



ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
FAX (510) 337-93

September 8, 2009

Natale and Darlene Piazza  
7613 Peppertree Road  
Dublin, CA 94568-2243

Subject: Fuel Leak Case No. RO0002739 and Geotracker Global ID T06019758706, Nat Piazza Property, 20957 Baker Road, Castro Valley, CA 94546 – Case Closure

Dear Natale and Darlene Piazza:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Health (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed. This case closure letter and the case closure summary can also be viewed on the State Water Resources Control Board's Geotracker website (<http://geotracker.swrcb.ca.gov>) and the Alameda County Environmental Health website (<http://www.acgov.org/aceh/index.htm>).

#### SITE INVESTIGATION AND CLEANUP SUMMARY

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

- Total petroleum hydrocarbons as diesel remain in soil at concentrations up to 5 ppm.

If you have any questions, please call Jerry Wickham at (510) 567-6791. Thank you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Donna L. Drogos', written over a horizontal line.

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

#### Enclosures:

1. Remedial Action Completion Certification
2. Case Closure Summary

cc:

Franklin and Priscilla May (w/enc)  
7567 Amarillo Road  
Dublin, CA 94568-2223

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

Mr. Robert Flory (w/o enc)  
AEI Consultants  
2500 Camino Diablo, Suite 100  
Walnut Creek, CA 94597

D. Drogos (w/enc)  
Jerry Wickham (w/orig enc),  
Geotracker (w/enc)  
File (w/enc)



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ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
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**REMEDIAL ACTION COMPLETION CERTIFICATION**

September 8, 2009

Natale and Darlene Piazza  
7613 Peppertree Road  
Dublin, CA 94568-2243

Subject: Fuel Leak Case No. RO0002739 and Geotracker Global ID T06019758706, Nat Piazza Property, 20957 Baker Road, Castro Valley, CA 94546 – Case Closure

Dear Natale and Darlene Piazza:

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

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

This notice is issued pursuant to subdivision (h) of Section 25296.10 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ariu Levi', is written over the typed name and title.

Ariu Levi  
Director  
Alameda County Environmental Health

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

**I. AGENCY INFORMATION**

Date: July 1, 2009

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6791
Responsible Staff Person: Jerry Wickham	Title: Senior Hazardous Materials Specialist

**II. CASE INFORMATION**

Site Facility Name: Nat Piazza Property		
Site Facility Address: 20957 Baker Road, Castro Valley, CA 94546		
RB Case No.: ---	Local Case No.: ---	LOP Case No.: RO0002739
URF Filing Date: 4/22/2004	Geotracker ID: T06019758706	APN: 84A-16-6-4
Responsible Parties	Addresses	Phone Numbers
Natale and Darlene Piazza	7613 Peppertree Road, Dublin, CA 94568-2243	925-828-1577

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	1,000 gallons	Gasoline	Removed	04/16/2004
2	1,000 gallons	Diesel	Removed	04/16/2004
Piping			Removed	04/16/2004

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and Type of Release: Unknown. Minor rust and corrosion was observed on the surface of the tanks during removal.		
Site characterization complete? Yes	Date Approved By Oversight Agency: ----	
Monitoring wells installed? Yes	Number: 5	Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 8.0 feet bgs	Lowest Depth: 11.56 feet bgs	Flow Direction: Variable but to the southwest more often
Most Sensitive Current Use: Potential drinking water source.		

Summary of Production Wells in Vicinity: No water supply wells within 1/2 mile of the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: South Reservoir is approximately 2,500 feet south of the site.
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	2 tanks	Disposed off-site at Ecology Control Industries in Richmond, CA	04/21/2004
Piping	Not reported	Disposed off-site at Ecology Control Industries in Richmond, CA	04/21/2004
Free Product	----	----	----
Soil	---	---	---
Groundwater	----	----	----

**MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP**  
 (Please see Attachments 1 through 6 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	1,400	<1	7,300(1)	<50(2)
TPH (Diesel)	10,000	5.1	23,000(3)	<50(4)
TPH (Motor Oil)	<5	<5	1,400(5)	<250(6)
Benzene	<1	<0.005	<0.5	<0.5
Toluene	<1	<0.005	11	<0.5
Ethylbenzene	<1	<0.005	<0.5	<0.5
Xylenes	<1	<0.005	27	<0.5
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	7.4(7)	7.4(7)	<0.5(8)	<0.5(8)
MTBE	<10(9)	<0.005(10)	<5(11)	<5(11)
Other (8240/8270)	Not analyzed	Not analyzed	Not analyzed	Not analyzed

- (1) Grab groundwater sample collected from boring SB-2 on 05/18/2005.
- (2) Not detected in groundwater samples from monitoring wells during the most recent sampling event on 08/20/2008.
- (3) Grab groundwater sample collected from boring SB-2 on 05/18/2005.
- (4) Not detected in groundwater samples from monitoring wells during the most recent sampling event on 08/20/2008.
- (5) Grab groundwater sample collected from boring SB-1 on 05/18/2005.
- (6) Not detected in groundwater samples from monitoring wells during sampling event on 10/18/2007.
- (7) Lead = 7.4 ppm; Cd <0.25 ppm; Cr = 22 ppm; Ni = 27 ppm; and Zn = 39 ppm.
- (8) Lead <0.5 ppb; Cd <0.25 ppb; Cr = 0.57 ppb; Ni = 2.0 ppb; and Zn = 190 ppb.
- (9) <10 ppm MTBE, no other fuel oxygenates analyzed.
- (10) <0.5 ppm MTBE; no other fuel oxygenates analyzed.
- (11) <5 ppb MTBE; no other fuel oxygenates analyzed.

#### Site History and Description of Corrective Actions:

The site is within a mixed residential and commercial area of Castro Valley. The site is currently undeveloped with the surface of the site partially covered by asphalt or concrete slabs with the remainder of the site covered by gravel.

A geotechnical investigation for the design of a proposed construction project was conducted at the site in 1986. Nine soil borings (GT-1 through GT-9) were advanced to the top of bedrock (boring logs attached). Bedrock was encountered at depths ranging from 6 to 13 feet bgs. Groundwater was encountered at depths of 6 to 9 feet bgs in the geotechnical borings.

On April 21, 2004, a 1,000-gallon gasoline and 1,000-gallon diesel UST were removed from the site. Prior to removal, a small amount of fuel and sludge was removed from the tanks. Two soil samples were collected from beneath each UST. Petroleum hydrocarbons were detected in each of the four tank removal soil samples. TPH as gasoline was reported at concentrations ranging from 160 to 1,400 ppm and TPH as diesel was reported at concentrations ranging from 1,400 to 10,000 ppm in the tank removal soil samples. The USTs were reportedly not used for 15 years prior to removal in 2004. Observations during the tank removal indicated that the tanks were intact with no obvious holes or other signs of failure.

On May 18, 2005, eight direct-push soil borings were advanced to depths of 14 to 18 feet bgs. TPHg, TPHd, TPHmo, and BTEX were not detected at concentrations above the reporting limits in any of the soil samples, which were collected between depths of 7.5 to 11 feet bgs. TPHg was reported in the groundwater sample from boring SB-2 (SB-2W) at a concentration of 7,300 ppm. TPHg was not detected at concentrations above the reporting limit in groundwater samples collected from any of the soil borings other than SB-2. TPHd was detected in groundwater samples from 7 of the 8 soil borings at concentrations ranging from 56 to 23,000 ppb. Benzene and MTBE were not detected at concentrations above the reporting limits in groundwater samples from any of the 8 soil borings.

Five groundwater monitoring wells (MW-1 through MW-4 and IN-1) were installed at the site in October 2007. The monitoring well borings were advanced to depths of 16.5 feet bgs. Soil samples were typically collected from the monitoring well borings at depths of 5, 8, 10, and 12 feet bgs. TPHg, TPHd, TPHmo, BTEX, and MTBE were not detected at concentrations above the reporting limits in any soil samples from boring MW-1 through MW-4. TPHd was the only analyte detected in soil samples from boring IN-1. TPHd was detected at concentrations of 4.0 and 5.1 ppm in soil samples collected at depths of 8.5 and 10.0 feet bgs, respectively. The boring for well IN-1 was advanced in the center of the former tank pit only a few feet from the locations of two soil samples collected during the tank removal (T1E-EB8' and T2W-EB8'). It is notable that TPHd was detected at concentrations of 10,000 ppm and 2,400 ppm in tank removal soil samples -EB8' and T2W-EB8', respectively; however, TPHd was not detected in the soil sample collected at a similar depth in boring IN-1, which was only a few feet away and located between the tank removal samples.

Groundwater samples were collected from the five monitoring wells for four quarters from October 18, 2007 to August 20, 2008. TPHg, BTEX, and MTBE were not detected in any groundwater samples collected. TPHd was detected only in the initial groundwater sample from well MW-1 but was not detected during the subsequent three quarterly monitoring events.

Three of the monitoring wells are located immediately adjacent to soil boring locations where grab groundwater samples were collected during the 2005 direct-push soil boring investigation. Results from sampling of the groundwater monitoring wells indicated that a significant decrease in dissolved hydrocarbon concentrations in groundwater had occurred or the grab groundwater sample results were biased high.

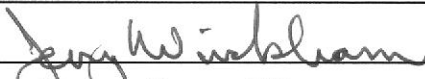
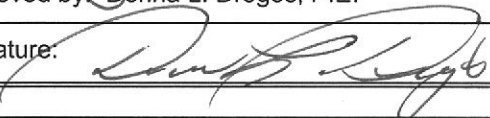
**IV. CLOSURE**

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: None		
Should corrective action be reviewed if land use changes? No		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 5
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

**V. ADDITIONAL COMMENTS, DATA, ETC.**

<p>Considerations and/or Variances:</p> <p>No soil vapor sampling was conducted at the site. Based on the absence of BTEX compounds in soil and groundwater samples from the site and the likely age of the release (prior to 1989), the potential for vapor intrusion appears to be low.</p> <p>No analyses for fuel oxygenates other than MTBE were performed. Based on the likely age of the release and absence of MTBE, analyses for other fuel oxygenates does not appear to be warranted.</p> <p>Conclusion:</p> <p>Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment based upon the information available in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site.</p>
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**VI. LOCAL AGENCY REPRESENTATIVE DATA**

Prepared by: Jerry Wickham	Title: Senior Hazardous Materials Specialist
Signature: 	Date: 07/29/09
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: 	Date: 07/29/09

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

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB: 7/29/09
Signature: <i>Cherie McCaulou</i>	Date: 7/29/09

**VIII. MONITORING WELL DECOMMISSIONING**

Date Requested by ACEH: 07/29/09	Date of Well Decommissioning Report: 09/08/09	
All Monitoring Wells Decommissioned: <input checked="" type="radio"/> Yes <input type="radio"/> No	Number Decommissioned: 5	Number Retained: 0
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: None		
ACEH Concurrence - Signature: <i>Jerry Williams</i>	Date: 09/08/09	

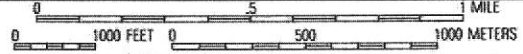
**Attachments:**

1. Site Location Map (1 p)
2. Site Plans (3 pp)
3. Soil Analytical Maps, Groundwater Analytical Maps, Cross Sections, and Depth to Bedrock Map (8 pp)
4. Soil and Soil Vapor Analytical Data (3 pp)
5. Groundwater Analytical Data (3 pp)
6. Groundwater Elevation Data and Well Construction Details (2 pp)
7. Boring Logs (22 pp)

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

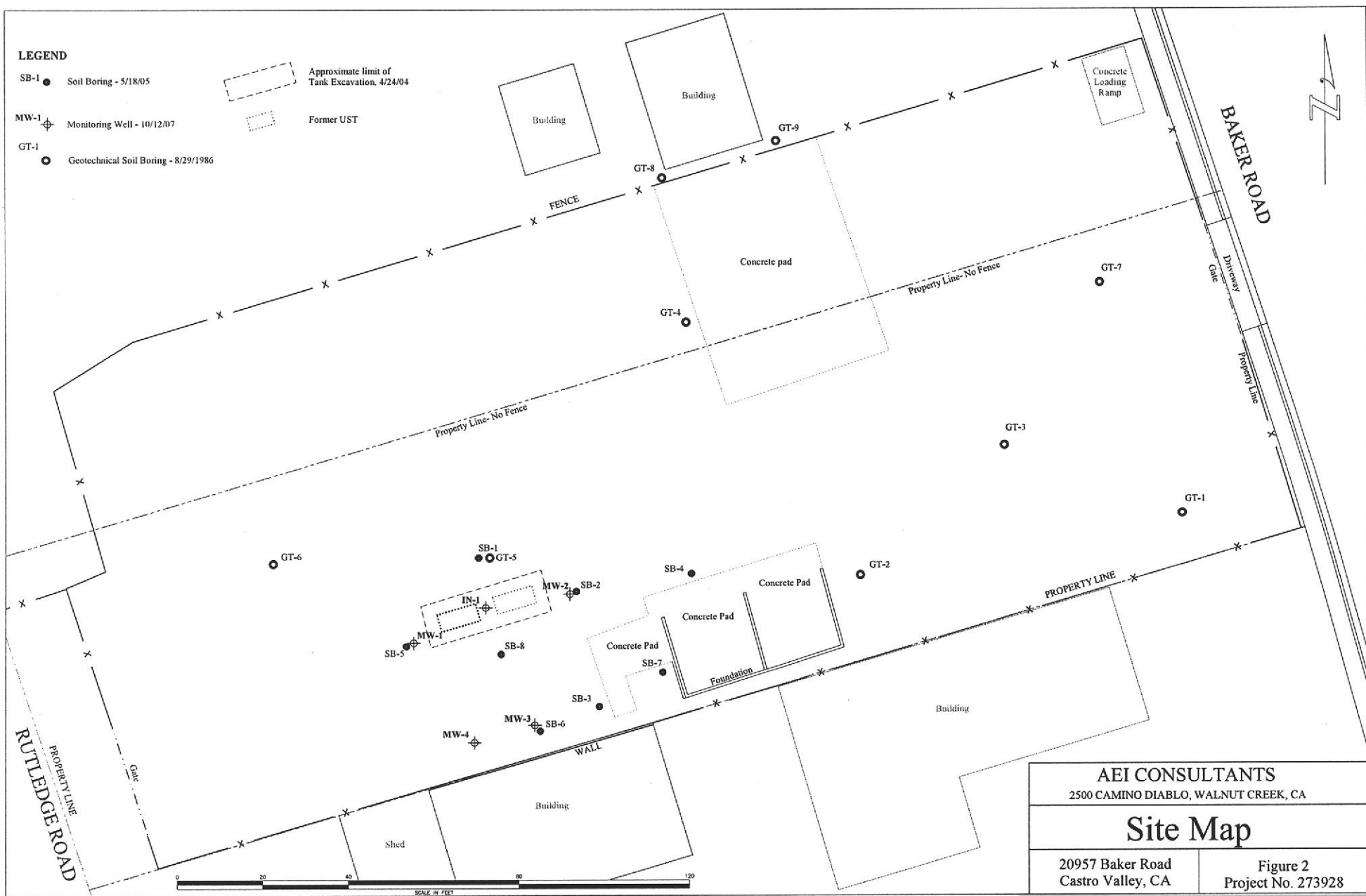


TN\* / MN  
15°

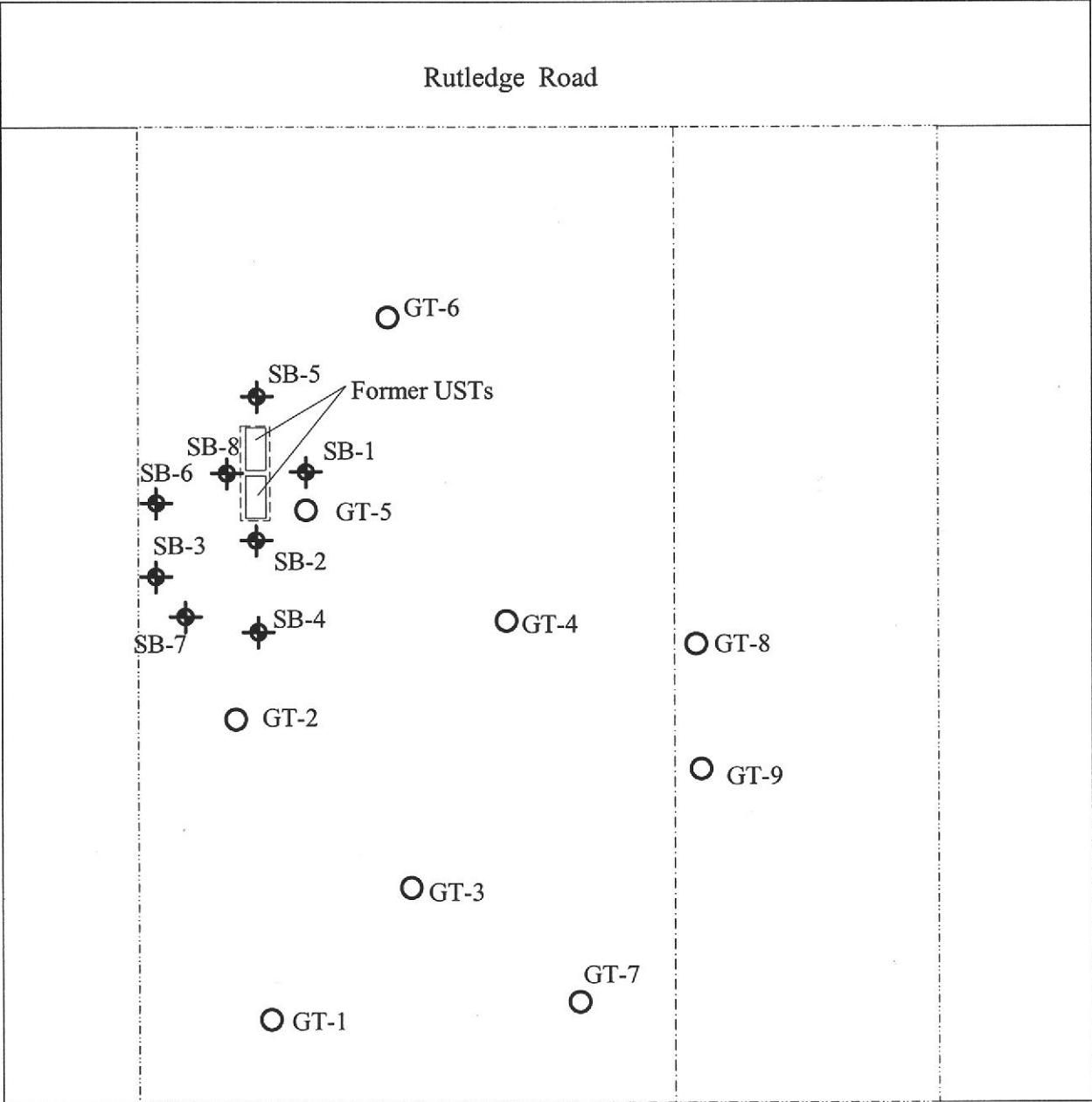


Map created with TOPO!® ©2003 National Geographic (www.nationalgeographic.com/topo)

<b>AEI CONSULTANTS</b>	
<b>SITE LOCATION MAP</b>	
20957 BAKER ROAD CASTRO VALLEY, CALIFORNIA	<b>FIGURE 1</b> PROJECT NO. 273928



<b>AEI CONSULTANTS</b> 2500 CAMINO DIABLO, WALNUT CREEK, CA	
<h2>Site Map</h2>	
20957 Baker Road Castro Valley, CA	Figure 2 Project No. 273928



○ GT-1 Geotechnical Boring - 1986

⊕ SB-1 Soil Borings - 5/18/2005

SCALE 1inch = 50 feet

Baker Road



<b>AEI CONSULTANTS</b> <small>2500 CAMINO DIABLO, SUITE 100 WALNUT CREEK, CA</small>	
<b>SITE MAP</b>	
20957 BAKER ROAD CASTRO VALLEY, CA	<b>FIGURE 2</b> Project No. 10509

Rutledge Road

Property Boundary

○ GT-6



SB-5

SB-8

SB-1

SB-6

○ GT-5

SB-2

Former USTs

SB-3

SB-7

SB-4

SCALE 1 inch = 20 feet

○ GT-1 Geotechnical Boring - 1986

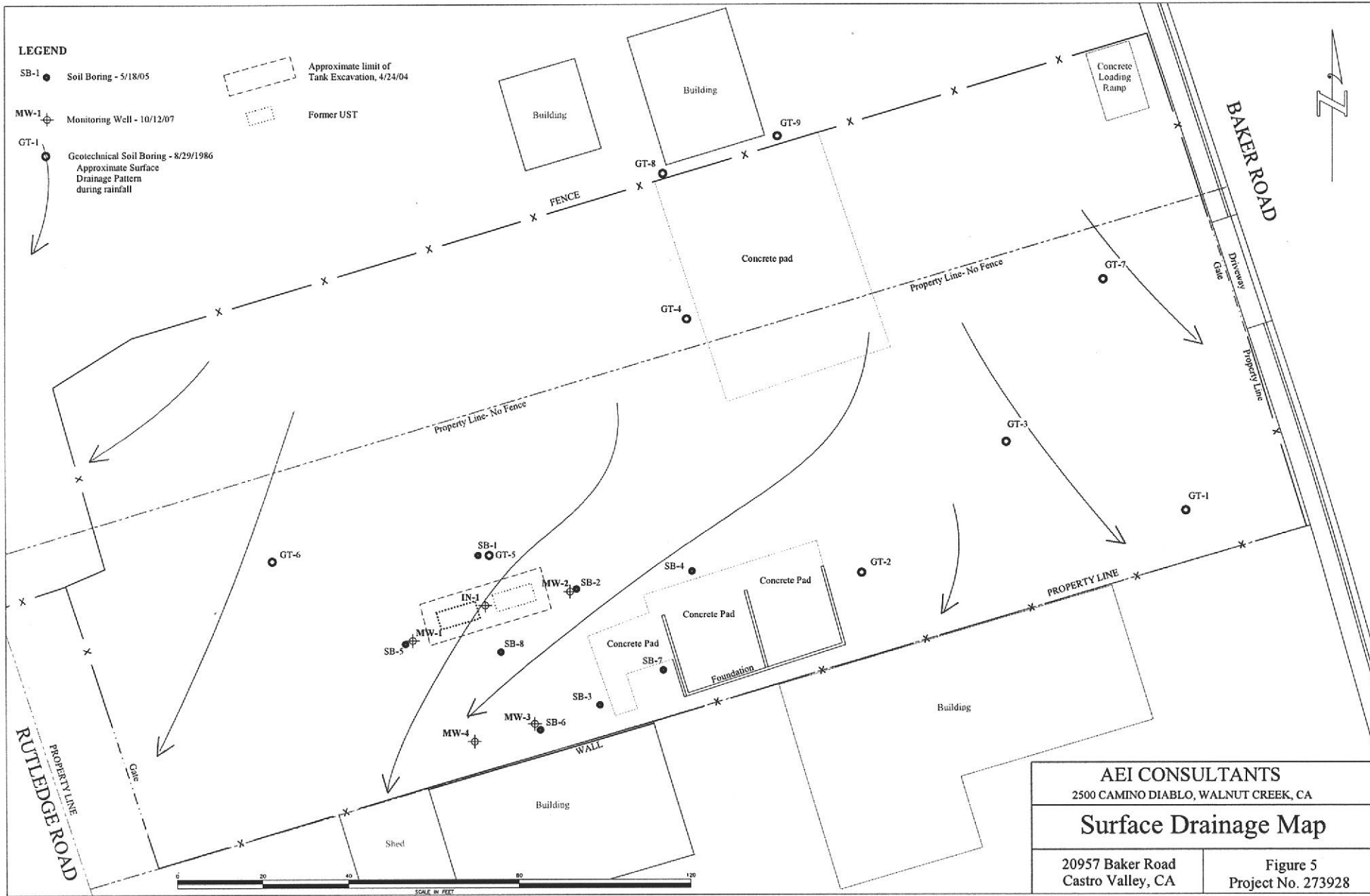
⊕ SB-1 Soil Borings - 5/18/05

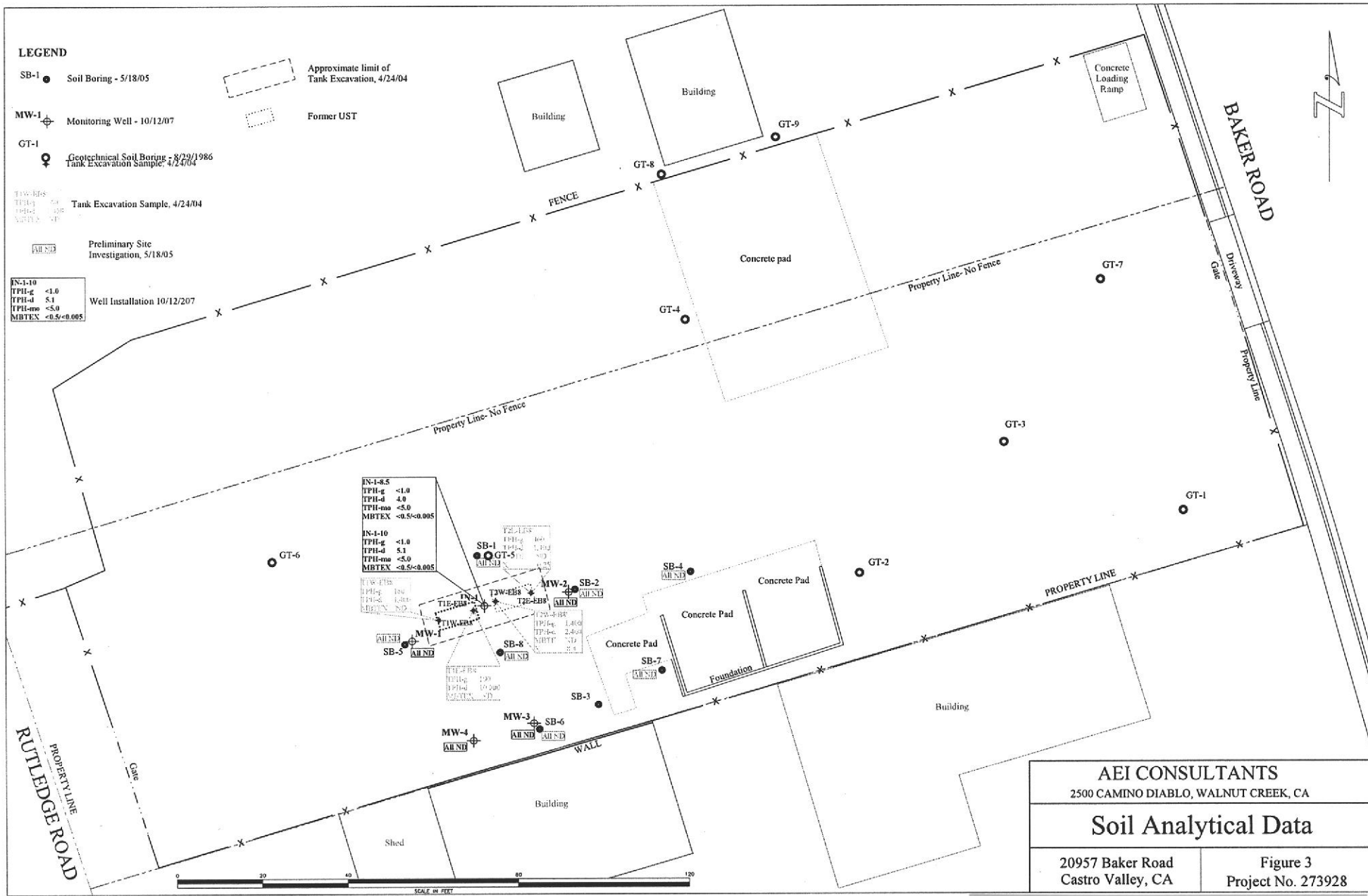
**AEI CONSULTANTS**  
2500 CAMINO DIABLO, SUITE 100 WALNUT CREEK, CA

**BORING LOCATION PLAN**

20957 BAKER ROAD  
CASTRO VALLEY, CA

FIGURE 3  
Project No. 10509





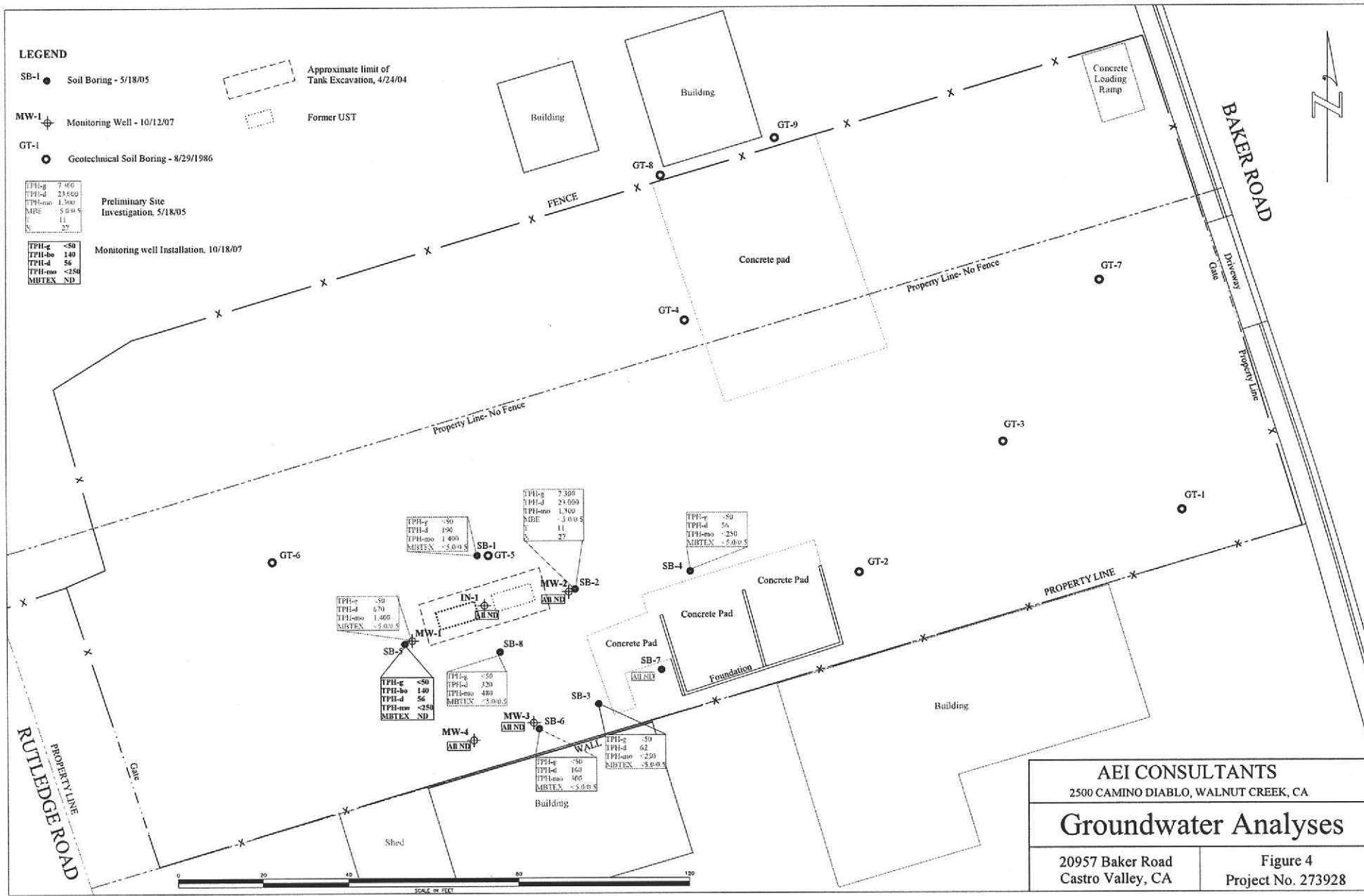
**AEI CONSULTANTS**  
2500 CAMINO DIABLO, WALNUT CREEK, CA

**Soil Analytical Data**

20957 Baker Road  
Castro Valley, CA

Figure 3  
Project No. 273928

**ATTACHMENT 3**



**AEI CONSULTANTS**  
2500 CAMINO DIABLO, WALNUT CREEK, CA

**Groundwater Analyses**

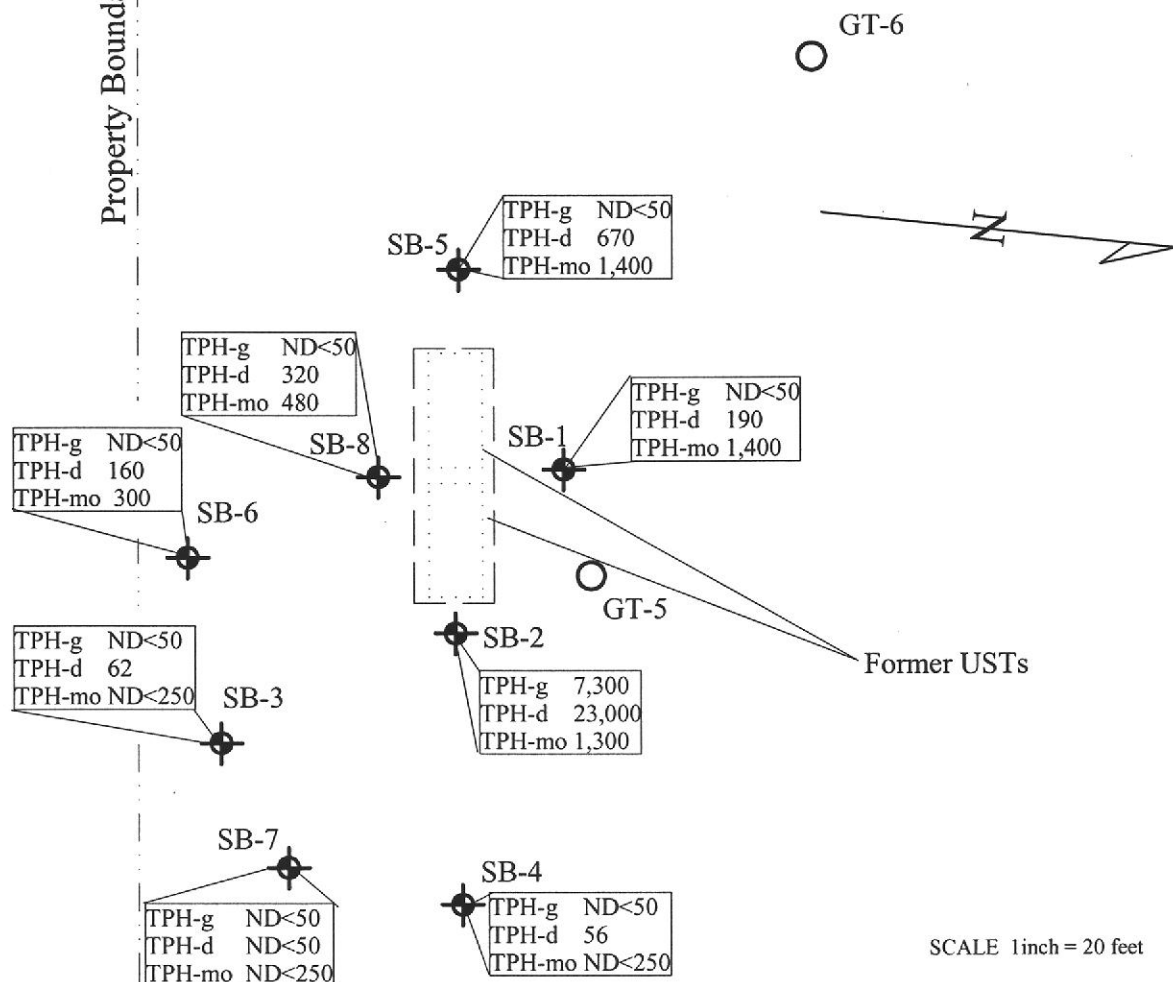
20957 Baker Road  
Castro Valley, CA

Figure 4  
Project No. 273928



Rutledge Road

Property Boundary



○ GT-1 Geotechnical Boring - 1986

⊕ SB-1 Soil Borings - 5/18/05

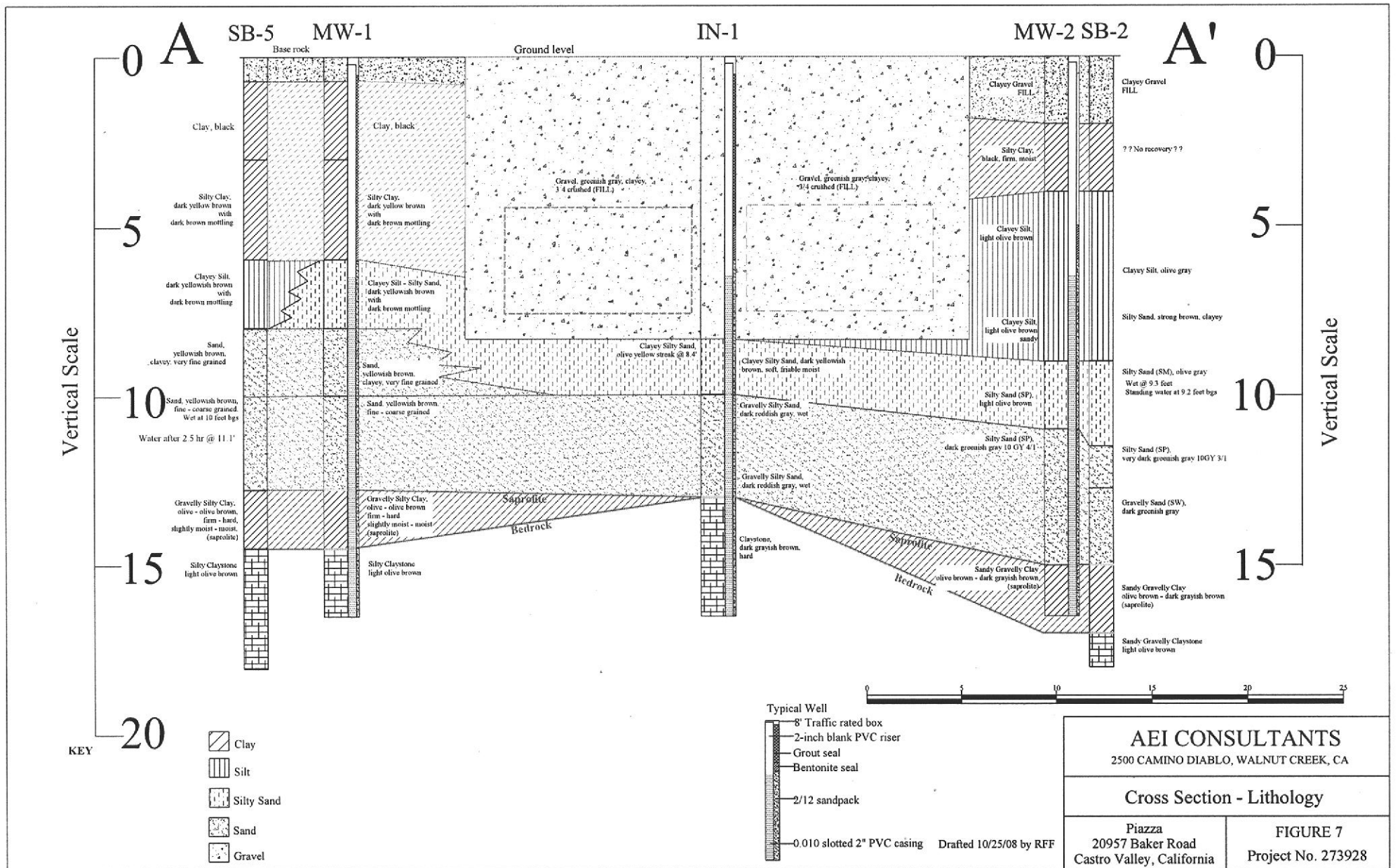
TPH-g 7,300  
 TPH-d 23,000  
 TPH-mo 1,300  
 Units µg/L

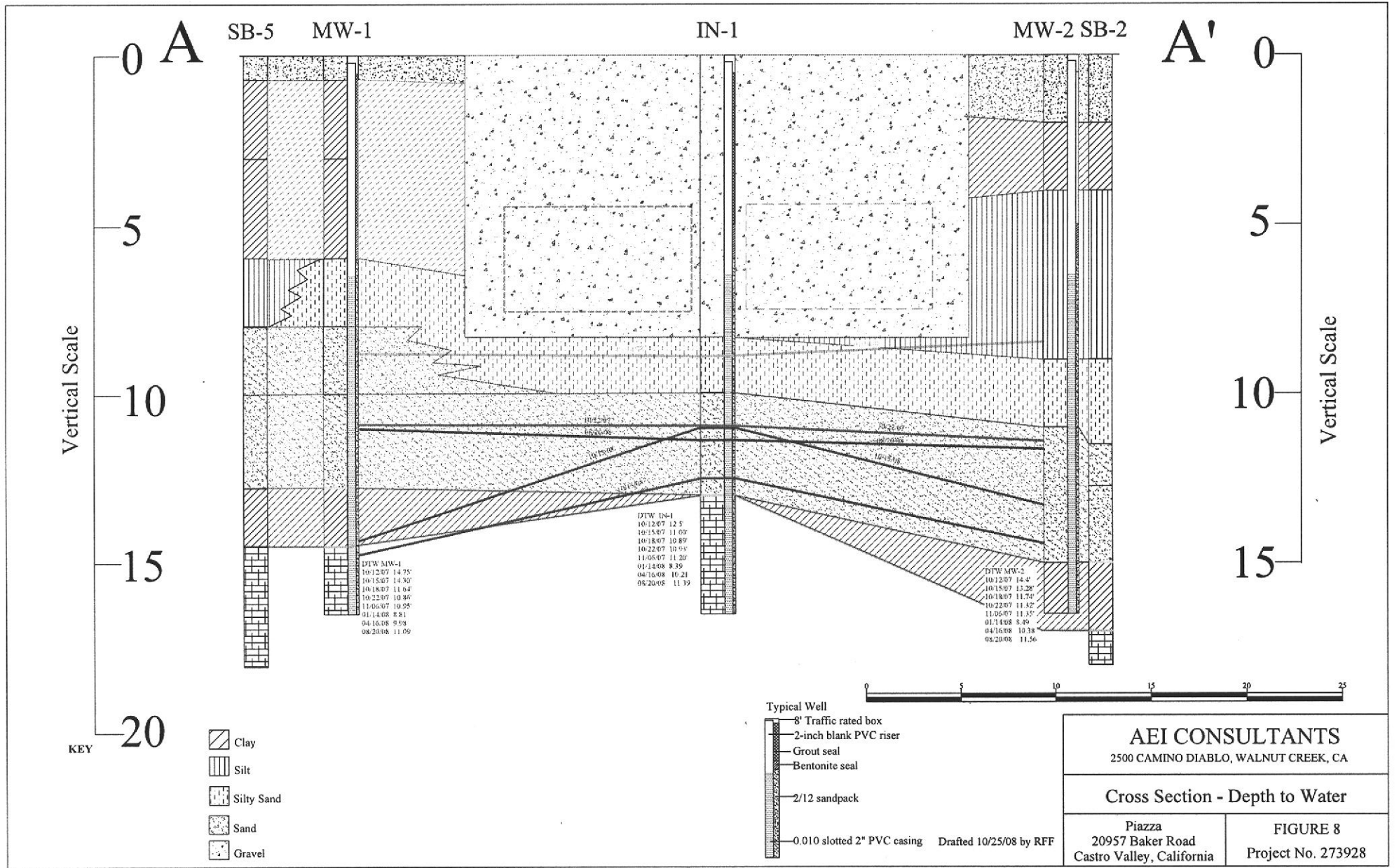
**AEI CONSULTANTS**  
 2500 CAMINO DIABLO, SUITE 100 WALNUT CREEK, CA

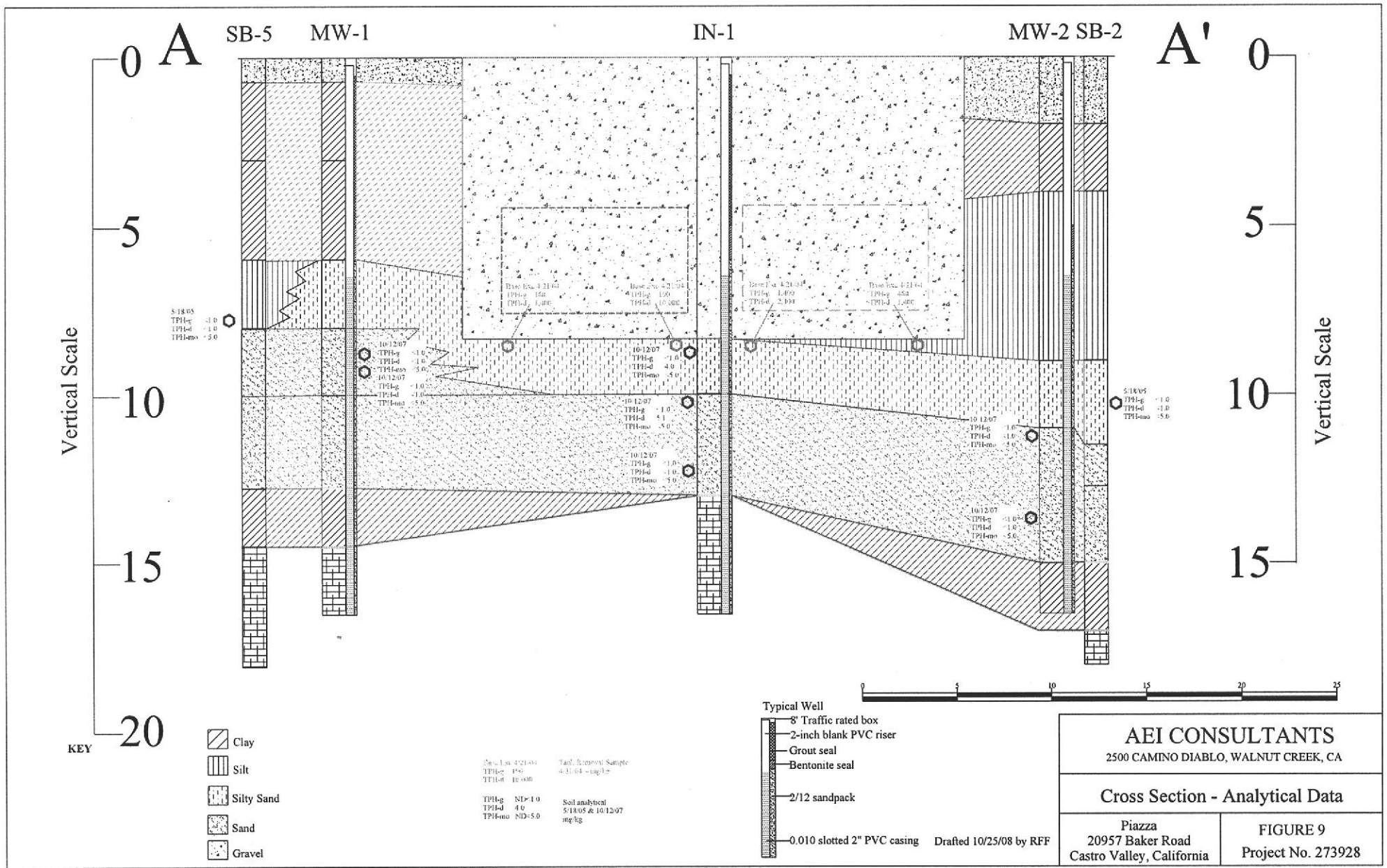
GROUNDWATER ANALYTICAL RESULTS (5/18/05)

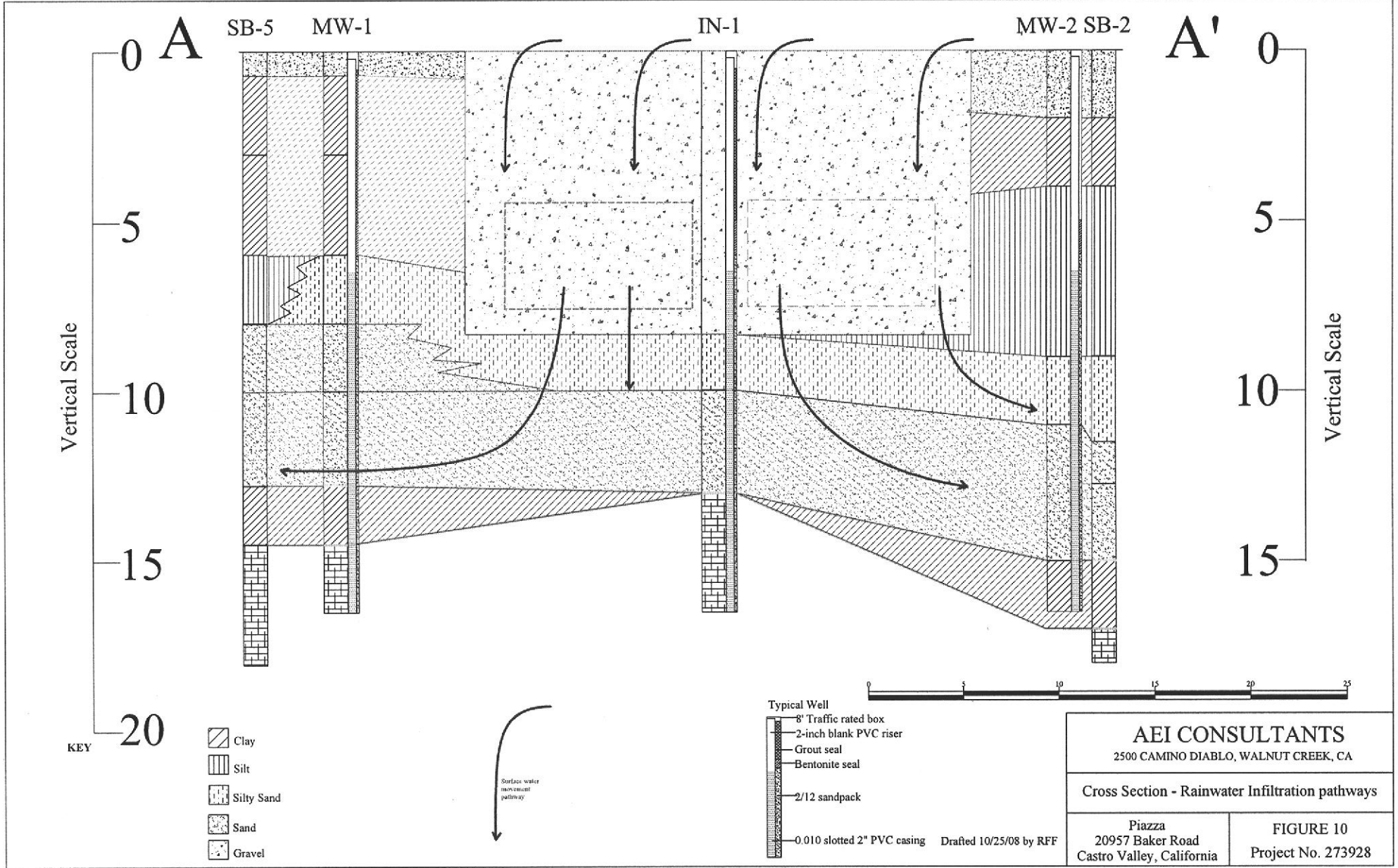
20957 BAKER ROAD  
 CASTRO VALLEY, CA

FIGURE 4  
 Project No. 10509

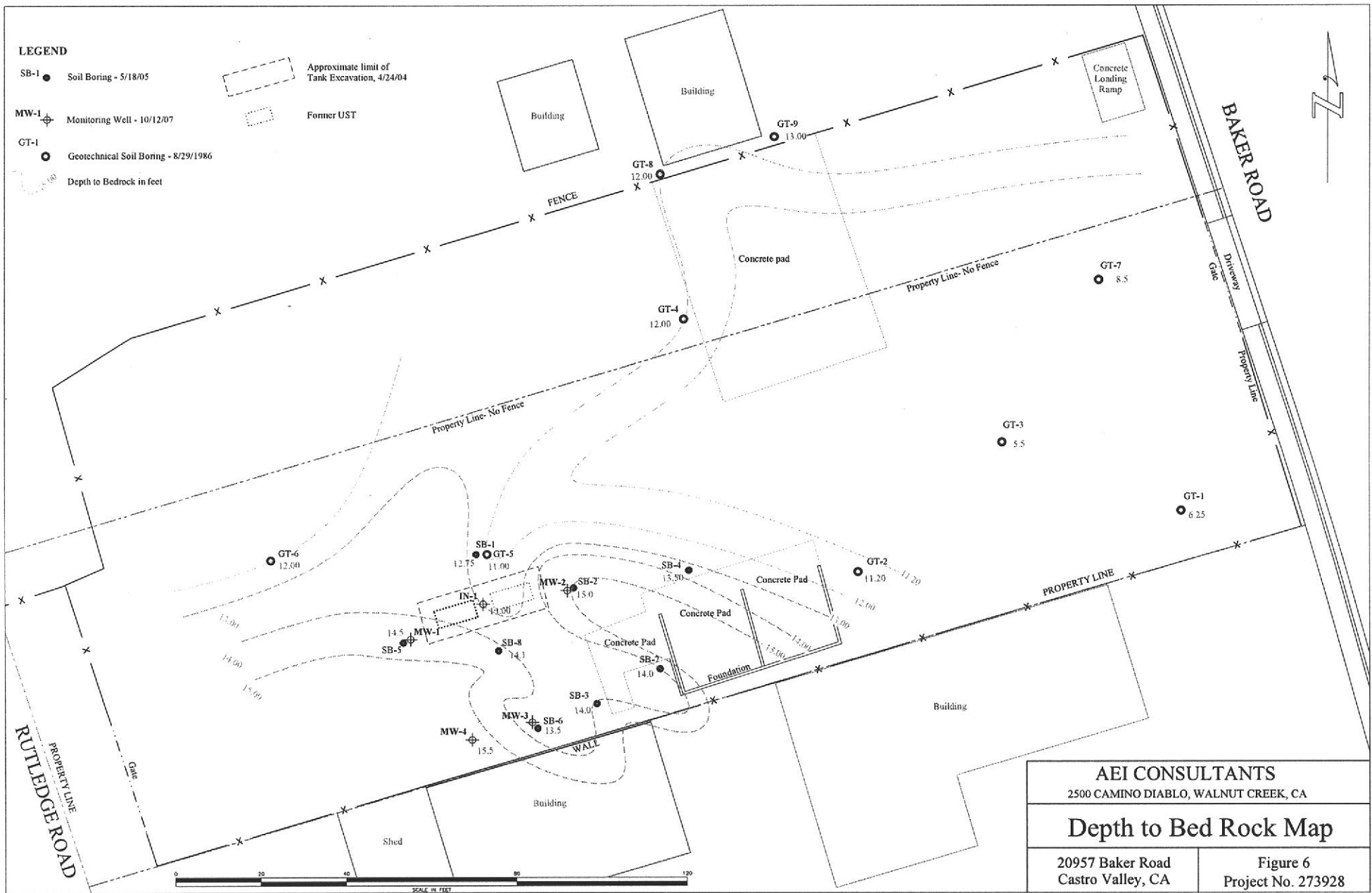








<b>AEI CONSULTANTS</b> 2500 CAMINO DIABLO, WALNUT CREEK, CA	
<b>Cross Section - Rainwater Infiltration pathways</b>	
Piazza 20957 Baker Road Castro Valley, California	<b>FIGURE 10</b> Project No. 273928



<b>AEI CONSULTANTS</b> 2500 CAMINO DIABLO, WALNUT CREEK, CA	
<b>Depth to Bed Rock Map</b>	
20957 Baker Road Castro Valley, CA	Figure 6 Project No. 273928

Table 1

**Soil Analytical Data**  
**Piazza, 20957 Baker Road, Castro Valley, CA**

Sample ID		TPH-g	TPH-d	TPH-mo	MTBE	Benzene	Toluene	Ethyl benzene	Xylenes				
										mg/kg			
										8015 C		8021 B	
<b>Tank Removal</b>													
T1W-EB8'	4/21/2004	160	4,900	----	<0.50	<0.05	<0.05	<0.05	<0.05				
T1E-EB8'	4/21/2004	190	10,000	----	<1.7	<0.17	<0.17	<0.17	8.4				
T2W-EB8'	4/21/2004	1,400	2,400	----	<10	<1.0	<1.0	<1.0	<1.0				
T2E-EB8'	4/21/2004	460	1,400	----	<0.50	<0.05	<0.05	<0.05	0.25				
<b>Phase II Site Investigation</b>													
SB1-11.5	5/18/2005	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
SB2-10	5/18/2005	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
SB3-7.5	5/18/2005	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
SB4-7.5	5/18/2005	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
SB5-7.5	5/18/2005	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
SB6-7.5	5/18/2005	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
SB7-8	5/18/2005	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
SB8-7.5	5/18/2005	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
<b>Well Installation</b>													
IN-1-8.5	10/12/2008	<1.0	<b>4.0</b>	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
IN-1-10	10/12/2008	<1.0	<b>5.1</b>	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
IN-1-12	10/12/2008	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
MW-1-8.5	10/12/2008	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
MW-1-9	10/12/2008	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
MW-2-11.5	10/12/2008	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
MW-2-13.5	10/12/2008	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
MW-3-11	10/12/2008	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
MW-3-13	10/12/2008	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
MW-4-11	10/12/2008	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
MW-4-12	10/12/2008	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
MW-4-16	10/12/2008	<1.0	<1.0	<5.0	<0.05	<0.005	<0.005	<0.005	<0.005				
ESL <9 ft DW		83	83	370	0.25	0.044	0.29	2.3	2.3				
ESL <9 ft NDW		83	83	2500	0.25	0.044	0.29	2.3	2.3				

Notes:

**Values in Bold above reporting limit**

Values in Bold Orange are above ESL

ESL &lt;9 ft DW = Shallow soil groundwater having potential for drinking water use

ESL &lt;9 ft NDW = Shallow soil groundwater with no potential for drinking water use

**Table 5****Soil Analytical Data - Metals and Misc.  
Piazza, 20957 Baker Road, Castro Valley, CA**

Analyte	Sample ID	
	IN-1-8.5	MW-2-11.5
	mg/kg	mg/kg
Antimony	0.51	0.60
Arsenic	4.4	5.3
Barium	73	80
Beryllium	<0.5	<0.5
Cadmium	<0.25	<0.25
Chromium (Total)	22	22
Chromium VI	<0.8	<0.2
Cobalt	4.3	11
Copper	11	14
Lead	4	7.4
Mercury	<0.05	<0.012
Molybdenum	<0.5	<0.5
Nickel	18	27
Selenium	<0.5	<0.5
Silver	<0.5	<0.5
Thallium	<0.5	<0.5
Vanadium	26	34
Zinc	26	39
COD	2400	1800
pH	7.37 @24.1 C	5.86 @ 23.8 C

Sampled 10/12/07  
mg/kg = micrograms per kilogram



**Table 7**      **Soil Vapor Data - RKI Eagle Gas Detector**  
**Piazza, 20957 Baker Road, Castro Valley, CA**

Sample ID	Date	Vacuum	TVH	Methane	Oxygen	Carbon Dioxide
			ppmv	Percent (%)		
MW-1	10/18/2007	11.64	0.0	0.0	20.8	0.4
	7/12/2008	----	0.0	0.0	9.8	8.8
MW-2	10/18/2007	11.74	0.0	0.0	15.9	2.9
	7/12/2008	----	0.0	0.0	10.5	7.7
MW-3	10/18/2007	11.1	0.0	0.0	7.9	7.3
	7/12/2008	----	0.0	0.0	10.5	7.7
MW-4	10/18/2007	14.92	0.0	0.0	19.0	1.3
	7/12/2008	----	0.0	0.0	11.3	6.0
IN-1	10/18/2007	10.89	0.0	0.0	12.4	5.0
	7/12/2008	----	0.0	0.0	9.2	9.4

TVH - Total Volatile Hydrocarbons      7?

**Table 2 Groundwater Analytical Data - Soil Borings and Paired Monitoring Wells  
Piazza, 20957 Baker Road, Castro Valley, CA**

Sample ID	Date	Depth to Water feet	TPH-g C6-C12	TPH-d C10-C23	TPH-mo C18+	TPH-bo C10+	MTBE	Benzene	Toluene	Ethyl- benzene	Xylenes
			µg/L		µg/L		µg/L	µg/L	µg/L	µg/L	µg/L
EPA Method 8015						EPA Method 8021B					
SB-1 W	5/18/2005	8.75	<50	190	1,400	----	<5.0	<0.5	<0.5	<0.5	<0.5
IN-1	10/18/07	10.89	<50	<50	ND<250	<100	<5.0	<0.5	<0.5	<0.5	<0.5
	1/14/2008	8.39	<50	<50	----	<250	<5.0	<0.5	<0.5	<0.5	<0.5
	04/16/08	10.21	<50	<50	----	<100	<5.0	<0.5	<0.5	<0.5	<0.5
	08/20/08	11.39	<50	<50	----	<100	<5.0	<0.5	<0.5	<0.5	<0.5
SB-2 W	5/18/2005	9.20	7,300	23,000	1,300	----	<5.0	<0.5	11	ND<5.0	27
MW-2	10/18/07	11.74	<50	<50	ND<250	<100	<5.0	<0.5	<0.5	<0.5	<0.5
	1/14/2008	8.49	<50	<50	----	<250	<5.0	<0.5	<0.5	<0.5	<0.5
	04/16/08	10.38	<50	<50	----	<100	<5.0	<0.5	<0.5	<0.5	<0.5
	08/20/08	11.56	<50	<50	----	<100	<5.0	<0.5	<0.5	<0.5	<0.5
SB3-W	5/18/2005	8.56	<50	62	ND<250	----	<5.0	<0.5	<0.5	<0.5	<0.5
MW-3	10/18/07	11.10	<50	<50	ND<250	<100	<5.0	<0.5	<0.5	<0.5	<0.5
	1/14/2008	8.41	<50	<50	----	<250	<5.0	<0.5	<0.5	<0.5	<0.5
	04/16/08	10.19	<50	<50	----	<100	<5.0	<0.5	<0.5	<0.5	<0.5
	08/20/08	11.38	<50	<50	----	<100	<5.0	<0.5	<0.5	<0.5	<0.5
SB4-W	5/18/2005	9.60	<50	56	ND<250	----	<5.0	<0.5	<0.5	<0.5	<0.5
SB5-W	5/18/2005	11.60	<50	670	1,400	----	<5.0	<0.5	<0.5	<0.5	<0.5
MW-1	10/18/07	11.64	<50	56	ND<250 (86)	140	<5.0	<0.5	<0.5	<0.5	<0.5
	1/14/2008	8.81	<50	<50	----	<250	<5.0	<0.5	<0.5	<0.5	<0.5
	04/16/08	8.98	<50	<50	----	<100	<5.0	<0.5	<0.5	<0.5	<0.5
	08/20/08	11.09	<50	<50	----	<100	<5.0	<0.5	<0.5	<0.5	<0.5
SB6-W	5/18/2005	8.62	<50	160	300	----	<5.0	<0.5	<0.5	<0.5	<0.5
MW-3	10/18/07	11.10	<50	<50	ND<250	<100	<5.0	<0.5	<0.5	<0.5	<0.5
SB7-W	5/18/2005	8.56	ND<50	ND<50	ND<250	----	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
SB8-W	5/18/2005	8.70	ND<50	320	480	----	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
RWQCB ESLs**			100	100	100	----	5.0	1.0	40	30	20

Notes

Soil boring data from 2005 is paired with twin 2007 groundwater monitoring well data for comparison purposes.

**BOLD** = Current groundwater data

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

TPH-mo = total petroleum hydrocarbons as motor oil

\*\* = RWQCB ESLs November 2007, TABLE F-1a. Groundwater Screening levels, Groundwater is a current or potential drinking water resource

MTBE = methyl tert-butyl ether

µg/L = micrograms per liter (parts per billion)

ft amsl = feet above mean sea level

ND = Not reported at or above the indicated method detection limit

**Table 6 Groundwater Analytical Data  
Piazza, 20957 Baker Road, Castro Valley, CA**

Sample ID	Date	Depth to Water feet	TPH-g C6-C12	TPH-d C10-C23	TPH-mo C18+	TPH-bo C10+	MTBE	Benzene	Toluene	Ethyl-benzene	Xylenes
			µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
EPA Method 8015						EPA Method 8021B					
IN-1	10/18/07	10.89	ND<50	ND<50	ND<250	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	1/14/2008	8.39	ND<50	ND<50	----	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	04/16/08	10.21	ND<50	ND<50	----	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	08/20/08	11.39	ND<50	ND<50	----	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW-1	10/18/07	11.64	ND<50	<b>56</b>	ND<250	<b>140</b>	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	1/14/2008	8.81	ND<50	ND<50	----	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	04/16/08	8.98	ND<50	ND<50	----	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	08/20/08	11.09	ND<50	ND<50	----	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW-2	10/18/07	11.74	ND<50	ND<50	ND<250	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	1/14/2008	8.49	ND<50	ND<50	----	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	04/16/08	10.38	ND<50	ND<50	----	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	08/20/08	11.56	ND<50	ND<50	----	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW-3	10/18/07	11.10	ND<50	ND<50	ND<250	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	1/14/2008	8.41	ND<50	ND<50	----	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	04/16/08	10.19	ND<50	ND<50	----	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	08/20/08	11.38	ND<50	ND<50	----	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
MW-4	10/18/07	14.82	ND<50	ND<50	ND<250	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	1/14/2008	8.77	ND<50	ND<50	----	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	04/16/08	9.94	ND<50	ND<50	----	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
	08/20/08	11.42	ND<50	ND<50	----	ND<100	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5
ESLs Residential			100	100	100	----	5.0	1.0	40	30	20
ESLs Commercial Industrial			210	210	210	----	1800	46	130	43	100

Notes

**Bold concentration above detection limit**

TPH-g = total petroleum hydrocarbons as gasoline  
 TPH-d = total petroleum hydrocarbons as diesel  
 TPH-mo = total petroleum hydrocarbons as motor oil  
 TPH-bo = total petroleum hydrocarbons as bunker oil  
 MTBE = methyl tert-butyl ether

µg/L = micrograms per liter (parts per billion)

ft amsl = feet above mean sea level

ND = Not reported at or above the indicated method detection limit

\*\* = RWQCB ESLs November 2007, TABLE F-1a. Groundwater Screening levels, Groundwater is a current or potential drinking water resource

**Table 6**

**Groundwater Analytical Data - Metals  
Piazza, 20957 Baker Road, Castro Valley, CA**

Analyte	Sample ID	
	MW-2	MW-3
	µg/L	µg/L
Antimony	0.72	<0.5
Arsenic	2.3	0.82
Barium	300	360
Beryllium	<0.5	<0.5
Cadmium	<0.25	<0.25
Chromium (Total)	0.57	0.55
Chromium VI	<0.2	<0.2
Cobalt	<0.2	<0.5
Copper	2.00	1.3
Lead	<0.5	<0.5
Mercury	0.017	<0.012
Molybdenum	4.7	0.70
Nickel	1.6	2.0
Selenium	1.9	1.4
Silver	<0.19	<0.19
Thallium	<0.5	<0.5
Vanadium	2.1	1.3
Zinc	180	190

Sampled 10/18/07

µg/L = micrograms per kilogram

**Table 4 Groundwater Elevation Data  
Piazza, 20957 Baker Road, Castro Valley, CA**

Well ID	Date	Well Elevation (ft amsl)	Depth to Water (ft)	Groundwater Elevation (ft amsl)	Elevation Change (ft)	
IN-1	10/15/07	159.85	11.00	148.85	----	
	10/18/07	159.85	10.89	148.96	0.11	
	10/22/2007*	159.85	10.93	148.92	-0.04	
	11/06/07	159.85	11.20	148.65	-0.27	
	01/14/08	159.85	8.39	151.46	2.81	
	04/16/08	159.85	10.21	149.64	-1.82	
	<b>08/20/08</b>	<b>159.85</b>	<b>11.39</b>	<b>148.46</b>	<b>-1.18</b>	
MW-1	10/15/07	159.62	14.30	145.32	----	
	10/18/07	159.62	11.64	147.98	2.66	
	10/22/07	159.62	10.86	148.76	0.78	
	11/06/07	159.62	10.95	148.67	-0.09	
	01/14/08	159.62	8.81	150.81	2.14	
	04/16/08	159.62	9.98	149.64	-1.17	
	<b>08/20/08</b>	<b>159.62</b>	<b>11.09</b>	<b>148.53</b>	<b>-1.11</b>	
MW-2	10/15/07	160.00	13.28	146.72	----	
	10/18/07	160.00	11.74	148.26	1.54	
	10/22/07	160.00	11.32	148.68	0.42	
	11/06/07	160.00	11.35	148.65	-0.03	
	01/14/08	160.00	8.49	151.51	2.86	
	04/16/08	160.00	10.38	149.62	-1.89	
	<b>08/20/08</b>	<b>160.00</b>	<b>11.56</b>	<b>148.44</b>	<b>-1.18</b>	
MW-3	10/15/07	159.79	11.01	148.78	----	
	10/18/07	159.79	11.10	148.69	-0.09	
	10/22/07	159.79	10.95	148.84	0.15	
	11/06/07	159.79	11.20	148.59	-0.25	
	01/14/08	159.79	8.41	151.38	2.79	
	04/16/08	159.79	10.19	149.60	-1.78	
	<b>08/20/08</b>	<b>159.79</b>	<b>11.38</b>	<b>148.41</b>	<b>-1.19</b>	
MW-4	10/15/07	159.69	14.57	145.12	----	
	10/18/07	159.69	14.92	144.77	-0.35	
	10/22/07	159.69	14.65	145.04	0.27	
	10/22/07	Well loaded with fresh water- surged for 15 minutes- water level dropping slowly @ 4.0 feet bgs				
	11/06/07	159.69	8.00	151.69	6.65	
	01/14/08	159.69	8.77	150.92	-0.77	
	04/16/08	159.69	9.94	149.75	-1.17	
	<b>08/20/08</b>	<b>159.69</b>	<b>11.42</b>	<b>148.27</b>	<b>-1.48</b>	

Depth to water measured from the top of well casing  
ft amsl = feet above mean sea level

**Table 3: Well Construction Details****Piazza, 20957 Baker Road, Castro Valley, CA**

<b>Well ID</b>	<b>Date Installed</b> (feet)	<b>Top of casing</b> (feet)	<b>Top of Well Box</b> (feet)	<b>Depth To Water 08/20/08</b> (feet)	<b>Casing Material</b>	<b>Boring Total Depth</b> (feet)	<b>Well Total Depth</b> (feet)	<b>Borehole Diameter</b> (inches)	<b>Casing Diameter</b> (inches)	<b>Screened Interval</b> (feet)	<b>Slot Size</b> (inches)	<b>Filter Pack Interval</b> (feet)	<b>Filter Pack Sand</b> (feet)	<b>Bentonite Interval</b> (feet)	<b>Grout Interval</b> (feet)
IN-1	10/12/07	160.12	159.85	11.39	PVC	16.5	16.5	8 1/4	2.0	6.5-16.5	0.020	6.0-16.5	2/12	5.0-5.5	.05-5.0
MW-1	10/12/07	159.84	159.62	11.09	PVC	16.5	16.5	8 1/4	2.0	6.5-16.5	0.020	6.0-16.5	2/12	5.0-6.5	.05-5.0
MW-2	10/12/07	160.30	160.00	11.56	PVC	16.5	16.5	8 1/4	2.0	6.5-16.5	0.020	6.0-16.5	2/12	5.0-6.5	.05-5.0
MW-3	10/12/07	160.04	159.79	11.38	PVC	16.5	16.5	8 1/4	2.0	6.5-16.5	0.020	6.0-16.5	2/12	5.0-6.5	.05-5.0
MW-4	10/12/07	159.95	159.69	11.42	PVC	16.5	16.5	8 1/4	2.0	6.5-16.5	0.020	6.0-16.5	2/12	5.0-6.5	.05-5.0

**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 273928**

**Log of Boring MW-1**  
 Sheet 1 of 1

Date(s) Drilled	October 12, 2007	Logged By	Leah Levine-Goldberg	Checked By	Robert F. Flory, PG
Drilling Method	Hollow Stem Auger	Drill Bit Size/Type	8 1/4 inch	Total Depth of Borehole	16.5 feet bgs
Drill Rig Type	CME-75	Drilling Contractor	HEW Drilling	Surface Elevation	159.84 feet MSL
Groundwater Level and Date Measured	14.75 feet ATD	Sampling Method(s)	ModCal	Permit #	W2007-0964
Borehole Backfill	Well Completion	Location			

Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				Asphalt		Asphalt 2", base rock 4"			TOC 159.62 ft
				CL		Clay, black 10YR 2/1, firm, stiff, moist			MW-1 is a twin to boring 5 (SB-5)
				CL		Silty Clay, dark yellowish brown 10YR3/4 with very dark brown mottling 10YR 2/2			Blank 2" diameter schedule 40 PVC
5		MW-1-5	5/7/7	SM-ML		Clayey Silt - Silty Sand, dark yellowish brown 10YR3/4 with some 10YR 4/6 mottling, firm, slightly moist	<1		Neat cement grout
		MW-1-8	4/6/7	SM		Sand, yellowish brown 10YR 4/6, very fine grained, clayey, firm - moderately firm, friable, very moist	<1		3/8" bentonite pellets
10		MW-1-10	5/7/10	SP		Sand, yellowish brown 10YR 4/6, very fine grained - coarse grained, firm, wet ?	<1		
		MW-1-12	5/10/13	CL		Gravelly Clay - Silty Clay, olive - olive brown 5y 4/4 - 2.5 4/4, firm - hard, slightly moist - (saprolite)	<1		
15				Claystone		Silty Claystone, light olive brown 2.5Y 4/4, firm - hard, indurated (ATD) $\frac{7}{16}$			

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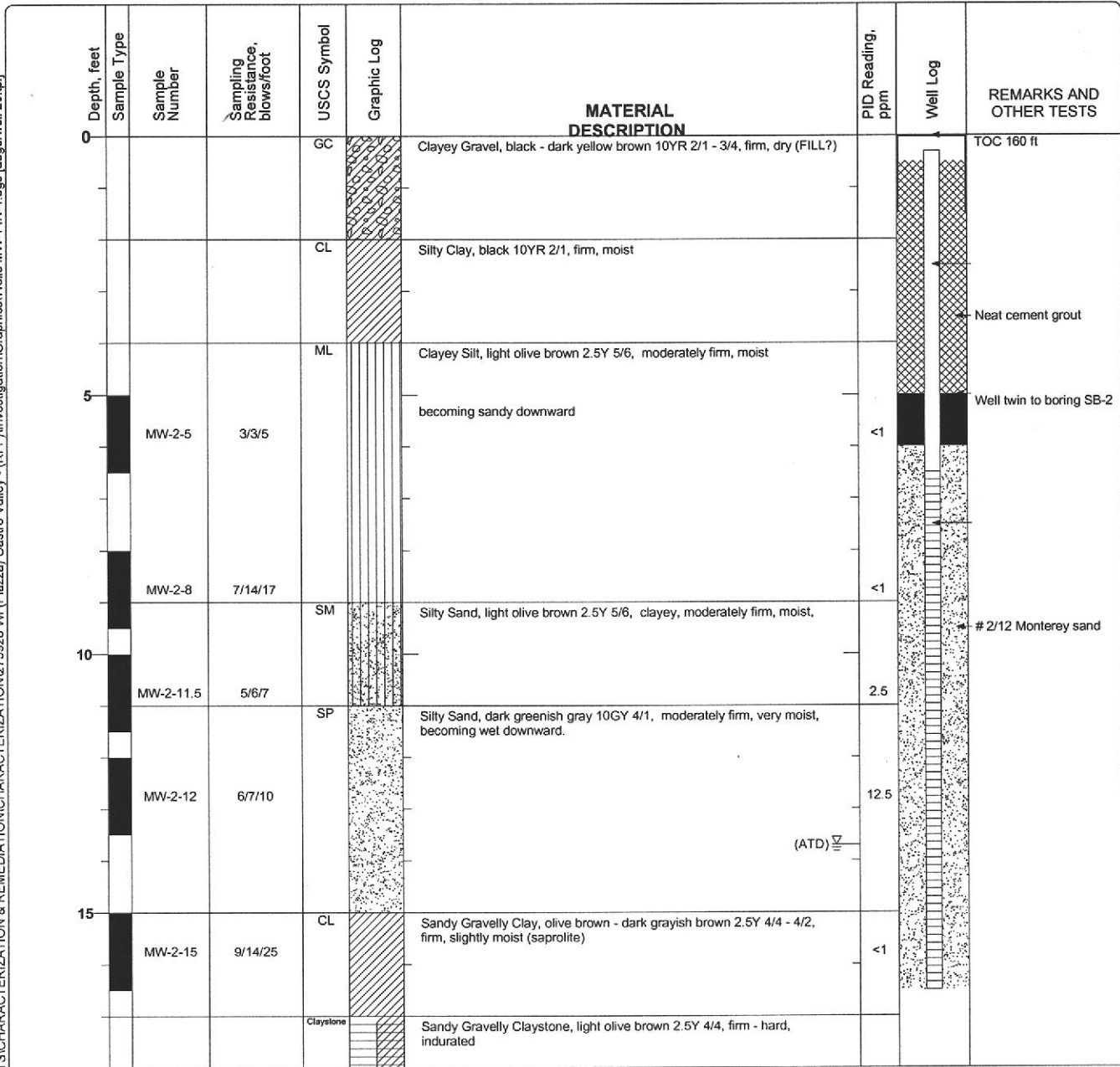


**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 273928**

**Log of Boring MW-2**  
 Sheet 1 of 1

Date(s) Drilled <b>October 12, 2007</b>	Logged By <b>Leah Levine-Goldberg</b>	Checked By <b>Robert F. Flory, PG</b>
Drilling Method <b>Hollow Stem Auger</b>	Drill Bit Size/Type <b>8 1/4 inch</b>	Total Depth of Borehole <b>18 feet bgs</b>
Drill Rig Type <b>CME-75</b>	Drilling Contractor <b>HEW DRILLING</b>	Surface Elevation <b>160.3 feet</b>
Groundwater Level and Date Measured <b>13.7 feet ATD</b>	Sampling Method(s) <b>ModCal</b>	Permit # <b>W2007-0965</b>
Borehole Backfill <b>Well Completion</b>	Location	

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**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 273928**

**Log of Boring MW-3**  
 Sheet 1 of 1

Date(s) Drilled	October 12, 2007	Logged By	Leah Levine-Goldberg	Checked By	Robert F. Flory, PG
Drilling Method	Hollow Stem Auger	Drill Bit Size/Type	8 1/4 inch	Total Depth of Borehole	16.5 feet bgs
Drill Rig Type	CME-75	Drilling Contractor	HEW Drilling	Surface Elevation	160.04 feet MSL
Groundwater Level and Date Measured	13.3 feet ATD	Sampling Method(s)	ModCal	Permit #	W2007-0966
Borehole Backfill	Well Completion	Location			

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Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				Asphalt GC		Asphalt			TOC 159.79 ft
				CL		Clayey Gravel, gray, FILL			
				CL		Clay, black 10YR 2/1, soft, moist			Blank 2" diameter schedule 40 PVC
				CL		Silty Clay, dark yellowish brown 10YR3/4 with very dark brown mottling 10YR 2/2			Neat cement grout
5		MW-3-5	3/5/5	CL-ML		Sandy Silty Clay - Clayey Silt, dark yellowish brown 10YR3/4 with some 10YR 4/6 mottling, firm, moist	<1		3/8" bentonite pellets
		MW-3-8	3/7/11	SM		Silty Sand, dark brown 10YR 5/8, very fine grained, slightly clayey, firm - moderately firm, friable, moist	<1		
10		MW-3-10	6/7/8	SP		Sandy Gravel, yellowish brown 10YR 5/4, well graded, moderately firm, moist	<1		
		MW-3-12	7/11/14	SW		Gravelly Sand, yellowish brown 10YR 5/4, well graded, moderately firm, wet.	<1		
				GC-CL		Clayey Gravel - Gravelly Clay, olive gray - olive 4/2 - 5/3, firm, wet, (saprolite)	(ATD) ∇		
15						Bottom of Boring at 16.5 feet bgs			



**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 273928**

**Log of Boring MW-4**  
 Sheet 1 of 1

Date(s) Drilled <b>October 12, 2007</b>	Logged By <b>Leah Levine-Goldberg</b>	Checked By <b>Robert F. Flory, P.G</b>
Drilling Method <b>Hollow Stem Auger</b>	Drill Bit Size/Type <b>8 1/4 inch</b>	Total Depth of Borehole <b>16.5 feet bgs</b>
Drill Rig Type <b>CME-75</b>	Drilling Contractor <b>HEW Drilling</b>	Surface Elevation <b>159.95 feet MSL</b>
Groundwater Level and Date Measured <b>15.4 feet ATD</b>	Sampling Method(s) <b>ModCal</b>	Permit # <b>W2007-0967</b>
Borehole Backfill <b>Well Completion</b>	Location	

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Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				Asphalt					TOC 159.69 ft
				GC		Clayey Gravel, gray, FILL			
				CL		Clay, Black 10YR 2/1			Blank 2" diameter schedule 40 PVC Neat cement grout
5		MW-4-6	5/8/9	CL		Sandy Silty Clay, dark brown, 10YR 3/6, moist, firm	<1		
		MW-4-8	5/7/10	SC		Clayey Silty Sand, dark olive brown - light olive brown 2.5Y 3/3 - 5/6, moderately firm, moist	<1		
10		MW-4-11	3/8/11	CL		Gravelly Clay, light brownish gray, weathered claystone with green siltstone clasts, firm, moist	<1		
		MW-4-12	6/8/12				<1		
15		MW-4-16	5/7/10	Claystone		Silty Claystone, grayish brown 2.5Y 5/2, saprolitic with purplish black clasts, firm, moist	<1		(ATD) $\frac{1}{2}$
						Bottom of Boring at 16.5 feet bgs			



**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 273928**

**Log of Boring IN-1**  
 Sheet 1 of 1

Date(s) Drilled <b>October 12, 2007</b>	Logged By <b>Leah Levine-Goldberg</b>	Checked By <b>Robert F. Flory, P.G</b>
Drilling Method <b>Hollow Stem Auger</b>	Drill Bit Size/Type <b>8 1/4 inch</b>	Total Depth of Borehole <b>16.5 feet bgs</b>
Drill Rig Type <b>CME-75</b>	Drilling Contractor <b>HEW Drilling</b>	Surface Elevation <b>160.12 feet MSL</b>
Groundwater Level and Date Measured <b>11.3 feet ATD</b>	Sampling Method(s) <b>ModCal</b>	Permit # <b>W2007-0968</b>
Borehole Backfill <b>Well Completion</b>	Location	

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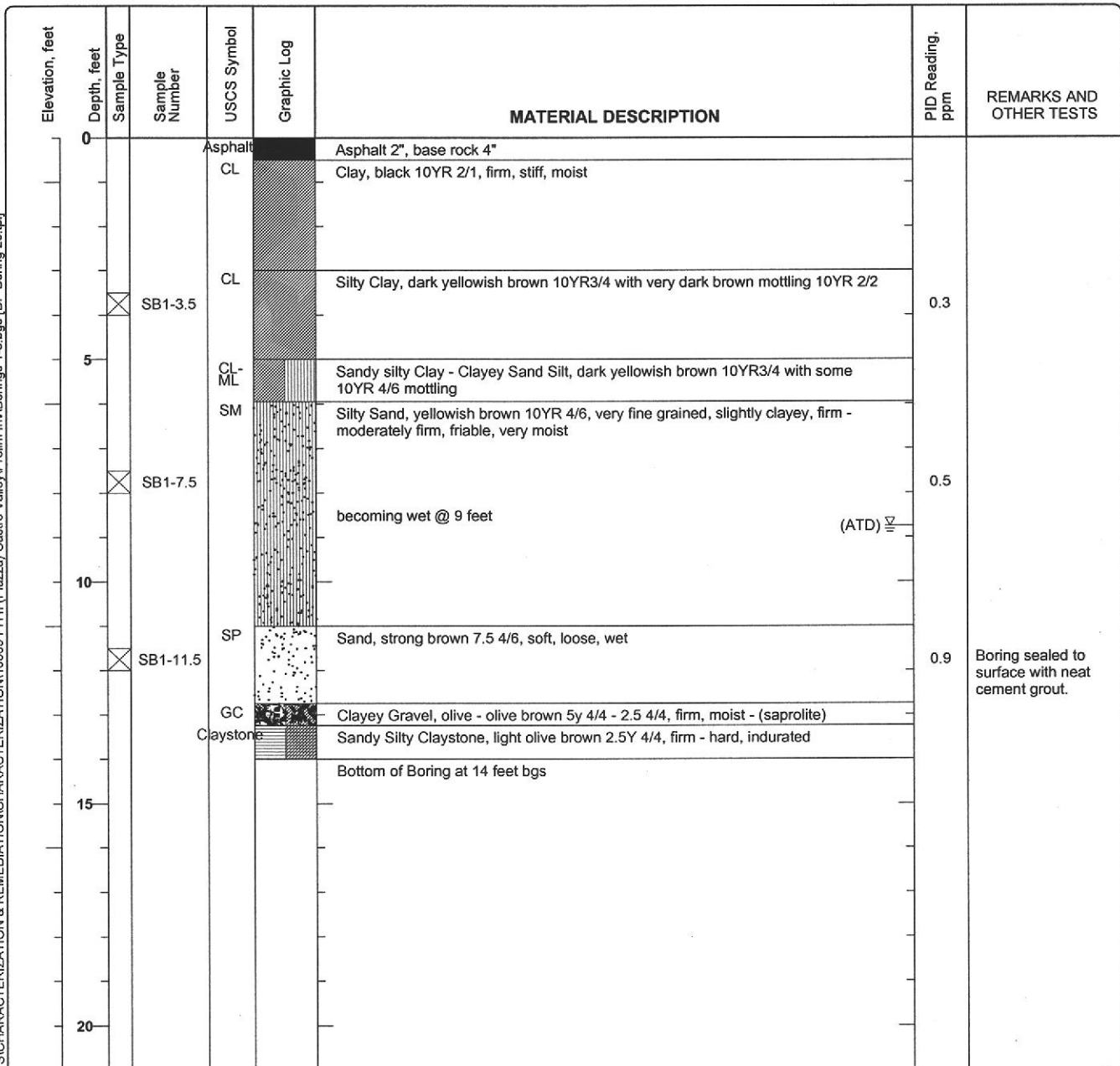
Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				GW		Gravel, light greenish gray, clayey, FILL			TOC 159.85 ft
5									Blank 2" diameter schedule 40 PVC Neat cement grout 3/8" bentonite pellets
10		IN-1-8	6/8/8	SM		Clayey Silty Sand, dark yellowish brown 10YR 4/6, soft, friable, moist	<1		0.010 factory slotted schedule 40 PVC casing # 2/12 Monterey sand
		IN-1-10		SP		Gravelly Silty Sand, dark reddish gray 7.5YR 4/4, soft, wet	<1		(ATD) $\frac{1}{2}$
		IN-1-12	7/14/20	Claystone		Claystone, dark grayish brown 10YR 3/2, hard			
15									
						Bottom of Boring at 16.5 feet bgs			



**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 10509**

**Log of Boring SB-1**  
 Sheet 1 of 1

Date(s) Drilled <b>May 18, 2005</b>	Logged By <b>Robert F. Flory</b>	Checked By <b>Adrian Angel</b>
Drilling Method <b>Geoprobe</b>	Drill Bit Size/Type	Total Depth of Borehole <b>14 feet bgs</b>
Drill Rig Type <b>Geoprobe 5410</b>	Drilling Contractor <b>EnProb</b>	Approximate Surface Elevation
Groundwater Level and Date Measured <b>8.75 feet ATD</b>	Sampling Method(s) <b>Tube</b>	Permit #
Borehole Backfill <b>Cement Slurry</b>	Location	



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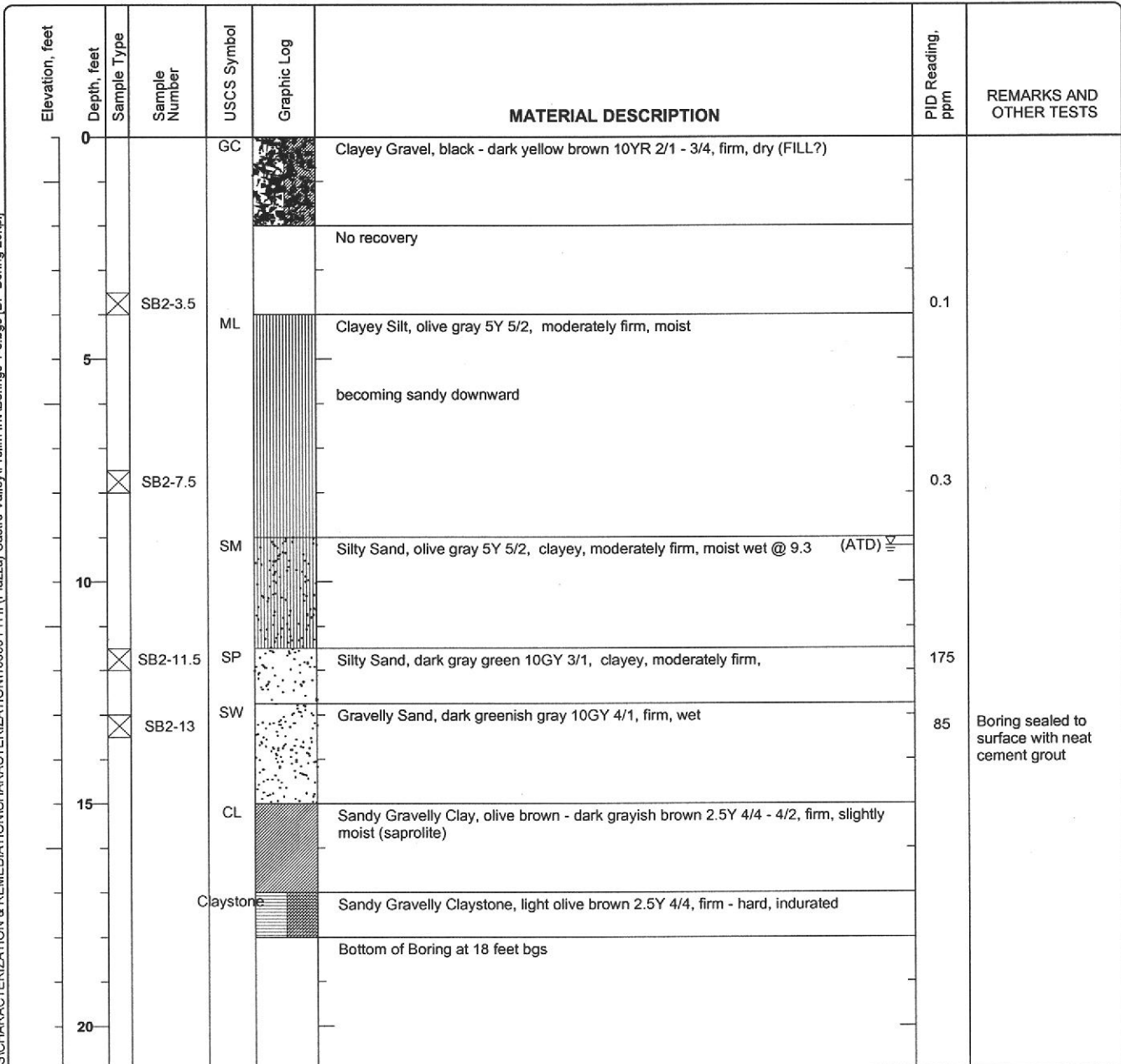


Figure

**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 10509**

**Log of Boring SB-2**  
 Sheet 1 of 1

Date(s) Drilled <b>May 18, 2005</b>	Logged By <b>Robert F. Flory</b>	Checked By <b>Adrian Angel</b>
Drilling Method <b>Geoprobe</b>	Drill Bit Size/Type <b>2 inch</b>	Total Depth of Borehole <b>18 feet bgs</b>
Drill Rig Type <b>Geoprobe 5410</b>	Drilling Contractor <b>EnProb</b>	Approximate Surface Elevation
Groundwater Level and Date Measured <b>9.2 feet ATD</b>	Sampling Method(s) <b>Tube</b>	Permit #
Borehole Backfill <b>Cement Slurry</b>	Location	



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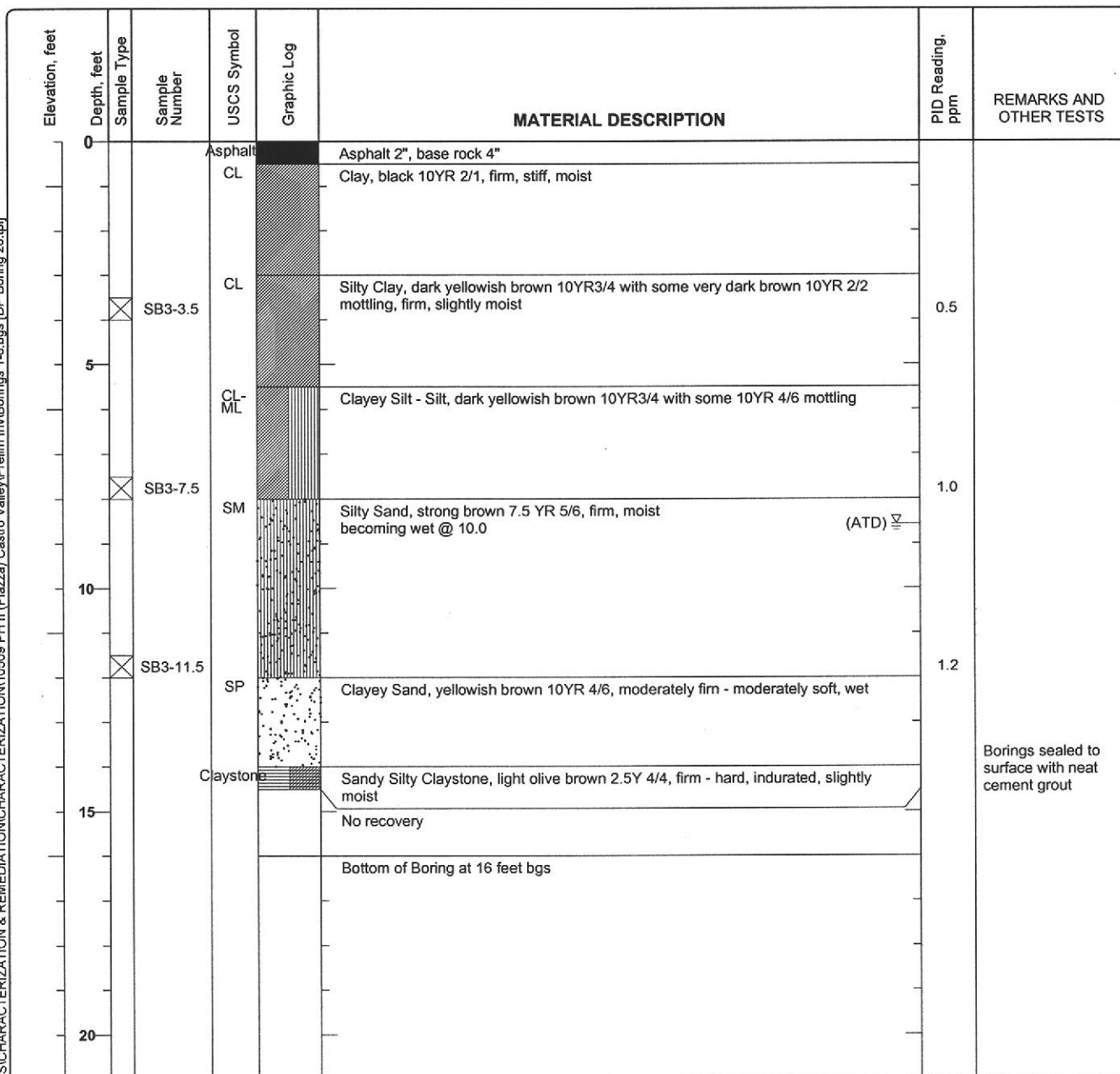


Figure

**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 10509**

**Log of Boring SB-3**  
 Sheet 1 of 1

Date(s) Drilled <b>May 18, 2005</b>	Logged By <b>Robert F. Flory</b>	Checked By <b>Adrian Angel</b>
Drilling Method <b>Geoprobe</b>	Drill Bit Size/Type <b>2 inch</b>	Total Depth of Borehole <b>16 feet bgs</b>
Drill Rig Type <b>Geoprobe 5410</b>	Drilling Contractor <b>EnProb</b>	Approximate Surface Elevation
Groundwater Level and Date Measured <b>8.56 feet ATD</b>	Sampling Method(s) <b>Tube</b>	Permit #
Borehole Backfill <b>Cement Slurry</b>	Location	



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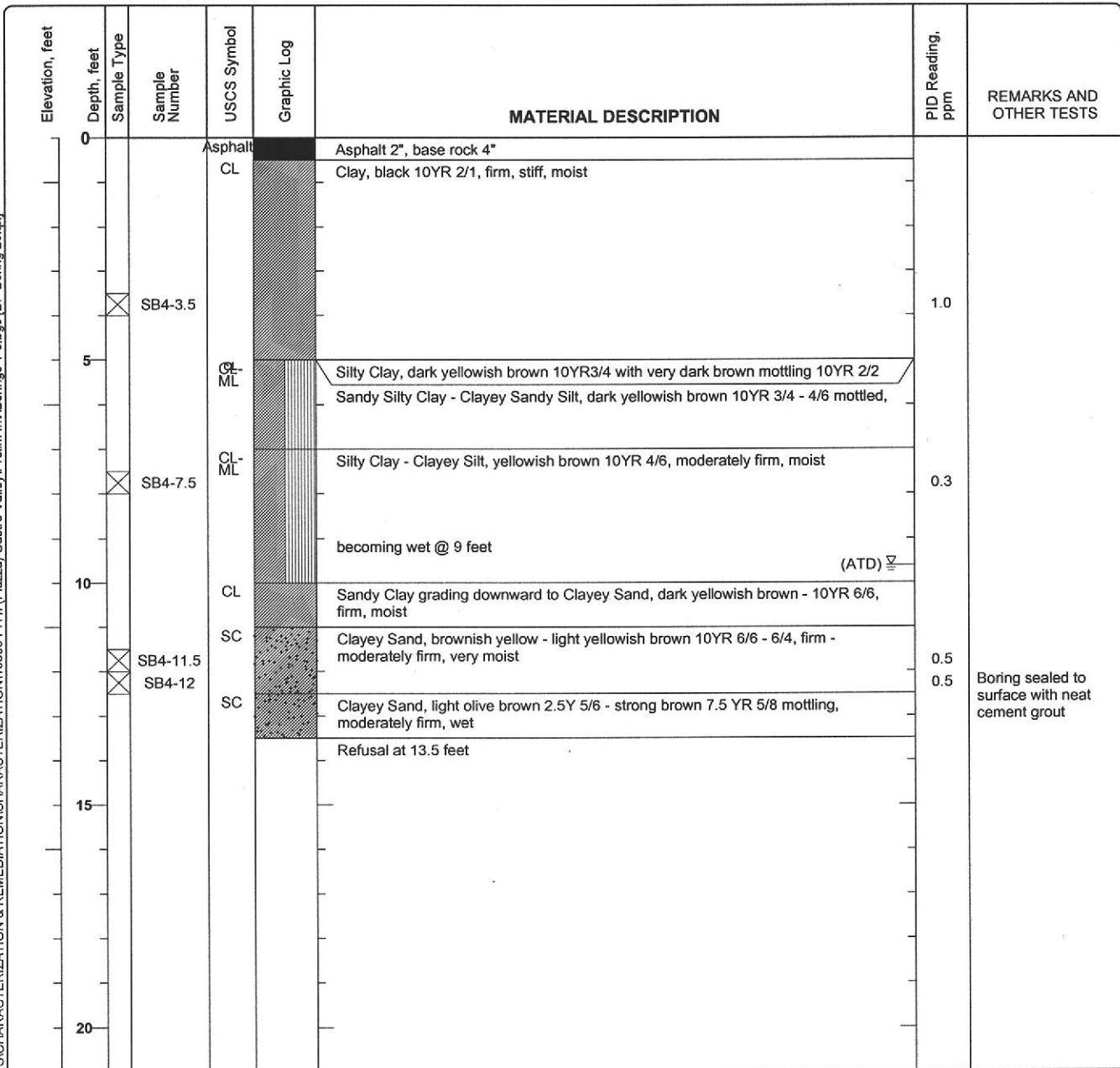


Figure

**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 10509**

**Log of Boring SB-4**  
 Sheet 1 of 1

Date(s) Drilled <b>May 18, 2005</b>	Logged By <b>Robert F. Flory</b>	Checked By <b>Adrian Angel</b>
Drilling Method <b>Geoprobe</b>	Drill Bit Size/Type <b>2 inch</b>	Total Depth of Borehole <b>13.5 feet bgs</b>
Drill Rig Type <b>Geoprobe 5410</b>	Drilling Contractor <b>EnProb</b>	Approximate Surface Elevation
Groundwater Level and Date Measured <b>9.6 feet ATD</b>	Sampling Method(s) <b>Tube</b>	Permit #
Borehole Backfill <b>Cement Slurry</b>	Location	

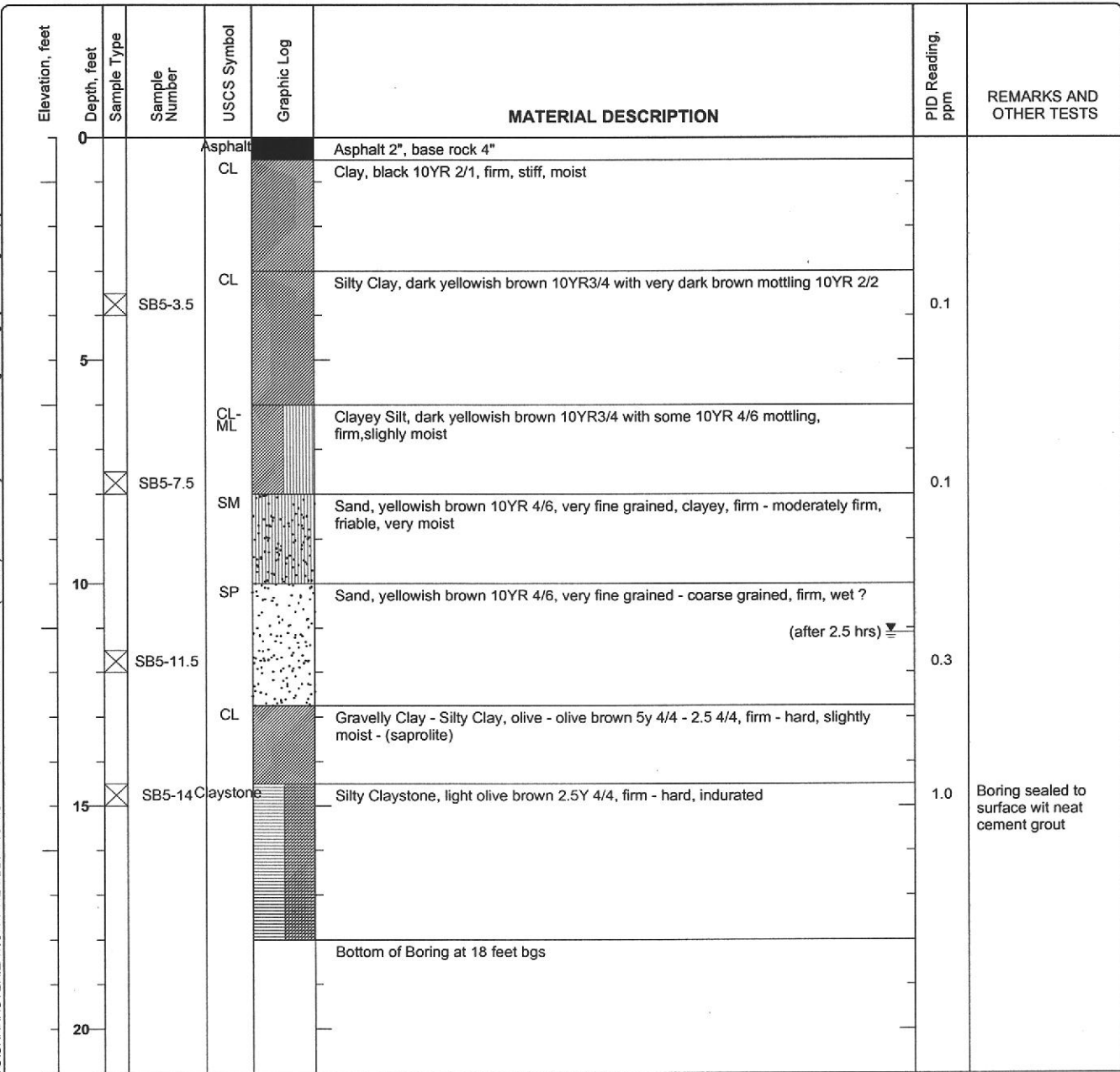


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Figure

Date(s) Drilled <b>May 18, 2005</b>	Logged By <b>Robert F. Flory</b>	Checked By <b>Adrian Angel</b>
Drilling Method <b>Geoprobe</b>	Drill Bit Size/Type <b>2 inch</b>	Total Depth of Borehole <b>18 feet bgs</b>
Drill Rig Type <b>Geoprobe 5410</b>	Drilling Contractor <b>EnProb</b>	Approximate Surface Elevation
Groundwater Level and Date Measured <b>Dry feet ATD, 11.1 feet after 2.5 hrs</b>	Sampling Method(s) <b>Tube</b>	Permit #
Borehole Backfill <b>Cement Slurry</b>	Location	



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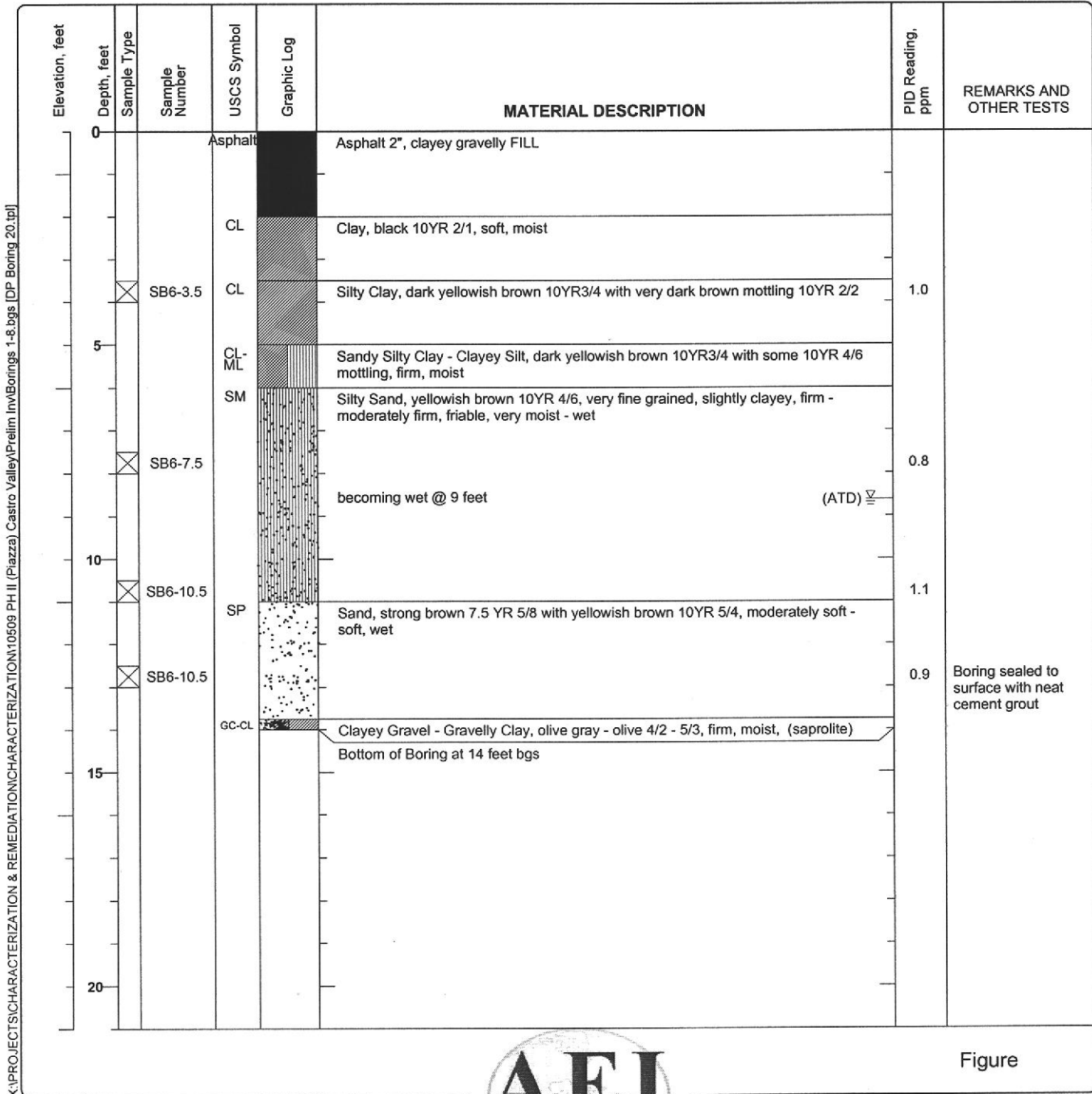
Figure



**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 10509**

**Log of Boring SB-6**  
 Sheet 1 of 1

Date(s) Drilled <b>May 18, 2005</b>	Logged By <b>Robert F. Flory</b>	Checked By <b>Adrian Angel</b>
Drilling Method <b>Geoprobe</b>	Drill Bit Size/Type <b>2 inch</b>	Total Depth of Borehole <b>14 feet bgs</b>
Drill Rig Type <b>Geoprobe 5410</b>	Drilling Contractor <b>EnProb</b>	Approximate Surface Elevation
Groundwater Level and Date Measured <b>8.62 feet ATD</b>	Sampling Method(s) <b>Tube</b>	Permit #
Borehole Backfill <b>Cement Slurry</b>	Location	



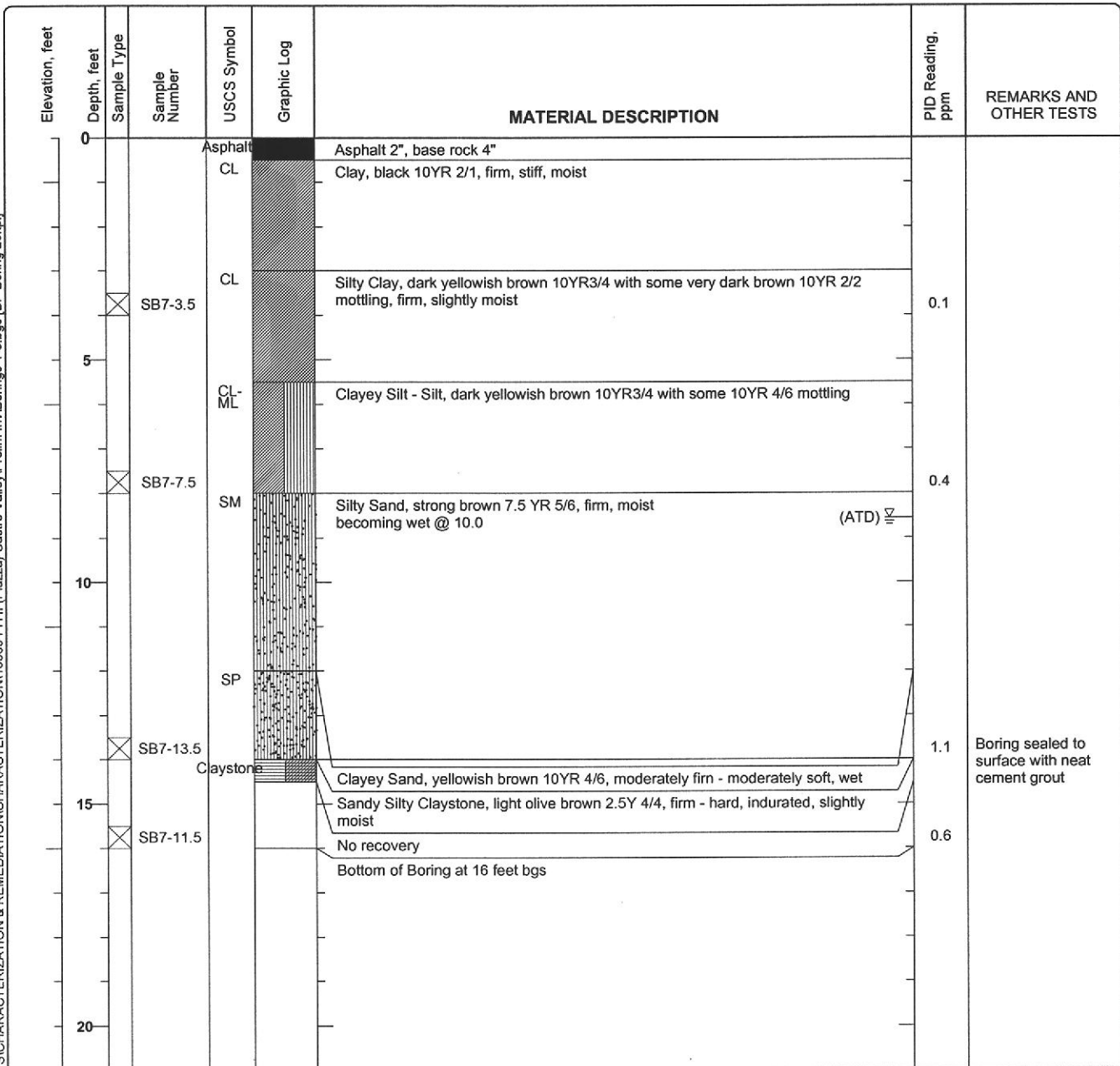
Figure

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**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 10509**

**Log of Boring SB-7**  
 Sheet 1 of 1

Date(s) Drilled <b>May 18, 2005</b>	Logged By <b>Robert F. Flory</b>	Checked By <b>Adrian Angel</b>
Drilling Method <b>Geoprobe</b>	Drill Bit Size/Type <b>2 inch</b>	Total Depth of Borehole <b>16 feet bgs</b>
Drill Rig Type <b>Geoprobe 5410</b>	Drilling Contractor <b>EnProb</b>	Approximate Surface Elevation
Groundwater Level and Date Measured <b>8.56 feet ATD</b>	Sampling Method(s) <b>Tube</b>	Permit #
Borehole Backfill <b>Cement Slurry</b>	Location	



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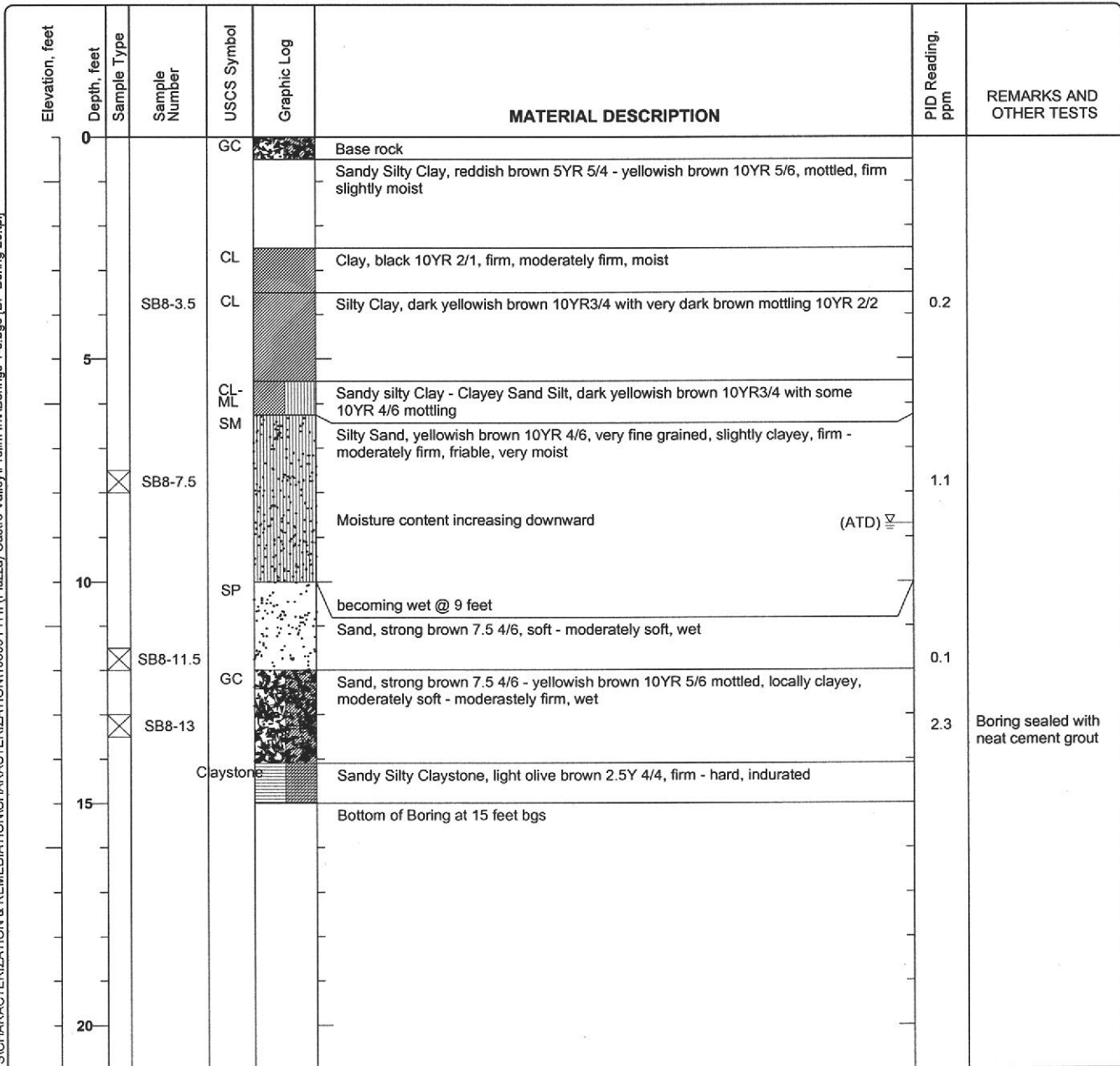
Figure

**Project: Piazza**  
**Project Location: 20957 Baker Road, Castro Valley, CA**  
**Project Number: 10509**

**Log of Boring SB-8**  
 Sheet 1 of 1

Date(s) Drilled <b>May 18, 2005</b>	Logged By <b>Robert F. Flory</b>	Checked By <b>Adrian Angel</b>
Drilling Method <b>Geoprobe</b>	Drill Bit Size/Type <b>2 inch</b>	Total Depth of Borehole <b>15 feet bgs</b>
Drill Rig Type <b>Geoprobe 5410</b>	Drilling Contractor <b>EnProb</b>	Approximate Surface Elevation
Groundwater Level and Date Measured <b>8.7 feet ATD</b>	Sampling Method(s) <b>Tube</b>	Permit #
Borehole Backfill <b>Cement Slurry</b>	Location	

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Figure

Project: Baker Road Apartments  
Castro Valley, California

# Log of Boring No. 1

Project Number: 86204

Type of Boring: 4½ inch Auger

Date Drilled: August 29, 1986

Hammer Weight: 140 lbs.

Depth, Ft.	Samples	Blows/Ft.	MATERIAL DESCRIPTION	LABORATORY TESTS		
				Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, pcf
Surface Elevation: 158.0 ft.						
1		16	GRAVELLY CLAY (CL) FILL stiff, moist, brown	21	101	5430
2		10	SILTY CLAY (CL) very stiff, moist, dark brown to black with traces of coarse sands and weathered light brown sandstone deposits	20	101	5000
3		47	WEATHERED CLAYSTONE plastic, light brown	24	99	6590
4		30* 2"	light grey-brown	---	---	---
5		50* 1"		---	---	---
Bottom of boring at 15'-1". No groundwater encountered at time of drilling. *Blow count during seating of sampler.						

Project: Baker Road Apartments  
Castro Valley, California

# Log of Boring No. 2

Project Number: 86204  
Date Drilled: August 29, 1986

Type of Boring: 4½ inch Auger  
Hammer Weight: 140 lbs.

Depth, Ft.	Samples	Blows/Ft.	MATERIAL DESCRIPTION	LABORATORY TESTS		
				Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf
Surface Elevation: 157.7 ft.						
1		19	GRAVELLY CLAY (CL) FILL very stiff, moist, mottled orange-brown with silts, sands, and angular rock fragments	12	112	6660
2		13	SILTY CLAY (CL) very stiff, moist, brown with traces of fine sands and orange-brown sandstone deposits	16	111	5680
5		15		16	112	5030
4		21	orange-brown with fine gravels and coarse sands	11	123	2100
10			▽ **			
5		30* 3"	WEATHERED CLAYSTONE plastic, orange-brown	---	---	---
15			Bottom of boring at 13'-3". *Blow count during seating of sampler. **Groundwater at 10'-0" at time of drilling.			
20						
25						
30						

<b>Project:</b> Baker Road Apartments Castro Valley, California	<h2 style="margin: 0;">Log of Boring No. 3</h2>
--	---

<b>Project Number:</b> 86204  <b>Date Drilled:</b> August 29, 1986	<b>Type of Boring:</b> 4½ inch Auger  <b>Hammer Weight:</b> 140 lbs.
--	--

Depth, Ft.	Samples	Blows/Ft.	MATERIAL DESCRIPTION	LABORATORY TESTS		
				Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf
Surface Elevation: 158.2 ft.						
1		17	A.C. pavement approximately 6 inches thick GRAVELLY CLAY (CL) FILL very stiff, moist, mottled brown	20	101	9850
2		20	SILTY CLAY (CL) hard, moist, dark brown to black with traces of sands	14	119	13,210
5		30	↓ grey-brown with some coarse sands	13	120	6010
		4"	WEATHERED CLAYSTONE plastic, brown, indurated	---	---	---
4		37*	Bottom of boring at 9'-0". No groundwater at time of drilling. *Blow count during seating of sampler.			
10		6"				
15						
20						
25						
30						

<b>Project:</b> Baker Road Apartments Castro Valley, California	<h1 style="margin: 0;">Log of Boring No. 4</h1>
--	---

<b>Project Number:</b> 86204  <b>Date Drilled:</b> August 29, 1986	<b>Type of Boring:</b> 4½ inch Auger  <b>Hammer Weight:</b> 140 lbs.
--	--

Depth, Ft.	Samples	Blows/Ft.	MATERIAL DESCRIPTION	LABORATORY TESTS		
				Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf
Surface Elevation: 157.9 ft.						
1	12		GRAVELLY CLAY (CL) <span style="float: right;">FILL</span> stiff, moist, mottled brown with rock fragments	13	104	---
2	12		SILTY CLAY (CL) hard, moist, dark brown to black with traces of sands	15	111	10,530
5	3	16	CLAYEY SILT (ML) hard, moist, brown with some fine sands	14	117	12,820
4	17		CLAYEY SAND (SC-SW) medium dense, moist, brown with varying amounts of silt and clay  wet	17	109	1340
10			*** 			
5	26		** 			
6	39		WEATHERED SHALE plastic, brown			
15	7	20 3"	grey with fine sands stronger with depth			
20	8	50* 2"	Bottom of boring at 20'-2". *Blow count during seating of sampler. **Groundwater at 11'-6" at time of drilling. ***Groundwater at 10'-3" on September 2, 1986.			

Project: Baker Road Apartments  
Castro Valley, California

# Log of Boring No. 5

Project Number: 86204

Type of Boring: 4½ inch Auger

Date Drilled: August 29, 1986

Hammer Weight: 140 lbs.

Depth, Ft.	Samples	Blows /Ft.	MATERIAL DESCRIPTION	LABORATORY TESTS		
				Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf
Surface Elevation: 157.3 ft.						
1	18		A.C. pavement and aggregate baserock			
			SILTY CLAY (CH) hard, moist, black	24	101	8180
5			mottled brown-grey			
2	14					
			SILTY CLAY (CL) stiff, moist, light brown, silt content increasing with depth			
10	3	12				
	4	30*	SANDY SILT - SILTY SAND (ML-SM) stiff, moist, light brown-orange brown with very fine sands			
		1"	WEATHERED SHALE weak, brown			
15			Bottom of boring at 11'-1". *Blow count during seating of sampler. **Groundwater at 11'-0" at time of drilling.			
20						
25						
30						



Project: Baker Road Apartments  
Castro Valley, California


# Log of Boring No. 6

Project Number: 86204

Type of Boring: 4½ inch Auger

Date Drilled: August 29, 1986

Hammer Weight: 140 lbs.

Depth, Ft.	Samples	Blows/Ft.	MATERIAL DESCRIPTION	LABORATORY TESTS		
				Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf
Surface Elevation: 156.8 ft.						
1		16	A.C. pavement GRAVELLY CLAY (CL) FILL stiff, moist, mottled brown	23	97	6520
5		13	SILTY CLAY (CH) very stiff, moist, black ↓ mottled brown-grey with traces of sands ↑ increasing silt content	17	111	6370
10		21	SILTY SAND (SM) dense, moist, mottled orange-brown * 	---	---	---
15		20 5"	WEATHERED SHALE weak, grey with clay seams	---	---	---
15			Bottom of boring at 12'-11". *Groundwater at 9'-6" at time of drilling.			

Project: Baker Road Apartments  
 Castro Valley, California

# Log of Boring No. 7

Project Number: 86204

Type of Boring: 4½ inch Auger

Date Drilled: August 29, 1986

Hammer Weight: 140 lbs.

Depth, Ft.	Samples	Blows/Ft.	MATERIAL DESCRIPTION	LABORATORY TESTS		
				Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf
Surface Elevation: 158.1 ft.						
1		11	GRAVELLY CLAY (CL) FILL stiff, moist, mottled brown	12	113	17,050
2		11	SILTY CLAY (CL) very stiff to hard, moist, dark brown with scattered organics and fine sands	15	113	6700
5		15	increasing silt content	---	---	---
10	4	46	SANDY SILT - SILTY SAND (ML-SM) hard, moist, mottled dark brown	---	---	---
			WEATHERED SHALE weak, light brown			
Bottom of boring at 10'-0". No groundwater encountered at time of drilling.						

Project: Baker Road Apartments  
Castro Valley, California


# Log of Boring No. 8

Project Number: 86204

Type of Boring: 4½ inch Auger

Date Drilled: August 29, 1986

Hammer Weight: -----

Depth, Ft.	Samples	Blows/Ft.	MATERIAL DESCRIPTION	LABORATORY TESTS		
				Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf
Surface Elevation: 158.0 ft.						
			GRAVELLY CLAY (CL) FILL stiff, moist, mottled brown			
5			SILTY CLAY (CL) very stiff, moist, dark brown  ↓ mottled brown			
10			SILTY SAND (SM) * dense, wet, mottled brown 			
15			WEATHERED CLAYSTONE weak, brown			
20			Bottom of boring at 13'-0". *Groundwater at 9'-0" at time of drilling.			
25						
30						

Project: Baker Road Apartments  
Castro Valley, California

# Log of Boring No. 9

Project Number: 86204

Type of Boring: 4½ inch Auger

Date Drilled: August 29, 1986

Hammer Weight: ----

Depth, Ft.	Samples	Blows/Ft.	MATERIAL DESCRIPTION	LABORATORY TESTS		
				Moisture Content, %	Dry Density, pcf	Unconfined Compressive Strength, psf
			Surface Elevation: 158.0 ft.			
			GRAVELLY CLAY (CL) FILL stiff, moist, brown			
5			SILTY CLAY (CL) very stiff, moist, dark brown mottled brown			
10			GRAVELLY CLAY (CL) very stiff, moist			
15			Bottom of boring at 13'-0". No groundwater encountered at time of drilling. Weathered claystone encountered at bottom of boring.			
20						
25						
30						