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

March 4, 2009

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

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

Chris Panaitescu
Thrifty Oil Company
13116 Imperial Hwy
Santa Fe Springs, CA 90670

Subject: Fuel Leak Case No. RO0000174 and GeoTracker Global ID T0600101368 ARCO #5387/Thrifty Oil #52, 20200 Hesperian Boulevard, Hayward, CA 94541

Dear Messrs. Supple and Panaitescu:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Residual pollution remaining in soil beneath the site includes TPH as gasoline, benzene, and MTBE at concentrations of up to 360 mg/kg, <0.5 mg/kg, and 2.0 mg/kg, respectively.
- Maximum concentrations of up to 200 µg/L TPH as gasoline and 0.53 µg/L MTBE remain in groundwater beneath the site.

If you have any questions, please call Paresh Khatri at (510) 777-2478. Thank you.

Sincerely,

Donna L. Drogos, P.E.
LOP and Toxics Program Manager

Enclosures:
1. Remedial Action Completion Certificate
2. Case Closure Summary

cc:
Ms. Cherie McCaulou (w/enc)
SF- Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Closure Unit (w/enc)
State Water Resources Control Board
UST Cleanup Fund
P.O. Box 944212
Sacramento, CA 94244-2120

Paresh Khatri (w/orig enc), D. Drogos (w/enc), R. Garcia (w/enc)

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REMEDIAL ACTION COMPLETION CERTIFICATE

Subject: Fuel Leak Case, RO0000174, ARCO #5387/Thrifty Oil #52, 20200 Hesperian Boulevard, Hayward, CA 94541

Dear Messrs. Supple and Panaitescu:

This letter confirms the completion of a site investigation and remedial action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Ariu Levi
Director
Alameda County Environmental Health

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

I. AGENCY INFORMATION

Date: July 24, 2008

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 777-2478
Responsible Staff Person: Paresh Khatri	Title: Hazardous Materials Specialist

II. CASE INFORMATION

Site Facility Name: ARCO #5387 / Thrifty Oil #52		
Site Facility Address: 20200 Hesperian Boulevard, Hayward, California 94541		
RB Case No.: 01-1481	Local Case No.: 817	LOP Case No.: RO0000174
URF Filing Date: --	Global ID No.: T0600101368	APN: 432-0020-030-04

Responsible Parties	Addresses	Phone Numbers
Paul Supple	BP West Coast Products, LLC. P.O. Box 1257 San Ramon, CA 94583	925-275-3801
Chris Panaitescu	Thrifty Oil Company 13116 Imperial Hwy Santa Fe Springs, CA 90670	562-921-3581

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	1x12,000-gallon	Gasoline	Removed	2/1/2007 2/5 2/7/2007
2	1x 10,000-gallon	Gasoline	Removed	2/1/2007 2/5-2/7/2007
3	1x 8,000-gallon	Gasoline	Removed	2/1/2007 2/5-2/7/2007
4	1x 6,000-gallon	Gasoline	Removed	2/1/2007 2/5-2/7/2007
Piping			Removed	3/1/2002

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Leaking dispenser		
Site characterization complete? Yes	Date Approved By Oversight Agency: 5/12/2008	
Monitoring wells installed? Yes	Number: 12	Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 4.95 ft bgs (MW-1, 1/28/1998)	Lowest Depth: 21.25 ft bgs (A-9, 1/28/1998)	Flow Direction: West to Northwesterly
Most Sensitive Current Use: Potential drinking water source.		

Summary of Production Wells in Vicinity: In May/June 2001, a well survey was conducted that identified 8 wells within a 2,000 feet radius of the Site, of which only one unknown diameter irrigation well with a total depth of 155 feet bgs, screened from 35 to 155 feet bgs, was identified to be located in the general down-gradient direction of the Site, at an approximate distance of 500 feet northwest of the Site. Considering the non-migratory residual concentrations of dissolved phase petroleum hydrocarbons in the groundwater that is confined to the primary source areas at the Site, no water wells, deeper drinking water aquifers, surface water or other sensitive receptors are likely to be impacted.

Are drinking water wells affected? No	Aquifer Name: San Leandro Cone, a sub basin of the Bay Plains Groundwater Basin
Is surface water affected? No	Nearest SW Name: Sulphur Creek is approximately 0.2 miles south of the site.
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	One 12,000-gallon One 10,000-gallon One 8,000-gallon One 6,000-gallon	Disposal to Ecology Control Industries 255 Parr Blvd., Richmond, CA	2/1/2007 2/5-2/7/2007
Piping	Unknown	Disposal, unknown location	3/1/2002
Free Product	NA	---	---
Soil	184.54 ton	Disposal to Forward Landfill, Manteca, CA	02/14-02/15/2002
Groundwater	12,300-gallons	Treated and Disposed to Sanitary Sewer	11/4-11/9/2002

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
(Please see Attachments for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	2,400 (8N, 2.5-3 ft, 5/27/1999)	360 (OE-DP-1-12, 2/06/2002)	210,000 (MW-2, 3/10/1992)	200 (MW-2, 09/05/2007)
TPH (Diesel)	NA	NA	NA	NA
TPH (Motor Oil)	NA	NA	NA	NA
TRPH	NA	NA	NA	NA
Benzene	0.38 (8N, 2.5-3 ft, 5/27/1999)	<0.5 (OE-DP-1-12, 2/06/2002)	44,000 (MW-2, 3/10/1992)	<0.5 (MW-2, 09/05/2007)
Toluene	18 (8N, 2.5-3 ft, 5/27/1999)	0.87 (UST-6-15, 12/07/2002)	3,900 (MW-2, 3/10/1992)	<0.50 (MW-2, 09/05/2007)
Ethylbenzene	9.8 (8N, 2.5-3 ft, 5/27/1999)	2.1 (OE-DP-1-12, 2/06/2002)	1,700 (MW-2, 3/10/1992)	<0.50 (MW-2, 09/05/2007)
Xylenes	210 (8N, 2.5-3 ft, 5/27/1999)	2.5 (OE-DP-1-12, 2/06/2002)	5,800 (MW-2, 3/10/1992)	<0.50 (MW-2, 09/05/2007)
MTBE	19[5] (8N, 2.5-3 ft, 5/27/1999)	2.0[4] (UST-8-14, 2/06/2002)	902[3] (MW-2, 12/09/2002)	0.53[2] (MW-1, 09/05/2007)
Lead	NA	130[1] (PL-2-5, 5 FT, 2/01/2002)	NA	NA

[1] All other Pb concentrations on-site ranged from <10 to 20 mg/kg.
[2]Other VOCs (groundwater µg/L after cleanup): 0.53 µg/L MtBE, < 20 µg/L TBA, <0.5 µg/L DIPE, <0.5 µg/L ETBE, <0.5 µg/L TAME, <0.5 µg/L EDB, <0.5 µg/L 1.2-DCA, <300 µg/L EtOH
[3]Other VOCs (groundwater ppb before cleanup): 902 µg/L MtBE, 66 µg/L TBA, 13 µg/L TAME, <0.5 µg/L ETBE, <0.5 µg/L DIPE
[4]Other VOCs (Soil mg/kg after cleanup): < 0.5 mg/kg TBA, <0.5 mg/kg DIPE, <0.5 mg/kg ETBE, <0.85 mg/kg TAME, <20 mg/kg EtOH
[5]Other VOCs (Soil mg/kg before cleanup): 19 mg/kg MtBE, 4.1 mg/kg TBA, 21 mg/kg TAME, <0.05 mg/kg DIPE, 20 mg/kg EtOH

Site History and Description of Corrective Actions:

On August 7 and 8, 1986, Groundwater Technology, Inc. (GTI) conducted an environmental investigation at the subject site consisting of installing four soil borings (SB-1 through SB-4) and three monitoring wells (MW-1 through MW-3). Total petroleum hydrocarbons (TPH) as gasoline (g) were detected in soil in borings SB-2, SB-3, and SB-4 at concentrations of 49 milligrams per kilogram (mg/kg), 42 mg/kg, and 20 mg/kg, respectively. TPH-g was detected in groundwater samples collected from the three groundwater monitoring wells ranging from 2,900 micrograms per liter (µg/L) to 14,000 µg/L.

In October and December 1991, GeoStrageties, Inc. (GSI) installed an additional four groundwater monitoring wells designated A-4 through A-7. TPH-g was detected in soil only from boring A-4. Groundwater samples collected from the entire monitoring well network detected petroleum hydrocarbons in six of the seven wells ranging in concentrations from 1,600 µg/L to 23,000 µg/L.

In August 1992, GSI installed two groundwater monitoring wells A-8 and A-9, and one groundwater recovery well AR-1. TPH-g was detected in soil samples from boring AR-1 collected at depths of 10 and 14.5 feet bgs at concentrations of 1 mg/kg and 8.8 mg/kg, respectively. TPH-g was detected in recovery well AR-1 at a concentration of 820 µg/L and reported as non-detect for samples collected from monitoring wells A-8 and A-9.

On October 13 and 14, 1992, GSI conducted a 4-hour step-drawdown and a 24-hour constant-rate aquifer tests at the site. Drawdown was measured in recovery well AR-1 at 12.061 ft below the ground surface (bgs). Transmissivity ranged from 4,147 to 11,000 gallons per day per foot was calculated utilizing the Jacob Straight Line Method. Storativity ranged from 1.09×10^{-4} to 9.92×10^{-2}. Drawdown observed in observation wells ranged between 0.08 and 0.47 feet below initial water levels. The maximum extent of influence was observed in well A-7, located approximately 80 feet apart from the pumping well AR-1.

In November 1992, GSI installed one off-site groundwater monitoring well A-10, down-gradient of the site. TPH-g was not detected above the laboratory detection limit in soil samples analyzed from boring A-10. TPH-g was detected at 660 µg/L in a groundwater sample collected from monitoring well A-10.

In March 1993, GSI installed six onsite exploratory borings, installed recovery well AR-2, dual vapor extraction/air sparging well AS-1, air sparging well AS-2, and vapor extraction wells AV-1 through AV-3.

Seven exploratory borings were drilled onsite on December 6, 1993, and completed as air sparging wells AS-3 through AS-5, AS-7 through AS-9, and vapor extraction well AV-4. One exploratory boring was drilled onsite on January 24, 1994 and completed as air sparging well AS-6. Soil vapor extraction and air sparging system began operation on February 15, 1994. The system consists of vapor extraction wells, air-sparing wells, associated piping, internal combustion engine (ICE) for vapor extraction and abatement, and sparge blower and control panel with alarm monitor. Air sparging did not begin until March 15, 1994 because of delays by Pacific Gas and Electric in installing electric service at the site. The system operation was limited to regular daytime working hours (8:00 a.m. to 6:00 p.m.) due to complaints from nearby residents regarding the noise caused by the vapor extraction equipment.

On June 18, 1994, GSI ceased operation of the IC engine due to a significant decrease in hydrocarbon concentration in extracted vapors. On September 1, 1994, Pacific Environmental Group (PEG) assumed environmental consulting responsibility from GeoStrategies, Inc. Based on a cost analysis performed by PEG, a operational cost savings can be gained by implementing carbon adsorption for the treatment of extracted vapors over continue operation of the IC engine.

In January 1995, ACRO transferred the service station operation and environmental responsibility to Thrifty Oil Company.

On August 28, 1995, ARCO removed their remediation equipment from the site and Thrifty Oil assumed control of the remediation. On August 22, 1998, Thrifty Oil requested case closure based on low concentrations of contaminants in groundwater.

On May 27, 1999, four soil samples were collected beneath dispensers #6, #7, and #8 because an ACEH CUPA Inspector noticed a valve was dripping fuel from dispenser #8. Soil sample analytical results detect 2,400 mg/kg TPH-g, 0.38 mg/kg benzene, and 10 mg/kg MtBE underneath dispenser #8.

In May through June 2001, a well survey was conducted within a one-mile radius of the Site using Records obtained from the Department of Water Resources (DWR) and Alameda County Public Works department. Approximately 59 wells were noted to be located within a one mile radius of the Site, of which, 9 were domestic 38 were irrigation, 9 were unknown, and 3 were industrial. Approximately 8 wells were identified within a 2,000 feet radius of the Site, of which 6 were irrigation wells and 2 were of unknown usage. However, of the 8 wells identified within a 2,000 feet radius of the Site, only one irrigation well was identified to be located in the general down-gradient direction of the Site, at an approximate distance of 500 feet northwest of the Site. Considering the non-migratory residual concentrations of dissolved phase petroleum hydrocarbons in the groundwater that is confined to the primary source areas at the Site, no water wells, deeper drinking water aquifers, surface water or other sensitive receptors are likely to be impacted.

During the second quarter 2002, ARCO resumes environmental responsibility for the site with URS as their consultant.

On February 1, and 5 through 7, 2002, four USTs (one 12,000-gallon, one 10,000-gallon, one 8,000-gallon and one 6,000-gallon), were excavated from the site. TPH-g concentrations ranged from 0.76 mg/kg (UST-3-14) to 110 mg/kg (UST-8-4). Benzene was not detected above the laboratory reporting limit. MtBE concentrations ranged from 0.50 mg/kg (UST-2-14) to 2.0 mg/kg (UST8-14).

On February 6 and 7, 2002, Delta oversaw soil over-excavation of the upper two feet of soil from beneath the former 6,000 and 8,000-gallon USTS and limited over-excavation of soil in the area of dispenser one (DP-1). Approximately 60 and 40 cubic yards of soil were over-excavated from the tank basin area and around DP-1, respectively. Total petroleum hydrocarbons as gasoline concentration ranged from 16 mg/kg in soil sample OE-DP-1-12.3 to 360 mg/kg in soil sample O E-DP-1-12. A benzene concentration of 0.13 mg/kg was detected in soil sample OE-DP-1-12.3. Methyl tertiary butyl ether concentrations ranged from 0.22 mg/kg in soil sample UST-6-15 to 1.3 mg/kg in soil sample UST-8-15.

On November 4 through 9, 2002, URS conducted a DPE pilot test to mitigate TPH and MtBE impacts to soil and groundwater. Based on a pump performance curve, the vapor flow rate was approximately 300 ACFM during the test. The total vacuum for the system ranged from 20 in Hg to 22 in Hg with an average system vacuum of 20.75 in Hg. Based on the laboratory results the influent TPH-g vapor concentrations during the test ranged from 2.9 to 20 ppmv for well AR-2 and remained below the detection limit of 2.5 ppmv for well MW-2. Assuming the molecular weight for gasoline to below 100 grams during the pilot test a total of 9.3 pounds of TPH-g and 0.05 pounds of MtBE were removed as vapor.

During the pilot test, approximately 12,300 gallons of groundwater was extracted at an average rate of 1.71 gpm. Approximately 0.06 pounds of TPH-g and 0.01 pounds of MtBE were removed from groundwater during the pilot test.

MTBE detections at AR-2 decreased from 4 .43 µg/L to below the detection limit of 5.0 µg/L from third to fourth quarter (after the DPE test). Well MW-2 showed an increase in MTBE from 228 µg/L TO 529 µg/L from third to fourth quarter 2002. The test results indicate limited success using DPE on wells MW-2 and AR-1 to mitigate soil and groundwater impact by hydrocarbons and MtBE.

On December 16, 2003, URS injected hydrogen peroxide in wells AR-I, AR-2, MW-1, MW-2, and A -7 and monitored baseline natural attenuation parameters for these wells on November 17, 2003 and on March 1, 2004. Peroxide injections were conducted under pressure for wells MW-I and MW-2. The subsequent monitoring of hydrocarbon concentrations indicated that hydrogen peroxide injection did not have a uniform effect on hydrocarbon concentrations in the injection wells. Additionally, the natural attenuation parameters did not exhibit any conclusive trends.

During four mobilizations on December 3, 6, 10 and 21, 2004, URS staff supervised Precision Sampling, Inc and Gregg Drilling and Testing Inc. in advancing ten soil gas borings SG-I through SG-I0 at the Site. A total of twenty-three soil gas samples collected in Summa Canisters including two duplicates, and two soil samples collected in 14 Encore™ containers were sampled from borings SG-I through SG-10 and submitted for chemical analyses to STL. A total of six soil samples collected from borings SG-5, SG-9, and SG-10 at depths ranging from 4.5 to 9 feet bgs were submitted to URS's Pleasant Hill Laboratory for physical properties analyses, including bulk density, soil moisture, effective permeability, porosity and grain size distribution. The respective samples were also analyzed for organic carbon content (by the Walkee Black Method, as requested by ACEH staff) by STL Laboratories. The soil type was analyzed as brown fine sandy clays, with a moisture content ranging between 17.89 and 20.92 percent. The average porosity ranged between 33.53 and 37.6 percent, the hydraulic conductivity ranged between 1.10×10^{-8} and 5.17×10^{-8} cm/sec, and the total organic content ranged between 0.0058 and 0.25 percent. The analytical results of soil and soil gas samples collected from SG-I through SG-I0 indicate that the BTEX and MtBE concentrations in onsite soils do not exceed their applicable and ACEH approved Site Closure Goals for the Site or the more conservatives soil vapor ESLs. TPH-g concentrations in soil gas samples SG-2-8.5 (at 8.5 feet bgs), GG-3-7.0 Dup (at 7.0 feet bgs), SG-7-8.5 (at 8.5 feet bgs), and SG-5-8.5 (at 8.5 feet bgs), collected from the deeper silts and sandy silt stratum, exceeded the Site Closure Goal (ESLs) for TPH-g. The residual TPH-g/GRO concentrations encountered in deeper onsite soils are unlikely to pose significant human health risks in the future since the shallow soil gas samples did not detect TPH-g or BTEX above the ESL indicating that upward migration (i.e. contaminant vapor volatilization to indoor air) does not appear to be a completed exposure pathway. Considering that the soil gas ESLs, protective of indoor air, are more relevant and representatively applicable to soil gas samples collected from within 5 feet bgs, it is likely that the Site Closure Goals may be overly conservative for the residual TPHg/GRO concentrations encountered in soil gas samples collected from below 5 feet bgs. It is also to be noted that the hydraulic conductivity of the onsite soils in the deeper silty and sandy silty stratum range from $1.10x\ 10^{-8}$ cm/sec to $8.47x\ 10^{-8}$ cm/sec, which is very low. This thereby minimizes the potential for residual TPH-g/GRO concentrations in deeper onsite soils from volatilizing from the subsurface to the surface.

The most recent groundwater sampling data collected in September 2007 detected 200 µg/L TPH-g, <0.5 µg/L benzene, 0.53 µg/L MtBE, <20 µg/L TBA, and <300 µg/L ethanol. The groundwater contaminant plume appears defined and stable based on consecutive groundwater sampling events between March 1991 through September 2007.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a significant risk to human health based upon current land use and conditions.		
Site Management Requirements: City of Hayward Building Department has been notified that should excavation or development of the property be proposed that may encounter impacted soil or groundwater, Alameda County Environmental Health must be notified as required by Government Code Section 65850.2.2. The current property owner/developer must submit a soil and groundwater management plan for review prior to any construction activities.		
Should corrective action be reviewed if land use changes? Yes		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 12
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

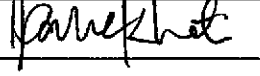
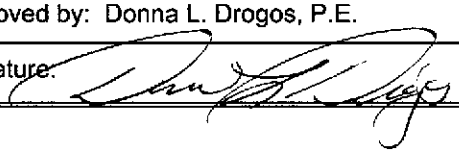
Currently, residual soil contamination of TPH-g and benzene at concentrations of 360 mg/kg and <0.5 mg/kg, respectively, was left in place near the dispenser island, and MtBE at a concentration of 2.0 mg/kg was left in place within the former UST pit. The residual contamination does not appear to pose a significant risk to the current commercial use of the site or to groundwater resources in the area. Additionally, soil vapor sample analytical results, did not detect TPH-g, BTEX, or MtBE above the Residential Land-use Soil Gas Screening Level.

Residual concentrations of TPH-g and MtBE were was detected in groundwater at concentrations of up to 200 µg/L and 0.53 µg/L, respectively, of which TPH-g exceeds the ESLs where groundwater is a potential drinking water source. The concentrations of TPH-g are expected to decrease over time as a result of biodegradation and natural attenuation processes. Please note that EDB and EDC were not analyzed in soil.

Conclusion:

Alameda County Environmental Health staff consider that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site based on the current commercial use of the site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Paresh Khatri	Title: Hazardous Materials Specialist
Signature: 	Date: July 24, 2008
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: 	Date: 07/24/08

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions.

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB: 8/4/08
Signature:	Date: 8/12/08

VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH:	Date of Well Decommissioning Report:	
All Monitoring Wells Decommissioned:	Number Decommissioned:	Number Retained:
Reason Wells Retained: No monitoring wells installed or retained.		
Additional requirements for submittal of groundwater data from retained wells: None		
ACEH Concurrence - Signature:		Date:

Attachments:

1. Tables 1 & 2 (Comparison of residual contamination to applicable ESLs).
2. Site Vicinity Map.
3. April 1991 Site Plan and Cross-sections.
4. May 1994 Site Plan and Cross-sections.
5. Cumulative Soil Analyses Data from August 1996 through January 1994.
6. Soil Vapor Extraction System Performance Data.
7. May 1999 Dispenser Sampling Location Plan and Laboratory Results
8. February 2002 UST & Dispenser Soil Sample Location Map, Over-excavation Map, and Analytical Data.
9. Soil Gas Sample Location Map and Analytical Data.
10. September 2007 Groundwater Analytical Summary Map and Cumulative Groundwater Analyses Data.
11. Well Survey Map and summary Table.
12. Boring Logs (46 pages).

This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.

Environmental Impacts in Soil

ARCO #5387 / Thrifty Oil #52

20200 Hesperian Boulevard, Hayward, California

Table 1. Comparison of Maximum Residual Soil Concentrations at the Site to Relevant Cleanup Standards (mg/kg)

	TPH-g (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl Benzene (mg/kg)	Xylenes (mg/kg)	MtBE (mg/kg)
Maximum Residual Soil Concentrations at Site in milligrams per kilogram	**360**[4]	**<0.5**[4]	0.87[5]	2.1[4]	**2.5**[4]	**2.0**[6]
RWQCB, Region 2 ESLs[1]	83[3]	0.044[3]	2.9[3]	3.3[3]	2.3[3]	0.023[3]

[1] Environmental Screening Levels (ESLs); Shallow Soil Screening Level for residential land use where potentially impacted groundwater is current or potential drinking water resource. Shallow soils defined as soils situated <3 meters below the ground surface. Depth to water ranges between 4.9 ft and 21.25 ft bgs.

[2] Lowest ESL value based on direct exposure scenario. Depth to water ranges between 4.9 ft and 21.25 ft bgs.

[3] Lowest ESL value based on groundwater protection (soil leaching). Depth to water ranges between 4.9 ft and 21.25 ft bgs.

[4] Soil sample collected at 12 feet bgs. Depth to water ranges between 4.9 ft and 21.25 ft bgs.

[5] Soil sample collected at 15 feet bgs. Depth to water ranges between 4.9 ft and 21.25 ft bgs.

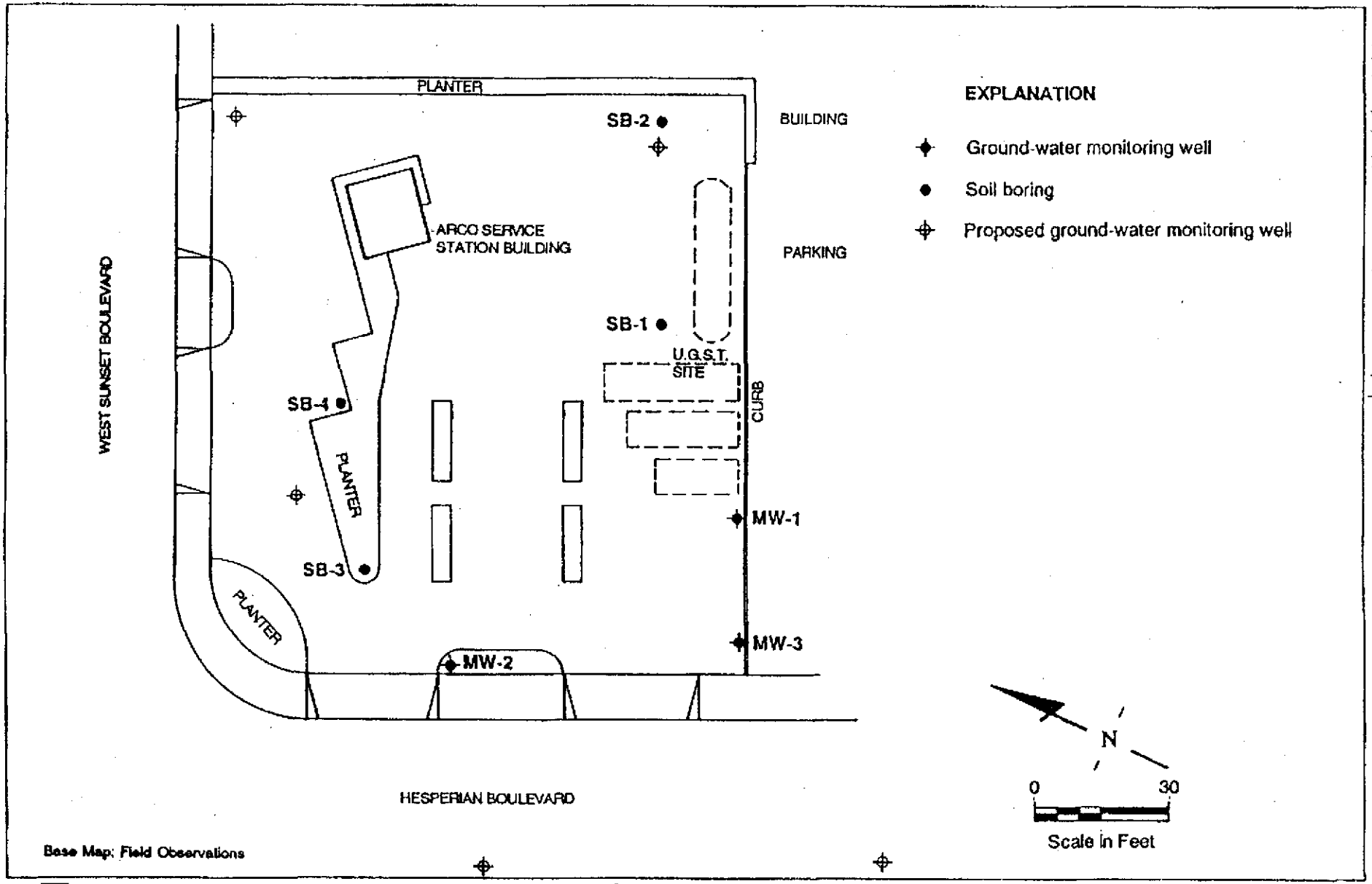
[6] Soil sample collected at 14 feet bgs. Depth to water ranges between 4.9 ft and 21.25 ft bgs.

Environmental Impacts in Groundwater
ARCO #5387 / Thrifty Oil #52
20200 Hesperian Boulevard, Hayward, California

Table 2. Comparison of Maximum Residual Groundwater Concentrations at the Site to Relevant Cleanup Standards (µg/L)

	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)
Maximum Residual Groundwater Concentrations at Site	**200**	<0.5	<0.5	<0.5	<0.5	0.53	<20
RWQCB Region 2 ESLs[2]	100[1] 100[3] 210[4] --[6]	1.0[1] 170[2] 1.0[3] 540[4] --[6]	40[1] 40[2] 150[3] 380,000[4] --[6]	30[1] 30[2] 300[3] 170,000[4] --[6]	20[1] 20[2] 1,800[3] 160,000[4] --[6]	5[1] 5[2] 13[3] 24,000[4]	--[1] 50,000[2] --[3] --[4]
ASTM Tier 1 Standard Human Health RBSL (Benzene)	NA	11,000[5] 23.8[6]	32,800	77,500	NA	NA	NA

[1] Environmental Screening Levels (ESLs) for impacted subsurface groundwater less than 10 feet, where groundwater IS a current or potential drinking water resource
[2] Final Groundwater Screening Level, based on ceiling value (taste and odor threshold)
[3] Groundwater Screening Level, based on drinking water toxicity
[4] Groundwater Volatilization to indoor air (residential) Level,
[5] Groundwater Vapor Intrusion from groundwater to buildings (residential, chronic hazard quotient = 1)
[6] Final Groundwater Screening Level, based on Aquatic Habitat



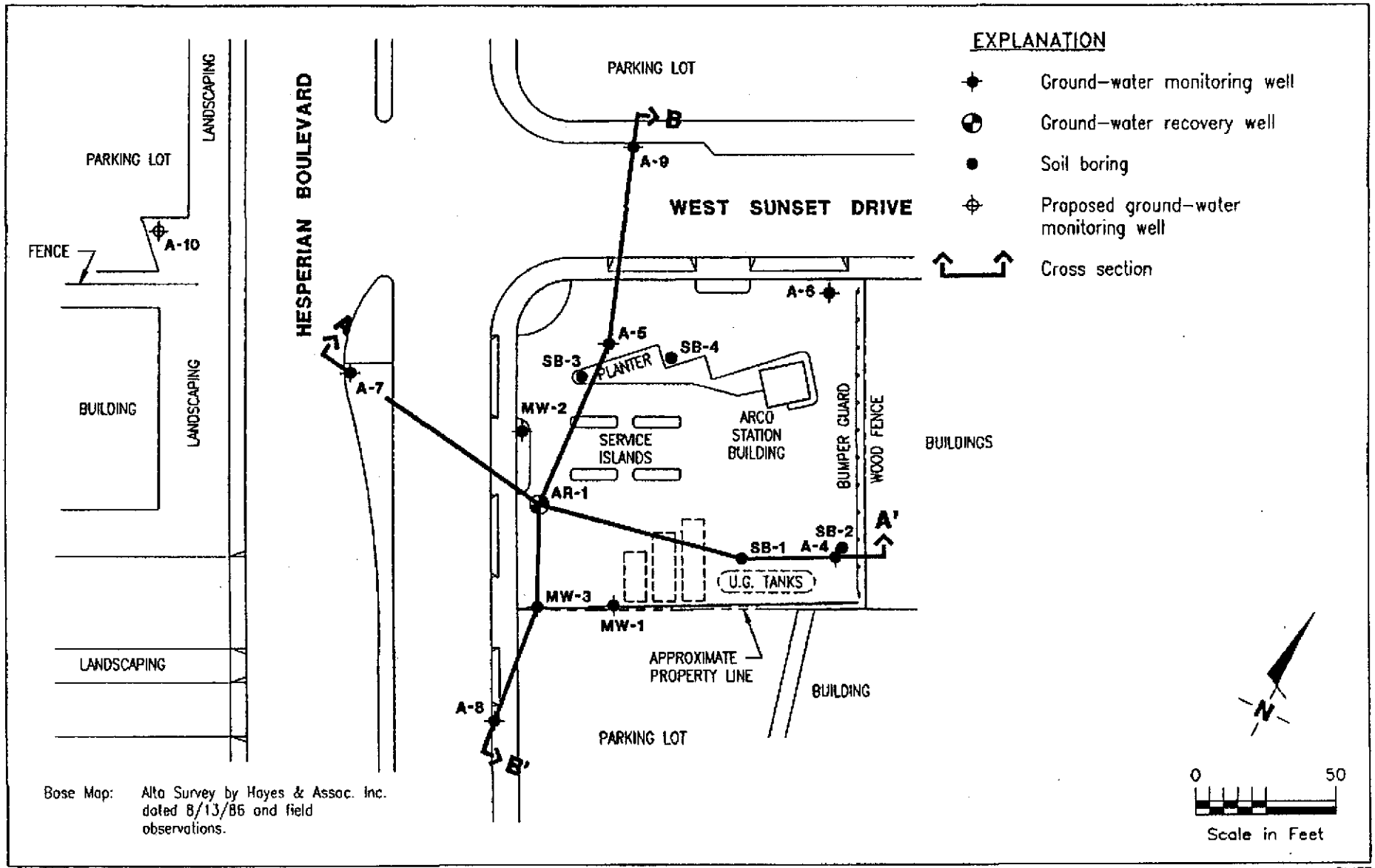
APRIL 30, 1991 WORK PLAN - GSI

GeoStrategies Inc.

SITE PLAN
ARCO Service Station #5387
20200 Hesperian Boulevard
San Lorenzo, California

PLATE **1**

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE	REVISED DATE
792601-1	DHP	4/91		

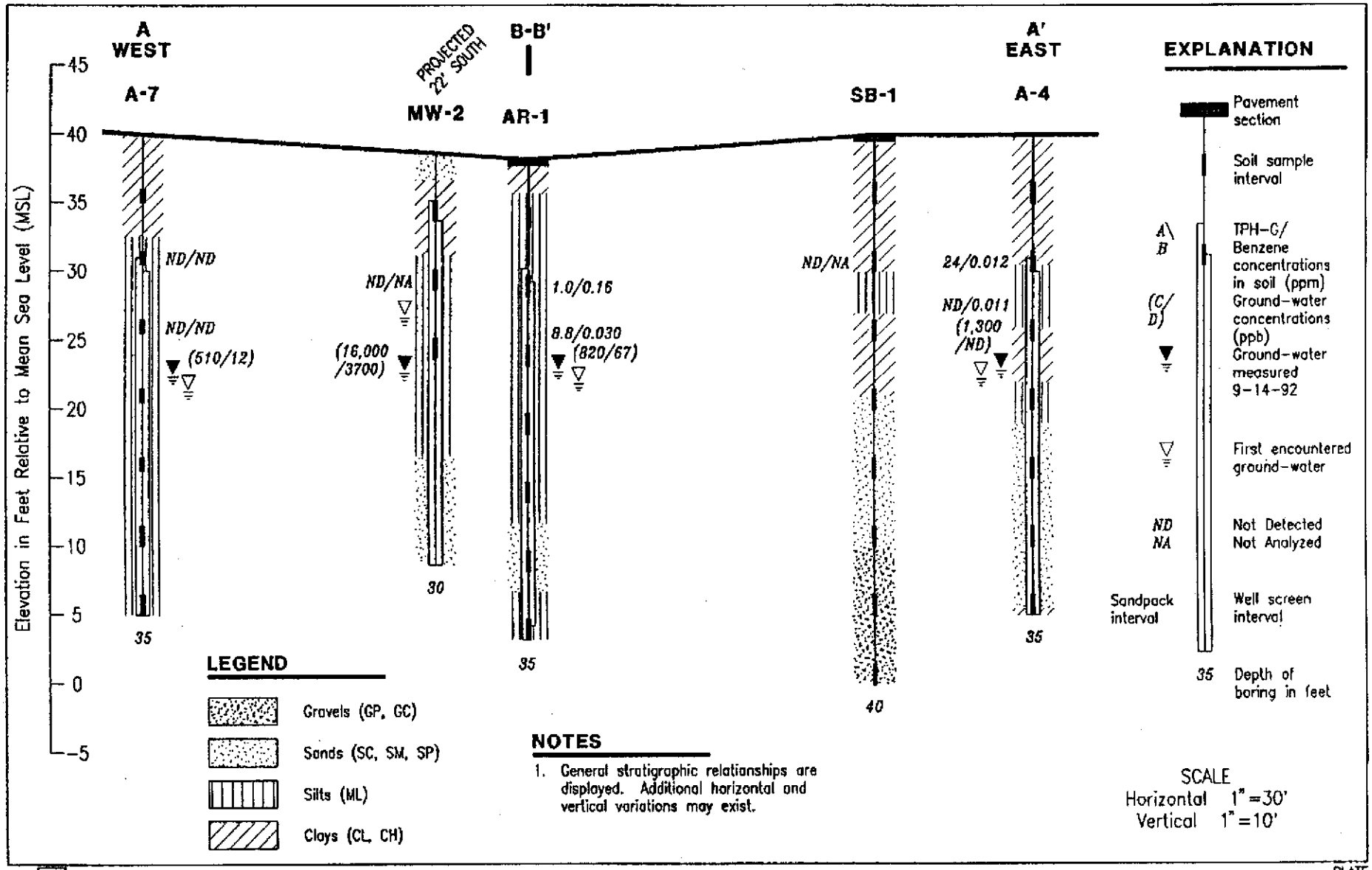


GeoStrategies Inc.

SITE PLAN
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

PLATE
2

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
7926		11/92	

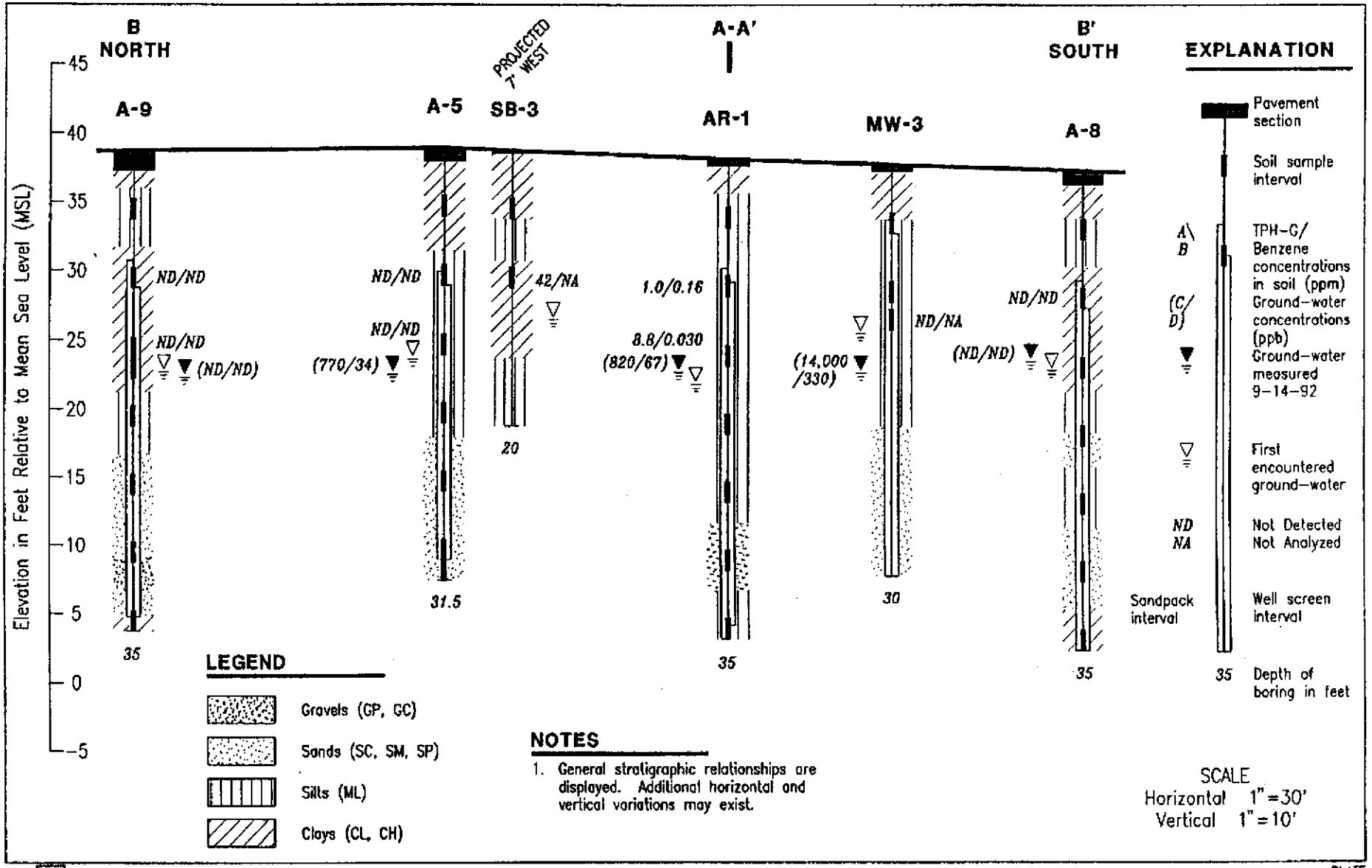


GeoStrategies Inc.

CROSS SECTION A-A'
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

PLATE
3

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
792605-7		11/92	

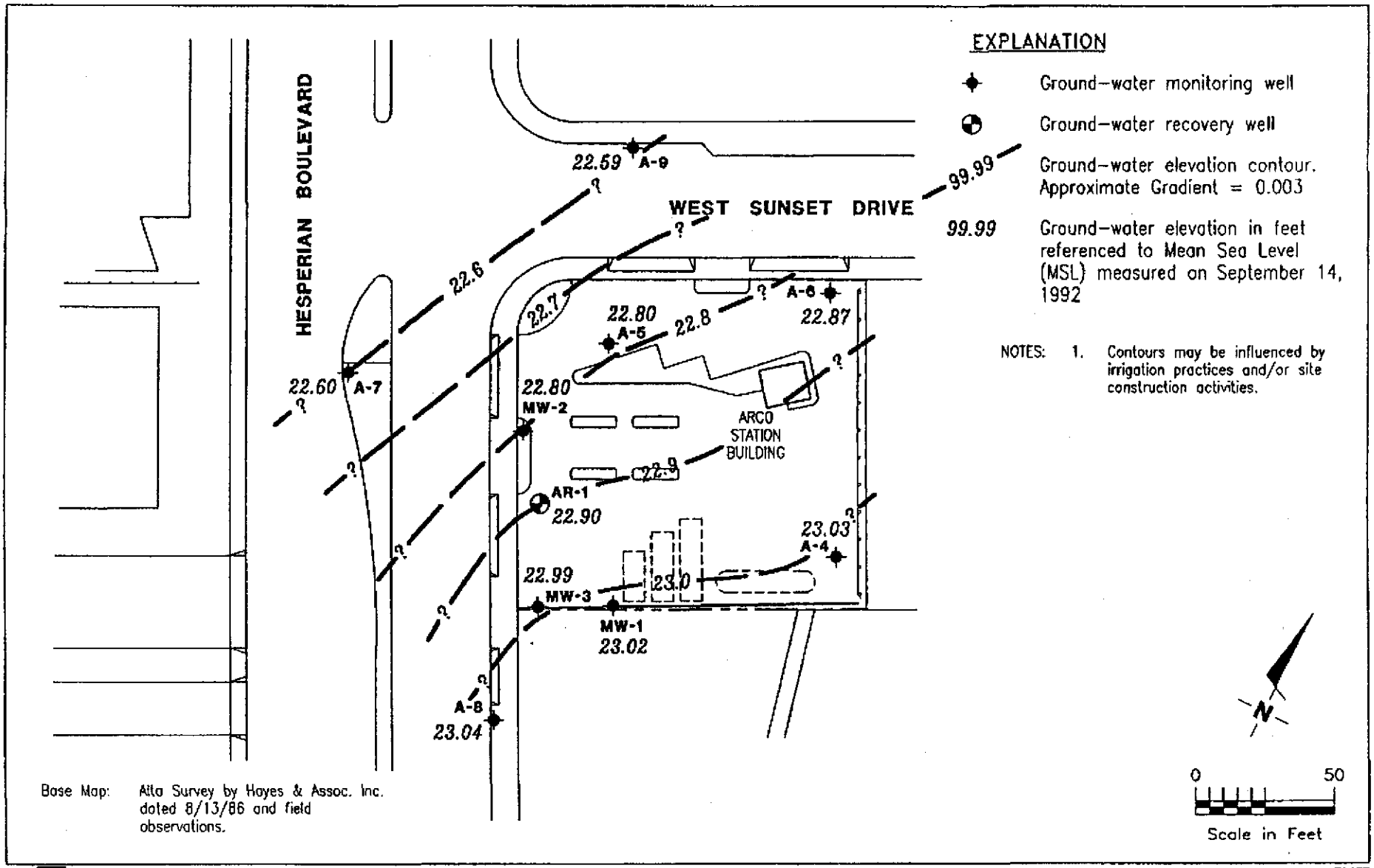


GeoStrategies Inc.

CROSS SECTION B-B'
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

PLATE
4

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
792605-7		11/92	

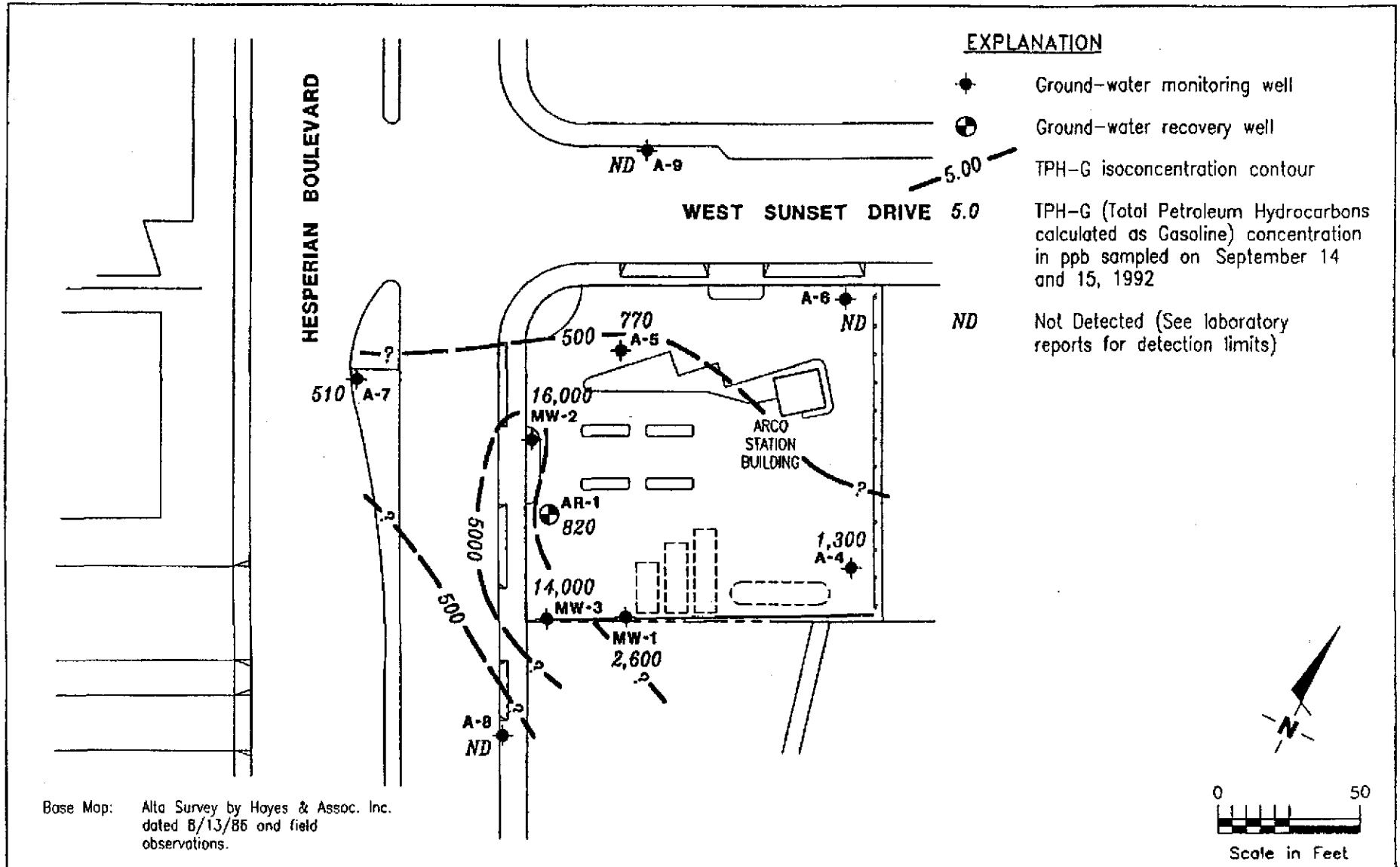


GeoStrategies Inc.

POTENTIOMETRIC MAP
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

PLATE
5

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
792605-7		11/92	



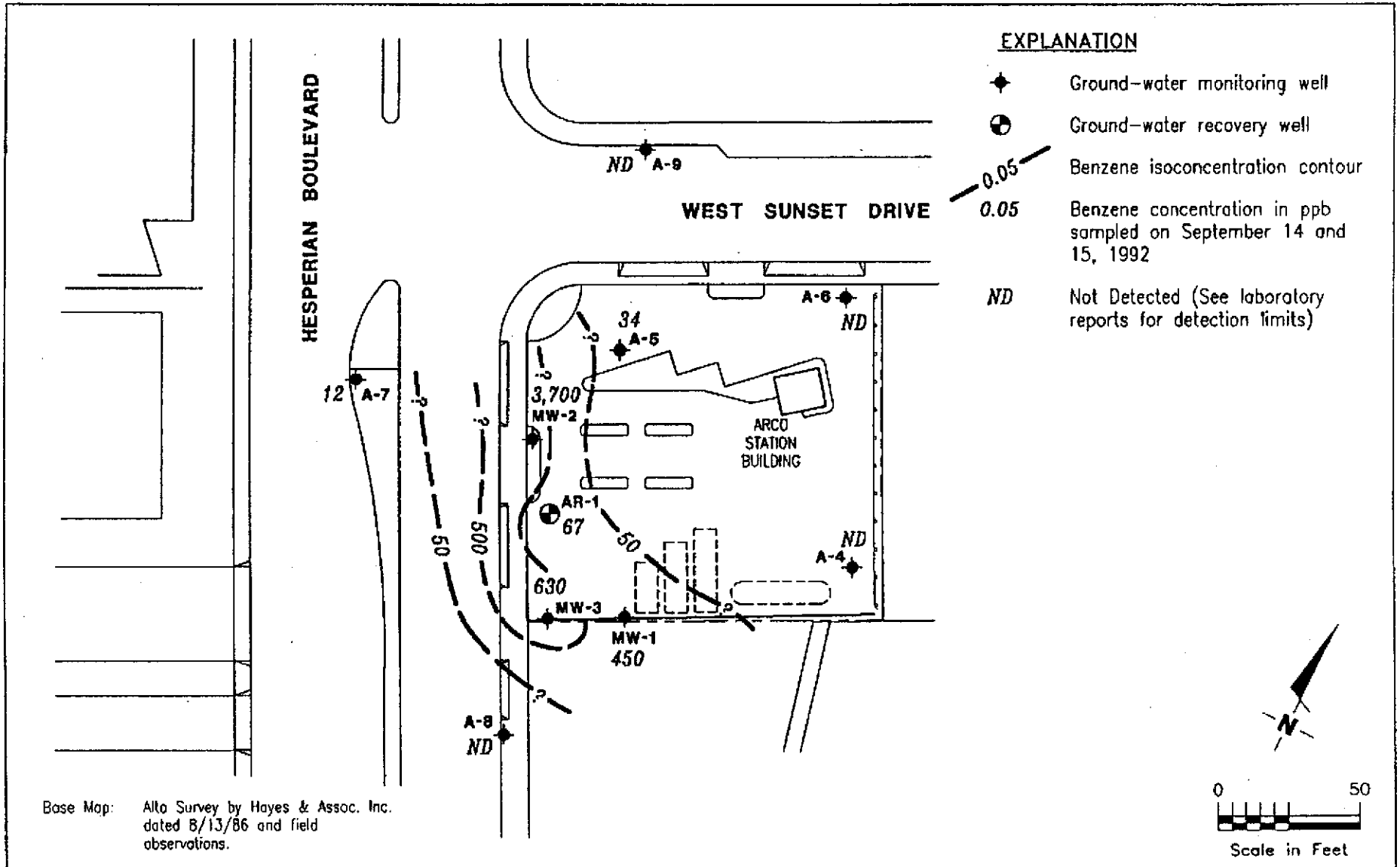
Base Map: Alta Survey by Hayes & Assoc. Inc. dated 8/13/86 and field observations.

GeoStrategies Inc.

TPH-G ISOCONCENTRATION MAP
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

PLATE 6

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
792605-7	RTM	11/92	

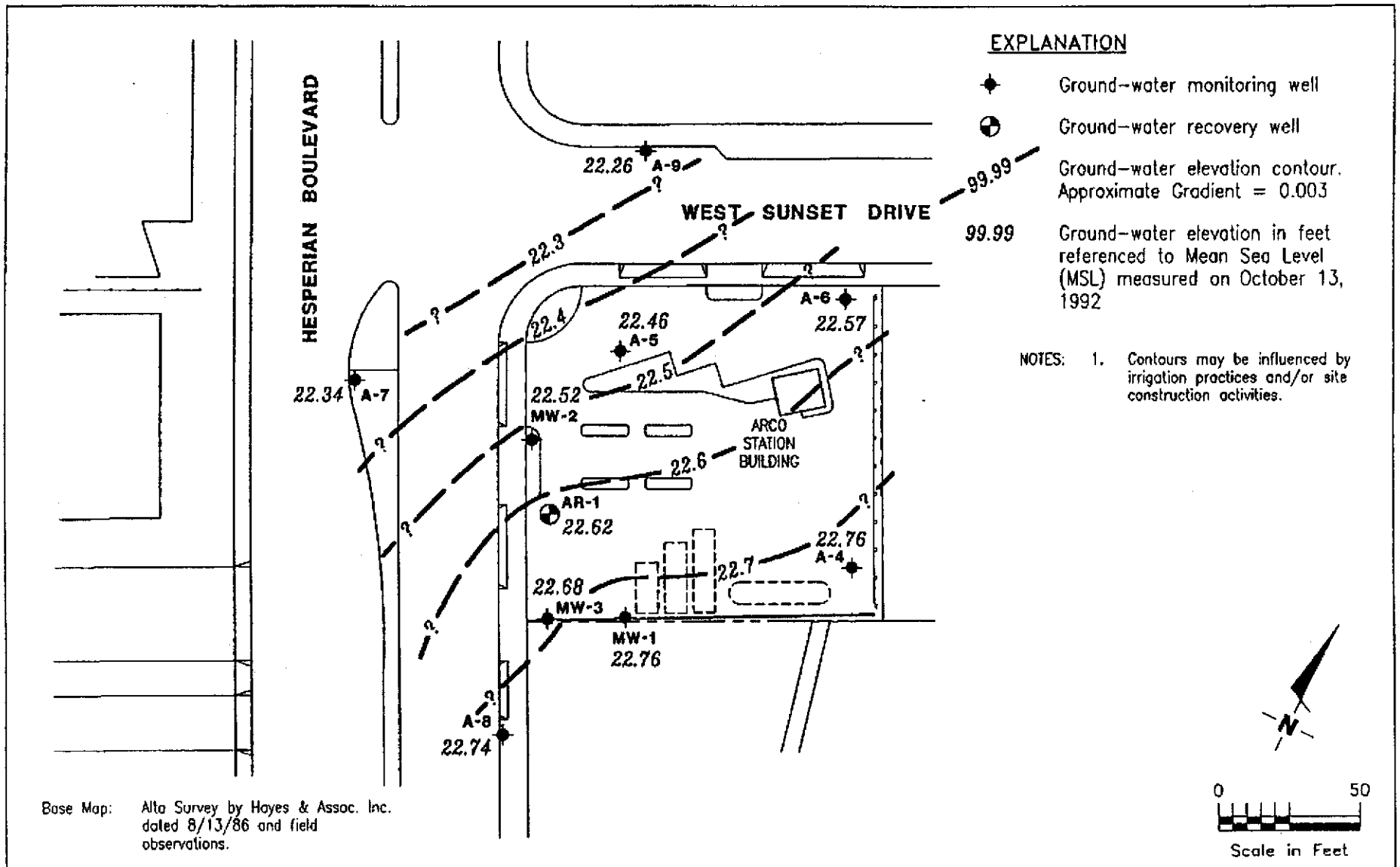


GeoStrategies Inc.

BENZENE ISOCONCENTRATION MAP
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

PLATE 7

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
792605-7	RCM	11/92	

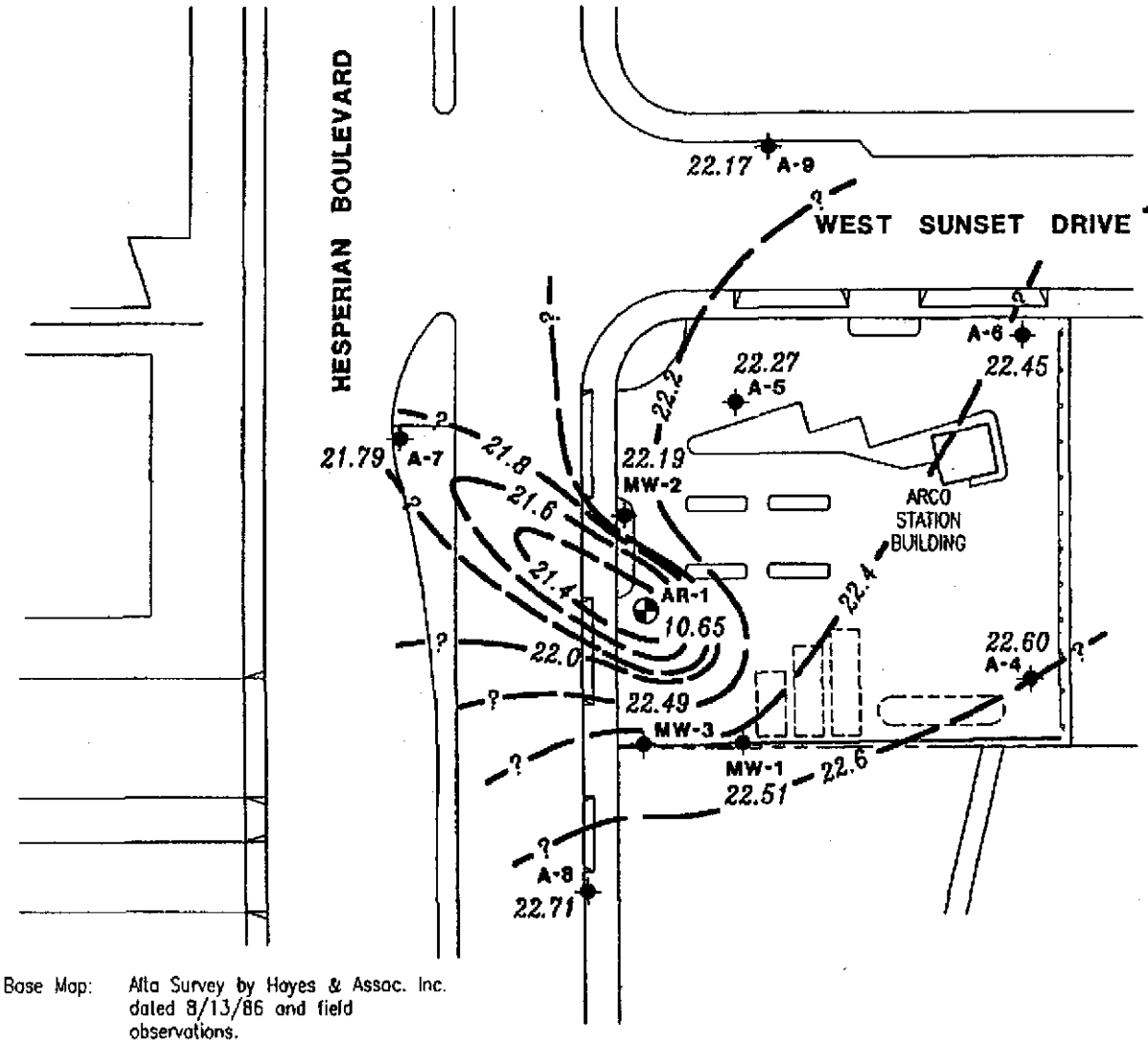


GeoStrategies Inc.

WATER LEVEL MAP PRIOR TO PUMPING
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

PLATE 8

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
792605-7	RCM	11/92	



EXPLANATION

- Ground–water monitoring well
- Ground–water recovery well
- 99.99 — Ground–water elevation contour. Approximate Gradient = NONE
- 99.99 — Ground–water elevation in feet referenced to Mean Sea Level (MSL) measured on October 14, 1992

NOTES: 1. Contours may be influenced by irrigation practices and/or site construction activities.

Base Map: Alta Survey by Hayes & Assoc. Inc. dated 8/13/86 and field observations.

0 50

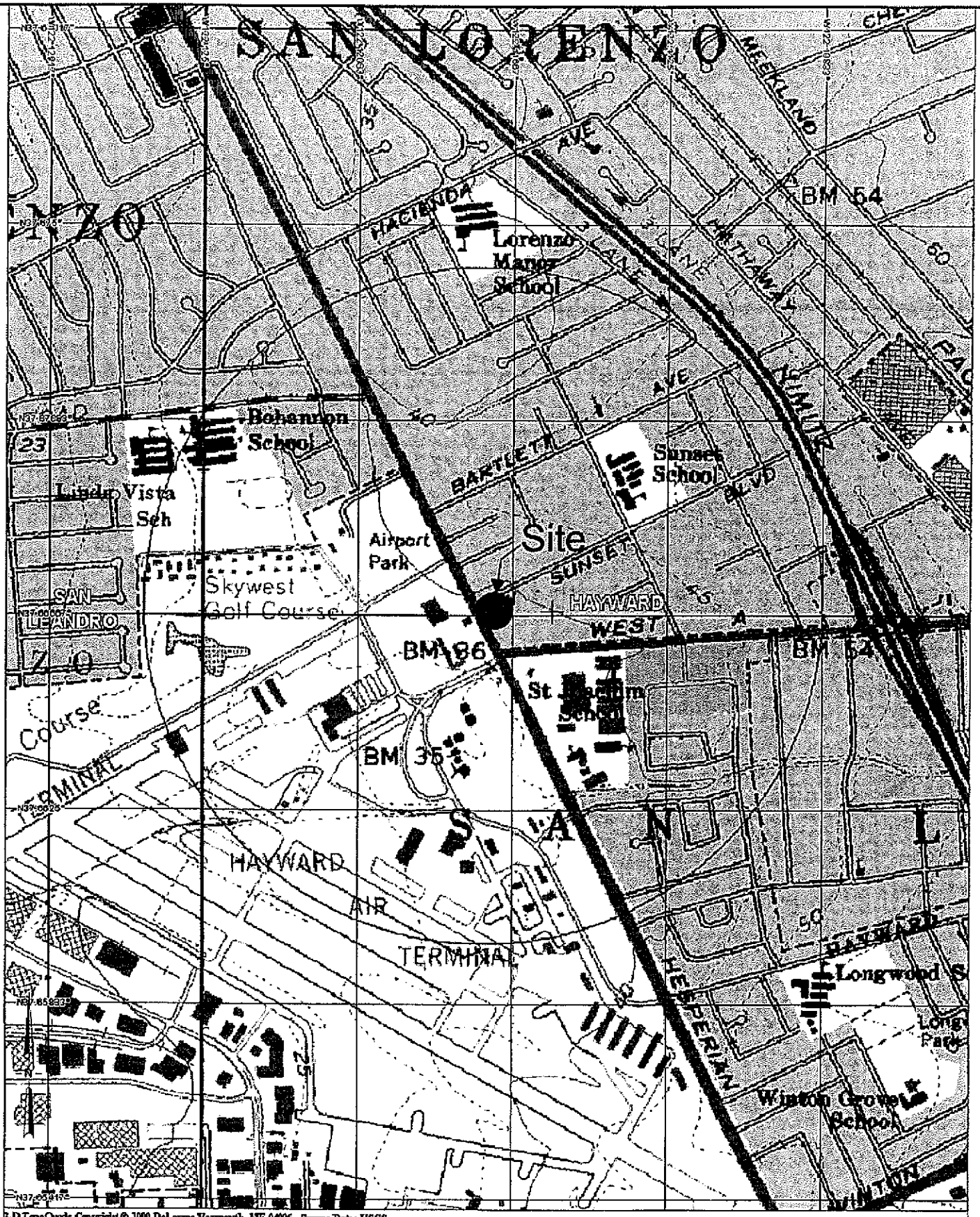
Scale in Feet

GeoStrategies Inc.

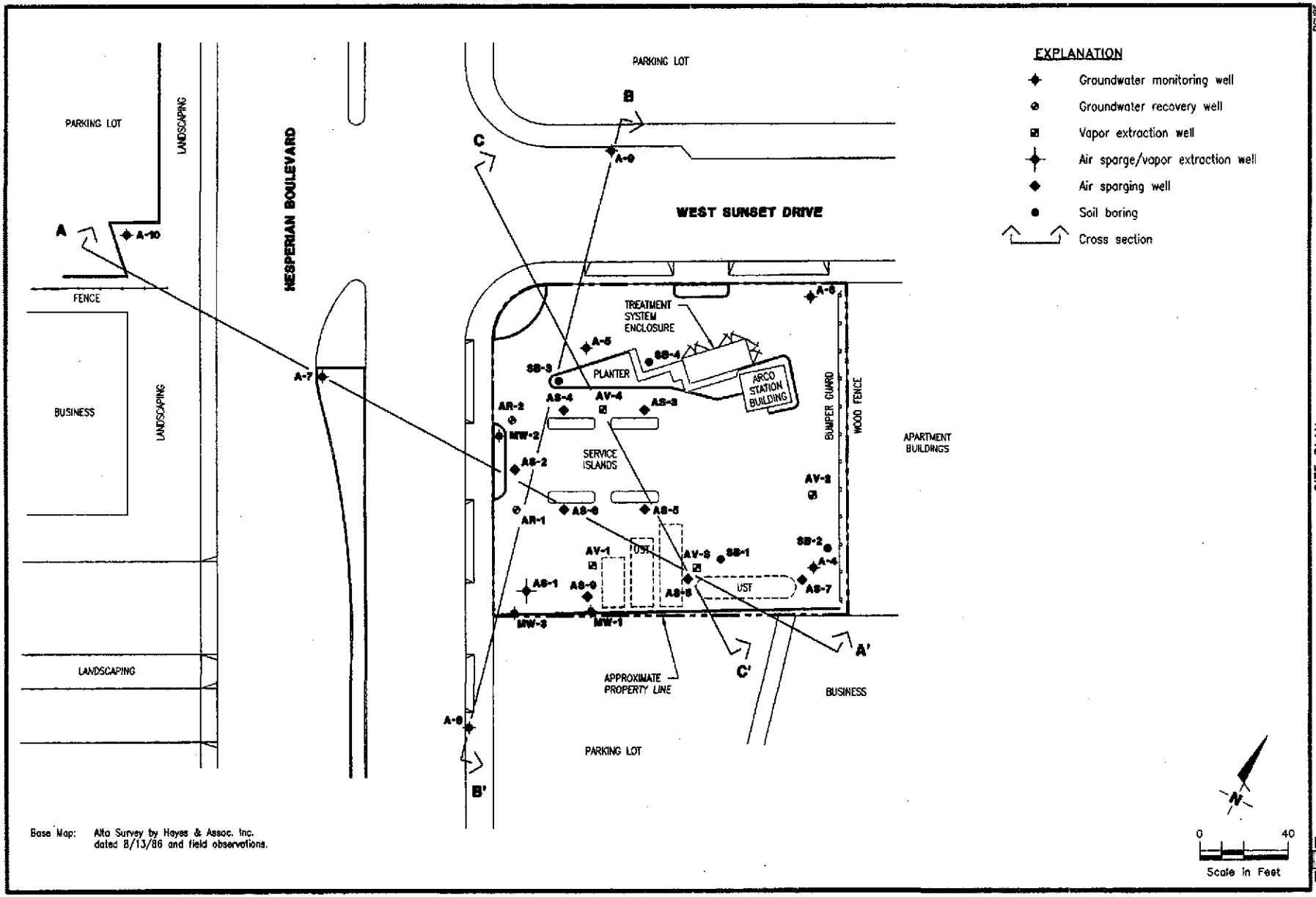
WATER LEVEL MAP AFTER PUMPING
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

PLATE 9

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
792605–7	ACM	11/92	



BROADBENT & ASSOCIATES, INC. ENGINEERING, WATER RESOURCES & ENVIRONMENTAL 1324 Mangrove Ave. Suite 212, Chico, California 95926 Project No.: 06-02-628 Date: 3/15/2007	Station #5387 20200 Hesperian Boulevard Hayward, California	Site Location Map	Drawing 1



Base Map: Alta Survey by Hayes & Assoc. Inc. dated 8/13/86 and field observations.

FIGURE 2

SITE PLAN
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

GeoStrategies Inc.

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
792612-18	BP	5/94	

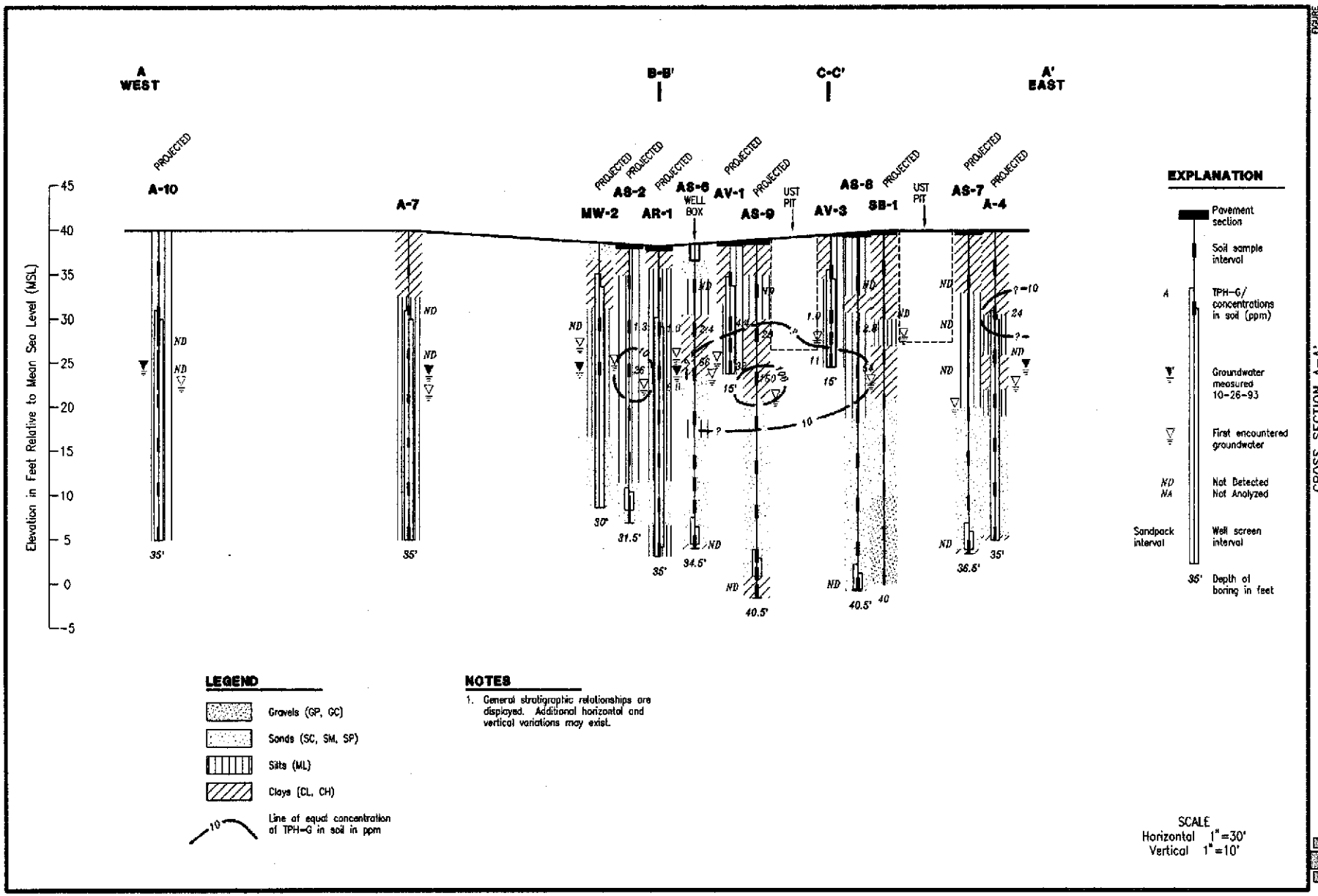


FIGURE 3

CROSS SECTION A-A'
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

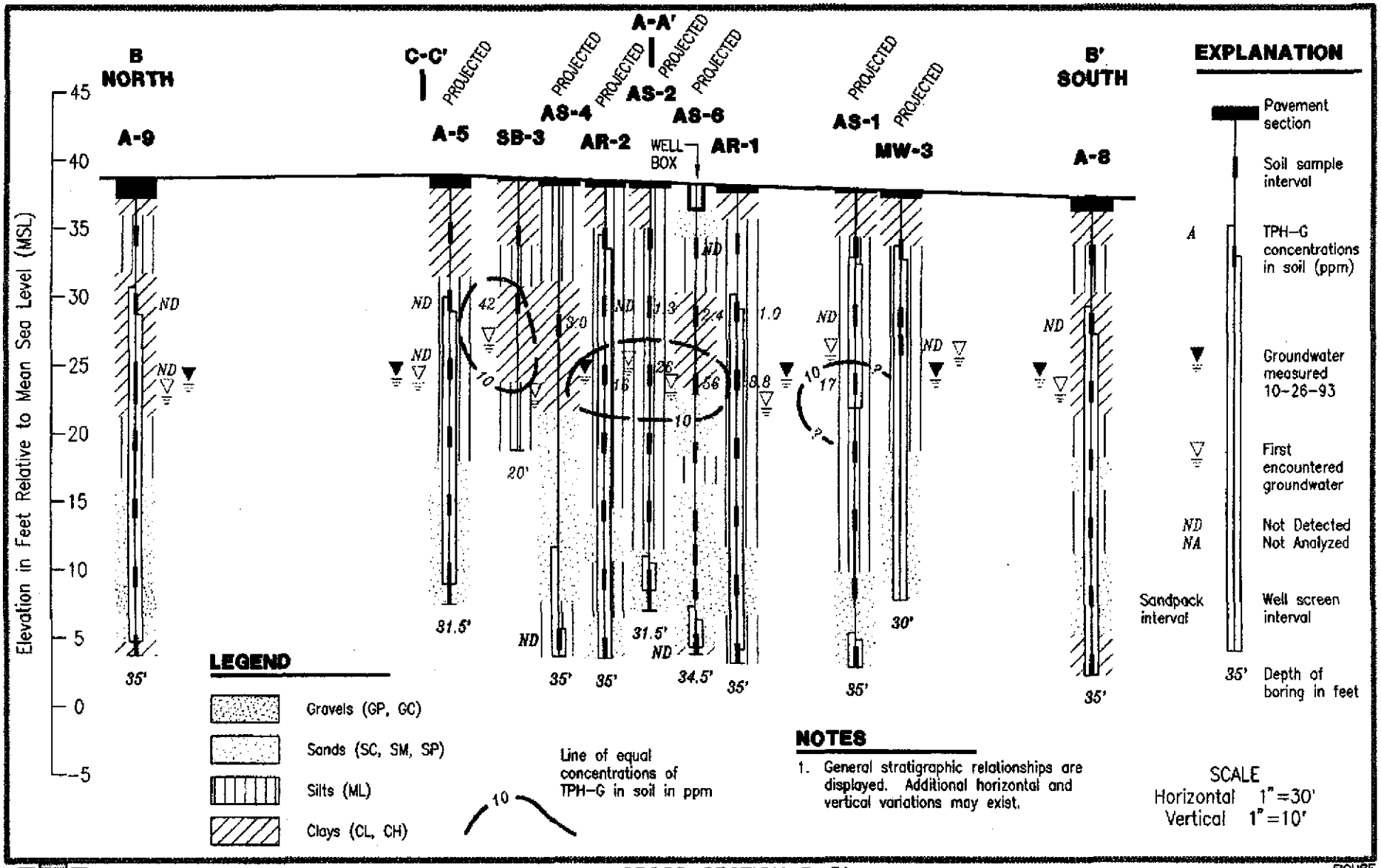
DATE 5/94

REVISED DATE

REVIEWED BY

JOB NUMBER 792612-18

GeoStrategies Inc.



GeoStrategies Inc.

CROSS SECTION B-B'
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

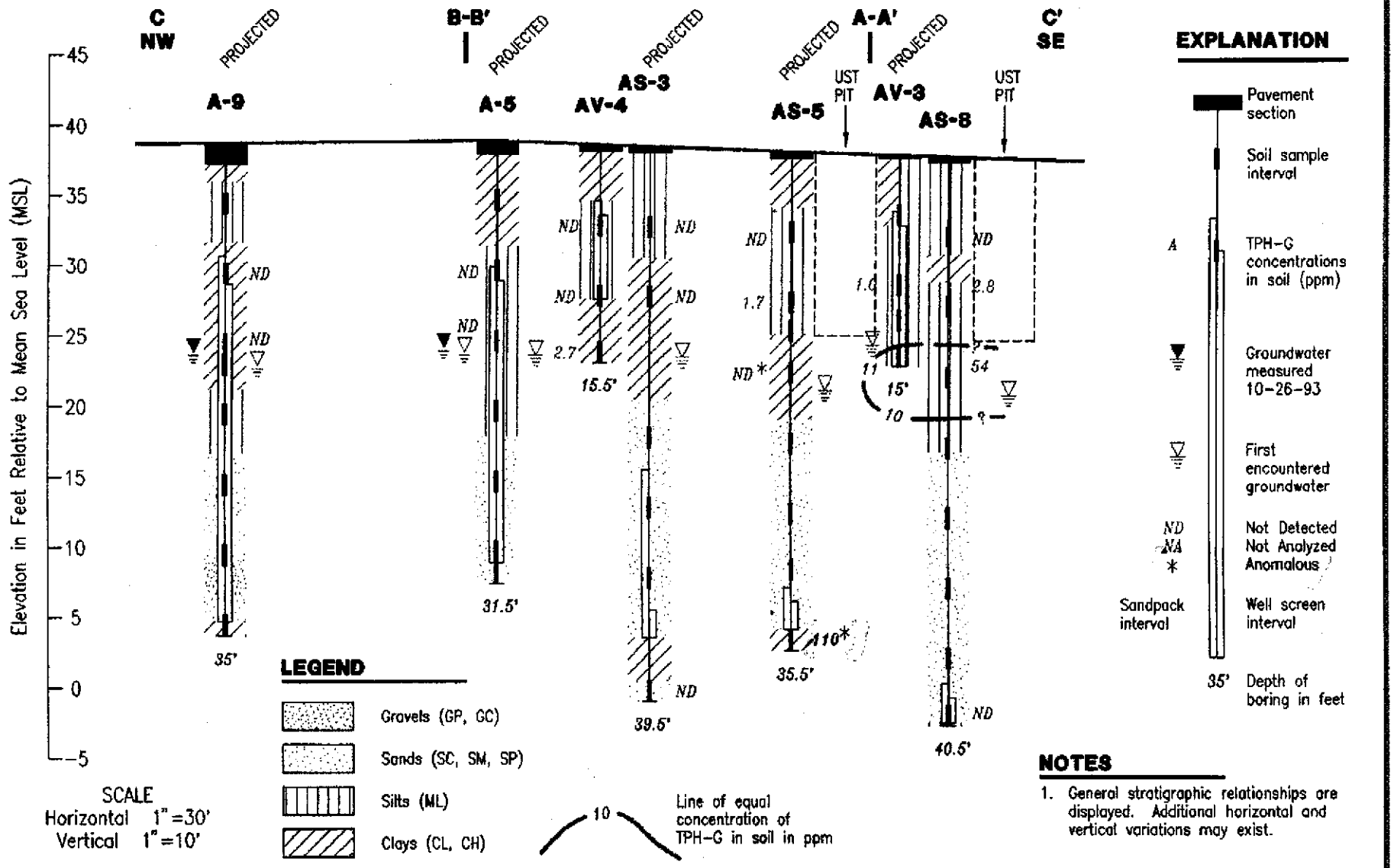
FIGURE
4

JOB NUMBER
792612-18

REVIEWED BY

DATE
5/94

REVISED DATE



NOTES

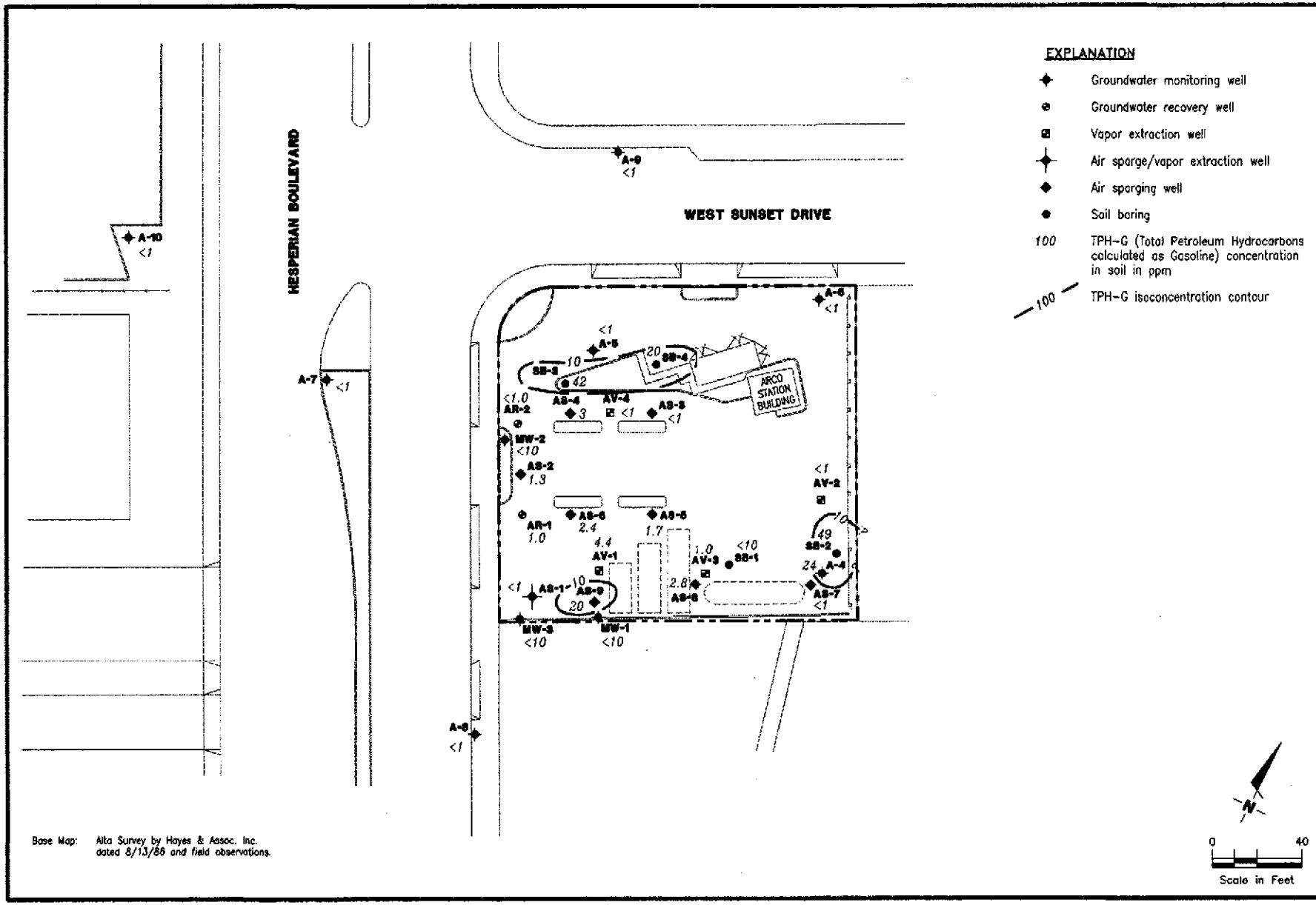
1. General stratigraphic relationships are displayed. Additional horizontal and vertical variations may exist.

GeoStrategies Inc.

CROSS SECTION C-C'
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, Calofornia

FIGURE 5

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
792612-18		5/94	



Base Map: Alta Survey by Hayes & Assoc. Inc. dated 8/13/86 and field observations.

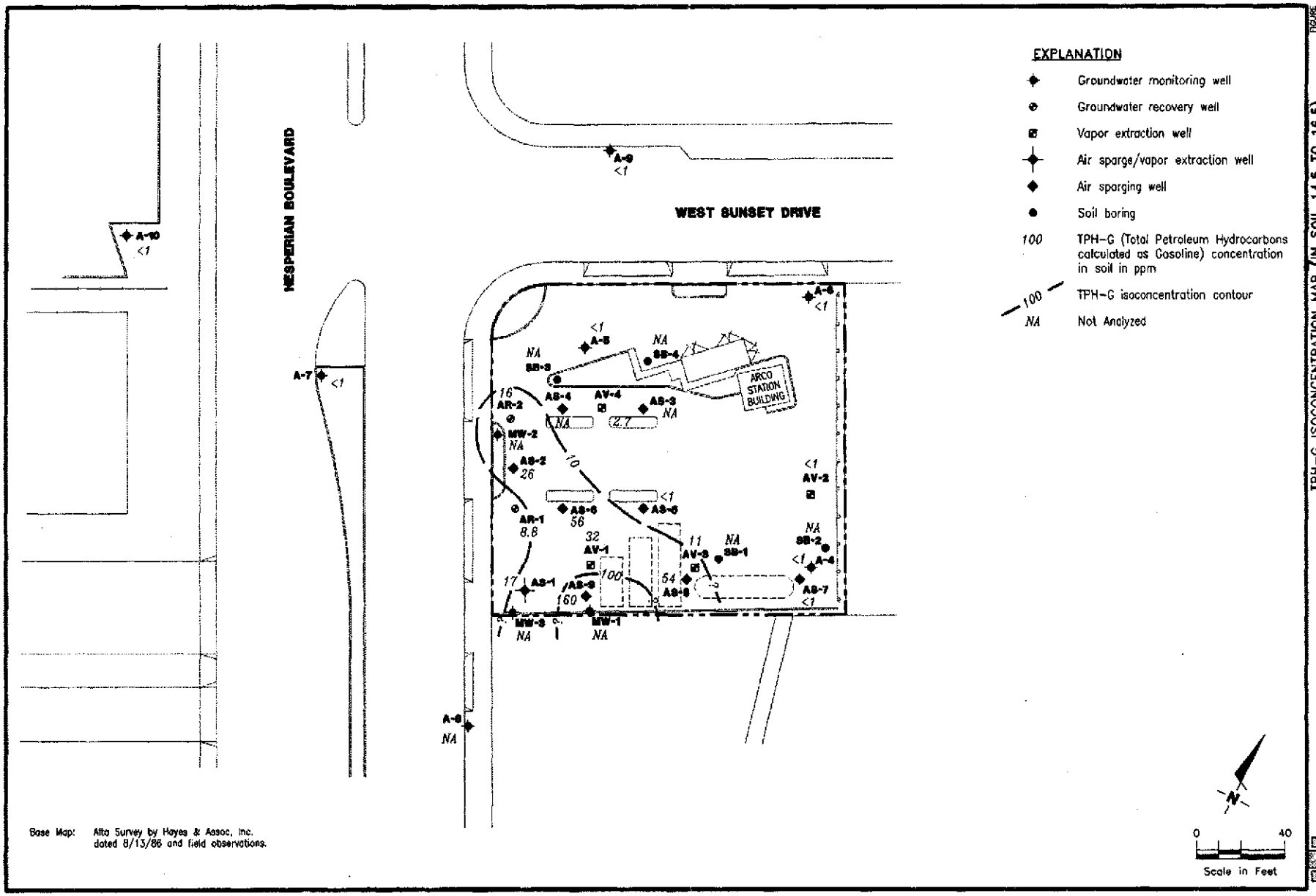
TPH-G ISOCONCENTRATION MAP (IN [redacted] 13 FEET)
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

FIGURE 6

GeoStrategies Inc.

GSI

JOB NUMBER 792612-18
REVIEWED BY
DATE 5/94
REVISED DATE



Base Map: Alta Survey by Hayes & Assoc, Inc. dated 8/13/86 and field observations.

TPH-G ISOCONCENTRATION MAP (IN SOIL 14.5 TO 16.5)
ARCO Service Station #5387
20200 Hesperian Boulevard
Hayward, California

FIGURE 7

GeoStrategies Inc.

JOB NUMBER 792612-18
REVIEWED BY
DATE 5/94
REVISED DATE

TABLE 1

CUMULATIVE SOIL ANALYSES DATA
ARCO Station 5387
Hayward, California

SAMPLE I.D.	SAMPLE DEPTH (FEET)	TPH-G or [TRPH] (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)
August 1986						
MW-1	9-9.5	[<10]	N/A	N/A	N/A	N/A
MW-2	9-9.5	[<10]	N/A	N/A	N/A	N/A
MW-3	11-11.5	[<10]	N/A	N/A	N/A	N/A
SB-1	9-9.5	[<10]	N/A	N/A	N/A	N/A
SB-2	9-9.5	[49]	N/A	N/A	N/A	N/A
SB-3	9-9.5	[42]	N/A	N/A	N/A	N/A
SB-4	9-9.5	[20]	N/A	N/A	N/A	N/A
October 1991						
A-4-10	10	24	0.012	0.042	0.072	0.052
A-4-15	15	<1.0	0.011	<0.0050	0.028	0.0080
A-5-10	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
A-5-15	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
A-6-10	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
A-6-15	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
December 1991						
A-7-9.5	9.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
A-7-14.5	14.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
August 1992						
A-8-10.0	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
A-9-10.0	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050

TABLE 1

CUMULATIVE SOIL ANALYSES DATA
ARCO Station 5387
Hayward, California

SAMPLE I.D.	SAMPLE DEPTH (FEET)	TPH-G or (TRPH) (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)
August 1992 cont.						
A-9-15.0	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AR-1-10.0	10	1.0	0.16	<0.0050	0.039	<0.0050
AR-1-14.5	14.5	8.8	0.030	<0.0050	0.060	0.070
November 1992						
A-10-13.0	13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
A-10-16.5	16.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
March 1993						
A-A-10.0 (AV-1)	10	4.4	0.022	<0.0050	0.033	0.030
A-A-15.0 (AV-1)	15	32	0.12	0.042	0.38	0.22
A-B-10.0 (AV-2)	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
A-B-15.0 (AV-2)	15	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
A-C-10.0 (AV-3)	10	1.0	0.010	0.0060	0.050	0.0080
A-C-15.0 (AV-3)	15	11	0.027	0.081	0.11	0.52
AS-1-10.0	10	<1.0	<0.0050	<0.0050	<0.0050	0.0070
AS-1-15.0	15	17	0.027	0.012	0.090	0.16
AS-2-10.0	10	1.3	0.042	<0.0050	<0.0050	0.020
AS-2-15.0	15	26	0.085	0.012	0.26	0.22
AR-2-10.0	10	<1.0	0.11	<0.0050	<0.0050	0.022
AR-2-15.0	15	16	0.061	0.015	0.14	0.56
December 1993						
AV-4-6.5	6.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AV-4-11.5	11.5	<1.0	0.048	<0.0050	<0.0050	<0.0050
AV-4-15.5	15.5	2.7	0.030	<0.0050	0.12	0.063

TABLE 1

CUMULATIVE SOIL ANALYSES DATA
ARCO Station 5387
Hayward, California

SAMPLE I.D.	SAMPLE DEPTH (FEET)	TPH-G or (TRPH) (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)
December 1993 cont.						
AS-3-6.5	6.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-3-11.5	11.5	<1.0	0.0068	<00050	<0.0050	<0.0050
AS-3-39.5	39.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-4-11.5	11.5	3.0	0.18	0.0062	0.15	0.22
AS-4-34.5	34.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-5-6.5	6.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-5-11.5	11.5	1.7	0.067	<0.0050	0.073	0.049
AS-5-16.5*	16.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-5-36.5*	36.5	110	<0.125	<0.125	1.7	1.4
AS-7-6.5	6.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-7-11.5	11.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-7-16.5	16.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-7-36.5	36.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-8-6.5	6.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-8-11.5	11.5	2.8	0.016	<0.0050	0.048	0.0068
AS-8-16.5	16.5	54	0.093	<0.010	0.84	2.8
AS-8-40.5	40.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
AS-9-6.5	6.5	<1.0	0.011	<0.0050	0.058	0.035
AS-9-11.5	11.5	20	0.032	0.026	0.18	0.69
AS-9-16.5	16.5	160	<0.025	<0.025	1.4	0.53
AS-9-40.5	40.5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050
January 1994						
AS-6-4.5	4.5	<1.0	0.0060	<0.0050	<0.0050	<0.0050
AS-6-10	10	2.4	0.13	0.0060	0.055	<0.0050

TABLE 1

CUMULATIVE SOIL ANALYSES DATA
ARCO Station 5387
Hayward, California

SAMPLE I.D.	SAMPLE DEPTH (FEET)	TPH-G or [TRPH] (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)
January 1994 cont.						
AS-6-14.5	14.5	66	0.37	<0.05	0.97	0.097
AS-6-34	34	<1.0	<0.0050	<0.0050	<0.0050	<0.0050

TPH-G = Total Petroleum Hydrocarbons calculated as Gasoline (analyzed using EPA Method 8015).
TRPH = Total Recoverable Petroleum Hydrocarbons (analyzed using EPA Method 418.1).
PPM = Parts Per Million.
N/A = Not Analyzed.
* = Sample results appear to be anomalous compared to adjacent borings, possibly switched in the field or laboratory.

Sample Identification:

AS-6-34
| └— Depth in feet
└— Well ID

Table 5

Soil Vapor Extraction System Performance Data

ARCO Service Station 5387
20200 Hesperian Boulevard at West Sunset Drive
Hayward, California

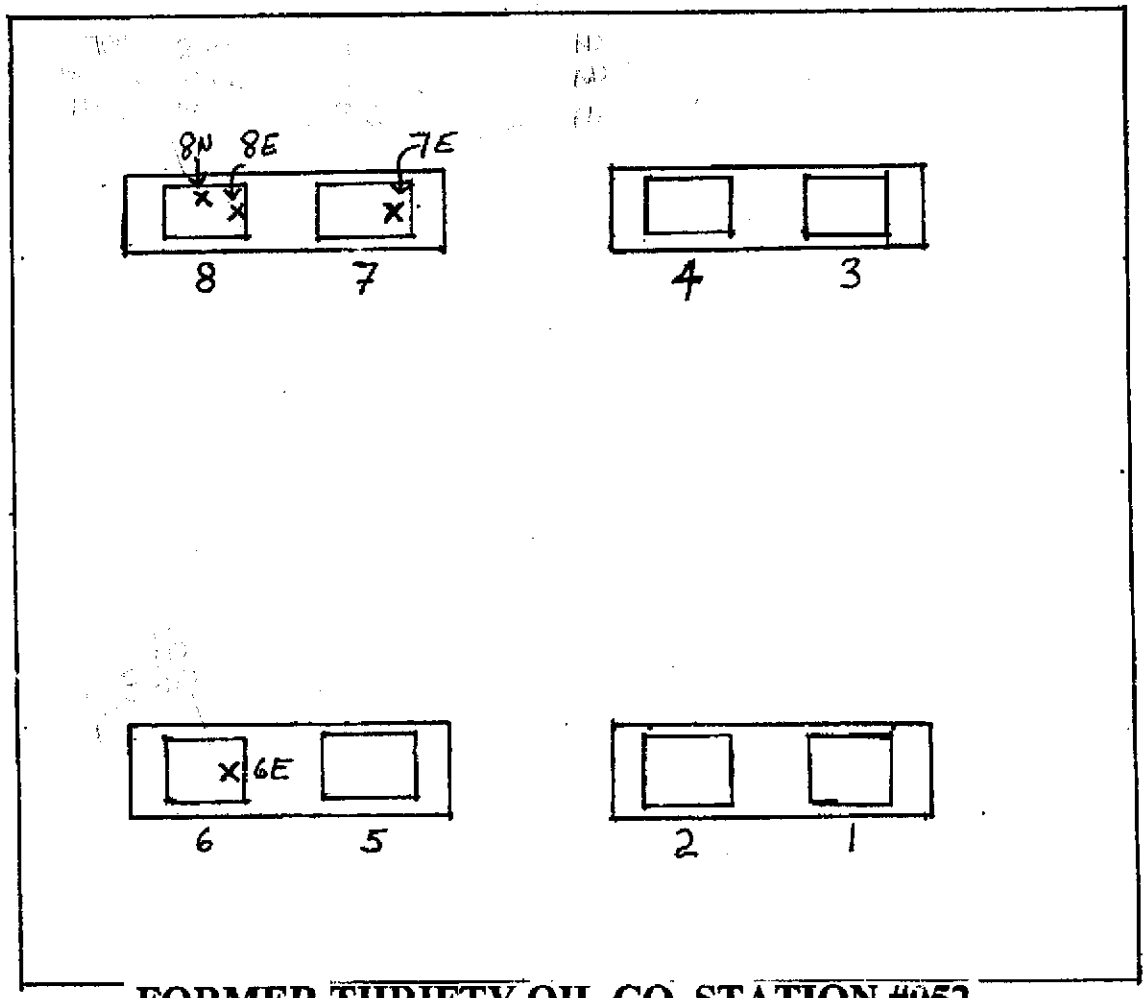
Sample I.D.	Date Sampled	Operational Hours To Date (hours)	Vacuum (" H20)	Flow Rate (scfm)	TPH as Gasoline: Influent Concentration (ppmv)	TPH as Gasoline: Removal Rate (lbs/day)	TPH as Gasoline: Removed to Date (lbs)	Benzene: Influent Concentration (ppmv)	Benzene: Removal Rate (lbs/day)	Benzene: Removed to Date (lbs)
INFL	04/01/93 a	339	N/A	N/A	450 b	4.31	105.6 c	2.7 b	0.023	1.35 c
INFL	11/02/94 d	342	60	260	1,726	185.7	115.4	10.4	0.91	1.40
REPORTING PERIOD: 09/30/94 - 12/31/94										
TOTAL POUNDS REMOVED:							115.4			1.40
TOTAL GALLONS REMOVED:							18.9			0.19
PERIOD POUNDS REMOVED:						9.8			0.05	
PERIOD GALLONS REMOVED:						1.6			0.01	
PERIOD AVERAGE FLOW RATE:				260						

" H20 = Inches of water
TPH = Total petroleum hydrocarbons
scfm = Standard cubic feet per minute
ppmv = Parts per million by volume; converted from micrograms per liter
lbs = Pounds
N/A = Not available

a. Data prior to October 1, 1994 taken from material provided by prior consultant.
b. Samples taken March 28, 1994 as reported by prior consultant.
c. Estimated cumulative pounds removed since startup, as reported by prior consultant.
d. System startup performed by Pacific Environmental Group, Inc. (new consultant). System shut down after 2.5 hours.

Density of Gasoline assumed to be 6.1 pounds/gallon; density of benzene assumed to be 7.34 pounds/gallon.
See certified analytical reports for detection limits.

Dispenser Site Location Map for Soil Sampling



FORMER THRIFTY OIL CO. STATION #052

ARCO SERVICE STATION #5387

20200 Hesperian Boulevard at West Sunset Drive

Hayward, California

0 10 20 Feet

MAY 27, 1999

FIGURE 5

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS# 052
Sample Matrix: Soil
Method: EPA 8015M (Gasoline)

AA Project No.: A135052-15
Date Received: 05/28/99
Date Reported: 06/02/99
Units: mg/Kg

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
88644	6E	05/27/99	06/01/99	<1	1
88645	7E	05/27/99	06/01/99	<1	1
88646	8E	05/27/99	06/01/99	8.4	1
88647	8N	05/27/99	06/01/99	2400	1

MRL: Method Reporting Limit
<: Not detected at or above the value of the concentration indicated.

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS# 052
Sample Matrix: Soil
Method: EPA 8020 (BTEX)

AA Project No.: A135052-15
Date Received: 05/28/99
Date Reported: 06/02/99
Units: mg/Kg

Date Sampled:	05/27/99	05/27/99	05/27/99	05/27/99	
Date Analyzed:	06/01/99	06/01/99	06/01/99	06/01/99	
AA ID No.:	88644	88645	88646	88647	
Client ID No.:	6E	7E	8E	8N	MRL
Compounds:					
Benzene	<0.005	<0.005	<0.005	0.38	0.005
Ethylbenzene	<0.005	<0.005	<0.005	9.8	0.005
Toluene	<0.005	<0.005	<0.005	18	0.005
Xylenes	<0.01	<0.01	0.038	210	0.01

MRL: Method Reporting Limit
<: Not detected at or above the value of the concentration indicated.

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS# 052
Sample Matrix: Soil
Method: MTBE (EPA 8020)

AA Project No.: A135052-15
Date Received: 05/28/99
Date Reported: 06/02/99
Units: ug/Kg

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
88644	6E	05/27/99	06/01/99	<20	20
88645	7E	05/27/99	06/01/99	<20	20
88646	8E	05/27/99	06/01/99	8100	20
88647	8N	05/27/99	06/01/99	13000	20

MRL: Method Reporting Limit
<: Not detected at or above the value of the concentration indicated.

George Havalias
Laboratory Director

AMERICAN ANALYTICS

LABORATORY ANALYSIS RESULTS

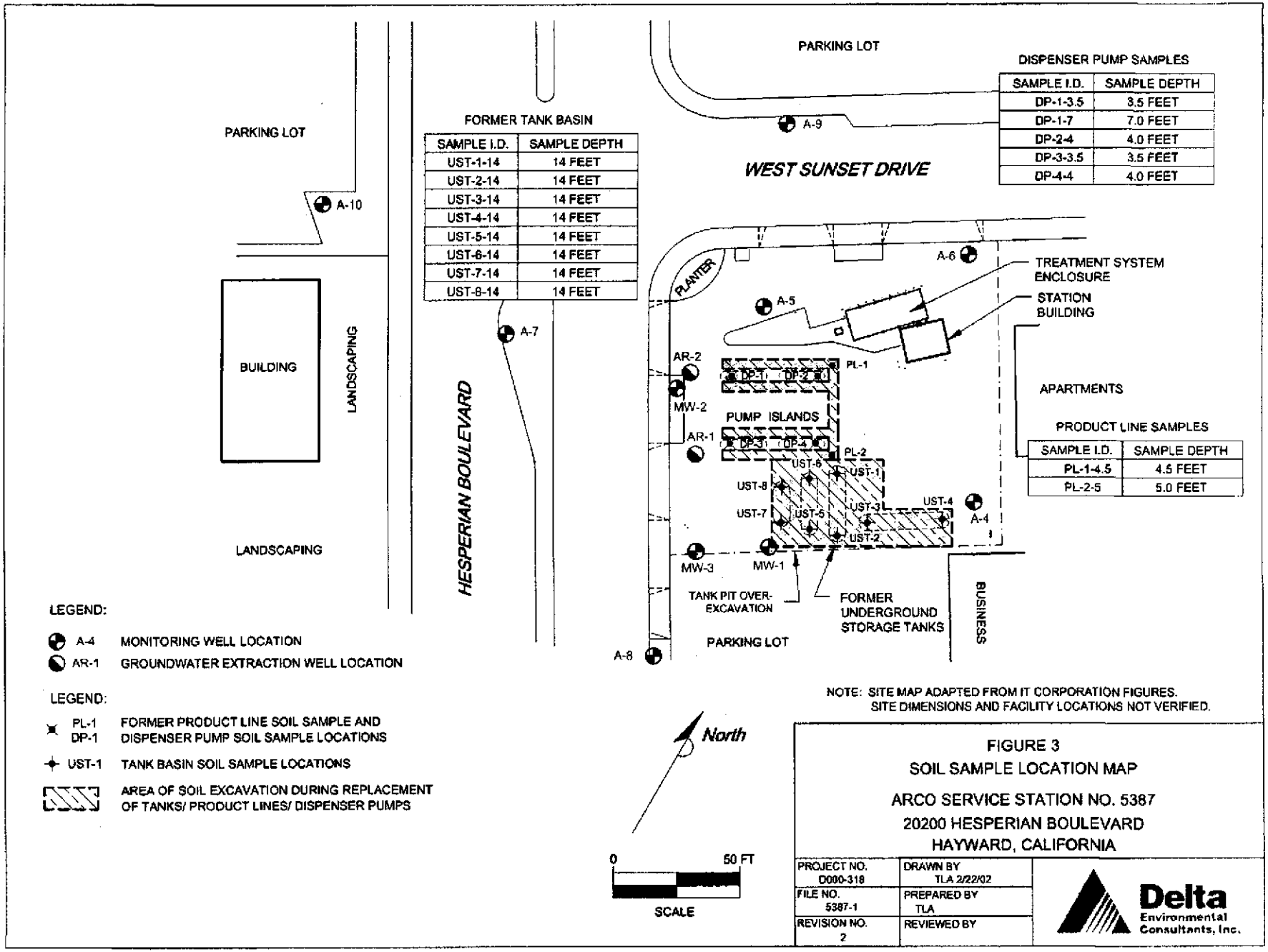
Client: Thrifty Oil Company
Project No.: N/A
Project Name: SS# 052
Sample Matrix: Soil
Method: MTBE (EPA 8260)

AA Project No.: A135052-15
Date Received: 05/28/99
Date Reported: 06/10/99
Units: ug/Kg

AA I.D. No.	Client I.D. No.	Date Sampled	Date Analyzed	Results	MRL
88646	8E	05/27/99	06/07/99	2200	10
88647	8N	05/27/99	06/07/99	10000	10

MRL: Method Reporting Limit
<: Not detected at or above the value of the concentration indicated.

George Havalias
Laboratory Director



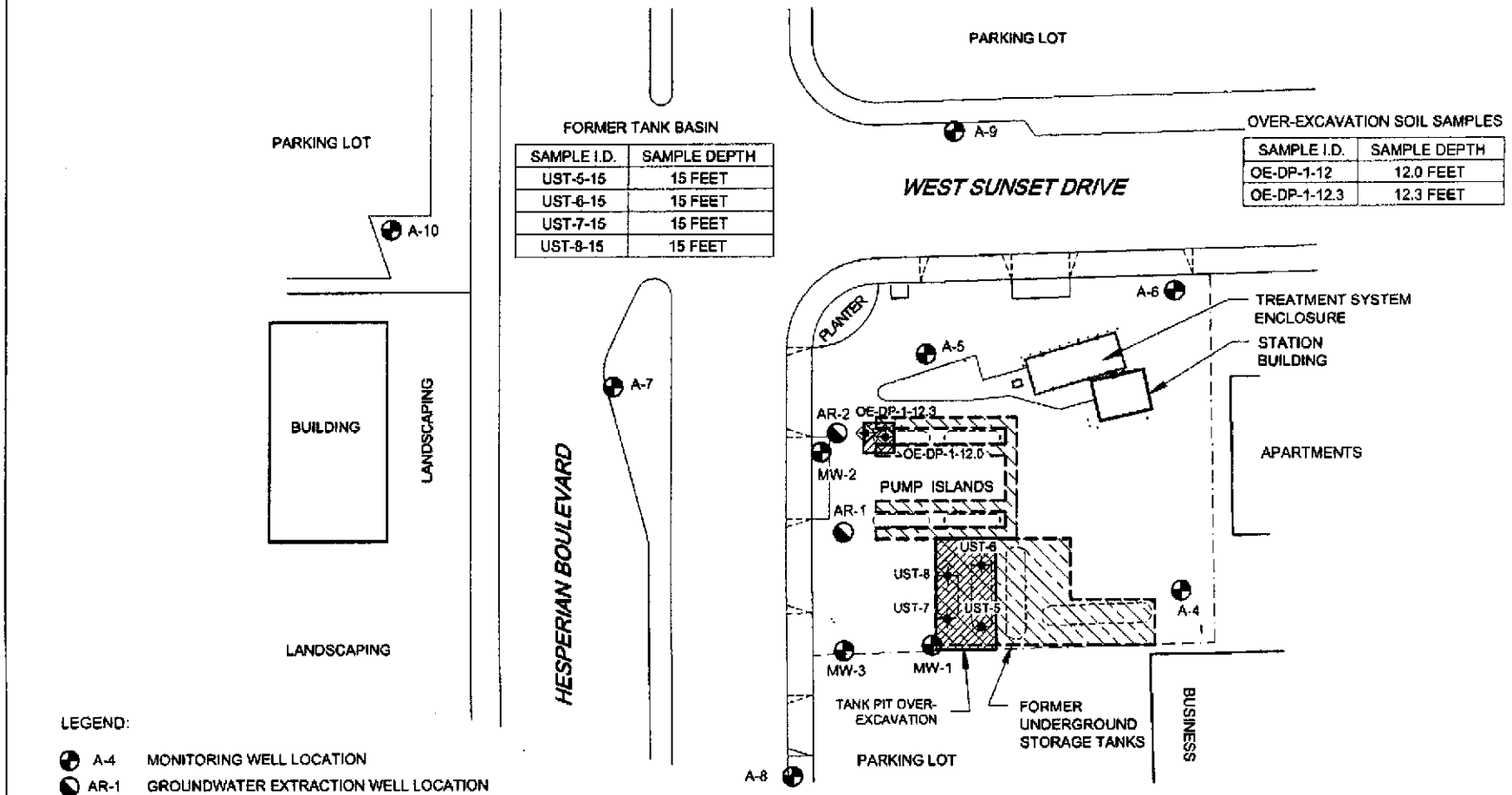
NOTE: SITE MAP ADAPTED FROM IT CORPORATION FIGURES.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.

FIGURE 3
SOIL SAMPLE LOCATION MAP

ARCO SERVICE STATION NO. 5387
20200 HESPERIAN BOULEVARD
HAYWARD, CALIFORNIA

PROJECT NO. 0000-318	DRAWN BY TLA 2/22/02
FILE NO. 5387-1	PREPARED BY TLA
REVISION NO. 2	REVIEWED BY

Delta Environmental Consultants, Inc.



SAMPLE I.D.	SAMPLE DEPTH
UST-5-15	15 FEET
UST-6-15	15 FEET
UST-7-15	15 FEET
UST-8-15	15 FEET

SAMPLE I.D.	SAMPLE DEPTH
OE-DP-1-12	12.0 FEET
OE-DP-1-12.3	12.3 FEET

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

FIGURE 4
OVER-EXCAVATION SOIL SAMPLE LOCATION MAP
ARCO SERVICE STATION NO. 5387
20200 HESPERIAN BOULEVARD
HAYWARD, CALIFORNIA

PROJECT NO. D000-318	DRAWN BY TLA 2/17/02
FILE NO. 5387-1	PREPARED BY TLA
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.

TABLE 1

SOIL SAMPLE LABORATORY ANALYTICAL RESULTS

ARCO Service Station No. 5387
20200 Hesperian Blvd. Hayward,California

Sample ID	Date	Depth (ft)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Total Xylenes (mg/kg)	TPHg (mg/kg)	MTBE (mg/kg)	Lead (mg/kg)
Dispenser Island Samples									
DP-1-3.5	02/01/02	3.5	0.19	1.6	0.47	2.8	16	0.27	<10
DP-1-7	02/01/02	7.0	<1.0	36	25	140	1800	19	<10
DP-2-4	02/01/02	4.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.50	<0.0050	<10
DP-3-3.5	02/01/02	3.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.50	<0.0050	<10
DP-4-4	02/01/02	4.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.50	<0.0050	<10
Product Line Samples									
PL-1-4.5	02/01/02	4.5	<0.0050	<0.0050	<0.0050	<0.0050	<0.50	<0.0050	<10
PL-2-5	02/01/02	5.0	0.0060	0.014	<0.0050	0.0080	<0.050	0.033	130
Tank Basin Samples									
UST-1-14	02/01/02	14.0	<0.025	<0.025	<0.025	0.029	8.1	<0.0050	<10
UST-2-14	02/01/02	14.0	<0.50	<0.0050	<0.0050	0.025	1.4	0.50	<12
UST-3-14	02/01/02	14.0	<0.025	0.041	<0.025	<0.025	0.76	0.67	<12
UST-4-14	02/01/02	14.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.50	<0.0050	<10
UST-5-14	02/05/02	14.0	<0.050	0.099	0.23	0.050	56	1.2	<10
UST-6-14	02/05/02	14.0	<0.050	0.28	0.70	2.2	100	0.74	20
UST-7-14	02/06/02	14.0	<0.050	<0.050	0.18	<0.050	42	1.5	<10
UST-8-14	02/06/02	14.0	<0.050	0.18	0.49	0.073	110	2.0	<10
Over-excavation Results									
OE-DP-1-12	12/06/02	12.0	<0.50	0.76	2.1	2.5	360	0.85	<10
OE-DP-1-12.3	12/06/02	12.3	0.13	0.42	0.15	0.12	16	0.59	<12
UST-5-15	02/07/02	15.0	<0.050	0.080	<0.050	<0.050	45	0.47	<10
UST-6-15	02/07/02	15.0	<0.050	0.87	0.80	0.70	270	0.22	<10
UST-7-15	02/07/02	15.0	<0.050	0.065	0.23	0.12	50	0.53	<10
UST-8-15	02/07/02	15.0	<0.050	0.081	0.086	0.28	43	1.3	<10
Soil Stockpile Results									
SP-(1,2,3,4)	02/01/02	---	<0.0050	0.012	<0.0050	0.011	0.66	NA	17
SP-(5,6,7,8)	02/01/02	---	<0.0050	<0.0050	<0.0050	<0.0050	<0.5	NA	660[1]/14
SP-(9,10,11,12)	02/01/02	---	0.23	2.9	3.2	14	250	NA	<10

[1] Sample result was believed to be anomolous based on other lead results from same stockpile and site soil samples. The exact same sample was re-run with a result of 14 mg/kg.

TPHg = Total petroleum hydrocarbons as gasoline

MTBE = Methyl tertiary butyl ether

NA = Not analyzed

--- = Not applicable

TABLE 2

SOIL SAMPLE OXYGENATES LABORATORY ANALYTICAL RESULTS

ARCO Service Station No. 5387
20200 Hesperian Blvd. Hayward,California

Sample ID	Date	Depth (ft)	TBA (mg/kg)	MTBE (mg/kg)	DIPE (mg/kg)	ETBE (mg/kg)	TAME (mg/kg)	Ethanol (mg/kg)
Dispenser Island Samples								
DP-1-1-3.5	02/01/02	3.5	<0.050	0.27	<0.0050	<0.0050	0.0050	NA
DP-1-7	02/01/02	7.0	4.1	19	<0.050	<0.050	21	NA
DP-2-4	02/01/02	4.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	NA
DP-3-3.5	02/01/02	3.5	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	NA
DP-4-4	02/01/02	4.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	NA
Product Line Samples								
PL-1-4.5	02/01/02	4.5	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	NA
PL-2-5	02/01/02	5.0	<0.050	0.033	<0.0050	<0.0050	<0.0050	NA
Tank Basin Samples								
UST-1-14	02/01/02	14.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	NA
UST-2-14	02/01/02	14.0	<0.25	0.50	<0.025	<0.025	<0.025	NA
UST-3-14	02/01/02	14.0	<0.25	0.67	<0.025	<0.025	<0.025	NA
UST-4-14	02/01/02	14.0	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	NA
UST-5-14	02/05/02	14.0	<1.0	1.2	<0.10	0.10	<0.10	<10
UST-6-14	02/05/02	14.0	<5.0	0.74	<0.50	<0.50	<0.50	<50
UST-7-14	02/06/02	14.0	<2.0	1.5	<0.20	<0.20	<0.20	20
UST-8-14	02/06/02	14.0	<1.0	2.0	<0.10	<0.10	<0.10	<10
Over-excavation Results								
OE-DP-1-12	12/06/02	12.0	<5.0	<0.50	<0.50	<0.50	0.85	<50
OE-DP-1-12.3	12/06/02	12.3	<2.0	0.59	<0.20	<0.20	<20	<20
UST-5-15	02/07/02	15.0	<1.0	0.47	<0.10	<0.10	<0.10	<10
UST-6-15	02/07/02	15.0	<1.0	0.22	<0.10	<0.10	<0.10	<10
UST-7-15	02/07/02	15.0	<1.0	0.53	<0.10	<0.10	<0.10	<10
UST-8-15	02/07/02	15.0	<1.0	1.3	<0.10	<0.10	<0.10	<10

TBA = Tert-butyl alcohol

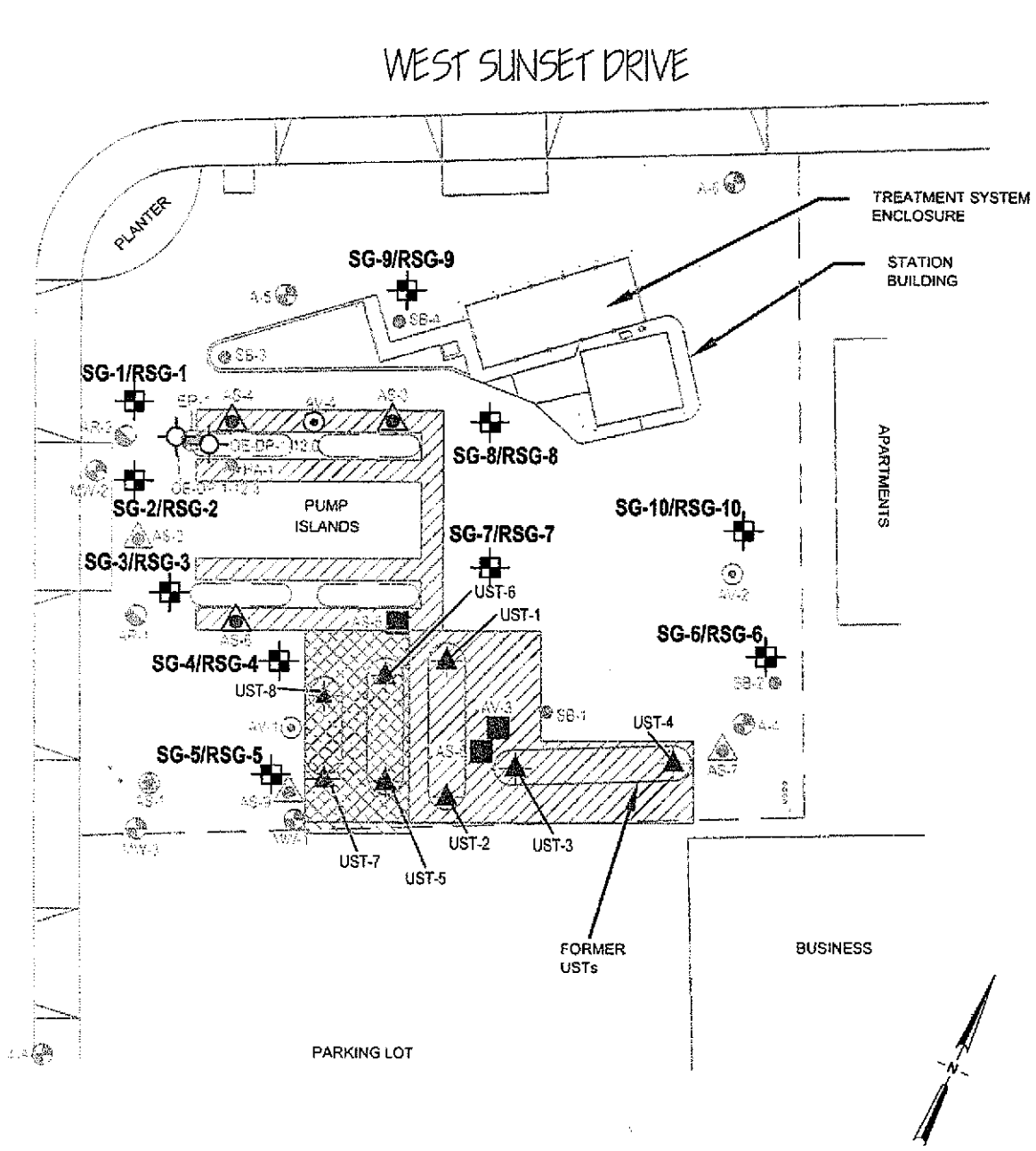
MTBE = Methyl tertiary butyl ether (analyzed by DHS LUFT)

DIPE = Di-isopropyl ether

ETBE =Ethyl ter-butyl ether

TAME = Tert-amyl methyl ether

NA = Not Analyzed



LEGEND

- SOIL GAS SAMPLE LOCATION 2004 / SAMPLE LOCATION 2007
- ABANDONED MONITORING WELL
- MONITORING WELL
- GROUND-WATER EXTRACTION WELL
- SOIL VAPOR EXTRACTION WELL
- AIR SPARGE WELL
- DUAL AIR SPARGE/SOIL VAPOR EXTRACTION WELL
- AIR SPARGE WELL (DELTA ENVIRONMENTAL, 2000)
- SOIL BORING LOCATION
- EXTRACTION POINT
- OVER-EXCAVATION SOIL SAMPLE (DELTA ENVIRONMENTAL, 2002)
- TANK BASIN SOIL SAMPLE (DELTA ENVIRONMENTAL, 2002)
- AREA OF OVER-EXCAVATION DURING REPLACEMENT OF TANKS/PRODUCT LINES/DISPENSER PUMPS (DELTA ENVIRONMENTAL, 2002)
- AREA OF SOIL EXCAVATION DURING REPLACEMENT OF TANKS/PRODUCT LINES/DISPENSER PUMPS (DELTA ENVIRONMENTAL, 2002)

NOTES: SITE MAP ADAPTED FROM CAMBRIA ENVIRONMENTAL 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.: 06-02-628 Date: 7/23/2007

Station #5387
20200 Hesperian Boulevard
Hayward, California

Site Map with Historical Sample Locations and Soil Gas Sample Locations

Drawing 3

Table 1. Summary of Soil Gas Sample Analytical Data
Station#5387, Hayward, California

Soil Gas Sample Identification	Date Sampled	Sample Depth (ft bls)	Benzene[1] (µg/m³)	Toluene[1] (µg/m³)	Ethyl-benzene[1] (µg/m³)	Total Xylenes[1] (µg/m³)	Gasoline Range Organics* (µg/m³)	MTBE[1] (µg/m³)	Isopropanol[2] (ug/m³)	Carbon Dioxide %(v/v)	Methane %(v/v)	Oxygen %(v/v)
RSG-1-5	06/13/07	5.0	<7.7	<9.0	<10	<10	<7,300	<8.6	<28	**0.079**	**0.00036**	**39**
RSG-1-7	06/13/07	7.0	<7.9	<9.3	<11	<11	<7,300	<8.9	<29	**0.35**	<0.00036	**21**
RSG-2-5	06/13/07	5.0	<12	<14	<17	<17	<10,000	<14	<45	**0.28**	<0.00050	**21**
RSG-2-8.5	06/13/07	8.5	<8.2	<9.6	<11	<11	<8,000	<9.2	<30	**0.12**	**0.00044**	**22**
RSG-2-8.5D	06/13/07	8.5	<8.2	<9.6	<11	<11	<8,000	<9.2	<30	**0.12**	**0.00044**	**21**
RSG-3-5	6/12/2007	5.0	<8.1	<9.4	<11	<11	<7,200	<9.1	<30	**0.061**	<0.00035	**21**
RSG-3-7	6/12/2007	7.0	<8.6	<10	<12	<12	<7,500	<9.6	<32	**0.075**	<0.00037	**22**
RSG-3-7D	6/12/2007	7.0	<11	<12	<14	<14	<7,400	<12	<39	**0.078**	**0.00056**	**37**
RSG-4-5	6/12/2007	5.0	<7.2	<8.5	<9.8	<9.8	<6,800	<8.1	<27	**5.6**	**0.00058**	**5.5**
RSG-4-8.5	6/12/2007	8.5	<7.6	<8.8	<10	<10	<7,300	<8.5	<28	**6.8**	<0.00035	**2.6**
RSG-5-5	6/12/2007	5.0	<6.5	<7.6	<8.8	<8.8	<8,100	<7.3	<24	**0.067**	<0.00039	**22**
RSG-5-8.5	6/12/2007	8.5	<7.3	**10**	<9.9	**12**	<7,700	**10**	<27	**0.25**	<0.00037	**21**
RSG-6-5	6/11/2007	5.0	<9.5	<11	<13	<13	<8,000	<11	<35	**0.055**	<0.00039	**22**
RSG-6-5D	6/11/2007	5.0	<8.5	<10	<12	<12	<8,100	<9.6	<31	**0.053**	<0.00040	**21**
RSG-6-9.5	6/11/2007	9.5	<7.2	<8.5	<9.8	<9.8	<7,900	<8.1	<27	**0.32**	<0.00039	**21**
RSG-7-5	6/12/2007	5.0	<6.4	<7.5	<8.7	<8.7	<8,600	<7.2	<24	**0.074**	<0.00042	**22**
RSG-7-10	6/12/2007	10.0	<6.4	<7.5	<8.7	<8.7	<8,000	<7.2	<24	**0.087**	<0.00039	**42**

Table 1. Summary of Soil Gas Sample Analytical Data
Station#5387, Hayward, California

Soil Gas Sample Identification	Date Sampled	Sample Depth (ft bls)	Benzene[1] (µg/m³)	Toluene[1] (µg/m³)	Ethyl-benzene[1] (µg/m³)	Total Xylenes[1] (µg/m³)	Gasoline Range Organics* (µg/m³)	MTBE[1] (µg/m³)	Isopropanol[2] (ug/m³)	Carbon Dioxide %(v/v)	Methane %(v/v)	Oxygen %(v/v)
RSG-8-5	6/11/2007	5.0	<12	<14	<17	<17	<8,300	<14	<45	**0.056**	<0.00041	**22**
RSG-8-9	6/11/2007	9.0	<7.9	<9.3	<11	<11	<8,600	<8.9	<29	**2.2**	**0.00044**	**16**
RSG-9-5	6/11/2007	5.0	<7.0	<8.2	<9.5	<9.5	<7,800	<7.8	<26	**0.052**	<0.00038	**22**
RSG-9-10	6/11/2007	10.0	<7.2	<8.4	<9.7	<9.7	<7,800	<8.1	<26	**3.2**	<0.00038	**18**
RSG-10-5.5	6/11/2007	5.5	<6.4	<7.5	**11**	**39**	<7,300	<7.2	<24	**0.071**	**0.00045**	**22**
RSG-10-10	6/11/2007	10.0	<7.2	<8.5	<9.8	<9.8	<8,300	<8.1	<27	**0.059**	<0.00040	**22**
Ambient Air	6/11/2007	---	<11	<13	<16	<16	<12,000	<13	<42	**0.042**	<0.00057	**22**
Environmental Screening Levels[3]			~~850~~	~~630,000~~	~~4,200,000~~	~~1,500,000~~	~~260,000~~	~~94,000~~	---	---	---	---
RESIDENTIAL ESL			84	63,000	210,000	21,000	10,000	9,400				

Notes:

* = Gasoline Range Organics (C4-C12)

[1] = Laboratory qualifier DH: Reporting limits elevated due to insufficient sample quantity

[2] = Isopropanol was used as the leak detection compound during the soil gas sampling

[3] = As proposed in the April 10, 2007 *Soil Gas Investigation Work Plan*

MTBE = Methyl tert-butyl ether

< = Not detected at or above specified laboratory reporting limit

µg/m³ = Micrograms per cubic meter

Bold = detected above the laboratory reporting limit

Duplicate Soil Gas Sample

Table 2. Summary of Soil Gas Sample Fuel Additives Analytical Data
Station#5387, Hayward, California

Soil Gas Sample Identification	Date Sampled	Sample Depth (ft bls)	ETBE[1] ($\mu g/m^3$)	DIPE[1] ($\mu g/m^3$)	TAME[1] ($\mu g/m^3$)	TBA[1] ($\mu g/m^3$)	Ethanol ($\mu g/m^3$)	MTBE[1] ($\mu g/m^3$)
RSG-1-5	06/13/07	5.0	<10	<10	<10	<36	<90	<8.6
RSG-1-7	06/13/07	7.0	<10	<10	<10	<38	<93	<8.9
RSG-2-5	06/13/07	5.0	<16	<16	<16	<58	<140	<14
RSG-2-8.5	06/13/07	8.5	<11	<11	<11	<39	<96	<9.2
RSG-2-8.5D	06/13/07	8.5	<11	<11	<11	<41	<100	<9.8
RSG-3-5	6/12/2007	5.0	<11	<11	<11	**51**	<94	<9.1
RSG-3-7	6/12/2007	7.0	<11	<11	<11	**54**	<100	<9.6
RSG-3-7D	6/12/2007	7.0	<14	<14	<14	<50	<120	<12
RSG-4-5	6/12/2007	5.0	<9.4	<9.4	<9.4	<34	<85	<8.1
RSG-4-8.5	6/12/2007	8.5	<9.8	<9.8	<9.8	<36	<88	<8.5
RSG-5-5	6/12/2007	5.0	<8.4	<8.4	<8.4	<31	<76	<7.3
RSG-5-8.5	6/12/2007	8.5	<9.5	<9.5	<9.5	**43**	<86	**10**
RSG-6-5	6/11/2007	5.0	<12	<12	<12	<45	<110	<11
RSG-6-5D	6/11/2007	5.0	<11	<11	<11	<40	<100	<9.6
RSG-6-9.5	6/11/2007	9.5	<9.4	<9.4	<9.4	**72**	<85	<8.1
RSG-7-5	6/12/2007	5.0	<8.3	<8.3	<8.3	<30	<75	<7.2
RSG-7-10	6/12/2007	10.0	<8.3	<8.3	<8.3	<30	<75	<7.2
RSG-8-5	6/11/2007	5.0	<16	<16	<16	<58	<140	<14
RSG-8-9	6/11/2007	9.0	<10	<10	<10	<38	<93	<8.9
RSG-9-5	6/11/2007	5.0	<9.1	<9.1	<9.1	<33	<82	<7.8
RSG-9-10	6/11/2007	10.0	<9.3	<9.3	<9.3	**37**	<84	<8.1
RSG-10-5.5	6/11/2007	5.5	<8.3	<8.3	<8.3	**57**	<75	<7.2
RSG-10-10	6/11/2007	10.0	<9.4	<9.4	<9.4	**40**	<85	<8.1
Ambient Air	6/11/2007	---	<15	<15	<15	<54	<130	<13

Notes:

[1] = Laboratory qualifier DH: Reporting limits elevated due to insufficient sample quantity

< = Not detected at or above specified laboratory reporting limit

ETBE = Tert-butyl ethyl ether

DIPE = Diisopropyl ether

TAME = Tert-amyl methyl ether

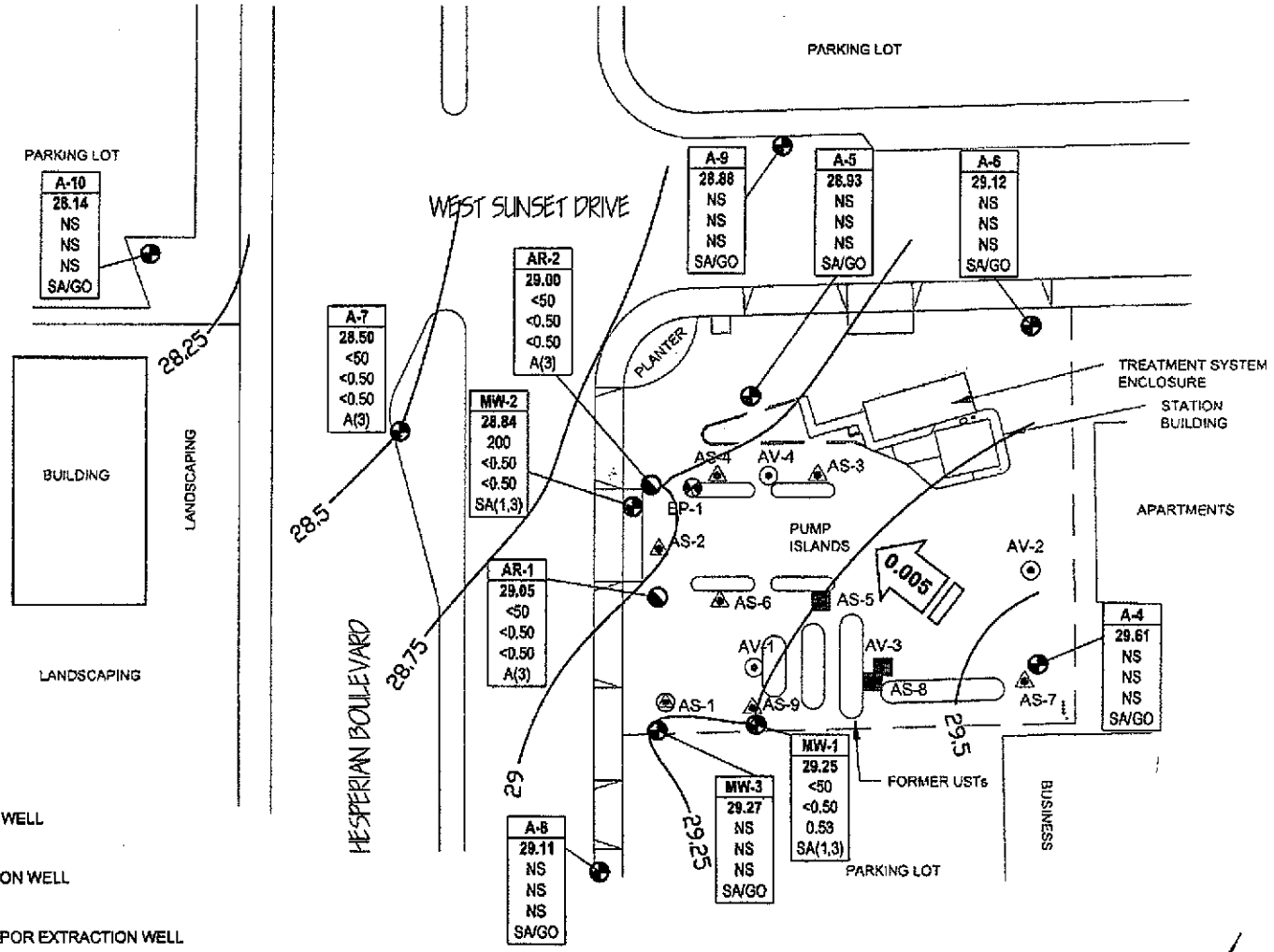
TBA = tert-Butyl alcohol

MTBE = Methyl tert-butyl ether

$\mu g/m^3$ = Micrograms per cubic meter

Bold = detected above the laboratory reporting limit

= Duplicate Soil Gas Sample



LEGEND

- ABANDONED MONITORING WELL
- MONITORING WELL
- GROUNDWATER EXTRACTION WELL
- AIR SPARGE WELL
- DUAL AIR SPARGE/SOIL VAPOR EXTRACTION WELL
- EXTRACTION POINT
- 29.5 APPOXIMATE GROUNDWATER ELEVATION CONTOUR (FEET ABOVE MSL)
- 0.005 GROUNDWATER FLOW DIRECTION AND GRADIENT (FEET/FOOT)

Well — WELL DESIGNATION
ELEV — GROUNDWATER ELEVATION
GRO
Benzene
MTBE — GRO, BENZENE & MTBE CONCENTRATIONS IN MICROGRAMS PER LITER (µg/L)
SA/A — SAMPLING FREQUENCY

* NOT USED IN CONTOURING
A(3) SAMPLED ANNUALLY 3rd QUARTER
GO GAUGED ONLY
< NOT DETECTED AT OR ABOVE LABORATORY REPORTING LIMITS
NS NOT SAMPLED
Q SAMPLED QUARTERLY
SA(1,3) SAMPLED SEMI-ANNUALLY 1st & 3rd QUARTER

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

0 50 100
SCALE (ft)

BROADBENT & ASSOCIATES, INC.
ENGINEERING, WATER RESOURCES & ENVIRONMENTAL
1324 Mangrove Ave, Suite 212, Chico, California, 95926
Project No.: 06-02-628 Date: 10/26/07

Former Station #5387
20200 Hesperian Boulevard
Hayward, California

Ground-Water Elevation Contour and Analytical Summary Map
September 5, 2007

Drawing
1

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

Station #5387, 20200 Hesperian Blvd., Hayward, 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		
A-4															
3/6/1991	--		39.46	10.0	35.0	13.22	26.24	34,000	11,000	870	2,500	2,100	--	--	--
12/24/1991	--		39.86	10.0	35.0	17.60	22.26	1,900	29	1.9	25	29	--	--	--
3/10/1992	--		39.86	10.0	35.0	14.76	25.10	7,400	37	<0.60	11	73	--	--	--
6/9/1992	--		39.86	10.0	35.0	15.63	24.23	4,500	3.2	1.5	37	16	--	--	--
9/14/1992	--		39.86	10.0	35.0	16.83	23.03	1,300	<2.5	2.5	61	6.8	--	--	--
11/12/1992	--		39.86	10.0	35.0	16.97	22.89	610	7.2	0.98	34	0.97	--	--	--
2/11/1993	--		39.86	10.0	35.0	13.43	26.43	740	2.4	<0.5	5	3.5	--	--	--
4/14/1993	--		39.86	10.0	35.0	13.06	26.80	380	<0.5	<0.5	10	1.6	--	--	--
8/12/1993	--		39.86	10.0	35.0	14.94	24.92	1,200	0.93	<0.5	0.91	<0.5	--	--	--
10/26/1993	--		39.86	10.0	35.0	15.52	24.34	160	<0.5	<0.5	1	<0.5	--	--	--
2/17/1994	--		39.46	10.0	35.0	14.02	25.44	320	0.5	<0.5	28	0.9	--	--	--
5/3/1994	--		39.46	10.0	35.0	13.85	25.61	130	<0.5	<0.5	1.1	<0.5	--	--	--
8/17/1994	--		39.53	10.0	35.0	14.95	24.58	62	34.58	<0.5	<0.5	<0.5	--	--	--
11/18/1994	--		39.53	10.0	35.0	14.46	25.07	98	1.3	0.6	<0.5	<0.5	--	--	--
12/6/1995	--		39.53	10.0	35.0	13.82	25.71	--	0.6	--	--	--	--	--	--
2/14/1996	--		39.53	10.0	35.0	11.24	28.29	--	--	2.3	--	0.71	--	--	--
10/29/1996	--		39.53	10.0	35.0	13.50	26.03	140	--	--	--	--	--	--	--
1/29/1997	--		39.53	10.0	35.0	12.65	26.88	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/30/1997	--		39.53	10.0	35.0	13.97	25.56	<20	<0.3	<0.3	<0.3	<0.5	<50	--	--
7/31/1997	--		39.53	10.0	35.0	12.70	26.83	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
10/22/1997	--		39.53	10.0	35.0	13.95	25.58	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		39.53	10.0	35.0	11.90	27.63	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		39.53	10.0	35.0	13.92	25.61	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		39.53	10.0	35.0	10.80	28.73	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
10/22/1998	--		39.53	10.0	35.0	12.60	26.93	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/13/1999	--		39.53	10.0	35.0	12.60	26.93	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/29/1999	--		39.53	10.0	35.0	12.61	26.92	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/15/2002	--		39.53	10.0	35.0	--	--	<50	<0.5	<0.5	<0.5	<0.5	6.2	--	--
4/24/2002	--	j	39.53	10.0	35.0	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
09/23/2002	--	a	39.53	10.0	35.0	--	--	--	--	--	--	--	--	--	--
12/9/2002	P		39.53	10.0	35.0	13.36	26.17	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	2.4	6.6

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

Station #5387, 20200 Hesperian Blvd., Hayward, 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		
A-4 Cont.															
2/11/2003	P	e	39.53	10.0	35.0	11.82	27.71	<50	<0.50	<0.50	<0.50	<0.50	0.53	1.8	6.6
6/27/2003	--		39.53	10.0	35.0	12.12	27.41	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	6.7
09/04/2003	--	a	39.53	10.0	35.0	--	--	--	--	--	--	--	--	--	--
11/17/2003	--	m	39.53	10.0	35.0	15.09	24.44	--	--	--	--	--	--	--	--
03/01/2004	P	i	42.26	10.0	35.0	10.95	31.31	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.2	6.7
06/02/2004	--	m	42.26	10.0	35.0	12.34	29.92	--	--	--	--	--	--	--	--
09/16/2004	P		42.26	10.0	35.0	13.19	29.07	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.7	6.7
12/07/2004	--	m	42.26	10.0	35.0	13.00	29.26	--	--	--	--	--	--	--	--
03/02/2005	P		42.26	10.0	35.0	10.66	31.60	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.9	6.7
06/20/2005	--	m	42.26	10.0	35.0	11.42	30.84	--	--	--	--	--	--	--	--
09/06/2005	P		42.26	10.0	35.0	12.30	29.96	<50	<0.50	<0.50	<0.50	<1.5	<0.50	0.1	6.7
03/07/2006	--		42.26	10.0	35.0	10.78	31.48	--	--	--	--	--	--	--	--
9/7/2006	--		42.26	10.0	35.0	11.65	30.61	--	--	--	--	--	--	--	--
3/6/2007	--		42.26	10.0	35.0	11.18	31.08	--	--	--	--	--	--	--	--
9/5/2007	--		42.26	10.0	35.0	12.65	29.61	--	--	--	--	--	--	--	--
A-5															
12/24/1991	--		38.94	10	30.00	16.85	22.09	1,600	21	<0.30	32	52	--	--	--
3/10/1992	--		38.94	10	30.00	13.83	25.11	1,000	1.6	<0.30	43	100	--	--	--
6/9/1992	--		38.94	10	30.00	14.91	24.03	680	34	<1.5	14	16	--	--	--
9/14/1992	--		38.94	10	30.00	16.14	22.80	770	12	<0.30	51	65	--	--	--
11/12/1992	--		38.94	10	30.00	16.35	22.59	520	3	<2.5	29	36	--	--	--
2/11/1993	--		38.94	10	30.00	13.21	25.73	150	1.6	0.96	5.1	1.5	--	--	--
4/14/1993	--		38.94	10	30.00	12.97	25.97	190	5.4	<0.5	1.5	0.97	--	--	--
8/12/1993	--		38.94	10	30.00	14.12	24.82	230	1.7	<0.5	5.3	0.94	--	--	--
10/26/1993	--		38.94	10	30.00	14.72	24.22	190	2.8	<0.5	5.5	2	--	--	--
2/17/1994	--		38.47	10	30.00	13.20	25.27	340	<0.5	<0.5	13	2.9	--	--	--
5/3/1994	--		38.47	10	30.00	13.08	25.39	170	1.4	<0.5	4	1.9	--	--	--
8/17/1994	--		38.54	10	30.00	14.18	24.36	270	0.6	<0.5	7.3	1.1	--	--	--
11/18/1994	--		38.54	10	30.00	13.73	24.81	338	--	<0.5	4.6	<0.5	--	--	--
9/26/1995	--		38.47	10	30.00	12.44	26.03	--	0.63	1.1	--	1.2	--	--	--

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Station #5387, 20200 Hesperian Blvd., Hayward, 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		
A-5 Cont.															
12/6/1995	--		38.47	10	30.00	12.92	25.55	--	--	--	--	--	--	--	--
2/14/1996	--		38.47	10	30.00	10.76	27.71	--	--	2	--	1.1	--	--	--
10/29/1996	--		38.47	10	30.00	12.35	26.12	--	--	--	--	--	--	--	--
1/29/1997	--		38.47	10	30.00	10.85	27.62	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/30/1997	--		38.47	10	30.00	13.56	24.91	<20	<0.3	<0.3	<0.3	<0.5	<50	--	--
7/31/1997	--		38.47	10	30.00	11.80	26.67	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
10/22/1997	--		38.47	10	30.00	12.20	26.27	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		38.47	10	30.00	10.12	28.35	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		38.47	10	30.00	13.50	24.97	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		38.47	10	30.00	10.20	28.27	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
10/22/1998	--		38.47	10	30.00	11.50	26.97	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/13/1999	--		38.47	10	30.00	10.15	28.32	<50	0.32	0.38	<0.3	<0.5	<20	--	--
4/29/1999	--		38.47	10	30.00	11.50	26.97	<50	<0.3	<0.3	<0.3	0.58	<5	--	--
1/15/2002	--		38.47	10	30.00	--	--	<50	<0.5	<0.5	<0.5	<0.5	5	--	--
4/24/2002	--	j	38.47	10	30.00	--	--	<50	<0.50	<0.50	<0.50	<0.50	1.2	--	--
9/23/2002	P		38.47	10	30.00	12.55	25.92	<50	<0.50	<0.50	<0.50	<1.5	1.3	1.0	6.7
12/9/2002	P		38.47	10	30.00	12.60	25.87	<50	<0.50	<0.50	<0.50	<1.0	<5.00	1.9	6.6
2/11/2003	P	e	38.47	10	30.00	11.37	27.10	<50	<0.50	<0.50	<0.50	<0.50	0.97	1.2	6.7
6/27/2003	--		38.47	10	30.00	11.55	26.92	<50	<0.50	<0.50	<0.50	<0.50	0.98	1.5	6.8
9/4/2003	--		38.47	10	30.00	12.21	26.26	<50	<0.50	<0.50	<0.50	<0.50	0.5	3.1	7
11/17/2003	--	m	38.94	10	30.00	12.37	26.57	--	--	--	--	--	--	--	--
03/01/2004	P	i	41.00	10	30.00	10.90	30.10	<50	<0.50	<0.50	<0.50	<0.50	0.77	3.2	6.7
06/02/2004	--	m	41.00	10	30.00	11.70	29.30	--	--	--	--	--	--	--	--
09/16/2004	P		41.00	10	30.00	12.40	28.60	<50	<0.50	<0.50	<0.50	<0.50	0.50	0.2	6.8
12/07/2004	--	m	41.00	10	30.00	12.40	28.60	--	--	--	--	--	--	--	--
03/02/2005	P		41.00	10	30.00	10.54	30.46	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.6	6.6
06/20/2005	--	m	41.00	10	30.00	10.92	30.08	--	--	--	--	--	--	--	--
09/06/2005	P		41.00	10	30.00	11.67	29.33	<50	<0.50	<0.50	<0.50	<1.5	0.61	0.2	6.7
03/07/2006	--		41.00	10	30.00	10.43	30.57	--	--	--	--	--	--	--	--
9/7/2006	--		41.00	10	30.00	11.14	29.86	--	--	--	--	--	--	--	--
3/6/2007	--	a	41.00	10	30.00	--	--	--	--	--	--	--	--	--	--

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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		
A-5 Cont.															
9/5/2007	--		41.00	10	30.00	12.07	28.93	--	--	--	--	--	--	--	--
A-6															
12/24/1991	--		39.07	5.0	30.0	16.88	22.19	<30	<0.3	<0.3	<0.3	<0.3	--	--	--
3/10/1992	--		39.07	5.0	30.0	13.73	25.34	<30	<0.3	<0.3	<0.3	<0.3	--	--	--
6/9/1992	--		39.07	5.0	30.0	14.95	24.12	<30	<0.3	<0.3	<0.3	<0.3	--	--	--
9/14/1992	--		39.07	5.0	30.0	16.20	22.87	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
11/12/1992	--		39.07	5.0	30.0	16.35	22.72	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
2/11/1993	--		39.07	5.0	30.0	13.04	26.03	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
4/14/1993	--		39.07	5.0	30.0	12.23	26.84	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/12/1993	--		39.07	5.0	30.0	14.18	24.89	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
10/26/1993	--		39.07	5.0	30.0	14.85	24.22	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
5/3/1994	--		39.07	5.0	30.0	13.66	25.41	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/17/1994	--		38.78	5.0	30.0	14.34	24.44	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
11/18/1994	--		38.78	5.0	30.0	13.76	25.02	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
9/26/1995	--		38.78	5.0	30.0	12.56	26.22	--	--	--	--	--	--	--	--
12/6/1995	--		38.78	5.0	30.0	13.18	25.60	--	--	--	--	--	--	--	--
2/14/1996	--		38.78	5.0	30.0	12.46	26.32	--	--	--	--	--	--	--	--
10/29/1996	--		38.78	5.0	30.0	12.40	26.38	50	--	--	--	--	--	--	--
1/29/1997	--		38.78	5.0	30.0	13.85	24.93	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/30/1997	--		38.78	5.0	30.0	12.49	26.29	<20	<0.3	<0.3	<0.3	<0.5	<50	--	--
7/31/1997	--		38.78	5.0	30.0	12.10	26.68	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
10/22/1997	--		38.78	5.0	30.0	15.20	23.58	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		38.78	5.0	30.0	13.80	24.98	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		38.78	5.0	30.0	12.45	26.33	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		38.78	5.0	30.0	10.30	28.48	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
10/22/1998	--		38.78	5.0	30.0	11.10	27.68	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/13/1999	--		38.78	5.0	30.0	10.40	28.38	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/29/1999	--		38.78	5.0	30.0	13.80	24.98	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/15/2002	--		38.78	5.0	30.0	--	--	<50	<0.5	<0.5	<0.5	<0.5	5.7	--	--
4/24/2002	--	j	38.78	5.0	30.0	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--

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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		
A-6 Cont.															
9/23/2002	P		38.78	5.0	30.0	12.61	26.17	<50	<0.500	<0.500	<0.500	<1.50	<0.500	1.4	6.8
12/9/2002	P		38.78	5.0	30.0	12.67	26.11	<50	<0.500	<0.500	<0.500	<1.00	<5.00	2.6	6.7
2/11/2003	P	e	38.78	5.0	30.0	11.21	27.57	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.0	6.7
6/27/2003	--		38.78	5.0	30.0	11.60	27.18	<50	<0.50	<0.50	<0.50	<0.50	<0.50	5.0	6.9
9/4/2003	--		38.78	5.0	30.0	12.29	26.49	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.8	6.9
11/17/2003	--		38.78	5.0	30.0	12.44	26.34	--	--	--	--	--	--	--	--
03/01/2004	--	i, n	41.25	5.0	30.0	10.45	30.80	--	--	--	--	--	--	--	--
06/02/2004	--	n	41.25	5.0	30.0	11.75	29.50	--	--	--	--	--	--	--	--
09/16/2004	P		41.25	5.0	30.0	12.56	28.69	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.8	6.8
12/07/2004	--	n	41.25	5.0	30.0	12.35	28.90	--	--	--	--	--	--	--	--
03/02/2005	--	n	41.25	5.0	30.0	10.34	30.91	--	--	--	--	--	--	--	--
06/20/2005	--	n	41.25	5.0	30.0	10.90	30.35	--	--	--	--	--	--	--	--
09/06/2005	P		41.25	5.0	30.0	11.70	29.55	<50	<0.50	<0.50	<0.50	<1.5	<0.50	0.2	6.8
03/07/2006	--		41.25	5.0	30.0	10.39	30.86	--	--	--	--	--	--	--	--
9/7/2006	--		41.25	5.0	30.0	11.18	30.07	--	--	--	--	--	--	--	--
3/6/2007	--		41.25	5.0	30.0	10.72	30.53	--	--	--	--	--	--	--	--
9/5/2007	--		41.25	5.0	30.0	12.13	29.12	--	--	--	--	--	--	--	--
A-7															
12/24/1991	--		39.95	10.00	35.00	18.11	21.84	10,000	88	16	170	610	--	--	--
3/10/1992	--		39.95	10.00	35.00	15.30	24.65	320	9.3	0.54	8.8	34	--	--	--
6/9/1992	--		39.95	10.00	35.00	16.12	23.83	340	11	1.1	8.9	26	--	--	--
9/14/1992	--		39.95	10.00	35.00	17.35	22.60	510	12	<2.0	30	51	--	--	--
11/12/1992	--		39.95	10.00	35.00	17.47	22.48	760	17	0.83	50	73	--	--	--
2/11/1993	--		39.95	10.00	35.00	13.80	26.15	260	20	1	11	21	--	--	--
4/14/1993	--		39.95	10.00	35.00	13.60	26.35	1300	89	2.1	48	87	--	--	--
8/12/1993	--		39.95	10.00	35.00	15.54	24.41	360	9	<0.50	13	9	--	--	--
10/26/1993	--		39.95	10.00	35.00	16.28	23.67	99	1.7	<0.50	4	3	--	--	--
2/17/1994	--		39.38	10.00	35.00	14.44	24.94	1,300	38	<1	35	25	--	--	--
5/3/1994	--		39.38	10.00	35.00	14.34	25.04	330	8.1	<0.5	7.8	3.7	--	--	--
8/17/1994	--		39.45	10.00	35.00	15.40	24.05	350	2.2	<0.5	9.6	3.6	--	--	--

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

Station #5387, 20200 Hesperian Blvd., Hayward, 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		
A-7 Cont.															
11/18/1994	--	--	39.45	10.00	35.00	14.95	24.50	412	1.3	<0.5	6.2	2	--	--	--
9/26/1995	--		39.38	10.00	35.00	13.92	25.46	--	--	--	--	--	--	--	--
12/6/1995	--	--	39.38	10.00	35.00	14.42	24.96	--	--	--	--	--	--	--	--
2/14/1996	--		39.38	10.00	35.00	12.38	27.00	--	--	1.1	--	0.59	--	--	--
10/29/1996	--	--	39.38	10.00	35.00	12.33	27.05	--	--	--	--	--	--	--	--
1/29/1997	--		39.38	10.00	35.00	13.10	26.28	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/30/1997	--	--	39.38	10.00	35.00	11.70	27.68	<20	<0.3	<0.3	<0.3	<0.5	<50	--	--
7/31/1997	--		39.38	10.00	35.00	13.25	26.13	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
10/22/1997	--	--	39.38	10.00	35.00	14.42	24.96	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		39.38	10.00	35.00	13.00	26.38	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--	--	39.38	10.00	35.00	11.65	27.73	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		39.38	10.00	35.00	11.20	28.18	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
10/22/1998	--	--	39.38	10.00	35.00	13.75	25.63	51	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/13/1999	--		39.38	10.00	35.00	14.45	24.93	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/29/1999	--	--	39.38	10.00	35.00	13.74	25.64	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/15/2002	--		39.38	10.00	35.00	--	--	<50	<0.5	<0.5	<0.5	<0.5	4.8	--	--
4/24/2002	--	--	39.38	10.00	35.00	--	--	<50	<0.50	<0.50	<0.50	<0.50	7.2	--	--
9/23/2002	P		39.38	10.00	35.00	13.78	25.60	<50.0	<0.500	<0.500	<0.500	<1.50	3.48	0.8	6.7
12/9/2002	P	--	39.38	10.00	35.00	13.97	25.41	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	2.2	6.8
2/11/2003	P	e	39.38	10.00	35.00	12.35	27.03	54	<0.50	<0.50	<0.50	<0.50	21	1.7	6.3
6/27/2003	--	--	39.38	10.00	35.00	12.95	26.43	<50	<0.50	<0.50	<0.50	<0.50	9.4	1.3	6.8
9/4/2003	--		39.38	10.00	35.00	13.59	25.79	<50	<0.50	<0.50	<0.50	<0.50	3.4	2.6	6.9
11/17/2003	P	--	39.38	10.00	35.00	13.84	25.54	<50	<0.50	<0.50	<0.50	<0.50	1.4	3.5	6.5
03/01/2004	P	i	41.94	10.00	35.00	12.65	29.29	<50	<0.50	<0.50	<0.50	<0.50	1.1	3.5	6.7
06/02/2004	P	--	41.94	10.00	35.00	13.08	28.86	<50	<0.50	<0.50	<0.50	<0.50	0.92	1.3	7.3
09/16/2004	P		41.94	10.00	35.00	13.89	28.05	<50	<0.50	<0.50	<0.50	<0.50	1.0	0.7	6.7
12/07/2004	P	--	41.94	10.00	35.00	13.77	28.17	<50	<0.50	<0.50	<0.50	<0.50	1.8	0.8	7.3
03/02/2005	P		41.94	10.00	35.00	12.35	29.59	<50	<0.50	<0.50	<0.50	<0.50	1.4	3.1	6.7
06/20/2005	P	--	41.94	10.00	35.00	12.30	29.64	<50	<0.50	<0.50	<0.50	<0.50	6.0	0.12	6.8
09/06/2005	P		41.94	10.00	35.00	13.10	28.84	<50	<0.50	<0.50	<0.50	<1.5	<0.50	0.1	6.7
03/07/2006	--	--	41.94	10.00	35.00	11.83	30.11	--	--	--	--	--	--	--	--

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

Station #5387, 20200 Hesperian Blvd., Hayward, 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		
A-7 Cont.															
9/7/2006	P		41.94	10.00	35.00	12.64	29.30	<50	<0.50	<0.50	<0.50	<0.50	0.80	1.31	6.7
3/6/2007	--		41.94	10.00	35.00	12.12	29.82	--	--	--	--	--	--	--	--
9/5/2007	NP		41.94	10.00	35.00	13.44	28.50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.31	7.37
A-8															
9/14/1992	--		37.23	10.00	35.00	14.19	23.04	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
11/12/1992	--		37.23	10.00	35.00	14.35	22.88	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
2/11/1993	--		37.23	10.00	35.00	11.25	25.98	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
4/14/1993	--		37.23	10.00	35.00	12.33	24.90	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/12/1993	--		37.23	10.00	35.00	12.41	24.82	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
10/26/1993	--		37.23	10.00	35.00	13.02	24.21	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
2/17/1994	--		36.76	10.00	35.00	11.47	25.29	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
5/3/1994	--		36.76	10.00	35.00	11.35	25.41	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/17/1994	--		36.84	10.00	35.00	12.34	24.50	<50	<0.5	1.7	<0.5	1.4	--	--	--
11/18/1994	--		36.84	10.00	35.00	11.90	24.94	<50	1	<0.5	<0.5	<0.5	--	--	--
9/26/1995	--		36.76	10.00	35.00	10.94	25.82	<50	--	--	--	--	--	--	--
12/6/1995	--		36.76	10.00	35.00	11.42	25.34	<50	--	--	--	--	--	--	--
2/14/1996	--		36.76	10.00	35.00	8.80	27.96	<50	--	0.48	--	--	--	--	--
10/29/1996	--		36.76	10.00	35.00	11.30	25.46	<50	--	--	--	--	--	--	--
1/29/1997	--		36.76	10.00	35.00	7.60	29.16	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/30/1997	--		36.76	10.00	35.00	10.54	26.22	<50	<0.3	<0.3	<0.3	<0.5	<50	--	--
7/31/1997	--		36.76	10.00	35.00	11.20	25.56	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
10/22/1997	--		36.76	10.00	35.00	12.14	24.62	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		36.76	10.00	35.00	4.43	32.33	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		36.76	10.00	35.00	10.55	26.21	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		36.76	10.00	35.00	9.07	27.69	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
10/22/1998	--		36.76	10.00	35.00	12.12	24.64	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/13/1999	--		36.76	10.00	35.00	9.60	27.16	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/29/1999	--		36.76	10.00	35.00	9.08	27.68	<50	<0.3	<0.3	<0.3	1.5	<5	--	--
1/15/2002	--		36.76	10.00	35.00	--	--	<50	<0.5	<0.5	<0.5	<0.5	5.6	--	--
4/24/2002	--	j	36.76	10.00	35.00	--	--	<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 #5387, 20200 Hesperian Blvd., Hayward, 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		
A-8 Cont.															
9/23/2002	P		36.76	10.00	35.00	10.75	26.01	<50	<0.500	<0.500	<0.500	<1.50	<0.500	1.0	6.8
12/9/2002	P		36.76	10.00	35.00	10.81	25.95	<50	<0.500	<0.500	<0.500	<1.00	<5.00	2.1	6.6
2/11/2003	P	e	36.76	10.00	35.00	9.90	26.86	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.4	6.5
6/27/2003	--		36.76	10.00	35.00	9.73	27.03	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.0	6.8
9/4/2003	--		36.76	10.00	35.00	10.32	26.44	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.1	6.9
11/17/2003	--	m	36.76	10.00	35.00	10.55	26.21	--	--	--	--	--	--	--	--
03/01/2004	P		39.29	10.00	35.00	8.51	30.78	<50	<0.50	<0.50	<0.50	<0.50	0.76	3.6	6.8
06/02/2004	--	m	39.29	10.00	35.00	9.83	29.46	--	--	--	--	--	--	--	--
09/16/2004	P		39.29	10.00	35.00	10.75	28.54	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.1	6.7
12/07/2004	--	m	39.29	10.00	35.00	10.55	28.74	--	--	--	--	--	--	--	--
03/02/2005	P		39.29	10.00	35.00	8.35	30.94	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.6	6.8
06/20/2005	--	m	39.29	10.00	35.00	8.95	30.34	--	--	--	--	--	--	--	--
09/06/2005	P		39.29	10.00	35.00	9.85	29.44	<50	<0.50	<0.50	<0.50	<1.5	<0.50	0.3	6.7
03/07/2006	--		39.29	10.00	35.00	8.33	30.96	--	--	--	--	--	--	--	--
9/7/2006	--		39.29	10.00	35.00	9.24	30.05	--	--	--	--	--	--	--	--
3/6/2007	--		39.29	10.00	35.00	5.78	33.51	--	--	--	--	--	--	--	--
9/5/2007	--		39.29	10.00	35.00	10.18	29.11	--	--	--	--	--	--	--	--
A-9															
9/14/1992	--		38.71	10.0	35.0	16.12	22.59	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
11/12/1992	--		38.71	10.0	35.0	16.29	22.42	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
2/11/1993	--		38.71	10.0	35.0	12.31	26.40	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
4/14/1993	--		38.71	10.0	35.0	12.01	26.70	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/12/1993	--		38.71	10.0	35.0	13.90	24.81	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
10/26/1993	--		38.71	10.0	35.0	14.86	23.85	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
2/17/1994	--		38.19	10.0	35.0	12.99	25.20	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/17/1994	--		38.19	10.0	35.0	14.03	24.16	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
11/18/1994	--		37.24	10.0	35.0	13.44	23.80	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
9/26/1995	--		37.24	10.0	35.0	12.43	24.81	<50	<0.5	--	--	--	--	--	--
12/6/1995	--		38.19	10.0	35.0	13.14	25.05	<50	<0.5	--	--	--	--	--	--
2/14/1996	--		38.19	10.0	35.0	9.05	29.14	<50	--	1.8	0.49	0.82	--	--	--

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Station #5387, 20200 Hesperian Blvd., Hayward, 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		
A-9 Cont.															
10/29/1996	--		38.19	10.0	35.0	12.85	25.34	<50	--	--	--	--	--	--	--
1/29/1997	--		38.19	10.0	35.0	9.02	29.17	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/30/1997	--		38.19	10.0	35.0	12.05	26.14	<50	<0.3	<0.3	<0.3	<0.5	<50	--	--
7/31/1997	--		38.19	10.0	35.0	12.18	26.01	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
10/22/1997	--		38.19	10.0	35.0	7.45	30.74	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		38.19	10.0	35.0	21.25	16.94	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		38.19	10.0	35.0	12.10	26.09	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		38.19	10.0	35.0	10.40	27.79	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
10/22/1998	--		38.19	10.0	35.0	1.55	36.64	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/13/1999	--		38.19	10.0	35.0	12.05	26.14	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/29/1999	--		38.19	10.0	35.0	7.43	30.76	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/15/2002	--		38.19	10.0	35.0	--	--	<50	<0.5	<0.5	<0.5	<0.5	4.3	--	--
4/24/2002	--	j	38.19	10.0	35.0	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
9/23/2002	P		38.19	10.0	35.0	12.35	25.84	<50	<0.500	<0.500	<0.500	<1.50	<0.500	1.6	6.8
12/9/2002	P		38.19	10.0	35.0	12.37	25.82	<50	<0.500	<0.500	<0.500	<1.00	<5.00	3.2	7.1
2/11/2003	P	e	38.19	10.0	35.0	10.97	27.22	<50	<0.50	<0.50	<0.50	<0.50	<0.50	3.0	6.7
6/27/2003	--		38.19	10.0	35.0	11.41	26.78	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.9	6.7
9/4/2003	--		38.19	10.0	35.0	12.00	26.19	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.3	6.9
11/17/2003	--		38.19	10.0	35.0	12.18	26.01	--	--	--	--	--	--	--	--
03/01/2004	P	i	40.73	10.0	35.0	10.30	30.43	<50	<0.50	<0.50	<0.50	<0.50	0.50	3.1	6.7
06/02/2004	--	m	40.73	10.0	35.0	11.50	29.23	--	--	--	--	--	--	--	--
09/16/2004	P		40.73	10.0	35.0	12.23	28.50	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.2	6.8
12/07/2004	--	m	40.73	10.0	35.0	12.20	28.53	--	--	--	--	--	--	--	--
03/02/2005	P		40.73	10.0	35.0	10.09	30.64	--	--	--	--	--	--	3.7	--
06/20/2005	--	m	40.73	10.0	35.0	10.75	29.98	--	--	--	--	--	--	--	--
09/06/2005	P		40.73	10.0	35.0	11.44	29.29	<50	<0.50	<0.50	<0.50	<1.5	<0.50	1.0	6.6
03/07/2006	--		40.73	10.0	35.0	10.33	30.40	--	--	--	--	--	--	--	--
9/7/2006	--		40.73	10.0	35.0	10.98	29.75	--	--	--	--	--	--	--	--
3/6/2007	--		40.73	10.0	35.0	10.57	30.16	--	--	--	--	--	--	--	--
9/5/2007	--		**40.73**	**10.0**	**35.0**	**11.85**	**28.88**	--	--	--	--	--	--	--	--

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

Station #5387, 20200 Hesperian Blvd., Hayward, 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		
A-10															
12/7/1992	--		38.94	10.00	35.00	16.81	22.13	660	30	<2.5	<2.5	<2.5	--	--	--
2/11/1993	--		38.94	10.00	35.00	13.15	25.79	210	<0.5	0.97	<0.5	<0.5	--	--	--
4/14/1993	--		38.94	10.00	35.00	12.19	26.75	770	<0.5	3	0.76	1.9	--	--	--
8/12/1993	--		38.94	10.00	35.00	14.87	24.07	390	<0.5	<0.5	<0.5	0.84	--	--	--
10/26/1993	--		38.94	10.00	35.00	15.65	23.29	290	<0.5	<0.5	<0.5	<0.5	--	--	--
2/17/1994	--		38.66	10.00	35.00	14.16	24.50	52	<0.5	<0.5	<0.5	<0.5	--	--	--
5/3/1994	--		38.66	10.00	35.00	14.00	24.66	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
8/17/1994	--		38.72	10.00	35.00	15.08	23.64	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
11/18/1994	--		38.72	10.00	35.00	14.68	24.04	<50	<0.5	<0.5	<0.5	<0.5	--	--	--
9/26/1995	--		38.66	10.00	35.00	13.58	25.08	--	--	--	--	--	--	--	--
12/6/1995	--		38.66	10.00	35.00	14.24	24.42	--	--	--	--	--	--	--	--
2/14/1996	--		38.66	10.00	35.00	6.70	31.96	--	--	--	--	--	--	--	--
10/29/1996	--		38.66	10.00	35.00	14.10	24.56	--	--	--	--	1.1	--	--	--
1/29/1997	--		38.66	10.00	35.00	11.20	27.46	<50	0.41	4.8	0.6	4.4	37	--	--
4/30/1997	--		38.66	10.00	35.00	12.66	26.00	<20	0.4	4.2	0.5	3.8	50	--	--
7/31/1997	--		38.66	10.00	35.00	13.20	25.46	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		38.66	10.00	35.00	12.60	26.06	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		38.66	10.00	35.00	8.08	30.58	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
10/22/1998	--		38.66	10.00	35.00	11.15	27.51	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/13/1999	--		38.66	10.00	35.00	9.60	29.06	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/29/1999	--		38.66	10.00	35.00	11.15	27.51	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/15/2002	--		38.66	10.00	35.00	--	--	<50	<0.5	<0.5	<0.5	<0.5	17	--	--
4/24/2002	--		38.66	10.00	35.00	--	--	--	--	--	--	--	--	--	--
9/23/2002	--	o	38.66	10.00	35.00	--	--	--	--	--	--	--	--	--	--
12/19/2002	P	c	38.66	10.00	35.00	12.75	25.91	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
2/11/2003	P	e	38.66	10.00	35.00	12.21	26.45	<50	<0.50	<0.50	<0.50	<0.50	1.9	1.3	6.7
6/27/2003	--		38.66	10.00	35.00	12.66	26.00	<50	<0.50	<0.50	<0.50	<0.50	0.99	0.8	7.2
9/4/2003	--		38.66	10.00	35.00	13.31	25.35	<50	<0.50	<0.50	<0.50	<0.50	1.1	0.9	6.9
11/17/2003	--	n	38.66	10.00	35.00	13.27	25.39	--	--	--	--	--	--	--	--
03/01/2004	--	j, n	41.22	10.00	35.00	11.55	29.67	--	--	--	--	--	--	--	--
06/02/2004	--	n	41.22	10.00	35.00	12.61	28.61	--	--	--	--	--	--	--	--

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

Station #5387, 20200 Hesperian Blvd., Hayward, 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		
A-10 Cont.															
09/16/2004	P	k	41.22	10.00	35.00	12.51	28.71	<50	<0.50	<0.50	<0.50	<0.50	0.84	0.2	6.8
12/07/2004	--	n	41.22	10.00	35.00	13.60	27.62	--	--	--	--	--	--	--	--
03/02/2005	--	n	41.22	10.00	35.00	11.46	29.76	--	--	--	--	--	--	--	--
06/20/2005	--	n	41.22	10.00	35.00	12.00	29.22	--	--	--	--	--	--	--	--
09/06/2005	--	n	41.22	10.00	35.00	--	--	--	--	--	--	--	--	--	--
03/07/2006	--		41.22	10.00	35.00	10.42	30.80	--	--	--	--	--	--	--	--
9/7/2006	--		41.22	10.00	35.00	11.85	29.37	--	--	--	--	--	--	--	--
3/6/2007	--		41.22	10.00	35.00	11.80	29.42	--	--	--	--	--	--	--	--
9/5/2007	--		41.22	10.00	35.00	13.08	28.14	--	--	--	--	--	--	--	--
AR-1															
9/14/1992	--		38.11	15.00	40.00	15.21	22.90	820	67	<1.0	8.8	6.7	--	--	--
11/12/1992	--		38.11	15.00	40.00	15.36	22.75	140	66	<0.5	4.3	3.7	--	--	--
2/11/1993	--		38.11	15.00	40.00	12.81	25.30	360	190	<2.5	8.6	<2.5	--	--	--
4/14/1993	--		38.11	15.00	40.00	11.77	26.34	420	240	5.2	30	8.7	--	--	--
8/12/1993	--		38.11	15.00	40.00	13.55	24.56	370	150	<2	11	<2	--	--	--
10/26/1993	--		38.11	15.00	40.00	13.98	24.13	240	98	<2	11	<2	--	--	--
2/17/1994	--		37.46	15.00	40.00	12.15	25.31	4,700	1,100	<10	140	26	--	--	--
5/3/1994	--		37.46	15.00	40.00	12.03	25.43	620	130	1.3	48	4.3	--	--	--
8/17/1994	--		37.33	15.00	40.00	12.92	24.41	3,600	630	<5	200	12	--	--	--
11/18/1994	--		37.33	15.00	40.00	12.41	24.92	12,100	720	6.1	337	15	--	--	--
9/26/1995	--		37.46	15.00	40.00	11.34	26.12	--	83	--	--	--	--	--	--
12/6/1995	--		37.46	15.00	40.00	11.87	25.59	120	20	--	20	0.6	--	--	--
2/14/1996	--		37.46	15.00	40.00	10.48	26.98	--	--	--	--	0.52	--	--	--
10/29/1996	--		37.46	15.00	40.00	11.80	25.66	--	--	0.99	--	--	--	--	--
1/29/1997	--		37.46	15.00	40.00	11.25	26.21	<50	0.41	<0.3	<0.3	<0.3	<20	--	--
4/30/1997	--		37.46	15.00	40.00	12.24	25.22	<20	<0.3	<0.3	<0.3	<0.5	<50	--	--
7/31/1997	--		37.46	15.00	40.00	10.80	26.66	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
10/22/1997	--		37.46	15.00	40.00	11.90	25.56	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		37.46	15.00	40.00	11.20	26.26	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		37.46	15.00	40.00	12.20	25.26	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--

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

Station #5387, 20200 Hesperian Blvd., Hayward, 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		
AR-1 Cont.															
7/8/1998	--		37.46	15.00	40.00	9.10	28.36	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
10/22/1998	--		37.46	15.00	40.00	9.80	27.66	270	2.1	<0.3	3.6	<0.5	190	--	--
1/13/1999	--		37.46	15.00	40.00	10.10	27.36	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/29/1999	--		37.46	15.00	40.00	11.35	26.11	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/15/2002	--		37.46	15.00	40.00	--	--	<50	<0.5	<0.5	<0.5	1.1	2.9	--	--
4/24/2002	--	j	37.46	15.00	40.00	--	--	<50	<0.50	<0.50	<0.50	<0.50	2.6	--	--
9/23/2002	P		37.46	15.00	40.00	11.26	26.20	<50.0	<0.500	<0.500	<0.500	<1.50	20.2	1.6	6.9
12/9/2002	P		37.46	15.00	40.00	11.35	26.11	<50.0	<0.500	<0.500	<0.500	<1.00	26.6	1.8	6.9
2/11/2003	P	e	37.46	15.00	40.00	9.91	27.55	<50	<0.50	<0.50	<0.50	<0.50	4.7	1.2	6.7
6/27/2003	NP		37.46	15.00	40.00	10.30	27.16	<50	<0.50	<0.50	<0.50	<0.50	1.6	1.6	7
09/04/2003	--	f	37.46	15.00	40.00	--	--	--	--	--	--	--	--	--	--
11/17/2003	P		37.46	15.00	40.00	11.13	26.33	<50	<0.50	<0.50	<0.50	<0.50	1.4	1.8	6.7
03/01/2004	P	i	39.82	15.00	40.00	9.00	30.82	<50	<0.50	<0.50	<0.50	<0.50	8.6	0.6	7.0
06/02/2004	NP		39.82	15.00	40.00	10.40	29.42	<50	<0.50	<0.50	<0.50	<0.50	3.6	0.3	7.2
09/16/2004	NP		39.82	15.00	40.00	11.18	28.64	<50	<0.50	<0.50	<0.50	<0.50	3.2	0.1	6.7
12/07/2004	NP		39.82	15.00	40.00	11.15	28.67	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.2	7.3
03/02/2005	P	p	39.82	15.00	40.00	9.01	30.81	<50	<0.50	<0.50	<0.50	<0.50	1.7	0.9	6.8
06/20/2005	NP		39.82	15.00	40.00	9.55	30.27	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.07	8.1
09/06/2005	NP		39.82	15.00	40.00	10.42	29.40	<50	<0.50	<0.50	<0.50	<1.5	<0.50	0.7	7.5
03/07/2006	--		39.82	15.00	40.00	9.04	30.78	--	--	--	--	--	--	--	--
9/7/2006	NP		39.82	15.00	40.00	9.83	29.99	<50	<0.50	<0.50	<0.50	<0.50	<0.50	2.07	7.1
3/6/2007	--		39.82	15.00	40.00	9.32	30.50	--	--	--	--	--	--	--	--
9/5/2007	**P**		**39.82**	**15.00**	**40.00**	**10.77**	**29.05**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**2.23**	**7.30**
AR-2															
3/30/1993	--		38.39	5.0	35.00	11.53	26.86	390	4.1	1.6	<0.5	47	--	--	--
4/14/1993	--		38.39	5.0	35.00	11.87	26.52	310	18	<0.5	0.67	36	--	--	--
8/12/1993	--		38.39	5.0	35.00	13.59	24.80	130	16	<0.5	1.7	0.57	--	--	--
10/26/1993	--		38.39	5.0	35.00	14.25	24.14	110	15	<0.5	1.8	<0.5	--	--	--
2/17/1994	--		38.39	5.0	35.00	12.76	25.63	130	2.9	<0.5	15	0.8	--	--	--
5/3/1994	--		38.39	5.0	35.00	12.60	25.79	<50	<0.5	<0.5	<0.5	<0.5	--	--	--

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Station #5387, 20200 Hesperian Blvd., Hayward, 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		
AR-2 Cont.															
8/17/1994	--		38.18	5.0	35.00	13.86	24.32	3,000	140	140	220	91	--	--	--
11/18/1994	--		38.18	5.0	35.00	13.33	24.85	623	10.5	10.5	27.9	8	--	--	--
9/26/1995	--		37.98	5.0	35.00	11.67	26.31	--	--	--	--	--	--	--	--
12/6/1995	--		37.98	5.0	35.00	12.32	25.66	320	12	12	23	2.1	--	--	--
2/14/1996	--		37.98	5.0	35.00	10.74	27.24	--	--	--	--	0.76	--	--	--
10/29/1996	--		37.98	5.0	35.00	11.95	26.03	--	--	--	--	--	--	--	--
1/29/1997	--		37.98	5.0	35.00	11.35	26.63	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/30/1997	--		37.98	5.0	35.00	12.15	25.83	<20	<0.3	<0.3	<0.3	<0.5	<50	--	--
7/31/1997	--		37.98	5.0	35.00	11.20	26.78	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
10/22/1997	--		37.98	5.0	35.00	12.14	25.84	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		37.98	5.0	35.00	10.05	27.93	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		37.98	5.0	35.00	12.10	25.88	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		37.98	5.0	35.00	9.50	28.48	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
10/22/1998	--		37.98	5.0	35.00	10.45	27.53	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/13/1999	--		37.98	5.0	35.00	10.50	27.48	<50	<0.3	0.4	<0.3	0.53	<20	--	--
4/29/1999	--		37.98	5.0	35.00	11.48	26.50	<50	<0.3	<0.3	<0.3	0.82	<5	--	--
1/15/2002	--		37.98	5.0	35.00	--	--	<50	<0.5	<0.5	<0.5	<0.5	17	--	--
4/24/2002	--	j	37.98	5.0	35.00	--	--	<50	<0.50	<0.50	<0.50	<0.50	39	--	--
9/23/2002	P		37.98	5.0	35.00	12.22	25.76	<50.0	<0.500	<0.500	<0.500	<1.50	4.43	1.0	7.1
12/9/2002	P		37.98	5.0	35.00	12.30	25.68	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	1.1	7
2/11/2003	P	e	37.98	5.0	35.00	10.80	27.18	<50	<0.50	<0.50	<0.50	<0.50	0.75	1.8	6.9
6/27/2003	NP		37.98	5.0	35.00	11.14	26.84	<50	<0.50	<0.50	<0.50	<0.50	6	0.9	6.4
09/04/2003	--	f	37.98	5.0	35.00	--	--	--	--	--	--	--	--	--	--
11/17/2003	P		38.89	5.0	35.00	12.08	26.81	<50	<0.50	<0.50	<0.50	<0.50	0.86	1.8	6.8
03/01/2004	P	i	40.68	5.0	35.00	10.01	30.67	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.2	6.9
06/02/2004	--		40.68	5.0	35.00	11.38	29.30	<50	<0.50	<0.50	<0.50	<0.50	4.3	0.3	6.7
09/16/2004	NP		40.68	5.0	35.00	12.12	28.56	<50	<0.50	<0.50	<0.50	<0.50	1.5	0.1	6.9
12/07/2004	NP		40.68	5.0	35.00	12.00	28.68	<50	<0.50	<0.50	<0.50	<0.50	1.2	0.3	7.4
03/02/2005	NP		40.68	5.0	35.00	9.92	30.76	<50	<0.50	<0.50	<0.50	<0.50	1.5	0.8	7.0
06/20/2005	NP		40.68	5.0	35.00	10.49	30.19	<50	<0.50	<0.50	<0.50	<0.50	0.97	0.11	6.6
09/06/2005	NP		40.68	5.0	35.00	11.35	29.33	<50	<0.50	<0.50	<0.50	<1.5	0.79	0.7	7.0

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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		
AR-2 Cont.															
03/07/2006	--		40.68	5.0	35.00	9.92	30.76	--	--	--	--	--	--	--	--
9/7/2006	NP		40.68	5.0	35.00	10.69	29.99	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.31	6.7
3/6/2007	--		40.68	5.0	35.00	10.30	30.38	--	--	--	--	--	--	--	--
9/5/2007	**NP**		**40.68**	**5.0**	**35.00**	**11.68**	**29.00**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**0.85**	**7.39**
MW-1															
8/8/1986	--		38.36	5.0	30.00	11.25	27.11	7,040	132	8.7	439	230	--	--	--
12/24/1991	--		38.36	5.0	30.00	16.12	22.24	2,200	190	8.5	6.9	2.6	--	--	--
3/10/1992	--		38.36	5.0	30.00	13.34	25.02	2,800	270	29	56	39	--	--	--
6/9/1992	--		38.36	5.0	30.00	14.12	24.24	2,900	960	27	99	63	--	--	--
9/14/1992	--		38.36	5.0	30.00	15.34	23.02	2,600	450	<50	45	21	--	--	--
11/12/1992	--		38.36	5.0	30.00	15.46	22.90	1,600	310	7.2	22	8.9	--	--	--
2/11/1993	--		38.36	5.0	30.00	11.95	26.41	4,000	510	47	200	91	--	--	--
4/14/1993	--		38.36	5.0	30.00	11.65	26.71	1,700	260	20	100	70	--	--	--
8/12/1993	--		38.36	5.0	30.00	12.93	25.43	830	60	3.8	39	3.6	--	--	--
10/26/1993	--		38.36	5.0	30.00	14.13	24.23	8,800	140	<10	41	<10	--	--	--
2/17/1994	--		37.26	5.0	30.00	11.86	25.40	1,200	130	12	54	58	--	--	--
5/3/1994	--		37.26	5.0	30.00	11.58	25.68	--	--	--	--	--	--	--	--
8/17/1994	--		37.33	5.0	30.00	12.78	24.55	3,900	86	51	78	9.4	--	--	--
11/18/1994	--		37.33	5.0	30.00	12.31	25.02	6,350	112	8.4	107	35	--	--	--
9/26/1995	--		37.26	5.0	30.00	11.26	26.00	--	--	--	--	--	--	--	--
12/6/1995	--		37.26	5.0	30.00	12.16	25.10	4,100	0.86	0.46	0.38	0.92	--	--	--
2/14/1996	--		37.26	5.0	30.00	8.53	28.73	--	--	0.56	--	0.82	--	--	--
10/29/1996	--		37.26	5.0	30.00	10.23	27.03	130	--	--	--	--	--	--	--
1/29/1997	--		37.26	5.0	30.00	8.15	29.11	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/30/1997	--		37.26	5.0	30.00	8.05	29.21	<20	<0.3	<0.3	<0.3	<0.5	<50	--	--
7/31/1997	--		37.26	5.0	30.00	10.50	26.76	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
10/22/1997	--		37.26	5.0	30.00	11.15	26.11	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		37.26	5.0	30.00	4.95	32.31	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		37.26	5.0	30.00	8.10	29.16	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		37.26	5.0	30.00	8.02	29.24	<50	<0.3	<0.3	<0.3	<0.5	40	--	--

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

Station #5387, 20200 Hesperian Blvd., Hayward, 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-1 Cont.															
10/22/1998	--		37.26	5.0	30.00	9.70	27.56	230	0.43	1.9	0.99	0.99	33	--	--
1/13/1999	--		37.26	5.0	30.00	9.60	27.66	<50	0.43	<0.3	<0.3	<0.5	<20	--	--
4/29/1999	--	l	37.26	5.0	30.00	8.05	29.21	<50	<0.3	<0.3	<0.3	<0.5	31/17	--	--
1/15/2002	--		37.26	5.0	30.00	--	--	<50	<0.05	<0.5	<0.5	<0.5	21	--	--
4/24/2002	--	j	37.26	5.0	30.00	--	--	160	1.5	<0.50	<0.50	<0.50	770	--	--
09/23/2002	--	a	37.26	5.0	30.00	--	--	--	--	--	--	--	--	--	--
12/9/2002	P	b, d, j	37.26	5.0	30.00	10.22	26.04	998	<0.50	<0.50	<0.50	1.37	855/1310	2.2	7.0
2/11/2003	P	e	37.26	5.0	30.00	9.70	27.56	120	<0.50	<0.50	<0.50	<0.50	76	1.6	6.7
6/27/2003	P		37.26	5.0	30.00	10.10	27.16	<500	<5.0	<5.0	<5.0	<5.0	170	0.8	6.8
09/04/2003	--	f	37.26	5.0	30.00	--	--	--	--	--	--	--	--	--	--
11/17/2003	P		37.26	5.0	30.00	10.94	26.32	420	<0.50	<0.50	<0.50	<0.50	140	1.7	--
03/01/2004	P	i	39.80	5.0	30.00	8.85	30.95	<50	<0.50	<0.50	<0.50	<0.50	14	2.1	6.5
06/02/2004	P		39.80	5.0	30.00	10.30	29.50	340	<2.5	<2.5	<2.5	<2.5	250	0.4	7.0
09/16/2004	P		39.80	5.0	30.00	11.02	28.78	<250	<2.5	<2.5	<2.5	<2.5	170	0.5	6.7
12/07/2004	--		39.80	5.0	30.00	10.83	28.97	<250	<2.5	<2.5	<2.5	<2.5	180	1.0	7.4
03/02/2005	P		39.80	5.0	30.00	8.62	31.18	50	<0.50	<0.50	<0.50	<0.50	24	1.8	6.8
06/20/2005	P		39.80	5.0	30.00	9.20	30.60	<50	<0.50	<0.50	<0.50	<0.50	2.2	0.08	7.5
09/06/2005	P		39.80	5.0	30.00	10.12	29.68	<50	<0.50	<0.50	<0.50	<1.5	3.5	0.1	6.8
03/07/2006	P		39.80	5.0	30.00	8.69	31.11	<50	<0.50	<0.50	<0.50	<0.50	4.7	0.5	6.8
9/7/2006	P		39.80	5.0	30.00	9.62	30.18	<50	<0.50	<0.50	<0.50	<0.50	2.6	2.20	7.0
3/6/2007	NP		39.80	5.0	30.00	9.10	30.70	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.92	7.43
9/5/2007	**P**		**39.80**	**5.0**	**30.00**	**10.55**	**29.25**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**0.53**	**1.36**	**7.71**
MW-2															
8/8/1986	--		38.58	5.00	30.00	11.62	26.96	1,910	20.1	2.8	1.8	--	--	--	--
12/24/1991	--		38.58	5.00	30.00	16.50	22.08	23,000	1,500	1,100	480	1,400	--	--	--
3/10/1992	--		38.58	5.00	30.00	13.50	25.08	210,000	44,000	3,900	1,700	5,800	--	--	--
6/9/1992	--		38.58	5.00	30.00	14.52	24.06	33,000	2,300	370	780	2,600	--	--	--
9/14/1992	--		38.58	5.00	30.00	15.78	22.80	16,000	3,700	10	470	1,000	--	--	--
11/12/1992	--		38.58	5.00	30.00	15.98	22.60	16,000	3,800	86	470	910	--	--	--
2/11/1993	--		38.58	5.00	30.00	12.27	26.31	27,000	3,500	720	1,600	380	--	--	--

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

Station #5387, 20200 Hesperian Blvd., Hayward, 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-2 Cont.															
4/14/1993	--		38.58	5.00	30.00	12.01	26.57	27,000	3500	220	2,200	5,100	--	--	--
8/12/1993	--		38.58	5.00	30.00	13.81	24.77	16,000	1,600	27	1,300	1,200	--	--	--
10/26/1993	--		38.58	5.00	30.00	14.53	24.05	12,000	1200	<25	510	330	--	--	--
2/17/1994	--		38.58	5.00	30.00	12.81	25.77	15,000	1,800	21	850	540	--	--	--
5/3/1994	--		38.58	5.00	30.00	12.63	25.95	--	--	--	--	--	--	--	--
8/17/1994	--		37.99	5.00	30.00	13.69	24.30	14,000	850	13	640	270	--	--	--
11/18/1994	--		38.06	5.00	30.00	13.18	24.88	14,900	640	3.4	532	156	--	--	--
9/26/1995	--		37.99	5.00	30.00	12.23	25.76	5,100	40	25	2.5	18	--	--	--
12/6/1995	--		37.99	5.00	30.00	12.82	25.17	810	34	23	11	11	--	--	--
2/14/1996	--		37.99	5.00	30.00	10.87	27.12	420	0.75	0.54	0.64	0.53	--	--	--
10/29/1996	--		37.99	5.00	30.00	12.95	25.04	670	1.7	1.3	0.6	0.8	--	--	--
1/29/1997	--		37.99	5.00	30.00	11.15	26.84	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/30/1997	--		37.99	5.00	30.00	11.09	26.90	<20	<0.3	<0.3	<0.3	<0.5	<50	--	--
7/31/1997	--		37.99	5.00	30.00	11.70	26.29	330	<0.3	0.58	0.53	<0.5	<20	--	--
10/22/1997	--		37.99	5.00	30.00	11.05	26.94	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		37.99	5.00	30.00	9.50	28.49	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		37.99	5.00	30.00	11.15	26.84	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		37.99	5.00	30.00	10.20	27.79	78	<0.3	<0.3	<0.3	<0.5	97	--	--
10/22/1998	--		37.99	5.00	30.00	11.10	26.89	270	0.37	2	0.91	0.73	26	--	--
1/13/1999	--		37.99	5.00	30.00	11.10	26.89	650	5.8	1	1.4	1.1	<20	--	--
4/29/1999	--	i	37.99	5.00	30.00	11.05	26.94	<50	<0.3	<0.3	<0.3	<0.5	23/16	--	--
1/15/2002	--		37.99	5.00	30.00	--	--	1,200	15	4.5	<0.5	<0.5	190	--	--
4/24/2002	--	j	37.99	5.00	30.00	--	--	1,300	18	<10	<10	<10	170	--	--
9/23/2002	P		37.99	5.00	30.00	12.15	25.84	1,440	11.2	0.73	<0.500	<1.50	228	1.6	6.9
12/9/2002	P	b, d, j	37.99	5.00	30.00	12.20	25.79	1,770	8.08	0.694	2.47	3.79	529/902	6.2	6.7
2/11/2003	P	e	37.99	5.00	30.00	10.79	27.20	1,100	<0.50	<0.50	<0.50	0.53	71	1.2	6.8
6/27/2003	P		37.99	5.00	30.00	11.20	26.79	520	<0.50	<0.50	<0.50	<0.50	45	0.8	6.8
9/4/2003	P		37.99	5.00	30.00	11.84	26.15	500	<0.50	<0.50	<0.50	<0.50	28	1.2	6.9
11/17/2003	P		37.99	5.00	30.00	11.98	26.01	530	<0.50	<0.50	<0.50	<0.50	50	3.1	6.7
03/01/2004	P	i	40.51	5.00	30.00	10.05	30.46	890	<0.50	<0.50	<0.50	<0.50	36	3.1	6.6
06/02/2004	P		40.51	5.00	30.00	11.32	29.19	310	<0.50	<0.50	<0.50	<0.50	9.2	0.3	7.2

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								GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE		
MW-2 Cont.															
09/16/2004	P		40.51	5.00	30.00	12.01	28.50	400	<0.50	<0.50	<0.50	<0.50	4.0	0.2	6.8
12/07/2004	P		40.51	5.00	30.00	12.00	28.51	920	<5.0	<5.0	<5.0	<5.0	10	0.9	7.4
03/02/2005	P		40.51	5.00	30.00	9.92	30.59	180	<0.50	<0.50	<0.50	<0.50	4.4	1.7	6.9
06/20/2005	P		40.51	5.00	30.00	10.46	30.05	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.12	6.7
09/06/2005	P		40.51	5.00	30.00	11.28	29.23	440	<0.50	<0.50	<0.50	<1.5	2.5	0.2	6.7
03/07/2006	P		40.51	5.00	30.00	10.04	30.47	360	<0.50	<0.50	<0.50	<0.50	1.3	0.6	6.8
9/7/2006	P		40.51	5.00	30.00	10.77	29.74	280	<0.50	<0.50	<0.50	<0.50	1.2	2.23	6.9
3/6/2007	NP		40.51	5.00	30.00	10.32	30.19	140	<0.50	<0.50	<0.50	<0.50	0.73	2.16	7.31
9/5/2007	NP		40.51	5.00	30.00	11.67	28.84	200	<0.50	<0.50	<0.50	<0.50	<0.50	1.70	7.31
MW-3															
8/8/1986	--		37.77	5.0	30.0	10.61	27.16	7,450	510	549	409	1,380	--	--	--
12/24/1991	--		37.77	5.0	30.0	15.60	22.17	6,800	450	10	610	45	--	--	--
3/10/1992	--		37.77	5.0	30.0	12.90	24.87	11,000	2,500	75	400	560	--	--	--
6/9/1992	--		37.77	5.0	30.0	13.60	24.17	16,000	2,000	69	1,300	2,600	--	--	--
9/14/1992	--		37.77	5.0	30.0	14.78	22.99	14,000	630	<50	1,500	2,400	--	--	--
11/12/1992	--		37.77	5.0	30.0	14.92	22.85	7,400	400	<25	860	330	--	--	--
2/11/1993	--		37.77	5.0	30.0	11.65	26.12	8,600	580	<20	710	300	--	--	--
4/14/1993	--		37.77	5.0	30.0	11.16	26.61	6,900	300	8.8	580	99	--	--	--
8/12/1993	--		37.77	5.0	30.0	12.82	24.95	3,400	56	<5	190	<5	--	--	--
10/26/1993	--		37.77	5.0	30.0	13.60	24.17	2,900	42	<10	76	<10	--	--	--
2/17/1994	--		36.80	5.0	30.0	11.53	25.27	3,100	160	<10	36	8.6	--	--	--
5/3/1994	--		36.80	5.0	30.0	11.36	25.44	2,300	44	<2.5	8	<2.5	--	--	--
8/17/1994	--		36.87	5.0	30.0	12.38	24.49	1,900	7	<9.5	4.4	<5	--	--	--
11/18/1994	--		36.87	5.0	30.0	11.93	24.94	909	1.1	<0.5	0.9	4	--	--	--
9/26/1995	--		36.80	5.0	30.0	10.96	25.84	410	1.9	1.9	2.3	3.3	--	--	--
12/6/1995	--		36.80	5.0	30.0	11.56	25.24	--	0.9	4.6	3	4.3	--	--	--
2/14/1996	--		36.80	5.0	30.0	7.47	29.33	99	--	0.49	0.46	--	--	--	--
10/29/1996	--		36.80	5.0	30.0	9.80	27.00	250	0.7	0.6	--	--	--	--	--
1/29/1997	--		36.80	5.0	30.0	7.50	29.30	170	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/30/1997	--		36.80	5.0	30.0	12.10	24.70	<20	<0.3	<0.3	<0.3	<0.5	<50	--	--

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Station #5387, 20200 Hesperian Blvd., Hayward, 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-3 Cont.															
7/31/1997	--		36.80	5.0	30.0	9.90	26.90	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
10/22/1997	--		36.80	5.0	30.0	12.10	24.70	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
1/28/1998	--		36.80	5.0	30.0	7.50	29.30	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/22/1998	--		36.80	5.0	30.0	12.30	24.50	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
7/8/1998	--		36.80	5.0	30.0	8.30	28.50	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
10/22/1998	--		36.80	5.0	30.0	9.10	27.70	<50	<0.3	<0.3	<0.3	<0.5	<5	--	--
1/13/1999	--		36.80	5.0	30.0	9.50	27.30	<50	<0.3	<0.3	<0.3	<0.5	<20	--	--
4/29/1999	--		36.80	5.0	30.0	5.93	30.87	<50	<0.3	0.35	<0.3	<0.5	<5	--	--
1/15/2002	--		36.80	5.0	30.0	--	--	<50	<0.5	<0.5	<0.5	<0.5	7.9	--	--
4/24/2002	--	j	36.80	5.0	30.0	--	--	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	--
9/23/2002	P		36.80	5.0	30.0	10.30	26.50	<50.0	<0.500	<0.500	<0.500	<1.50	<0.500	1.0	6.9
12/9/2002	P		36.80	5.0	30.0	10.38	26.42	<50.0	<0.500	<0.500	<0.500	<1.00	<5.00	1.7	6.7
2/11/2003	P	e	36.80	5.0	30.0	8.85	27.95	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	6.7
6/27/2003	--		36.80	5.0	30.0	9.12	27.68	<50	<0.50	<0.50	<0.50	<0.50	0.61	0.9	6.8
9/4/2003	--		36.80	5.0	30.0	9.85	26.95	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1.0	6.9
11/17/2003	--	h, n	36.63	5.0	30.0	9.93	26.70	--	--	--	--	--	--	--	--
03/01/2004	--	i, n	38.72	5.0	30.0	7.95	30.77	--	--	--	--	--	--	--	--
06/02/2004	--	n	38.72	5.0	30.0	9.25	29.47	--	--	--	--	--	--	--	--
09/16/2004	P		38.72	5.0	30.0	9.95	28.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.4	6.8
12/07/2004	--	n	38.72	5.0	30.0	9.90	28.82	--	--	--	--	--	--	--	--
03/02/2005	--	n	38.72	5.0	30.0	7.86	30.86	--	--	--	--	--	--	--	--
06/20/2005	--	n	38.72	5.0	30.0	8.38	30.34	--	--	--	--	--	--	--	--
09/06/2005	P		38.72	5.0	30.0	9.25	29.47	<50	<0.50	<0.50	<0.50	<1.5	<0.50	0.3	6.8
03/07/2006	--		38.72	5.0	30.0	7.86	30.86	--	--	--	--	--	--	--	--
9/7/2006	--		38.72	5.0	30.0	8.66	30.06	--	--	--	--	--	--	--	--
3/6/2007	--		38.72	5.0	30.0	8.20	30.52	--	--	--	--	--	--	--	--
9/5/2007	--		38.72	5.0	30.0	9.45	29.27	--	--	--	--	--	--	--	--

SYMBOLS AND ABBREVIATIONS:
--/--- = Not analyzed/applicable/measured/available
< = Not detected at or above specified laboratory reporting limit
ND = 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
GWE = Groundwater elevation in ft MSL
mg/L = Milligrams per liter
MTBE = Methyl tert-butyl ether
NP/P = Well not purged/purged prior to sampling
TOC = Top of casing in ft MSL
TPH-g = Total petroleum hydrocarbons as gasoline
µg/L = Micrograms per liter

FOOTNOTES:
a = Well inaccessible.
b = The analyte concentration may be artificially elevated due to coeluting compounds or components.
c = The closing calibration was outside acceptance limits by 2%. This should be considered in evaluating the results. The average % difference for all analytes met the 15% requirement and the QC suggests that the calibration linearity is not a factor.
d = Estimated value. The reported value exceeds the calibration range of the analysis.
e = TPH-g, benzene, toluene, ethylbenzene, total xylenes, and MTBE analyzed by EPA method 8260B beginning first quarter monitoring event (2/11/03).
f = Unable to gauge because the bolt was warped on the well head.
h = Well MW-3 TOC was lowered by 0.17 ft during repairs on 11/14/03.
i = Well surveyed to NAVD'88 datum on 2/23/04.
j = Analyzed by EPA Method 8260B.
k = Obstruction in well removed.
l = Analytical results as measured by EPA Methods 8020 / 8260.
m = Well sampled semi-annually (1st and 3rd quarters).
n = Well sampled annually (3rd quarter).
o = Well dry.
p = No purge protocol well. Well was purged and sampled in error.

NOTES:
Data for DO and pH were obtained through field measurements.

MTBE analyzed by EPA Method 8021B unless otherwise noted (prior to 2/11/03) and TPH-g by EPA Method 8015B Modified (prior to 2/11/03).

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.

Top and bottom of screen depths for the following wells were derived from cross-sections since the well logs were not available: A-4, A-5, A-7, A-8, A-9, and AR-1.

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 #5387, 20200 Hesperian Blvd., Hayward, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-4									
2/11/2003	<100	<20	0.53	<0.50	<0.50	<0.50	--	--	
6/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/4/2003	--	--	<0.50	--	--	--	--	--	
03/01/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
09/16/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/02/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
A-5									
2/11/2003	<100	<20	0.97	<0.50	<0.50	<0.50	--	--	
6/27/2003	<100	<20	0.98	<0.50	<0.50	<0.50	<0.50	<0.50	
9/4/2003	<100	<20	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	
03/01/2004	<100	<20	0.77	<0.50	<0.50	<0.50	<0.50	<0.50	a
09/16/2004	<100	<20	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/02/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	<10	0.61	<0.50	<0.50	<0.50	<0.50	<0.50	
A-6									
2/11/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
6/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/4/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/16/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
A-7									
2/11/2003	<100	<20	21	<0.50	6.5	<0.50	--	--	
6/27/2003	<100	<20	9.4	<0.50	<0.50	2.1	<0.50	<0.50	
9/4/2003	<100	<20	3.4	<0.50	<0.50	0.86	<0.50	<0.50	
11/17/2003	<100	<20	1.4	<0.50	<0.50	<0.50	--	--	b
03/01/2004	<100	<20	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	a
06/02/2004	<100	<20	0.92	<0.50	<0.50	<0.50	<0.50	<0.50	
09/16/2004	<100	<20	1.0	<0.50	<0.50	<0.50	<0.50	<0.50	
12/07/2004	<100	<20	1.8	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #5387, 20200 Hesperian Blvd., Hayward, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
A-7 Cont.									
03/02/2005	<100	<20	1.4	<0.50	<0.50	<0.50	<0.50	<0.50	
06/20/2005	<100	<20	6.0	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/7/2006	<300	<20	0.80	<0.50	<0.50	<0.50	<0.50	<0.50	
9/5/2007	**<300**	**<20**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
A-8									
2/11/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
6/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/4/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/01/2004	<100	<20	0.76	<0.50	<0.50	<0.50	<0.50	<0.50	a
09/16/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/02/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
A-9									
2/11/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
6/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/4/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/01/2004	<100	<20	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
09/16/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
A-10									
2/11/2003	<100	<20	1.9	<0.50	<0.50	<0.50	--	--	
6/27/2003	<100	<20	0.99	<0.50	<0.50	<0.50	<0.50	<0.50	a
9/4/2003	<100	<20	1.1	<0.50	<0.50	<0.50	<0.50	<0.50	
09/16/2004	<100	<20	0.84	<0.50	<0.50	<0.50	<0.50	<0.50	
AR-1									
2/11/2003	<100	<20	4.7	<0.50	<0.50	<0.50	--	--	
6/27/2003	<100	<20	1.6	<0.50	<0.50	<0.50	<0.50	<0.50	a
11/17/2003	<100	<20	1.4	<0.50	<0.50	<0.50	--	--	b

Table 2. Summary of Fuel Additives Analytical Data

Station #5387, 20200 Hesperian Blvd., Hayward, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
AR-1 Cont.									
03/01/2004	<100	<20	8.6	<0.50	<0.50	<0.50	<0.50	<0.50	a
06/02/2004	<100	<20	3.6	<0.50	<0.50	<0.50	<0.50	<0.50	
09/16/2004	<100	<20	3.2	<0.50	<0.50	<0.50	<0.50	<0.50	
12/07/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
03/02/2005	<100	<20	1.7	<0.50	<0.50	<0.50	<0.50	<0.50	
06/20/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/7/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/5/2007	**<300**	**<20**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
AR-2									
2/11/2003	<100	<20	0.75	<0.50	<0.50	<0.50	--	--	
6/27/2003	<100	<20	6	<0.50	<0.50	2.6	<0.50	<0.50	a
11/17/2003	<100	<20	0.86	<0.50	<0.50	<0.50	--	--	b
03/01/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
06/02/2004	<100	<20	4.3	<0.50	<0.50	2.2	<0.50	<0.50	
09/16/2004	<100	<20	1.5	<0.50	<0.50	0.79	<0.50	<0.50	
12/07/2004	<100	<20	1.2	<0.50	<0.50	0.57	<0.50	<0.50	
03/02/2005	<100	<20	1.5	<0.50	<0.50	0.66	<0.50	<0.50	
06/20/2005	<100	<20	0.97	<0.50	<0.50	0.53	<0.50	<0.50	
09/06/2005	<150	<10	0.79	<0.50	<0.50	<0.50	<0.50	<0.50	
9/7/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/5/2007	**<300**	**<20**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-1									
2/11/2003	<100	<20	76	<0.50	<0.50	<0.50	--	--	
6/27/2003	<1,000	<200	170	<0.50	<5.0	<5.0	<5.0	<5.0	
11/17/2003	<100	<20	140	<0.50	<0.50	1.7	--	--	b
03/01/2004	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	a
06/02/2004	<500	<100	250	<2.5	<2.5	<2.5	<2.5	<2.5	
09/16/2004	<500	<100	170	<2.5	<2.5	<2.5	<2.5	<2.5	
12/07/2004	<500	<100	180	<2.5	<2.5	<2.5	<2.5	<2.5	

Table 2. Summary of Fuel Additives Analytical Data

Station #5387, 20200 Hesperian Blvd., Hayward, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1 Cont.									
03/02/2005	<100	66	24	<0.50	<0.50	<0.50	<0.50	<0.50	
06/20/2005	<100	<20	2.2	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	21	3.5	<0.50	<0.50	<0.50	<0.50	<0.50	
03/07/2006	<300	<20	4.7	<0.50	<0.50	<0.50	<0.50	<0.50	
9/7/2006	<300	<20	2.6	<0.50	<0.50	<0.50	<0.50	<0.50	c
3/6/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
9/5/2007	<300	<20	0.53	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-2									
2/11/2003	<100	<20	71	<0.50	<0.50	13	--	--	
6/27/2003	<100	<20	45	<0.50	<0.50	5.4	<0.50	<0.50	
9/4/2003	<100	<20	28	<0.50	<0.50	3.8	<0.50	<0.50	
11/17/2003	<100	30	50	<0.50	<0.50	6.2	--	--	b
03/01/2004	<100	49	36	<0.50	<0.50	6.2	<0.50	<0.50	a
06/02/2004	<100	<20	9.2	<0.50	<0.50	1.7	<0.50	<0.50	
09/16/2004	<100	<20	4.0	<0.50	<0.50	<0.50	<0.50	<0.50	
12/07/2004	<1,000	<200	10	<5.0	<5.0	<5.0	<5.0	<5.0	
03/02/2005	<100	75	44	<0.50	<0.50	<0.50	<0.50	<0.50	
06/20/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	<10	2.5	<0.50	<0.50	1.1	<0.50	<0.50	
03/07/2006	<300	<20	1.3	<0.50	<0.50	<0.50	<0.50	<0.50	
9/7/2006	<300	<20	1.2	<0.50	<0.50	<0.50	<0.50	<0.50	c
3/6/2007	<300	<20	0.73	<0.50	<0.50	<0.50	<0.50	<0.50	
9/5/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-3									
2/11/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
6/27/2003	<100	<20	0.61	<0.50	<0.50	<0.50	<0.50	<0.50	
9/4/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/16/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
09/06/2005	<150	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

SYMBOLS AND ABBREVIATIONS:
-- = Data not available, analyzed, applicable, or sampled
< = Not detected at or above specified 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 = The continuing calibration verification was outside of client contractual acceptance limits by 11.7% low. However, it was within method acceptance limits. The data should be useful for its intended purpose.
b = The result was reported with a possible low bias due to continuing calibration verification falling outside the acceptance criteria.
c = Calib. verif. is within method limits but outside contract limits.

NOTES:
All fuel oxygenate compounds analyzed using EPA Method 8260B.

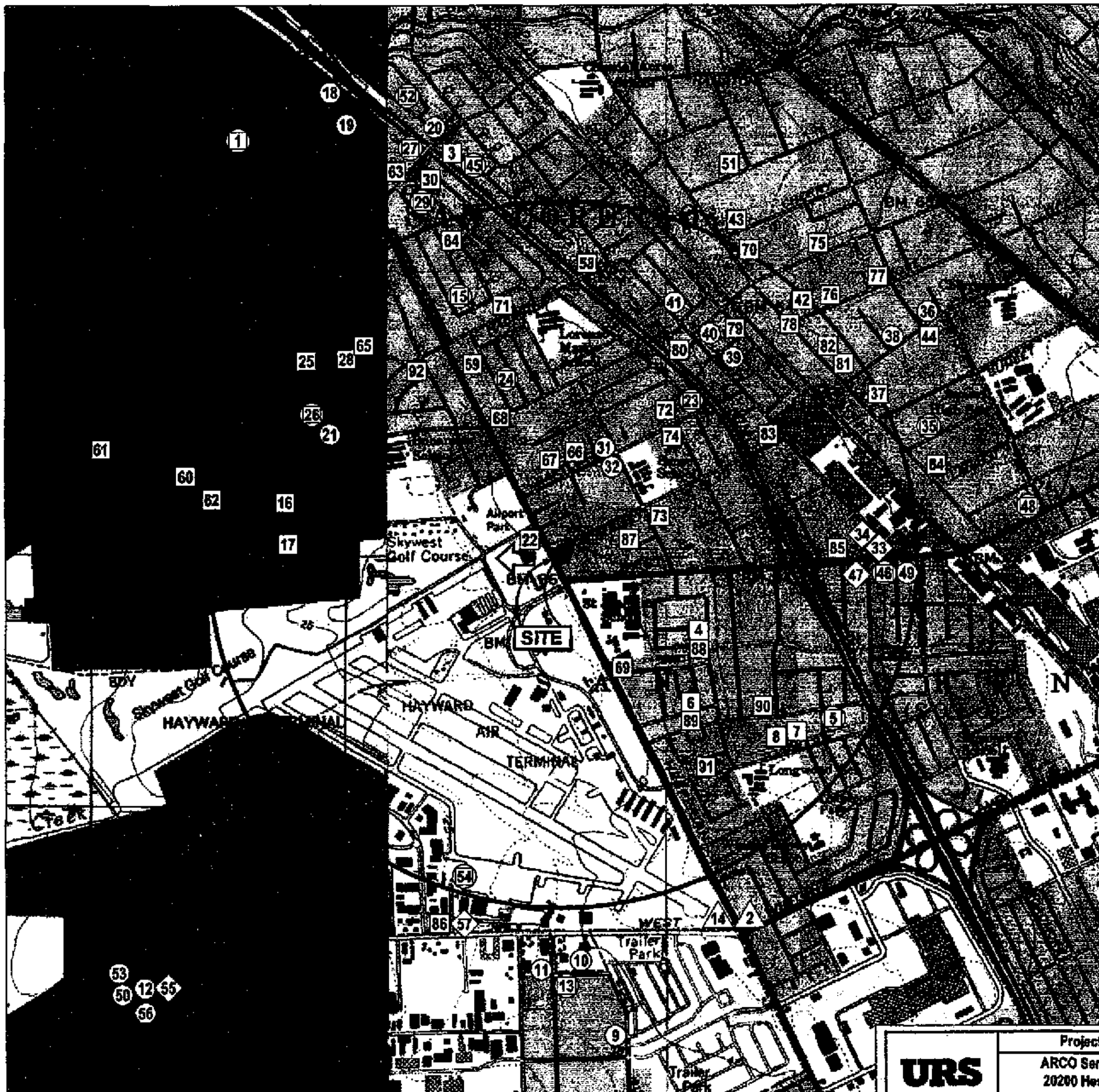
Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

Table 3. Historical Ground-Water Flow Direction and Gradient

Station #5387, 20200 Hesperian Blvd., Hayward, CA

Date Sampled	Approximate Flow Direction	Approximate Hydraulic Gradient
4/24/2002	--	--
9/23/2002	West	0.004
12/9/2002	West	0.003
2/11/2003	West	0.007
6/27/2003	West	0.005
9/4/2003	West	0.005
11/17/2003	West	0.003
3/1/2004	West	0.008
6/2/2004	West	0.005
9/16/2004	Southwest to West	0.004
12/7/2004	West	0.006
3/2/2005	West	0.01
6/20/2005	West	0.006
9/6/2005	West	0.006
3/7/2006	West-Northwest	0.008
9/7/2006	West	0.007
3/6/2007	Northwest	0.02
9/5/2007	**West**	**0.005**

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.



LEGEND

- (X) Unknown well
- [X] Irrigation well
- ((X)) Domestic well
- ◇X Industrial well
- △X Other well
- ⇦ Site historic groundwater direction

NORTH

0 — 1400 — 2800

APPROXIMATE SCALE 1" = 1400'

URS	Project No. 38486576 ARCO Service Station #5387 20200 Hesperian Boulevard Hayward, California	WELL SURVEY MAP	FIGURE 6

TABLE 1

INVENTORY OF WATER WELLS WITHIN 5,280 FEET OF SITE

Arco Service Station No. 05387
20200 Hesperian Boulevard
Hayward, California

Site Map Location	State Well I.D.	Well Location	Date Drilled	Well Type	Total Depth (ft)	Screened Interval(s) (ft)	Notes
1	3S/2W-7M3	754 Grant Avenue	06/01/77	Domestic	31	10.5-30	outside boundary
2	3S/2W-20L	N of W Winton, E of Hesperian	03/09/93	Other	670		outside boundary
3	3S/2W-20C1	776 Barker Avenue	05/05/77	Irrigation	29	20-29	
4	3S/2W-20B3	21979 Thelma Street	07/11/77	Irrigation	28.5	20-28	
5	3S/2W	622 Fifth Street	05/23/53	Domestic	72	52-72	
6	3S/2W-20D	849 Lester Avenue	09/30/77	Irrigation	42	22-42	
7	3S/2W-20G1	22920 Lilla Road	07/14/77	Irrigation	52	15-50	
8	3S/2W-20G2	22917 Lilla Road	08/08/77	Irrigation	50	34-50	
9	3S/2W-19R1	Eden Avenue	03/01/49		80		outside boundary
10	3S/2W-19R2	Saklin Road			96	35-92	outside boundary
11	3S/2W-19R3	Saklin Road	09/14/38		125		outside boundary
12	3S/2W-19R4	Russet City Road			112		
13	3S/2W-19R6	3431 Brookdale Blvd	06/21/89	Domestic	148	128-144	outside boundary
14	3S/2W-19R	1401 West Winton	08/29/85	Other	848		outside boundary
15	3S/2W-18M2	1304 Via Madera	06/04/77	Domestic	27		
16	3S/2W-18M3	17252 Via Estrella	04/09/77	Irrigation	20		
17	3S/2W-18N2	17356 Via Alamitos	06/11/77	Irrigation	25		
18	3S/2W-18J2	21626 Hesperian			91		outside boundary
19	3S/2W-18J3	Hesperian Blvd			100	80-96	outside boundary
20	3S/2W-18J	Royal Avenue	09/01/48		69	60-65	outside boundary
21	3S/2W-18J8	1266 Bartlett Avenue			75		
22	3S/2W-18K3	Kennedy park, Hesperian Blvd	03/25/78	Irrigation	155	35-155	
23	3S/2W-18	1238 Bartlett Avenue		Domestic	202		
24	3S/2W-18G1	18451 Robscott Avenue	05/07/77	Domestic	26	15-25	
25	3S/2W-18F4	17061 Via Perdido	05/01/89	Irrigation	25		
26	3S/2W-18F3	840 Hacienda Avenue	07/19/77	Domestic		15-29.5	
27	3S/2W	700 Hathaway	02/26/53	Domestic	100	40-60, 80-100	
28	3S/2W-18C1	17127 Via Flores	03/13/77	Irrigation	25	25-Dec	outside boundary
29	3S/2W-18B6	19578 Via Primero	08/24/89	Domestic	30	20-30	outside boundary
30	3S/2W-18B1	16136 Via Segundo		Irrigation	34		

TABLE 1

INVENTORY OF WATER WELLS WITHIN 5,280 FEET OF SITE

Arco Service Station No. 05387
20200 Hesperian Boulevard
Hayward, California

Site Map Location	State Well I.D.	Well Location	Date Drilled	Well Type	Total Depth (ft)	Screened Interval(s) (ft)	Notes
31	3S/2W-17M1	1230 Bartlett Avenue	10/01/48			66	
32	3S/2W/17M2	130 feet sw of Garden Avenue			72	45-63	
33	3S/2W/-17K2	Corner of West A St. and Hathaway	07/01/65	Industrial	680	480-510	
34	3S/2W-17K3	West A St. and Hathaway	07/22/65	Industrial	680		
35	3S/2W-17J2	746 Poplar Avenue	03/08/54	Domestic	74	50-70	outside boundary
36	3S/2W-17H	Willow Avenue	04/28/42		128	105-107	outside boundary
37	3S/2W-17G3	21455 Meekland	10/05/77	Irrigation	82	40-80	outside boundary
38	3S/2W-17G1	Meekland and Willow	05/15/35		93	56-93	outside boundary
39	3S/2W-17F3	Florence and Hathaway	06/12/31		201		
40	3S/2W-17D3	Highway 17 and Hathaway			68	48-60	
41	3S/2W-17D1	Highway 17 and Hathaway			67	48-60	
42	3S/2W-17C4	21005 Meekland Avenue	07/27/77	Irrigation	77	20-77	
43	3S/2W-17C3	163 Cherry Way	05/17/77	Irrigation	63	25-68	outside boundary
44	3S/2W-17A3	21671 Haviland Avenue	05/19/77	Irrigation	80	40-72	outside boundary
45		1330 Solano	04/11/53	Domestic	61	40-61	
46		1338 Solano	04/18/53	Domestic	61	41-61	
47	3S/2W-17R6	West A St. and Hathaway	07/16/65	Industrial	510		
48	3S/2W-17Q5	2601 A Street		Domestic	63		outside boundary
49	3S/2W-17Q2	Hathaway and A Street	07/15/58		541	533-541	
50	3S/2W-17Q1	Russel City Road	03/03/38		47	33-43	
51	3S/2W-8P3	219 Medford Avenue	01/31/78	Irrigation	83	53-83	outside boundary
52		15861 Via Granada		Domestic	70		outside boundary
53	3S/2W-19Q1	Russel City Road	05/25/26		81	70-80	outside boundary
54	3S/2W-19P5	1844 West Winton Avenue	05/25/77	Domestic	100	57-96	
55	3S/2W-19N	Russell City	04/17/53	Industrial	97	41-51	outside boundary
56	3S/2W-19N3	Washington Avenue	03/26/43		89		outside boundary
57	3S/2W-19L02	1900 West Winton Avenue	04/23/92	Industrial	180	150-160	outside boundary
58	3S/2W-18	17061 Via Perdido	07/01/77	Irrigation	29		
59	3S/2W-18	840 Hacienda Avenue	05/01/89	Irrigation	25		

TABLE 1

INVENTORY OF WATER WELLS WITHIN 5,280 FEET OF SITE

Arco Service Station No. 05387
20200 Hesperian Boulevard
Hayward, California

Site Map Location	State Well I.D.	Well Location	Date Drilled	Well Type	Total Depth (ft)	Screened Interval(s) (ft)	Notes
60	3S/2W	17166 Via Del Ray		Irrigation	30		outside boundary
61	3S/2W	1580 Bockman Road	01/01/53	Irrigation	42		outside boundary
62	3S/2W	1316 Via Madera	02/01/89	Irrigation	29		outside boundary
63	3S/2W-18	16138 Via Segundo	09/01/50	Irrigation	34		
64	3S/22-18	17162 Via Primero	02/01/78	Irrigation	40		
65	3S/2W-18	17127 Via Flores	03/01/77	Irrigation	25		
66	3S/2W-18	657 Bartlett Avenue	02/01/18	Irrigation	90		
67	3S/2W-18	713 Bartlett Avenue	01/01/46	Irrigation	95		
68	3S/2W-18	18600 Hesperian Blvd	01/01/29	Irrigation	65		
69	3S/2W-18	21626 Hesperian Blvd	12/01/41	Irrigation	91		
70	3S/2W-17	19288 Medford Ct	12/01/55	Irrigation	45		
71	3S/2W-18	396 Hacienda Avenue	11/01/77	Irrigation	31		
72	3S/2W-17	421 Bartlett Street	11/28/01	Irrigation	44		outside boundary
73	3S/2W-17	20859 Royal Avenue	11/01/53	Irrigation	45		
74	3S/2W-17	20555 Garden Avenue	11/01/60	Irrigation	44		outside boundary
75	3S/2W-17	854 Blossom Way	05/01/77	Irrigation	72		outside boundary
76	3S/2W-17	204 Grove Way	06/01/33	Irrigation	100		
77	3S/2W-17	294 Grove Way	06/01/86	Irrigation	23		
78	3S/2W-17	21005 Meekland Avenue	07/01/77	Irrigation	77		
79	3S/2W-17	20161 Times Avenue	12/01/52	Irrigation	55		
80	3S/2W-17	20165 Hathaway	06/01/31	Irrigation	200		
81	3S/2W-17	21568 Meekland Avenue	05/01/34	Irrigation	92		
82	3S/2W-17	21455 Meekland	10/01/77	Irrigation	80		
83	3S/2W-17	21335 Hathaway Avenue	10/01/51	Irrigation	70		
84	3S/2W-17	193 Laurel Avenue	10/01/54	Irrigation	85		outside boundary
85	3S/2W-17	351 A Street		Irrigation	63		
86	3S/2W-18	1655 West Winton Avenue	06/01/46	Irrigation	65		outside boundary
87	3S/2W	21367 Garden Avenue	09/18/01	Irrigation	85		
88	3S/2W-20	776 Barker Avenue	05/01/77	Irrigation	29		

TABLE 1

INVENTORY OF WATER WELLS WITHIN 5,280 FEET OF SITE

Arco Service Station No. 05387
20200 Hesperian Boulevard
Hayward, California

Site Map Location	State Well I.D.	Well Location	Date Drilled	Well Type	Total Depth (ft)	Screened Interval(s) (ft)	Notes
89	3S/2W-20	849 Lester Avenue	09/01/77	Irrigation	42		
90	3S/2W-20	716 Marin Avenue	08/01/35	Irrigation	60		
91	3S/2W-20	22719 Corkwood Street	07/01/77	Irrigation	40		
92	3S/2W-20	Via Arriba & Haclenda	07/01/91	Irrigation	595		

TECHNOLOGY
Division of C[illegible]covery Systems, Inc

MW 1

Drilling Log

Project Arco/ Hesperian Owner Arco Petroleum

Location Hayward, Calif Project Number 20-8127

Date Drilled 8/07/86 Total Depth of Hole 30 ft Diameter 7.5 in.

Surface Elevation _____ Water Level, Initial 12.0' 24-hrs. 11.3'

Screen: Dia. 2 in. Length 25 ft Slot Size .020 in.

Casing: Dia. 2 in. Length 5 ft Type P.V.C

Drilling Company Sierra Pacific Drilling Method h. s. auger

Driller J. Pera Log by S. Gable

Sketch Map

Notes

Depth (Feet)	Well Construction	Notes	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0					Asphalt, gravel fine
2				CL	Black, blue mottled silty clay, stiff, dry no odor
4		o PID 2	A 5 8		
6					Brown-green, silty clay, firm, damp, moderate product odor
8				ML	
10		o PID 10	B 3 4		Green, fine sand-silty clay, soft, damp, moderate odor
12					8/7/86
14		o PID 50	C 3 4		Green-gray, silty clay, soft, damp, moderate odor
16					
18					
20		o PID 30	D 3 4	SM	
22					
24		o PID 130	E 8 12	SW	Light brown, coarse sand, loose, wet, slight odor

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Page ____ of ____

GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc.

Drilling Log

Well Number MW-1

Depth (Feet)	Well Construction	Notes	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
26					
28		o PID 130	F 10 12	SP	Lightcolored, coarse, sand & pebbles, loose, wet, slight odor
30					

GROUNDWATER TECHNOLOGY

Division of Oil Recovery Systems, Inc.

Drilling Log

Well Number MW 2

Project Arco/Hesperian Owner Arco Petroleum

Location Hayward, Calif. Project Number 20-8127

Date Drilled 8/8/86 Total Depth of Hole 25 ft. Diameter .020 in.

Surface Elevation — Water Level Initial 12.0 ft 24-hrs.

Screen: Dia. 2 in. Length 25 ft. Slot Size .020 in.

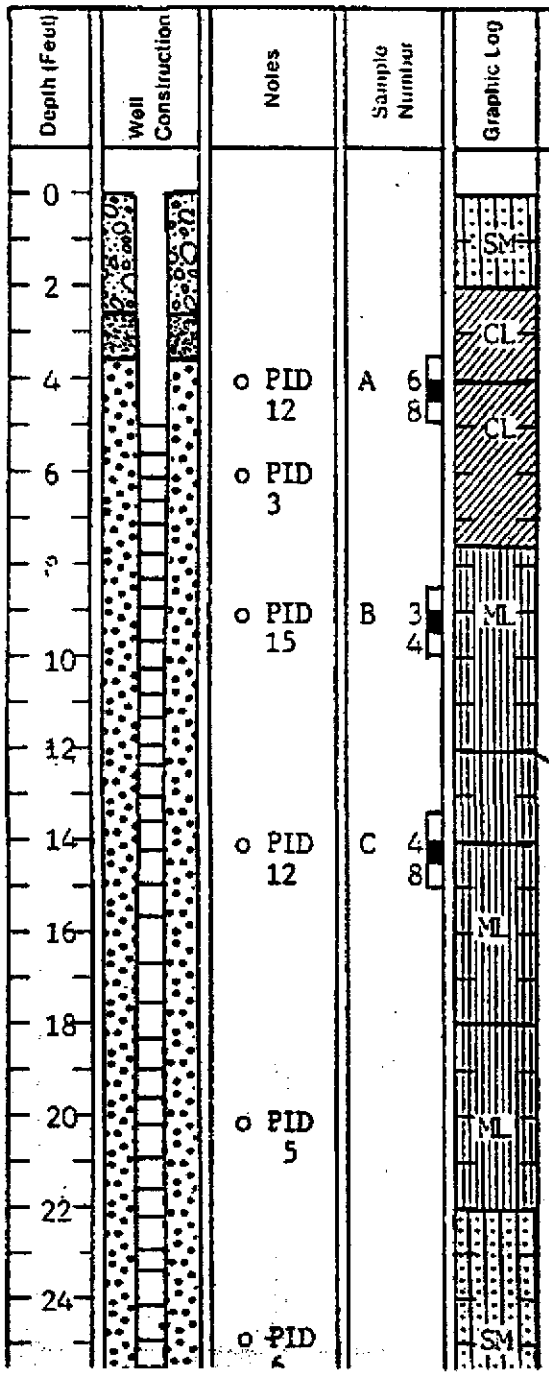
Casing: Dia. 2 in. Length 5 ft. Type P.V.C.

Drilling Company Sierra Pacific Drilling Method h.s. auger

Driller L. Pera Log by S. Gable

Sketch Map

Notes



Description/Soil Classification (Color, Texture, Structures)

Brown, sandy silt, very loose, dry, no odor

Black, silty clay, stiff, dry, no odor

Brown, fine sandy clay, firm, damp, slight odor

Green-gray, clay, soft, damp, moderate odor

8/8/86

Mottled green brown, silty clay, stiff, wet, moderate odor

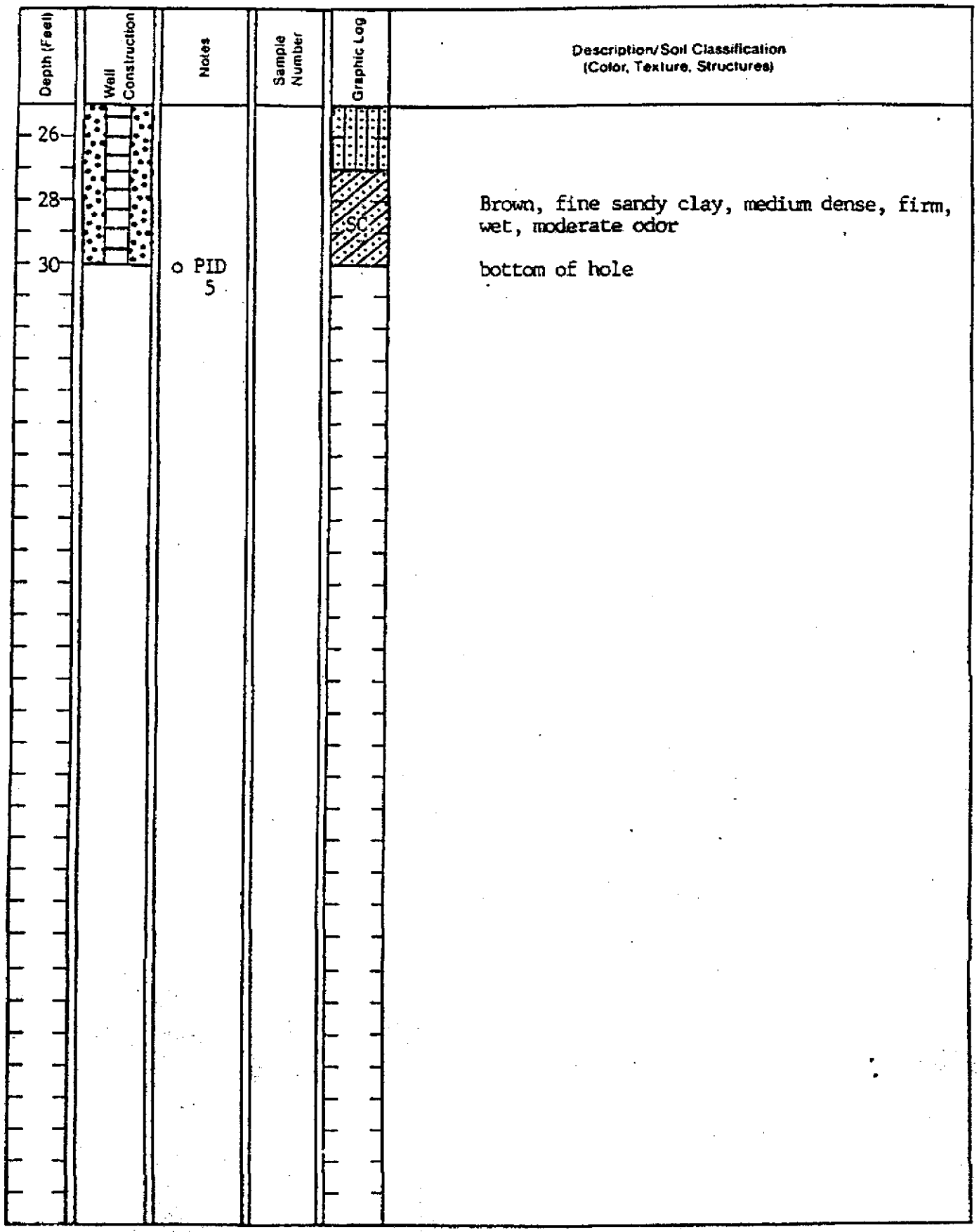
Gray brown, silty clay, stiff, wet, moderate odor

Light brown, silty sand, loose, wet, moderate odor

GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc.

Drilling Log

Well Number MW-2



GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc.

Drilling Log

Well Number MW 3

Project Arco/Hesperian Owner Arco Petroleum

Location Hayward, Calif. Project Number 20-8127

Date Drilled 8/8/86 Total Depth of Hole 30 ft. Diameter 7.5 in.

Surface Elevation — Water Level, Initial 12.0 ft 24-hrs.

Screen: Dia. 2 in. Length 25 ft. Slot Size .020

Casing: Dia. 2 in. Length 5 ft. Type P.V.C.

Drilling Company Sierra Pacific Drilling Method h.s. auger

Driller L. Pera Log by S. Gable

Sketch Map

Notes

Depth (Feet)	Well Construction	Notes	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0					Asphalt, gravel fill
2				CL	Black, silty clay, stiff, dry, no odor
4		o PID 9	A 4	CL	Brown, silty clay, stiff, dry, no odor
6		o PID 8	5	ML	Green, sandy silty clay, firm, damp, mild odor
8		o PID 7			Green, clay, soft, moist, strong odor
10		o PID 13	B 3 4	ML	
12		o PID 40	C 2 2		Green brown, fine sandy clay, soft, wet, mild odor 8/8/86
14					
16		o PID 120.0			Mottled brown green, silty clay, stiff, wet, strong odor
18					
20		o PID			Brown, silty sand, loose, wet, mild odor
22				SM	
24					

GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc.

Drilling Log

Well Number MW 3

Depth (Feet)	Well Construction	Notes	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
26					
28				SM	Brown silty sand, loose, wet, mild odor
30		o PID 4			

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GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

SOIL BORING SB 1

Drilling Log

Project Arco/Hesperian Owner Arco Petroleum

Location Hayward, Calif Project Number 20-8127

Date Drilled 8-8-86 Total Depth of Hole 40 ft. Diameter 7.5 in.

Surface Elevation - Water Level, Initial 12.0 24-hrs. -

Screen: Dia. - Length - Slot Size -

Casing: Dia. - Length - Type -

Drilling Company Sierra Pacific Drilling Method h. s. auger

Driller L. Pera Log by S. Gable

Sketch Map

Notes

Depth (Feet)	Well Construction	Blow Counts / Notes	PID / Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0					Asphalt, gravel fill, green sand
2					Black, silty clay, stiff, dry, no odor
4		o PID 1	4 9	CL	
6					
8		o PID 30	4 4	CL	Brown, silty clay, firm, damp, moderate odor
10					
12				ML	Green, clay, soft, damp, moderate odor 8/8/86
14		o PID	2 3		Brown green, mottled clay, stiff, moist, strong odor
16				CH	High organic content
18					
20		o PID 20.0	3 4	SM	Brown, green mottled, sandy silt, firm, [redacted] moderate odor
22					
24			8 10		Green, medium sand, loose, [redacted], strong odor
		o PID 30			

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GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc.

Drilling Log

SOIL BORING SB 1

Depth (Feet)	Well Construction	Notes	Sample Number	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
26				SP	Brown, silty sand, medium dense, wet, strong odor
28		o PID 18	12 24	SW	Medium size sand, medium dense, wet, strong odor
30		o PID 9		GP	Multicolored, pebbly gravels and sand, some clasts up to 20 mm, medium dense, wet, strong odor
32					
34		o PID 10	17 25		Brown-multicolored sandy gravel, loose, wet, moderate
36				GC	
38					Brown gravelly, sandy clay, very stiff, damp moderate odor
40		o PID 1	14 17		

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GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Drilling Log

SOIL BORING SB2

Project Arco/Hesperian Owner Arco Petroleum

Location Hayward, Calif. Project Number 20-8127

Date Drilled 8-8-86 Total Depth of Hole 20 ft. Diameter 7.5 in.

Surface Elevation – Water Level Initial 12.0 ft 24-hrs. –

Screen: Dia. – Length – Slot Size –

Casing: Dia. – Length – Type –

Drilling Company Sierra Pacific Drilling Method h. s. auger

Driller L. Pera Log by S. Gable

Sketch Map

Notes

Depth (Feet)	Well Construction	Blow Notes Counts	Sample Number PID	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0				SM	Asphalt, gravel fill Brown sandy silt, dry, loose, no odor
2					Black silty clay, stiff, dry, strong odor
4		o PID 25	A 4 8	CL	
6					
8					Green clay, firm, moist, moderate odor
10		o PID 50	B 4 4	CH	
12					8/8/86
14		o PID 160		ML	Green clay, firm, [redacted], moderate odor
16					
18				SM	Light brown sandy silt, soft, [redacted] moderate odor
20		o PID 90			
22					
24					

GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

SOIL BORING SB3

Drilling Lo

Project Arco/Hesperian Owner Arco Petroleum

Location Hayward, Calif Project Number 20-8127

Date Drilled 8-8-86 Total Depth of Hole 20 ft Diameter 7.5 in.

Surface Elevation - Water Level Initial 12.5 ft 24-hrs. -

Screen: Dia. - Length - Slot Size -

Casing: Dia. - Length - Type -

Drilling Company Sierra Pacific Drilling Method h. s. auger

Driller L. Pena Log by S. Gable

Sketch Map

Notes

Depth (Feet)	Well Construction	Blow Counts / Notes	Sample Number / PID	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0					Topsoil
2				CL	
4		PID 25	A 3 6		Black silty clay, stiff, dry, no odor
6				MH	Brown, fine sandy clay, firm, damp, slight odor
8					
10		PID	B 2 3	CH	Green clay, soft, damp, slight odor
12					8/8/86
14					
16		PID 9		ML	Green brown sandy clay, firm, [illegible], slight odor
18					
20		PID 160			Green brown sandy clay, firm, [illegible], slight odor
22					
24					

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GROUNDWATER TECHNOLOGY
Division of Oil Recovery Systems, Inc

Drilling Log

SOIL BORING SB 4

Project Arco/Hesperian Owner Arco Petroleum

Location Hayward, Calif. Project Number 20-8127

Date Drilled 8-8-86 Total Depth of Hole 20 ft. Diameter 7.5 in.

Surface Elevation - Water Level Initial 12.5 ft 24-hrs. -

Screen: Dia. - Length - Slot Size -

Casing: Dia. - Length - Type -

Drilling Company Sierra Pacific Drilling Method h. s. auger

Driller L. Pera Log by S. Gable

Sketch Map

Notes

Depth (Feet)	Well Construction	Notes PID	BLOW Sample Number COUNT	Graphic Log	Description/Soil Classification (Color, Texture, Structures)
0					Asphalt, gravel fill
2				SM	Brown sandy silt, dry, soft, no odor
4		o PID 40	6 8	CL	Black sandy silt, dry, stfff, dry, no odor
6		o PID 100		CL	Brown silty clay, firm, damp, slight odor
8		o PID 100	4 5		
10				ML	Green brown mottled, silty clay, soft, damp, slight odor
12					▼ 8/8/86
14		o PID 18			Dark brown sandy clay, firm, [redacted], slight odor
16					
18				CL	
20		o PID 18			
22					
24					

Field location of boring:

(See Plate 2)

Project No.:	792602	Date: 10/29/91	Boring No: A-4
Client:	ARCO Service Station No. 5387		
Location:	20200 Hesperian Boulevard		
City:	Hayward, California		Sheet 1 of 2
Logged by:	R.S.Y.	Driller: Bayland	

Drilling method: Hollow Stem Auger

Hole diameter: 8-inches

Casing installation data:

Top of Box Elevation: 39.86 Datum: MSL

Water Level	17.5'	17'	17.3'
Time	09:50	11:00	09:50
Date	10/29/91	10/29/91	10/30/91

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
								PAVEMENT SECTION - 2-inches
				1				
				2				CLAY (CL) - black (7.5YR 2/0), medium stiff, moist; small roots; medium plasticity; small voids; minor silt content.
				3				
	50			4				
	50		A-4-					
1.0	50	S&H	5	5				
	psi							
				6				
				7				
				8				
				9				
			A-4-					
1.0	8	S&H	10	10				
				11				CLAYEY SILT (ML) - gray (5Y 5/1), medium stiff, moist; voids; organic matter; low plasticity.
			A-4-	12				
1.5	5	S&H	12.5					
				13				
				14				
			A-4-					
7.9	5	S&H	15	15				SILTY CLAY (CL) - brown (10YR 4/3), medium stiff, moist; voids; medium plasticity.
				16				
				17				soft at 17.5 ft.
				18				
				19				SILT (ML) - yellow brown (10YR 5/4), medium stiff, saturated; low plasticity; trace fine sand at 20 ft.
			A-4-					
0	6	S&H	20	20				

Remarks:

* Converted to equivalent Standard Penetration blow/ft.

GeoStrategies Inc.

Log of Boring

BORING NO. A-4

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602		10/91		

Field location of boring: (See Plate 2)	Project No.: 792602	Date: 10/29/91	Boring No.: A-4
	Client: ARCO Service Station No. 5387		
	Location: 20200 Hesperian Boulevard		
	City: Hayward, California		Sheet 2 of 2
	Logged by: R.S.Y.	Driller: Bayland	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation:		Datum:

								Water Level				
								Time				
								Date				
PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description				
				21								
				22								
				23				SILTY SAND (SM) - dark yellowish brown (10YR 4/4), medium dense, ~~saturated~~, 60% fine sand.				
				24								
			A-4-									
0	11	S&H	25	25								
				26								
				27								
				28				GRAVELLY SAND (SP) - dark yellow brown (10YR 4/4), dense, ~~saturated~~, 30% fine subround gravel 1-inch maximum size; 60-70% medium to coarse sand; 5-10% fines.				
				29								
			A-4-									
0	33	S&H	30	30								
				31								
				32								
				33								
				34								
			A-4-									
0	26	S&H	35	35				SANDY CLAY (CL) - olive (5Y 5/3), very stiff, ~~saturated~~, medium plasticity; fine sand.				
				36				Bottom of Boring at 35 ft.				
								10/29/91				
				37								
				38								
				39								
				40								

Remarks:

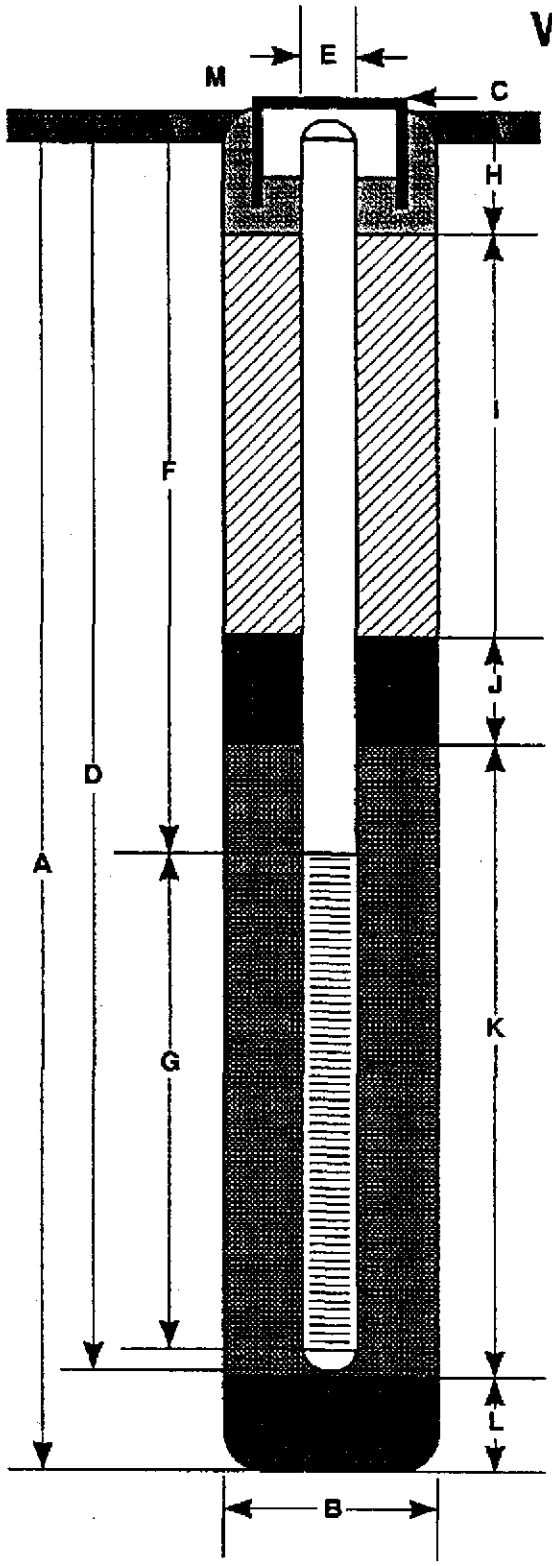
GeoStrategies Inc.

Log of Boring

BORING NO. A-4

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602		10/91		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 35 ft.

B Diameter of Boring 10 in.
Drilling Method Hollow Stem Auger

C Top of Box Elevation 39.86 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 35 ft.
Material Schedule 40 PVC

E Casing Diameter 3 in.

F Depth to Top Perforations 10 ft.

G *Perforated Length* 25 ft.
Perforated Interval from 10 to 35 ft.
Perforation Type Factory slot
Perforation Size 0.020 in.

H Surface Seal from 0.0 to 1.5 ft.
Seal Material Concrete grout

I Backfill from 0.0 to 1.5 ft.
Backfill Material Cement grout

J Seal from 8 to 9 ft.
Seal Material Bentonite pellets

K Gravel Pack from 9 to 35 ft.
Pack Material Lonestar #2/12 sand

L Bottom Seal ft.
Seal Material

M Traffic-rated box with locking well cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO. A-4

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602		1/92		

Field location of boring:

(See Plate 2)

Project No.:	792602	Date: 10/29/91	Boring No.: A-5
Client:	ARCO Service Station No. 5387		
Location:	20200 Hesperian Boulevard		
City:	Hayward, California		Sheet 1 of 2
Logged by: R.S.Y.		Driller: Bayland	
Casing installation data:			
Drilling method:	Hollow Stem Auger		
Hole diameter:	8-inches	Top of Box Elevation: 38.94	Datum: MSL

Water Level	18'	
Time	15:00	
Date	10/29/91	

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				1				PAVEMENT SECTION - 1 ft.
				2				
				3				CLAY (CL) - black (7.5YR 2/0), medium stiff, moist, roots, organics; minor silt content.
	50			4				
	50		A-5-					
0	350	S&H	5	5				COLOR CHANGE to dark yellowish brown (10YR 4/4) at 4.5 ft.; 20% fine sand.
				6				
				7				
				8				
				9				SILT (ML) - olive gray (5Y 5/2), soft, moist, minor clay; low plasticity, voids.
			A-5-					
0	5	S&H	10	10				
				11				lenses of silty sand <1/4-inch thick
				12				
				13				
				14				
			A-5-					
0	4	S&H	15	15				
				16				
				17				
				18		▽		
				19				COLOR CHANGE to yellow brown (10YR 5/4), [redacted]
			A-5-					[redacted] ft.
0	5	S&H	20	20				

Remarks:

* Converted to equivalent Standard Penetration blows/ft

GeoStrategies Inc.

Log of Boring

BORING NO. A-5

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602		10/91		

Field location of boring:

(See Plate 2)

Project No.: 792602	Date: 10/29/91	Boring No: A-5	
Client: ARCO Service Station No. 5387			
Location: 20200 Hesperian Boulevard			
City: Hayward, California		Sheet 2 of 2	
Logged by: R.S.Y.	Driller: Bayland		

Drilling method: Hollow Stem Auger

Hole diameter: 8-inches

Casing installation data:

Top of Box Elevation: Datum:

Water Level				
Time				
Date				

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				21				
				22				SILTY SAND (SM) - dark brown (10YR 4/4), loose, ~~saturated~~; 70% fine sand; 30% fines.
				23				
				24				
			A-5-					
0	11	S&H	25	25				SAND (SP) - dark yellow brown (10YR 5/4), medium dense, ~~saturated~~; fine to medium sand; trace gravel.
				26				
				27				
				28				
				29				
			A-5-					
0	11	S&H	30	30				
				31				interbedded silt and sand between 30 and 31.5 ft.
	20	S&H						
				32				Bottom of Boring at 31.5 ft. 10/29/91
				33				
				34				
				35				
				36				
				37				
				38				
				39				
				40				

Remarks:

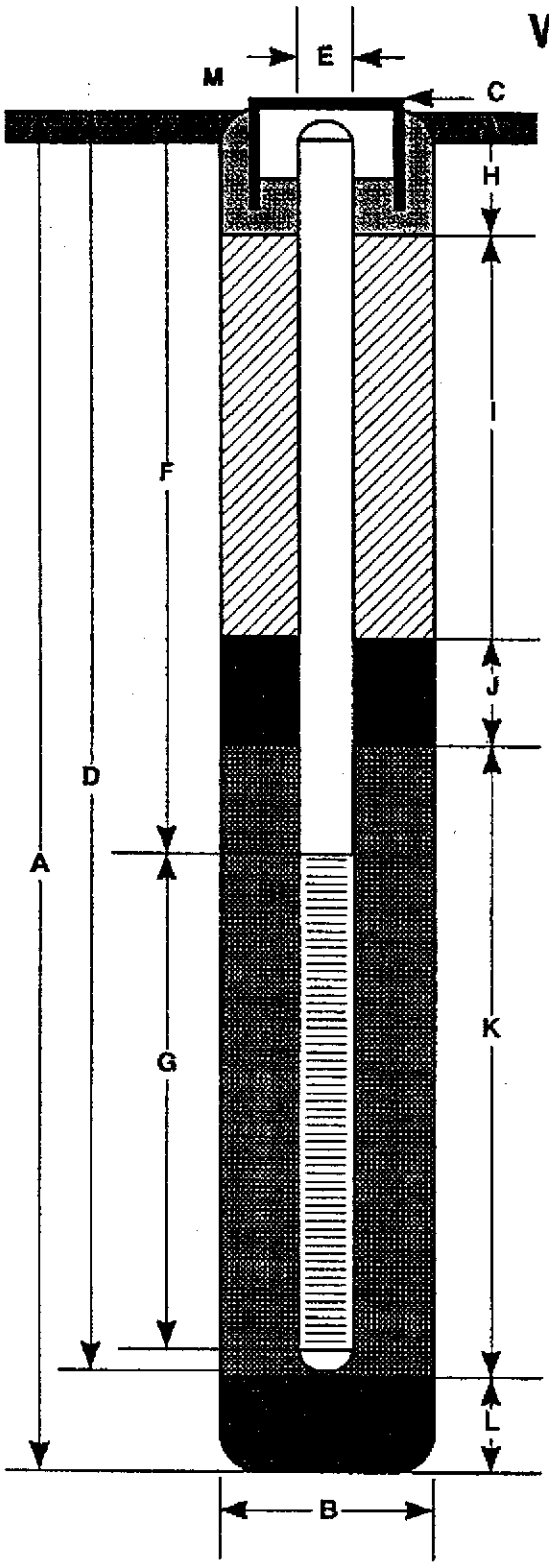
GeoStrategies Inc.

Log of Boring

BORING NO. A-5

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602	JPW	10/91		

WELL CONSTRUCTION DETAIL



A	Total Depth of Boring	31.5 ft.
B	Diameter of Boring	10 in.
	Drilling Method	Hollow Stem Auger
C	Top of Box Elevation	38.94 ft.
	[X] Referenced to Mean Sea Level	
	[ ] Referenced to Project Datum	
D	Casing Length	30 ft.
	Material	Schedule 40 PVC
E	Casing Diameter	3 in.
F	Depth to Top Perforations	10 ft.
G	Perforated Length	20 ft.
	Perforated Interval from 10 to 30	ft.
	Perforation Type	Factory slot
	Perforation Size	0.020 in.
H	Surface Seal from 0.0 to 1.5	ft.
	Seal Material	Concrete grout
I	Backfill from 1.5 to 7	ft.
	Backfill Material	Cement grout
J	Seal from 7 to 9	ft.
	Seal Material	Bentonite pellets
K	Gravel Pack from 9 to 30	ft.
	Pack Material	Lonestar #2/12 sand
L	Bottom Seal	1.5 ft.
	Seal Material	Native
M	Traffic-rated box with locking well cap and lock.	

Note: Depths measured from initial ground surface.

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Well Construction Detail

WELL NO.

A-5

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602		1/92		

Field location of boring:

(See Plate 2)

Project No.: 792602	Date: 10/30/91	Boring No: A-6	
Client: ARCO Service Station No. 5387			
Location: 20200 Hesperian Boulevard			
City: Hayward, California		Sheet 1 of 2	
Logged by: R.S.Y.	Driller: Bayland		
Casing installation data:			
Drilling method: Hollow Stem Auger			
Hole diameter: 8-inches	Top of Box Elevation: 39.07	Datum: MSL	

Water Level	18'	
Time	11:20	
Date	10/30/91	

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
								PAVEMENT SECTION - 3-inches
				1				
				2				CLAY (CL) - black (7.5YR 2/0), medium stiff, moist; voids; organic fragments; trace sand.
				3				
	50			4				
	350		A-6-					
0	350	S&H	5	5				COLOR CHANGE to dark brown (10YR 4/3) at 4 ft.
				6				
				7				
				8				SILTY SAND (SM) - olive (5Y 4/3), loose, moist; 70% fine sand; 30% silt; voids.
				9				
			A-6-					
0	6	S&H	10	10				
				11				
				12				
				13				
				14				SANDY SILT (ML) - olive gray (5Y 4/2), medium stiff, moist; low plasticity; voids; fine sand.
			A-6-					
0	6	S&H	15	15				
				16				
				17				
				18		▽		Saturated at 18 ft.
				19				
			A-6-					
0	7	S&H	20	20				

Remarks:

* Converted to equivalent Standard Penetration blows/ft.

GeoStrategies Inc.

Log of Boring

BORING NO. A-6

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602		10/91		

Field location of boring: (See Plate 2)	Project No.: 792602	Date: 10/30/91	Boring No.: A-6
	Client: ARCO Service Station No. 5387		
	Location: 20200 Hesperian Boulevard		
	City: Hayward, California		Sheet 2 of 2
	Logged by: R.S.Y.	Driller: Bayland	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation:	Datum:	

	Water Level			
	Time			
	Date			

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				21				
				22				SILTY SAND (SM) - olive (5Y 5/3), loose, saturated; 80%
				23				fine sand; 20% fines.
				24				interbedded with 100% fine to medium sand.
			A-6-					
0	9	S&H	25	25				
				26				
				27				
				28				SAND (SW) - dark yellowish brown (10YR 4/4), medium dense, saturated; fine to medium grain.
				29				
			A-6-					sand coarsening downward
0	17	S&H	30	30				
				31				
				32				gravels at 33 ft.
				33				
				34				
			A-6-					
0	10	S&H	35	35				SANDY CLAY (CL) - olive (5Y 4/3), medium stiff,
				36				saturated; 15% fine sand; black organic nodules, some silt.
				37				Bottom of Boring at 35 ft.
				38				
				39				
				40				

Remarks:

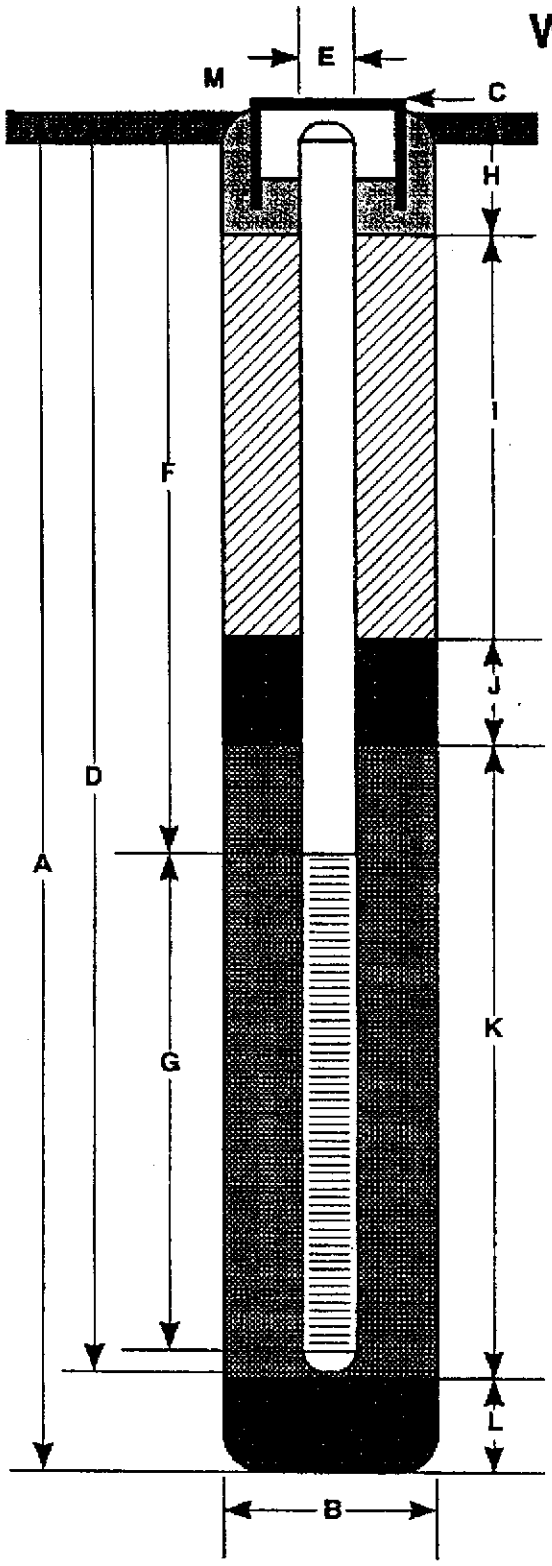
GeoStrategies Inc.

Log of Boring

BORING NO. A-6

JOB NUMBER	REVIEWED BY PG/CEG	DATE	REVISED DATE	REVISED DATE
792602		10/91		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 35 ft.

B Diameter of Boring 10 in.
Drilling Method Hollow Stem Auger

C Top of Box Elevation 39.07 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 35 ft.
Material Schedule 40 PVC

E Casing Diameter 3 in.

F Depth to Top Perforations 10 ft.

G Perforated Length 25 ft.
Perforated Interval from 10 to 35 ft.
Perforation Type Factory slot
Perforation Size 0.020 in.

H Surface Seal from 0.0 to 1.5 ft.
Seal Material Concrete grout

I Backfill from 1.5 to 7 ft.
Backfill Material Cement grout

J Seal from 7 to 9 ft.
Seal Material Bentonite pellets

K Gravel Pack from 9 to 35 ft.
Pack Material Lonestar #2/12 sand

L Bottom Seal ft.
Seal Material

M Traffic-rated box with locking well cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO. A-6

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602		1/92		

Field location of boring:

(See Plate 2)

Project No.: 792602	Date: 12/20/91	Boring No: A-7	
Client: ARCO Service Station No. 5387			
Location: 20200 Hesperian Boulevard			
City: Hayward, California		Sheet 1 of 2	
Logged by: T.D.L	Driller: Bayland		
Casing installation data:			
Drilling method: Hollow Stem Auger			
Hole diameter: 8-10-inches	Top of Box Elevation: 39.95	Datum: MSL	
	Water Level: 18.5'		
	Time: 11:00		
	Date: 12/29/91		

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				1				CLAY (CL) very dark brown (10YR 2/2), medium stiff, damp; trace coarse sand.
				2				
				3				CLAY with SAND (CH) - black (10YR 2/1), very stiff, damp; trace silt; 20% fine sand; 80% fines.
	250	S&H	A-7-	4				
0	250	push	4.5	5				
	psi			6				
				7				
				8				
	150	S&H	A-7-	9				SILT (ML) - brown (10YR 5/3), medium stiff, damp; 100% fines; trace clay.
0	150	push	9.5	10				
	250							
	psi			11				
				12				
				13				
			A-7-	14				COLOR CHANGE to dark grayish brown (2.5Y 4/2), trace clay; 10% sand.
25	7	S&H	14.5	15				
				16				
				17				
				18				
			A-7-	19				COLOR CHANGE to very dark grayish brown (2.5Y 3/2), [illegible] mottling.
26	9	S&H	19.5	20				

Remarks:

* Converted to equivalent Standard Penetration blows/ft.

GeoStrategies Inc.

Log of Boring

BORING NO. A-7

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602		12/91		

Field location of boring: (See Plate 2)	Project No.: 792602	Date: 12/20/91	Boring No.: A-7
	Client: ARCO Service Station No. 5387		
	Location: 20200 Hesperian Boulevard		
	City: Hayward, California		Sheet 2 of 2
	Logged by: T.D.L.	Driller: Bayland	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-10-inches	Top of Box Elevation:	Datum:	

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Water Level / Time / Date	Description
				21					
				22					
				23					
			A-7-	24					COLOR CHANGE to light olive brown (7.5Y 5/4).
3	5	S&H	24.5	25					
				26					
				27					
				28					
				29					SANDY SILT (ML) - olive brown (10YR 4/4), soft, [illegible] 65% fines; 35% very fine sand; mottling.
			A-7-						
3.5	7	S&H	30	30					
				31					
				32					
				33					
				34					COLOR CHANGE to light olive brown (2.5Y 5/4), increase sand to 45%.
			A-7-						
1	7	S&H	35	35					
				36					Bottom of Boring at 35 ft. 12/20/91
				37					
				38					
				39					
				40					

Remarks:

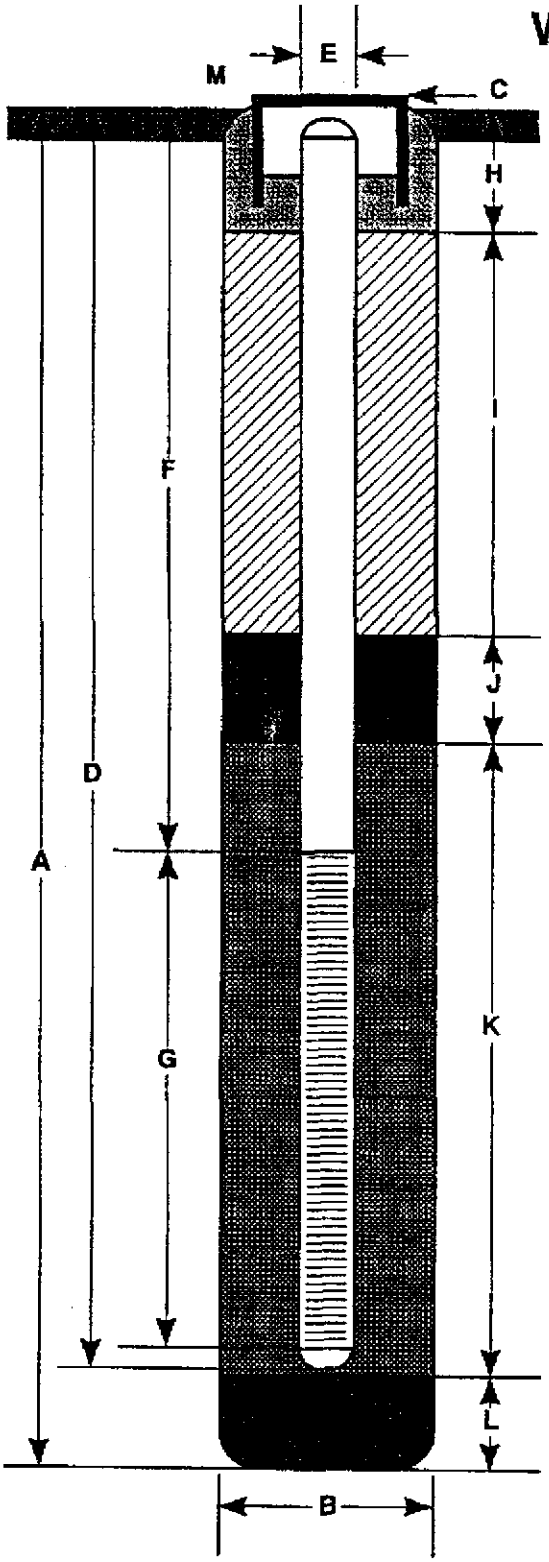
GeoStrategies Inc.

Log of Boring

BORING NO. A-7

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602		12/91		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 35 ft.

B Diameter of Boring 10 in.
Drilling Method Hollow Stem Auger

C Top of Box Elevation 39.95 ft.
[X] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 35 ft.
Material Schedule 40 PVC

E Casing Diameter 3 in.

F Depth to Top Perforations 10 ft.

G Perforated Length 25 ft.
Perforated Interval from 10 to 35 ft.
Perforation Type Factory slot
Perforation Size 0.020 in.

H Surface Seal from 0.0 to 1.5 ft.
Seal Material Concrete grout

I Backfill from 1.5 to 8 ft.
Backfill Material Cement grout

J Seal from 8 to 9 ft.
Seal Material Bentonite pellets

K Gravel Pack from 9 to 35 ft.
Pack Material Lonestar #2/12 sand

L Bottom Seal ft.
Seal Material

M Traffic-rated box with locking well cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO. A-7

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792602		1/92		

Field location of boring: (See Plate 2)	Project No.: 792605	Date: 8/25/92	Boring No: A-8
	Client: Arco Products Company SS# 5387		
	Location: 20200 Hesperian Blvd.		
	City: Hayward		Sheet 1 of 2
	Logged by: RCM	Driller: W. Hazmat	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation:	Datum:	

Water Level	13.5	14.0
Time	10:15	17:08
Date	8/25/92	8/26/92

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Description
				0	PAVEMENT SECTION - 1.0 ft.
				1	
				2	CLAY (CL), very dark grayish brown (10YR 2/2), medium stiff, damp; 90% clay, 10% fine sand.
				3	
	300	S&H		4	
	300	(Push)			
0	300		A-8-5.0	5	SILT (ML), dark yellowish brown (10YR 4/4), medium stiff, moist; 65% silt, 30% clay, 5% fine sand.
				6	
				7	
				8	
		S&H		9	
2.3	10		A-8-10.0	10	CLAY (CL), dark greenish gray (5GY 4/1), stiff, moist; 90% clay, 10% silt.
				11	
				12	
				13	
				14	
		S&H	A-8-14.5	15	Color Change to olive brown (2.5Y 4/4), increase fine sand to 10%, increase silt to 20%, saturated at 13.5 ft.
0	12				
				16	
				17	
				18	
		S&H		19	SILT (ML), light olive brown (2.5Y 5/6), stiff, saturated; 65% filt, 30% fine sand, 5% clay.
0	13		A-8-20.0	20	SILTY SAND (SM), light olive brown (2.5Y 5/6), medium dense, saturated; 80% fine sand, 20% silt.

Remarks: * Converted to equivalent Standard Penetration blows/ft.

GeoStrategies Inc.

Log of Boring

BORING NO. A-8

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		8/25/92		

Field location of boring: (See Plate 2)	Project No.: 792605	Date: 8/6/92	Boring No.: A-8
	Client: Arco Products Company SS# 5387		
	Location: 20200 Hesperian Blvd.		
	City: Hayward		Sheet 2 of 2
	Logged by: RCM	Driller: W. Hazmat	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation:	Datum:	

PID (ppm)	Blows/ft*. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Water Level / Time / Date	Description
				21					
				22					
				23					
		S&H							CLAYEY SILT (ML/CL), light olive brown (2.5Y 5/6), stiff,
0				24					saturated; 70% silt, 25% clay, 5% fine sand.
	10		A-8-24.5	25					
				26					
				27					
				28					SAND (SP), olive brown (2.5Y 4/4), medium dense, saturated; 95% fine sand, 5% silt.
		S&H		29					SAND with GRAVEL (SW), olive brown (2.5Y 4/4),
0	14		A-8-30.0	30					medium dense, saturated; 85% fine to coarse sand, 15% fine subrounded gravel.
				31					SAND (SP), brown (10YR 4/3), medium dense, saturated; 95% fine sand, 5% silt.
				32					
				33					
		S&H		34					CALY (CL), light olive brown (2.5Y 5/4), stiff, moist; 85%
0	12		A-8-35.0	35					clay, 15% fine sand.
				36					Bottom of boring 35.0 ft. 8/25/92
				37					
				38					
				39					
				40					

Remarks: * Converted to equivalent Standard Penetration blows/ft.

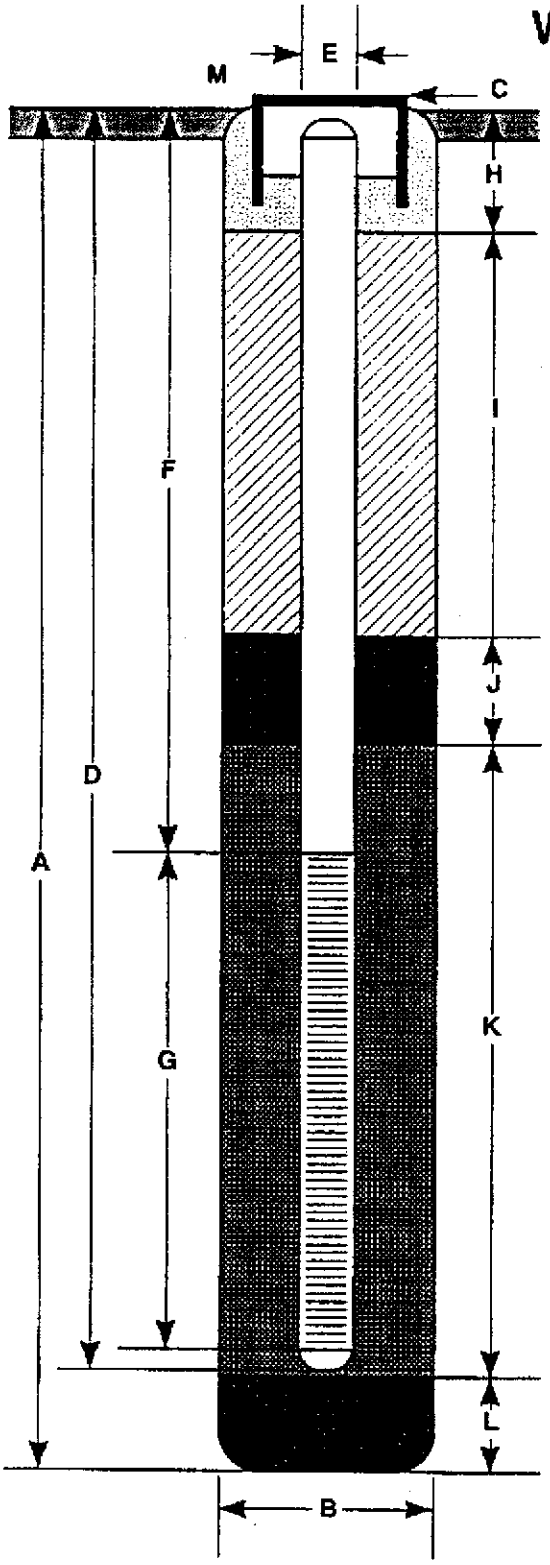
GeoStrategies Inc.

Log of Boring

BORING NO. A-8

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		8/25/92		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 35.0 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow Stem Auger

C Top of Box Elevation 37.23 ft.
[x] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 35.0 ft.
Material Schedule 40 PVC

E Casing Diameter 2 in.

F Depth to Top Perforations 10.0 ft.

G Perforated Length 25.0 ft.
Perforated Interval from 10.0 to 35.0 ft.
Perforation Type machine slotted
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.0 ft.
Seal Material Concrete

I Backfill from 1.0 to 7.0 ft.
Backfill Material Neat Cement

J Seal from 7.0 to 8.0 ft.
Seal Material Bentonite

K Gravel Pack from 8.0 to 35.0 ft.
Pack Material Lonestar #2/12 Graded Sand

L Bottom Seal ft.
Seal Material

M Underground vault box with waterproof locking cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO. A-8

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		8/92		

Field location of boring: (See Plate 2)	Project No.: 792605	Date: 8/25/92	Boring No: A-9
	Client: Arco Products Company SS# 5387		
	Location: 20200 Hesperian Blvd.		
	City: Hayward		Sheet 1 of 2
	Logged by: RCM	Driller: W. Hazmat	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation:		Datum:

Water Level	15.75	15.9	
Time	14:02	17:25	
Date	8/25/92	8/26/92	

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				1				PAVEMENT SECTION 1.5 FT.
				2				
				3				
	300	S&H		4				CLAY (CL), very dark grayish brown (10YR 3/2), medium stiff, damp; 90% clay 10% fine sand.
	300	(Push)						
0	300		A-9-5.0	5				SILT (ML), dark yellowish brown (10YR 3/6), medium stiff, damp; 80% silt, 10% fine sand.
				6				
				7				
				8				
		S&H		9				
0	9		A-9-10.0	10				CLAY (CL), olive brown (2.5Y 4/4), stiff, very moist; 90% clay, 10% silt, large 1-2 mm. diameter, voids (tube like) rootholes?
				11				
				12				
				13				
		S&H		14				GREY (5Y 6/1), discoloration in voids at 13.5 ft.
0	11		A-915.0	15				
		S&H						SATURATED at 15.75 ft.
				16		▽		
0	11		A-9-16.5	17				
				18				
		S&H		19				SILT (ML), olive brown (2.5Y 4/4), stiff, saturated; 85% silt, 15% clay, trace fine sand, minor small voids.
0	9		A-9-20.0	20				

Remarks: * Converted to equivalent Standard Penetration blows/ft.

GeoStrategies Inc.

Log of Boring

BORING NO. A-9

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		8/25/92		

Field location of boring: (See Plate 2)	Project No.: 792605	Date: 8/25/92	Boring No.: A-9
	Client: Arco Products Company SS#5387		
	Location: 20200 Hesperian Blvd.		
	City: Hayward		Sheet 2 of 2
	Logged by: RCM	Driller: W. Hazmat	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation:	Datum:	

	Water Level			
	Time			
	Date			

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				21				
				22				
				23				
		S&H		24				
								SAND with SILT (SP-SM), dark grayish brown (10YR
0	9		A-9-25.0	25				4/2), loose, saturated; 90% fine sand, 10% silt.
				26				
				27				
				28				
		S&H		29				
								GRAVEL with SAND (GP), very dark grayish brown
0	55		A-9-30.0	30				(10YR 4/2), very dense, saturated; 75% fine gravel, 25%
				31				fine to coarse sand.
				32				SILTY SAND (SM), light olive brown (2.5Y 5/4), medium dense, saturated; 65% fine sand, 35% silt.
				33				SANDY CLAY (CL), light olive brown (2.5Y 5/4), very stiff, moist; 85% clay, 15% fine sand.
		S&H		34				
0	23		A-9-35.0	35				Bottom of boring at 35.0 ft.
								8/25/92
				36				
				37				
				38				
				39				
				40				

Remarks: * Converted to equivalent Standard Penetration blows/ft.

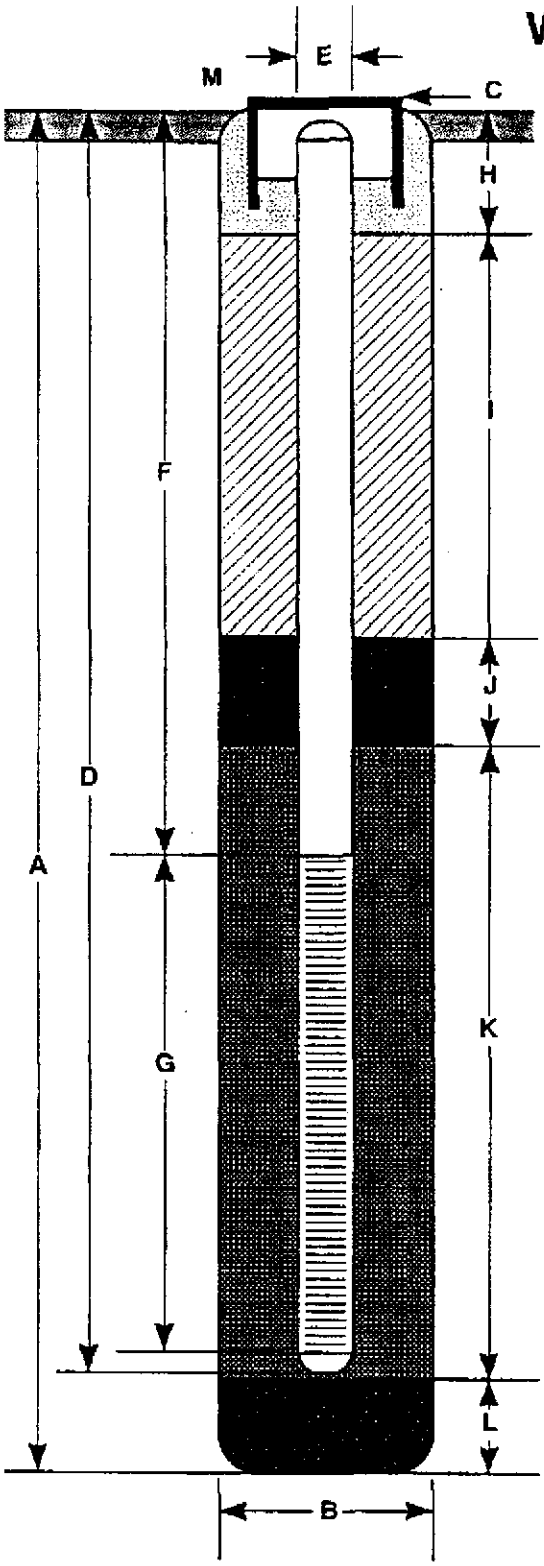
GeoStrategies Inc.

Log of Boring

BORING NO. A-9

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		8/25/92		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 35.0 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow Stem Auger

C Top of Box Elevation 38.71 ft.
[x] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 34.0 ft.
Material Schedule 40 PVC

E Casing Diameter 2 in.

F Depth to Top Perforations 10.0 ft.

G Perforated Length 24.0 ft.
Perforated Interval from 10.0 to 34.0 ft.
Perforation Type Machine Slotted
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.0 ft.
Seal Material Concrete

I Backfill from 1.0 to 7.0 ft.
Backfill Material Neat Cement

J Seal from 7.0 to 8.0 ft.
Seal Material Bentonite

K Gravel Pack from 8.0 to 34.0 ft.
Pack Material Lonestar #2/12 Graded Sand

L Bottom Seal 1.0 ft.
Seal Material Bentonite

M Underground, traffic rated vault box with waterproof locking cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO. A-9

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		8/92		

Field location of boring: (See Plate 2)	Project No.: 792605	Date: 11/18/92	Boring No.: A-10
	Client: ARCO Products Co. #5387		
	Location: 20200 Hesperian Boulevard		
	City: San Lorenzo		Sheet 1 of 2
	Logged by: RCM	Driller: Bayland	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation: 38.94		Datum: MSL

Water Level	17.5	16.93	
Time	10:58	12:05	
Date	11/18/92	11/19/92	

PID (ppm)	Blows/ft., or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				1				SILT (ML) - very dark grayish brown (10YR 3/2); medium stiff, damp; 85% silt, 15% fine sand.
				2				
				3				
	700	S&H	A-10	4				SANDY SILT (ML) - dark yellowish brown (10YR 4/4);
0	900	(push)	4.5					stiff, damp; 60% silt, 40% fine to coarse sand; trace
	1300			5				organic matter.
				6				
				7				
				8				
	5	S&H		9				
	8		A-10					SILT (ML) - light olive brown (2.5Y 5/6); stiff, damp; 95%
0	9		10.0	10				silt, 5% fine sand;
	3	S&H						
	6		A-10	11				moist, 2 mm. thick laminae of fine sand; rootholes at 11.0
0	7		11.5					ft.
	3	S&H		12				
	6		A-10					Light yellowish brown mottling at 12.0 ft., 4 mm. thick
0	9		13.0	13				sand laminae at 12.5 ft.
	4	S&H		14				Color change to olive brown (2.5Y 4/4); rootholes at 14.5
	6		A-10					ft.
0	12		15.0	15				
	9	S&H						Increase clay to 25% at 15.0 ft
	7		A-10	16				
0	12		16.5					Gray (5Y 5/1) discoloration in rootholes; at 16.0 ft.
	6	S&H	A-10	17		▼		
0	6		17.5			▽		
				18				
	0	S&H		19				COLOR CHANGE to greenish gray (5GY 5/1); medium
	3		A-10					stiff at 20.0.
	5		20.0	20				

Remarks: * Converted to equivalent Standard Penetration blows/ft.

GSI GeoStrategies Inc.

Log of Boring

BORING NO. A-10

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		11/92		

Field location of boring:	Project No.: 792605	Date: 11/18/92	Boring No:
(See Plate 2)	Client: ARCO Products Company		A-10
	Location: 20200 Hesperian Boulevard		Sheet 2
	City: San Lorenzo		of 2
	Logged by: RCM	Driller: Bayland	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 8-inches	Top of Box Elevation:	Datum:	

Water Level										
Time										
Date										

PID (ppm)	Blows/ft. or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				21				
				22				
				23				
	1	S&H	A-10	24				Increase clay to 35%, soft at 23.5 ft.
	1		24.5					
	3			25				
				26				
				27				
				28				
	2	S&H		29				COLOR CHANGE to yellowish brown (10YR 5/4) with
	3		A-10					greenish gray (5GY-5/1) and black (10YR 2/1),
	4		30.0	30				discoloration/mottling.
				31				
				32				
				33				
	2	S&H		34				Increase fine sand to 10%, decrease clay to 20% at 33.5
	3		A-10					ft.
	4		35.0	35				
				36				
				37				Bottom of boring at 35.0 ft.
								11/18/92
				38				
				39				
				40				

Remarks:

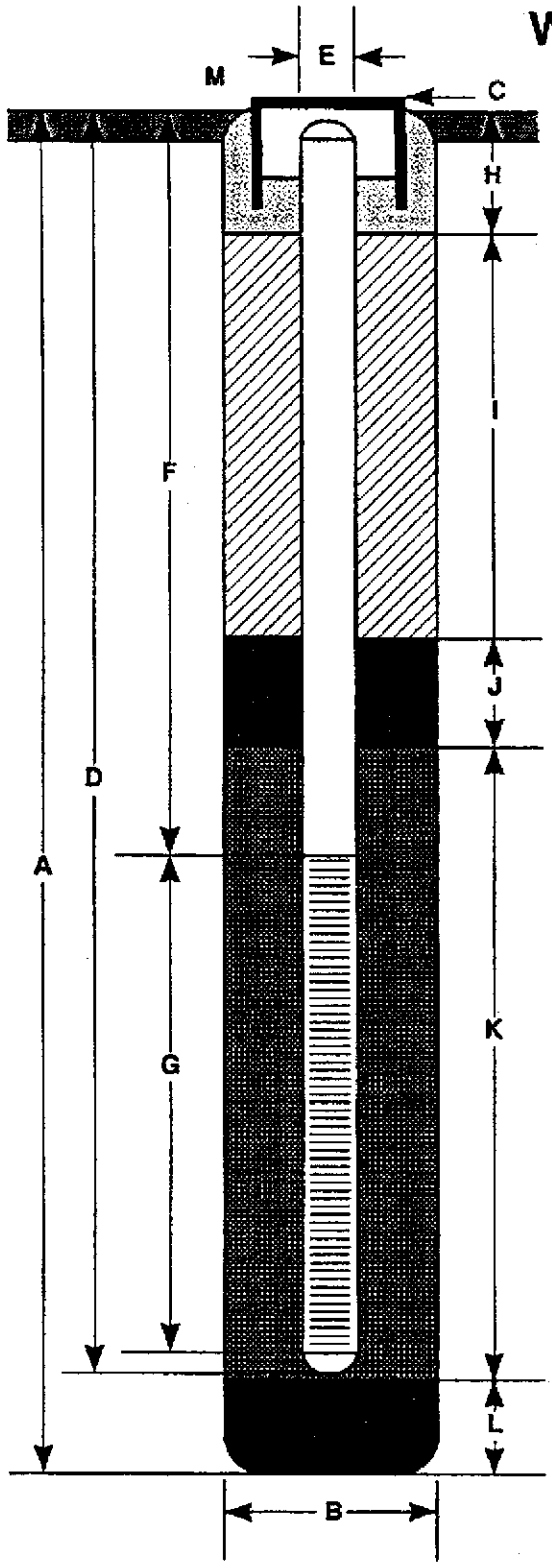
GeoStrategies Inc.

Log of Boring

BORING NO. A-10

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		11/92		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 35.0 ft.

B Diameter of Boring 8 in.
Drilling Method Hollow Stem Auger

C Top of Box Elevation 38.94 ft.
[x] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 35.0 ft.
Material Schedule 40 PVC

E Casing Diameter 2 in.

F Depth to Top Perforations 10.0 ft.

G Perforated Length 25.0 ft.
Perforated Interval from 10.0 to 35.0 ft.
Perforation Type Continuous Wrap
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.0 ft.
Seal Material Concrete

I Backfill from 1.0 to 8.0 ft.
Backfill Material Neat Cement

J Seal from 8.0 to 9.0 ft.
Seal Material Bentonite

K Gravel Pack from 9.0 to 35.0 ft.
Pack Material Lonestar #2/12 Graded Sand

L Bottom Seal ft.
Seal Material

M Waterproof vault box with waterproof locking cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO. A-10

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		11/92		

Field location of boring: (See Plate 2)	Project No.: 792605	Date: 8/25/92	Boring No: AR-1
	Client: Arco Products Company SS#5387		
	Location: 20200 Hesperian Blvd.		
	City: Hayward		Sheet 1 of 2
	Logged by: RCM	Driller: W. Hazmat	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 12-inches	Top of Box Elevation:	Datum:	

Water Level	16.0	15.1	
Time	16:30	17:15	
Date	8/25/92	8/26/92	

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
								PAVEMENT SECTION - 0.5 FT.
				1				
								CLAY (CL), very dark grayish brown (10YR 2/2), medium stiff, damp; 95% clay, 5% fine sand.
				2				
				3				
	300	S&H		4				SILT (ML), dark grayish brown (2.5Y 4/2), medium stiff, damp; 80% fine sand, moderate dark greenish gray (5B6 4/1) , discoloration.
	300	(Push)	AR-1					
4	300		5.0	5				
				6				
				7				
				8				
		S&H		9				COLOR CHANGE to greenish gray (5GY 5/1), increase clay to 35%, very moist at 8.5 ft.
			AR-1					
151	10		10.0	10				
				11				
				12				
				13				
484		S&H	AR-1	14				
	16		14.5					
				15		▼		
				16		▽		Saturated at 16.0 ft.
				17				
				18				
		S&H		19				COLOR CHANGE to dark yellowish brown (10YR 4/6), saturated, minor greenish gray (5GY 5/1), discoloration in voids (rootholes?).
			AR-1					
0	23		20.0	20				

Remarks: * Converted to equivalent Standard Penetration blows/ft.

GeoStrategies Inc.

Log of Boring

BORING NO. AR-1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		8/25/92		

Field location of boring: (See Plate 2)	Project No.: 792605	Date: 8/26/92	Boring No: AR-1
	Client: Arco Products Company SS# 5387		
	Location: 20200 Hesperian Blvd.		
	City: Hayward		Sheet 2 of 2
	Logged by: RCM	Driller: W. Hazmat	
Drilling method: Hollow Stem Auger	Casing installation data:		
Hole diameter: 12-inches	Top of Box Elevation:	Datum:	
	Water Level		
	Time		
	Date		

PID (ppm)	Blows/ft.* or Pressure (psi)	Type of Sample	Sample Number	Depth (ft.)	Sample	Well Detail	Soil Group Symbol (USCS)	Description
				21				
				22				
				23				
		S&H		24				SANDY SILT (ML), dark yellowish brown (10YR 4/4), very
			AR-1					stiff, saturated; 70% silt, 30% fine sand, rootholes, voids
2	18		25.0	25				with greenish gray discocloration (5GY 5/1).
				26				
				27				
				28				
		S&H		29				SILTY SAND (SM), olive brown (2.54 4/4), medium dense
			AR-1					saturated; 70% fine sand, 30% silt.
0	22		30.0	30				
				31				
				32				
				33				
		S&H		34				CLAYEY SILT (ML/CL), light oliuve brown (2.5Y 5/4), stiff,
			AR-1					saturated; 55% silt, 30% clay, 15% fine sand.
0	14		35.0	35				Bottom of boring at 35.0 ft.
				36				
				37				
				38				
				39				
				40				

Remarks:

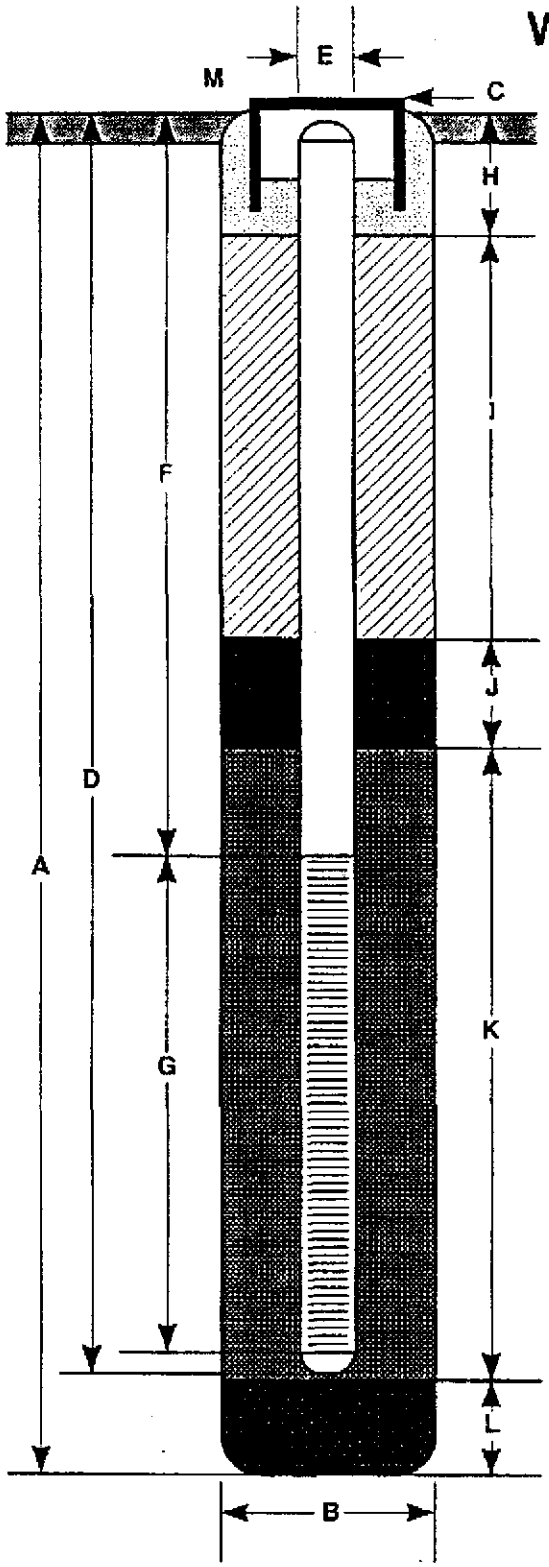
GeoStrategies Inc.

Log of Boring

BORING NO. AR-1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		8/25/92		

WELL CONSTRUCTION DETAIL



A Total Depth of Boring 35.0 ft.

B Diameter of Boring 12 in.
Drilling Method Hollow Stem Auger

C Top of Box Elevation 38.11 ft.
[x] Referenced to Mean Sea Level
[ ] Referenced to Project Datum

D Casing Length 35 ft.
Material Sch. 40 PVC & Carbon Steel

E Casing Diameter 6 in.

F Depth to Top Perforations 9.0 ft.

G Perforated Length 25.0 ft.
Perforated Interval from 9.0 to 34.0 ft.
Perforation Type Continuous Wrap
Perforation Size 0.020 in.

H Surface Seal from 0 to 1.0 ft.
Seal Material Concrete

I Backfill from 1.0 to 7.0 ft.
Backfill Material Neat Cement

J Seal from 7.0 to 8.0 ft.
Seal Material Bentonite

K Gravel Pack from 8.0 to 35.0 ft.
Pack Material Lonestar #2/12 Graded Sand

L Bottom Seal ft.
Seal Material

M Underground vault box with waterproof locking cap and lock.

Note: Depths measured from initial ground surface.

GeoStrategies Inc.

Well Construction Detail

WELL NO.
AR-1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
792605		8/92		

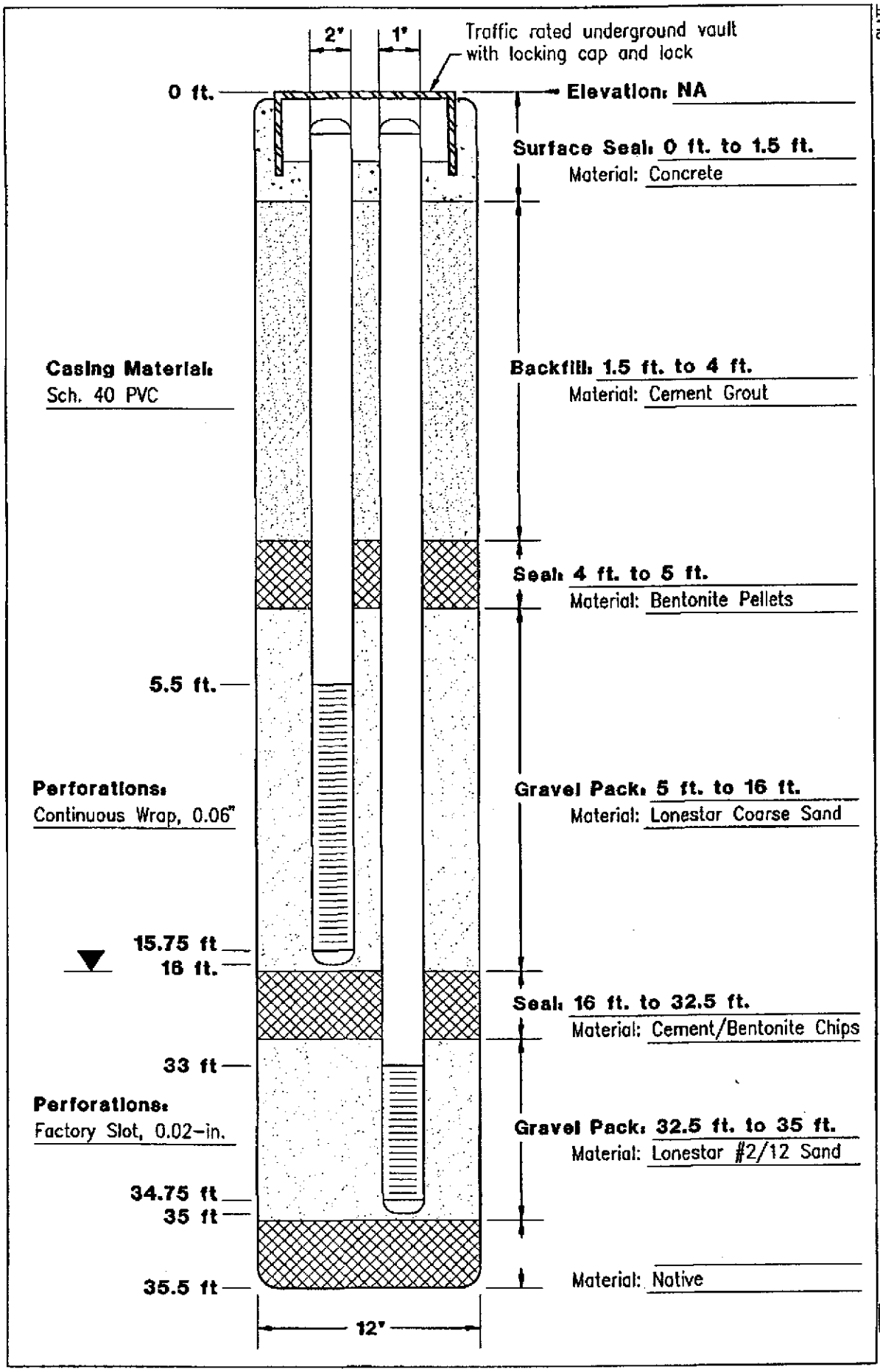


PLATE **AS-1**

WELL CONSTRUCTION DETAIL
Dual Completion Air sparge/Vapor Extraction

GeoStrategies Inc.

GSI

JOB NUMBER 792608-10

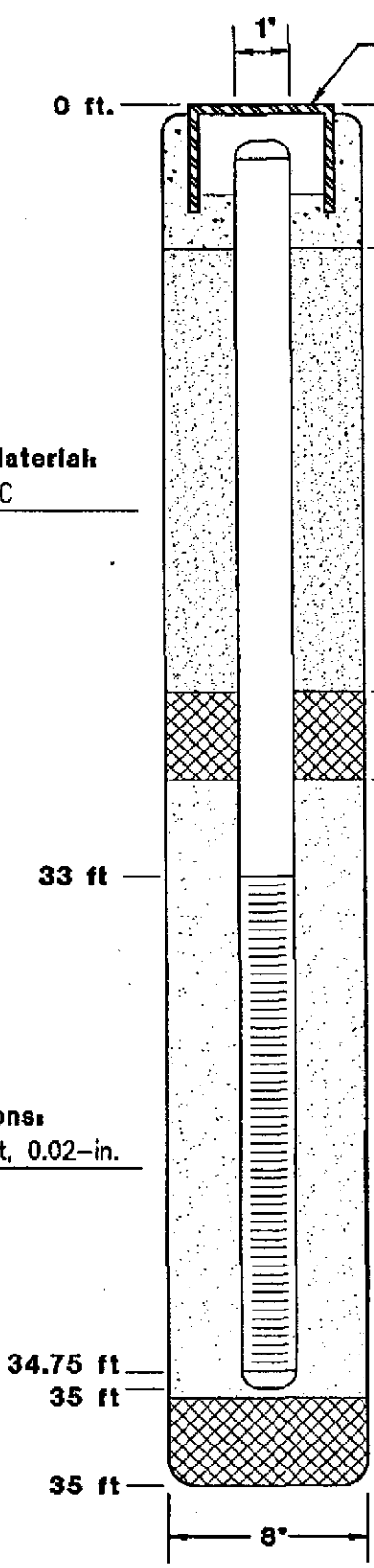
REVIEWED BY

DATE 2/93

REVISED DATE

PLATE

AS-2



Elevation: MSL

Surface Seal: 0 ft. to 1.5 ft.
Material: Concrete

Backfill: 1.5 ft. to 32 ft.
Material: Cement Grout

Seal: 31.5 ft. to 32.5 ft.
Material: Bentonite

Gravel Pack: 32.5 ft. to 35 ft.
Material: Lonestar #2/12 Sand

Casing Material:
Sch. 40 PVC

Perforations:
Factory Slot, 0.02-in.

Material: Native

WELL CONSTRUCTION DETAIL
Air Sparging

GeoStrategies Inc.

GSI

JOB NUMBER 792608-10

REVIEWED BY

DATE 2/93

REVISED DATE

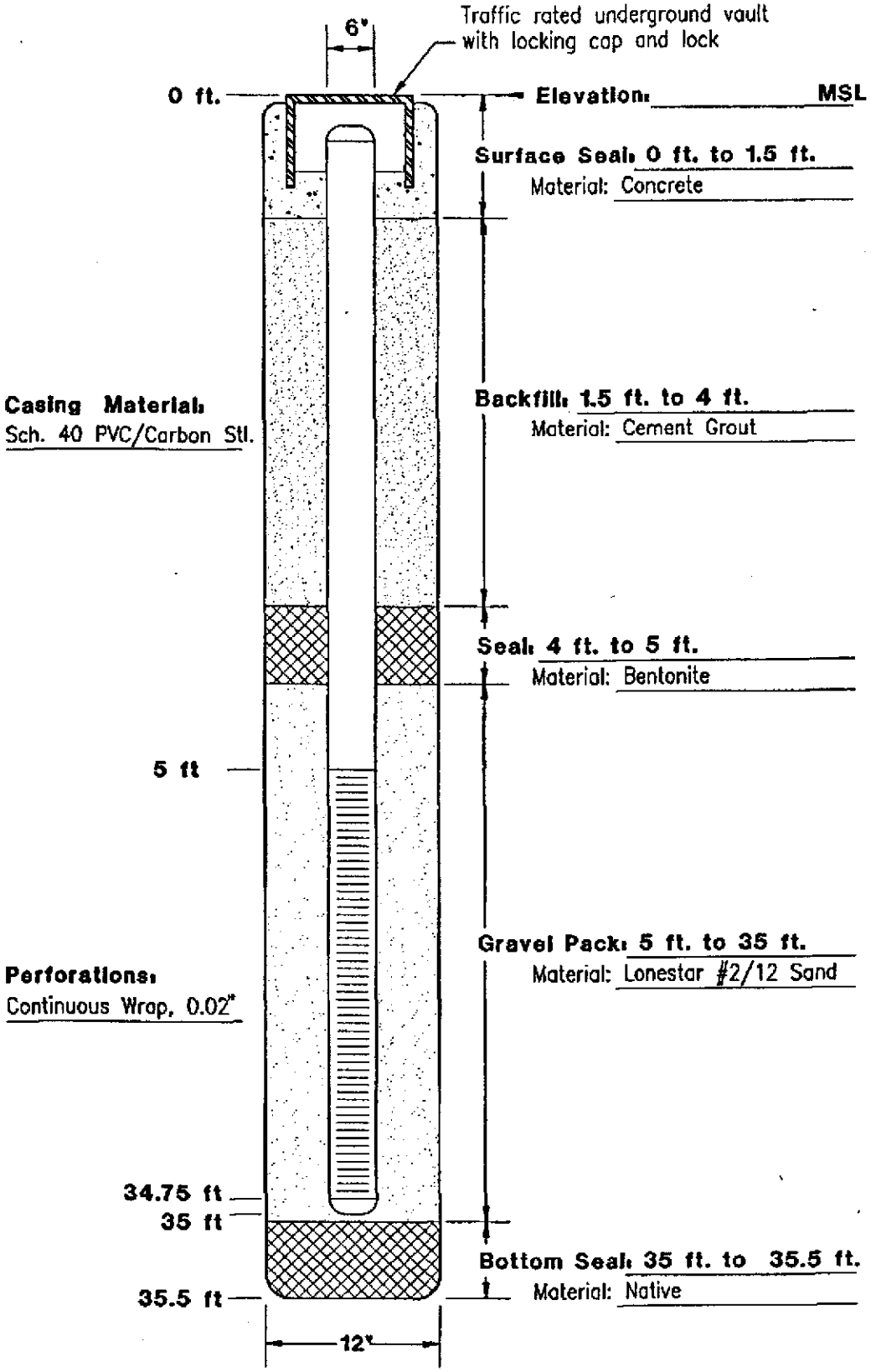


PLATE
AR-2

WELL CONSTRUCTION DETAIL
Vapor/Groundwater Extraction

REVISED DATE

DATE 2/93

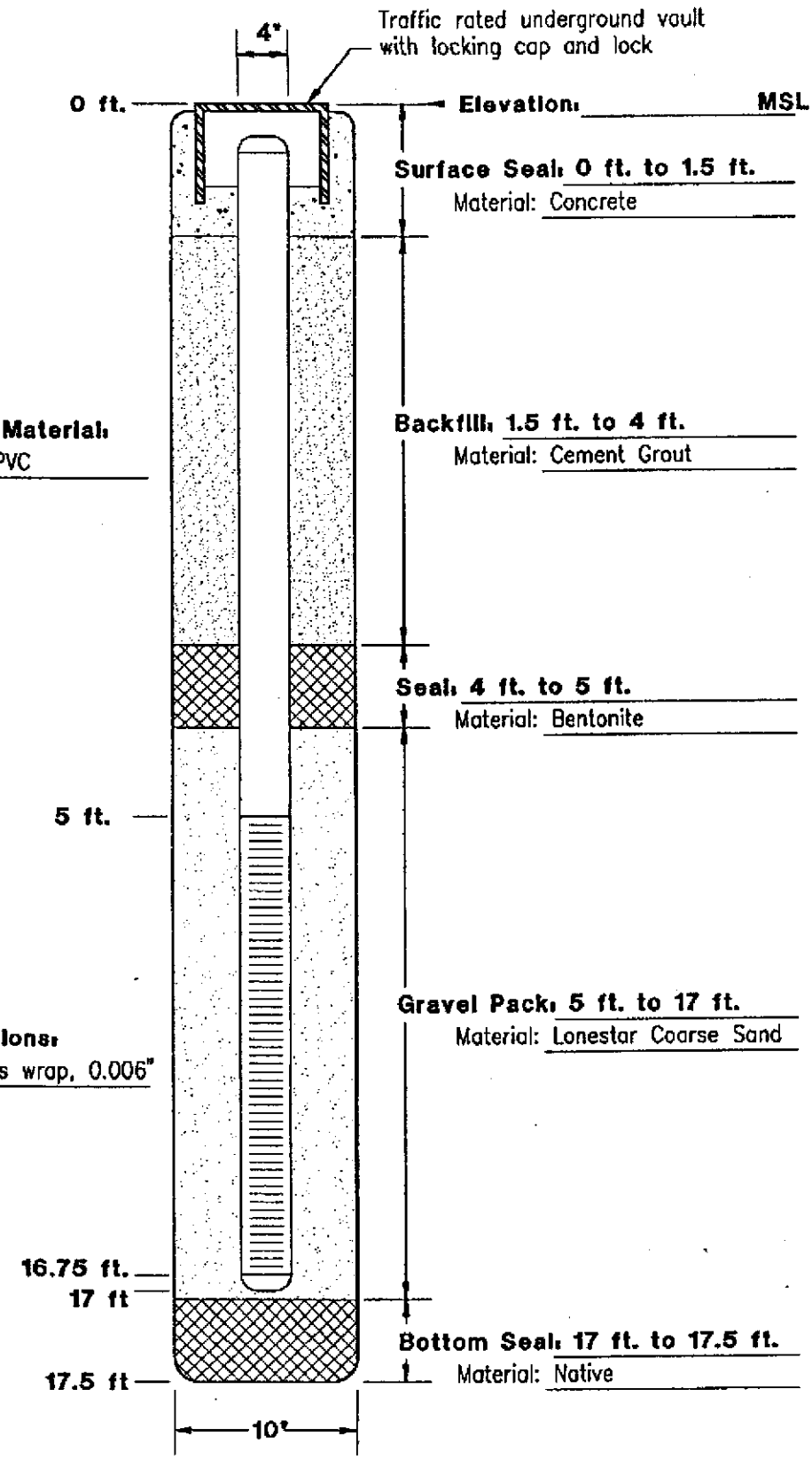
REVIEWED BY

GeoStrategies Inc.

GSI

JOB NUMBER 792608-10

PLATE VE



WELL CONSTRUCTION DETAIL
Vapor Extraction

GeoStrategies Inc.

GSI

JOB NUMBER 792608-10

REVIEWED BY

DATE 2/93

REVISED DATE

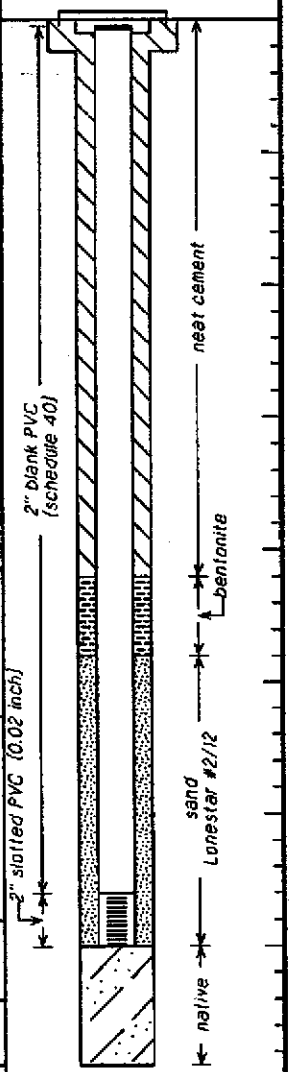
GeoStrategies, Inc.

Log of Boring AS-3

PROJECT: *ARCO Station 5387*	LOCATION: *20200 Hesperian Blvd, Hayward, Ca.*
GSI PROJECT NO.: *7926.12*	SURFACE ELEVATION: *38.92ft. MSL*
DATE STARTED: *12/6/93*	WL (ft. bgs): *17.5* DATE: *12/6/93* TIME: *09:45*
DATE FINISHED: *12/6/93*	WL (ft. bgs): *15* DATE: *12/6/93* TIME:
DRILLING METHOD: *6 in. Hollow Stem Auger*	TOTAL DEPTH: *39.5 Feet*
DRILLING COMPANY: *Bayland / Green Drilling*	GEOLOGIST: *TW*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SOIL CLASS	GEOLOGIC DESCRIPTION
				PV	PAVEMENT SECTION – 6" concrete
				ML	CLAYEY SILT (ML) – very dark brown (10YR 2/2), medium stiff, damp, 60% silt, 40% clay, low plasticity.
5	0	33	AS-3-6.5		Color change to dark yellowish brown (10YR 3/6), becoming hard at 5 ft
				CL	SILTY CLAY (CL) – greenish gray (5BG 5/1) with light mottling yellowish brown (10YR 5/6), stiff, moist, 80% clay, 20% silt.
10	4.3	14	AS-3-11.5		
15	NM	12			Color change to olive gray (5Y 4/2), increase sand to 25% at 15 ft.
				SM	SILTY SAND (SM) – brown (10YR 4/3), medium dense, saturated, 60% sand, 25% silt, 15% clay, low plasticity.
20	0	15	AS-3-21.6		
25	0	35	AS-3-26.5		Color change to dark gray (5Y 4/1) at 25 ft.
				GW	GRAVEL WITH SAND AND SILT (GW) – yellowish brown (10YR 5/6), dense, saturated, 60% gravel, 30% fine- to coarse-grained sand, 10% fines.
30	1.4	44	AS-3-31.5		
35	NM	35		CL	SANDY CLAY (CL) – yellowish brown (10YR 5/6), hard, moist, 60% clay, 40% fine-grained sand.
				SC	CLAYEY SAND (SC) – dark grayish brown (10YR 4/2), medium dense, saturated.
40	0	25	AS-3-39.5		
					BOTTOM OF BORING AT 39.5 FEET. 12/6/93
45					(* = converted to equivalent standard penetration blows/ft.)
					NM = Not Measured

WELL DIAGRAM



GeoStrategies, Inc.

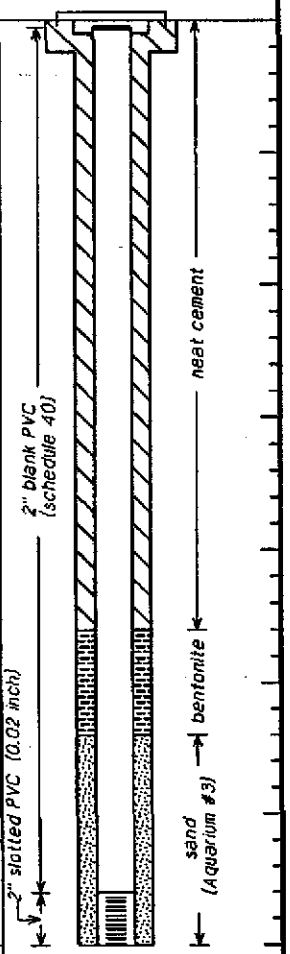
Log of Boring AS-4

PROJECT: *ARCO Station 5387*	LOCATION: *20200 Hesperian Blvd, Hayward, Ca.*
GSI PROJECT NO. : *7926.12*	SURFACE ELEVATION: *38.50ft. MSL*
DATE STARTED: *12/7/93*	WL (ft. bgs): *17.5* DATE: *12/7/94* TIME:
DATE FINISHED: *12/7/93*	WL (ft. bgs): *16* DATE: *12/7/94* TIME:
DRILLING METHOD: *6 in. Hollow Stem Auger*	TOTAL DEPTH: *35.5 Feet*
DRILLING COMPANY: *Bayland / Green Drilling*	GEOLOGIST: *TW*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
0						PV	PAVEMENT SECTION – 6" concrete
						ML	CLAYEY SILT (ML) – very dark brown (10YR 2/2), medium stiff, damp, 60% silt, 40% clay, low plasticity.
10	21	14	AS-4-11.5			CL	SILTY CLAY (CL) – dark greenish gray (5GY 4/1), stiff, moist, 80% clay ,20% silt, medium plasticity.
20						SM	SILTY SAND (SM) – brown (7.5YR 5/4), medium dense, saturated, 65% sand, 35% silt.
25							Increasing coarse-grained sand and fine gravel at 28 feet.
30						ML	SANDY SILT (ML) – brown (10YR 4/3), very stiff, very moist , 60% silt, 40% fine-grained sand.
35	0	25	AS-4-34.5				BOTTOM OF BORING AT 35 FEET. 12/7/93
40							
45							

(* = converted to equivalent standard penetration blows/ft.)

WELL DIAGRAM



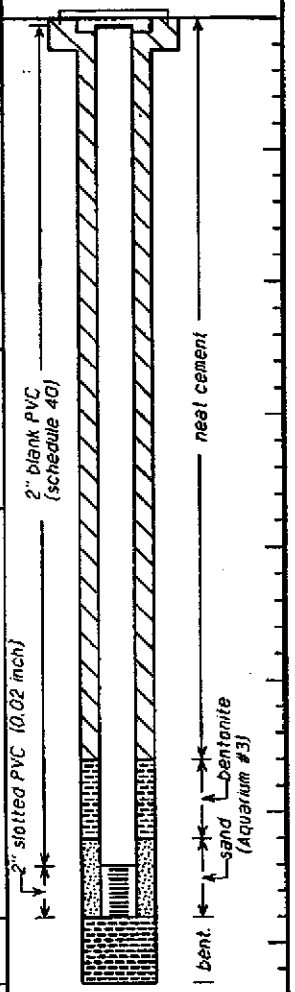
GeoStrategies, Inc.

Log of Boring AS-5

PROJECT: *ARCO Station 5387*	LOCATION: *20200 Hesperian Blvd, Hayward, CA.*
GSI PROJECT NO. : *7926.12*	SURFACE ELEVATION: *38.76ft. MSL*
DATE STARTED: *9/7/93*	WL (ft. bgs): *17* DATE: *12/7/93* TIME:
DATE FINISHED: *9/7/93*	WL (ft. bgs): *17* DATE: *12/7/93* TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *36.5 Feet*
DRILLING COMPANY: *Exploration Geoservices*	GEOLOGIST: *RDC*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						PV	PAVEMENT SECTION - 6" concrete
						CL	SILTY CLAY (CL) - very dark gray (10YR 3/1); medium stiff, damp, 55% clay, 45% silt, low plasticity.
5	NM	NM	AS-5-6.5			ML	CLAYEY SILT (ML) - very dark gray (10YR 3/1), medium stiff, damp, 60% silt, 40% clay, low plasticity. Color change to olive (5Y 4/3) at 7.0 feet.
10	NM	NM	AS-5-11.5				
15	NM	NM	AS-5-16.5			CL	SILTY CLAY (CL) - dark greenish gray (5BG 4/1), medium stiff, very moist, 65% clay, 35% silt, low plasticity. Saturated at 17.0 feet.
20	NM	NM	AS-5-21.5			SM	SILTY SAND (SM) - brown (7.5YR 5/4), medium dense, saturated, 60% fine to medium-grained sand, 40% silt.
25	NM	NM	AS-5-26.5				
30	NM	NM	AS-5-31.5				
35	NM	NM	AS-5-36.5			CL	SILTY CLAY (CL) - dark grayish brown (10YR 4/2), medium stiff, moist, 55% clay, 45% silt, low plasticity.
40							BOTTOM OF BORING AT 36.5 FEET. 12/7/93
45							

WELL DIAGRAM



(* = converted to equivalent standard penetration blows/ft.)

NM = Not Measured

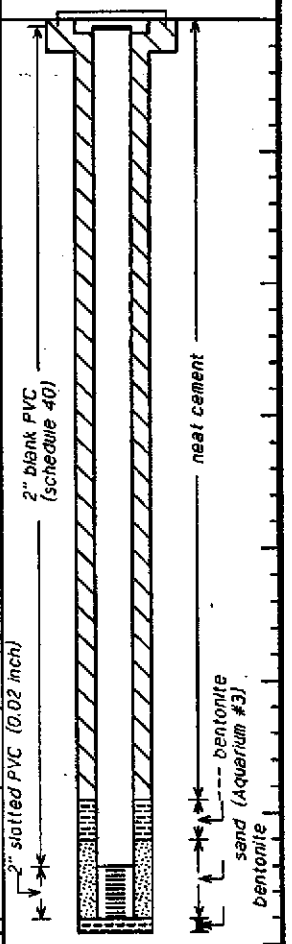
GeoStrategies, Inc.

Log of Boring AS-6

PROJECT: *ARCO Station 5387*	LOCATION: *20200 Hesperian Blvd, Hayward, CA.*
GSI PROJECT NO.: *7926.12*	SURFACE ELEVATION: *38.38ft. MSL*
DATE STARTED: *01/24/94*	WL (ft. bgs): *15* DATE: *01/24/94* TIME:
DATE FINISHED: *01/24/94*	WL (ft. bgs): *15* DATE: *01/24/94* TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *34.5 Feet*
DRILLING COMPANY: *Exploration Geoservices*	GEOLOGIST: *BS*

DEPTH feet	PID (ppm)	BLOWS/FT.*	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						Box	EXISTING WELL BOX.
						SP	SAND (SP) – gray (5Y 5/1), medium dense, very moist, 100% fine- to medium-grained sand; backfill.
5	0	NM	AS-6-4.5			ML	CLAYEY SILT WITH SAND (ML) – dark greenish gray (5G 4/1), stiff, moist, 70% fines, 30% fine-grained sand, low plasticity.
10	3	NM	AS-6-10			CL	SILTY CLAY (CL) – dark greenish gray (5BG 4/1), stiff, damp, 85% fines, 15% fine-grained sand, medium plasticity.
	25	NM	AS-6-14				
15						SM	SILTY SAND (SM) – dark greenish gray (5G 4/1), medium dense, saturated, 60% fine- to medium-grained sand, 40% fines.
20	0	NM	AS-6-20			ML	SANDY SILT (ML) – light olive brown (2.5Y 5/6), stiff, moist, 70% fines, 30% fine-grained sand, low plasticity.
						SM	
25	0	NM	AS-6-25				SILTY SAND (SM) – yellowish brown (10YR 5/6) mottled olive (5Y 5/6), dense, saturated, 70% fine-grained sand, 30% fines.
						SP	SAND (SP) – dark yellowish brown (10YR 4/6), dense, saturated, 95% fine-grained sand, 5% fines.
30						SM	SILTY SAND (SM) – light olive brown (2.5Y 5/4), dense, saturated, 70% fine-grained sand, 30% fines.
	0	NM	AS-6-34				Decreasing sand at 33 feet.
35						CL	SANDY CLAY (CL) – olive brown (2.5Y 4/4), very stiff, damp to moist, 70% fines, 30% sand, low plasticity.
40							BOTTOM OF BORING AT 34.5 FEET.
							12/6/93
45							(* = converted to equivalent standard penetration blows/ft.)
							NM = Not Measured

WELL DIAGRAM



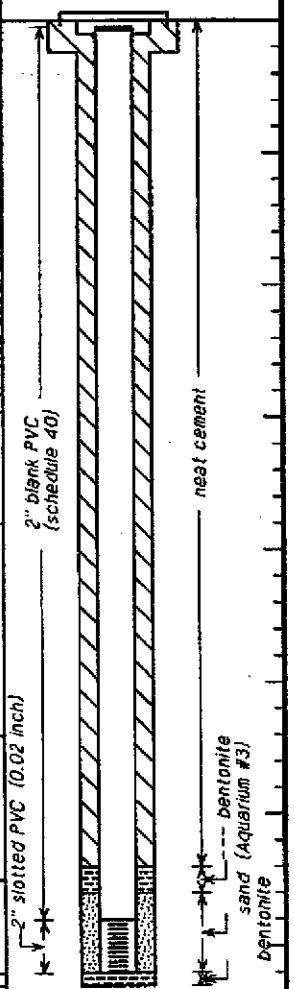
GeoStrategies, Inc.

Log of Boring AS-7

PROJECT: *ARCO Station 5387*	LOCATION: *20200 Hesperian Blvd, Hayward, CA.*
GSI PROJECT NO.: *7926.12*	SURFACE ELEVATION: *39.79ft. MSL*
DATE STARTED: *12/6/93*	WL (ft. bgs): *19* DATE: *12/6/93* TIME:
DATE FINISHED: *12/6/93*	WL (ft. bgs): *19* DATE: *12/6/93* TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *36.5 Feet*
DRILLING COMPANY: *Bayland / Green Drilling*	GEOLOGIST: *RDC*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						PV	PAVEMENT SECTION – 3" asphalt.
						CL	SILTY CLAY (CL) – very dark brown (10YR 2/2), very stiff, damp, 60% clay, 40% silt, low plasticity.
5	0	20	AS-7-6.5				
						ML	CLAYEY SILT (ML) – dark greenish gray (5GY 4/1), stiff, damp, 55% silt , 45% clay, low plasticity.
10	0	8	AS-7-11.5				
						ML	CLAYEY SILT WITH SAND (ML) – olive gray (5Y 4/2), medium stiff, moist, 50% silt, 30% clay, 20% fine-grained sand, low plasticity.
15	6.9	6	AS-7-16.5				
						SM	SILTY SAND (SM) – dark yellowish brown (10YR 4/6), medium dense, saturated, 60% fine-grained sand, 40% silt.
20	32	12	AS-7-21.5				
25	0	11	AS-7-26.5				
						GM	SILTY GRAVEL WITH SAND (GM) – dark yellowish brown (10YR 4/4), dense, saturated, 50% fine gravel, 20% medium- to coarse-grained sand, 15% fine-grained sand, 15% silt.
30	23	35	AS-7-31.5				
						SM	SILTY SAND (SM) – dark yellowish brown (10YR 4/3), dense, saturated, 40% fine-grained sand, 30% silt, 20% coarse-grained sand, 10% fine gravel.
35	0	8	AS-7-36.5			CL	SILTY CLAY WITH SAND (CL) – olive brown (2.5Y 4/4), stiff, moist, 50% clay, 30% silt, 20% fine-grained sand.
40							BOTTOM OF BORING AT 36.5 FEET. 12/6/93
45							(* = converted to equivalent standard penetration blows/ft.)

WELL DIAGRAM



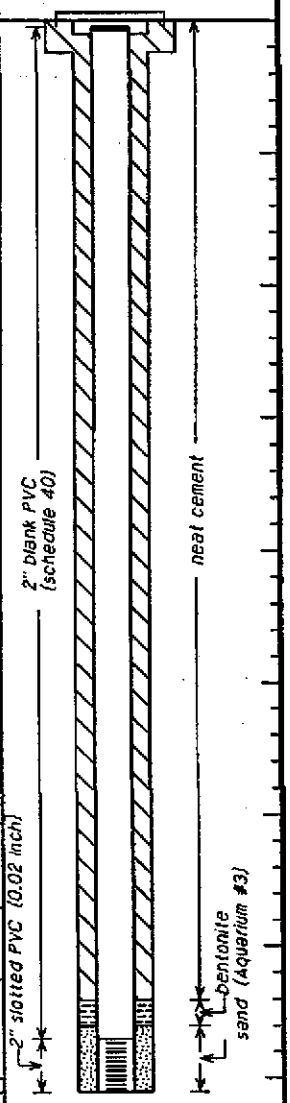
GeoStrategies, Inc.

Log of Boring AS-8

PROJECT: *ARCO Station 5387*	LOCATION: *20200 Hesperian Blvd, Hayward, CA.*
GSI PROJECT NO.: *7926.12*	SURFACE ELEVATION: *39.04ft. MSL*
DATE STARTED: *12/7/93*	WL (ft. bgs): *17* DATE: *12/7/93* TIME:
DATE FINISHED: *12/7/93*	WL (ft. bgs): *17* DATE: *12/7/93* TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *40.5 Feet*
DRILLING COMPANY: *Bayland / Green Drilling*	GEOLOGIST: *RDC*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SOIL CLASS	GEOLOGIC DESCRIPTION
				PV	PAVEMENT SECTION - 6" concrete
				ML	SANDY SILT (ML) - black (10YR 2/1), very stiff, damp, 55% silt, 30% fine sand, 15% clay, low plasticity.
5	0	21	AS-8-6.5		
				CL	SILTY CLAY (CL) - dark greenish gray (5GY 4/10), very stiff, moist, 50% clay, 40% silt, 10% fine-grained sand, low plasticity.
				ML	
10	3	11	AS-8-11.5		SANDY SILT (ML) - black (10YR 2/1), very stiff, moist, 50% silt, 30% fine-grained sand, 20% clay, low plasticity.
				ML	CLAYEY SILT (ML) - black (10YR 2/1), stiff, moist, 50% silt, 45% clay, 5% fine-grained sand; with root holes and roots.
15	0	8	AS-8-16.5		
20	3.7	8	AS-8-21.5	SM	SILTY SAND (SM) - yellowish brown (10YR 3/4) with olive mottling, loose, saturated, 85% fine- to medium-grained sand, 15% silt.
25	115	12	AS-8-26.5		Color change to olive (5Y 4/4), medium dense, increase silt to 30%.
				SW	SAND (SW) - yellowish brown (10YR 3/4), medium dense, saturated, 50% medium- to coarse-grained sand, 45% fine sand, 5% fines.
30	41	25	AS-8-31.5	SM	SILTY SAND (SM) - yellowish brown (10YR 3/4), medium dense, saturated, 85% fine- to medium-grained sand, 15% silt.
				SP	SAND (SP) - dark gray (5Y 3/1), medium dense, saturated, 95% medium- to coarse-grained sand, 5% fines.
35	0	24	AS-8-36.5	SW	SAND WITH GRAVEL (SW) - dark gray (5Y 3/1), medium dense, saturated, 70% fine- to coarse-gained sand, 25% fine gravel, 5% fines.
40	0	16	AS-8-40.5	ML	SANDY SILT (ML) - olive brown (2.5Y 4/4), very stiff, very moist, 50% silt, 45% sand, 5% clay.
45					BOTTOM OF BORING AT 40.5 12/7/93

WELL DIAGRAM



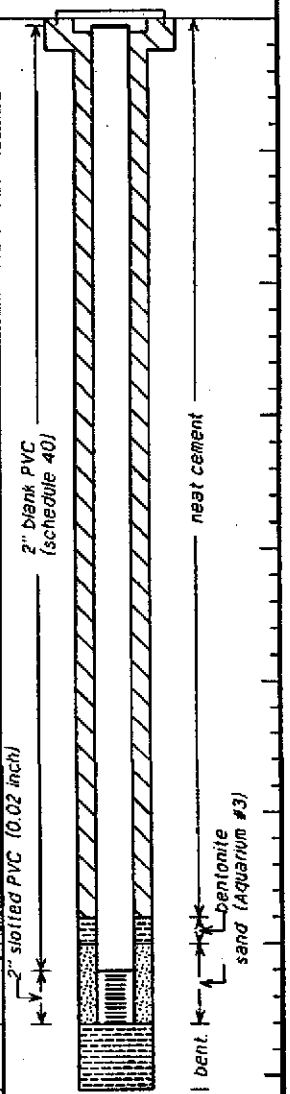
GeoStrategies, Inc.

Log of Boring AS-9

PROJECT: *ARCO Station 5387*	LOCATION: *20200 Hesperian Blvd, Hayward, CA.*
GSI PROJECT NO.: *7926.12*	SURFACE ELEVATION: *38.40ft. MSL*
DATE STARTED: *12/6/93*	WL (ft. bgs): *18* DATE: *12/6/93* TIME:
DATE FINISHED: *12/6/93*	WL (ft. bgs): *17.5* DATE: *12/6/93* TIME:
DRILLING METHOD: *8 in. Hollow Stem Auger*	TOTAL DEPTH: *40.5 Feet*
DRILLING COMPANY: *Bayland / Green Drilling*	GEOLOGIST: *RDC*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SOIL CLASS	GEOLOGIC DESCRIPTION
				PV	PAVEMENT SECTION - 7" baserock, 5" asphalt
				CL	SILTY CLAY (CL) - very dark gray (10YR 3/1), medium stiff, damp, 55% clay, 45% silt, medium plasticity.
				ML	CLAYEY SILT (ML) - very dark grayish brown (10YR 3/2), very stiff, damp, 50% silt, 40% clay, 10% fine-grained sand, low plasticity.
5	115	18	AS-9-6.5		Color change to olive (5Y 4/3) at 7.5 feet.
				CL	Color change to dark greenish gray (5BG 4/1) at 9 feet.
10	510	7	AS-9-11.5		SANDY CLAY (CL) - dark greenish gray (5BG 4/1), medium stiff, moist, 50% clay, 30% fine-grained sand, 20% silt, low plasticity.
15	426	8	AS-9-16.5		Becoming very moist at 15 feet.
				SM	SILTY SAND (SM) - brown (7.5 YR 5/4), medium dense, saturated, 80% sand, 20% silt.
20	6.2	10	AS-9-21.5		
25	22.9	22	AS-9-26.5		
				GM	SILTY GRAVEL WITH SAND (GM) - dark yellowish brown (10YR 4/4), saturatated, 45% fine gravel, 40% fine- to coarse-grained sand, 15% silt.
				SP	SAND (SP) - dark grayish brown (10YR 4/2), medium dense, saturated, 95% medium-grained sand, 5% silt.
30	19.7	17	AS-9-31.5		
35	14.2	7	AS-9-36.5	SM	SILTY SAND (SM) - dark grayish brown (10YR 4/2), loose, saturated, 80% sand, 20% silt.
	0	2	AS-9-38		
40	0	11	AS-9-40.5	CL	SANDY CLAY (CL) - dark grayish brown (10YR 4/2), stiff, moist, 60% clay, 30% fine-grained sand, 10% silt, low plasticity.
45					BOTTOM OF BORING AT 40.5 FEET 12/6/93

WELL DIAGRAM



GeoStrategies, Inc.

Log of Boring AV-4

PROJECT: *ARCO Station 5387*	LOCATION: *20200 Hesperian Blvd, Hayward, Ca.*
GSI PROJECT NO. : *7926.12*	SURFACE ELEVATION: *38.62ft. MSL*
DATE STARTED: *12/7/93*	WL (ft. bgs): *15* DATE: *12/7/93* TIME: *09:15*
DATE FINISHED: *12/7/93*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *6 in. Hollow Stem Auger*	TOTAL DEPTH: *15 Feet*
DRILLING COMPANY: *Bayland / Green Drilling*	GEOLOGIST: *TW*

DEPTH feet	PID (ppm)	BLOWS/FT. *	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						PV	PAVEMENT SECTION – 6" concrete
						CL	SILTY CLAY (CL) – very dark brown (10YR 2/1), medium stiff, damp, 70% clay, 30% silt, medium plasticity.
5	0	30	AV-4-6.5			ML	CLAYEY SILT (ML) – dark yellowish brown (10YR 4/6), very stiff, damp, 60% silt, 40% clay, medium plasticity.
10	0	11	AV-4-11.5			CL	SILTY CLAY (CL) – greenish gray (5GY 5/1), stiff, moist, 70% clay, 30% silt, trace fine-grained sand.
15	0	18	AV-4-15.5				▽ Color change to dark greenish gray (5GY 4/1), becoming, very moist, very stiff.
							BOTTOM OF BORING AT 15.5 feet. 12/7/93
20							(* = converted to equivalent standard penetration blows/ft.)
25							
30							
35							
40							
45							

WELL DIAGRAM