CONESTOGA-ROVERS & ASSOCIATES

5900 Hollis Street, Suite A
Emeryville, California 94608
Telephone: (510) 420-0700 Fax: (510) 420-9170
www.CRAworld.com

TRANSMITTAL

DATE: October 24, 2011

REFERENCE NO.: 240523

PROJECT NAME: 4212 First Street, Pleasanton

TO: Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

RECEIVED
1:21 pm, Oct 27, 2011
Alameda County
Environmental Health

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QUANTITY	DESCRIPTION
1	Corrective Action Plan

- ☐ As Requested
- ☐ For Your Use
- ☒ For Review and Comment
- ☐

COMMENTS:
If you have any questions regarding the contents of this document, please call Peter Schaefer at (510) 420-3319.

Copy to: Denis Brown, Shell Oil Products US (electronic copy)
Douglas E. & Mary M. Safreno, 1627 Vineyard Avenue, Pleasanton, CA 94566-6389
Danielle Stefani, Livermore-Pleasanton Fire Department, 3560 Nevada Street, Pleasanton, CA 94566-6267
Cheryl Dizon, Zone 7 Water Agency, 100 North Canyons Parkway, Livermore, CA 94551
Clint Mercer, SC Fuels, 1800 West Katella Avenue, Orange, CA 92867

Completed by: Peter Schaefer Signed: Peter Schaefer

Filing: **Correspondence File**

Denis L. Brown
Shell Oil Products US
HSE - Environmental Services
20945 S. Wilmington Ave.
Carson, CA 90810-1039
Tel (707) 865 0251
Fax (707) 865 2542
Email denis.l.brown@shell.com

Mr. Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Shell-branded Service Station
4212 First Street
Pleasanton, California
SAP Code 135782
Incident No. 98995840
ACEH Case No. RO0000360

Dear Mr. Wickham:

The attached document is provided for your review and comment. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

If you have any questions or concerns, please call me at (707) 865-0251.

Sincerely,

Denis L. Brown
Senior Program Manager

CORRECTIVE ACTION PLAN

SHELL-BRANDED SERVICE STATION
4212 FIRST STREET
PLEASANTON, CALIFORNIA

SAP CODE	135782
INCIDENT NO.	98995840
AGENCY NO.	RO0000360

Prepared by:
Conestoga-Rovers & Associates

5900 Hollis Street, Suite A
Emeryville, California
U.S.A. 94608

Office: (510) 420-0700
Fax: (510) 420-9170

web: http://www.CRAworld.com

OCTOBER 24, 2011
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EXECUTIVE SUMMARY

Excavation and mobile GWE have been implemented historically at the subject site. DPE and air sparge pilot testing demonstrated the infeasibility of these remedial methods for addressing residual impacts. The very low permeability soil types in the upper saturated zone inhibit effective mass removal by extraction, and effective delivery and dispersion of media by injection. Soil impacts are limited to depths that are not practical or cost-effective to excavate, and excavation is inhibited by the existing fuel equipment and infrastructure. Collectively, this information demonstrates that on-site residual hydrocarbon mass can not be remediated by any practical means. In addition, there is no practical way to remediate off-site groundwater impacts because they are limited in magnitude and located under First Street and Vineyard.

Previous investigations hypothesized a risk of groundwater impacts reaching Arroyo Del Valle Creek; however, there is no data that verifies this assertion. Down-gradient well data show that groundwater impacts have been adequately delineated. It is not likely that COCs originating from the site will impact the Arroyo Del Valle Creek or down-gradient water producing wells. Based on this reasoning, the preferred remediation option for the site is MNA.

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) prepared this *Corrective Action Plan* (CAP) on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell). Alameda County Environmental Health's August 18, 2011 letter requested the preparation of this CAP. This CAP complies with California Code of Regulations, Title 23, Division 3, Chapter 16, Underground Storage Tank Regulations.

The subject site is an active Shell-branded Service Station located on the southeastern corner of the First Street and Vineyard Avenue intersection in a mixed residential and commercial area of Pleasanton, California (Figure 1). The site layout includes three current fuel underground storage tanks (USTs), a former fuel UST complex, two fuel dispenser islands, a former waste oil UST, and a station building (Figure 2).

A summary of previous work performed at the site and additional background information is contained in Appendix A.

2.0 SITE BACKGROUND

2.1 HISTORICAL SITE USE

A review of aerial photographs from 1949 to 2005 indicates that the site was in residential use from 1949 to 1966 and that a service station occupied the site from at least 1968 to the present. The surrounding area is of mixed commercial and residential use.

2.2 PRODUCT RELEASES AND SOURCE AREA

Site assessment activities began in 1985, when hydrocarbons were detected in five borings drilled adjacent to the waste oil and fuel USTs prior to UST replacement. Release source and volume are unknown. The USTs were replaced in 1986, dispensers and piping were replaced in 1995, a waste oil UST remote fill pipe was removed in 1998, and the gasoline USTs were upgraded in 2005. Approximately 40 cubic yards of soil were over-excavated for off-site disposal during the 1995 dispenser and piping replacement. One 550-gallon waste oil tank was removed in 2006.

In August 1988, approximately 40 gallons of gasoline were spilled in the area of the pump islands. Impacted soil was removed to a depth of 1 to 2 feet below grade (fbg).

2.3 SITE GEOLOGY AND HYDROGEOLOGY

2.3.1 REGIONAL GEOLOGY AND HYDROGEOLOGY

According to the *Evaluation of Ground Water Resources: Livermore and Sunol Valleys* (California Department of Water Resources [DWR] Bulletin No. 118-2, June 1974), the site is located in the Bernal sub-basin of the Livermore Valley groundwater basin. Streams draining Livermore Valley merge in the Bernal sub-basin and then leave the valley as Arroyo de la Laguna.

Sediments below the site are inter-layered clays, silts, and sands with occasional gravel lenses to the total depth explored of approximately 108 fbg. DWR Bulletin No. 118-2 indicates that surface soils extend to 110 fbg in the area of the site and that water-bearing materials below these shallow sediments are comprised of the valley-fill materials. These materials are present as a sequence of sandy gravel and sandy clayey gravel aquifers up to 100 feet in thickness. The aquifers are separated by silty clay confining beds up to 30 feet in thickness.

2.3.2 SOIL TYPES

Available cross-sections and exploratory boring logs are included in Appendix B. The locations of the wells and the soil borings are shown on Figures 2 and 3.

Shallow soils consist of interbedded layers of silts and clays from the surface to approximately 15 fbg underlain by inter-layer sands, silts, and clays to approximately 30 fbg. Shallow groundwater occurs just below this sandy layer within a relatively low permeability zone at a depth of approximately 31 fbg. Deeper soils consist of silts and clays with sand and gravel inter-beds to approximately 95 fbg underlain by sands to the total depth explored of 108 fbg.

2.3.3 GROUNDWATER DEPTH AND FLOW DIRECTION

The depth to groundwater at the site typically ranges between 31 to 34 fbg. A groundwater contour map for the second quarter 2011 groundwater monitoring event is included as Figure 4. As seen on Figure 4, the groundwater flow direction for the site is predominantly toward the northwest, which is consistent with historical groundwater flow direction.

2.3.4 GROUNDWATER QUALITY ASSESSMENT

The California State Water Resources Control Board's Geotracker website file for the environmental case at this site states that the groundwater at this site is considered a "drinking water supply"; however, neighboring properties are served by the local municipal water purveyor for potable water.

2.4 PREFERENTIAL PATHWAY ANALYSIS

Based on the depth to water which typically ranges between 31 to 34 fbg, on- and off-site utilities are not likely to be preferential pathways for groundwater flow.

2.5 SENSITIVE RECEPTORS

2.5.1 WELL SURVEY

In May 2004, Toxichem Management Systems, Inc. (Toxichem) conducted a well survey which identified a municipal well (3S/1E-21B1) and a well of unknown use (3S/1E-21B) approximately 900 feet northeast of the site and another municipal well (3S/1E-16P1) approximately 1,200 feet north of the site. The locations of the wells could not be field verified.

In September 2005, Delta Consultants (Delta) conducted a well survey which located an old water tower in the area of the wells identified in Toxichem's 2004 well survey and identified a water supply well (3S/1E-21C1) and an irrigation well (3S/1E-21C4) approximately 1,000 feet northwest of the site and another irrigation well in Kottinger Park, approximately 800 feet east of the site.

Given the distance from the site to the municipal wells, it is unlikely that hydrocarbons originating from the site will reach these wells.

2.5.2 SURFACE WATER

Arroyo del Valle, a creek located approximately 1,130 feet north of the site, is the closest potential surface water receptor to the site. Surface water in Arroyo del Valle flows to

the west at a depth of approximately 20 feet below the surrounding grade. Based on the typical depth to water which ranges between 31 to 34 fbg and the distance to Arroyo del Valle, it is unlikely that the creek will be impacted.

2.5.3 VAPOR INTRUSION

Based on historical soil and groundwater data, there is no apparent vapor intrusion risk to site occupants. Soil vapor data has not been collected at this site to assess this exposure pathway. As shown in Figure 3, residual concentrations of constituents of concern (COCs) in vadose zone soils are generally limited to the area of the current fuel system and are minimal above 14 fbg. There appears to be little potential for off-site soil vapor intrusion from COCs in residual soils. Groundwater typically ranges from 31 to 34 fbg, and all groundwater concentrations are below San Francisco Bay Regional Water Quality Control Board (RWQCB) groundwater environmental screening levels[1] (ESLs) for evaluation of vapor intrusion concerns. In addition, since the site use remains an active gas station, an assessment of on-site vapor intrusion is not considered necessary. If the site use changes in the future, an assessment may be necessary depending on the proposed development plan.

3.0 REMEDIATION

The site history included as Appendix A provides additional details for the events described below.

3.1 1995 EXCAVATION

In September 1995, Paradiso Mechanical removed the product lines and replaced the dispensers and piping. Approximately 40 cubic yards of soil were over-excavated for off-site disposal at the direction of the Pleasanton Fire Department.

3.2 2007 MOBILE GROUNDWATER EXTRACTION (GWE)

From June through August 2007, Delta extracted approximately 4,226 gallons of groundwater from MW-4.

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1 *Screening for Environmental Concerns at Site With Contaminated Soil and Groundwater,* California Regional Water Quality Control Board, Interim Final – November 2007 [Revised May 2008]

3.3 2007 DUAL-PHASE EXTRACTION (DPE) PILOT TEST

In January 2009, Delta conducted a 5-day DPE pilot test on MW-4 and 4-hour DPE pilot tests on MW-1 and MW-2. Delta estimated that 286.3 pounds of hydrocarbons were removed from the vadose zone. An estimated 0.23 pounds of dissolved hydrocarbons were removed along with 2,748 gallons of groundwater.

3.4 2010 AIR SPARGING (AS) PILOT TEST

In January 2010, Delta conducted an AS pilot test using well AS-10. Delta calculated an AS radius of influence of 31 feet; however, CRA's subsequent analysis of the pilot test data determined that the test was flawed and therefore inconclusive.

4.0 DISTRIBUTION OF COCS

4.1 HYDROCARBON DISTRIBUTION IN SOIL

As stated above, COCs in residual soils are generally limited to the area of the fuel system, and there are minimal soil impacts above 14 fbg (Figure 3). COCs in soils have been adequately delineated to below RWQCB ESLs and are primarily present in the area of the current and former dispensers and fuel USTs. Vadose zone soil impacts (less than 30 fbg) exceeding ESLs are defined horizontally by soil samples collected from MW-1, MW-2, SB-2, MW-3, WO-1, SB-1, and SB-7. Deeper soil impacts (greater than 30 fbg) are likely related to groundwater impacts and generally have been found within the area of the historical groundwater plume.

Historical soil analytical data are presented in Tables 1 and 2, soil sample locations are shown in Figure 2, and soil analytical results are presented in Figure 3.

4.2 HYDROCARBON DISTRIBUTION IN GROUNDWATER

Currently, there are four shallow monitoring wells (with screened intervals from 20 to 35, 26 to 46, 37 to 47, and 37.5 to 57.5 fbg) and one deeper groundwater monitoring well (screened from 100 to 108 fbg) located on-site. Historical groundwater data is presented

in Tables 3 and 4. During the most recent groundwater monitoring event on May 31, 2011 (Figure 4), maximum concentrations of 26 micrograms per liter (µg/L) benzene, 3,000 µg/l methyl tertiary-butyl ether (MTBE), and 1,000 µg/l tertiary-butyl alcohol (TBA) were detected in shallow monitoring well MW-1. All COC concentrations in deeper well MW-1B are below ESLs. The hydrocarbon plume in groundwater is adequately delineated down gradient to the south and south east by wells at the 76 Station at 4191 First Street, Pleasanton.

As shown in Figures 5 through 7, trends of benzene, MTBE, and/or TBA concentrations in wells MW-1, MW-2, and MW-4 are all declining. The following table shows that all benzene, MTBE, and TBA concentrations are predicted to reach ESLs within approximately 50 years (at most based on MTBE in MW-1).

TABLE A

Well ID	*COC*	*May 31, 2011 Concentration (µg/L)*	*RWQCB Drinking Water ESL (µg/L)*	*Time to Reach Drinking Water ESL*
MW-1	Benzene	**26**	1.0	July 2012
	MTBE	**3,000**	5.0	March 2064
	TBA	**1,000**	12	May 2032
MW-2	MTBE	**1,200**	5.0	January 2020
MW-4	MTBE	**5,600**	5.0	August 2027
	TBA	**1,200**	12	July 2025

California State Water Resource Control Board (SWRCB) Resolution 92-49 states that the requisite level of water quality does not need to be met at the time of closure if it can be demonstrated that cleanup levels will be attained in a reasonable time period. SWRCB Water Quality Order 98-04 states that "decades to hundreds of years may be a reasonable time period."

5.0 FEASIBLITY STUDY / CAP

5.1 PROPOSED SITE CLEANUP GOALS

Cleanup goals are typically based on one or more of the following criteria:

- California Department of Health Services (DHS) primary or secondary maximum contaminant levels (MCLs) for drinking water,

- ESLs established by the RWQCB,
- Risk-based clean-up levels established by risk assessment or risk-based corrective action (RBCA) analysis,
- Current closure guidelines from the regulatory agencies, such as the SWRCB criteria for low-risk groundwater cases,
- Application of Best Available Technology based on remediation system operation data that demonstrate asymptotic levels have been achieved for chemical concentrations in soil and/or groundwater,
- Background concentrations of individual pollutants, or
- Technologic and economic feasibility.

The Arroyo del Valle Creek and down-gradient water producing wells are the primary receptors. As stated above, it does not appear that COCs originating the site have or will reach the Arroyo del Valle Creek or the down-gradient wells. Additionally, this station is part of a service station sale with contract provisions including specific restrictions on site development to commercial uses excluding child day care, elder care, or other similar sensitive uses. Therefore, we propose commercial ESLs as the cleanup goals for the site.

5.2 REMEDIAL ALTERNATIVES DISCUSSION AND APPROACH

Excavation and mobile GWE have been implemented at this site. DPE and air sparge were proved to be infeasible. The very low permeability soil types in the upper saturated zone inhibit effective mass removal by extraction, and effective delivery and dispersion of media by injection. Due to the limited extent and depth of residual soil impacts (Figure 3) and the existing infrastructure, excavation is not considered practical or cost-effective, if even feasible. Therefore, CRA's opinion is that the remaining source mass can not be actively remediated by any practical or cost-effective means. In addition, there is no practical way to remediate off-site groundwater impacts because they are limited in magnitude and located under First Street and Vineyard Avenue.

As stated above, it does not appear that COCs originating from the site will reach the Arroyo del Valle Creek or down-gradient water producing wells. Thus, COC concentrations are currently at acceptable levels.

Given the site conditions and remedial objective, excavation is considered the only feasible source removal method, and excavation is not practical while the service station is in operation. Also, given the depth and limited extent of residual soil impacts, excavation would not likely remove a significant amount of residual source material.

Migration of COCs to Arroyo Del Valle Creek or down-gradient water producing wells is unlikely. Therefore, CRA believes monitored natural attenuation (MNA) is the only remaining feasible technology for mitigating residual hydrocarbon mass, and it is evaluated below.

5.2.1 MNA

Description: MNA consists of allowing hydrocarbons to biodegrade naturally under the terms of a long-term groundwater monitoring plan. Biodegradation, adsorption, chemical reactions, and volatilization can all naturally degrade hydrocarbons found in impacted groundwater. MNA is performed by monitoring the natural degradation process that can take place in the subsurface. The primary indicator of the success of natural attenuation is a decreasing concentration trend. Secondary indicators such as dissolved oxygen (DO) concentrations, oxidation-reduction potential, alkalinity, and nitrate, sulfate, and ferrous iron concentrations can also be used to evaluate the presence of and the potential for natural attenuation.

Feasibility and Cost-Effectiveness: As previously discussed, it does not appear that COCs originating from the site will reach the Arroyo del Valle Creek or down-gradient water producing wells. Vapor intrusion does not appear to be an issue for the on-going site use as an active gas station. No receptors are at risk from residual impacts. COC trend analysis indicates all COCs are degrading and projected to reach ESLs within 50 years or sooner, which is a reasonable time period relative to the risk to receptors. Based on the site conditions, MNA is technically feasible and already occurring.

MNA is typically a low-cost alternative if cleanup levels can be met in a reasonable timeframe, which is the case for this site. Groundwater monitoring at this site will cost approximately $12,200 in total, assuming two more years of data is necessary to validate the projections. A closure request and well destructions are estimated to cost $37,500. Therefore, the total life-cycle cost for MNA is $49,700.

As previously discussed, other active remedial methods are considered marginally feasible or infeasible. Implementation of any of those methods would cost more than $100,000, extend the life of the project, and increase the life cycle cost of the project. It is apparent that the active remedial methods considered are not warranted by current site conditions, feasibility, and their relatively high costs. Thus, MNA would be the most cost-effective approach.

6.0 CONCLUSIONS

The Arroyo del Valle Creek and down-gradient water producing wells are the primary potential receptors. Groundwater impacts are adequately delineated, and, as stated above, it does not appear that COCs originating from the site will reach the Arroyo del Valle Creek or down-gradient water producing wells. The current site use remains an active gas station. Additionally, this station is part of a service station sale with contract provisions including specific restrictions on site development to commercial uses excluding child day care, elder care, or other similar sensitive uses. CRA proposes commercial ESLs as the cleanup goals for the site.

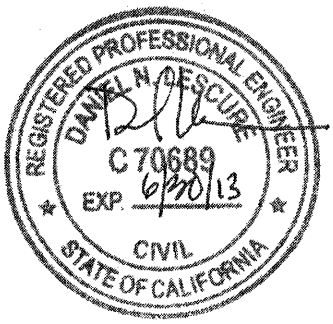
Residual source mass can not be removed efficiently or cost effectively. Additionally, the apparent risk to receptors does not warrant active remediation.

7.0 RECOMMENDATIONS

Based on the information presented, CRA recommends implementing MNA. CRA also recommends reducing the sampling frequency to semiannual sampling during the second and fourth quarters. CRA also recommends collection of bioparameters to further assess MNA. Unless directed otherwise, Blaine Tech Services, Inc. will gauge and sample wells according to the modified monitoring program for this site, and CRA will issue groundwater monitoring reports semiannually following the sampling events.

All of Which is Respectfully Submitted,
CONESTOGA-ROVERS & ASSOCIATES

Peter Schaefer, CEG, CHG



Dan Lescure, PE

FIGURES

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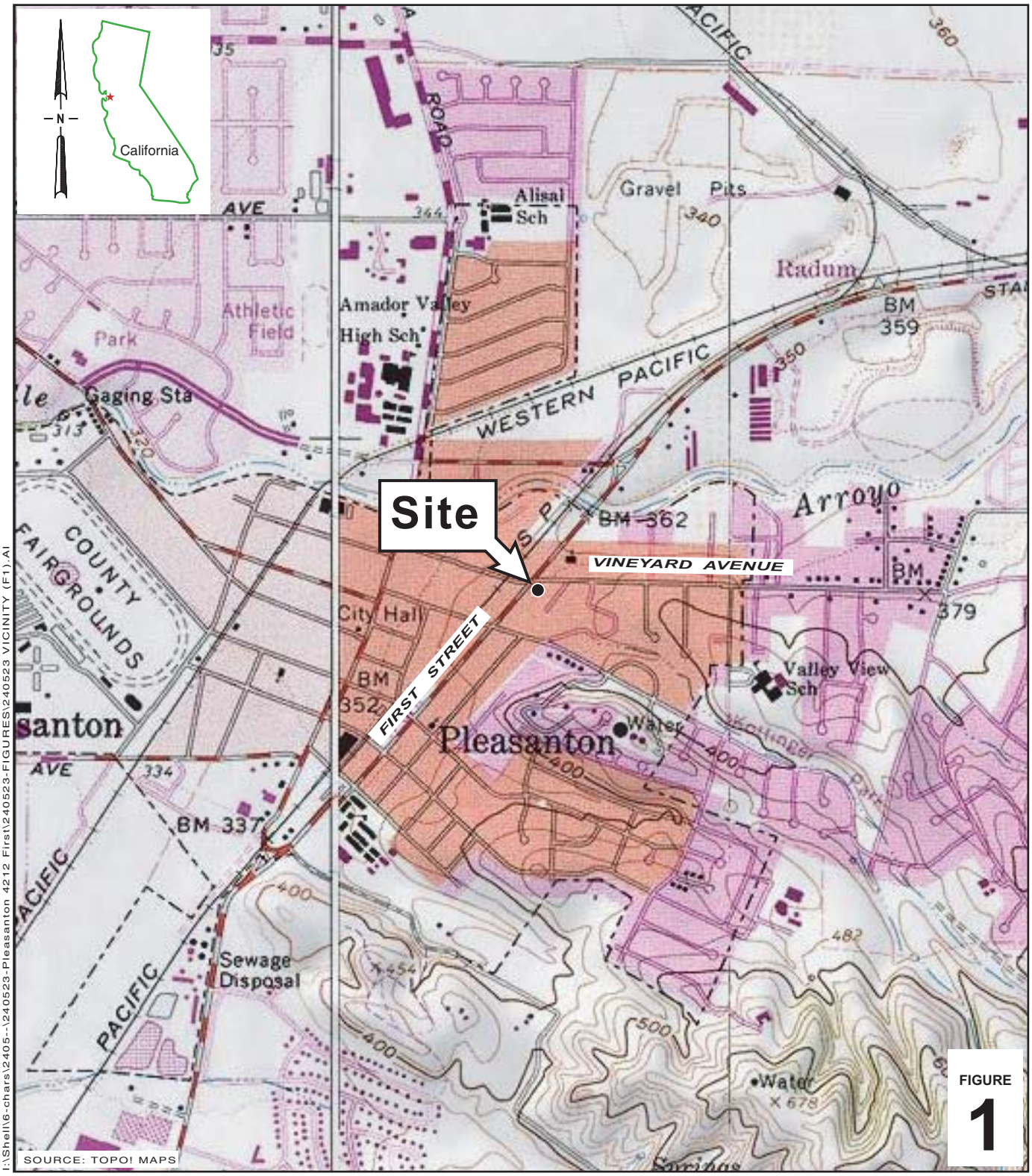

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0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

FIGURE 1

Shell-branded Service Station

4212 First Street

Pleasanton, California

CONESTOGA-ROVERS & ASSOCIATES

Vicinity Map

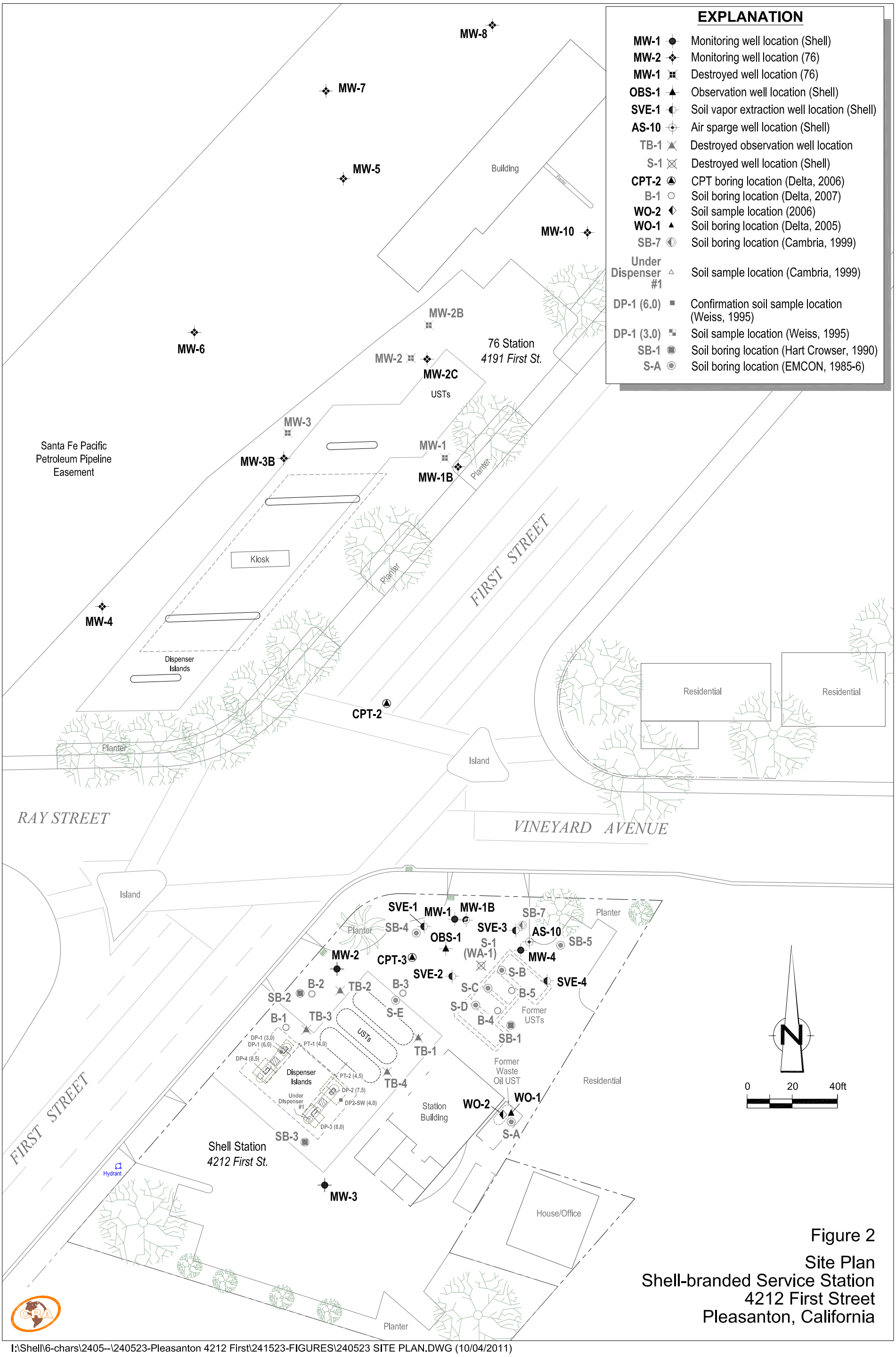


Figure 2

Site Plan
Shell-branded Service Station
4212 First Street
Pleasanton, California

I:\Shell\6-chars\2405--\240523-Pleasanton 4212 First\241523-FIGURES\240523 SITE PLAN.DWG (10/04/2011)

EXPLANATION

- MW-1 — Monitoring well location (Shell)
- OBS-1 — Observation well location (Shell)
- SVE-1 — Soil vapor extraction well location (Shell)
- AS-10 — Air sparge well location (Shell)
- TB-1 — Destroyed observation well location
- S-1 — Destroyed well location (Shell)
- CPT-3 — CPT boring location (Delta, 2006)
- B-1 — Soil boring location (Delta, 2007)
- WO-2 — Soil sample location (2006)
- WO-1 — Soil boring location (Delta, 2005)
- SB-7 — Soil boring location (Cambria, 1999)
- Under Dispenser #1 — Soil sample location (Cambria, 1999)
- DP-1 (6.0) — Confirmation soil sample location (Weiss, 1995)
- DP-1 (3.0) — Soil sample location (Weiss, 1995)
- SB-1 — Soil boring location (Hart Crowser, 1990)
- S-A — Soil boring location (EMCON, 1985-6)

ID	Depth	TPHg	Benzene	MTBE
DP-1	3	1.3	<0.0050	NA

Notes:
Soil sample ID, date, depth in feet below grade, and concentrations in milligrams per kilogram
TPHg = Total petroleum hydrocarbons as gasoline
MTBE = Methyl tertiary-butyl ether
NA = Not analyzed
<X = Not detected at reporting limit X
- Values in **bold** are above the Environmental Screening Level (ESL)

ID	Depth	TPHg	Benzene	MTBE
MW-2-6.3	6.3	<1.0	<0.0050	<0.050
MW-2-16.5	16.5	<1.0	<0.0050	<0.050
MW-2-21.5	21.5	<1.0	<0.0050	<0.050
MW-2-26	26	<1.0	<0.0050	<0.050
MW-2-30.5	30.5	<1.0	<0.0050	<0.050
MW-2-35.0	35	<1.0	<0.0050	<0.050

ID	Depth	TPHg	Benzene	MTBE
B-2@5	5	<0.10	<0.0050	<0.0050
B-2@9.5	9.5	<0.10	<0.0050	<0.0050
B-2@14.5	14.5	<0.10	<0.0050	<0.0050
B-2@19.5	19.5	<0.10	<0.0050	<0.0050
B-2@24.5	24.5	<0.10	<0.0050	**0.11**
B-2@29.5	29.5	0.25	<0.0050	**0.22**
B-2@34.5	34.5	0.32	<0.0050	**0.45**

ID	Depth	TPHg	Benzene	MTBE
SVE-1@30'	30	<0.50	<0.0050	<0.0050

ID	Depth	TPHg	Benzene	MTBE
SB4-15	15	<1.0	<0.0050	NA
SB4-35	35	<1.0	0.023	NA
SB4-50	50	<1.0	0.030	NA

ID	Depth	TPHg	Benzene	MTBE
B-3@5	5	<0.10	<0.0050	<0.0050
B-3@9.5	9.5	<0.10	<0.0050	<0.0050
B-3@14.5	14.5	<0.10	<0.0050	**0.080**
B-3@19.5	19.5	0.11	<0.0050	**0.14**
B-3@24.5	24.5	0.45	<0.0050	**0.083**
B-3@29	29	<0.10	<0.0050	0.016
B-3@34.5	34.5	**710**	**0.096**	<0.025

ID	Depth	TPHg	Benzene	MTBE
SB-6-15.5	15.5	<1.0	<0.0050	<0.025
SB-6-19.5	19.5	<1.0	<0.0050	<0.025
SB-6-25.0	25	<1.0	<0.0050	<0.025
SB-6-30.0	30	<1.0	<0.0050	<0.025
SB-6-35.0	35	<1.0	<0.0050	<0.025
SB-6-40.0	40	<1.0	<0.0050	<0.025
SB-6-45.0	45	<1.0	**0.10**	<0.025

ID	Depth	TPHg	Benzene	MTBE
MW-1B@65	65	<2.5	<0.025	<0.025
MW-1B@69.5	69.5	<2.5	<0.025	<0.025
MW-1B@95	95	<2.5	<0.025	<0.025

ID	Depth	TPHg	Benzene	MTBE
SB-7-15.0	15	<1.0	<0.0050	<0.025
SB-7-19.5	19.5	<1.0	<0.0050	<0.025
SB-7-24.5	24.5	<1.0	<0.0050	<0.025
SB-7-29.3	29.3	<1.0	<0.0050	<0.025
SB-7-34.3	34.3	<1.0	<0.0050	<0.025
SB-7-40.0	40	**83**	<0.0050	<0.025
SB-7-44.5	44.5	<1.0	<0.0050	<0.025
SB-7-59.5	59.5	<1.0	<0.0050	<0.050
SB-7-64.5	64.5	<1.0	<0.0050	<0.050

ID	Depth	TPHg	Benzene	MTBE
SB5-35	35	**820**	**65**	NA
SB5-40	40	<1.0	<0.0050	NA
SB5-50	50	<1.0	<0.0050	NA

ID	Depth	TPHg	Benzene	MTBE
OBS-1@30'	30	<0.50	<0.0050	<0.0050
OBS-1@35'	35	**350**	<1.0	<1.0
OBS-1@40'	40	<0.50	<0.0050	0.0089

ID	Depth	TPHg	Benzene	MTBE
AS-10@30'	30	<0.50	<0.0050	<0.0050
AS-10@35'	35	**140**	<0.50	<0.50
AS-10@40'	40	<50	<0.50	<0.50
AS-10@45'	45	0.90	<0.0050	**0.62**
AS-10@50'	50	1.4	<0.0050	**0.36**

ID	Depth	TPHg	Benzene	MTBE
MW-4@35'	35	51	<0.025	**0.17**
MW-4@36.5'	36.5	**380**	<0.025	**0.092**
MW-4@39.5'	39.5	6.7	<0.025	**0.038**
MW-4@44.5'	44.5	<2.5	<0.025	**0.59**
MW-4@50'	50	<2.5	<0.025	**0.56**

ID	Depth	TPHg	Benzene	MTBE
S-B	3.5-5	2.0	<0.10	NA
S-B	7-8.5	**460**	<2.0	NA
S-B	10.5-12	**610**	<2.0	NA
S-B	14-15.5	**1,300**	<2.5	NA
S-B	19-20	<2.0	<0.10	NA

ID	Depth	TPHg	Benzene	MTBE
B-5@5	5	<0.10	<0.0050	<0.0050
B-5@10.5	10.5	<0.10	<0.0050	<0.0050
B-5@15.5	15.5	<0.10	<0.0050	<0.0050
B-5@20.5	20.5	<0.10	<0.0050	0.0054
B-5@25.5	25.5	<0.10	<0.0050	<0.0050
B-5@30	30	<0.10	<0.0050	**0.065**
B-5@35	35	<0.50	<0.025	**0.30**

ID	Depth	TPHg	Benzene	MTBE
WA-1	30	**380**	**2.2**	NA
WA-1	35	**290**	**1.8**	NA
WA-1	40	<1.0	<0.050	NA
WA-1	50	<1.0	<0.050	NA

ID	Depth	TPHg	Benzene	MTBE
SB-2	15	<1.0	<0.050	NA
SB-2	30	7.2	<0.050	NA

ID	Depth	TPHg	Benzene	MTBE
S-D	10.5-12	<2.0	<0.10	NA

ID	Depth	TPHg	Benzene	MTBE
S-E	5.5	ND	ND	NA
S-E	10.5	ND	ND	NA
S-E	15.5	ND	ND	NA

ID	Depth	TPHg	Benzene	MTBE
S-C	10.5-12	<2.0	<0.10	NA

ID	Depth	TPHg	Benzene	MTBE
PT-1	4	2.5	0.0080	NA

ID	Depth	TPHg	Benzene	MTBE
PT-2	4.5	<1.0	<0.0050	NA

ID	Depth	TPHg	Benzene	MTBE
B-1@5	5	<0.10	<0.0050	<0.0050
B-1@9.5	9.5	5.4	<0.0050	<0.0050
B-1@14.5	14.5	0.13	<0.0050	**0.046**
B-1@19.5	19.5	0.57	<0.010	**0.60**
B-1@24.5	24.5	0.92	<0.050	**0.78**
B-1@29.5	29.5	<0.10	<0.0050	**0.059**
B-1@34.5	34.5	<0.10	<0.0050	**0.12**

ID	Depth	TPHg	Benzene	MTBE
B-4@5	5	<0.10	<0.0050	<0.0050
B-4@9.5	9.5	<0.10	<0.0050	<0.0050
B-4@14.5	14.5	<0.10	<0.0050	<0.0050
B-4@20	20	<0.10	<0.0050	**0.040**
B-4@24.5	24.5	<0.10	<0.0050	**0.026**
B-4@29.5	29.5	<0.10	<0.0050	0.0063
B-4@35	35	0.54	<0.025	**0.80**

ID	Depth	TPHg	Benzene	MTBE
SB-1	15	4.2	<0.050	NA
SB-1	35	18	<0.050	NA
SB-1	50	<1.0	<0.050	NA

ID	Depth	TPHg	Benzene	MTBE
DP-4	8.5	<1.0	<0.0050	NA

ID	Depth	TPHg	Benzene	MTBE
DP-1	6	2.5	<0.0050	NA

ID	Depth	TPHg	Benzene	MTBE
DP-1	3	1.3	<0.0050	NA

ID	Depth	TPHg	Benzene	MTBE
Under Dispenser #1	3	<0.50	<0.0050	<0.0050

ID	Depth	TPHg	Benzene	MTBE
DP-2	7.5	<1.0	<0.0050	NA

ID	Depth	TPHg	Benzene	MTBE
DP2-SW	4	1.7	<0.0050	NA

ID	Depth	TPHg	Benzene	MTBE
DP-3	8	**120**	<0.12	NA

ID	Depth	TPHg	Benzene	MTBE
SB-3	10	<1.0	<0.050	NA
SB-3	30	<1.0	<0.050	NA

ID	Depth	TPHg	Benzene	MTBE
MW-3-5.0	5	<1.0	<0.0050	<0.050
MW-3-10.5	10.5	<1.0	<0.0050	<0.050
MW-3-15.5	15.5	<1.0	<0.0050	<0.050
MW-3-25.5	20.5	<1.0	<0.0050	<0.050
MW-3-25.5	25.5	<1.0	<0.0050	<0.050

ID	Depth	TPHg	Benzene	MTBE
WO-2-14	14	<1.0	<0.0050	0.021

ID	Depth	TPHg	Benzene	MTBE
WO-1@10	10	<1.0	<0.0050	<0.050
WO-1@20	20	<1.0	<0.0050	<0.050
WO-1@30	30	<1.0	<0.0050	<0.050

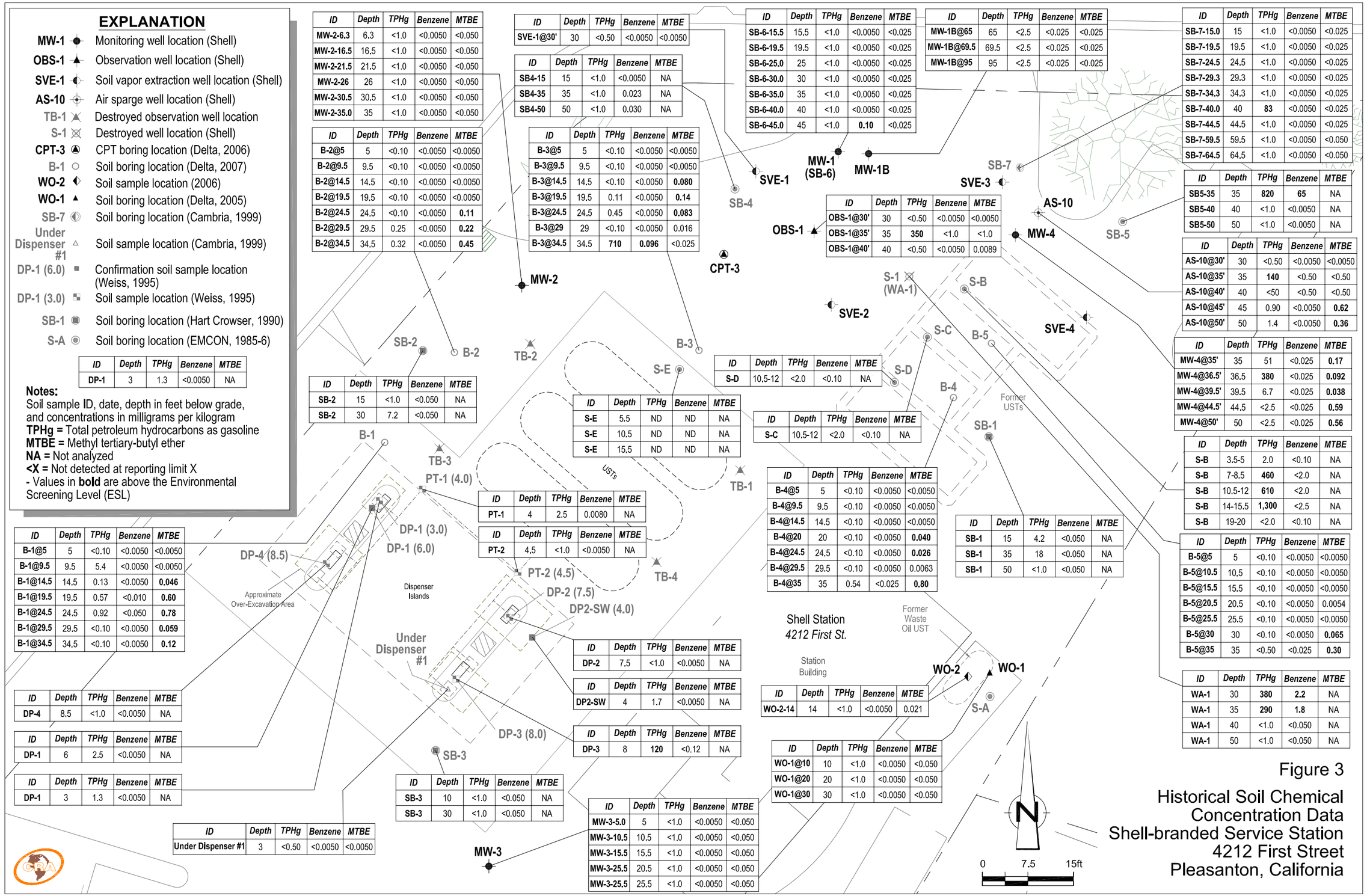


Figure 3

Historical Soil Chemical Concentration Data
Shell-branded Service Station
4212 First Street
Pleasanton, California

I:\Shell\6-chars\2405--\240523-Pleasanton 4212 First\241523-FIGURES\240523 SITE PLAN.DWG (01/24/2011)

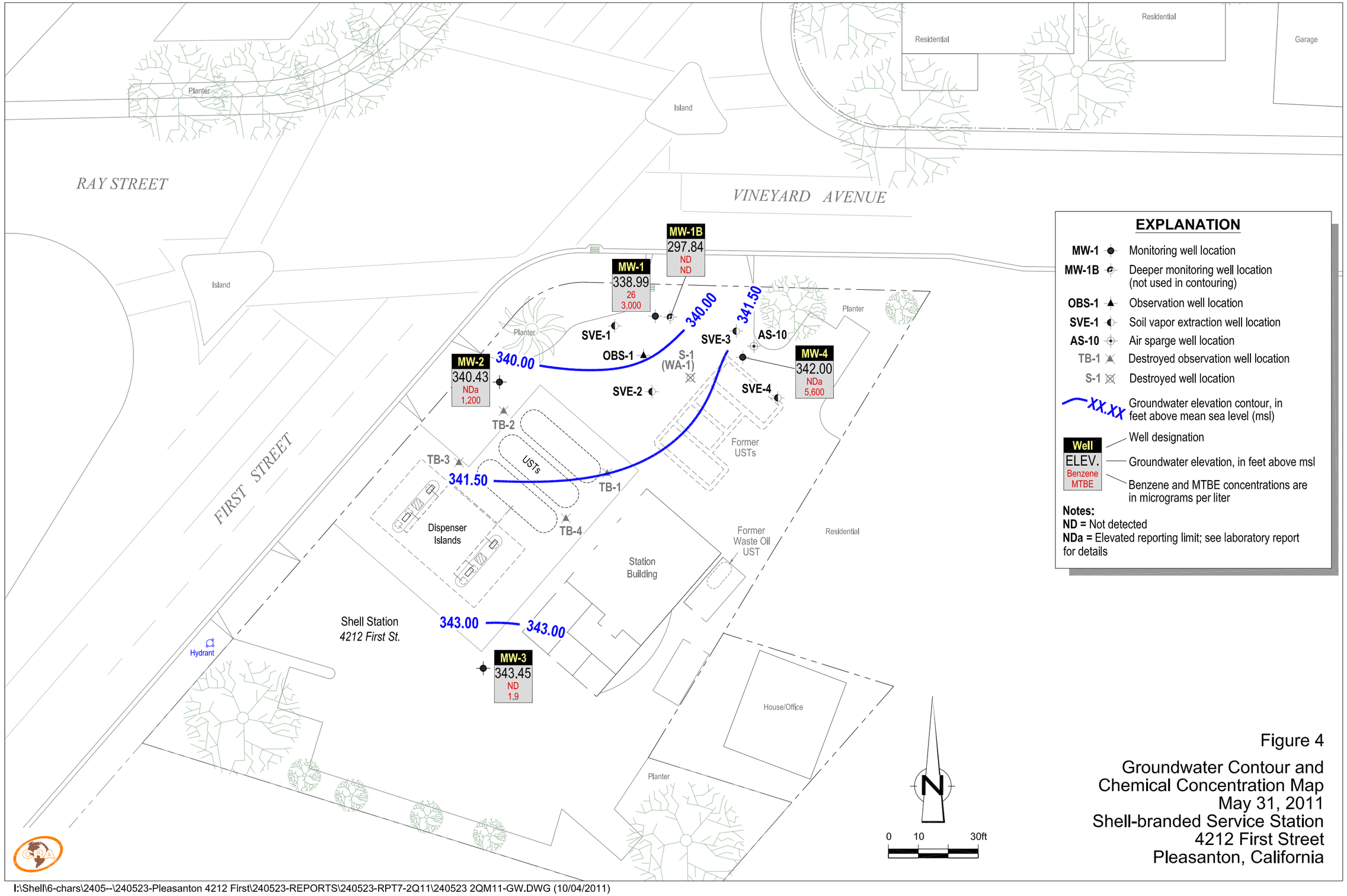


Figure 4

Groundwater Contour and Chemical Concentration Map
May 31, 2011
Shell-branded Service Station
4212 First Street
Pleasanton, California

I:\Shell\6-chars\2405--\240523-Pleasanton 4212 First\240523-REPORTS\240523-RPT7-2Q11\240523 2QM11-GW.DWG (10/04/2011)

Predicted Time to Reach Environmental Screening Levels (ESL) in Well MW-1

Shell-branded Service Station, 4212 First Street, Pleasanton, California

$y = b\,e^{ax}$ **===>** $x = \ln(y/b) / a$

where: y = concentration in µg/L, a = decay constant
b = concentration at time (x), x = time (x) in days

	Constituent	Benzene	Methyl tert-Butyl Ether (MTBE)	Tert-Butyl Alcohol (TBA)
Given				
ESL :	y	1	5	12
Constant:	b	7.00E+02	2.65E+09	3.23E+03
Constant:	a	-6.98E-05	-3.35E-04	-3.32E-05
Starting date for current trend:		2/12/2003	5/13/2010	8/22/2007
Calculate				
Attenuation Half Life (years):	(-ln(2)/a)/365.25	27.19	5.66	57.16
Estimated Date to Reach ESL:	(x = ln(y/b) / a)	Dec 2156	Mar 2064	Jun 2361

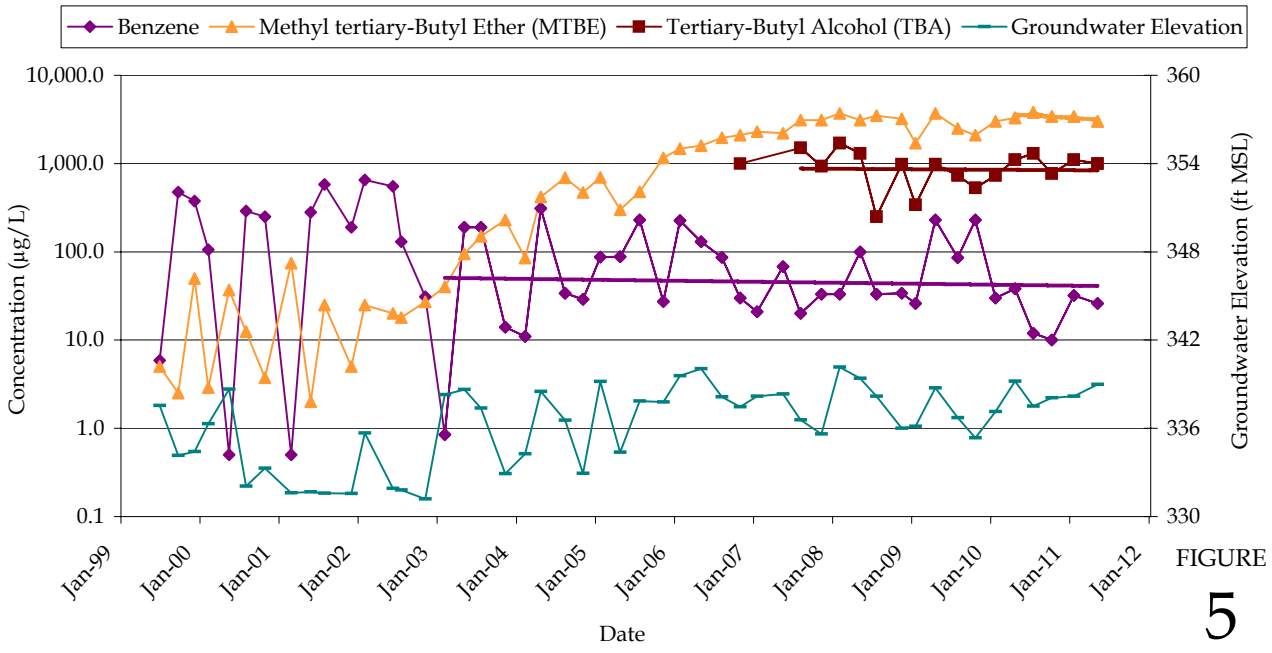


FIGURE 5

Shell-branded Service Station
4212 First Street
Pleasanton, California

CONESTOGA-ROVERS & ASSOCIATES

MW-1:
Benzene, MTBE, and TBA Concentrations and Groundwater Elevations versus Time

Predicted Time to Reach Environmental Screening Levels (ESL) in Well MW-2

Shell-branded Service Station, 4212 First Street, Pleasanton, California

$y = b\,e^{ax}$ **===>** $x = \ln(y/b) / a$

where: y = concentration in µg/L, a = decay constant
b = concentration at time (x), x = time (x) in days

	Constituent	Methyl tert-Butyl Ether (MTBE)
Given		
ESL :	y	5
Constant:	b	4.03E+34
Constant:	a	-1.78E-03
Starting date for current trend:		11/9/2009
Calculate		
Attenuation Half Life (years):	(-ln(2)/a)/365.25	1.07
Estimated Date to Reach ESL:	(x = ln(y/b) / a)	Jan 2020

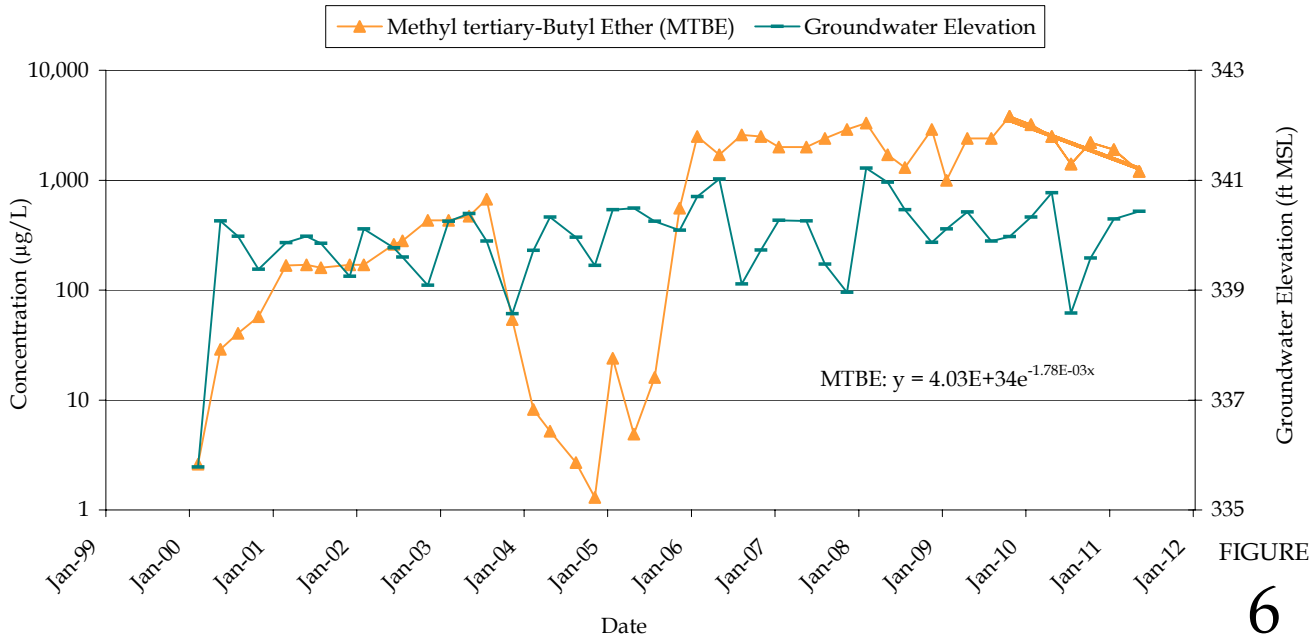


FIGURE 6

Shell-branded Service Station
4212 First Street
Pleasanton, California

CONESTOGA-ROVERS & ASSOCIATES

MW-2:
MTBE Concentrations and
Groundwater Elevations versus Time

Predicted Time to Reach Environmental Screening Levels (ESL) in Well MW-4

Shell-branded Service Station, 4212 First Street, Pleasanton, California

$y = b\,e^{ax}$ **===>** $x = \ln(y/b) / a$

where: y = concentration in µg/L, a = decay constant
b = concentration at time (x), x = time (x) in days

		Constituent: Methyl tert-Butyl Ether (MTBE)
Given		
ESL :	y	5
Constant:	b	9.97E+24
Constant:	a	-1.21E-03
Starting date for current trend:		11/26/2007
Calculate		
Attenuation Half Life (years):	(-ln(2)/a)/365.25	1.57
Estimated Date to Reach ESL:	(x = ln(y/b) / a)	Aug 2026

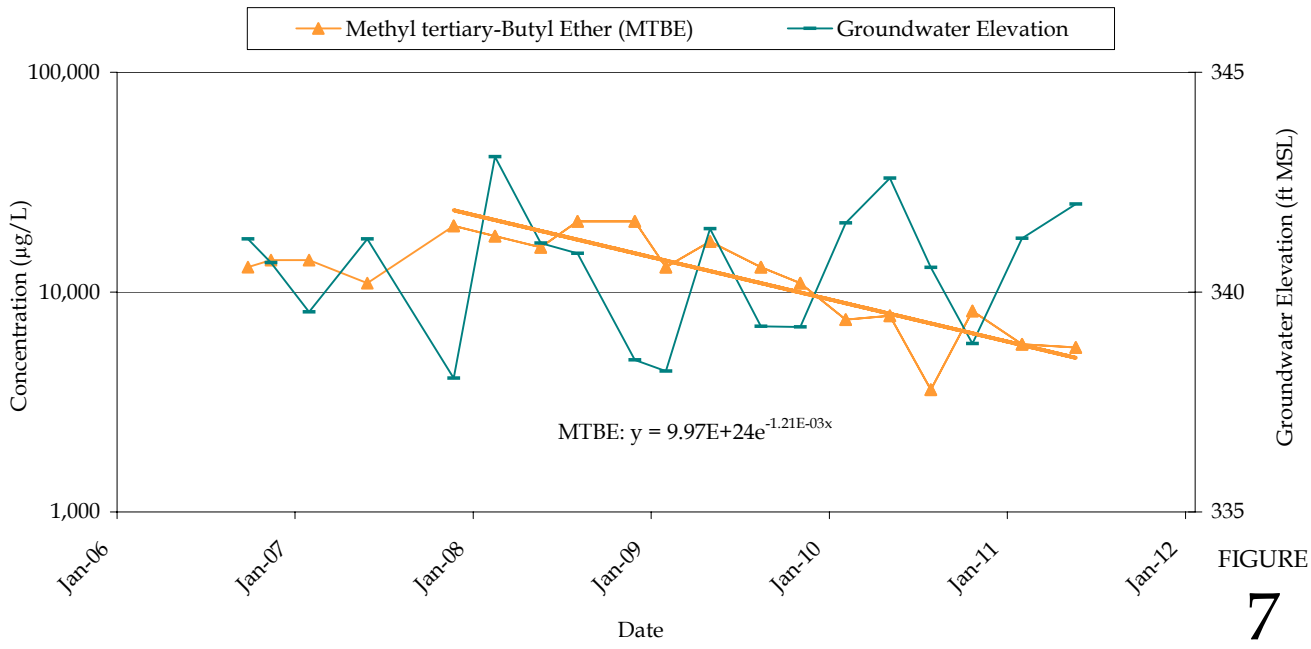


FIGURE 7

Shell-branded Service Station
4212 First Street
Pleasanton, California

CONESTOGA-ROVERS & ASSOCIATES

MW-4:
MTBE Concentrations and
Groundwater Elevations versus Time

TABLES

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA - PETROLEUM HYDROCARBONS, FUEL OXYGENATES, AND ETHANOL
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*O&G*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*Xylenes & Ethyl-benzene*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*Ethanol*
S-A	9/24/1985	7-8.5	---	<20	---	---	---	---	---	---	---	---	---	---	---	---	---
S-B	9/27/1985	3.5-5	---	---	---	2.0	<0.10[a]	<0.10[a]	---	---	<0.40[a]	---	---	---	---	---	---
S-B	9/27/1985	7-8.5	---	---	---	**460**	<2.0[a]	2.0[a]	---	---	32[a]	---	---	---	---	---	---
S-B	9/27/1985	10.5-12	---	---	---	**610**	<2.0[a]	**3.5**[a]	---	---	63[a]	---	---	---	---	---	---
S-B	9/27/1985	14-15.5	---	---	---	**1,300**	<2.5[a]	**9.6**[a]	---	---	260[a]	---	---	---	---	---	---
S-B	9/27/1985	19-20	---	---	---	<2.0	<0.10[a]	<0.10[a]	---	---	<0.40[a]	---	---	---	---	---	---
S-C	9/27/1985	10.5-12	---	---	---	<2.0	<0.10[a]	<0.10[a]	---	---	<0.40[a]	---	---	---	---	---	---
S-D	9/27/1985	10.5-12	---	---	---	<2.0	<0.10[a]	<0.10[a]	---	---	<0.40[a]	---	---	---	---	---	---
S-E	3/1986	5.5	---	---	---	ND	ND	ND	---	---	ND	---	---	---	---	---	---
S-E	3/1986	10.5	---	---	---	ND	ND	ND	---	---	ND	---	---	---	---	---	---
S-E	3/1986	15.5	---	---	---	ND	ND	ND	---	---	ND	---	---	---	---	---	---
SB-1	3/5/1990	15	---	---	---	4.2	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-1	3/5/1990	35	---	---	---	18	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-1	3/5/1990	50	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-2	3/5/1990	15	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-2	3/5/1990	30	---	---	---	7.2	<0.050	0.17	<0.10	<0.10	---	---	---	---	---	---	---
SB-3	3/5/1990	10	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-3	3/5/1990	30	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
WA-1 (S-1)	3/6/1990	30	---	---	---	**380**	**2.2**	2.7	**5.3**	**32**	---	---	---	---	---	---	---

HISTORICAL SOIL ANALYTICAL DATA - PETROLEUM HYDROCARBONS, FUEL OXYGENATES, AND ETHANOL
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*O&G*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*Xylenes & Ethyl-benzene*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*Ethanol*
WA-1 (S-1)	3/6/1990	35	---	---	---	**290**	**1.8**	0.35	0.24	1.5	---	---	---	---	---	---	---
WA-1 (S-1)	3/6/1990	40	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
WA-1 (S-1)	3/6/1990	50	---	---	---	<1.0	<0.050	<0.10	<0.10	<0.10	---	---	---	---	---	---	---
SB-4-15	7/17/1990	15	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
SB-4-35	7/17/1990	35	---	---	---	<1.0	0.023	0.0071	<0.0050	0.0055	---	---	---	---	---	---	---
SB-4-50	7/17/1990	50	---	---	---	<1.0	0.030	0.0059	<0.0050	<0.0050	---	---	---	---	---	---	---
SB-5-35	7/17/1990	35	---	---	---	**820**	**65**	**3.7**	**6.5**	**65**	---	---	---	---	---	---	---
SB-5-40	7/17/1990	40	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
SB-5-50	7/17/1990	50	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
DP-1	9/8/1995	3	---	---	---	1.3	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
DP-1	9/11/1995	6	---	---	---	2.5	<0.0050	<0.0050	0.020	0.035	---	---	---	---	---	---	---
DP-2	9/8/1995	7.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
DP-2-SW	9/8/1995	4	---	---	---	1.7	<0.0050	<0.0050	0.0075	0.017	---	---	---	---	---	---	---
DP-3	9/8/1995	8	---	---	---	**120**	<0.12	<0.12	<0.12	<0.12	---	---	---	---	---	---	---
DP-4	9/8/1995	8.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---
PT-1	9/8/1995	4	---	---	---	2.5	0.0080	<0.0050	0.038	0.19	---	---	---	---	---	---	---
PT-2	9/8/1995	4.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	---	---	---	---	---	---

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA - PETROLEUM HYDROCARBONS, FUEL OXYGENATES, AND ETHANOL
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*O&G*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*Xylenes & Ethyl-benzene*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*Ethanol*
SB-6-15.5' (MW-1)	4/9/1999	15.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-19.5' (MW-1)	4/9/1999	19.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-25.0' (MW-1)	4/9/1999	25	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-30.0' (MW-1)	4/9/1999	30	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-35.0' (MW-1)	4/9/1999	35	---	---	---	<1.0	0.0069	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-40.0' (MW-1)	4/9/1999	40	---	---	---	<1.0	<0.0050	0.28	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-6-45.0' (MW-1)	4/9/1999	45	---	---	---	<1.0	**0.10**	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-15.0'	4/7/1999	15	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-19.5'	4/7/1999	19.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-24.5'	4/7/1999	24.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-29.3'	4/7/1999	29.3	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-34.3'	4/7/1999	34.3	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-40.0'	4/7/1999	40	---	---	---	**83**	<0.0050	0.37	0.26	0.26	---	<0.025	---	---	---	---	---
SB-7-44.5'	4/7/1999	44.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.025	---	---	---	---	---
SB-7-59.5'	4/7/1999	59.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.050	---	---	---	---	---
SB-7-64.5'	4/7/1999	64.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.050	---	---	---	---	---
MW-2-6.3'	1/18/2000	6.3	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-2-16.5'	1/18/2000	16.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-2-21.5'	1/18/2000	21.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-2-26.0'	1/18/2000	26	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-2-30.5'	1/18/2000	30.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-2-35.0'	1/18/2000	35	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-3-5.0'	1/18/2000	5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-3-10.5'	1/18/2000	10.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---

HISTORICAL SOIL ANALYTICAL DATA - PETROLEUM HYDROCARBONS, FUEL OXYGENATES, AND ETHANOL
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*O&G*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*Xylenes & Ethyl-benzene*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*Ethanol*
MW-3-15.5'	1/18/2000	15.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-3-20.5'	1/18/2000	20.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
MW-3-25.5'	1/18/2000	25.5	---	---	---	<1.0	<0.0050	<0.0050	<0.0050	<0.010	---	<0.050	---	---	---	---	---
WO-1@10	6/10/2005	10	<100	---	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---
WO-1@20	6/10/2005	20	<100	---	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---
WO-1@30	6/10/2005	30	<100	---	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	---	---	---	---	---
WO-2-14	7/20/2006	14	26	---	5.5[b]	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	---	0.021	<0.0050	<0.0050	<0.0050	<0.0050	---
MW-1B@65'	8/23/2006	65	---	---	---	<2.5	<0.025	<0.025	<0.025	<0.050	---	<0.025	<0.250	---	---	---	---
MW-1B@69.5'	8/23/2006	69.5	---	---	---	<2.5	<0.025	<0.025	<0.025	<0.050	---	<0.025	<0.250	---	---	---	---
MW-1B@95'	8/23/2006	95	---	---	---	<2.5	<0.025	<0.025	<0.025	<0.050	---	<0.025	<0.250	---	---	---	---
MW-4@35'	8/24/2006	35	---	---	---	51	<0.025	<0.025	<0.025	<0.050	---	**0.17**	<0.250	---	---	---	---
MW-4@36.5'	8/24/2006	36.5	---	---	---	**380**	<0.025	<0.025	1.2	1.6	---	**0.092**	<0.250	---	---	---	---
MW-4@39.5'	8/24/2006	39.5	---	---	---	6.7	<0.025	<0.025	0.050	0.064	---	**0.038**	<0.250	---	---	---	---
MW-4@44.5'	8/24/2006	44.5	---	---	---	<2.5	<0.025	<0.025	<0.025	<0.050	---	**0.59**	<0.250	---	---	---	---
MW-4@50'	8/24/2006	50	---	---	---	<2.5	<0.025	<0.025	<0.025	<0.050	---	**0.56**	<0.250	---	---	---	---
B-1@5	3/27/2007	5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-1@9.5	3/29/2007	9.5	---	---	---	5.4	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-1@14.5	3/29/2007	14.5	---	---	---	0.13d	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.046**	0.068	---	---	---	---
B-1@19.5	3/29/2007	19.5	---	---	---	0.57d	<0.010	<0.010	<0.010	<0.010	---	**0.60**	0.80	---	---	---	---
B-1@24.5	3/29/2007	24.5	---	---	---	0.92d	<0.050	<0.050	<0.050	<0.050	---	**0.78**	**0.20**	---	---	---	---
B-1@29.5	3/29/2007	29.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.059**	<0.020	---	---	---	---
B-1@34.5	3/29/2007	34.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.12**	0.033	---	---	---	---

HISTORICAL SOIL ANALYTICAL DATA - PETROLEUM HYDROCARBONS, FUEL OXYGENATES, AND ETHANOL
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*O&G*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*Xylenes & Ethyl-benzene*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*Ethanol*
B-2@5	3/27/2007	5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-2@9.5	3/29/2007	9.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-2@14.5	3/29/2007	14.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-2@19.5	3/29/2007	19.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	**0.082**	---	---	---	---
B-2@24.5	3/29/2007	24.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.11**	0.030	---	---	---	---
B-2@29	3/29/2007	29	---	---	---	0.25	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.22**	**0.14**	---	---	---	---
B-2@34.5	3/29/2007	34.5	---	---	---	0.32d	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.45**	**0.75**	---	---	---	---
B-3@5	3/27/2007	5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-3@9.5	3/28/2007	9.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-3@14.5	3/28/2007	14.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.080**	<0.020	---	---	---	---
B-3@19.5	3/28/2007	19.5	---	---	---	0.11d	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.14**	0.021	---	---	---	---
B-3@24.5	3/28/2007	24.5	---	---	---	0.45	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.083**	<0.020	---	---	---	---
B-3@29	3/28/2007	29	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	0.016	0.073	---	---	---	---
B-3@34.5	3/28/2007	34.5	---	---	---	**710**	**0.096**	<0.05	2.3	**16**	---	<0.025	<5.0	---	---	---	---
B-4@5	3/27/2007	5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-4@9.5	3/28/2007	9.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-4@14.5	3/28/2007	14.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-4@20	3/28/2007	20	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.040**	<0.020	---	---	---	---
B-4@24.5	3/28/2007	24.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.026**	<0.020	---	---	---	---
B-4@29.5	3/28/2007	29.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	0.0063	0.071	---	---	---	---
B-4@35	3/28/2007	35	---	---	---	0.54[d]	<0.025	<0.025	<0.025	<0.025	---	**0.80**	**0.63**	---	---	---	---
B-5@5	3/27/2007	5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-5@10.5	3/28/2007	10.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---

TABLE 1

HISTORICAL SOIL ANALYTICAL DATA - PETROLEUM HYDROCARBONS, FUEL OXYGENATES, AND ETHANOL
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*O&G*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*Xylenes & Ethyl-benzene*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*Ethanol*
B-5@15.5	3/28/2007	15.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-5@20.5	3/28/2007	20.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	0.0054	<0.020	---	---	---	---
B-5@25.5	3/28/2007	25.5	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.020	---	---	---	---
B-5@30	3/28/2007	30	---	---	---	<0.10	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.065**	**0.10**	---	---	---	---
B-5@35	3/28/2007	35	---	---	---	<0.50	<0.025	<0.025	<0.025	<0.025	---	**0.30**	**0.46**	---	---	---	---
Under Dispenser #1	1/22/2009	3	---	---	<9.0	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.050	<0.010	<0.010	<0.010	---
AS-10@30'	1/14/2010	30	---	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.50
AS-10@35'	1/14/2010	35	---	---	---	**140**	<0.50	<0.50	0.50	0.90	---	<0.50	<5.0	<1.0	<1.0	<1.0	<50
AS-10@40'	1/14/2010	40	---	---	---	<50	<0.50[e]	<0.50[e]	<0.50[e]	<0.50[e]	---	<0.50[e]	<5.0[e]	<1.0[e]	<1.0[e]	<1.0[e]	<50
AS-10@45'	1/14/2010	45	---	---	---	0.90	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.62**	**0.19**	<0.010	<0.010	<0.010	<0.50
AS-10@50'	1/14/2010	50	---	---	---	1.4	<0.0050	<0.0050	<0.0050	<0.0050	---	**0.36[f]**	**0.14**	<0.010	<0.010	<0.010	<0.50
OBS-1@30'	1/13/2010	30	---	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.50
OBS-1@35'	1/13/2010	35	---	---	---	**350**	<1.0	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	<100
OBS-1@40'	1/13/2010	40	---	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	0.0089	<0.050	<0.010	<0.010	<0.010	<0.50
SVE-1@30'	1/14/2010	30	---	---	---	<0.50	<0.0050	<0.0050	<0.0050	<0.0050	---	<0.0050	<0.050	<0.010	<0.010	<0.010	<0.50
Shallow Soil (≤10 fbg) ESL[1]:			NA	2,500	83	83	0.044	2.9	3.3	2.3	NA	0.023	0.075	NA	NA	NA	NA
Deep Soil (>10 fbg) ESL[1]:			NA	5,000	83	83	0.044	2.9	3.3	2.3	NA	0.023	0.075	NA	NA	NA	NA

Notes:

All results in milligrams per kilogram (mg/kg) unless otherwise indicated.
fbg = Feet below grade

HISTORICAL SOIL ANALYTICAL DATA - PETROLEUM HYDROCARBONS, FUEL OXYGENATES, AND ETHANOL
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*O&G*	*TPHmo*	*TPHd*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*Xylenes & Ethyl-benzene*	*MTBE*	*TBA*	*DIPE*	*ETBE*	*TAME*	*Ethanol*

O&G = Oil and grease analyzed by EPA Method 1664 A (Modified)
TPHmo = Total petroleum hydrocarbons as motor oil analyzed by EPA Method 8015 (Modified)
TPHd = Total petroleum hydrocarbons as diesel analyzed by EPA Method 8015 (Modified)
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; before July 6, 2006, analyzed by EPA Method 8015
Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260B; before July 6, 2006, analyzed by EPA Method 8020 unless otherwise noted
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B; before July 6, 2006, analyzed by EPA Method 8020
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B
Ethanol analyzed by EPA Method 8260B
ND = Not detected; detection limit unknown
<x = Not detected at reporting limit x
--- = Not analyzed
NA = No applicable ESL
Results in **bold** equal or exceed applicable ESL

a = Analyzed by EPA Method 8015
b = Hydrocarbons reported as TPHd do not exhibit a typical Diesel chromatographic pattern. These hydrocarbons are higher boiling than typical diesel fuel.
d = Hydrocarbon result partly due to individual peak(s) in quantitation range
e = The reporting limit is elevated resulting from matrix interference.
f = Results were evaluated to the MDL, and concentration was >= to the MDL but < RL
g = Pea gravel sample from waste oil tank excavation
h = Hydrocarbon reported in the late diesel range, and does not match the laboratory diesel standard.
i = Not detected except for phenanthrene at 0.42 mg/kg. See laboratory analytical report for constituent-specific reporting limits
j = San Francisco Bay Regional Water Quality Control Board commercial/industrial ESL for soil where groundwater is a potential source of drinking water (Tables A and C of *Screening Contaminated Soil and Groundwater* , California Regional Water Quality Control Board, Interim Final - November 2007 [Revised May 2008]).

TABLE 2

HISTORICAL SOIL ANALYTICAL DATA - METALS, CHLORINATED HYDROCARBONS, VOCS, 1,2-DCA, EDB, SVOCS, PNAS, PCP, AND CREOSOTE
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*Antimony*	*Arsenic*	*Barium*	*Beryllium*	*Cadmium*	*Chromium*	*Cobalt*	*Copper*	*Lead*	*Molyb-denum*	*Nickel*	*Selenium*	*Silver*	*Thallium*	*Vanadium*	*Zinc*	*Mercury*	*Chlorinated Hydro-carbons*	*VOCs*	1,2-DCA	EDB	*SVOCs*	*PNAs*	*PCP*	*Creosote*	*PCBs*
W-1@30	6/10/2005	30	<2.0	2.8	93	<0.50	1.0	30	6.2	13	7.4	<1.0	32	<2.0	<1.0	<1.0	22	28	<0.050	ND	ND	<0.0050	<0.010	ND	---	---	---	<0.050
W0-2-14	7/20/2006	14	---	---	---	---	<0.500	40.7	---	---	6.00	---	46.9	---	---	---	---	52.5	---	a	---	<0.0050	<0.0050	---	a	<2.5	<0.40	<0.050
Under Dispenser	1/22/2009	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	<0.0050	<0.0050	---	---	---	---	---
Shallow Soil (≤10 fbg) ESL[b]:			40	1.6	1,500	8.0	7.4	750	80	230	750	40	150	10	40	16	200	600	10	Various	Various	0.0045	0.00033	Various	Various	5.0	NA	0.74
Deep Soil (>10 fbg) ESL[b]:			310	15	2,600	98	39	5,000	94	5,000	750	3,900	260	3,900	3,900	62	770	5,000	58	Various	Various	0.0045	0.00033	Various	Various	99	NA	63

Notes:

All results in milligrams per kilogram (mg/kg) unless otherwise indicated.
fbg = Feet below grade
Mercury analyzed by EPA Method 7471A; all other constituents analyzed by EPA Method 6010B.
Chlorinated hydrocarbons analyzed by EPA Method 8260B; see laboratory analytical report for a complete list of specific constituents
VOC = Volatile organic compounds analyzed by EPA Method 8260B; see laboratory analytical report for a complete list of specific constituents
1,2-DCA = 1,2-Dichloroethane analyzed by EPA Method 8260B
EDB = 1,2-Dibromoethane analyzed by EPA Method 8260B
SVOCs - Semi-volatile organic compounds analyzed by EPA Method 8270C; see laboratory analytical report for a complete list of specific constituents
PNAs = Polynuclear aromatics analyzed by EPA Method 8270C; see laboratory analytical report for a complete list of specific constituents
PCP = Pentachlorophenol by EPA Method 8270C
Creosote analyzed by EPA Method 8270C. It is reported as a combination of naphthalene, acenaphthylene, fluorene, phenanthrene, anthracene, fluoranthene, pyrene, 1-methylnaphthalene, and 2-methylnaphthene.
PCBs = Polychlorinated biphenyls analyzed by EPA Method 8082; see laboratory analytical report for a complete list of specific constituents
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
Results in **bold** equal or exceed applicable ESL

a = Not detected; see laboratory analytical report for constituent-specific reporting limits
b = San Francisco Bay Regional Water Quality Control Board commercial/industrial ESL for soil where groundwater is a potential source of drinking water (Tables A and C of *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater*, California Regional Water Quality Control Board, Interim Final - November 2007 [Revised May 2008]).

TABLE 3

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*GW Elevation (ft MSL)*
MW-1	06/16/1999	---	---	---	---	---	---	---	---	---	---	---	371.20	37.81	333.39
MW-1	06/30/1999	89.0	5.89	<0.500	<0.500	0.652	<5.00	---	---	---	---	---	371.20	33.65	337.55
MW-1	09/24/1999	1,560	473	<10.0	<10.0	22.8	<2.50	---	---	---	---	---	371.20	37.04	334.16
MW-1	12/08/1999	1,020	375	<5.00	<5.00	15.2	<50.0	---	---	---	---	---	371.20	36.79	334.41
MW-1	02/10/2000	523	106	<5.00	<5.00	31.8	2.9	---	---	---	---	---	371.20	34.90	336.30
MW-1	05/17/2000	<50.0	<0.500	<0.500	<0.500	<0.500	37	29.5	---	---	---	---	371.20	32.55	338.65
MW-1	08/03/2000	808	290	<2.50	<2.50	8.9	<12.5	---	---	---	---	---	371.20	39.13	332.07
MW-1	10/31/2000	507	250	0.962	<0.500	23.5	3.76	---	---	---	---	---	371.20	37.91	333.29
MW-1	03/01/2001	<50.0	<0.500	<0.500	<0.500	<0.500	74.6	---	---	---	---	---	371.20	39.60	331.60
MW-1	05/30/2001	780	280	<2.0	<2.0	11	---	<2.0	---	---	---	---	371.20	39.53	331.67
MW-1	08/02/2001	1,900	580	<2.5	<2.5	12	---	<25	---	---	---	---	371.20	39.61	331.59
MW-1	12/06/2001	840	190	<0.50	<0.50	13	---	<5.0	---	---	---	---	371.20	39.63	331.57
MW-1	02/05/2002	2,700	650	<2.5	<2.5	7.2	---	<25	---	---	---	---	371.20	35.53	335.67
MW-1	06/17/2002	2,500	550	<2.0	<2.0	5.9	---	<20	---	---	---	---	371.20	39.29	331.91
MW-1	07/25/2002	690	130	<0.50	<0.50	4.4	---	18	---	---	---	---	371.20	39.39	331.81
MW-1	11/14/2002	400	31	<0.50	<0.50	2.7	---	27	---	---	---	---	371.20	40.00	331.20
MW-1	02/12/2003	840	0.85	<0.50	<0.50	<0.50	---	40	---	---	---	---	371.20	32.92	338.28
MW-1	05/14/2003	680	190	<2.5	<2.5	<5.0	---	95	---	---	---	---	371.20	32.57	338.63
MW-1	07/29/2003	870	190	<2.5	<2.5	<5.0	---	150	---	---	---	---	371.20	33.82	337.38
MW-1	11/19/2003	<200	14	<2.0	<2.0	<4.0	---	230	---	---	---	---	371.20	38.28	332.92
MW-1	02/19/2004	58 f	11	<0.50	<0.50	<1.0	---	85	---	---	---	---	371.20	36.93	334.27
MW-1	05/03/2004	670	310	<2.5	<2.5	<5.0	---	420	---	---	---	---	371.20	32.70	338.50
MW-1	08/24/2004	430 f	34	<2.5	<2.5	<5.0	---	690	---	---	---	---	371.20	34.66	336.54
MW-1	11/15/2004	<250	29	<2.5	<2.5	<5.0	---	470	---	---	---	---	371.20	38.27	332.93
MW-1	02/02/2005	540 k	87	<2.5	<2.5	<5.0	---	700	---	---	---	---	371.20	32.02	339.18
MW-1	05/05/2005	460 k	88	<2.5	<2.5	<5.0	---	300	---	---	---	---	371.20	36.82	334.38
MW-1	08/05/2005	910	230	<2.5	<2.5	<5.0	---	480	---	---	---	---	371.20	33.35	337.85
MW-1	11/22/2005	1,760	27	<0.500	<0.500	1.18	---	1,160	---	---	---	---	371.20	33.42	337.78
MW-1	02/07/2006	4,620	225	<0.500	<0.500	<0.500	---	1,480	---	---	---	---	371.20	31.63	339.57
MW-1	05/16/2006	1,100	130	<0.50	2.0	2.1	---	1,600	---	---	---	---	371.20	31.16	340.04
MW-1	08/21/2006	2,700	86	<0.500	0.79	0.81	---	1,960	---	---	---	---	371.20	33.07	338.13

TABLE 3

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)
MW-1	11/14/2006	1,400 f	30	<25	<25	<25	---	2,100	<1,000	<25	<25	<25	371.20	33.73	337.47
MW-1	02/01/2007	800	21	<0.50	<0.50	<1.0	---	2,300	---	---	---	---	371.20	33.02	338.18
MW-1	06/01/2007	1,400 j,k	68	<20	<20	4.4 l	---	2,200	---	---	---	---	371.20	32.87	338.33
MW-1	08/22/2007	250 j	20	<20	<20	<20	---	3,100	1,500	---	---	---	371.20	34.64	336.56
MW-1	11/26/2007	1,800 j	33	<20	<20	<20	---	3,100	930	<40	<40	<40	371.20	35.59	335.61
MW-1	02/19/2008	1,800 j	33	<20	<20	<20	---	3,700	1,700	---	---	---	371.20	31.05	340.15
MW-1	05/23/2008	3,700	100	<25	<25	<25	---	3,100	1,300	---	---	---	371.20	31.80	339.40
MW-1	08/07/2008	4,200	33	<25	<25	<25	---	3,500	<250	---	---	---	371.20	33.03	338.17
MW-1	12/03/2008	3,400	34	<25	<25	<25	---	3,200	980	---	---	---	371.20	35.19	336.01
MW-1	02/05/2009	2,100	26	<25	<25	<25	---	1,700	340	---	---	---	371.20	35.07	336.13
MW-1	05/07/2009	4,400	230	<25	<25	<25	---	3,700	980	---	---	---	371.20	32.45	338.75
MW-1	08/20/2009	3,100	86	<25	<25	<25	---	2,500	730	---	---	---	371.20	34.48	336.72
MW-1	11/09/2009	3,200	230	<20	<20	33	---	2,100	530	<40	<40	<40	371.20	35.84	335.36
MW-1	02/11/2010	4,400	30	<20	<20	<20	---	3,000	730	---	---	---	371.20	34.06	337.14
MW-1	05/13/2010	3,300	38	<20	<20	<20	---	3,300	1,100	---	---	---	371.20	31.99	339.21
MW-1	08/05/2010	4,200	12	<20	<20	<20	---	3,800	1,300	---	---	---	371.20	33.70	337.50
MW-1	10/30/2010	2,700	<10	<20	<20	<20	---	3,400	770	<40	<40	<40	371.20	33.12	338.08
MW-1	02/09/2011	2,600	32	<12	<12	<25	---	3,400	1,100	---	---	---	371.20	33.03	338.17
MW-1	**05/31/2011**	**<2,500**	**26**	**<25**	**<25**	**<50**	**---**	**3,000**	**1,000**	**---**	**---**	**---**	**371.20**	**32.21**	**338.99**
MW-1B	09/21/2006	---	---	---	---	---	---	---	---	---	---	---	371.67	76.94	294.73
MW-1B	09/28/2006	<50	<0.50	<0.50	<0.50	<0.50	---	21	<20	---	---	---	371.67	77.15	294.52
MW-1B	11/14/2006	320 f	<5.0	<5.0	<5.0	<5.0	---	310	<200	<5.0	<5.0	<5.0	371.67	69.38	302.29
MW-1B	02/01/2007	77	0.53	<0.50	<0.50	<1.0	---	150	---	---	---	---	371.67	60.92	310.75
MW-1B	06/01/2007	<50 j,k	0.25 l	<1.0	<1.0	<1.0	---	74	---	---	---	---	371.67	61.07	310.60
MW-1B	08/22/2007	<50 j	0.25 l	<1.0	<1.0	<1.0	---	35	7.1 l	---	---	---	371.67	77.54	294.13
MW-1B	11/26/2007	<50 j	<0.50	<1.0	<1.0	<1.0	---	1.7	<10	<2.0	<2.0	<2.0	371.67	68.50	303.17
MW-1B	02/19/2008	65 j	2.6	4.2	<1.0	1.1	---	58	<10	---	---	---	371.67	57.21	314.46
MW-1B	05/23/2008	<50	<0.50	<1.0	<1.0	<1.0	---	3.6	<10	---	---	---	371.67	57.53	314.14
MW-1B	08/07/2008	<50	<0.50	<1.0	<1.0	<1.0	---	1.1	<10	---	---	---	371.67	72.51	299.16
MW-1B	12/03/2008	<50	<0.50	<1.0	<1.0	<1.0	---	3.4	<10	---	---	---	371.67	80.84	290.83

TABLE 3

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*GW Elevation (ft MSL)*
MW-1B	02/05/2009	<50	<0.50	<1.0	<1.0	<1.0	---	4.4	<10	---	---	---	371.67	76.11	295.56
MW-1B	05/07/2009	<50	<0.50	<1.0	<1.0	<1.0	---	2.5	13	---	---	---	371.67	66.97	304.70
MW-1B	08/20/2009	<50	<0.50	<1.0	<1.0	<1.0	---	1.7	<10	---	---	---	371.67	97.32	274.35
MW-1B	11/09/2009	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	371.67	98.90	272.77
MW-1B	02/11/2010	<50	<0.50	<1.0	<1.0	<1.0	---	1.1	<10	---	---	---	371.67	90.72	280.95
MW-1B	05/13/2010	<50	<0.50	<1.0	<1.0	<1.0	---	2.0	<10	---	---	---	371.67	80.56	291.11
MW-1B	08/05/2010	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	371.67	90.10	281.57
MW-1B	10/30/2010	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	<2.0	<2.0	<2.0	371.67	102.21	269.46
MW-1B	02/09/2011	<50	<0.50	<0.50	<0.50	<1.0	---	<1.0	<10	---	---	---	371.67	90.24	281.43
MW-1B	**05/31/2011**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**<1.0**	**<10**	**---**	**---**	**---**	**371.67**	**73.83**	**297.84**
MW-2	02/03/2000	---	---	---	---	---	---	---	---	---	---	---	372.40	32.65	339.75
MW-2	02/07/2000	---	---	---	---	---	---	---	---	---	---	---	372.40	35.51	336.89
MW-2	02/10/2000	<50.0	<0.500	<0.500	<0.500	<0.500	2.61	---	---	---	---	---	372.40	36.62	335.78
MW-2	05/17/2000	120	4.09	<0.500	<0.500	<0.500	29	---	---	---	---	---	372.40	32.14	340.26
MW-2	08/03/2000	<50.0	0.692	<0.500	<0.500	<0.500	40.5	36.6 b	---	---	---	---	372.40	32.42	339.98
MW-2	10/31/2000	<50.0	<0.500	<0.500	<0.500	<0.500	57.4	44.8 a	---	---	---	---	372.40	33.02	339.38
MW-2	03/01/2001	173	1.64	1.65	2.86	3.97	127	167	---	---	---	---	372.40	32.54	339.86
MW-2	05/30/2001	<50	<0.50	<0.50	<0.50	<0.50	---	170	---	---	---	---	372.40	32.42	339.98
MW-2	08/02/2001	<50	<0.50	<0.50	<0.50	<0.50	---	160	---	---	---	---	372.40	32.55	339.85
MW-2	12/06/2001	<50	<0.50	<0.50	<0.50	<0.50	---	170	---	---	---	---	372.40	33.15	339.25
MW-2	02/05/2002	<50	0.72	<0.50	<0.50	1.7	---	170	---	---	---	---	372.40	32.29	340.11
MW-2	06/17/2002	<50	<0.50	<0.50	<0.50	<0.50	---	260	---	---	---	---	372.40	32.63	339.77
MW-2	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	---	280	---	---	---	---	372.40	32.80	339.60
MW-2	11/14/2002	120	13	9.0	3.8	14	---	430	---	---	---	---	372.40	33.31	339.09
MW-2	02/12/2003	<100	<1.0	<1.0	<1.0	<1.0	---	430	---	---	---	---	372.40	32.15	340.25
MW-2	05/14/2003	<250	<2.5	<2.5	<2.5	<5.0	---	470	---	---	---	---	372.40	32.01	340.39
MW-2	07/29/2003	<250	<2.5	<2.5	<2.5	<5.0	---	670	---	---	---	---	372.40	32.51	339.89
MW-2	11/19/2003	<50	<0.50	<0.50	<0.50	<1.0	---	54	---	---	---	---	372.40	33.83	338.57
MW-2	02/19/2004	65	<0.50	3.4	1.4	6.5	---	8.2	---	---	---	---	372.40	32.68	339.72
MW-2	05/03/2004	<50	<0.50	<0.50	<0.50	<1.0	---	5.2	---	---	---	---	372.40	32.07	340.33

TABLE 3

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)
MW-2	08/24/2004	<50	<0.50	<0.50	<0.50	<1.0	---	2.7	---	---	---	---	372.40	32.44	339.96
MW-2	11/15/2004	<50	<0.50	<0.50	<0.50	<1.0	---	1.3	---	---	---	---	372.40	32.95	339.45
MW-2	02/02/2005	<50	<0.50	<0.50	<0.50	<1.0	---	24	---	---	---	---	372.40	31.94	340.46
MW-2	05/05/2005	72 f	<0.50	<0.50	<0.50	<1.0	---	4.9	---	---	---	---	372.40	31.91	340.49
MW-2	08/05/2005	<50	<0.50	<0.50	<0.50	<1.0	---	16	---	---	---	---	372.40	32.15	340.25
MW-2	11/22/2005	840	0.80	<0.500	<0.500	0.87	---	556	---	---	---	---	372.40	32.31	340.09
MW-2	02/07/2006	3,550	<0.500	<0.500	<0.500	<0.500	---	2,500	---	---	---	---	372.40	31.70	340.70
MW-2	05/16/2006	1,400	<5.0	<5.0	<5.0	<10	---	1,700	---	---	---	---	372.40	31.38	341.02
MW-2	08/21/2006	1,910	<0.500	<0.500	<0.500	<0.500	---	2,590	---	---	---	---	372.40	33.29	339.11
MW-2	11/14/2006	2,300 f	<25	<25	<25	<25	---	2,500	<1,000	<25	<25	<25	372.40	32.67	339.73
MW-2	02/01/2007	670	<0.50	<0.50	<0.50	<1.0	---	2,000	---	---	---	---	372.40	32.13	340.27
MW-2	06/01/2007	500 j,k	<10	<20	<20	<20	---	2,000	---	---	---	---	372.40	32.14	340.26
MW-2	08/22/2007	100 j,k	<10	<20	<20	<20	---	2,400	120 l	---	---	---	372.40	32.93	339.47
MW-2	11/26/2007	1,600 j,k	<10	<20	<20	<20	---	2,900	<200	<40	<40	<40	372.40	33.44	338.96
MW-2	02/19/2008	1,300 j,k	<10	<20	<20	<20	---	3,300	<200	---	---	---	372.40	31.18	341.22
MW-2	05/23/2008	1,900	<12	<25	<25	<25	---	1,700	<250	---	---	---	372.40	31.44	340.96
MW-2	08/07/2008	1,700	<10	<20	<20	<20	---	1,300	<200	---	---	---	372.40	31.94	340.46
MW-2	12/03/2008	3,000	<10	<20	<20	<20	---	2,900	<200	---	---	---	372.40	32.53	339.87
MW-2	02/05/2009	1,200	<10	<20	<20	<20	---	1,000	<200	---	---	---	372.40	32.29	340.11
MW-2	05/07/2009	2,400	<10	<20	<20	<20	---	2,400	<200	---	---	---	372.40	31.98	340.42
MW-2	08/20/2009	2,800	<10	<20	<20	<20	---	2,400	<200	---	---	---	372.40	32.51	339.89
MW-2	11/09/2009	4,100	<12	<25	<25	<25	---	3,800	<250	<50	<50	<50	372.40	32.43	339.97
MW-2	02/11/2010	4,300	<12	<25	<25	<25	---	3,200	<250	---	---	---	372.40	32.07	340.33
MW-2	05/13/2010	2,400	<10	<20	<20	<20	---	2,500	<200	---	---	---	372.40	31.63	340.77
MW-2	08/05/2010	1,500	<5.0	<10	<10	<10	---	1,400	210	---	---	---	372.40	33.82	338.58
MW-2	10/30/2010	1,700	<5.0	<10	<10	<10	---	2,200	130	<20	<20	<20	372.40	32.82	339.58
MW-2	02/09/2011	1,400	<12	<12	<12	<25	---	1,900	<250	---	---	---	372.40	32.11	340.29
MW-2	**05/31/2011**	**<1,000**	**<10**	**<10**	**<10**	**<20**	**---**	**1,200**	**<200**	**---**	**---**	**---**	**372.40**	**31.97**	**340.43**
MW-3	02/03/2000	---	---	---	---	---	---	---	---	---	---	---	375.05	32.06	342.99
MW-3	02/07/2000	---	---	---	---	---	---	---	---	---	---	---	375.05	32.57	342.48

TABLE 3

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)
MW-3	02/10/2000	180	5.12	<0.500	<0.500	0.714	26.8	21.5 a	---	---	---	---	375.05	32.77	342.28
MW-3	05/17/2000	1,360	414	<5.00	<5.00	17.6	<25.0	---	---	---	---	---	375.05	31.00	344.05
MW-3	08/03/2000	<50.0	0.536	<0.500	<0.500	<0.500	22	---	---	---	---	---	375.05	31.03	344.02
MW-3	10/31/2000	<50.0	<0.500	<0.500	<0.500	<0.500	31.1	---	---	---	---	---	375.05	31.28	343.77
MW-3	03/01/2001	384	172	0.815	<0.500	8.0	5.16	---	---	---	---	---	375.05	31.21	343.84
MW-3	05/30/2001	<50	<0.50	<0.50	<0.50	<0.50	---	110	---	---	---	---	375.05	31.02	344.03
MW-3	08/02/2001	<50	<0.50	<0.50	<0.50	<0.50	---	93	---	---	---	---	375.05	30.94	344.11
MW-3	12/06/2001	110	<0.50	<0.50	<0.50	2.3	---	180	---	---	---	---	375.05	31.28	343.77
MW-3	02/05/2002	<50	0.89	0.60	<0.50	2.1	---	130	---	---	---	---	375.05	31.12	343.93
MW-3	06/17/2002	<50	<0.50	<0.50	<0.50	<0.50	---	72	---	---	---	---	375.05	31.21	343.84
MW-3	07/25/2002	<50	<0.50	<0.50	<0.50	<0.50	---	81	---	---	---	---	375.05	30.96	344.09
MW-3	11/14/2002	<50	<0.50	<0.50	<0.50	<0.50	---	60	---	---	---	---	375.05	31.44	343.61
MW-3	02/12/2003	<50	<0.50	<0.50	<0.50	<0.50	---	43	---	---	---	---	375.05	31.28	343.77
MW-3	05/14/2003	<50	<0.50	<0.50	<0.50	<1.0	---	24	---	---	---	---	375.05	31.20	343.85
MW-3	07/29/2003	<50	<0.50	<0.50	<0.50	<1.0	---	21	---	---	---	---	375.05	31.29	343.76
MW-3	11/19/2003	<50	<0.50	<0.50	<0.50	<1.0	---	8.2	---	---	---	---	375.05	31.86	343.19
MW-3	02/19/2004	81	0.67	4.4	1.8	8.6	---	13	---	---	---	---	375.05	31.66	343.39
MW-3	05/03/2004	<50	<0.50	<0.50	<0.50	<1.0	---	13	---	---	---	---	375.05	31.72	343.33
MW-3	08/24/2004	<50	<0.50	<0.50	<0.50	<1.0	---	10	---	---	---	---	375.05	32.09	342.96
MW-3	11/15/2004	<50	<0.50	<0.50	<0.50	<1.0	---	6.6	---	---	---	---	375.05	31.50	343.55
MW-3	02/02/2005	<50	<0.50	<0.50	<0.50	<1.0	---	3.1	---	---	---	---	375.05	31.28	343.77
MW-3	05/05/2005	<50	<0.50	<0.50	<0.50	<1.0	---	2.3	---	---	---	---	375.05	31.42	343.63
MW-3	08/05/2005	<50	<0.50	<0.50	<0.50	<1.0	---	2.4	---	---	---	---	375.05	31.35	343.70
MW-3	11/22/2005	<50	<0.500	<0.500	<0.500	<0.500	---	3.84	---	---	---	---	375.05	31.98	343.07
MW-3	02/07/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	<0.500	---	---	---	---	375.05	31.24	343.81
MW-3	05/16/2006	<50	<0.50	<0.50	<0.50	<1.0	---	4.5	---	---	---	---	375.05	31.37	343.68
MW-3	08/21/2006	<50.0	<0.500	<0.500	<0.500	<0.500	---	4.04	---	---	---	---	375.05	31.95	343.10
MW-3	11/14/2006	<50	<0.50	<0.50	<0.50	<0.50	---	3.8	<20	<0.50	<0.50	<0.50	375.05	32.24	342.81
MW-3	02/01/2007	<50	<0.50	<0.50	<0.50	<1.0	---	2.8	---	---	---	---	375.05	32.17	342.88
MW-3	06/01/2007	<50 j	<0.50	<1.0	<1.0	<1.0	---	3.1	---	---	---	---	375.05	31.86	343.19
MW-3	08/22/2007	<50 j	<0.50	<1.0	<1.0	<1.0	---	4.6	<10	---	---	---	375.05	32.18	342.87

TABLE 3

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Well ID	Date	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TOC (ft MSL)	Depth to Water (ft TOC)	GW Elevation (ft MSL)
MW-3	11/26/2007	<50 j	<0.50	<1.0	<1.0	<1.0	---	3.5	<10	<2.0	<2.0	<2.0	375.05	32.69	342.36
MW-3	02/19/2008	<50 j	<0.50	1.2	<1.0	<1.0	---	2.6	<10	---	---	---	375.05	30.94	344.11
MW-3	05/23/2008	<50	<0.50	<1.0	<1.0	<1.0	---	3.6	<10	---	---	---	375.05	31.45	343.60
MW-3	08/07/2008	<50	<0.50	<1.0	<1.0	<1.0	---	3.0	<10	---	---	---	375.05	31.40	343.65
MW-3	12/03/2008	<50	<0.50	<1.0	<1.0	<1.0	---	2.1	<10	---	---	---	375.05	32.12	342.93
MW-3	02/05/2009	<50	<0.50	<1.0	<1.0	<1.0	---	1.1	<10	---	---	---	375.05	32.74	342.31
MW-3	05/07/2009	<50	<0.50	<1.0	<1.0	<1.0	---	<1.0	<10	---	---	---	375.05	31.69	343.36
MW-3	08/20/2009	<50	<0.50	<1.0	<1.0	<1.0	---	2.0	<10	---	---	---	375.05	32.42	342.63
MW-3	11/09/2009	<50	<0.50	<1.0	<1.0	<1.0	---	1.7	<10	<2.0	<2.0	<2.0	375.05	32.54	342.51
MW-3	02/11/2010	<50	<0.50	<1.0	<1.0	<1.0	---	2.1	<10	---	---	---	375.05	31.81	343.24
MW-3	05/13/2010	<50	<0.50	<1.0	<1.0	<1.0	---	1.7	<10	---	---	---	375.05	31.25	343.80
MW-3	08/05/2010	<50	<0.50	<1.0	<1.0	<1.0	---	1.2	<10	---	---	---	375.05	32.00	343.05
MW-3	10/30/2010	<50	<0.50	<1.0	<1.0	<1.0	---	1.4	<10	<2.0	<2.0	<2.0	375.05	32.18	342.87
MW-3	02/09/2011	<50	<0.50	<0.50	<0.50	<1.0	---	1.7	<10	---	---	---	375.05	31.80	343.25
MW-3	**05/31/2011**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**---**	**1.9**	**<10**	**---**	**---**	**---**	**375.05**	**31.60**	**343.45**
MW-4	09/21/2006	---	---	---	---	---	---	---	---	---	---	---	372.78	31.58	341.20
MW-4	09/28/2006	11,000	<250	<250	<250	<250	---	13,000	<10,000	---	---	---	372.78	31.57	341.21
MW-4	11/14/2006	30,000	<250	<250	<250	<250 a	---	14,000	<10,000	<250	<250	<250	372.78	32.11	340.67
MW-4	02/01/2007	6,300	50	<5.0	19	120	---	14,000	---	---	---	---	372.78	33.23	339.55
MW-4	06/01/2007	8,200 j	52	<25	26	150	---	11,000	---	---	---	---	372.78	31.57	341.21
MW-4	08/22/2007	---	---	---	---	---	---	---	---	---	---	---	372.78	33.40	339.38
MW-4	11/26/2007	12,000 j	71	<100	<100	<100	---	20,000	<1,000	<200	<200	<200	372.78	34.74	338.04
MW-4	02/19/2008	13,000 j	<100	<200	<200	<200	---	18,000	2,900	---	---	---	372.78	29.70	343.08
MW-4	05/23/2008	21,000	<100	<200	<200	<200	---	16,000	<2,000	---	---	---	372.78	31.67	341.11
MW-4	08/07/2008	27,000	<100	<200	<200	<200	---	21,000	<2,000	---	---	---	372.78	31.90	340.88
MW-4	12/03/2008	20,000	19	<25	<25	29	---	21,000	2,500	---	---	---	372.78	34.32	338.46
MW-4	02/05/2009	15,000	200	<200	<200	<200	---	13,000	<2,000	---	---	---	372.78	34.58	338.20
MW-4	05/07/2009	18,000	<100	<200	<200	<200	---	17,000	<2,000	---	---	---	372.78	31.34	341.44
MW-4	08/20/2009	15,000	<50	<100	<100	<100	---	13,000	1,900	---	---	---	372.78	33.56	339.22
MW-4	11/09/2009	13,000	<50	<100	<100	<100	---	11,000	<1000	<200	<200	<200	372.78	33.57	339.21

TABLE 3

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*GW Elevation (ft MSL)*
MW-4	02/11/2010	11,000	95	<100	<100	110	---	7,500	3,200	---	---	---	372.78	31.21	341.57
MW-4	05/13/2010	8,800	48	<50	57	96	---	7,800	2,900	---	---	---	372.78	30.19	342.59
MW-4	08/05/2010	4,000	<12	<25	<25	<25	---	3,600	600	---	---	---	372.78	32.22	340.56
MW-4	10/30/2010	6,800	<12	<25	<25	<25	---	8,200	1,400	<50	<50	<50	372.78	33.95	338.83
MW-4	02/09/2011	<5,000	<50	<50	<50	<100	---	5,800	2,700	---	---	---	372.78	31.56	341.22
MW-4	**05/31/2011**	**<5,000**	**<50**	**<50**	**<50**	**<100**	**---**	**5,600**	**1,200**	**---**	**---**	**---**	**372.78**	**30.78**	**342.00**
TB-1	02/12/2003	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	---
TB-1	02/28/2003	---	---	---	---	---	---	---	---	---	---	---	---	12.54	---
TB-1	05/14/2003	<50	<0.50	<0.50	<0.50	<1.0	---	<5.0	---	---	---	---	---	12.31	---
TB-2	02/12/2003	Well inaccessible		---	---	---	---	---	---	---	---	---	---	---	---
TB-2	02/28/2003	---	---	---	---	---	---	---	---	---	---	---	---	12.56	---
TB-2	05/14/2003	Insufficient water		---	---	---	---	---	---	---	---	---	---	12.54	---
TB-3	02/12/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-3	02/28/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-3	05/14/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-4	02/12/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-4	02/28/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---
TB-4	05/14/2003	Well dry	---	---	---	---	---	---	---	---	---	---	---	---	---

Notes:
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8260B
MTBE = Methyl tertiary-butyl ether analyzed as noted
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
DIPE = Di-isopropyl ether analyzed by EPA Method 8260B
ETBE = Ethyl tertiary-butyl ether analyzed by EPA Method 8260B
TAME = Tertiary-amyl methyl ether analyzed by EPA Method 8260B

TABLE 3

GROUNDWATER DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Well ID	*Date*	*TPHg (µg/L)*	*B (µg/L)*	*T (µg/L)*	*E (µg/L)*	*X (µg/L)*	*MTBE 8020 (µg/L)*	*MTBE 8260 (µg/L)*	*TBA (µg/L)*	*DIPE (µg/L)*	*ETBE (µg/L)*	*TAME (µg/L)*	*TOC (ft MSL)*	*Depth to Water (ft TOC)*	*GW Elevation (ft MSL)*

TOC = Top of casing elevation, in feet relative to mean sea level
GW = Groundwater
µg/L = Micrograms per liter
ft = Feet
MSL = Mean sea level
<x = Not detected at reporting limit x
--- = Not analyzed or available

a = Sample was analyzed outside of the EPA recommended holding time.
b = Concentration is an estimate value above the linear quantitation range.
f = The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.
j = Analyzed by EPA Method 8015B (M).
k = The sample chromatographic pattern for TPH does not match the chromatographic pattern of the specified standard. Quantitation of the unknown hydrocarbon(s) in the sample was based upon the specified standard.
l = Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.

Well MW-1 surveyed on May 4, 1999 by Virgil Chavez Land Surveying of Vallejo, CA.
Site wells surveyed on March 19, 2000 by Virgil Chavez Land Surveying of Vallejo, CA.
Site wells surveyed on January 15, 2002 by Virgil Chavez Land Surveying of Vallejo, CA.
September 21, 2006 survey data for wells MW-1B and MW-4 provided by Delta Environmental Consultants, Inc. of San Jose, CA.

TABLE 4

HISTORICAL GRAB GROUNDWATER ANALYTICAL DATA
SHELL-BRANDED SERVICE STATION
4212 FIRST STREET, PLEASANTON, CALIFORNIA

Sample ID	*Date*	*Depth (fbg)*	*TPHg*	*Benzene*	*Toluene*	*Ethyl-benzene*	*Total Xylenes*	*MTBE*	*TBA*
SB-6 (MW-1)	4/9/1999	NA	**10,000**	**4,500**	<50	<50	**140**	**250**	---
SB-7	4/8/1999	NA	**750**	**20**	<0.50	3.4	2.9	<2.5	---
CPT-2d72-78	9/29/2006	74-78	<50[a]	0.99[a]	<0.50[a]	<0.50[a]	<0.50[a]	**15**[a]	**27**[a]
CPT-2d92-98	9/29/2006	94-98	<50	<0.50	<0.50	<0.50	<0.50	**47**	<20
CPT-3@57'	8/15/2006	53-57	**700**	<0.50	<0.50	0.78	2.1	**79**	**2,000**
Groundwater (≤10 fbg) ESL[b]*:*		NA	100	1.0	40	30	20	5.0	12

Notes:

All results in micrograms per liter (µg/l) unless otherwise indicated.
TPHg = Total petroleum hydrocarbons as gasoline analyzed by EPA Method 8260B; before August 15, 2006, analyzed by EPA Method 8015B
Benzene, toluene, ethylbenzene, and xylenes analyzed by EPA Method 8260B; before August 15, 2006, analyzed by EPA Method 8020
MTBE = Methyl tertiary-butyl ether analyzed by EPA Method 8260B; before August 15, 2006, analyzed by EPA Method 8020
TBA = Tertiary-butyl alcohol analyzed by EPA Method 8260B
fbg = Feet below grade
<x = Not detected at reporting limit x
--- = Not analyzed
ESL = Environmental screening level
Results in **bold** equal or exceed applicable ESL
NA = Not available or no applicable ESL

a = Analyzed beyond the recommended EPA holding time
b = San Francisco Bay Regional Water Quality Control Board Environmental Screening Level for groundwater where groundwater is a potential source of drinking water (Tables A and C of *Screening for Environmental Concerns at Sites With Contaminated Soil and Groundwater*, California Regional Water Quality Control Board, Interim Final - November 2007 [Revised May 2008]).

APPENDIX A

SITE HISTORY

SITE HISTORY

1985 Subsurface Investigation: In September 1985, Emcon Associates (Emcon) drilled one soil boring (S-A) adjacent to the waste oil underground storage tank (UST), and drilled three soil borings (S-B through S-D) and installed one groundwater monitoring well (S-1) adjacent to the gasoline USTs. Soil samples contained up to 1,300 milligrams per kilogram (mg/kg) total petroleum hydrocarbons as gasoline (TPHg), 9.6 mg/kg toluene, and 260 mg/kg xylenes and ethylbenzene. Benzene was not detected in the soil samples. The monitoring well was dry. Emcon's November 12, 1985 letter presents investigation details.

1986 Subsurface Investigation: In March 1986, one soil boring (S-E) was drilled adjacent to product lines. No TPHg, benzene, toluene, ethylbenzene, or xylenes (BTEX) were detected in soil samples.

1986 *UST Removal:* In May 1986, Blaine Tech Services (Blaine) collected soil samples following removal of four gasoline USTs and one waste oil UST. Soil samples from the gasoline UST excavation contained up to 240 mg/kg TPHg. Hydrocarbons were not detected in a soil sample collected from the waste oil tank excavation. Three 10,000-gallon, double-walled, fiberglass tanks were installed at a location closer to the dispenser islands.

1988 Gasoline Spill: In August 1988, approximately 40 gallons of gasoline were spilled in the area of the pump islands. Impacted soil was removed to a depth of 1 to 2 feet below grade (fbg).

1990 Subsurface Investigations: In March 1990, Hart Crowser, Inc. (Hart) drilled three soil borings (SB-1 through SB-3) and destroyed one groundwater monitoring well (S-1). Following the well destruction, Hart continued drilling a boring (WA-1) below the depth of the monitoring well. Soil samples contained up to 380 mg/kg TPHg, 2.2 mg/kg benzene, 2.7 mg/kg toluene, 5.3 mg/kg ethylbenzene, and 32 mg/kg xylenes. Hart's April 23, 1990 *Report of Supplemental Site Assessment* provides details of this investigation.

In July 1990, Hart drilled two additional soil borings (SB-4 and SB-5) down gradient from the former UST complex. Soil samples contained up to 820 mg/kg TPHg, 65 mg/kg benzene, 3.7 mg/kg toluene, 6.5 mg/kg ethylbenzene, and 65 mg/kg xylenes (SB-5 at 35 fbg). Hart's December 11, 1990 *Supplemental Site Assessment* presents the soil boring investigation details.

1995 Dispenser and Piping Replacement: In September 1995, Paradiso Mechanical of San Leandro, California removed the product lines and replaced the dispensers and piping. Weiss Associates (Weiss) collected soil samples from beneath the gasoline product piping (PT-1 and PT-2) and dispensers (DP-1 through DP-4). Soil samples contained up to 120 mg/kg TPHg, 0.038 mg/kg ethylbenzene, and 0.19 mg/kg xylenes. Benzene and toluene were not detected in the soil samples. Approximately 40 cubic yards of soil were over-excavated at the direction of the Pleasanton Fire Department. Weiss' December 21, 1995 *Dispenser Replacement Sampling* report presents soil sampling locations and results.

1998 Facility Upgrade: In July 1998, Cambria Environmental Technology, Inc. (Cambria) inspected the waste oil tank remote-fill piping during its removal by Gettler-Ryan of Dublin, California. No hydrocarbon impact was observed during the site visit, and, therefore, no sampling was required. A pea gravel sample contained 27 mg/kg total petroleum hydrocarbons as diesel (TPHd). Cambria's September 2, 1998 *1998 Upgrade Site Inspection Report* provides inspection details.

1999 Subsurface Investigation: In April 1999, Cambria drilled two soil borings (SB-6 and SB-7) and converted SB-6 to monitoring well MW-1. Soil samples contained up to 83 mg/kg TPHg, 0.10 mg/kg benzene, 0.37 mg/kg toluene, 0.26 mg/kg ethylbenzene, and 0.26 mg/kg xylenes. Methyl tertiary-butyl ether (MTBE) was not detected in soil samples. Grab groundwater samples contained up to 10,000 micrograms per liter (µg/l) TPHg, 4,500 µg/l benzene, 3.4 µg/l ethylbenzene, and 2.9 µg/l xylenes. Toluene and MTBE were not detected in the grab groundwater samples. Cambria's August 12, 1999 *Subsurface Investigation Report* presents investigation details.

2000 Subsurface Investigation: In January 2000, Cambria installed two wells (MW-2 and MW-3) to determine whether groundwater had been impacted by petroleum hydrocarbons. No petroleum hydrocarbons or MTBE were detected in soil samples. Cambria's June 23, 2000 *Subsurface Investigation Report* presents well installation details.

2004 Well Survey: In May 2004, Toxichem Management Systems, Inc. (Toxichem) conducted a well survey, which identified a municipal well (3S/1E-21B1) and a well of unknown use (3S/1E-21B) approximately 900 feet northeast of the site and another municipal well (3S/1E-16P1) approximately 1,200 feet north of the site. The locations of the wells could not be field verified.

2005 UST Upgrades: In January 2005, Town and Country Contractors, Inc. (T & C) upgraded the gasoline USTs.

2005 Tank Backfill Well Destructions: In January 2005, T & C destroyed four tank backfill wells (TB-1 through TB-4).

2005 Waste Oil UST Investigation: In January 2005, an unknown liquid was likely poured into a port on the waste oil UST which led directly into the pea gravel surrounding the UST. Based on this observation, Shell submitted a UST Unauthorized Release (Leak)/Site Contamination Report on January 19, 2005. Able Maintenance (Able) and Service Station Systems sealed the UST port with epoxy and excavated pea gravel around the UST. Toxichem collected pea gravel samples which contained 1.4 mg/kg TPHg, 1,400 mg/kg TPHd, and 10,000 mg/kg total petroleum hydrocarbons as oil and grease. In June 2005, Delta Consultants (Delta) drilled one soil boring (WO-1) adjacent to the waste oil UST to determine if the liquid poured into the pea gravel had impacted soils. Petroleum hydrocarbons were not detected in the soil samples. Delta's July 11, 2005 *Soil and Water Investigation Report* provides investigation details.

2005 Receptor Survey: In September 2005, Delta conducted a well survey which located an old water tower in the area of the wells identified in Toxichem's 2004 well survey and identified a water supply well (3S/1E-21C1) and an irrigation well (3S/1E-21C4) approximately 1,000 feet northwest of the site and another irrigation well in Kottinger Park, approximately 800 feet east of the site. Delta identified the nearest surface water as Arroyo del Valle Creek located approximately 1,130 feet northwest of the site.

2006 Waste Oil UST Removal: In July 2006, Wayne Perry Inc. removed a 550-gallon waste oil UST. Cambria collected a soil sample from the bottom of the UST excavation (WO-2) which contained 26 mg/kg oil and grease, 5.5 mg/kg TPHd, 0.021 mg/kg MTBE, 40.7 mg/kg chromium, 6.00 mg/kg lead, 46.9 mg/kg nickel, and 52.5 mg/kg zinc. Based on these concentrations, Shell submitted a UST Unauthorized Release (Leak)/Site Contamination Report on July 28, 2006. Cambria's September 21, 2006 *UST Removal Report* details the UST removal and sampling.

2006 Subsurface Investigation: In August and September 2006, Delta installed two monitoring wells (MW-1B and MW-4) and drilled two cone penetrometer test (CPT) borings (CPT-2 and CPT-3). Well MW-4 was installed in first-encountered groundwater, and well MW-1B was installed in a deeper water-bearing zone. Soil samples from well boring MW-4 contained up to 380 mg/kg TPHg, 1.2 mg/kg ethylbenzene, 1.6 mg/kg xylenes, and 0.59 mg/kg MTBE. TPHg, BTEX, MTBE, and tertiary-butyl alcohol (TBA) were not detected in soil samples from MW-1B, and benzene, toluene, and TBA were not detected in soil samples from MW-4. Grab groundwater samples from off-site CPT boring CPT-2 contained up to 0.99 µg/l

benzene, 47 µg/l MTBE, and 27 µg/l TBA. Grab groundwater samples from on-site CPT boring CPT-3 contained up to 700 µg/l TPHg, 0.78 µg/l ethylbenzene, 2.1 µg/l xylenes, 79 µg/l MTBE, and 2,000 µg/l TBA. Delta's October 31, 2006 *Soil and Groundwater Investigation Report* provides well installation and CPT investigation details.

2007 Subsurface Investigation: In March 2007, Delta drilled five soil borings (B-1 through B-5) in or near on-site source areas. Soil samples from the soil borings contained up to 710 mg/kg TPHg, 2.3 mg/kg ethylbenzene, 16 mg/kg xylenes, 0.78 mg/kg MTBE, and 0.80 mg/kg TBA. Delta's June 25, 2007 *Site Investigation and Interim Remediation Report* provides details of this investigation.

2007 Mobile Groundwater Extraction (GWE): From June through August 2007, Delta extracted approximately 4,226 gallons of groundwater from MW-4. Delta's June 25, 2007 *Site Investigation and Interim Remediation Report* and November 2, 2007 *Draft Corrective Action Plan (CAP)* provide remediation details.

2009 Dual-Phase Extraction (DPE) Pilot Test: In January 2009, Delta conducted a 5-day DPE pilot test on MW-4 and 4-hour DPE pilot tests on MW-1 and MW-2. Prior to conducting the DPE pilot tests, Delta conducted step drawdown tests in MW-1 and MW-4. Delta calculated hydraulic conductivities of 3.59×10^{-5} centimeters per second (cm/sec) in MW-1 at a pumping rate of 0.48 gallons per minute (gpm) and 3.17×10^{-5} cm/sec in MW-4 at a pumping rate of 0.40 gpm. Based on the results of the DPE pilot test, Delta calculated a theoretical radius of influence of 26 feet for soil vapor extraction and estimated that 286.3 pounds of hydrocarbons were removed from the vadose zone. An estimated 0.23 pounds of dissolved hydrocarbons were removed along with 2,748 gallons of groundwater. Delta concluded that while GWE results indicated it was likely not a viable remediation strategy, soil vapor extraction (SVE) could be a viable remediation alternative. Delta's February 12, 2009 *DPE Pilot Test Report* provides pilot test data.

2009 Dispenser Repairs: In January 2009, Able replaced the faulty pan beneath the south dispenser on the pump island closest to the station building. Delta collected a soil sample (Under Dispenser #1) from the dispenser excavation. No TPHg, TPHd, BTEX, fuel oxygenates, or lead scavengers were detected in the soil sample. Delta's March 6, 2009 *Dispenser Repair Report* presents details of the repair and soil sampling.

2010 Subsurface Investigation: In January 2010, Delta installed one observation well (OBS-1), one air sparging (AS) well (AS-1), and four SVE wells (SVE-1 through SVE-4). Delta's June 7, 2010 *2010 AS Pilot Test Report* provides well installation details.

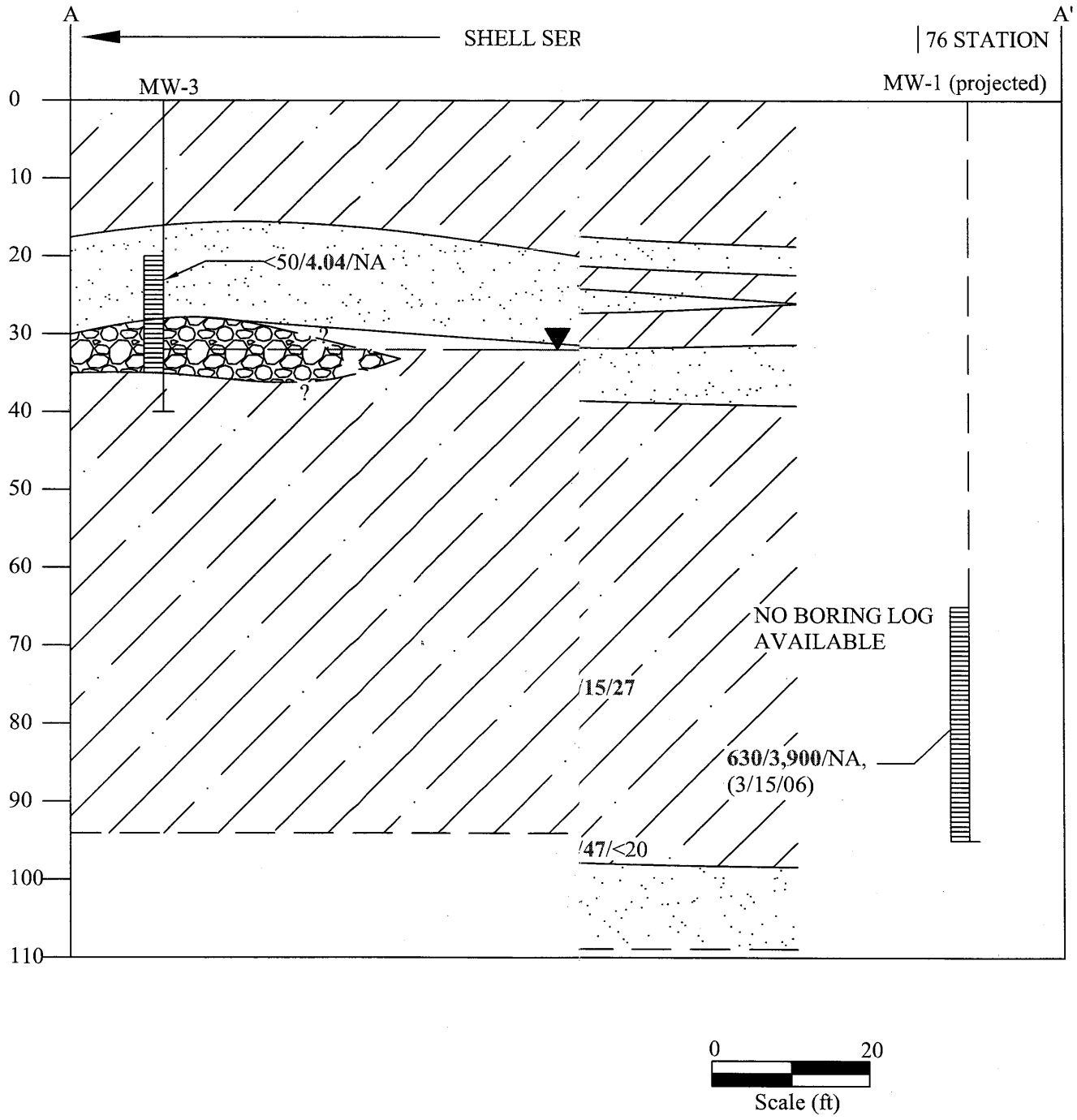
2010 AS Pilot Test: In January 2010, Delta conducted an AS pilot test using well AS-10. Delta calculated an air sparging radius of influence of 31 feet; however, CRA's subsequent analysis of the pilot test data determined that the test was flawed and therefore inconclusive. Delta's June 7, 2010 *2010 AS Pilot Test Report* details pilot testing results.

2011 Subsurface Investigation: In June 2011, CRA attempted to install two off-site wells across Vineyard Avenue from the site. CRA abandoned the well installation attempts because there were no other locations in the sidewalk where the wells could be installed safely due to the interference of underground utilities. CRA's July 28, 2011 letter provides investigation details.

Groundwater Monitoring Program: Groundwater monitoring and sampling began in June 1999. The depth to first-encountered groundwater typically ranges between 31 to 34 fbg. Groundwater flow is generally northwesterly.

APPENDIX B

CROSS SECTION AND BORING LOGS



MW-1 WELL/BORING IDENTIFICATION

SCREENED INTERVAL

(<50/21/<20) TPH-G/MTBE/TBA CONCENTRATIONS GROUNDWATER (µg/L), AUGUST 21, 2006

FIGURE 3
GEOLOGIC CROSS SECTION A-A'

SHELL SERVICE STATION
4212 FIRST ST.
PLEASANTON, CA

DRAWN BY	BH 10/19/06
PREPARED BY	HB
REVIEWED BY	

Delta Environmental Consultants, Inc.

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-60.01 BORING NO. S-A

PROJECT NAME Gettler-Ryan, Shell, 4226 First St., Pleasanton PAGE 1 OF 1

BY MGB DATE 9/27/85 SURFACE ELEV. 375'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
				0		ML / CL	ASPHALT and SAND - Fill GRAVELLY SILT - Fill; black (5Y, 2.5/2); 20% fine to coarse sand; 10% fine gravel; damp; no product odor.
				5			CLAY; light olive brown (2.5Y, 5/6); silty; 10% fine to medium sand; stiff; damp; no product odor.
	4.4	88			(1)		@7': no sand; hard; no product odor.
				10			@10': 20% fine gravel; no product odor.
	1.5	21		15	(2)		@14': 15-20% fine to medium sand; trace fine gravel; stiff; moist; no product odor.
	5	61		20	(3)		@18½': brownish yellow (10YR, 6/8); silty; hard; moist; no product odor. BOTTOM OF BORING AT 20 FEET.
				25			
				30			
				35			
				40			

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

EMCON ASSOCIATES

PLATE A

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-60.01 BORING NO. S-B

PROJECT NAME Gettler-Ryan, Shell, 4226 First St., Pleasanton PAGE 1 OF 1

BY MGB DATE 9/27/85 SURFACE ELEV. 373'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
				0			CONCRETE.
						SW	SAND - Fill; very dark gray (5Y, 3/1); fine to coarse grained; trace fine gravel; trace fines; loose; damp; strong gasoline odor.
		Push		5	1		
		2			2		@7': strong gasoline odor.
				10			
		64			3	GC	CLAYEY GRAVEL; olive gray (5Y, 5/2); to olive (5Y, 4/3); fine to coarse grained; 30% fines; 15% fine to coarse sand; very dense; damp; moderate gasoline odor.
	3.6	39		15	4	CL	CLAY; light olive brown (2.5Y, 5/6) to dark grayish brown (2.5Y, 4/2); 15% fine sand; trace coarse sand; very stiff; damp.; no gasoline odor.
	2.3	41		20	5		@19': olive gray (5Y, 4/2) to olive (5Y, 5/6); 20% fine to medium sand; no coarse sand; no gasoline odor.
			▽				@24': olive (5Y, 4/4); 25% fine to coarse sand; very plastic; soft; faint gasoline odor.
	0.4	50for 6"		25	6		BOTTOM OF BORING AT 24½ FEET.
				30			
				35			
				40			

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

EMCON ASSOCIATES

PLATE B

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-60.01 BORING NO. S-C

PROJECT NAME Gettler-Ryan, Shell, 4226 First St., Pleasanton PAGE 1 OF 1

BY MGB DATE 9/27/85 SURFACE ELEV. 373'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
				0		SW	CONCRETE.
		Push		5	1		SAND - Fill; very dark gray (5Y, 3/1); fine to coarse grained; trace fine gravel; trace fines; damp; strong gasoline odor.
		2			2		@7': loose; strong gasoline odor.
	4.3	30		10	3	CL	CLAY; olive (5Y, 5/6, 5/3); 20% fine to coarse sand; silty; hard; damp; no gasoline odor.
		50for 6"		15	4	GC	CLAYEY GRAVEL; olive (5Y, 5/6, 5/4); fine grained; 35% fine to coarse sand; 15% fines; very dense; damp; no gasoline odor.
	0.4	19		20	5	CL	CLAY; yellowish brown (10YR, 5/6, 5/8); 35% fine to coarse sand; silty; soft; moist; no gasoline odor.
		72		25	6	SW ML SC	SAND: olive (5Y, 4/3); fine to coarse grained; 10% fines; medium dense; moist; no gasoline odor.
		48			7		SANDY SILT; light olive brown (2.5Y, 5/6) 40% fine sand; very stiff; moist; no gasoline odor.
				30			CLAYEY SAND; olive brown (2.5Y, 4/4); fine to coarse grained; 40% clay; dense; moist; faint gasoline odor.
							BOTTOM OF BORING AT 28 FEET
				35			
				40			

REMARKS Drilled by 8-inch continuous flight, hollow-stem auger; samples collected with 2-inch California modified split-spoon sampler; borehole backfilled with concrete from 28 to 15 feet, soil cuttings to ½ foot; concrete to surface.

EMCON ASSOCIATES

PLATE C

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-60.01 BORING NO. S-D

PROJECT NAME Gettler-Ryan, Shell, 4226 First St., Pleasanton PAGE 1 OF 1

BY MGB DATE 9/27/85 SURFACE ELEV. 374'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
		Push		0		SW	CONCRETE.
				5	1		SAND - Fill; very dark gray (5Y, 3/1); fine to coarse grained; 15% fine gravel; trace fines; loose; damp; strong gasoline odor.
		2			2		@7': strong gasoline odor.
	4.25	37		10	3	CL	CLAY; olive yellow (5Y, 6/8) to olive (5Y, 4/3); 20% fine to coarse sand; silty; hard; damp; faint gasoline odor.
	5	44		15	4		@14': olive (5Y, 4/3); 35% fine to coarse sand; 10% fine gravel; faint gasoline odor.
	2.2	22		20	5		@19': olive (5Y, 4/3); to gray (5Y, 5/1); 20% fine to medium sand; slightly silty; very stiff; damp; faint gasoline odor.
	1.25	31			6	ML	SANDY SILT; olive (5Y, 4/4); 40% fine sand; slightly clayey; stiff; damp; faint gasoline odor.
				25			BOTTOM OF BORING AT 22½ FEET.
				30			
				35			
				40			

REMARKS Drilled by 8-inch continuous flight, hollow-stem auger; samples collected with 2-inch California modified split-spoon sampler; borehole backfilled with concrete from 22½ to 11½ feet, soil cuttings to ½ foot ; concrete to surface.

EMCON ASSOCIATES

PLATE D

LOG OF EXPLORATORY BORING

PROJECT NUMBER 738-60.01 BORING NO. S-1

PROJECT NAME Gettler-Ryan, Shell, 4226 First St., Pleasanton PAGE 1 OF 1

BY MGB DATE 9/27/85 SURFACE ELEV. 373'±

TORVANE (TSF)	POCKET PENETROMETER (TSF)	PENETRATION (Blows/Ft.)	GROUND WATER LEVELS	DEPTH IN FT.	SAMPLES	LITHOGRAPHIC COLUMN	DESCRIPTION
				0		SW SC	ASPHALT and GRAVEL - Fill SAND - Fill; very dark gray (5Y, 3/1); fine to coarse grained; 10% fine gravel; trace fines; damp; moderate gasoline odor.
				5			CLAYEY SAND; very dark gray (5Y, 3/1); fine to coarse grained; damp; moderate gasoline odor.
				10			
	4.25	34		15	1	CL	@12½': 10% fine gravel. CLAY; light olive brown (2.5Y, 5/6); 5% fine to coarse sand; silty; hard; damp; faint gasoline odor.
	3.6	28		20	2		@19': 20% fine to coarse sand; silty; very stiff; faint gasoline odor.
		57		25	3	GC	CLAYEY GRAVEL; olive (5Y, 5/4); fine grained; 35% fine to coarse sand; clayey; very dense; damp; no gasoline odor.
		60		30	4		@29': no gasoline odor.
				35			BOTTOM OF BORING AT 30½ FEET.
				40			

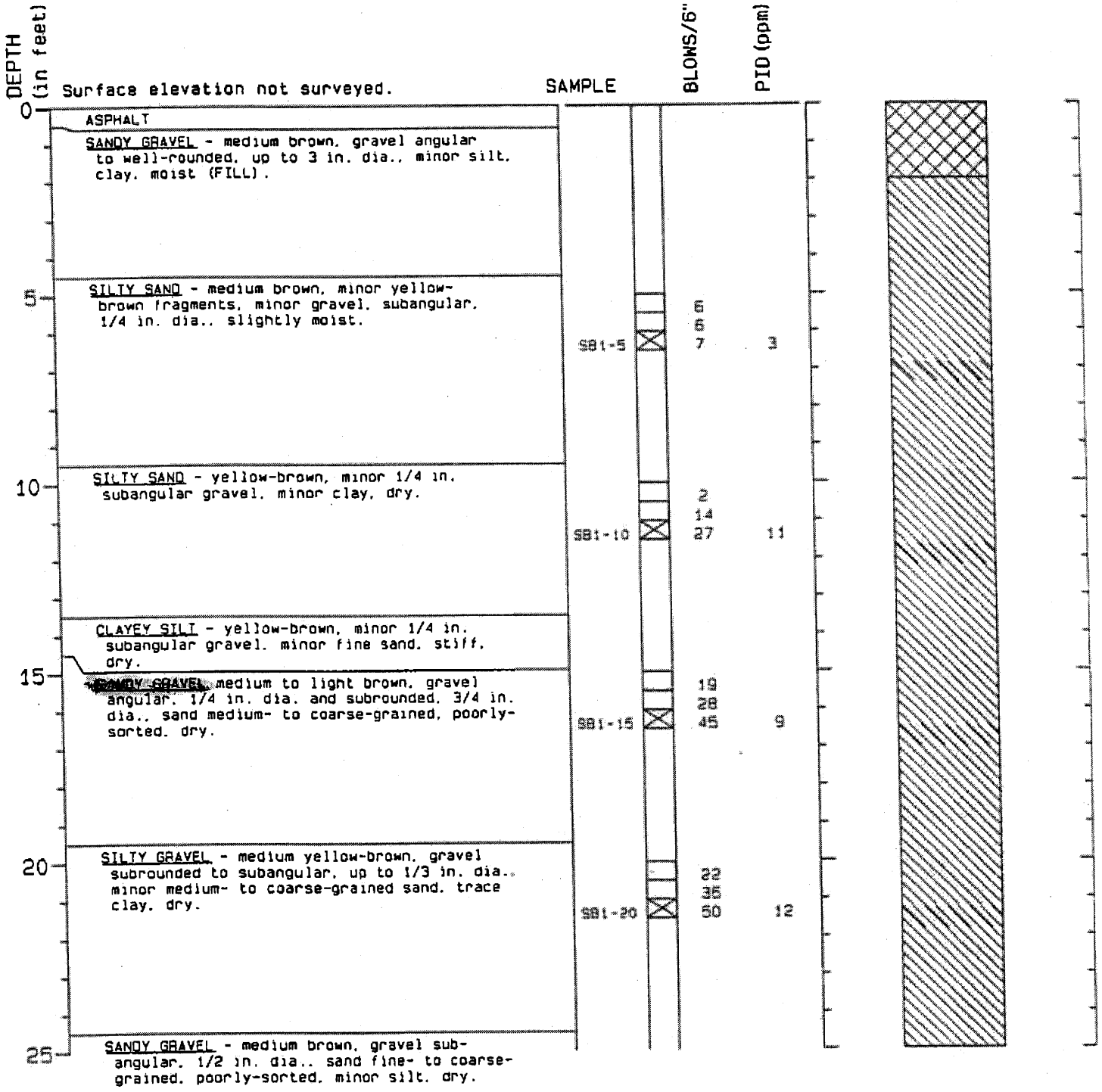
REMARKS Drilled by 8-inch continuous flight, hollow-stem auger; samples collected with 2-inch California modified split-spoon sampler; borehole converted to 3-inch monitoring well as detailed on Plate F.

EMCON ASSOCIATES

PLATE E

Boring Log SB-1

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil description and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

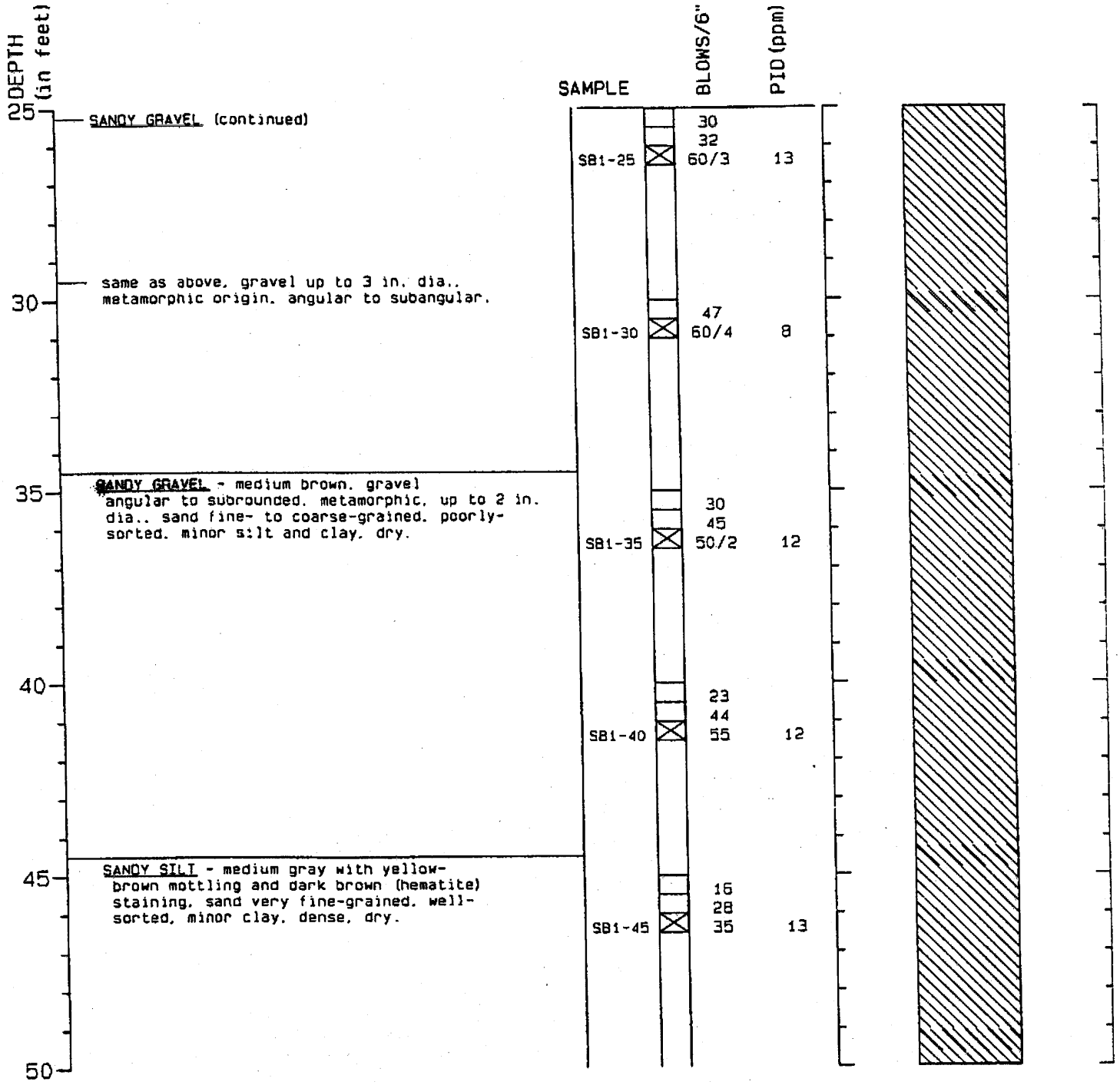
HARTCROWSER

J-6006 4/90

Figure A-2

Boring Log SB-1

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil description and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

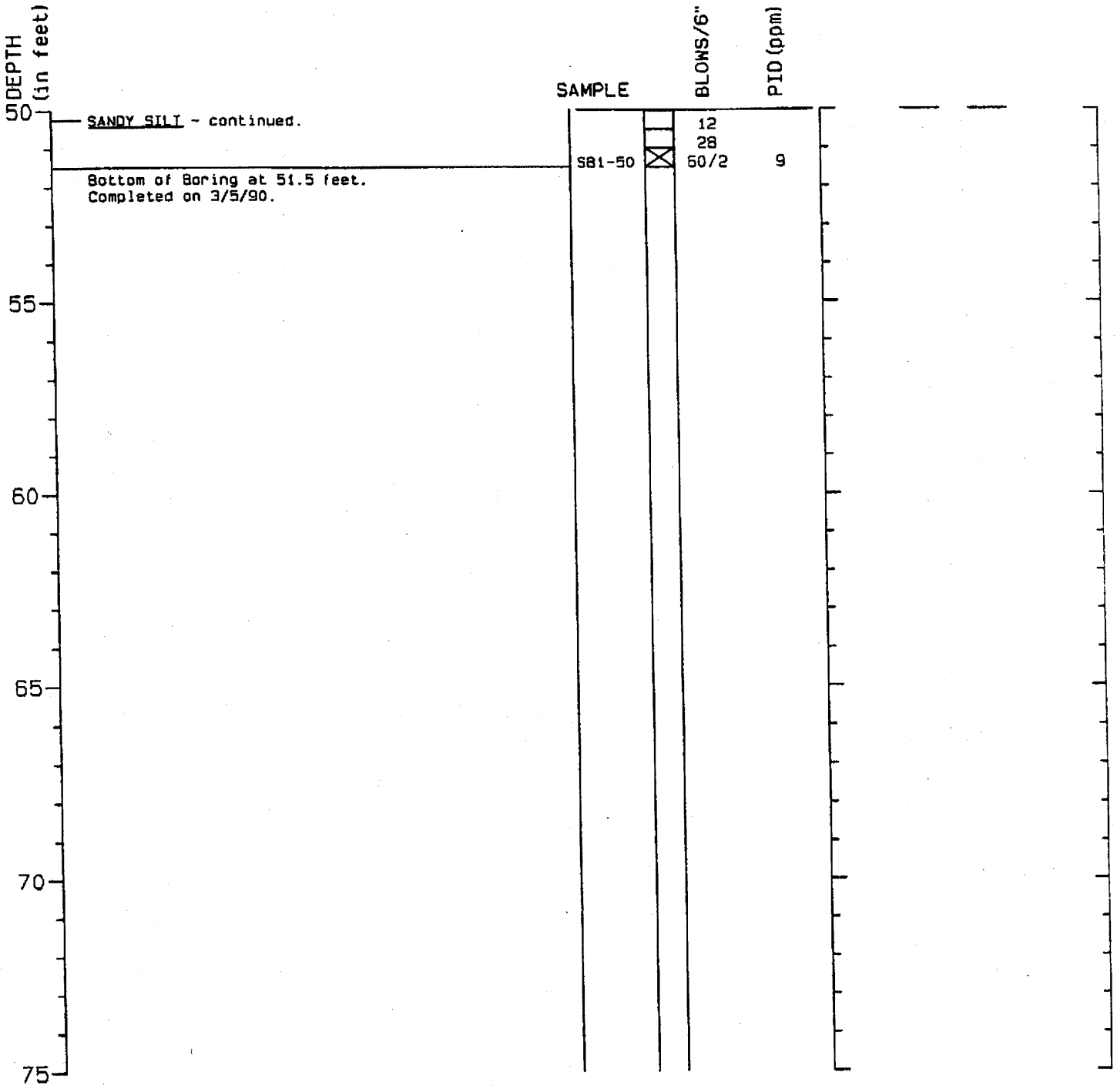
HARTCROWSER

J-6006 4/90

Figure A-2

Boring Log SB-1

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil description and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

HARTCROWSER

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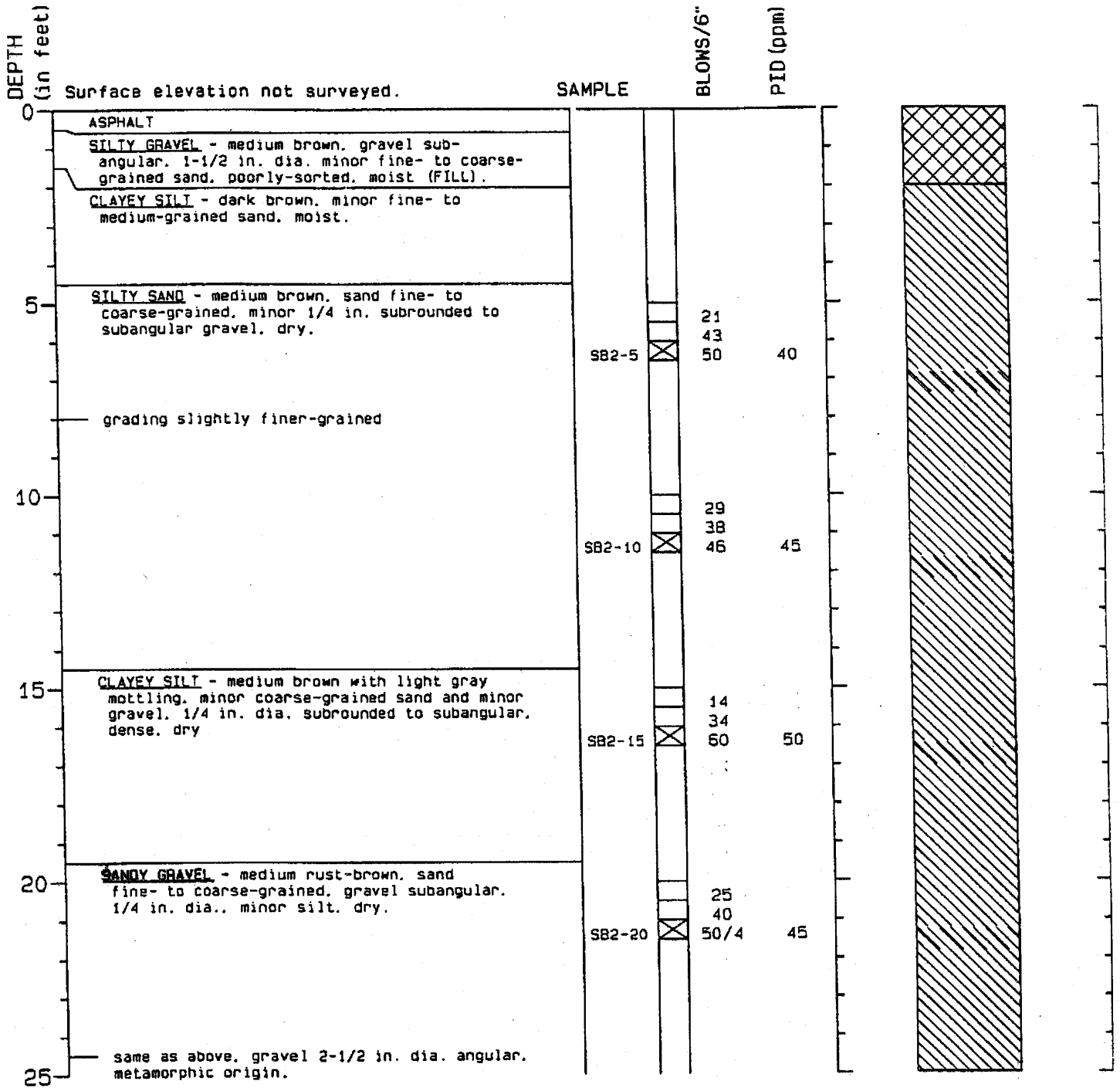
Figure A-2

Boring Log SB-2

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil description and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

HARTCROWSER

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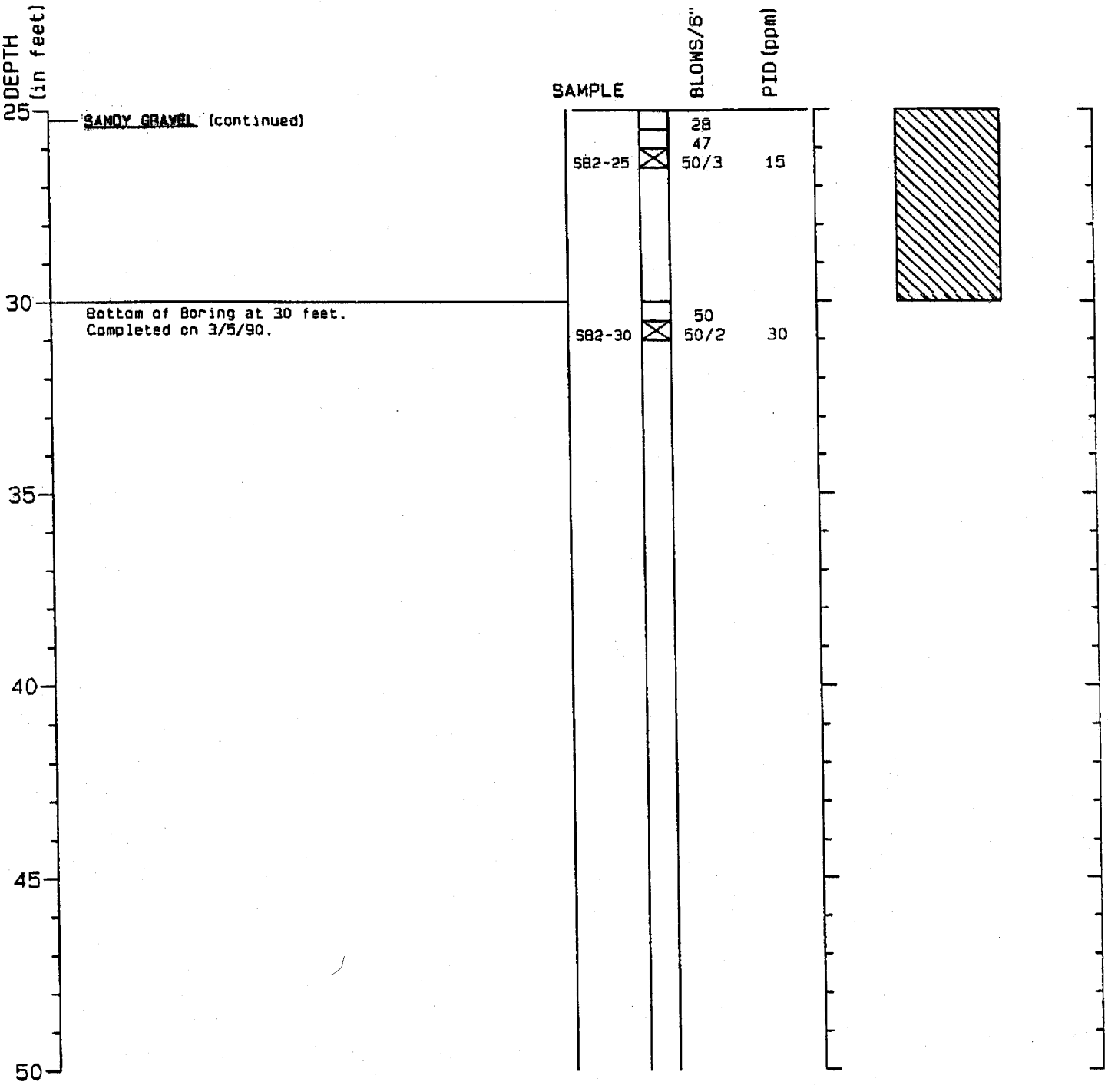
Figure A-3

Boring Log SB-2

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil description and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

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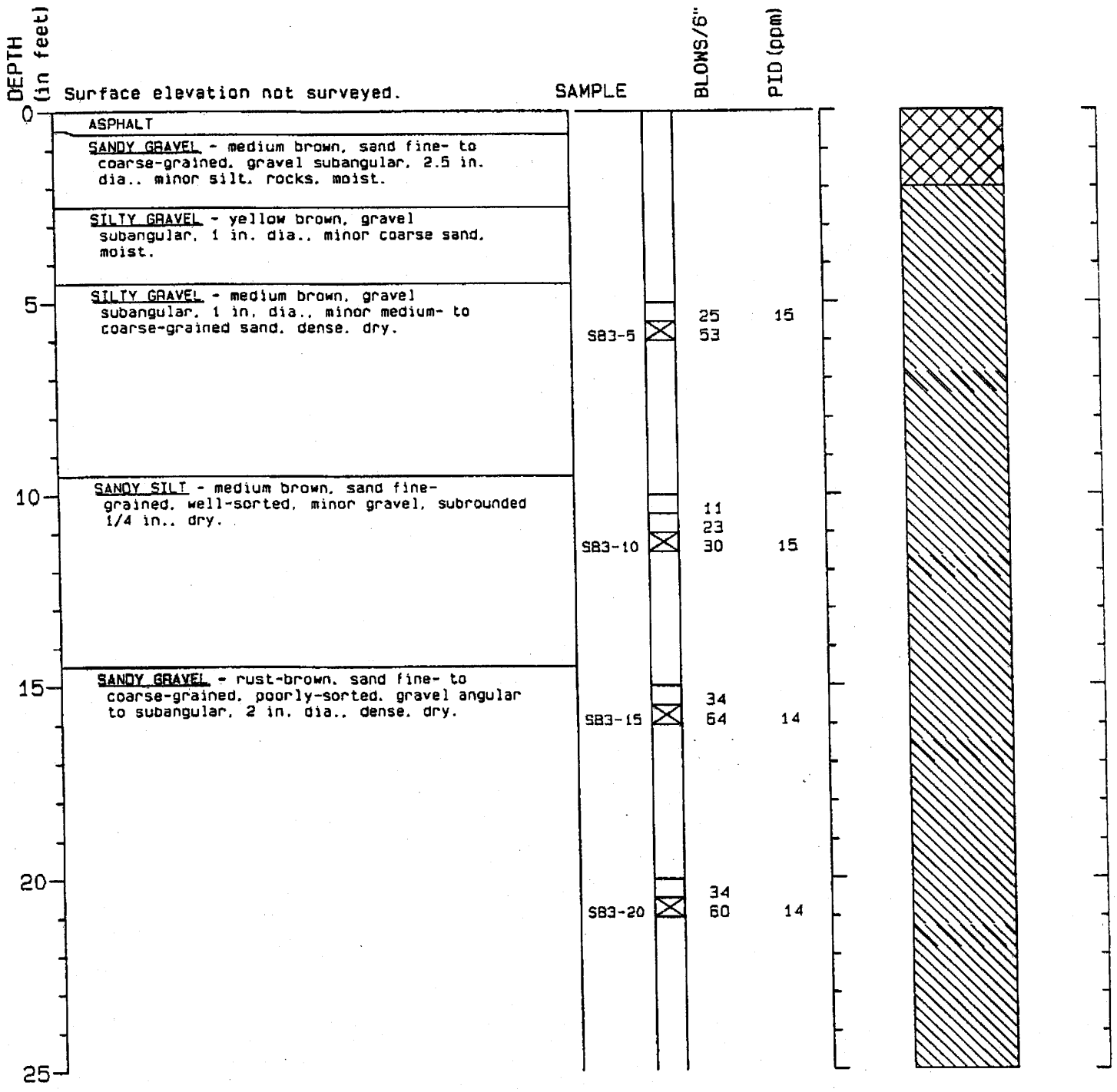
Figure A-3

Boring Log SB-3

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil description and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

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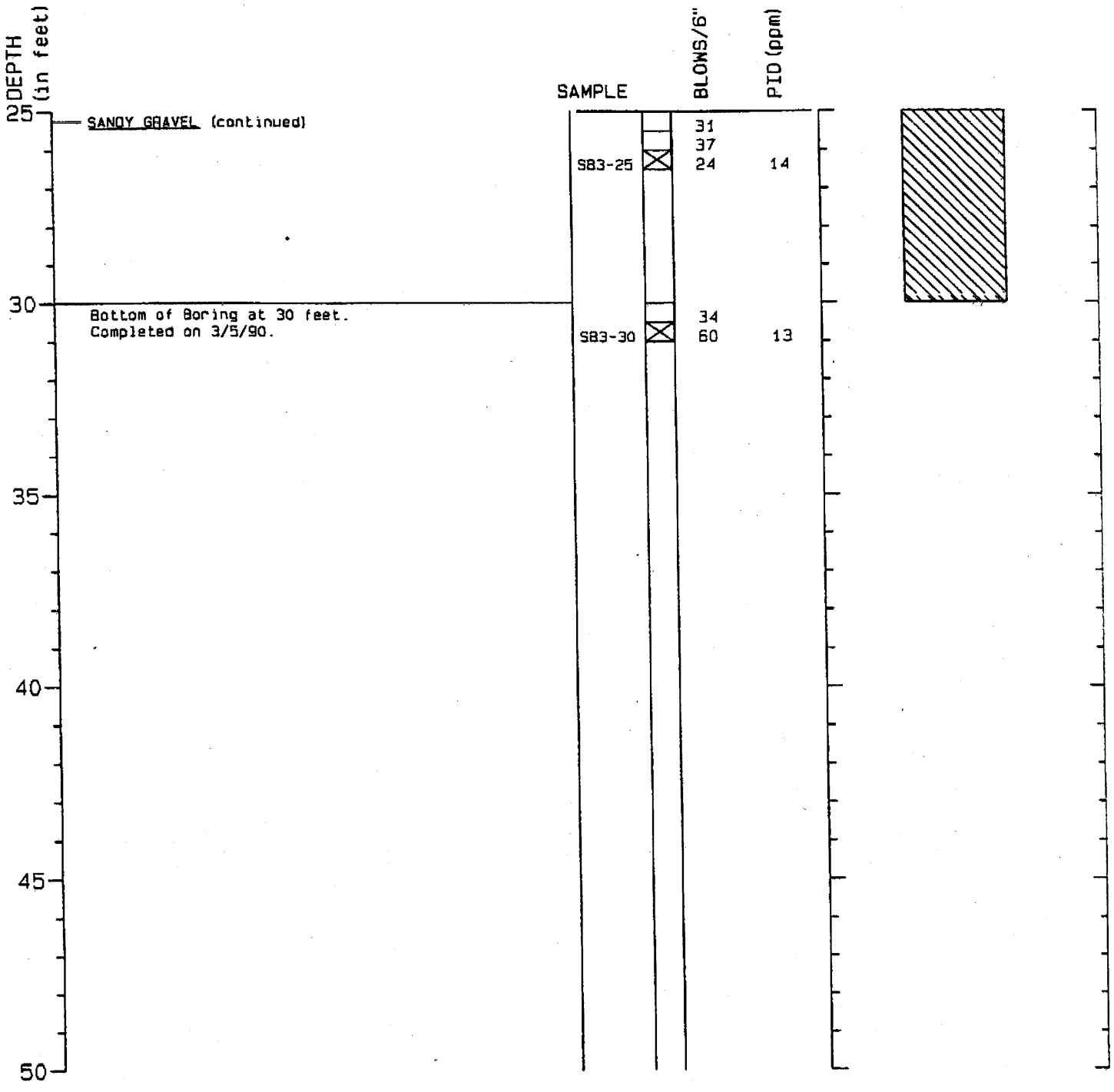
Figure A-4

Boring Log SB-3

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil description and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

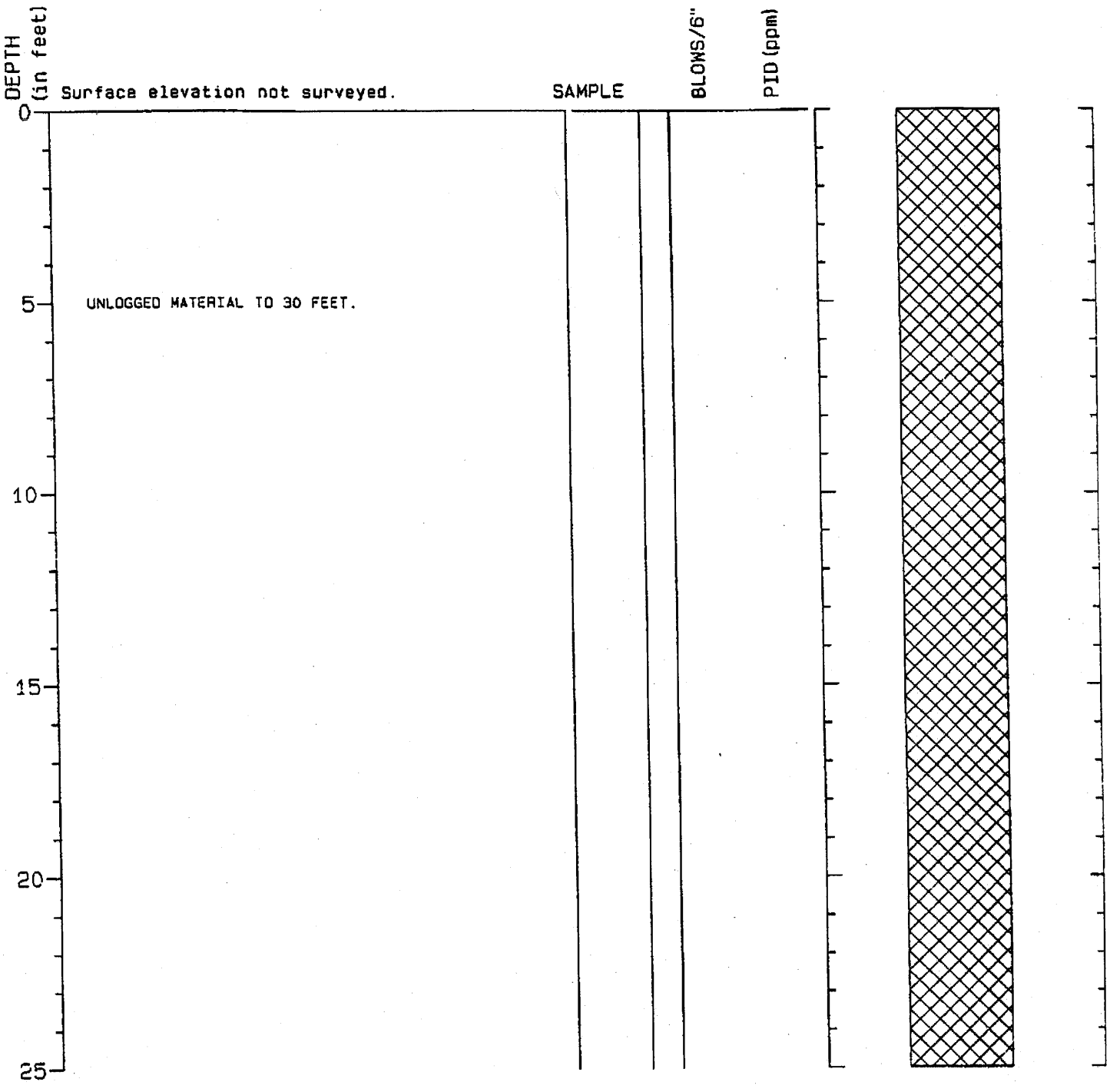
HARTCROWSER

J-6006 3/90

Figure A-4

Boring Log WA-1

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil description and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

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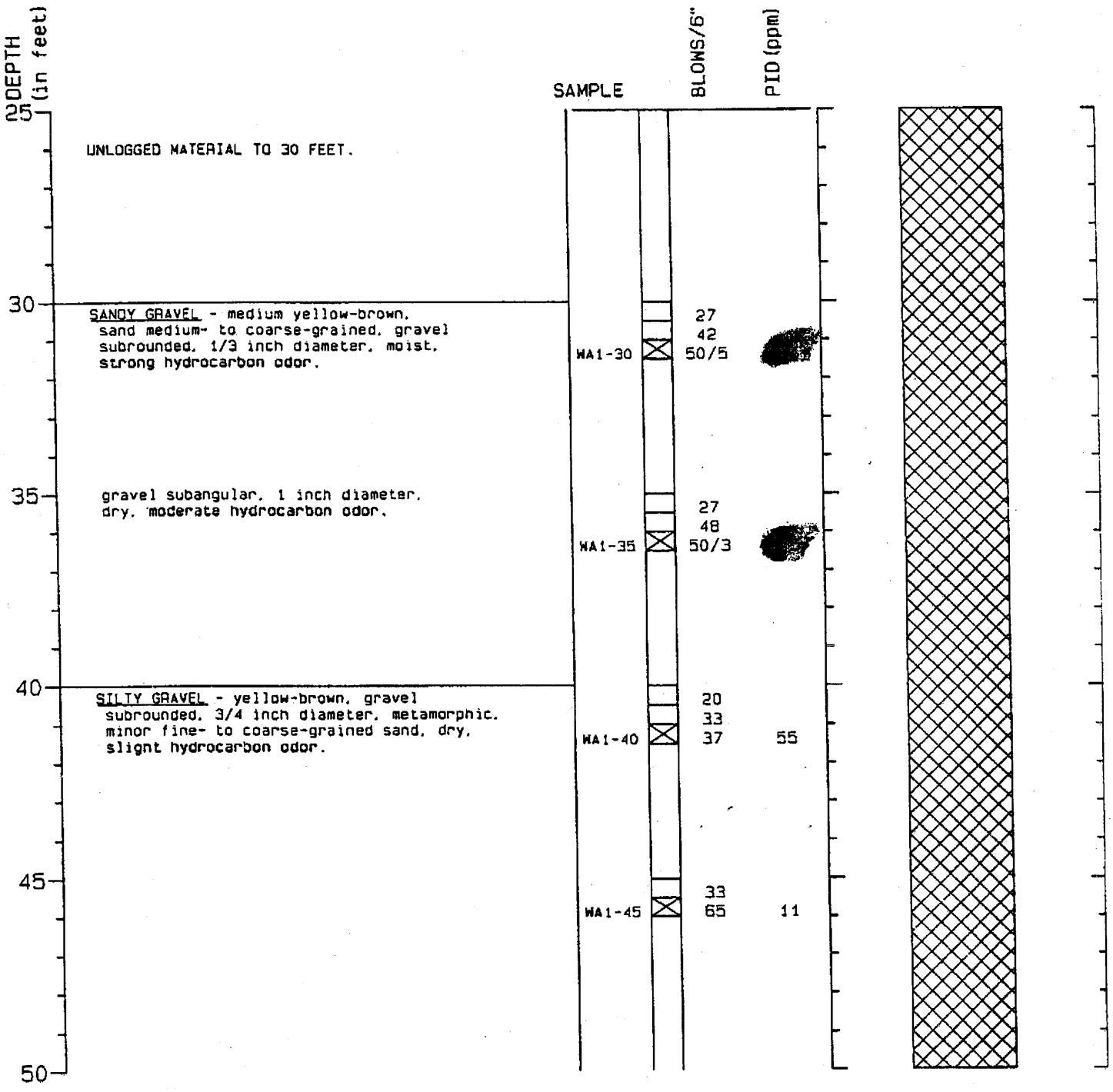
Figure A-5

Boring Log WA-1

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil description and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

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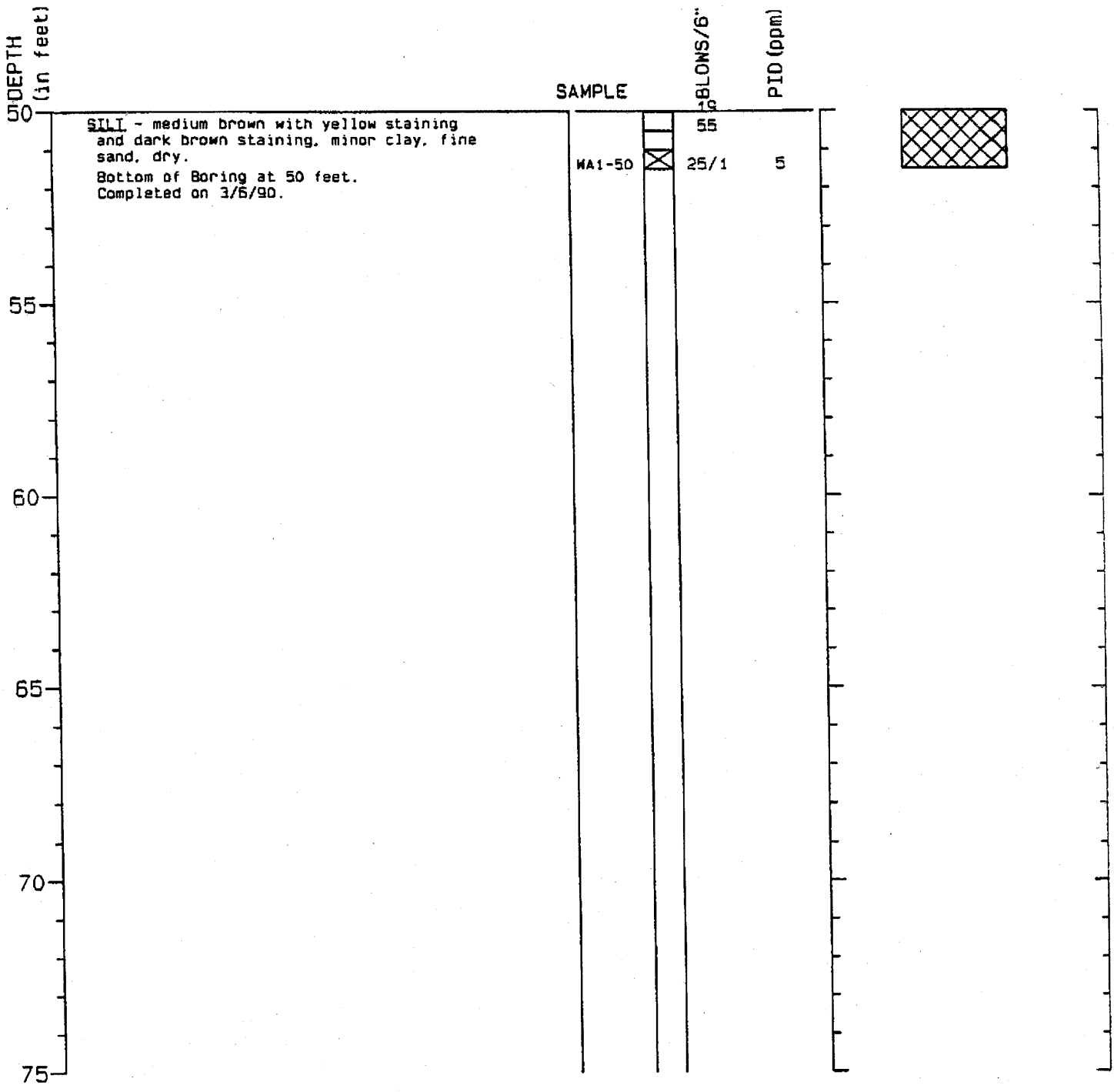
Figure A-5

Boring Log WA-1

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil description and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

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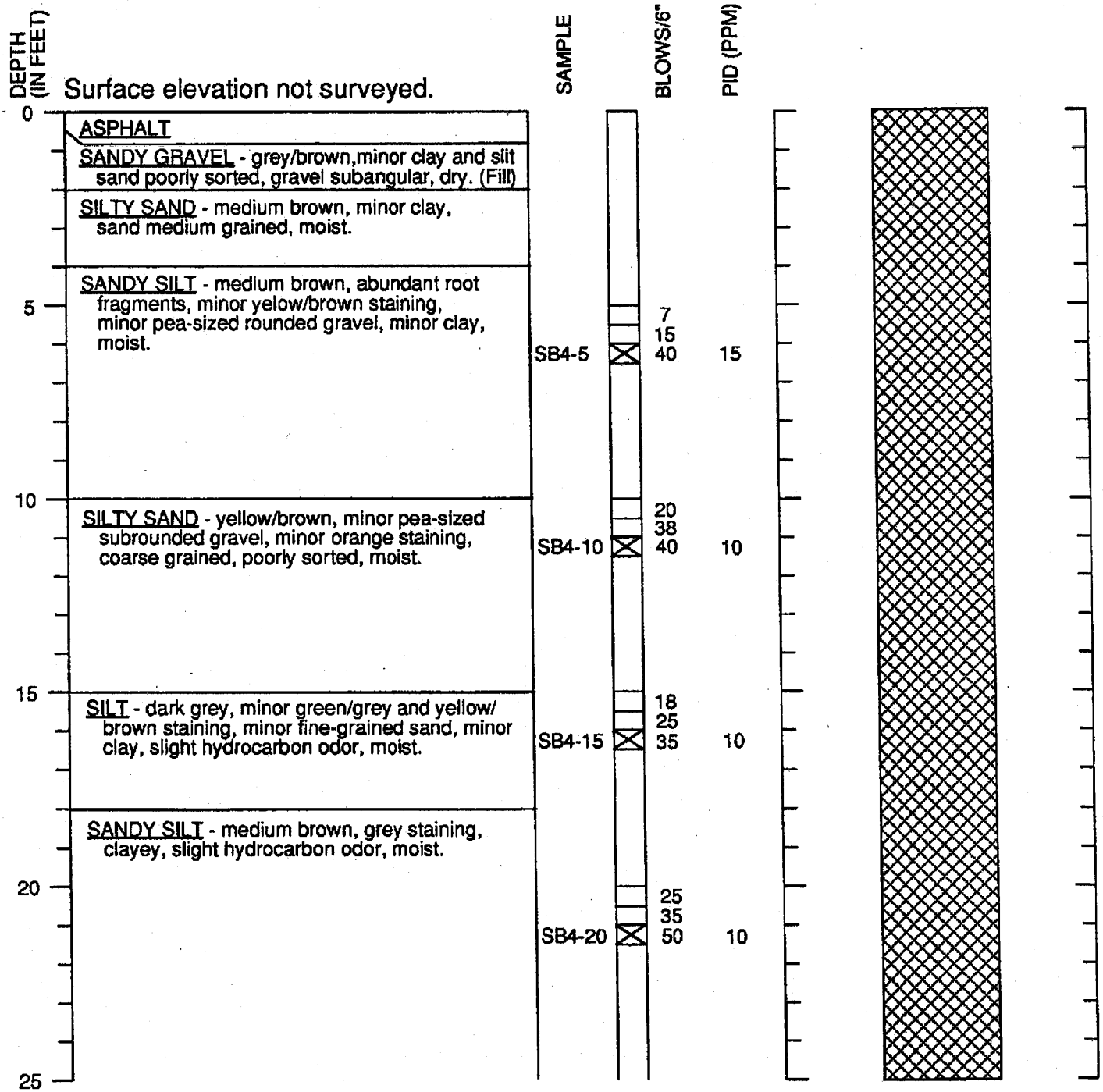
J-6006 4/90

Figure A-5

Boring Log SB-4

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

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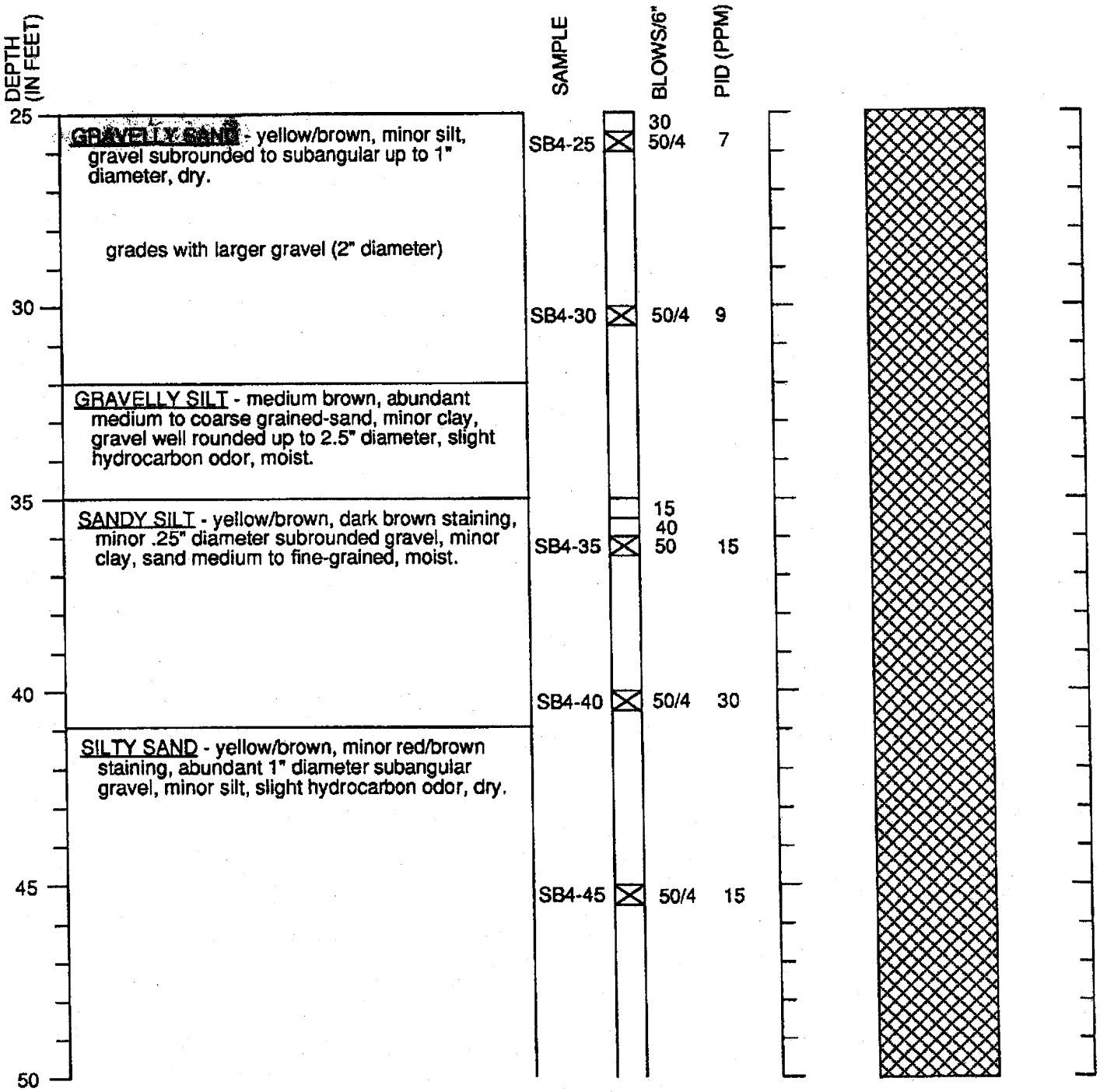
J-6006 *12/90*

Figure A-2

Boring Log SB-4

Geologic Log



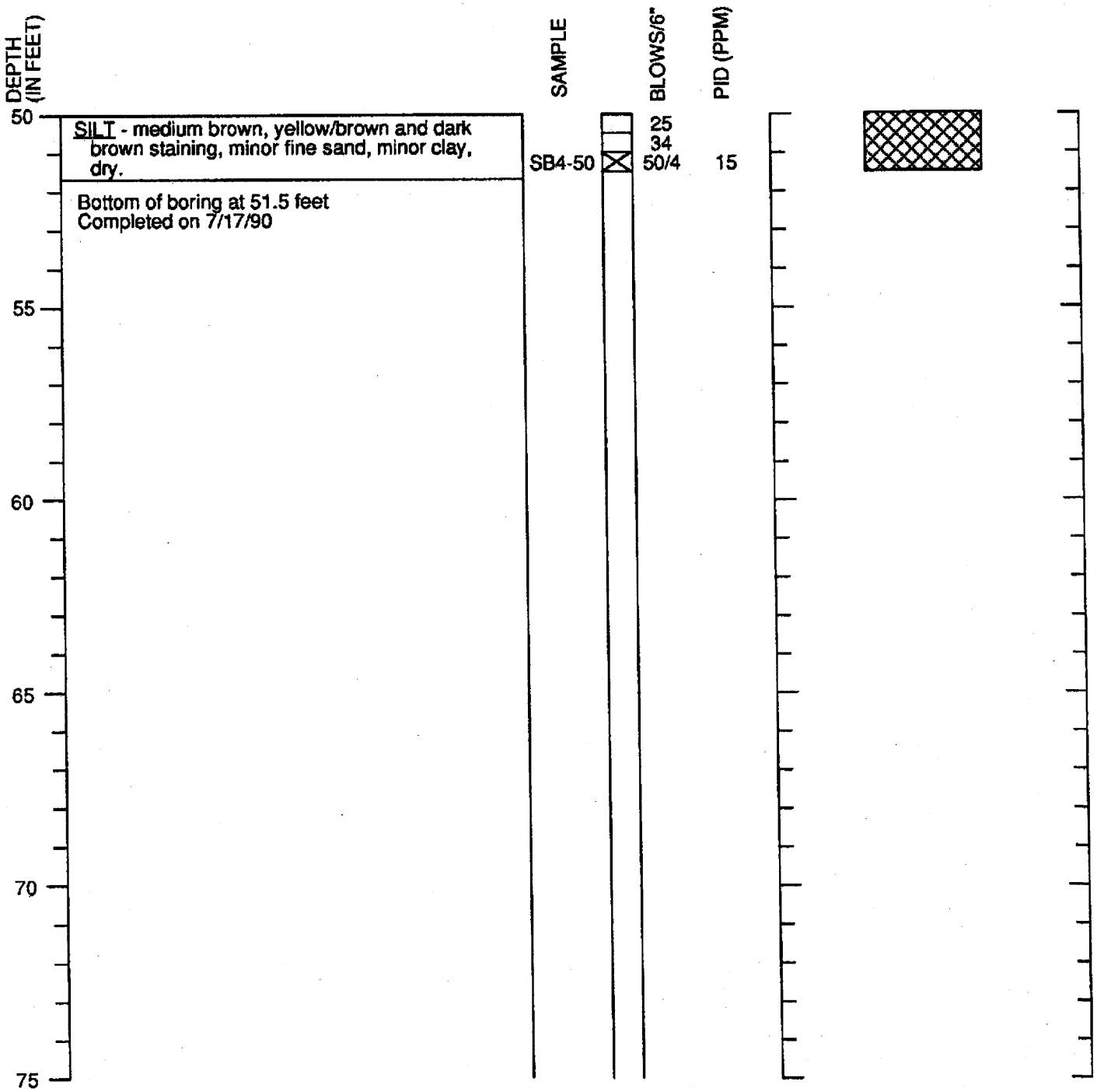
1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

HARTCROWSER

J-6006 12/90
Figure A-2
Page 2 of 3

Boring Log SB-4

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. No free water encountered.

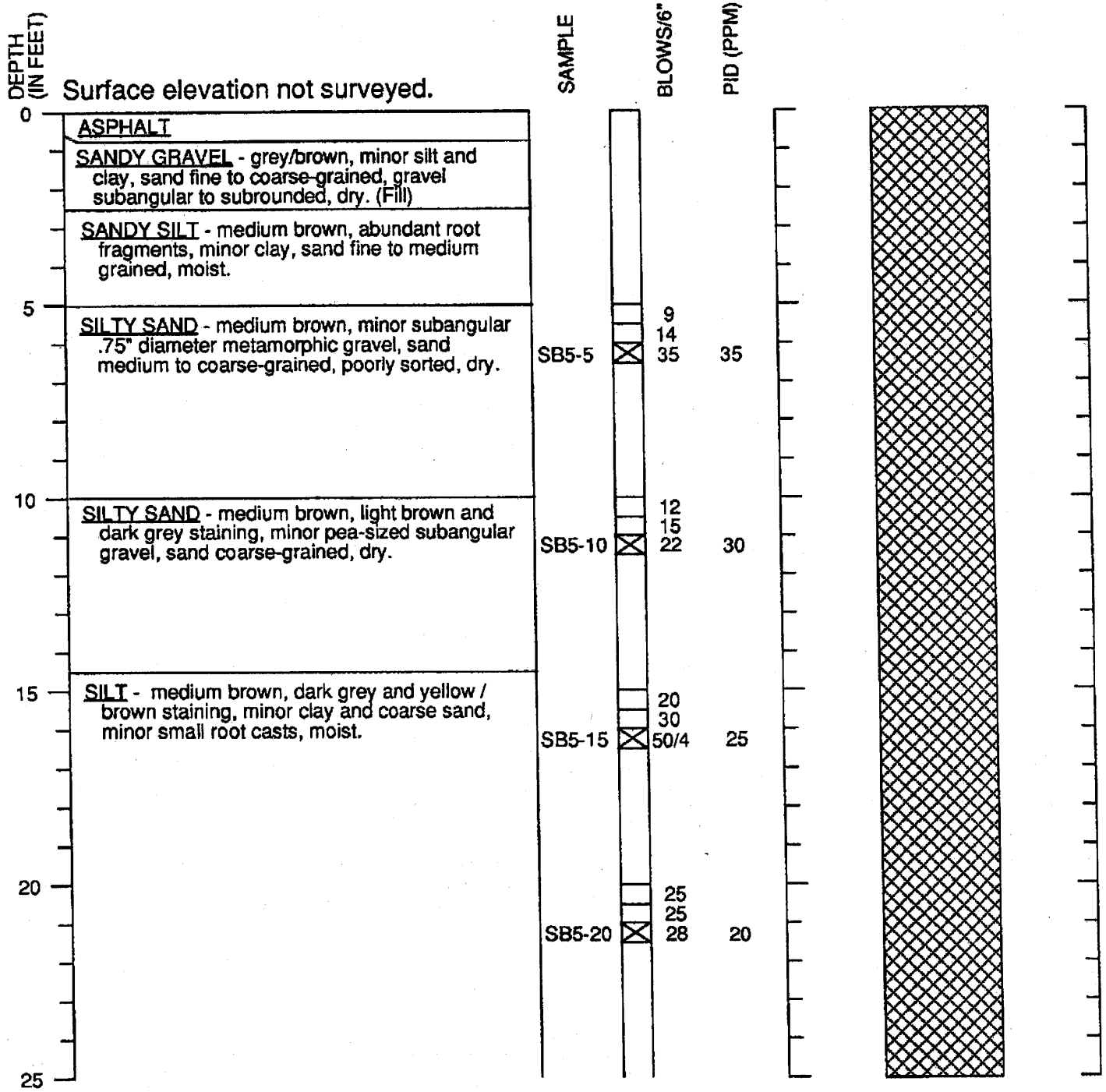
HARTCROWSER

J-6006 12/90
Figure A-2

Boring Log [redacted]

Geologic Log

Surface elevation not surveyed.



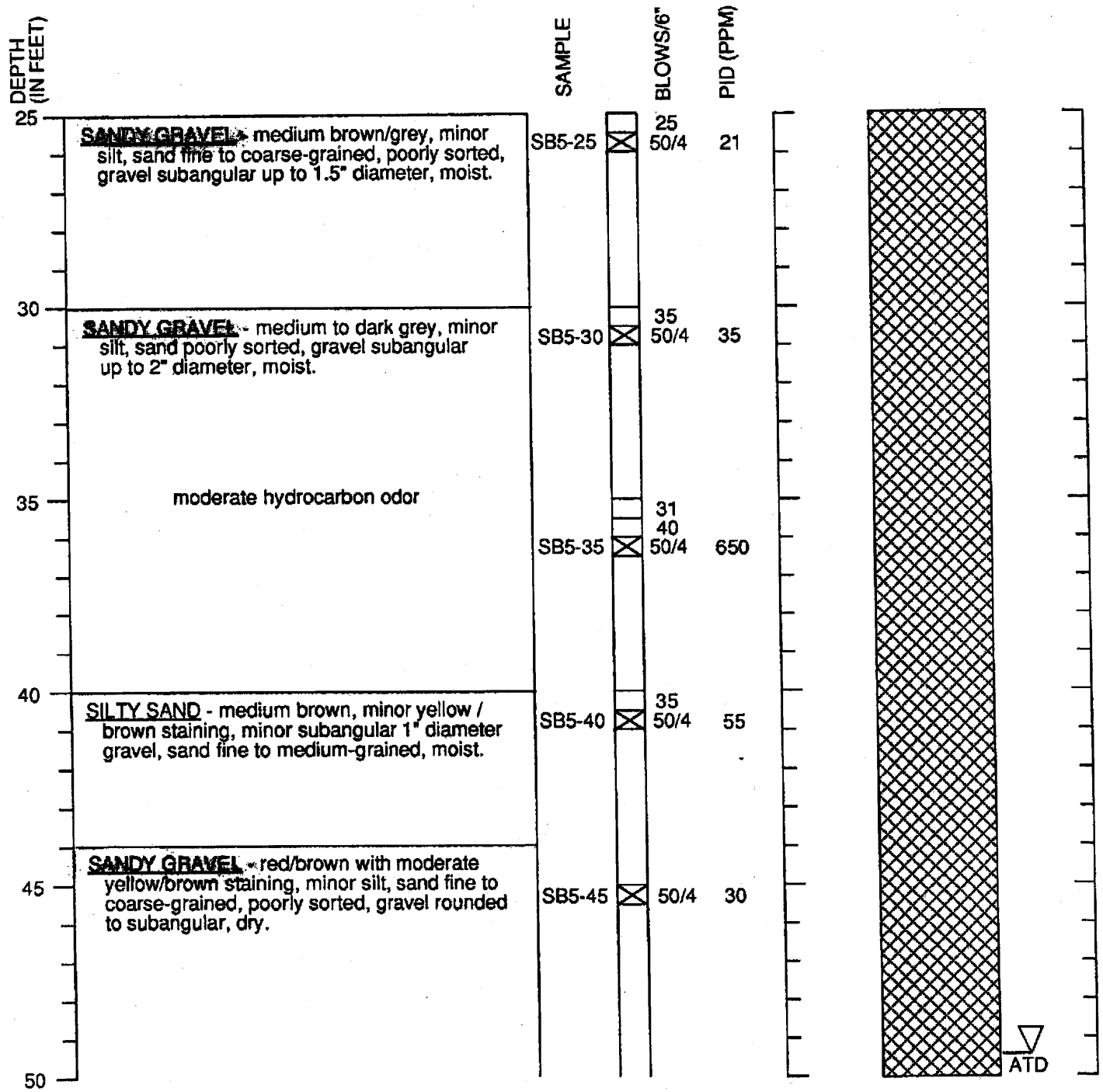
1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Perched water encountered at 49.5 feet BGS.

HARTCROWSER

J-6006 12/90
Figure A-3
Page 1 of 3

Boring Log SB- 5

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Perched water encountered at 49.5 feet BGS

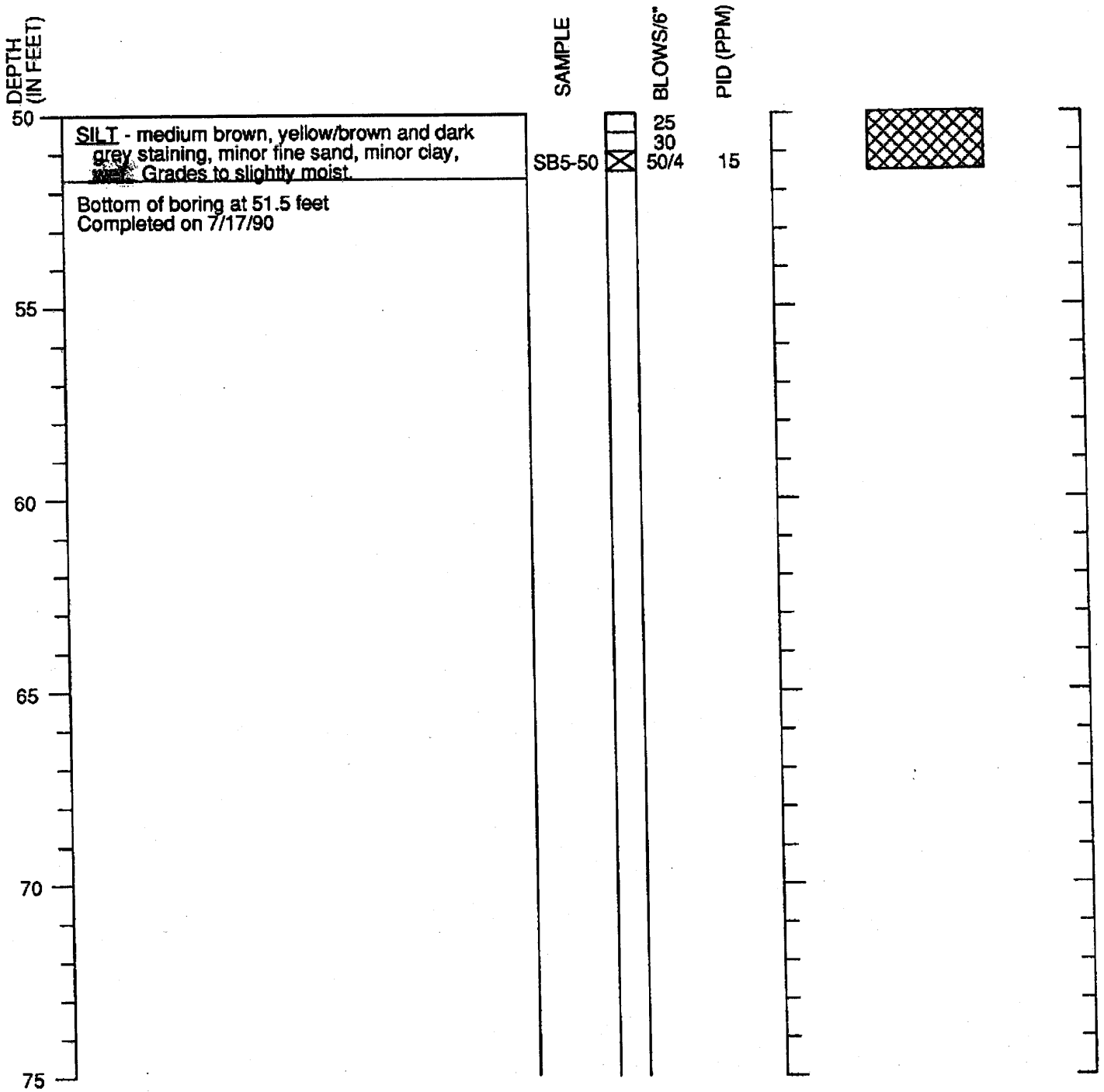
HARTCROWSER

J-6006 *12/90*

Figure A-3

Boring Log SB-5

Geologic Log



1. Refer to Figure A-1 for explanation of descriptions and symbols.
2. Soil descriptions and stratum lines are interpretive and actual changes may be gradual.
3. Perched water encountered at 49.5 feet.

HARTCROWSER

J-6006 12/90
Figure A-3
Page 3 of 3

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

(SB-6)

CLIENT NAME	Equiva Services LLC	BORING/WELL NAME	MW-1
JOB/SITE NAME	ple-4226	DRILLING STARTED	08-Apr-99
LOCATION	4226 First Street, Pleasanton, California	DRILLING COMPLETED	09-Apr-99
PROJECT NUMBER	241-0395	WELL DEVELOPMENT DATE (YIELD)	NA
DRILLER	Gregg Drilling	GROUND SURFACE ELEVATION	371.83 ft
DRILLING METHOD	Hollow-stem auger	TOP OF CASING ELEVATION	371.20 ft
BORING DIAMETER	8"	SCREENED INTERVAL	37.5 to 57.5 ft bgs
LOGGED BY	B. Jakub	DEPTH TO WATER (First Encountered)	42.5 ft (08-Apr-99)
REVIEWED BY	B. Jakub	DEPTH TO WATER (Static)	NA

REMARKS: Hand augered to 5' bgs; located near NW planter/entrance to Shell station on Vineyard and W of SB-7.

TPHg (mg/kg)	BLOW COUNTS	RECOVERY	SAMPLE ID	DEPTH (ft bgs)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
				0		**ASPHALT.**	0.3
						FILL.	1.5
					ML	**Sandy SILT**; (ML); brown (10YR4/3); very soft; wet; 5% clay, 70% silt, 25% fine to medium grained sand; low plasticity; moderate to low estimated permeability.	4.5
				5	ML	**SILT**; (ML); dark yellow brown (10YR4/6); stiff; moist; 5% clay, 85% silt, 8% sand, 2% fine grained gravel; low plasticity; low estimated permeability.	9.7
				10	ML	**Clayey SILT**; (ML); yellow brown (10YR5/8); stiff; damp; 38% clay, 50% silt, 2% fine grained sand, 10% fine to coarse subangular gravel; high plasticity; low estimated permeability.	15.0
<1.0	18 26 30		SB-6 -15.5	15	SP	**Clayey Gravelly SAND**; (SP); dark greenish gray (5GY4/1); dense; damp; 20% clay, 50% sand, 30% gravel; medium plasticity; low to moderate estimated permeability; wood fragments.	19.3
<1.0	13 11 20		SB-6 - 19.5	20	ML	**Sandy SILT with Clay**; (ML); olive (5Y4/3); very stiff; damp; 15% clay, 50% silt, 35% very fine grained sand; low plasticity; moderate to low estimated permeability.	24.5
<1.0	20 28 30		SB-6 - 25.0	25	SP	**Gravelly SAND with Silt**; (SP); olive (5Y4/3); dense; damp; 5% clay, 15% silt, 60% fine to medium grained sand, 20% gravel; no plasticity; high to moderate estimated permeability.	29.0
<1.0	40 43 45		SB-6 - 30.0	30	GP	**Sandy GRAVEL**; (GP); olive (5Y4/3); very dense; damp; 2% clay, 13% silt, 35% medium grained sand (red grains), 50% fine to coarse, subangular to subrounded gravel (chert); no plasticity; high estimated permeability.	34.0
	20 35			35		**Clayey Gravelly SAND**; (SP); dark yellow brown	

WELL DIAGRAM: Portland Type I/II; 2" diam., Schedule 40 PVC; Bentonite Seal

Continued Next Page

WELL LOG (TPH-G) G:\PLE4226\GINT\PLE4226.GPJ DEFAULT.GDT 8/11/99

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	MW-1
JOB/SITE NAME	ple-4226	**DRILLING STARTED**	08-Apr-99
LOCATION	4226 First Street, Pleasanton, California	**DRILLING COMPLETED**	09-Apr-99

Continued from Previous Page

TPHg (mg/kg)	BLOW COUNTS	RECOVERY	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
<1.0	50		SB-6 - 35.0					(10YR4/6); very dense; damp; 20% clay, 10% silt, 40% medium grained sand, 30% fine to coarse grained gravel (sandstone/claystone, serpentinite, some MnO_2/Fe staining); low plasticity; moderate to low estimated permeability.		Monterey Sand #3
	20									
	45									
<1.0	50/4		SB-6 - 40.0		40					
						SP		▽		
	25							@ 44' - moist to wet.		
	45				45					
	45									2"-diam., 0.020" Slotted Schedule 40 PVC
									50.0	
	32				50			Clayey GRAVEL with Silt; (GC); dark yellow brown (10YR4/6); very dense; moist to wet; 25% clay, 15% silt, 20% fine to coarse grained sand, 40% fine to coarse grained gravel.		
	60/6					GC				
					55				55.2	
	15							Clayey SILT; (MH); light olive brown (2.5Y5/4); hard; damp; 25% clay, 75% silt; medium to high plasticity; very low estimated permeability; black MnO_2 blebs throughout.		
	40					MH				
	50								58.0	Bottom of Boring @ 58 ft

WELL LOG (TPH-G) G:\PLE4226\GINT\PLE4226.GPJ DEFAULT.GDT 8/11/99

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	SB-7
JOB/SITE NAME	ple-4226	**DRILLING STARTED**	07-Apr-99
LOCATION	4226 First Street, Pleasanton, California	**DRILLING COMPLETED**	07-Apr-99
PROJECT NUMBER	241-0395	**WELL DEVELOPMENT DATE (YIELD)**	NA
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	Not Surveyed
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	Not Surveyed
BORING DIAMETER	8"	**SCREENED INTERVAL**	NA
LOGGED BY	B. Jakub	**DEPTH TO WATER (First Encountered)**	NA
REVIEWED BY	B. Jakub	**DEPTH TO WATER (Static)**	42.50ft (08-Apr-99)
REMARKS	Hand augered to 4' bgs; located E side of Vineyard exit near planter.		

TPHg (mg/kg)	BLOW COUNTS	RECOVERY	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
								ASPHALT.	0.3
								FILL.	1.5
						ML		**Sandy SILT**; (ML); brown (10YR4/3); very soft; wet; 5% clay, 70% silt, 25% fine to medium grained sand; low plasticity; moderate to low estimated permeability.	4.5
	11 12 19				5	ML		**SILT**; (ML); dark yellow brown (10YR4/6); stiff; moist; 5% clay, 85% silt, 8% sand, 2% fine grained gravel; low plasticity; low estimated permeability.	9.7
	15 25 31				10	ML		**Clayey SILT**; (ML); yellow brown (10YR5/8); stiff; damp; 38% clay, 50% silt, 2% fine grained sand, 10% fine to coarse subangular gravel; high plasticity; low estimated permeability.	
<1.0	16 25 35		SB-7 -15.0		15	ML		@ 14.3 - olive brown (2.5Y4/4) mottled with olive; 20% clay, 78% silt, 2% fine grained gravel; medium plasticity; low estimated permeability.	19.5
<1.0	11 22 25		SB-7 - 19.5		20	SP		**Gravelly SAND with Silt**; (SP); olive gray (5Y4/2); dense; damp; 3% clay, 15% silt, 62% fine to coarse grained sand, 20% fine to coarse grained gravel; no plasticity; high estimated permeability.	20.3
						GP		**Clayey Sandy GRAVEL**; (GP); yellow brown (10YR5/6); 20% clay, 20% fine to coarse grained sand, 80% fine to coarse grained gravel (quartz, possibly chert); low to medium plasticity; low to moderate estimated permeability.	24.3
<1.0	20 20 20		SB-7 - 24.5		25	SP		**Gravelly SAND with Silt**; (SP); yellow brown (10YR5/6); dense; damp; 3% clay, 15% silt, 52% medium grained sand, 25% fine grained gravel; no plasticity; high estimated permeability.	25.3
						ML		**Clayey SILT**; (ML); stiff; damp; 30% clay, 60% silt, 10% fine grained sand; high plasticity; low estimated permeability; trace carbon.	29.0
<1.0	35 36 40		SB-7 - 29.3		30	GP		**Sandy GRAVEL with Clay**; (GP); dark olive gray (5Y3/2); 15% clay, 5% silt, 35% fine to coarse grained sand, 45% fine to coarse grained gravel (quartz); low plasticity; moderate to high estimated permeability.	34.0
	19 20				35			**Clayey GRAVEL with Silt**; (GC); yellow brown	

WELL DIAGRAM

WELL LOG (TPH-G) G:\PLE4226\GINT\PLE4226.GPJ DEFAULT.GDT 8/11/99

Continued Next Page

Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	SB-7
JOB/SITE NAME	ple-4226	**DRILLING STARTED**	07-Apr-99
LOCATION	4226 First Street, Pleasanton, California	**DRILLING COMPLETED**	07-Apr-99

Continued from Previous Page

TPHg (mg/kg)	BLOW COUNTS	RECOVERY	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
	50		SB-7 - 34.3					(10YR5/8); very dense; damp; 35% clay, 15% silt, 10% sand, 40% fine to coarse grained gravel (quartz); medium plasticity; moderate to low estimated permeability.		
	25 45 53							@ 39' - quartz, siltstone, chert gravels.		
<1.0			SB-7 - 40.0		40	GC				
	25 40 50/3							@ 44' - moist to wet.		
83			SB-7 - 44.5		45				49.0	
	20 30 50							**Clayey GRAVEL**; (GC); yellow brown (10YR5/4); very dense; moist to wet; 20% clay, 10% silt, 10% medium to coarse grained sand, 60% fine grained gravel; medium plasticity; low to moderate estimated permeability.		Portland Type I/II
<1.0			SB-7 -49.5		50					
	30 50/3					GC				
<1.0			SB-7 - 54.3		55					
	20 30 50/3								59.0	
<1.0			SB-7 - 59.5		60			**Clayey SILT**; (MH); mottled yellow brown (10YR4/6) and light brownish gray (2.5Y6/2); hard; dry; 20% clay, 70% silt, 10% very fine to fine grained sand; medium plasticity; low estimated permeability.		
	25 35 50/3					MH		@ 64' - dark brown MnO_2 or organic blebs throughout.		
<1.0			SB-7 - 64.5		65					
	17 32 50/4								69.0	
			SB-7 - 69.5		70			**Clayey SILT**; (MH); light olive brown (2.5Y5/4); hard; dry; 25% clay, 75% silt; medium plasticity; very low estimated permeability.		
	20 40				75			@ 74' - increasing mottled with yellow brown (10YR5/8).	74.5	

WELL LOG (TPH-G) G:\PLE4226\GINT\PLE4226.GPJ DEFAULT.GDT 8/11/99

Continued Next Page

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1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	SB-7
JOB/SITE NAME	ple-4226	**DRILLING STARTED**	07-Apr-99
LOCATION	4226 First Street, Pleasanton, California	**DRILLING COMPLETED**	07-Apr-99

Continued from Previous Page

TPHg (mg/kg)	BLOW COUNTS	RECOVERY	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
	50/4		SB-7 - 74.5					@ 74' to 74.5' - black blebs, possibly MnO_2.		
	15 30 50/2		SB-7 - 79.5		80					
	15 25 50		SB-7 - 85.0		85	MH		@ 84' - dark yellow brown (10YR4/6); damp; 30% clay, 70% silt.		
	15 46 50				90					
	25 30 50		SB-7 - 94.5		95			@ 94' - MnO_2 blebs throughout; becomes siltier.		
	25 50/3		SB-7 - 100.0		100	SC		**Clayey SAND with Gravel**; (SC); dark yellow brown (10YR4/6); dense; damp; 30% clay, 5% silt, 50% fine to coarse grained sand, 15% fine grained gravel (quartz); medium plasticity; low to moderate estimated permeability.	99.0 100.0	Bottom of Boring @ 100 ft

Ground water sample (SB-7-GW) collected.

WELL LOG (TPH-G) G:\PLE4226\GINT\PLE4226.GPJ DEFAULT.GDT 8/11/99

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1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	MW-2
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	18-Jan-00
LOCATION	4226 First Street, Pleasanton, California	**DRILLING COMPLETED**	19-Jan-00
PROJECT NUMBER	241-0395	**WELL DEVELOPMENT DATE (YIELD)**	03-Feb-00
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	372.65 ft above msl
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	372.40 ft above msl
BORING DIAMETER	8"	**SCREENED INTERVAL**	26 to 46 ft bgs
LOGGED BY	B. Jakub	**DEPTH TO WATER (First Encountered)**	33.0 ft (18-Jan-00) ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Hand augered to 5' bgs.		

TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
							ASPHALT.	0.5	
					ML		Sandy SILT; (ML); dark brown; soft; damp; 3% clay, 80% silt, 15% fine grained sand, 2% gravel; low plasticity; low to moderate estimated permeability; palm tree roots.	4.0	
				5	SM		Silty SAND; (SM); yellow brown; soft; damp; 2% clay, 43% silt, 50% sand, 5% gravel; low plasticity; moderate estimated permeability.	5.8	4" diam., Schedule 40 PVC
					MH		Clayey SILT; (MH); yellow brown; stiff; damp; 38% clay, 50% silt, 2% fine grained sand, 10% fine to coarse, subangular gravel; high plasticity; low estimated permeability.	6.6	
<1.0		MW-2-6.3'			SM		Silty SAND; (SM); yellow brown; dense; damp; 2% clay, 40% silt, 50% sand, 8% gravel; no plasticity; high estimated permeability.	10.0	
				10	SM		Clayey Silty SAND; (SM); yellow brown; stiff; damp; 15% clay, 30% silt, 50% sand, 5% gravel; low plasticity; moderate estimated permeability.	11.0	
					SM		Silty SAND; (SM); yellow brown; dense; damp; 2% clay, 40% silt, 50% sand, 8% gravel; no plasticity; high estimated permeability. @ 12.8' - 10% clay, 38% silt, 50% sand, 8% gravel; moderate estimated permeability.	15.0	
				15	ML		Clayey SILT; (ML); yellowish brown; stiff; damp; 15% clay, 80% silt, 3% sand, 2% gravel; medium plasticity; low estimated permeability.	16.5	Portland Type I/II
<1.0		MW-2-16.5'			SM		Gravelly Silty SAND; (SM); yellow brown; damp; 5% clay, 25% silt, 45% fine to coarse grained sand, 25% gravel to 3/4"; high estimated permeability.	18.2	
				20	SM		Clayey Silty SAND; (SM); yellow brown; damp; 15% clay, 25% silt, 50% sand, 10% fine gravel.	22.0	
<1.0		MW-2-21.5'			GM		Sandy Silty GRAVEL; (GM); yellow brown; damp; 10% clay, 30% silt, 20% sand, 40% fine to coarse gravel; chert to 2".		Bentonite Seal
				25				26.0	Lonestar Sand #3
<1.0		MW-2-26.0'			SM		Gravelly Silty SAND; (SM); very dense; damp; 5% clay, 30% silt, 40% sand, 25% gravel; no to low plasticity; moderate to high estimated permeability.	30.0	
	35 50/6			30					
<1.0		MW-2-30.5'			GM		Clayey Sandy Silty GRAVEL; (GM); dark yellow brown; very dense; damp; 15% clay, 15% silt, 20% sand, 50% fine to coarse gravel; low plasticity; moderate estimated permeability. @ 31.7' - color change to dark greenish gray; chert to 2". ▽	33.5	
	38 50/6 45 50/8 24						Sandy Clayey GRAVEL; (GC); very dense; wet to saturated; 25% clay, 15% silt, 20% sand, 40% gravel.		
				35					

WELL LOG (SHELL) G:\PLEASA~4\GINT\PLE4226.GPJ DEFAULT.GDT 6/23/00

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Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME Equiva Services LLC
JOB/SITE NAME Shell-branded service station
LOCATION 4226 First Street, Pleasanton, California

BORING/WELL NAME MW-2
DRILLING STARTED 18-Jan-00
DRILLING COMPLETED 19-Jan-00

Continued from Previous Page

TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
<1.0	50/6 40 50/6 35 50/6 50/6 37 50/6 28 50/6 27 50/6 26 50/6 12 19 27	MW-2-35.0'		40 45	GC ML ML ML		**Sandy Clayey GRAVEL**; (GC); very dense; wet to saturated; 25% clay, 15% silt, 20% sand, 40% gravel. **Sandy Gravelly SILT**; (ML); hard; saturated; 12% clay, 58% silt, 15% sand, 15% gravel; medium plasticity; low estimated permeability. **Sandy Clayey SILT**; (ML); hard; saturated; 15% clay, 60% silt, 15% sand, 10% gravel. **Sandy SILT**; (ML); hard; saturated; 12% clay, 45% silt, 43% fine grained sand; slight plasticity ; low estimated permeability.	40.3 43.5 45.0 48.0	4"-diam., 0.020" Slotted Schedule 40 PVC Bottom of Boring @ 48 ft

WELL LOG (SHELL) G:\PLEASA~4\GINTVPLE4226.GPJ DEFAULT.GDT 6/29/00

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1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	MW-3
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	18-Jan-00
LOCATION	4226 First Street, Pleasanton, California	**DRILLING COMPLETED**	19-Jan-00
PROJECT NUMBER	241-0395	**WELL DEVELOPMENT DATE (YIELD)**	03-Feb-00
DRILLER	Gregg Drilling	**GROUND SURFACE ELEVATION**	375.90 ft above msl
DRILLING METHOD	Hollow-stem auger	**TOP OF CASING ELEVATION**	375.05 ft above msl
BORING DIAMETER	8"	**SCREENED INTERVAL**	20 to 35 ft bgs
LOGGED BY	B. Jakub	**DEPTH TO WATER (First Encountered)**	25.0 ft (18-Jan-00) ▽
REVIEWED BY	S. Bork, RG# 5620	**DEPTH TO WATER (Static)**	NA ▼
REMARKS	Hand augered to 5' bgs.		

TPHg (ppm)	BLOW COUNTS	SAMPLE ID	DEPTH (ft bgs)	U.S.C.S.	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)
			0		**ASPHALT.**	0.5
				ML	**SILT**; (ML); brown; soft; damp; 2% clay, 90% silt, 7% fine grained sand, 1% gravel; no plasticity; moderate to low estimated permeability.	
<1.0	14 28 40	MW-3-5.0'	5	SM	**Silty SAND**; (SM); yellow brown; dense; damp; 2% clay, 43% silt, 55% sand.	5.3 5.8
					Clayey SILT; (ML); yellow brown; hard; wet; 15% clay, 60% silt, 5% sand, 10% fine to coarse, subangular gravel; medium plasticity; low estimated permeability.	
<1.0	28 50/6	MW-3-10.5'	10	ML		
<1.0	42 50/6	MW-3-15.5'	15		**Gravelly Silty SAND**; (SM); yellow brown; very dense; 5% clay, 20% silt, 60% fine grained sand, 15% fine, subangular to subrounded gravel.	15.0
<1.0	13 24 50/6	MW-3-20.5'	20	SM	@ 22' - silt layer noted by driller.	
<1.0	12 22 30	MW-3-25.5'	25	SM	▽ **Clayey Silty SAND**; (SM); yellow brown; dense; wet to saturated; 15% clay, 35% silt, 40% fine grained sand, 10% fine to coarse, subangular gravel; low plasticity; low estimated permeability.	25.0
	50/6		30	GM	**Sandy Silty GRAVEL**; (GM); very dense; 5% clay, 30% silt, 25% sand, 40% gravel; low plasticity; moderate estimated permeability.	30.0
			35			35.0

WELL DIAGRAM

- 4" diam., Schedule 40 PVC
- Portland Type I/II
- Bentonite Seal
- Lonestar Sand #3
- 4"-diam., 0.020" Slotted Schedule 40 PVC

WELL LOG (SHELL) G:\PLEASA-4\GINTPLE4226.GPJ DEFAULT.GDT 6/23/00

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Cambria Environmental Technology, Inc.
1144 - 65th St.
Oakland, CA 94608
Telephone: (510) 420-0700
Fax: (510) 420-9170

BORING/WELL LOG

CLIENT NAME	Equiva Services LLC	**BORING/WELL NAME**	MW-3
JOB/SITE NAME	Shell-branded service station	**DRILLING STARTED**	18-Jan-00
LOCATION	4226 First Street, Pleasanton, California	**DRILLING COMPLETED**	19-Jan-00

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TPHg (ppm)	BLOW COUNTS	SAMPLE ID	EXTENT	DEPTH (ft bgs)	U.S.C.S.	GRAPHIC LOG	LITHOLOGIC DESCRIPTION	CONTACT DEPTH (ft bgs)	WELL DIAGRAM
	15 38 46				ML		SILT; (ML); light brown; hard; 10% clay, 80% silt, 10% sand; low plasticity; low estimated permeability.		Bentonite Seal
	15 25 42			40	ML		Clayey SILT; (ML); hard; 20% clay, 70% silt, 10% fine grained sand; medium plasticity; low estimated permeability.	40.0 41.5	Bottom of Boring @ 41.5 ft

WELL LOG (SHELL) G:\PLEASA~4\GINT\PLE4226.GPJ DEFAULT.GDT 6/23/00

Delta
Environmental Consultants, Inc.

Project No:	Sj42-26F-1	Client:	Shell Oil Products US	Boring No: WO-1	
Logged By:	Heather Buckingham	Location:	4226 First Street, Pleasanton	Page 1 of 2	
Driller:	Gregg	Date Drilled:	6/10/2005	Location Map	
Drilling Method:	Direct Push	Hole Diameter:	3"	Please see site map	
Sampling Method:	GeoProbe	Hole Depth:	37 ft		
Casing Type:		Well Diameter:			
Slot Size:		Well Depth:			
Gravel Pack:		Casing Stickup:			
Elevation		Northing		Easting	

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
								AF	Asphalt ~4"
		damp		hand augered	1			CL	**Sandy Lean CLAY**: medium brown; 30-40% fine to coarse grained sand; soft; low plasticity
					2				
					3				
					4				
					5				(same as above, orangish brown; trace gravels)
Grout					6				
					7			CL	**Sandy Lean CLAY with Gravels**: orangish brown; 55-65% fines; 35-45% fine grained sand; 15-20% rounded gravels up to ~4 mm in length
					8				
					9				
			0.1		10				
					11				(same as above, trace coarse grained sand)
					12				
					13				
					14				
			0.1		15				
					16			CL	**Sandy Lean CLAY**: same as above, trace gravels
					17				
		moist			18			CL	**Sandy Lean CLAY with Gravels**: same as above; gravels up to ~0.5 cm in length
					19				
			0.1		20				
					21			CL	**Sandy Lean CLAY**: same as above, dark gray mottling
					22				**Sandy Lean CLAY with Gravels**: same as above, dark gray mottling

Delta
Environmental Consultants, Inc.

Project No:	SJ42-26F-1	Client:	Shell Oil Products US	Boring No: WO-1	
Logged By:	Heather Buckingham	Location:	4226 First Street, Pleasanton	Page 2 of 2	
Driller:	Gregg	Date Drilled:	6/10/2005	Location Map	
Drilling Method:	Direct Push	Hole Diameter:	3"	Please see site map	
Sampling Method:	GeoProbe	Hole Depth:	37 ft		
Casing Type:		Well Diameter:			
Slot Size:		Well Depth:			
Gravel Pack:		Casing Stickup:			
Elevation		Northing		Easting	

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Grout								CL	**Sandy Lean CLAY with Gravels** (Continued)
					23			SC	**Clayey SAND**: orange brown; ~70% poorly graded fine grained sand; ~30% fines
		wet moist			24			CL	**Sandy Lean CLAY with Gravels**: same as above
			0.1		25				
					26				
					27			GW	**Well-graded GRAVEL with Sand**: orange brown; 10% fines; 30% coarse grained sand; 60% well graded sub-angular gravels
					28				
					29			CL	**Sandy Lean CLAY with Gravel**: same as above
					30				
			0.1		31			GW	**Well-graded GRAVEL with Silt**: orange tan; 10-20% silt; sub-angular gravels up to 0.5 cm in length
					32			GW	**Well-graded GRAVEL with Sand**: orange brown; ~40% coarse grained sand; 55-60% sub-rounded gravels; trace fines
					33			GW	**Well-graded GRAVEL with Clay**: orange brown; 20-30% clay; 80-70% sub-angular gravel up to 0.5 cm in length; trace coarse grained sand
					34				
					35				
			5.7		36				
					37				**Refusal at 37 feet below grade.** Hole remained dry after three hour wait.
					38				
					39				
					40				
					41				
					42				
					43				
					44				

Delta
Environmental Consultants, Inc.

Project No:	SJ42-26F-1	Client:	Shell Oil Products US	Well No: MW-4	
Logged By:	AP	Location:	4226 First Street	Page 1 of 3	
Driller:	Gregg	Date Drilled:	8/24/2006	Location Map	
Drilling Method:	HSA/AK (7')	Hole Diameter:	12"	Please see site map	
Sampling Method:	SS	Hole Depth:	50'		
Casing Type:	sch 40 PVC	Well Diameter:	4"		
Slot Size:	0.01	Well Depth:	47'		
Gravel Pack:	#2/12 sand	Casing Stickup:	-		
Elevation		Northing		Easting	

Well Completion (Backfill, Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Grout				air knifed & hand augered	1			AF	~4" asphalt, ~8" baserock
					2				
					3				
					4				
					5				
					6				
					7				
					8				
		dry	0.1	3 4 5	9			SC	**Clayey SAND with Gravel**: dark brown to orangish brown, loose, 60-70% fine to coarse grained sands, 20-30% fines, 10-20% gravels up to 1" diameter
					10				
					11				
					12				
					13			CL	**Sandy Lean CLAY**: orangish brown, very stiff, 5-10% gravels up to 1" diameter, 35-45% fine grained sands, 50-60% fines, low plasticity
		moist	7.4	6 8 12	14				
					15				
					16				
					17				
					18			SC	
		moist	2	7 11 11	19 20				**Clayey SAND**: orangish brown, medium dense, 20-30% fines, 70-80% fine grained sands, trace gravels up to 0.5" diameter, low plasticity

Delta
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Project No:	SJ42-26F-1	Client:	Shell Oil Products US	Well No: MW-4
Logged By:	AP	Location:	4226 First Street	Page 2 of 3
Driller:	Gregg	Date Drilled:	8/24/2006	
Drilling Method:	HSA/AK (7')	Hole Diameter:	12"	
Sampling Method:	SS	Hole Depth:	50'	
Casing Type:	sch 40 PVC	Well Diameter:	4"	
Slot Size:	0.01	Well Depth:	47'	
Gravel Pack:	#2/12 sand	Casing Stickup:	-	
Elevation		Northing		Easting

Location Map

Please see site map

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
					21		SC	Clayey SAND (cont.)
					22			
					23			
				6	24		SP-SC	**Poorly Graded SAND with Clay**: brown, medium dense, 5-15% fines, 85-95% fine grained sands
		moist	4.1	8				
				9	25			
					26			
					27			
					28			
				11	29		SC	**Clayey SAND with Gravel**: brown, medium dense, 20-30% fines, 10-20% gravels up to 0.5" diameter, 50-70% fine to coarse grained sands
		moist	7.2	13				
				17	30			
					31			
					32			
					33			
	▼			10	34		CL	**Sandy lean CLAY with Gravel**: brown, hard, 10-20% gravels up to 1" diameter, 20-30% fine grained sands (mostly in small inclusions or lenses), 50-70% fines, low plasticity
		moist	340	16				
				20	35			
				12	36			
		moist	555	14				
				17	37			
					38			
				13	39			(orangish brown w/grey mottling, 15-25% gravels up to 1" diameter, 20-30% fine grained sands, 45-65% fines, low plasticity)
		moist	762	17				
				20	40			

Delta
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Project No:	SJ42-26F-1	Client:	Shell Oil Products US	Well No: MW-4	
Logged By:	AP	Location:	4226 First Street	Page 3 of 3	
Driller:	Gregg	Date Drilled:	8/24/2006	Location Map	
Drilling Method:	HSA/AK (7')	Hole Diameter:	12"	Please see site map	
Sampling Method:	SS	Hole Depth:	50'		
Casing Type:	sch 40 PVC	Well Diameter:	4"		
Slot Size:	0.01	Well Depth:	47'		
Gravel Pack:	#2/12 sand	Casing Stickup:	-		
Elevation		Northing		Easting	

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					41			CL	sandy lean CLAY w/gravel (cont.)
					42				
					43				
		moist	106	14	44				no grey mottling, 10-20% gravels, 20-30% fine grained sands, 50-70% fines
				17					
				24	45				
					46				
	▽				47				
					48			CL	sandy lean CLAY: orangish brown, hard, 35-45% fine grained sands, 55-65% fines, low plasticity
				11	49				
		wet	27	17					
				20	50				Bottom of the boring is at 50 feet bg
					51				
					52				
					53				
					54				
					55				
					56				
					57				
					58				
					59				
					60				

Delta

Environmental Consultants, Inc.

Project No:	SJ42-26F-1	Client:	Shell Oil Products US	Well No: MW-1B	
Logged By:	AP	Location:	4226 First Street	Page 1 of 6	
Driller:	Gregg	Date Drilled:	8/23/2006	Location Map	
Drilling Method:	HSA/AK (7')	Hole Diameter:	12"	Please see site map	
Sampling Method:	SS	Hole Depth:	108'		
Casing Type:	sch 40 PVC	Well Diameter:	4"		
Slot Size:	0.01	Well Depth:	108'		
Gravel Pack:	#2/12 sand	Casing Stickup:	-		
Elevation		Northing		Easting	

Well Completion: Backfill	Well Completion: Casing	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample: Recovery	Sample: Interval	Soil Type	LITHOLOGY / DESCRIPTION
Grout					air knifed & hand augered	1			AF	~4" asphalt, ~8" baserock
						2				See Cambria's MW-1 boring log (attached) for soil lithology between 1 and 58.5 feet bg
						3				
						4				
						5				
						6				
						7				
						8				
						9				
						10				
						11				
						12				
						13				
						14				
						15				
						16				
						17				
						18				
						19				
						20				

Delta
Environmental
Consultants, Inc.

Project No:	SJ42-26F-1	Client:	Shell Oil Products US	Well No: MW-1B
Logged By:	AP	Location:	4226 First Street	Page 2 of 6
Driller:	Gregg	Date Drilled:	8/23/2006	
Drilling Method:	HSA/AK (7')	Hole Diameter:	12"	
Sampling Method:	SS	Hole Depth:	108'	
Casing Type:	sch 40 PVC	Well Diameter:	4"	
Slot Size:	0.01	Well Depth:	108'	
Gravel Pack:	#2/12 sand	Casing Stickup:	-	

Location Map

Please see site map

Elevation	Northing	Easting

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					21				
					22				
					23				
					24				
					25				
					26				
					27				
					28				
					29				
					30				
					31				
					32				
					33				
					34				
					35				
					36				
					37				
					38				
					39				
					40				

Delta Environmental Consultants, Inc.

Project No:	SJ42-26F-1	Client:	Shell Oil Products US	Well No: MW-1B
Logged By:	AP	Location:	4226 First Street	Page 3 of 6
Driller:	Gregg	Date Drilled:	8/23/2006	
Drilling Method:	HSA/AK (7')	Hole Diameter:	12"	
Sampling Method:	SS	Hole Depth:	108'	
Casing Type:	sch 40 PVC	Well Diameter:	4"	
Slot Size:	0.01	Well Depth:	108'	
Gravel Pack:	#2/12 sand	Casing Stickup:	-	
Elevation		Northing		Easting

Location Map

Please see site map

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
					41				
					42				
					43				
					44				
					45				
					46				
					47				
					48				
					49				
					50				
					51				
					52				
					53				
					54				
					55				
					56				
					57				
					58				
		dry	8.1	14 16 21	59 60			ML	**SILT**: mottled yellow brown and orangish brown, hard, 80-90% fines, <10% fine to very fine grained sands, low plasticity

Delta Environmental Consultants, Inc.

Project No:	SJ42-26F-1	Client:	Shell Oil Products US	Well No: MW-1B
Logged By:	AP	Location:	4226 First Street	Page 4 of 6
Driller:	Gregg	Date Drilled:	8/23/2006	
Drilling Method:	HSA/AK (7')	Hole Diameter:	12"	
Sampling Method:	SS	Hole Depth:	108'	
Casing Type:	sch 40 PVC	Well Diameter:	4"	
Slot Size:	0.01	Well Depth:	108'	
Gravel Pack:	#2/12 sand	Casing Stickup:	-	
Elevation		Northing		Easting

Location Map

Please see site map

Well Completion	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Bentonite / Casing					61			ML	SILT (cont.)
					62				
					63				
		dry	11.5	10 12 14	64				
					65				
					66				
					67				
					68				
		dry	10.9	11 16 18	69				
					70				
					71				
					72				
					73				
		dry	9.9	11 13 17	74				
					75				
					76				
					77				
					78				
		dry	9.1	11 13 16	79				(80-90% fines, <10% very fine grained sands, medium plasticity)
					80				

Delta

Environmental Consultants, Inc.

Project No:	SJ42-26F-1	Client:	Shell Oil Products US	Well No: MW-1B	
Logged By:	AP	Location:	4226 First Street	Page 5 of 6	
Driller:	Gregg	Date Drilled:	8/23/2006	Location Map	
Drilling Method:	HSA/AK (7')	Hole Diameter:	12"	Please see site map	
Sampling Method:	SS	Hole Depth:	108'		
Casing Type:	sch 40 PVC	Well Diameter:	4"		
Slot Size:	0.01	Well Depth:	108'		
Gravel Pack:	#2/12 sand	Casing Stickup:	-		
Elevation		Northing		Easting	

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery / Interval	Soil Type	LITHOLOGY / DESCRIPTION
Grout / Bentonite / Sand	▼				81		ML	SILT (cont.)
					82			
					83			
		dry	9.2	10 14 18	84 85		ML	**SILT with Sand**: mottled yellow brown and orange brown, hard, 70-80% fines, 20-30% very fine to fine grained sands, low to no plasticity
					86			
					87			
					88			
		moist	9.9	10 16 21	89 90			(15-25% very fine grained sands)
					91			
					92			
					93			
		dry	11.9	13 16 20	94 95			(20-30% very fine grained sands)
					96			
					97			
					98			
	▽	wet	8.1	11 16 20	99 100		SC	**Clayey SAND with Gravel**: brown, dense, 10-20% fines, 20-30% gravels up to 1" diameter, 60-70% medium to coarse grained sands (mostly coarse grained)

Delta
Environmental Consultants, Inc.

Project No:	SJ42-26F-1	Client:	Shell Oil Products US	Well No: MW-1B
Logged By:	AP	Location:	4226 First Street	Page 6 of 6
Driller:	Gregg	Date Drilled:	8/23/2006	
Drilling Method:	HSA/AK (7')	Hole Diameter:	12"	
Sampling Method:	SS	Hole Depth:	108'	
Casing Type:	sch 40 PVC	Well Diameter:	4"	
Slot Size:	0.01	Well Depth:	108'	
Gravel Pack:	#2/12 sand	Casing Stickup:	-	
Elevation		Northing		Easting

Location Map

Please see site map

Well Completion (Backfill / Casing)	Static Water Level	Moisture Content	PID Reading (ppm)	Penetration (blows/6")	Depth (feet)	Sample Recovery	Sample Interval	Soil Type	LITHOLOGY / DESCRIPTION
Sand					101			SC	**Clayey SAND with Gravel** (cont.)
					102				
					103				
				13	104				(30-40% fines, 40-60% fine to coarse graines sands,
		wet	0.7	17					10-20% gravels up to 1" diameter)
				19	105				
					106				
				13	107				(25-35% fines, 55-65% sand, 10-20% gravels up to
		wet	0.8	17					2" diameter)
				20	108				Bottom of boring at 108 feet bg
					109				
					110				
					111				
					112				
					113				
					114				
					115				
					116				
					117				
					118				
					119				
					120				

BORING LOG

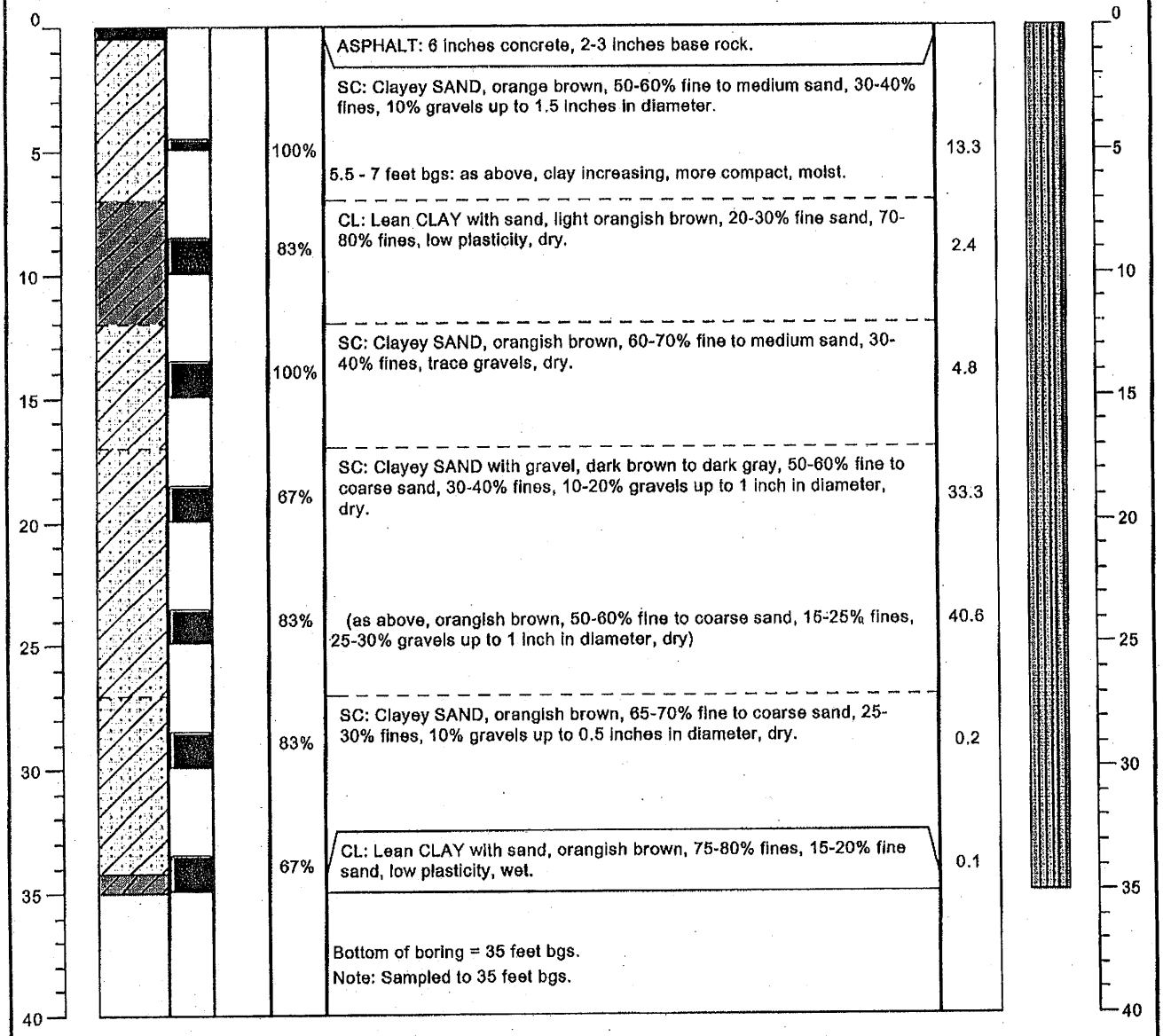
DELTA Inogen

Client: **Shell Oil Products US**

Project Number: **SJ4226F1X**

Boring No. **B-1**

Address: **4226 1st Street, Pleasanton, California**	Drilling Date(s): **3/27/07**	Boring diameter (in.): **8**	Casing Material: **NA**
Logged By: **Andy Persio**	Drilling Company: **Gregg**	Sampling Method: **Hand Auger/Split Spoon**	Screen Interval: **NA**
	Drilling Method: **HSA**	Well Depth (ft.): **NA**	Screen slot size: **NA**
	Boring Depth (ft): **35**	Casing Diameter (in.): **NA**	Sand Pack: **NA**

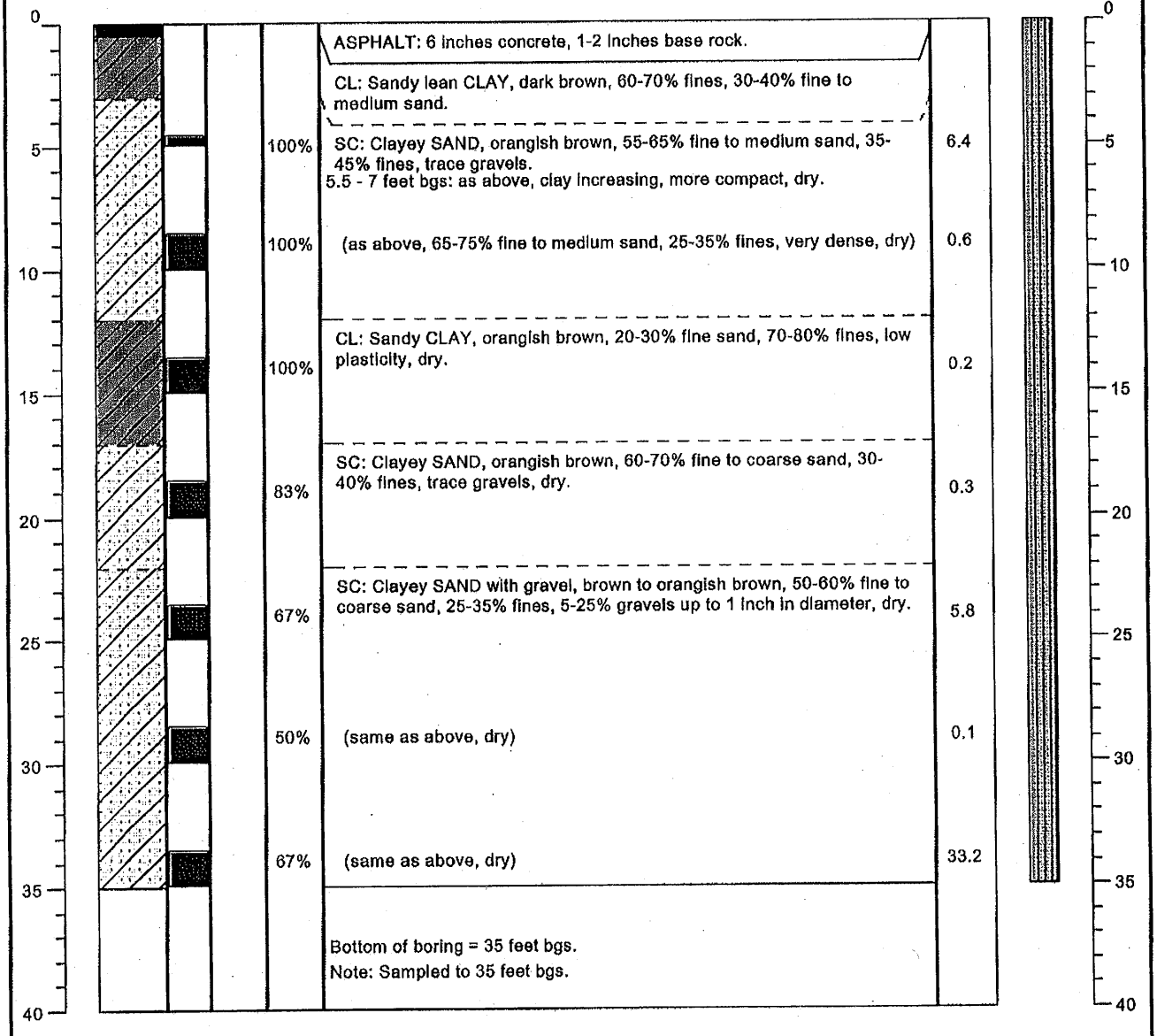


BORING LOG

DELTA Xinogen

Client Shell Oil Products US
Project Number SJ4226F1X
Boring No. B-2

Address:	Drilling Date(s): 3/27/07	Boring diameter (in.): 6	Casing Material: NA
4226 1st Street	Drilling Company: Gregg	Sampling Method: Hand Auger/Split Spoon	Screen Interval: NA
Pleasanton, California	Drilling Method: HSA	Well Depth (ft.): NA	Screen slot size: NA
Logged By: Andy Persio	Boring Depth (ft): 35	Casing Diameter (in.): NA	Sand Pack: NA



BORING LOG

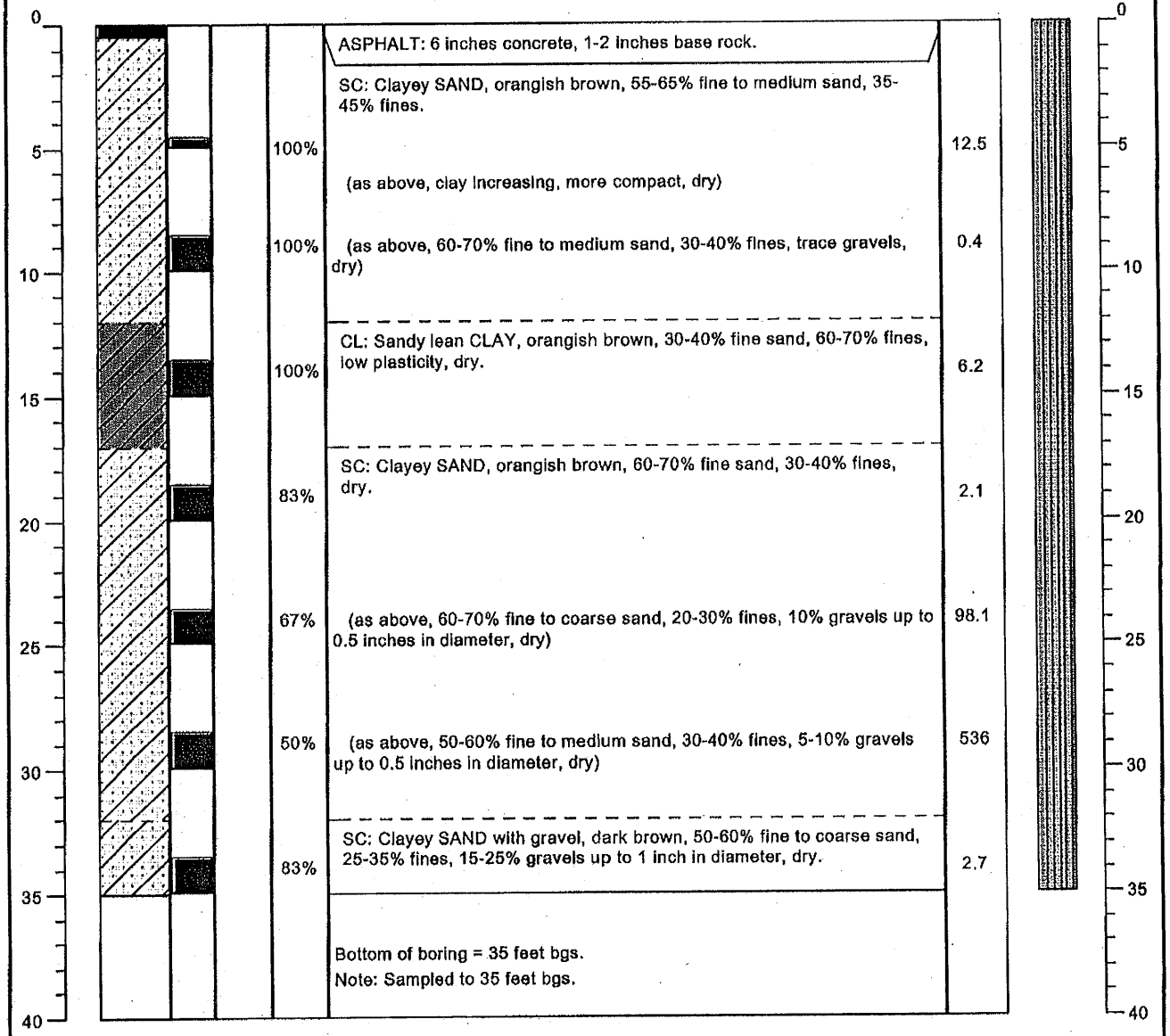
DELTA Xtnogen

Client **Shell Oil Products US**

Project Number **SJ4226F1X**

Boring No. B-3

Address:	Drilling Date(s): **3/27-28/07**	Boring diameter (in.): **8**	Casing Material: **NA**
4226 1st Street	Drilling Company: **Gregg**	Sampling Method: **Hand Auger/Split Spoon**	Screen Interval: **NA**
Pleasanton, California	Drilling Method: **HSA**	Well Depth (ft.): **NA**	Screen slot size: **NA**
Logged By: **Andy Persio**	Boring Depth (ft): **35**	Casing Diameter (in.): **NA**	Sand Pack: **NA**



BORING LOG

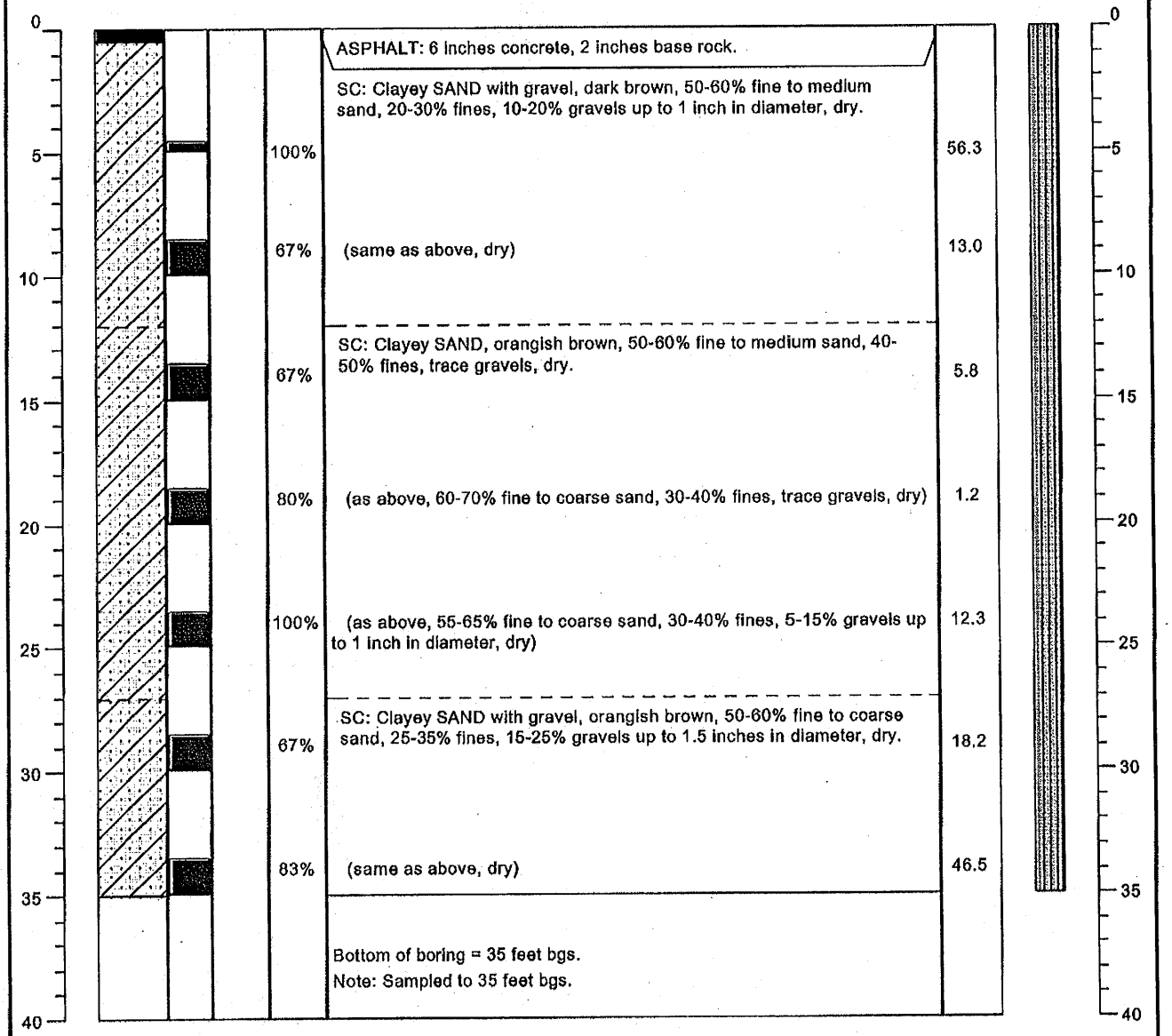
DELTA Xinogen

Client: **Shell Oil Products US**

Project Number: **SJ4226F1X**

Boring No. B-4

Address: **4226 1st Street** **Pleasanton, California** Logged By: **Andy Persio**	Drilling Date(s): **3/27-28/07** Drilling Company: **Gregg** Drilling Method: **HSA** Boring Depth (ft): **35**	Boring diameter (in.): **6** Sampling Method: **Hand Auger/Split Spoon** Well Depth (ft.): **NA** Casing Diameter (in.): **NA**	Casing Material: **NA** Screen Interval: **NA** Screen slot size: **NA** Sand Pack: **NA**



BORING LOG

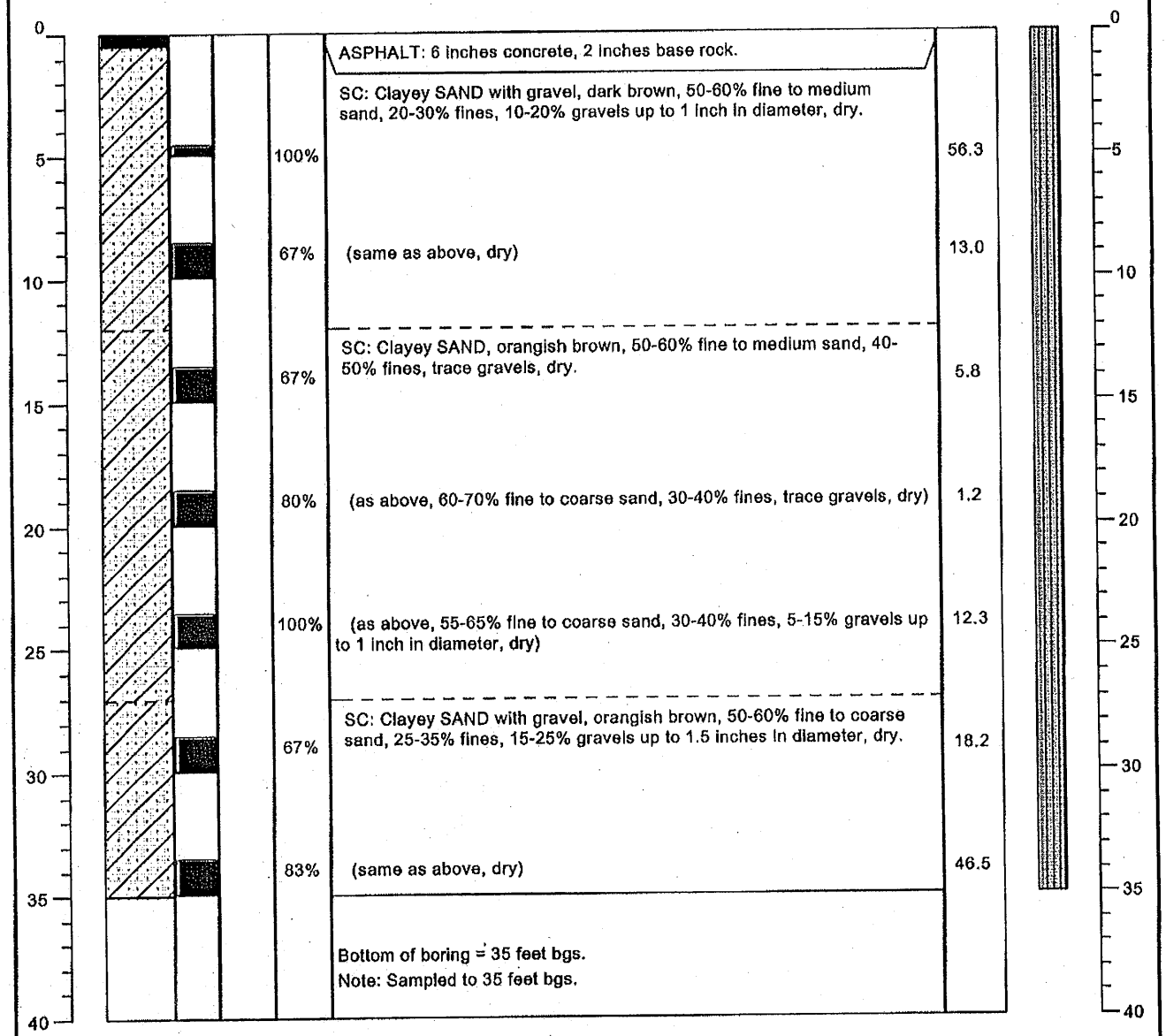
DELTA Xinogen

Client **Shell Oil Products US**

Project Number **SJ4226F1X**

Boring No. B-4

Address: **4226 1st Street Pleasanton, California** Logged By: **Andy Persio**	Drilling Date(s): **3/27-28/07** Drilling Company: **Gregg** Drilling Method: **HSA** Boring Depth (ft): **35**	Boring diameter (in.): **6** Sampling Method: **Hand Auger/Split Spoon** Well Depth (ft.): **NA** Casing Diameter (in.): **NA**	Casing Material: **NA** Screen Interval: **NA** Screen slot size: **NA** Sand Pack: **NA**



DELTA Xinogen

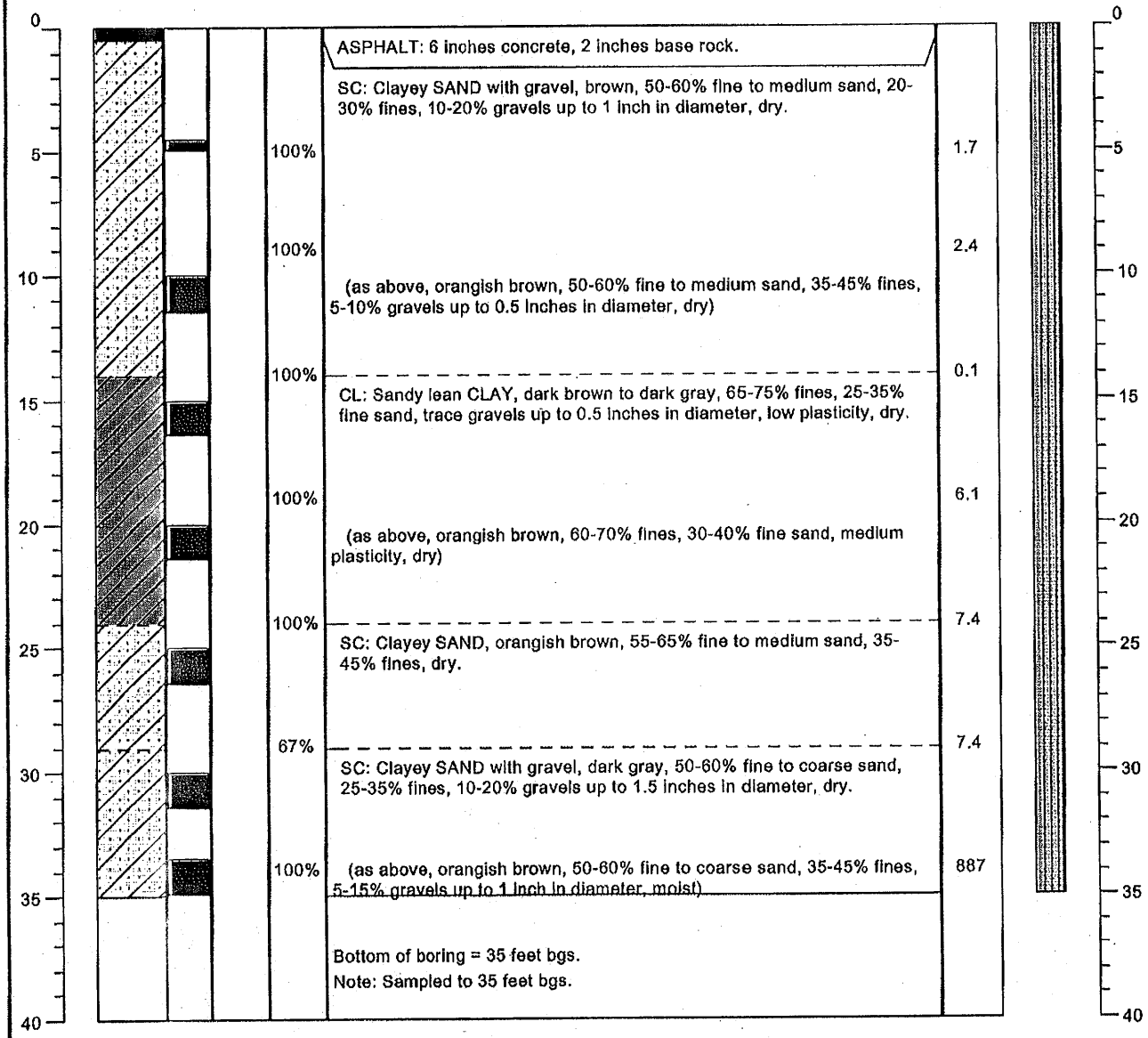
BORING LOG

Client **Shell Oil Products US**

Project Number **SJ4226F1X**

Boring No. B-5

Address: **4226 1st Street Pleasanton, California** Logged By: **Andy Persio**	Drilling Date(s): **3/27-28/07** Drilling Company: **Gregg** Drilling Method: **HSA** Boring Depth (ft): **35**	Boring diameter (in.): **6** Sampling Method: **Hand Auger/Split Spoon** Well Depth (ft.): **NA** Casing Diameter (in.): **NA**	Casing Material: **NA** Screen Interval: **NA** Screen slot size: **NA** Sand Pack: **NA**



BORING LOG

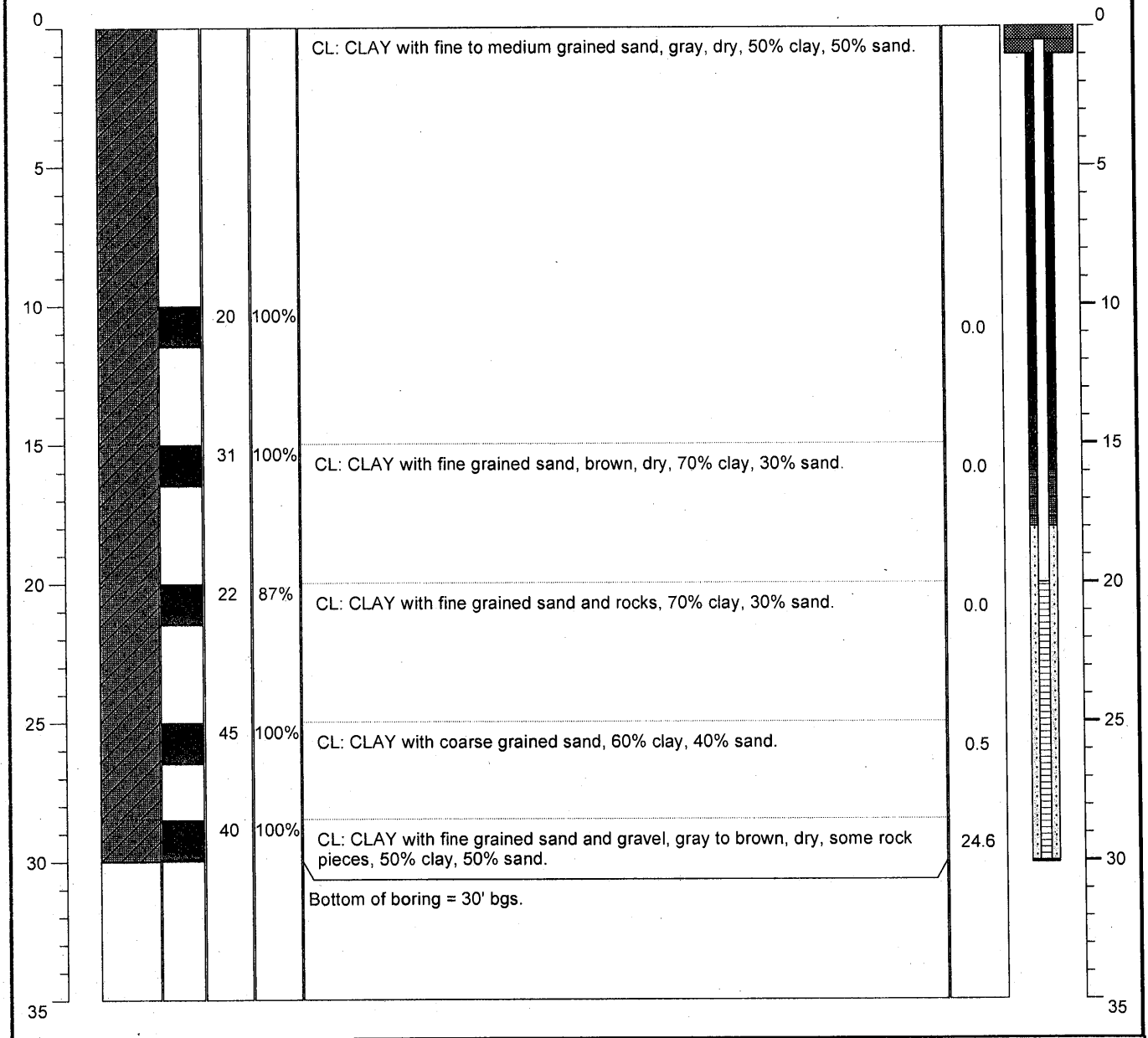
DELTA Inogen

Client **Shell Oil Products US**

Project Number **SCA421211A**

Well No. **SVE-1**

Address:	Drilling Date(s): **01/14/10**	Boring diameter (in.): **10"**	Casing Material: **Sch 40 PVC**
4212 First Street	Drilling Company: **RSI**	Sampling Method: **Split Spoon**	Screen Interval: **20' - 30' bgs**
Pleasanton, CA	Drilling Method: **HSA**	Well Depth (ft.): **30'**	Screen slot size: **0.020"**
Logged By: **Cora Olsun**	Boring Depth (ft): **30'**	Casing Diameter (in.): **4"**	Sand Pack: **2/12**



BORING LOG

DELTA Inogen

Client **Shell Oil Products US**

Project Number **SCA421211A**

Well No. **SVE-2**

Address:	Drilling Date(s): **01/12/10**	Boring diameter (in.): **10"**	Casing Material: **Sch 40 PVC**
4212 First Street	Drilling Company: **RSI**	Sampling Method: **Split Spoon**	Screen Interval: **20' - 30' bgs**
Pleasanton, CA	Drilling Method: **HSA**	Well Depth (ft.): **30'**	Screen slot size: **0.020"**
Logged By: **Cora Olsun**	Boring Depth (ft): **30'**	Casing Diameter (in.): **4"**	Sand Pack: **2/12**

Depth (ft.)	Water Level	Soil/Rock Graphic	Sampled Interval	Blow Counts (blows/ft)	Recovery (%)	Soil/Rock Visual Description	PID Reading (ppm)	Well Completion	Depth (ft.)
0									0
5						Airknifed to 8' bgs.			5
10				40	100%	No recovery. SP: SAND with clay, brown, medium to coarse grained, dry, 70% sand, 30% clay.	0.0		10
15				30	100%	CL: CLAY with fine grained sand, gray, dry.	0.0		15
20				19	93%	(as above)	0.0		20
25				49	100%	SP: SAND with clay, gray, coarse to medium grained, dry, 70% sand, 30% clay.	2.3		25
30						SP: SAND with clay, gray, coarse to medium grained, dry, some rocks and debris, 70% sand, 30% clay.	35.4		30
35						Bottom of boring = 30' bgs.			35

BORING LOG

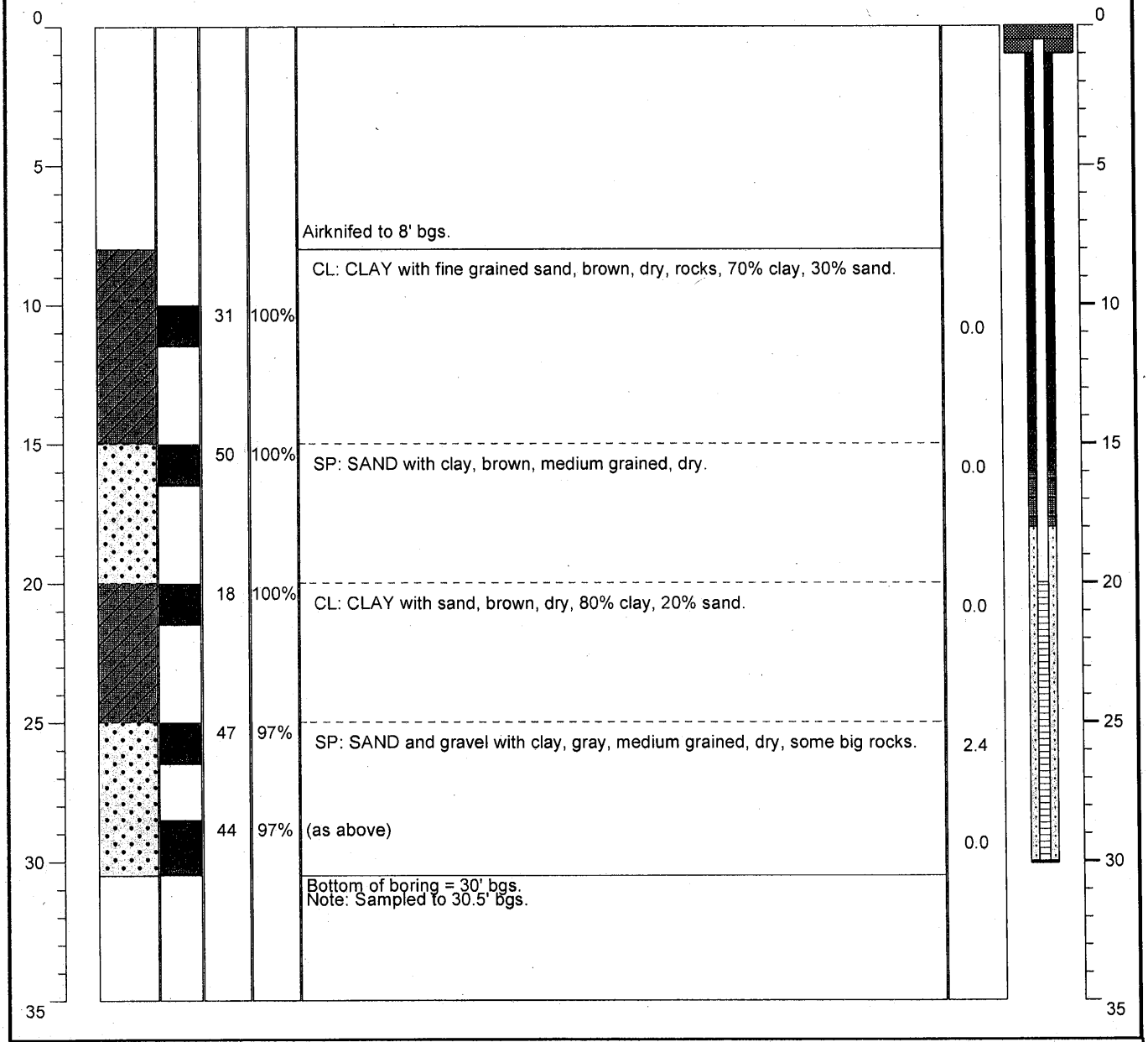
DELTA Inogen

Client **Shell Oil Products US**

Project Number **SCA421211A**

Well No. **SVE-3**

Address:	Drilling Date(s): **01/12/10**	Boring diameter (in.): **10"**	Casing Material: **Sch 40 PVC**
4212 First Street	Drilling Company: **RSI**	Sampling Method: **Split Spoon**	Screen Interval: **20' - 30' bgs**
Pleasanton, CA	Drilling Method: **HSA**	Well Depth (ft.): **30'**	Screen slot size: **0.020"**
Logged By: **Cora Olsun**	Boring Depth (ft): **30'**	Casing Diameter (in.): **4"**	Sand Pack: **2/12**



BORING LOG

DELTA Xinogen

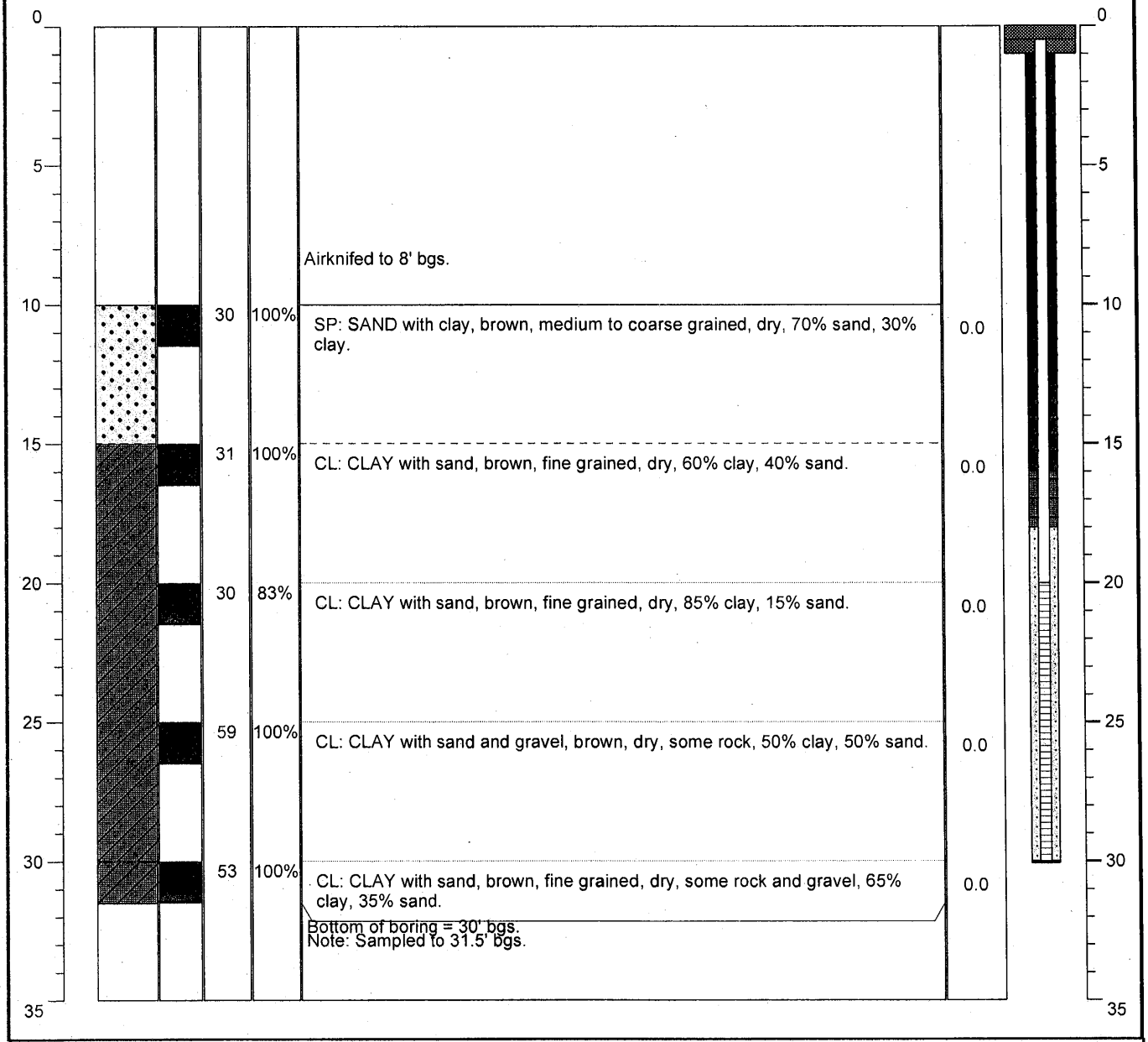
Client **Shell Oil Products US**

Project Number **SCA421211A**

Well No.

SVE-4

Address:	Drilling Date(s): **01/13/10**	Boring diameter (in.): **10"**	Casing Material: **Sch 40 PVC**
4212 First Street	Drilling Company: **RSI**	Sampling Method: **Split Spoon**	Screen Interval: **20' - 30' bgs**
Pleasanton, CA	Drilling Method: **HSA**	Well Depth (ft.): **30'**	Screen slot size: **0.020"**
Logged By: **Cora Olsun**	Boring Depth (ft): **30'**	Casing Diameter (in.): **4"**	Sand Pack: **2/12**



BORING LOG

DELTA Xinogen

Client **Shell Oil Products US**

Project Number **SCA421211A**

Well No. **AS-10**

Address:	Drilling Date(s): **01/14/10**	Boring diameter (in.): **8"**	Casing Material: **Sch 40 PVC**
4212 First Street	Drilling Company: **RSI**	Sampling Method: **Split Spoon**	Screen Interval: **47' - 52' bgs**
Pleasanton, CA	Drilling Method: **HSA**	Well Depth (ft.): **52'**	Screen slot size: **0.020"**
Logged By: **Cora Olsun**	Boring Depth (ft): **52'**	Casing Diameter (in.): **2"**	Sand Pack: **2/12**

Depth (ft.)	Water Level	Soil/Rock Graphic	Sampled Interval	Blow Counts (blows/ft)	Recovery (%)	Soil/Rock Visual Description	PID Reading (ppm)	Well Completion	Depth (ft.)
0						Airknifed to 8' bgs.			0
10				20	100%	No recovery. / CL: CLAY with fine grained sand, brown, dry.	0.0		10
15				28	97%	CL: CLAY with fine grained sand, gray with red staining, dry, 70% clay, 30% sand.	0.0		15
20				16	100%	CL: CLAY with fine grained sand, brown, dry, 70% clay, 30% sand.	0.0		20
25				15	100%	CL: CLAY with fine grained sand, brown, dry, 70% clay, 30% sand.	1.4		25
30				36	100%	CL: CLAY with fine grained sand and rocks, gray to brown, dry, 80% clay, 20% sand.	5.4		30
35				46	100%	CL: CLAY with fine grained sand, gray, dry, odor, 70% clay, 30% sand.	15000		35
40				56	43%	CL: CLAY with fine grained sand, moist, odor, rock pieces.	15000		40
45				52	87%	CL: CLAY with fine to medium grained sand, wet, some rocks.	40.9		45
50				47	100%	(as above) / Bottom of boring = 52' bgs.	142		50
55									55

BORING LOG

DELTA Xinogen

Client **Shell Oil Products US**

Project Number **SCA421211D**

Well No. **OBS-1**

Address: **4212 First Street** **Pleasanton, CA** Logged By: **Cora Olsun**	Drilling Date(s): **01/13/10** Drilling Company: **RSI** Drilling Method: **HSA** Boring Depth (ft): **47'**	Boring diameter (in.): **10"** Sampling Method: **Split Spoon** Well Depth (ft.): **47'** Casing Diameter (in.): **4"**	Casing Material: **Sch 40 PVC** Screen Interval: **22' - 47' bgs** Screen slot size: **0.020"** Sand Pack: **2/12**