey; moderate plasticity; 10% fine sand; sheen in blebs along rootholes; stiff; strong product odor.
				13		
▽	Sat	85	21	14		@14': greenish grey mottled with bluish gray; strong product odor.
				15		
GROUT				16	SC	CLAYEY SAND: light olive brown; medium dense; faint product odor.
				17		
			19	18		
SAND				19		
				20	CL	CLAY: yellowish brown; moderate plasticity; trace fine sand; very stiff; no product odor.
				21		
NATIVE			26	22		BOTTOM OF BORING AT 22.5'

LOCATION MAP



NORTHING EASTING ELEVATION

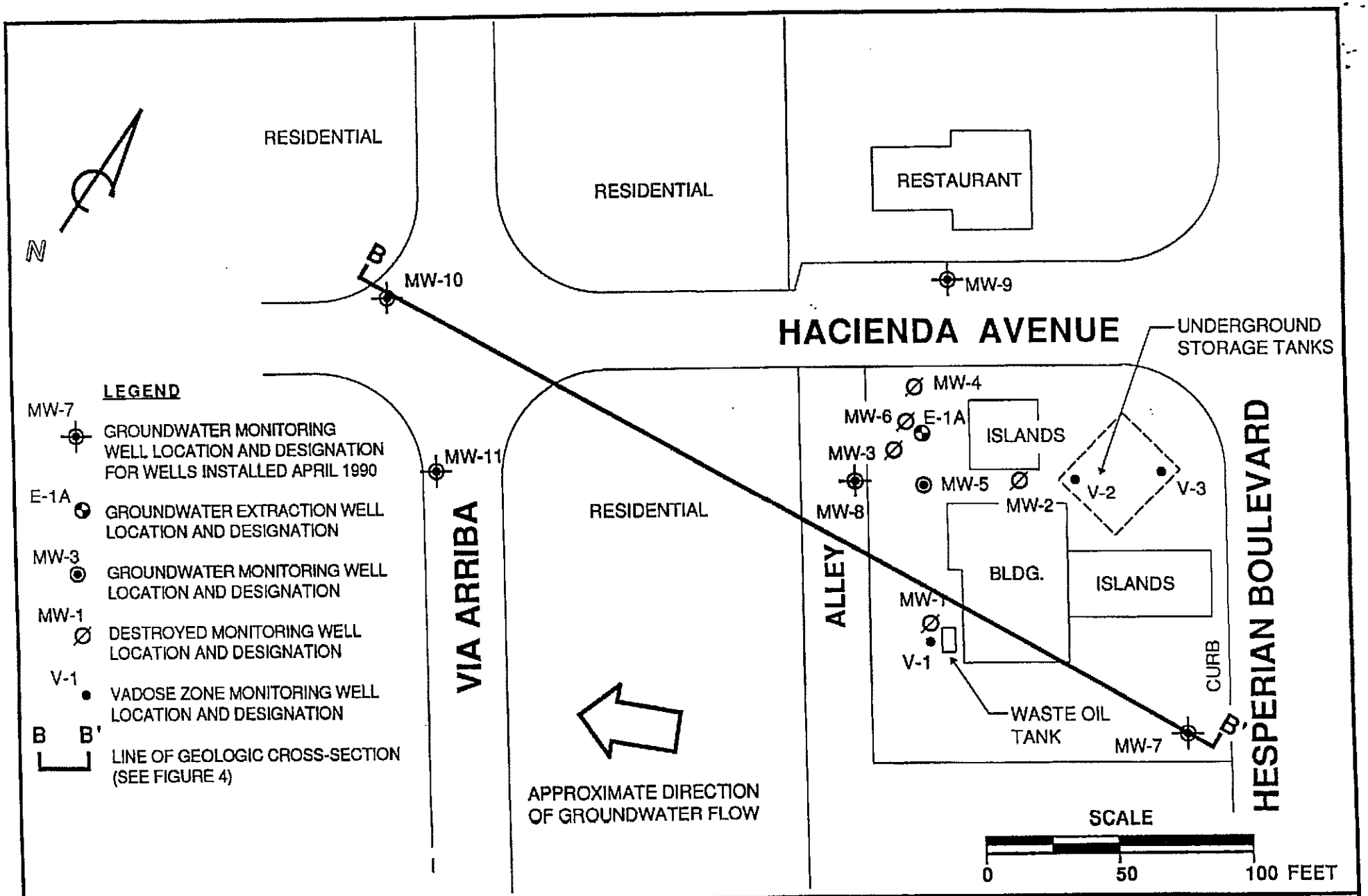
PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. SP-2/V-5
PAGE 1 OF 1

PROJECT NO. 330-06.20
LOGGED BY: RH
DRILLER: WEST HAZMAT
DRILLING METHOD: HSA
SAMPLING METHOD: CAL MOD
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"/0.040"
GRAVEL PACK: 2 X 12 SAND/Aquarium Sand

CLIENT: ARCO
DATE DRILLED: 3-18-93
LOCATION: Hacienda and Via Arriba
HOLE DIAMETER: 10"
HOLE DEPTH: 19'
WELL DIAMETER: 2"/2"
WELL DEPTH: 19'/11'
CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT				1				ASPHALT AND BASEROCK.
	Dp	0		2			CL	SANDY CLAY: black; low plasticity; 10-20% fine sand; trace coarse sand; stiff; no product odor. @2': dark yellowish brown.
				3				
				4				
				5				
	Dp	0		6				
SAND			12	7			SM	SILTY SAND: dark yellowish brown; fine sand; no product odor.
							SP	SAND: dark yellowish brown; fine sand; no product odor.
BENTONITE	Mst	0		8			ML	CLAYEY SILT: dark yellowish brown; 10% fine sand; firm; no product odor.
				9			SC	CLAYEY SAND: yellowish brown; 30-40% fines; fine sand; faint product odor.
	Sat	12	14	10				
				11			CL	CLAY: dark grey; low to moderate plasticity; rootholes; stiff; faint product odor.
GROUT				12				
				13				@13': olive brown with grey mottling along fine sand filled rootholes; caliche; faint product odor.
			22	14				
				15				@15': mottling lessening with depth; no product odor.
		0		16				
SAND				17				
				18				
		0	20	19				@18.5': increased fine sand and silt; no product odor.
								BOTTOM OF BORING AT 19'
				20				
				21				
				22				



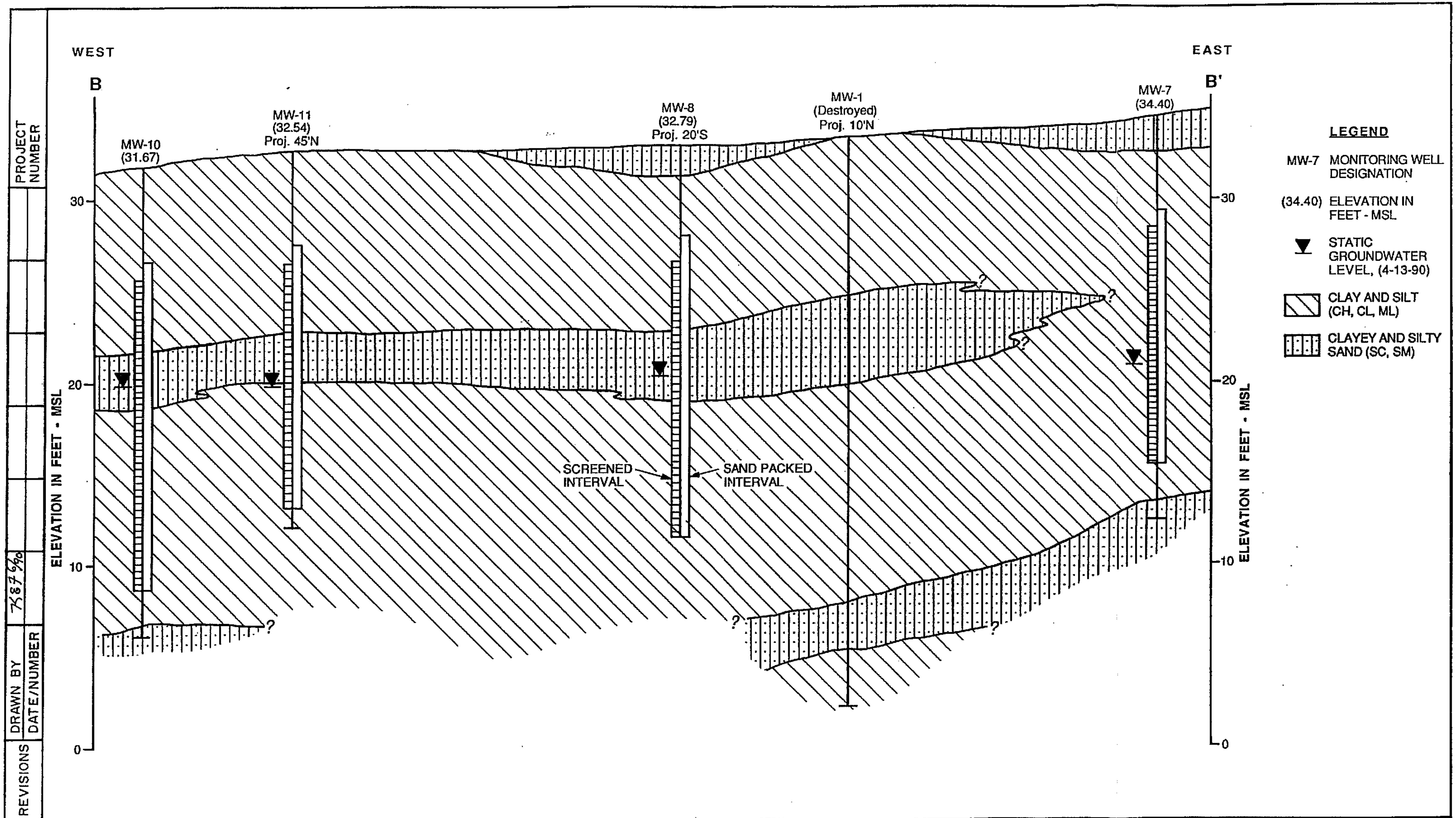
PACIFIC ENVIRONMENTAL GROUP, INC.

ARCO SERVICE STATION #608
17601 Hesperian Boulevard
San Lorenzo, California

SITE MAP

FIGURE: 3

PROJECT: 330-06.06



PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE

HORIZONTAL 1" = 30'
VERTICAL 1" = 5'

ARCO SERVICE STATION #0608
17601 Hesperian Boulevard
San Lorenzo, California

CROSS SECTION B-B'

FIGURE: 4
PROJECT: 330-06.06