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

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

June 25, 2001

Mr. Mark Gomez
City of Oakland
Environmental Services Division
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, California 94612

RE: Fuel Leak Site Case Closure
(STID # 6400 / RO # 183)

Preservation Park Residential Redevelopment
655 12th Street, Oakland, California 94612

Dear Mr. Gomez:

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 Services, Local Oversight Program is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

Site Investigation and Cleanup Summary:

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

- Four Thousand parts per million (ppm) Total Petroleum Hydrocarbon (TPH) as Gasoline; 1,800 ppm TPH diesel; 82 ppm total oil and grease; 3.2 ppm benzene; 26 ppm toluene; 19 ppm ethylbenzene; 156 ppm xylene; 0.28 ppm chlorobenzene; 0.33 ppm 1,2 dichloroethane, and 598 ppm lead remain in the soil at the site.
- Ninety six thousand parts per billion (ppb) TPH gasoline; 3,100 ppb TPH diesel; 4,000 ppb benzene; 1,000 ppb toluene; 2,200 ppb ethyl benzene; 13,400 ppb xylene; 180 ppb 1,2 dichloroethane; 430 ppb lead remain in groundwater beneath the site.
- A long term risk management plan (RMP) dated June 1, 2001 was submitted for the site. City of Oakland and Preservation Park, LLC will implement the RMP.
- The subject site will be flagged by the Permit Tracking System (PTS).

If you have any questions, please contact me at (510) 567-6780. Thank you.

Sincerely,

Susan L. Hugo
Supervising Hazardous Materials Specialist

Enclosures
1 Case Closure Letter
2 Case Closure Summary

c Leroy Griffin, Oakland Fire Department, 1605 Martin Luther King Jr Way, Oakland, CA 94612
SH / files

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

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

REMEDIAL ACTION COMPLETION CERTIFICATION

June 25, 2001

Mr. Mark Gomez
City of Oakland
Environmental Services Division
250 Frank H. Ogawa Plaza, Suite 5301
Oakland, California 94612

RE: RO# 183 / STID# 6400 **Preservation Park Residential Redevelopment**
655 12th Street, Oakland, California 94612

Dear Mr. Gomez:

This letter confirms the completion of a site investigation and remedial action for the reported five 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 tanks 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 site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

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

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

Sincerely,

Mee Ling Tung, Director

c: Chuck Headlee, San Francisco Bay RWQCB
Dave Deaner, SWRCB, UST Cleanup Fund Program (with enclosure)
Leroy Griffin, Oakland Fire Services
SH / file

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: June 20, 2001

Agency Name: **Alameda County-HazMat**
Address: **1131 Harbor Bay Parkway**
City/State/ Zip: **Alameda, CA 94502**
Phone: **(510) 567-6700**
Responsible Staff Person: **Susan L. Hugo**
Title: **Acting Supervisor, HMS**

II. CASE INFORMATION

Site Facility Name: **Preservation Park Residential Redevelopment**
Site Facility Address: **655 12th Street, Oakland, California 94612**
RB LUSTIS Case No.: **N/A**
Local Case No./ LOP Case No. **6704 / RO# 183**
URF Filing Date: **NA**
SWEEPS No.: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
City of Oakland Redevelopment Agency Attn: Mark Gomez	**250 Frank Ogawa Plaza, Suite 5301**	**(510) 238-7286**

Tank No:	Size in gal.	Contents:	Closed in-place or removed?:	Date:
At least Five tanks	**Approximately 500 -gallons**	**Either gasoline, diesel or waste oil**	**Reportedly removed**	**Probably in 1971**

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **UNKNOWN**
Site characterization complete: **YES**
Date approved by oversight agency:
Monitoring wells installed **YES (Temporary Wells)**
Number: **3**
Proper screened interval ? **YES (between 20 to 30 feet bgs)**
Highest GW depth below ground surface: **24 feet**
Lowest depth: **29 feet**
Flow direction: **North to Northwest**
Most sensitive current use: **Two to four story, 92-unit residential structure with first level parking garage below grade**
Are drinking water wells affected ? **NO**
Aquifer Name: **UNKNOWN**
Is surface water affected ? **UNKNOWN**
Nearest affected SW name: **NA**
Off-site beneficial use impacts (address / location): **UNKNOWN**
Report (s) on file ? **YES**
Where is report (s) filed ? **Alameda County, 1131 Harbor Bay Parkway, Alameda, CA 94502**

Treatment and Disposal of Affected Materials:

Materials	Amount (Include Units)	Action (Treatment /or Disposal w/ Destination)	Date
Tank	5 – 500 gallons	UNKNOWN	UNKNOWN
Soil	UNKNOWN	UNKNOWN	UNKNOWN
Water	UNKNOWN	UNKNOWN	UNKNOWN

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before*	After	Before**	After
TPH gasoline	4,000		96,000	
TPH diesel	1,800		3,100	
Total Oil & Grease	82			
Benzene	3.2		4.000	
Toluene	26		11,000	
Ethylbenzene	19		2,200	
Xylene	156		13,400	
MTBE	ND		ND	
Chlorobenzene	0.28			
1,2 dichloroethane	0.33		180	
Lead	598		430	

*** Soil samples collected in 1991 and 1998 (see Tables 1 and 2).**
**** Grab water sample collected from TW-1 on 3/3/01 see Table 4.**

Comments (Depth of Remediation, etc.): See "Additional Comments" section.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan ? **UNKNOWN**

Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan ? **UNKNOWN**

Does corrective action protect public health for current land use ? **YES**

Site management requirements: **A revised long term risk management plan dated June 1, 2001 submitted for the site will be implemented.**

Should corrective action be reviewed if land use changes ? **YES**

Monitoring wells Decommissioned : **NO (will decommission upon closure of the site)**

Number Decommissioned: **NA**

Number Retained **THREE**

List enforcement actions taken **NONE**

List enforcement actions rescinded. **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Susan L. Hugo** Title: **Supervising Hazardous Materials Specialist**

Signature: Susan L Hugo Date: 6/25/01

Reviewed by:

Name: **Ariu Levi** Title: **Chief, Environmental Health Services**

Signature: Date: 6/22/01

VI. RWQCB NOTIFICATION

Date Submitted to RB: 6/25/01 RB Response: Concur

RWQCB Staff Name: **Chuck Headlee** Title: **Engineering Geologist**

Signature: Chuck Headlee Date: 6/25/01

VII. ADDITIONAL COMMENTS, DATA, ETC.

The subject site is located at 655 12th Street, along Martin Luther King Way, between 11th and 12th Streets in downtown Oakland, California. The site (approximately 150 feet by 200 feet) is vacant and is currently owned by Oakland Redevelopment Agency. Preservation Park, LLC plans to redevelop the site into 2 to 4-story, 92-unit residential structure with a parking structure extending on-half story below ground across the entire property

In 1940, a gasoline service station was constructed at the site. It was reported that the service station had at least five 500-gallon capacity underground storage tanks (USTs). The service station was demolished in 1971 and the tanks were reportedly removed at that time.

Site assessment conducted by City of Oakland in 1991 concluded that Total Petroleum Hydrocarbon (TPH) as gasoline, TPH as diesel, oil & grease, 1,2 –dichloroethane, chlorobenzene, and lead were present in soil at the site (see Table 1). Test borings indicate that the site is blanketed by a layer of fill about 5 feet thick. The fill consists predominantly of loose sands underlain by dense sands and silty and clayey sands of the Merritt sand formation. These soils extended up to 32 feet (depth explored). Groundwater water levels were measured at depths of about 24 to 29 feet below ground surface (bgs). No groundwater samples were collected during this phase of the investigation.

In 1998, a Phase II site assessment was conducted by U.S. Environmental Protection Agency (EPA) which included soil and groundwater sampling, data validation and completion of City of Oakland's Risk-Based Corrective Action (RBCA) eligibility checklists. Analytical results (see Table 2) showed that benzene, toluene and xylene found in soils at the site were above City of Oakland's risk–based screening levels (RBSLs) and site specific target levels (SSTLs). Benzene, ethylbenzene, toluene and xylene were detected in groundwater above the RBSLs and SSTLs.

On August 4, 2000, additional soil sampling from twelve test pits was conducted at the site. Soil samples were collected at depths ranging from 0 to 6 feet bgs. Results showed petroleum hydrocarbons at very low concentration and lead up to 220 parts per million (ppm) (see Table 3).

On February 28, 2001, the depth to groundwater was measures in three monitoring wells (W-1 to W-3) located adjacent to City-owned property, approximately 100 feet east of the site (see Figure 4). Depth to groundwater ranged from 25.5 to 26.5 feet. Groundwater flow direction at this site appeared to be towards north-northwest.

Further site investigation was conducted in March 2000 which included the installation of three temporary wells (TW1 through TW-3) Soil and groundwater samples collected from TW-1 near the former tank area showed petroleum hydrocarbon contaminations (see Table 4). Samples collected from two off-site wells (TW-2 and TW-3) implaced in the downgradient direction (based on historical data collected from an adjacent site, see Figure 4) showed very low to non–detect concentrations of petroleum hydrocarbons and volatile organic compounds (see Table 4).

A Tier 3 Risk-Based Corrective Action (RBCA) evaluation was conducted using historical data and included the results of the most recent sampling in March 2001 collected for the site. Result of the Tier 3 RBCA evaluation using site specific information indicate that soil and groundwater chemical concentrations do not pose a risk under the anticipated land use scenario.

A revised risk management plan (RMP) dated June 1, 2001 was submitted for the site which addressed the long term risk management requirements by Alameda County Department of Environmental Health as stated in a letter dated April 26, 2001

This case appears to be a "Low Risk Soil and Groundwater Case" as described in the San Francisco Bay Regional Water Quality Control memorandum dated January 5, 1996 based on the following rationale:

1. **The leak has been stopped and ongoing sources have been removed. The subject tanks were reportedly removed in 1971. The site is currently vacant and proposed to be developed for its anticipated use.**

2. **The site has been adequately characterized. Site assessments were conducted in 1991, 1998 and 2001. Temporary wells were installed on and off-site. Residual contaminants do not appear to be migrating off-site.**

3. **Groundwater at the site is not used as drinking water source. There are no known municipal or residential water wells or surface water bodies that are expected to be impacted from the release at the site.**

4. **The site presents no significant risk to human health. Tier 3 Oakland RBCA evaluation was conducted at the site. Using site specific information, residual contamination in soil and groundwater do not pose a risk under the anticipated land use scenario.**

5. **The site presents no significant risk to the environment. No environmental receptors are expected to be impacted by the release at the site.**

6. **A long-term risk management plan have been submitted for the site. City of Oakland and Preservation Park, LLC will implement the RMP. The RMP includes the following:**

   a) **The human health risk assessment will be evaluated if land use changes to a more conservative scenario i.e. day care center, school residential units with back yard scenario, etc. The site will be flagged by the Permit Tracking System.**
   b) **Shallow groundwater will not be used at the site. Preservation Park, LLC will stipulate in the Covenants, Conditions and Restrictions (CC&Rs) that no water wells can be installed at the site and that no groundwater from the site can be used.**
   c) **Health and safety plan for future construction workers such as utility workers who may be exposed to residual contaminants left at the site.**

Table 1: Summary of Previous Results - 1991 SCI Soil Investigation
Martin Luther King Jr. Way, Between 11th and 12th Street
Oakland, California

Sample ID	Depth	Units	TEH	TVH	Oil and Grease	Lead	Other Detections
16	21	mg/kg	ND	ND	--	--	
	26	mg/kg	ND	ND	--	--	
17	25	mg/kg	ND	ND	--	--	
	30	mg/kg	ND	ND	--	--	
S-1	1.0	mg/kg	**7.6**	ND	ND	--	
S-2	0.5	mg/kg	--	--	--	**118**	
S-4	0.5	mg/kg	ND	--	ND	--	
S-6	0.5	mg/kg	ND	--	ND	--	
S-8	0.5	mg/kg	ND	--	**52**	--	
S-10	0.5	mg/kg	ND	--	ND	--	
S-13	0.5	mg/kg	ND	--	**82**	--	

Notes:
TEH: Total Extractable Hydrocarbons as diesel
TVHg: Total Volatile Hydrocarbons as gasoline
VOCs: Volatile Organic Compounds
mg/kg: milligrams per kilogram
ug/l: micrograms per liter
Detected concentrations shown in bold
--: Sample not analyzed

Reference: *Soil Contamination Assessment*, dated June 17, 1991 by SCI

Table 1: Summary of Previous Results - 1991 SCI Soil Investigation
Martin Luther King Jr. Way, Between 11th and 12th Street
Oakland, California

Sample ID	Depth	Units	TEH	TVH	Oil and Grease	Lead	Other Detections
1	1.5	mg/kg	--	ND	--	**31.0**	
	4	mg/kg	--	--	--	ND	
	5.5	mg/kg	--	--	--	ND	
2	1	mg/kg	--	--	--	**102**	
	3	mg/kg	--	--	--	ND	
	5	mg/kg	--	--	--	ND	
	7	mg/kg	ND	ND	ND	ND	
3	3	mg/kg	--	**2,300**	--	--	
	6.5	mg/kg	--	**51**	--	--	
	15.5	mg/kg	--	**4,000**	--	--	
	20.5	mg/kg	ND	**980**	ND	--	1,2-Dichloroethane (330 ug/kg)
4	24	mg/kg	--	ND	--	--	
		mg/kg	--	--	--	--	
6	26	mg/kg	ND	ND	--	--	
	27.5	mg/kg	ND	ND	--	--	
7	3	mg/kg	--	--	--	ND	
	5.5	mg/kg	--	--	--	ND	
	21	mg/kg	~~ND~~ 10	~~ND~~ 140	--	--	
	26	mg/kg	ND	ND	--	--	
8	2	mg/kg	ND	--	--	**363**	Wet Lead (8,350 ug/l)
	4	mg/kg	--	--	--	ND	
	5.5	mg/kg	--	--	--	ND	
9	1.5	mg/kg	--	--	--	ND	
	7	mg/kg	--	--	--	ND	
10	1	mg/kg	--	--	--	**598**	
	3	mg/kg	ND	--	**58**	ND	
	5.5	mg/kg	--	--	--	ND	
11	16.5	mg/kg	**620**	**54**	--	--	
	20.5	mg/kg	--	--	ND	--	
	21	mg/kg	**1,800**	**2,000**	--	--	
12	20.5	mg/kg	--	--	ND	--	
	21	mg/kg	**1,300**	**650**	--	--	Chlorobenzene (280 ug/kg)
	22.5	mg/kg	ND	ND	--	--	
	26	mg/kg	ND	ND	--	--	
13	21	mg/kg	ND	ND	--	--	
	26	mg/kg	ND	ND	--	--	
14	24	mg/kg	ND	ND	--	--	
	26	mg/kg	ND	ND	--	--	
15	19.5	mg/kg	--	--	ND	--	
	20	mg/kg	ND	ND	--	--	1,2-Dichloroethane (52 ug/kg)

Table 2: Summary of Previous Results - 1998 Tetra Tech Investigation
Martin Luther King Jr. Way, Between 11th and 12th Street
Oakland, California

Boring ID	Depth	Units	TPH Extractables	TPH Purgeables	Benzene	Toluene	Ethyl benzene	Xylenes	Lead	Detectable VOCs
Soil Samples										
SB1	9.5	mg/kg	**480.0**	**1,000.0**	**0.021**	**0.096**	**2.9**	**12.8**	**6.6**	
	16.5	mg/kg	**53.0**	**38.0**	ND	**0.03**	**0.12**	**1.0**	**27.4**	
	23.5	mg/kg	**1,400.0**	**1,800.0**	**3.2**	**26.0**	**19.0**	**156.0**	**4.9**	
SB2	9.5	mg/kg	ND	ND	ND	ND	ND	ND	**2.9**	
	16.5	mg/kg	ND	ND	ND	ND	**0.01**	**0.03**	**78.6**	
	23.5	mg/kg	**4.6**	**190.0**	**23.5**	**24.0**	**14.0**	**89.0**	**2.3**	
SB3	9.0	mg/kg	ND	ND	ND	ND	ND	ND	**2.4**	
	16.0	mg/kg	ND	ND	ND	ND	ND	ND	**2.3**	
	23.5	mg/kg	ND	ND	ND	ND	ND	ND	**0.88**	
Grab Groundwater Samples										
SB1	--	mg/L	**17.0**	**33.0**	**0.35**	**1.8**	**0.64**	ND	**0.43**	
SB2	--	mg/L	**0.09**	**0.11**	**0.02**	**0.026**	**0.0031**	**0.02**	**0.18**	1,2,4-Trimethylbenzene (0.0056 mg/L), 1,2-Dichlorethane (0.0014 mg/L), 1,3,5-Trimethylbenzene (0.0017 mg/L), and Napthalene (0.0014 mg/L)
SB3	--	mg/L	ND	ND	ND	ND	ND	ND	**0.04**	

Notes:
TPH: Total Petroleum Hydrocarbons
VOCs: Volatile Organic Compounds
mg/kg: milligrams per kilogram
mg/l: milligrams per liter
--: Sample not analayzed
ND: Not Detected
Detected concentrations shown in bold

Reference: *Final Phase II - Environmental Site Assessment Report*, dated June 23, 2000 by Tetra Tech EM, Inc.

Table 3: Results for Test Pit Samples
Martin Luther King Jr. Way, Between 11th and 12th Street
Oakland, California

Sample ID	Units	TEHd *	TEHo *	TVHg	Benzene	Toluene	Ethyl benzene	Xylenes	Lead	WET Lead	TCLP Lead
TP-1@0.0	mg/kg	--	--	--	--	--	--	--	160	--	--
TP-1@2.0	mg/kg	--	--	--	--	--	--	--	3.1	--	--
TP-1@5.0	mg/kg	<1	<5	<0.97	<4.9	<4.9	<4.9	<4.9	3.6	--	--
TP-2@0.0	mg/kg	--	--	--	--	--	--	--	20	--	--
TP-2@2.0	mg/kg	<1	<5	<0.97	<4.9	<4.9	<4.9	<4.9	1.6	--	--
TP-2@5.0	mg/kg	--	--	--	--	--	--	--	2.1	--	--
TP-3@0.0	mg/kg	--	--	--	--	--	--	--	160	--	--
TP-3@3.0	mg/kg	--	--	--	--	--	--	--	1.8	--	--
TP-3@6.0	mg/kg	<.99	<5	<0.95	<4.8	<4.8	<4.8	<4.8	7.0	--	--
TP-4@0.0	mg/kg	--	--	--	--	--	--	--	170	--	--
TP-4@2.5	mg/kg	6.3	46	<0.97	<4.9	<4.9	<4.9	<4.9	86	--	--
TP-4@6.0	mg/kg	--	--	--	--	--	--	--	91	--	--
TP-5@0.0	mg/kg	--	--	--	--	--	--	--	110	--	--
TP-5@2.0	mg/kg	<1	<5	<0.93	<4.7	<4.7	<4.7	<4.7	4.5	--	--
TP-5@6.0	mg/kg	--	--	--	--	--	--	--	2.4	--	--
TP-6@0.0	mg/kg	--	--	--	--	--	--	--	190	--	--
TP-6@2.5	mg/kg	--	--	--	--	--	--	--	1.9	--	--
TP-6@6.0	mg/kg	<1	<5	<0.92	<4.6	<4.6	<4.6	<4.6	2.0	--	--
TP-7@0.0	mg/kg	--	--	--	--	--	--	--	220	--	--
TP-7@2.0	mg/kg	<1	<5	<0.93	<4.7	<4.7	<4.7	<4.7	2.1	--	--
TP-7@6.0	mg/kg	--	--	--	--	--	--	--	2.5	--	--
TP-8@0.0	mg/kg	--	--	--	--	--	--	--	220	--	--
TP-8@2.5	mg/kg	4.6	36	<0.95	<4.8	<4.8	<4.8	<4.8	180	--	--
TP-8@6.0	mg/kg	--	--	--	--	--	--	--	1.7	--	--
TP-9@0.0	mg/kg	--	--	--	--	--	--	--	220	--	--
TP-9@2.0	mg/kg	--	--	--	--	--	--	--	1.4	--	--
TP-9@5.0	mg/kg	<1	<5	<0.95	<4.8	<4.8	<4.8	<4.8	1.3	--	--
TP-10@0.0	mg/kg	--	--	--	--	--	--	--	150	--	--
TP-10@2.0	mg/kg	<1	<5	<0.94	<4.7	<4.7	<4.7	<4.7	1.9	--	--
TP-10@5.0	mg/kg	--	--	--	--	--	--	--	2.2	--	--
TP-11@0.0	mg/kg	--	--	--	--	--	--	--	200	--	--
TP-11@2.0	mg/kg	--	--	--	--	--	--	--	15	--	--
TP-11@5.0	mg/kg	<1	<5	<0.97	<4.9	<4.9	<4.9	<4.9	1.9	--	--
TP-12@0.0	mg/kg	--	--	--	--	--	--	--	72	--	--
TP-12@2.0	mg/kg	6.6	81	<0.94	<4.7	<4.7	<4.7	<4.7	110	--	--
TP-12@5.0	mg/kg	--	--	--	--	--	--	--	19	--	--
COMP-1	mg/l	--	--	--	--	--	--	--	--	3.6	--
COMP-2	mg/l	--	--	--	--	--	--	--	--	7.7	--
Q1 though Q5	mg/l	--	--	--	--	--	--	--	--	--	<0.5

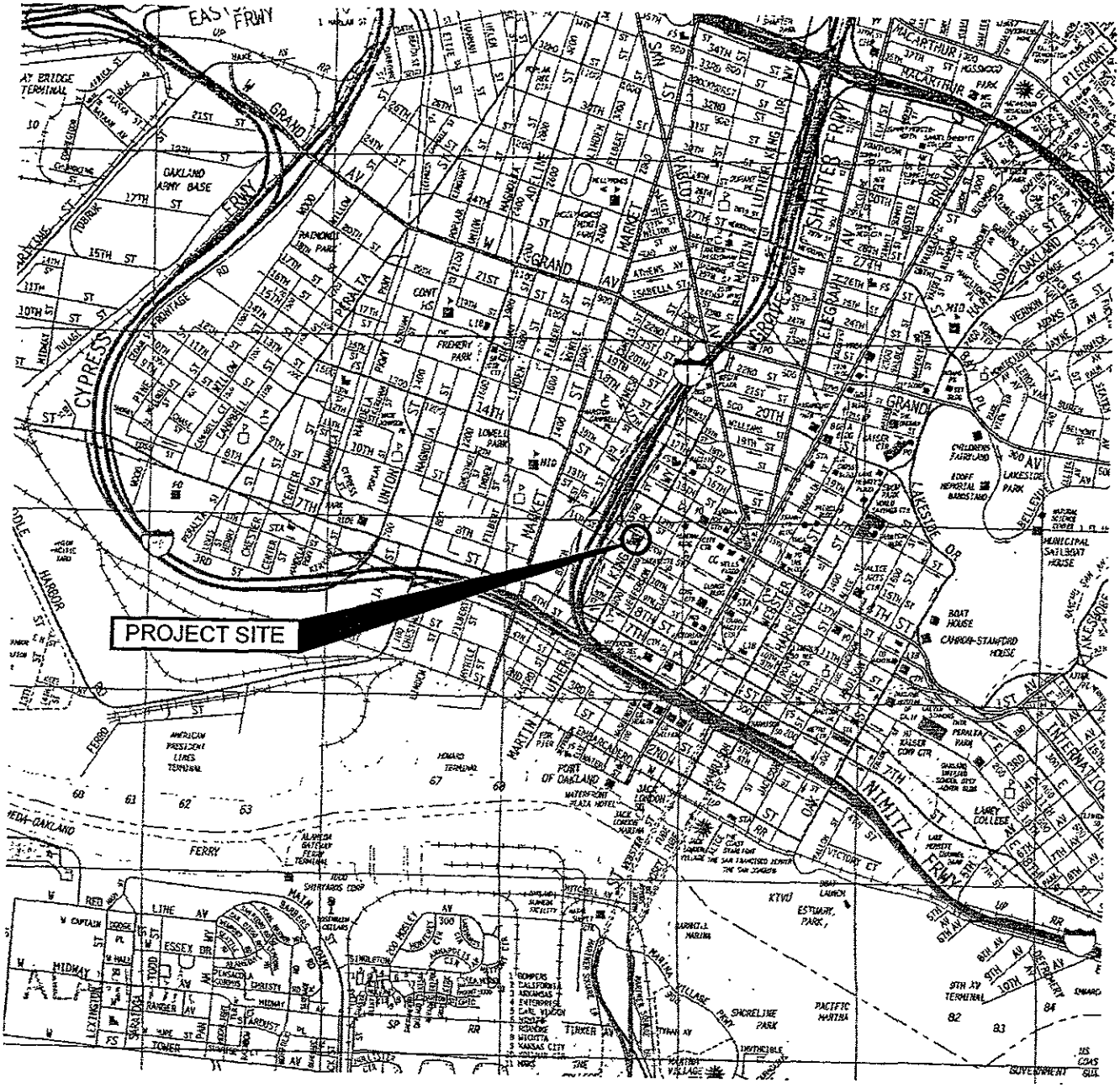
Notes:
Soil samples collected on August 4, 2000
Detected concentrations shown in bold
TEHd Total Extractable Hydrocarbons as diesel
TEHo: Total Extractable Hydrocarbons as motor oil
TVHg Total Volatile Hydrocarbons as gasoline
*: Using silica gel cleanup
WET Waste Extraction Test
TCLP Toxic Characteristic Leachability Procedure

mg/kg: milligrams per kilogram
mg/L milligrams per liter
-- Sample not analyzed
< Not detected at or above the laboratory reporting limit
COMP - 1 is a composite of TP-4@6', TH-8@6', and TP-12@5'
COMP - 2 is a composite of TP-4@2.5', TH-8@2.5', and TP-12@2'

Table 4: Results for Monitoring Well Locations
Martin Luther King Jr. Way, Between 11th and 12th Street
Oakland, California

					Volatile Organic Compounds**									
Sample ID	Date	Units	TEHd *	TVHg	Benzene	Toluene	Ethyl Benzene	Xylenes	Propyl benzene	1,3,5-Trimethyl benzene	1,2,4-Trimethyl benzene	n-Butyl benzene	Napthalene	1,2-Dichloroethane
Soil Sample:														
TW-1@18 5	03/03/01	mg/kg	**170**	**680**	<500	**2,500**	**1,600**	**11,000**	**1,500**	**4,400**	**14,000**	**1,800**	**2,900**	<500
Grab Groundwater Samples:														
TW-1	03/03/01	ug/l	**3,100**	**96,000**	**4,000**	**11,000**	**2,200**	**13,400**	<500	**1,200**	**3,800**	<500	<500	<500
TW-2	03/03/01	ug/l	<50	**120**	<5.0	**5.1**	<5.0	**10**	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
TW-3	03/03/01	ug/l	<50	**70**	<5.0	<5:0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**180**

Notes:
Detected concentrations shown in bold
TEHd Total Extractable Hydrocarbons as diesel
TVHg Total Volatile Hydrocarbons as gasoline
* Using silica gel cleanup
** = only the detected VOC analytes are listed
mg/kg milligrams per kilogram
ug/l micrograms per liter
< Not detected at or above the laboratory reporting limit



NOTE:

THIS VICINITY MAP IS BASED ON A THOMAS GUIDE MAP FOR SAN FRANCISCO, ALAMEDA AND CONTRA COSTA COUNTIES, CALIFORNIA, MAP 649, YEAR 2000

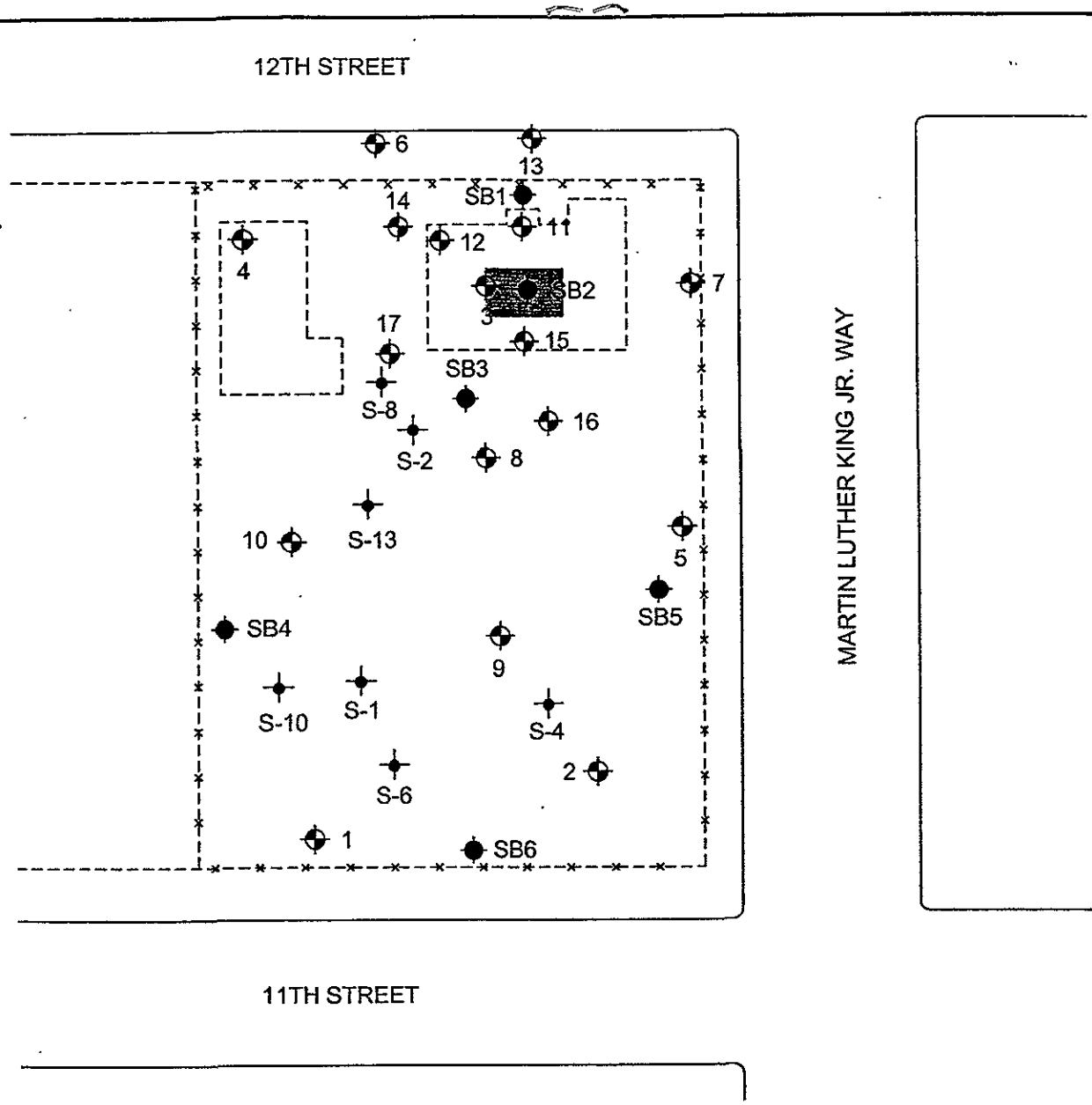
VICINITY MAP

12TH STREET AND MARTIN LUTHER KING JR. WAY
OAKLAND, CALIFORNIA

Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY	DATE	PLATE
CFY	3/8/01	1
JOB NUMBER	FILE NUMBER	
272.054	A272.054.03	

G:\JOBDOCS\272\272.054\A272.054.03.dwg 3-08-01 10:12:25 AM cyoung



LEGEND:

1	APPROXIMATE LOCATION OF TEST BORING BY SCI
S-1	APPROXIMATE LOCATION OF SURFACE SAMPLE BY SCI
SB1	SOIL BORING BY OTHERS
	FENCE
	APPROXIMATE LOCATION OF PREVIOUS BASEMENTS
	APPROXIMATE LOCATION OF FORMER TANKS

APPROXIMATE SCALE IN FEET

0 50 100

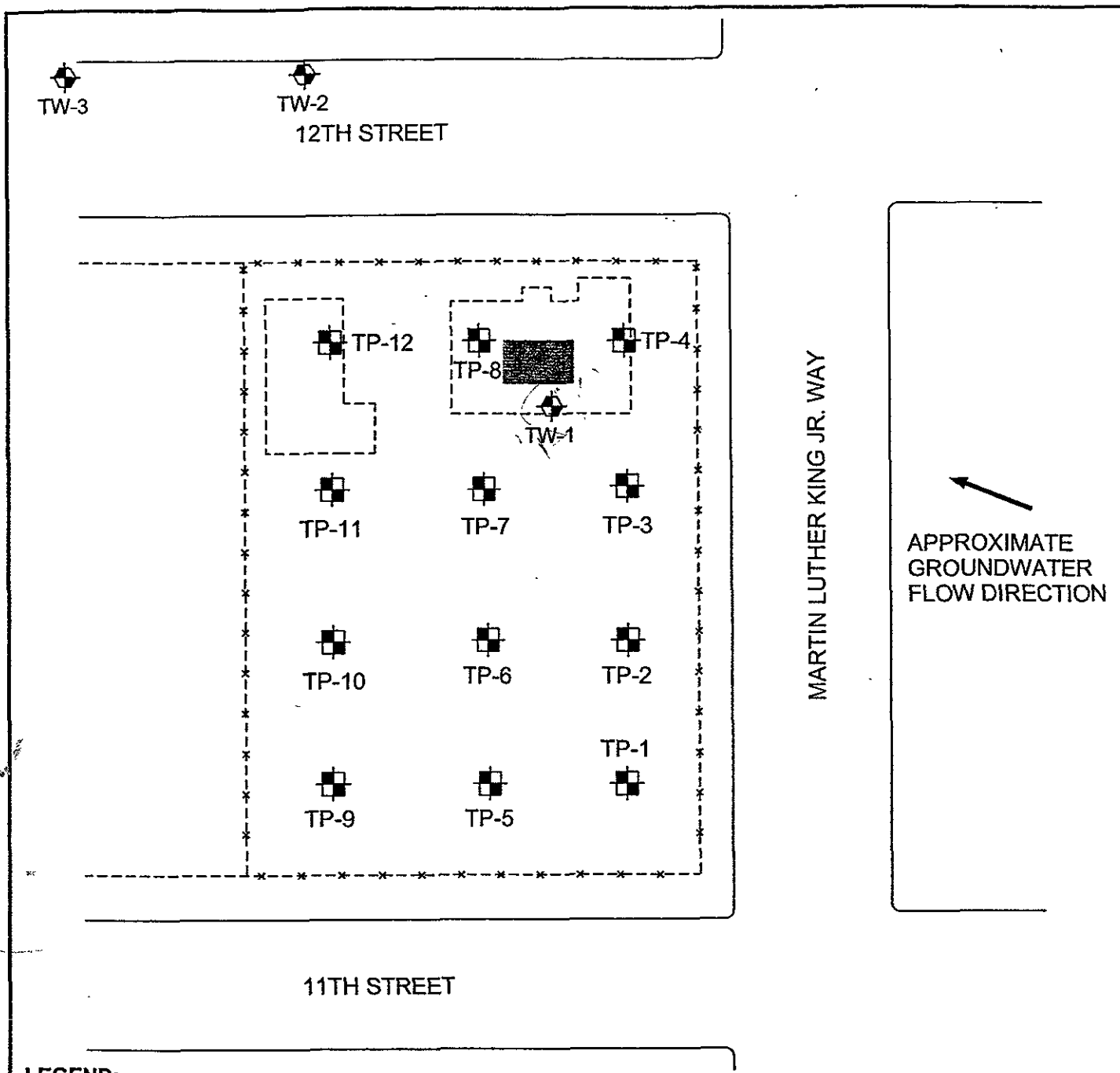
N

PREVIOUS SAMPLING LOCATIONS

12TH STREET AND MARTIN LUTHER KING JR. WAY
OAKLAND, CALIFORNIA

Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY	DATE	PLATE
CFY	08/21/00	2
JOB NUMBER	FILE NUMBER	
272.054	A272.054.01	



LEGEND:

TW-1 — APPROXIMATE LOCATION OF MONITORING WELL

TP-10 — APPROXIMATE LOCATION OF TEST PIT EXCAVATED ON 8/4/00

FENCE

APPROXIMATE LOCATION OF PREVIOUS BASEMENTS

APPROXIMATE LOCATION OF FORMER TANKS

APPROXIMATE SCALE IN FEET

0 50 100

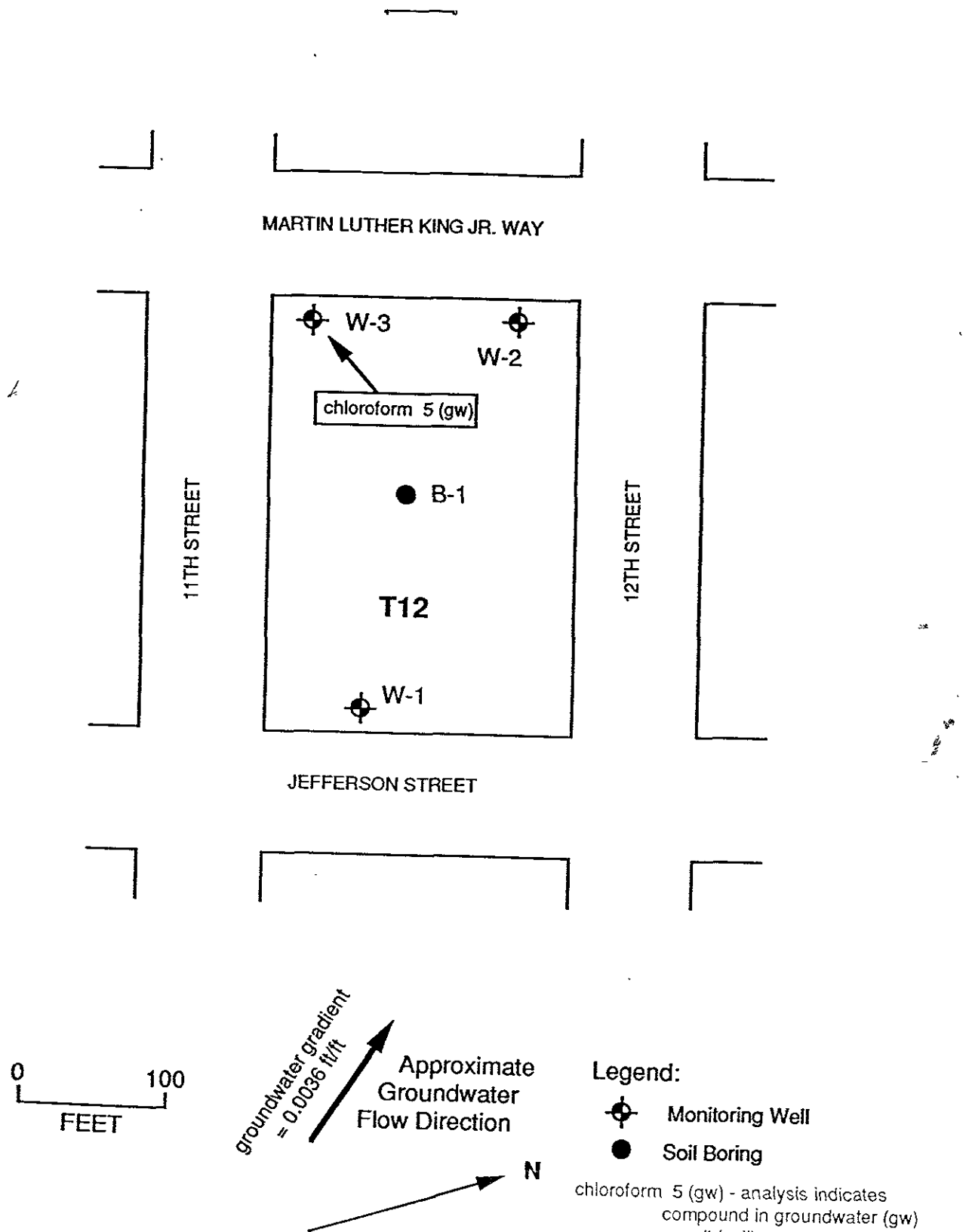
N

SAMPLE LOCATIONS

12TH STREET AND MARTIN LUTHER KING JR. WAY
OAKLAND, CALIFORNIA

Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY	DATE	PLATE
CFY	08/21/00	3
JOB NUMBER	FILE NUMBER	
272.054	A272.054.02	

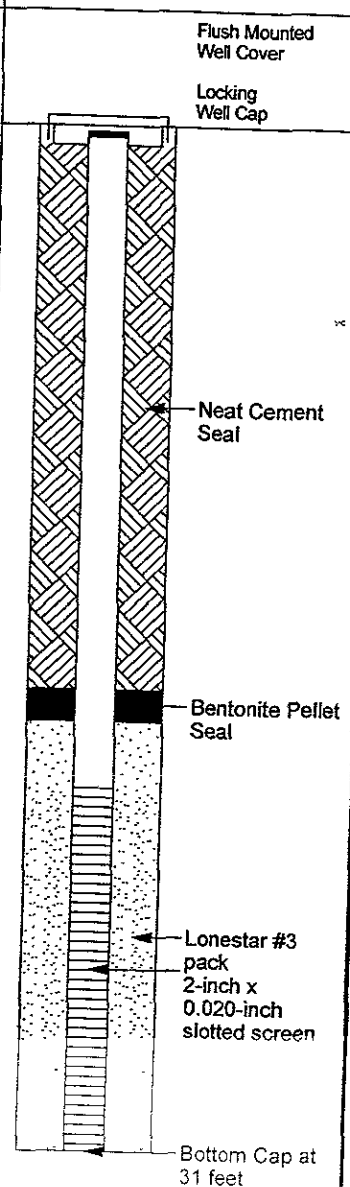


Project No. 90C0039A	City Center Environmental Assesment	PARCEL T12 - BORING AND MONITORING WELL LOCATIONS	FIGURE 4
Woodward-Clyde Consultants			

Project Name & Location: 12th Street and Martin Luther King Jr. Way, Oakland, California	Ground Surface Elevation:
	Elevation Datum:
Drilling Coordinates: not surveyed	Start: Date 3/2/01 Time 14:00 / Finish: Date 3/2/01 Time 17:00
Drilling Company & Driller: Precision, Terry McAdoo	Drilling Fluid: None / Hole Diameter: 8 inches
Rig Type & Drilling Method: Mobile B-4500 / Hollow Stem Auger	
Sampler Type(s): A) Modified California (3" O.D., 2.5" I.D.)	Logged By: JTW / GWL During Drilling
Sampling Method(s): A) 140 lb hammer with 30" drop (Rope and Cathead)	Backfill Method: Completed as Well / Date: 3/2/01

Depth (feet)	Sampler Type	Blows/6 inches or Pressure	Blows/12 inches	OVM (ppm)	Sample Interval	Graphic Log	SOIL DESCRIPTIONS GROUP NAME (GROUP SYMBOL) color, consistency/density, moisture condition, other descriptions (Local Name or Material Type)
0	A	14 14 12	26	0			**SILTY SAND (SM)** Dark brown, medium dense, moist with trace of brick fragments, ash, poorly graded, fine grained
5	A	27 50/3"	77/9"	0			Wet, perched water?
10	A	48 50/3"	98/9"	0			**POORLY GRADED SAND (SP)** Yellowish-brown, very dense
15	A	69 50/3"	119/9"	1200			**POORLY GRADED SAND WITH CLAY (SP)** Mottled light grayish-brown and yellowish-brown, very dense, moist strong hydrocarbon odor
20	A	81 50/1"	131/7"	2500			**POORLY GRADED SAND (SP)** Dark yellowish-brown, very dense, moist, fine to medium grained, very strong hydrocarbon odor
	A	85 50/.5"	133/6.5"	2300			
25	A	94 50/1"	144/7"	888			**POORLY GRADED SAND (SP)** Light olive-brown, very dense, wet, fine grained, mild hydrocarbon odor
	A	74 50/2"	124/7"	12			
30	A	34 50/4"	84/10"	146			Color change to light brownish-yellow at 29 0'
35							Bottom of boring at 31 feet below ground surface

WELL CONSTRUCTION



LOG OF BORING 272-054.GPJ GEO-ENV.GDT 3/21/01

SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

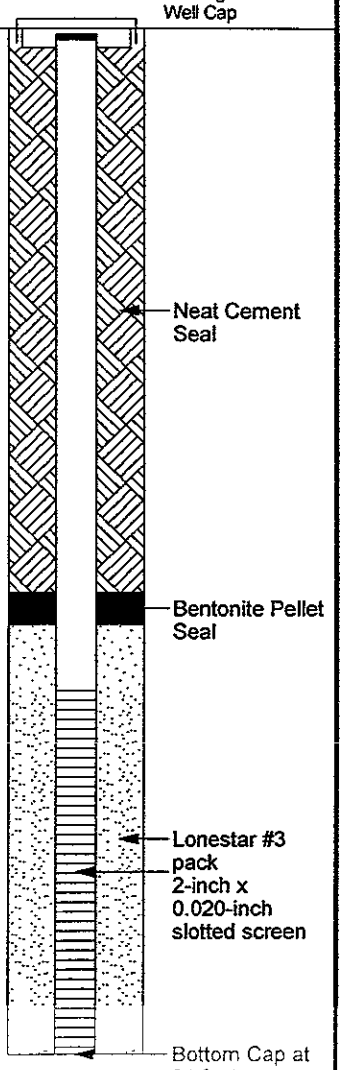
12th Street and Martin Luther King Jr Way
Oakland, California

JOB NUMBER 272 054 | DATE 3/01 | BORING TW-1

Project Name & Location: 12th Street and Martin Luther King Jr. Way Oakland, California	Ground Surface Elevation: Elevation Datum:
Drilling Coordinates: not surveyed	Start: Date 3/2/01 Time 10:45 / Finish: Date 3/2/01 Time 00:00
Drilling Company & Driller: Precision, Terry McAdoo	Drilling Fluid: None / Hole Diameter: 8 inches
Rig Type & Drilling Method: Mobile B-4500 / Hollow Stem Auger	
Sampler Type(s): A) Modified California (3" O.D., 2.5" I.D.)	Logged By: JTW / GWL During Drilling
Sampling Method(s): A) 140 lb hammer with 30" drop (Rope and Cathead)	Backfill Method: Completed as Well / Date: 3/2/01

Depth (feet)	Sampler Type	Blows/6 inches or Pressure	Blows/12 inches	OVM (ppm)	Sample Interval	Graphic Log	SOIL DESCRIPTIONS GROUP NAME (GROUP SYMBOL) color, consistency/density, moisture condition, other descriptions (Local Name or Material Type)
0							**ASPHALTIC CONCRETE 6 - INCHES THICK** **CONCRETE SLAB 4 - INCHES THICK** **POORLY GRADED SAND (SP)** Light olive-brown, very dense, moist, fine to medium grained
5	A	28 37 50/3"	87/9"	0			**INTERBEDDED CLAYEY SAND AND POORLY GRADED SAND (SP-SC)** Dark yellowish-brown and olive-brown, very dense, moist, fine to medium grained
10	A	38 50/2"	88/8"	0			**POORLY GRADED SAND WITH SILT (SP)** Dark yellowish-brown, very dense, moist, fine to medium grained
15	A	27 50/4"	77/10"	0			**POORLY GRADED SAND WITH CLAY (SP)** Light olive-brown, very dense, moist, fine to medium grained
20	A	34 50/3"	84/9"	0			**POORLY GRADED SAND (SP)** Light olive-brown, very dense, moist, fine to medium grained
25	A	81/6	81/6"	0			No odor or staining observed for cuttings on auger
30	A	47 50/1"	97/7"	0			Bottom of boring at 31 feet below ground surface
35							

WELL CONSTRUCTION



LOG OF BORING 272-054.GPJ GEO-ENV.GDT 3/21/01

SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

12th Street and Martin Luther King Jr Way
Oakland, California

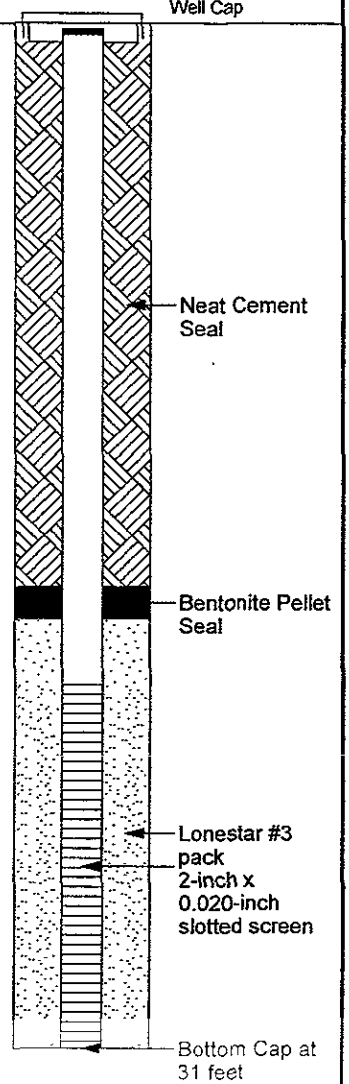
JOB NUMBER 272 054 | DATE 3/01

BORING **TW-2**

Project Name & Location: 12th Street and Martin Luther King Jr. Way Oakland, California	Ground Surface Elevation: Elevation Datum:
Drilling Coordinates: not surveyed	Start: Date 3/2/01 Time 07:30 — Finish: Date 3/2/01 Time 10:30
Drilling Company & Driller: Precision, Terry McAdoo	Drilling Fluid: None — Hole Diameter: 8 inches
Rig Type & Drilling Method: Mobile B-4500 / Hollow Stem Auger	
Sampler Type(s): A) Modified California (3" O.D., 2.5" I.D.)	Logged By: JTW — ▽ GWL During Drilling
Sampling Method(s): A) 140 lb hammer with 30" drop (Rope and Cathead)	Backfill Method: Completed as Well — Date: 3/2/01

Depth (feet)	Sampler Type	Blows/6 inches or Pressure	Blows/12 inches	OVM (ppm)	Sample Interval	Graphic Log	SOIL DESCRIPTIONS GROUP NAME (GROUP SYMBOL) color, consistency/density, moisture condition, other descriptions (Local Name or Material Type)
0							**ASPHALTIC CONCRETE 8 - INCHES THICK** **CONCRETE SLAB 4 - INCHES THICK** **CLAYEY SAND (SC)** Mottled dark yellowish-brown
5	A	50/6"	50/6"	0			**POORLY GRADED SAND WITH CLAY (SP)** Light brown, very dense, moist
10	A	35 50	85/12"	0			**CLAYEY SAND (SC)** Grayish-brown and dark yellowish-brown, very dense, moist, poorly graded, fine to medium grained
15	A	36 50	86/12"	0			**POORLY GRADED SAND WITH CLAY (SP)** Yellowish-brown to light olive-brown, fine to medium grained
20	A	28 41 50/5"	91/11"	0			**POORLY GRADED SAND (SP)** Light olive-brown, very dense, moist, fine to medium grained
25	A	18 48 50/3"	98/9"	0			▽
30	A	36 50/5"	86/11"	0			Bottom of boring at 31 feet below ground surface
35							

WELL CONSTRUCTION



LOG OF BORING 272-054.GPJ GEO-ENV.GDT 3/14/01

SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

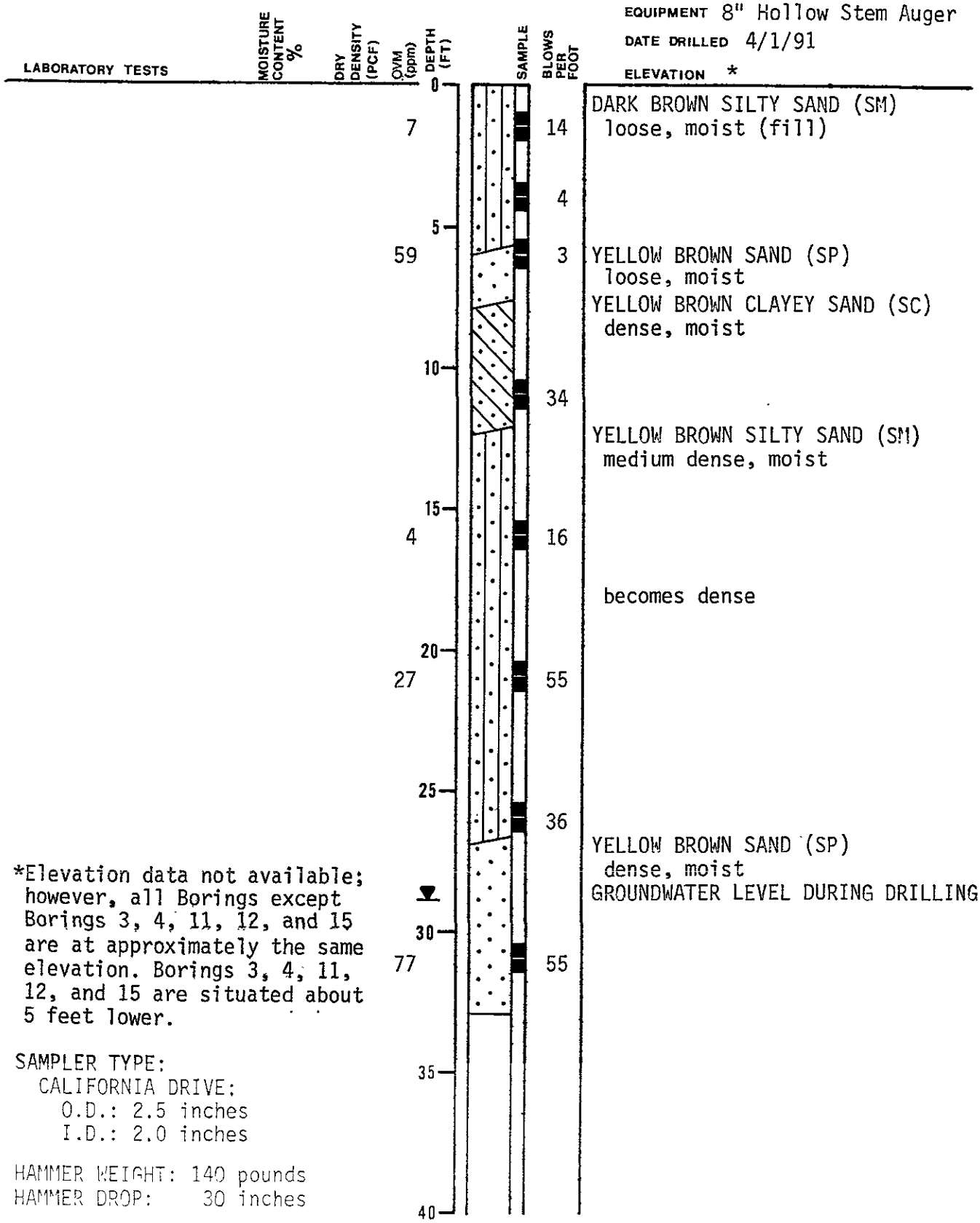
12th Street and Martin Luther King Jr. Way
Oakland, California

JOB NUMBER 272 054 — DATE 3/01

BORING **TW-3**

LOG OF TEST BORING 1

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 4/1/91
ELEVATION *



*Elevation data not available; however, all Borings except Borings 3, 4, 11, 12, and 15 are at approximately the same elevation. Borings 3, 4, 11, 12, and 15 are situated about 5 feet lower.

SAMPLER TYPE:
CALIFORNIA DRIVE:
O.D.: 2.5 inches
I.D.: 2.0 inches

HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

Subsurface Consultants	12TH ST. & MARTIN LUTHER KING JR. WAY			PLATE
	JOB NUMBER 272.021	DATE 4/5/91	APPROVED JUB	A-1

LOG OF TEST BORING 2

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 4/1/91
ELEVATION *

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	OVM (ppm)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
				0			BLACK-BROWN SAND (SM) loose, moist (fill)
			189			3	BROWN SILTY SAND (SM-SP) loose, moist (fill)
			10	5		3	
			421			17	RED-BROWN CLAYEY SAND (SC) medium dense, moist
			10	10		29	becomes dense
			17	15		17	MOTTLED RED BROWN-GRAY CLAYEY SAND (SC) medium dense to dense, moist
			123	20		38	
			280	25		30	
							GRAY-BROWN SILTY SAND (SP) dense, moist
				▼			GROUNDWATER LEVEL DURING DRILLING
			38	30		65	
				35			
				40			

Subsurface Consultants

12TH ST. & MARTIN LUTHER KING JR. WAY

JOB NUMBER	DATE	APPROVED
272.021	4/5/91	JVB

PLATE A-2

LOG OF TEST BORING 3

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 4/2/91
ELEVATION *

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	OVM (ppm)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
				0			CONCRETE SLAB - 6" thick
			10,000			6	DARK BROWN SILTY SAND (SM/SP) loose, moist (fill)
				5			GRAY GREEN SILTY SAND (SM/SP) dense, moist
			10,000			37	
			10,000	10		14	BROWN CLAYEY SAND (SC) medium dense, moist
			342	15		49	ORANGE BROWN SAND (SP) dense, moist
			10,000	20		37	
			845				becomes green gray and wet
							GROUNDWATER LEVEL DURING DRILLING
			375	25		64	
			10,000			65	
				30			
				35			
				40			

Subsurface Consultants

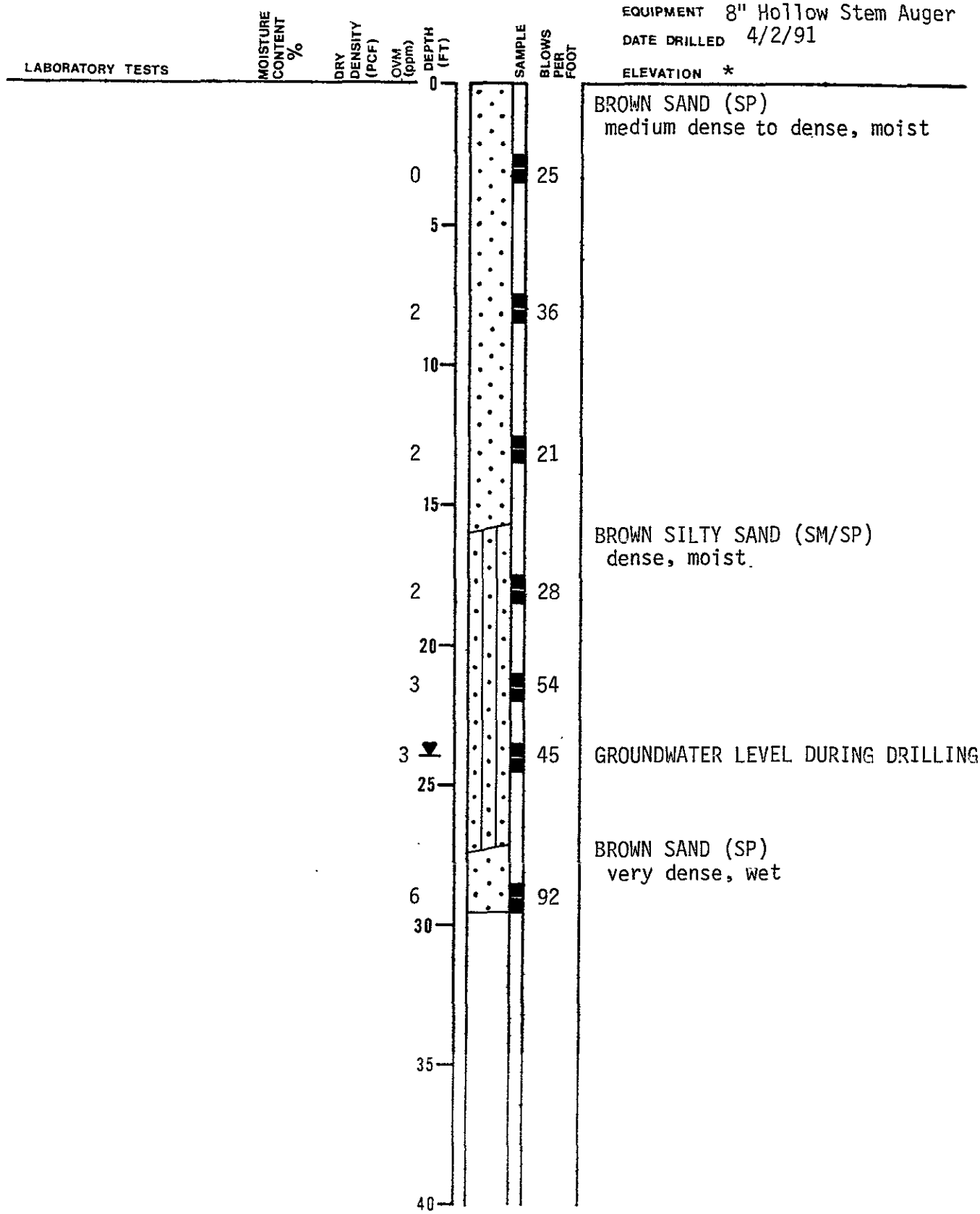
12TH ST. & MARTIN LUTHER KING JR. WAY

JOB NUMBER	DATE	APPROVED
272.021	4/5/91	JVB

PLATE A-3

LOG OF TEST BORING 4

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 4/2/91
ELEVATION *



Subsurface Consultants	12TH ST. & MARTIN LUTHER KING JR. WAY			PLATE A-4
	JOB NUMBER 272.021	DATE 4/5/91	APPROVED JVB	

LOG OF TEST BORING 5

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 4/2/91
ELEVATION *

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	OVM (ppm)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
				0			BROWN SAND (SP) loose, moist (fill)
			6			2	
				5			BROWN SILTY SAND (SM/SP) medium dense to dense, moist
			3			23	
				10			MOTTLED GRAY & BROWN CLAYEY SAND (SC) medium dense to dense, moist
			5			22	
				15			GRAY SAND (SP) medium dense to dense, moist
			3			22	
							NO GROUNDWATER ENCOUNTERED DURING DRILLING
				20			
				25			
				30			
				35			
				40			

Subsurface Consultants

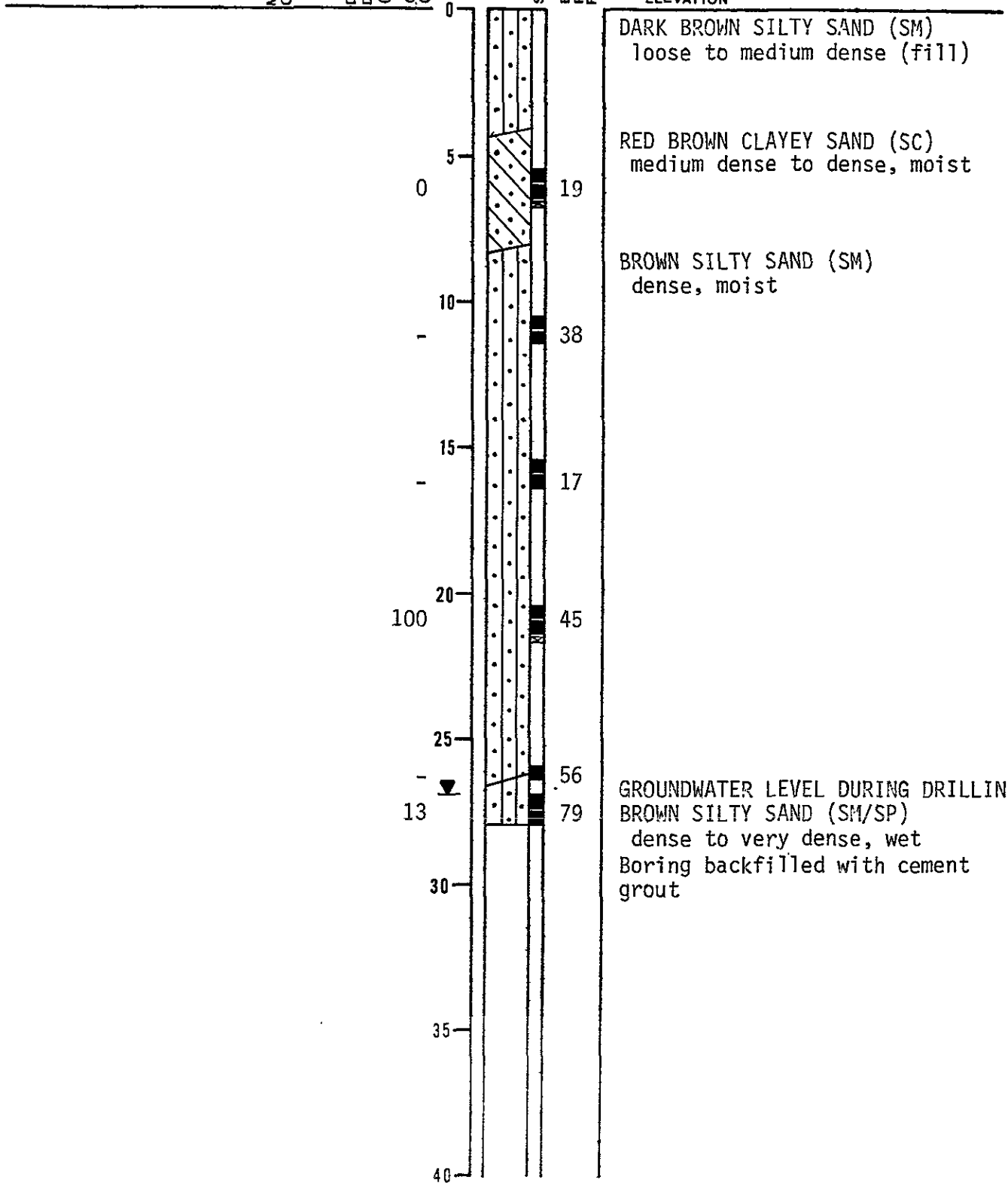
12TH ST. & MARTIN LUTHER KING JR. WAY

JOB NUMBER 272.021 | DATE 4/5/91 | APPROVED JVB

PLATE A-5

LOG OF TEST BORING 6

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 5/13/91
ELEVATION *



Subsurface Consultants	12TH ST. & MARTIN LUTHER KING JR. WAY			PLATE
	JOB NUMBER 272.021	DATE 5/23/91	APPROVED JVB	A-6

LOG OF TEST BORING 7

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 5/13/91
ELEVATION *

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	OVM (ppm)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
				0			DARK BROWN SILTY SAND (SM) loose, moist (fill)
			10			4	BROWN SILTY SAND (SM) loose, moist
				5			
			75			17	RED BROWN SILTY SAND (SM) dense, moist
			-			42	
				10			
			100			45	
				15			
			850			23	
							BROWN GRAY SILTY SAND (SM/SP) dense, moist
				20			
			2000+			46	hydrocarbon odor
				25			
			250			48	
							GROUNDWATER LEVEL DURING DRILLING
			20			64	color change to brown
				30			
			30			67	
							Boring backfilled with cement grout
				35			
				40			

Subsurface Consultants

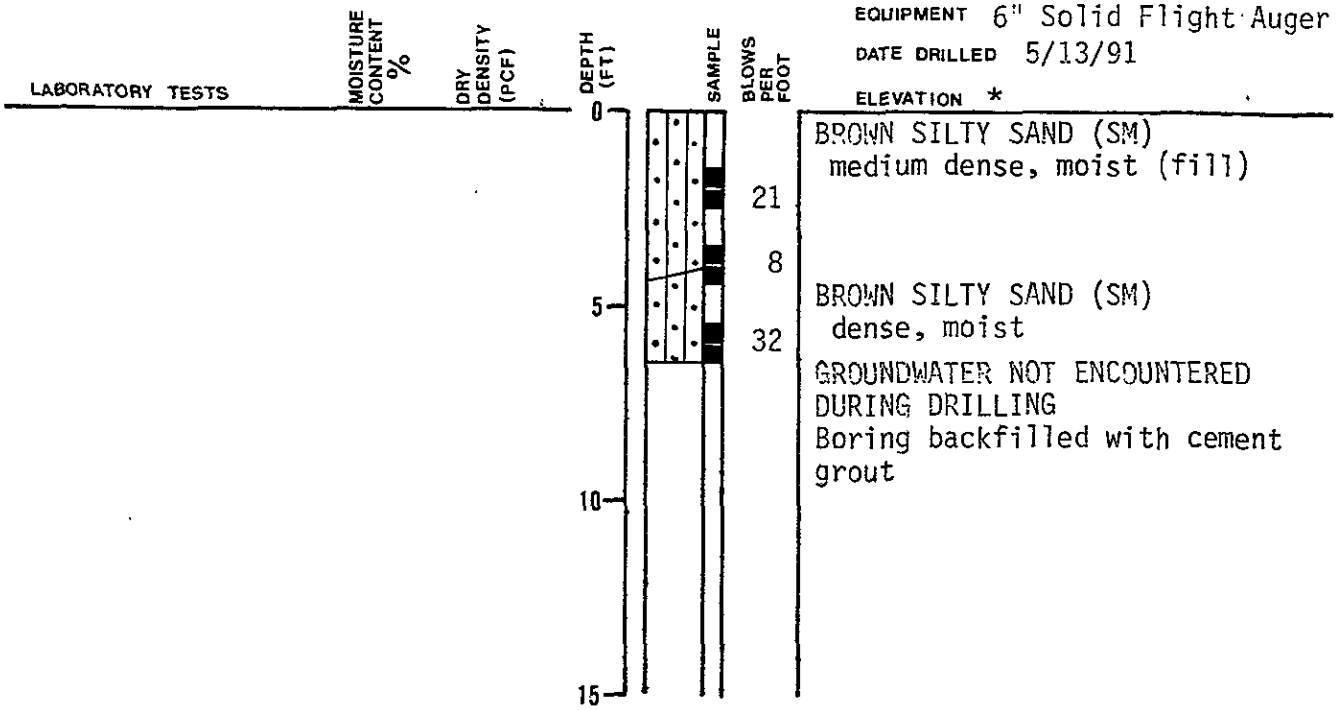
12TH ST. & MARTIN LUTHER KING JR. WAY

JOB NUMBER	DATE	APPROVED
272.021	5/23/91	JVB

PLATE A-7

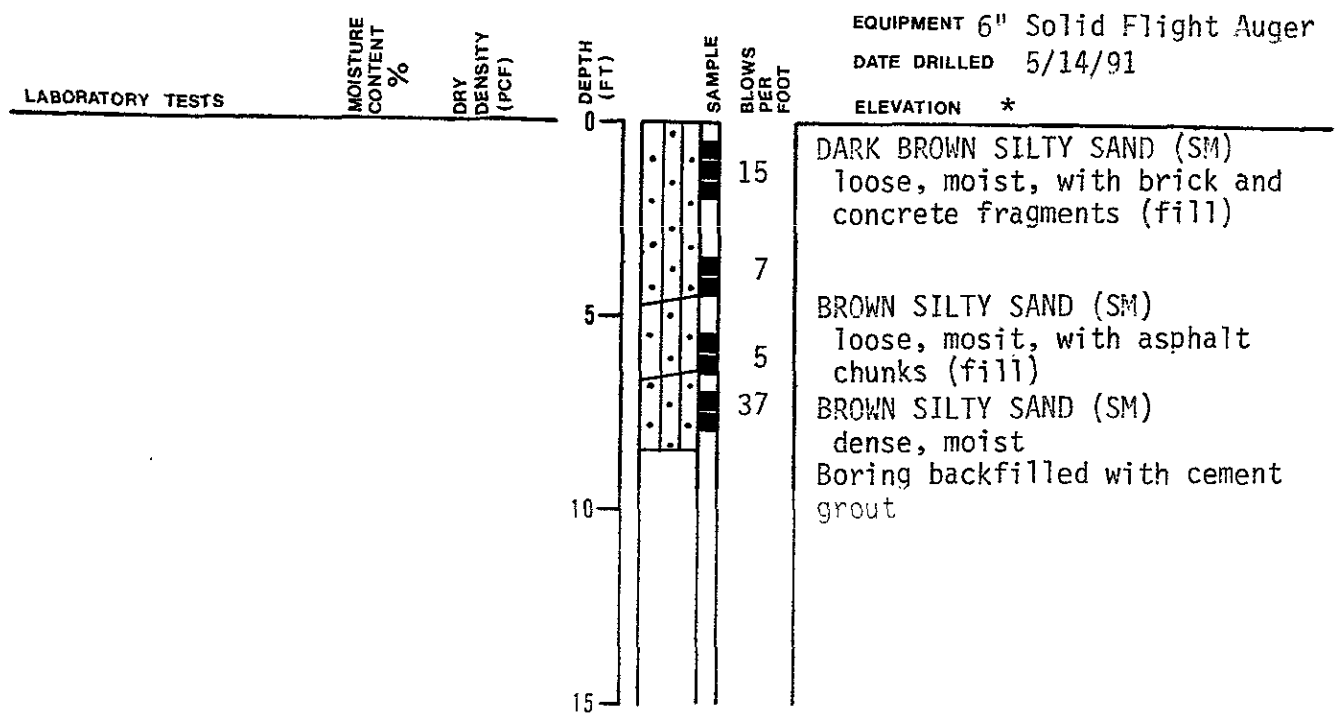
LOG OF TEST BORING 8

EQUIPMENT 6" Solid Flight Auger
DATE DRILLED 5/13/91
ELEVATION *



LOG OF TEST BORING 9

EQUIPMENT 6" Solid Flight Auger
DATE DRILLED 5/14/91
ELEVATION *



Subsurface Consultants	12TH ST. & MARTIN LUTHER KING JR. WAY			PLATE A-8
	JOB NUMBER 272.021	DATE 5/23/91	APPROVED JVB	

LOG OF TEST BORING 10

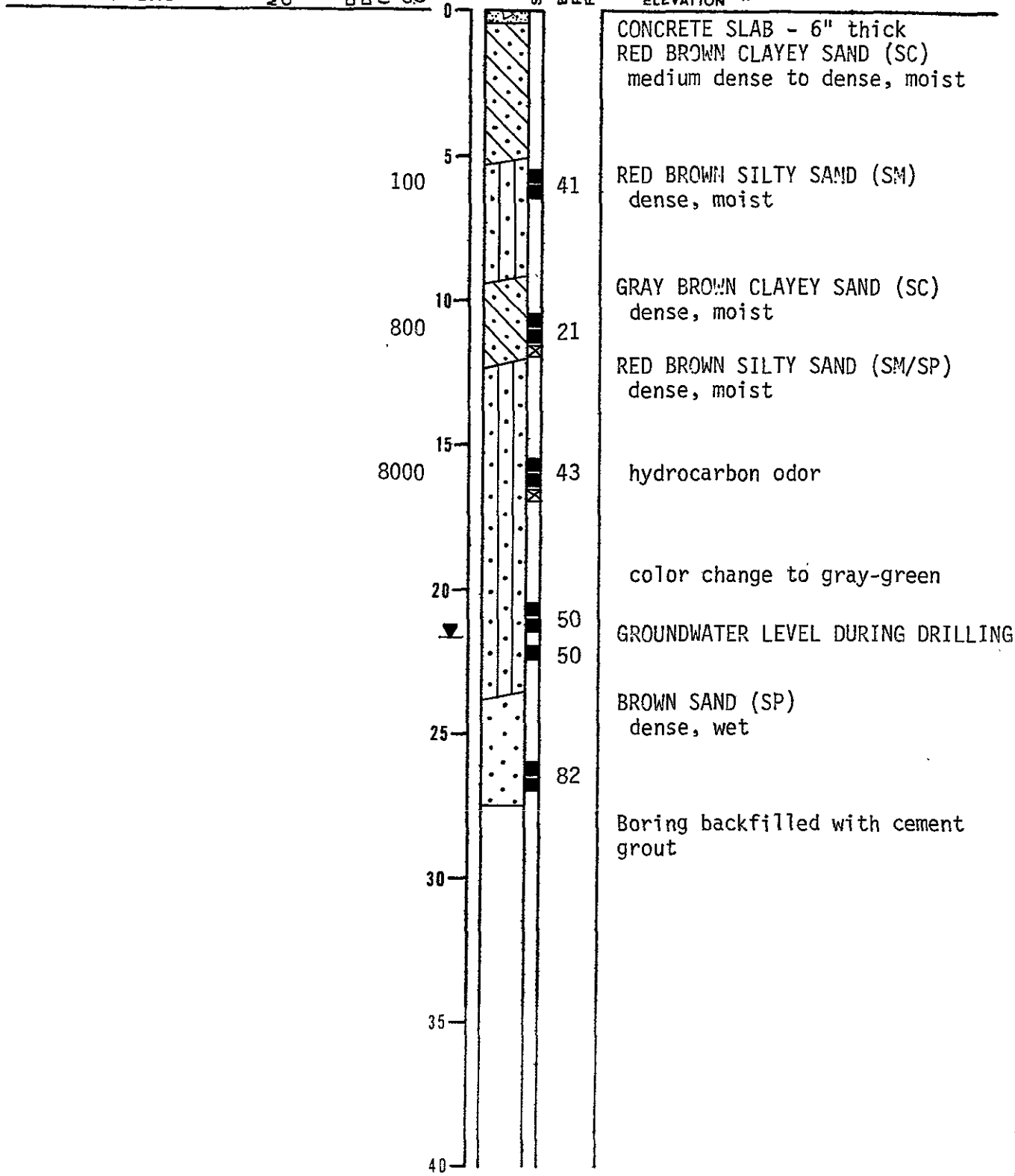
EQUIPMENT 6" Solid Flight Auger
DATE DRILLED 5/14/91
ELEVATION *

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
			0			DARK BROWN SILTY SAND (SM) loose, moist (fill)
						BROWN SILTY SAND (SM) loose, moist (fill)
			5			RED BROWN SILTY SAND (SM) dense, moist (fill)
						RED BROWN CLAYEY SAND (SC) dense, moist
			10			Boring backfilled with cement grout
			15			

Subsurface Consultants	12TH ST. & MARTIN LUTHER KING JR. WAY			PLATE
	JOB NUMBER	DATE	APPROVED	A-9
	272.021	5/23/91	JVB	

LOG OF TEST BORING 11

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 5/13/91
ELEVATION *



Subsurface Consultants

12TH ST. & MARTIN LUTHER KING JR. WAY

JOB NUMBER	DATE	APPROVED
272.021	5/23/91	JVB

PLATE A-10

LOG OF TEST BORING 12

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 5/13/91
ELEVATION *

LABORATORY TESTS	MOISTURE CONTENT %	DRY DENSITY (PCF)	OVM (ppm)	DEPTH (FT)	SAMPLE	BLOWS PER FOOT	
				0			CONCRETE SLAB - 6" thick
							RED BROWN CLAYEY SAND (SC) dense, moist
				5			RED BROWN SILTY SAND (SM) dense, moist
			130			42	
				10			slight increase in clay content
			670			23	
				15			RED BROWN SILTY SAND (SM/SP) dense, moist
			2000+			60	hydrocarbon odor
				20			color change to gray-green
			10,000			62	GROUNDWATER LEVEL DURING DRILLING
						80	
				25			BROWN SAND (SP) dense, wet
			800			71	
				30			Boring backfilled with cement grout
				35			
				40			

Subsurface Consultants

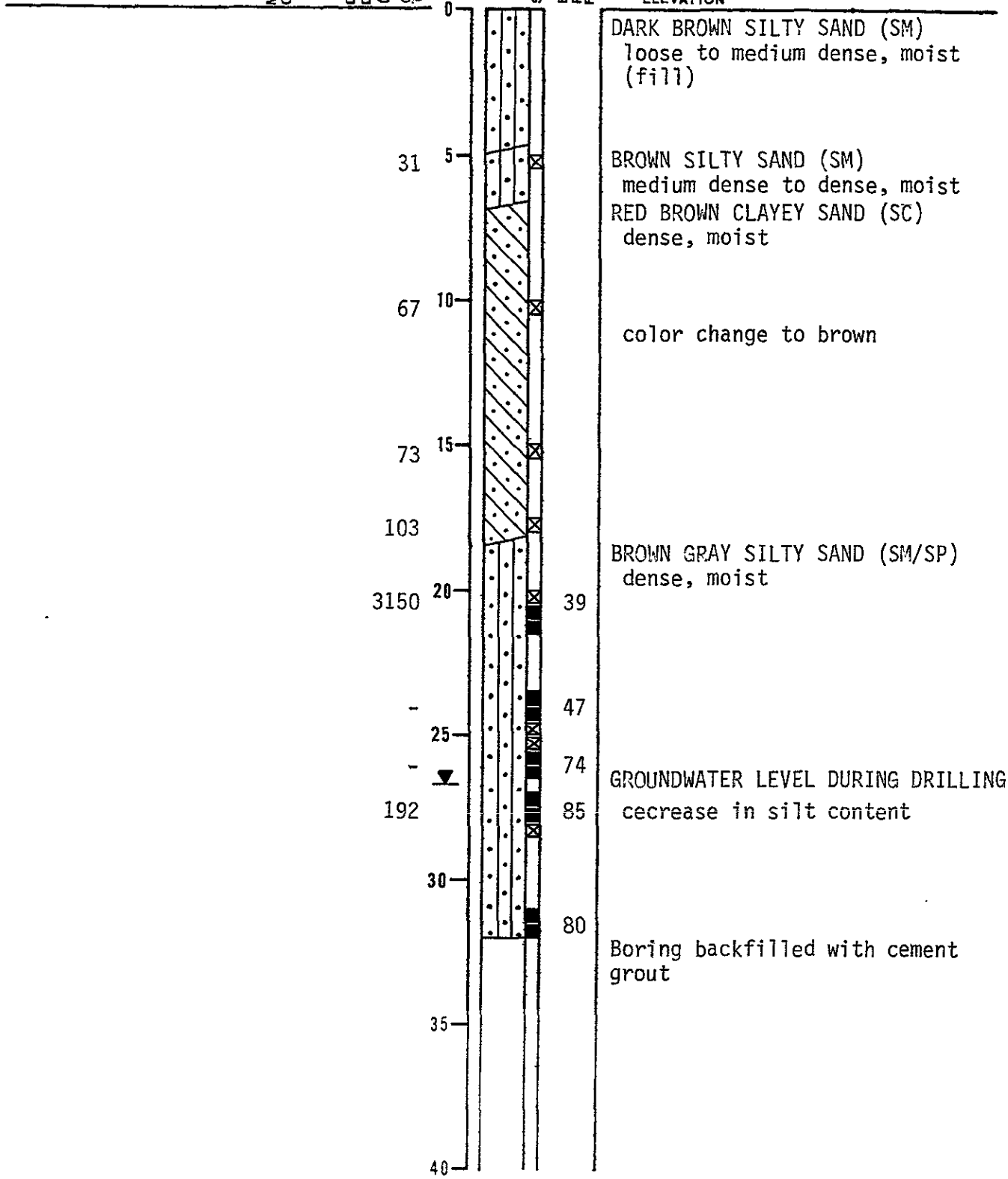
12TH ST. & MARTIN LUTHER KING JR. WAY

JOB NUMBER 272.021 | DATE 5/23/91 | APPROVED JVB

PLATE A-11

LOG OF TEST BORING 13

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 5/14/91
ELEVATION *



Subsurface Consultants

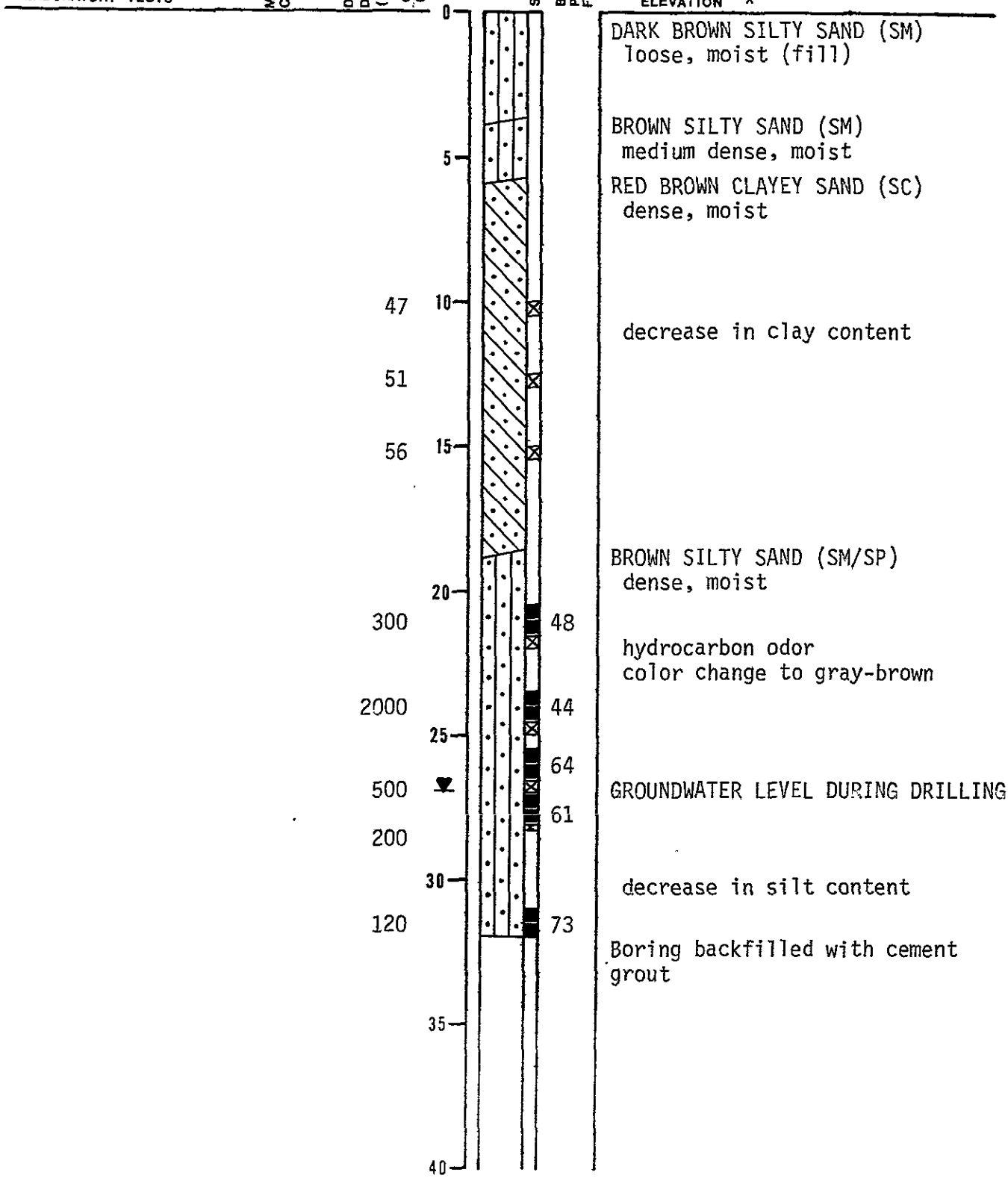
12TH ST. & MARTIN LUTHER KING JR. WAY

JOB NUMBER 272.021
DATE 5/23/91
APPROVED JVB

PLATE A-12

LOG OF TEST BORING 14

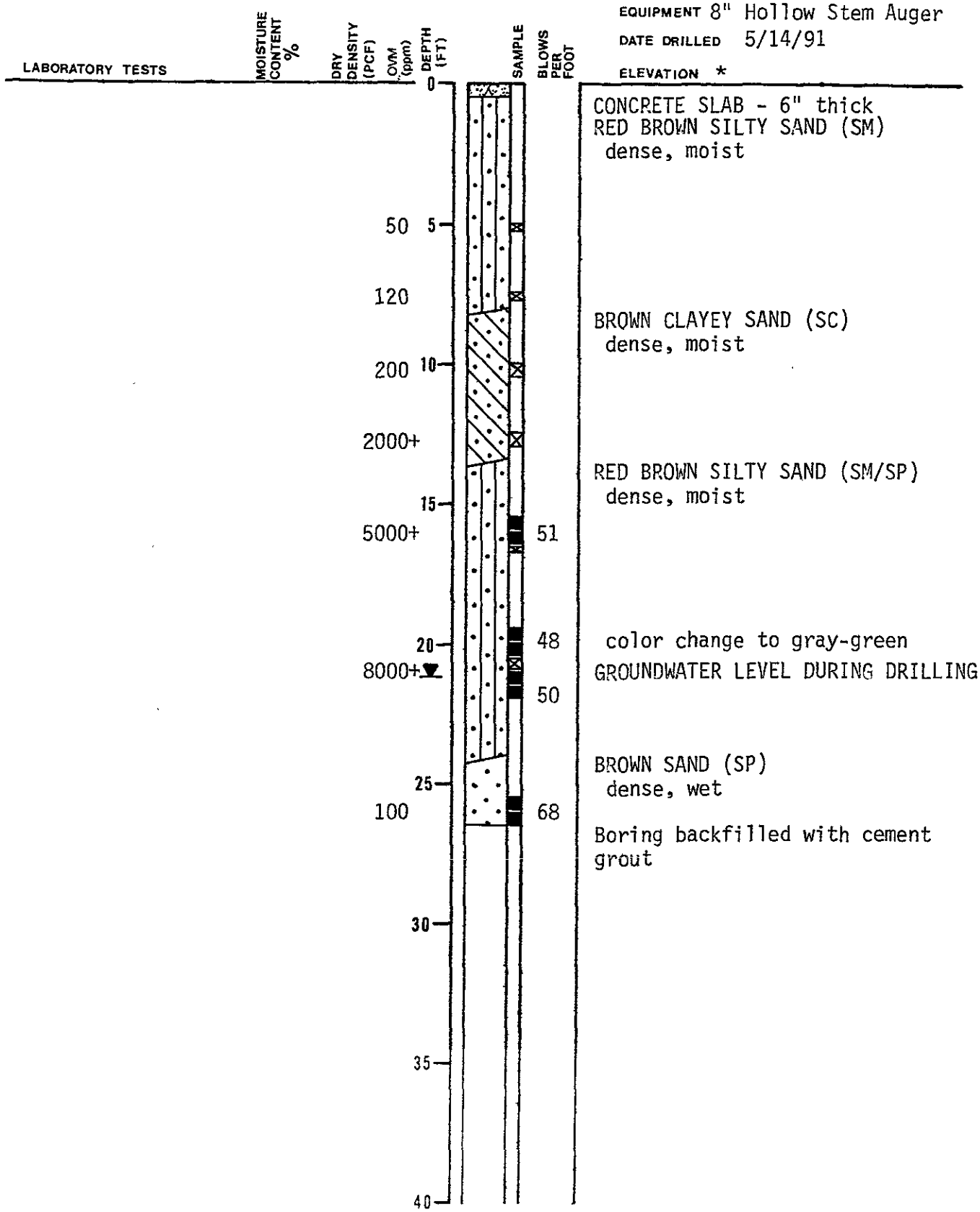
EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 5/14/91
ELEVATION *



Subsurface Consultants	12TH ST. & MARTIN LUTHER KING JR. WAY			PLATE A-13
	JOB NUMBER 272.021	DATE 5/23/91	APPROVED JVB	

LOG OF TEST BORING 15

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 5/14/91
ELEVATION *



Subsurface Consultants

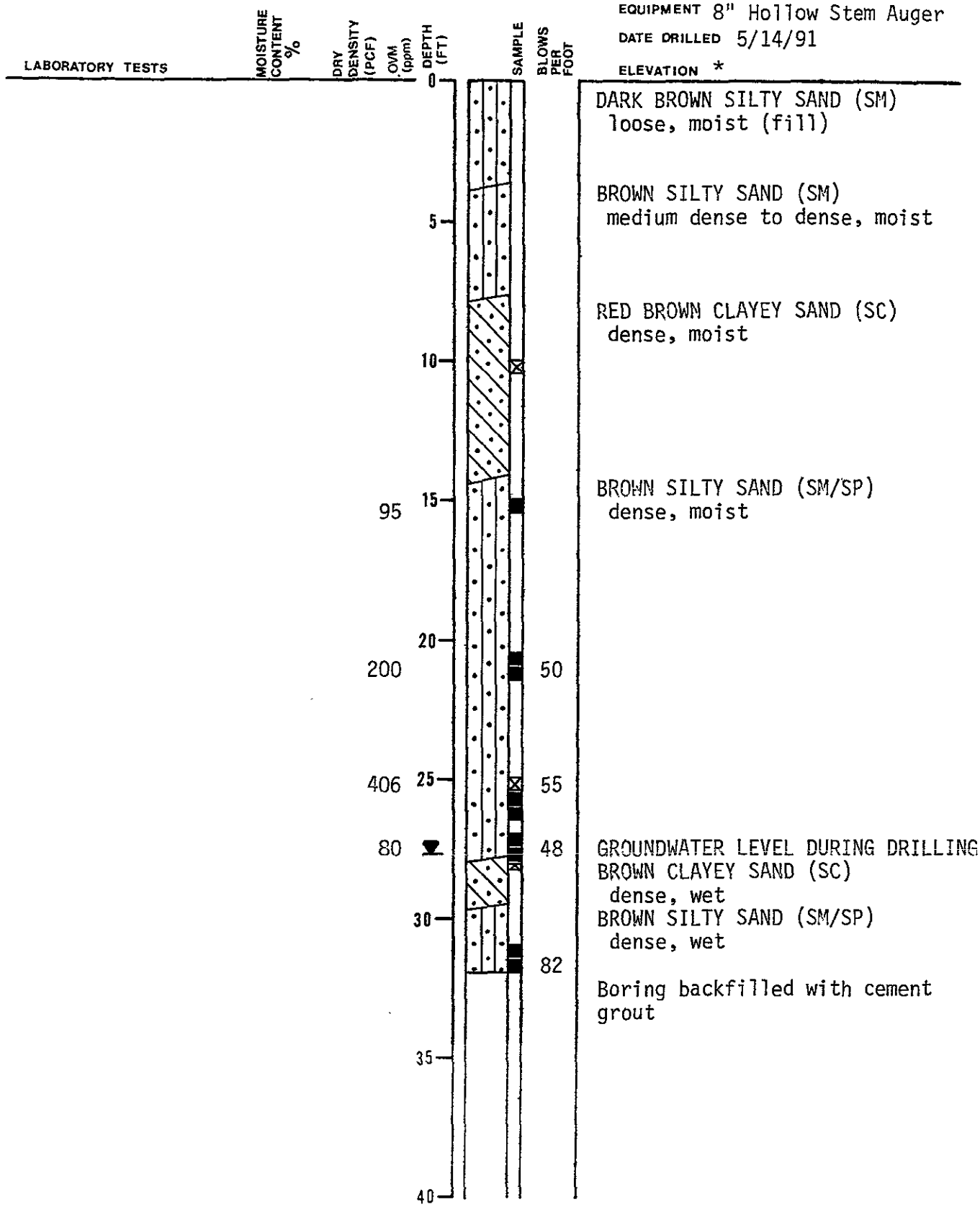
12TH ST. & MARTIN LUTHER KING JR. WAY

JOB NUMBER	DATE	APPROVED
272.021	5/23/91	JVB

PLATE A-14

LOG OF TEST BORING 16

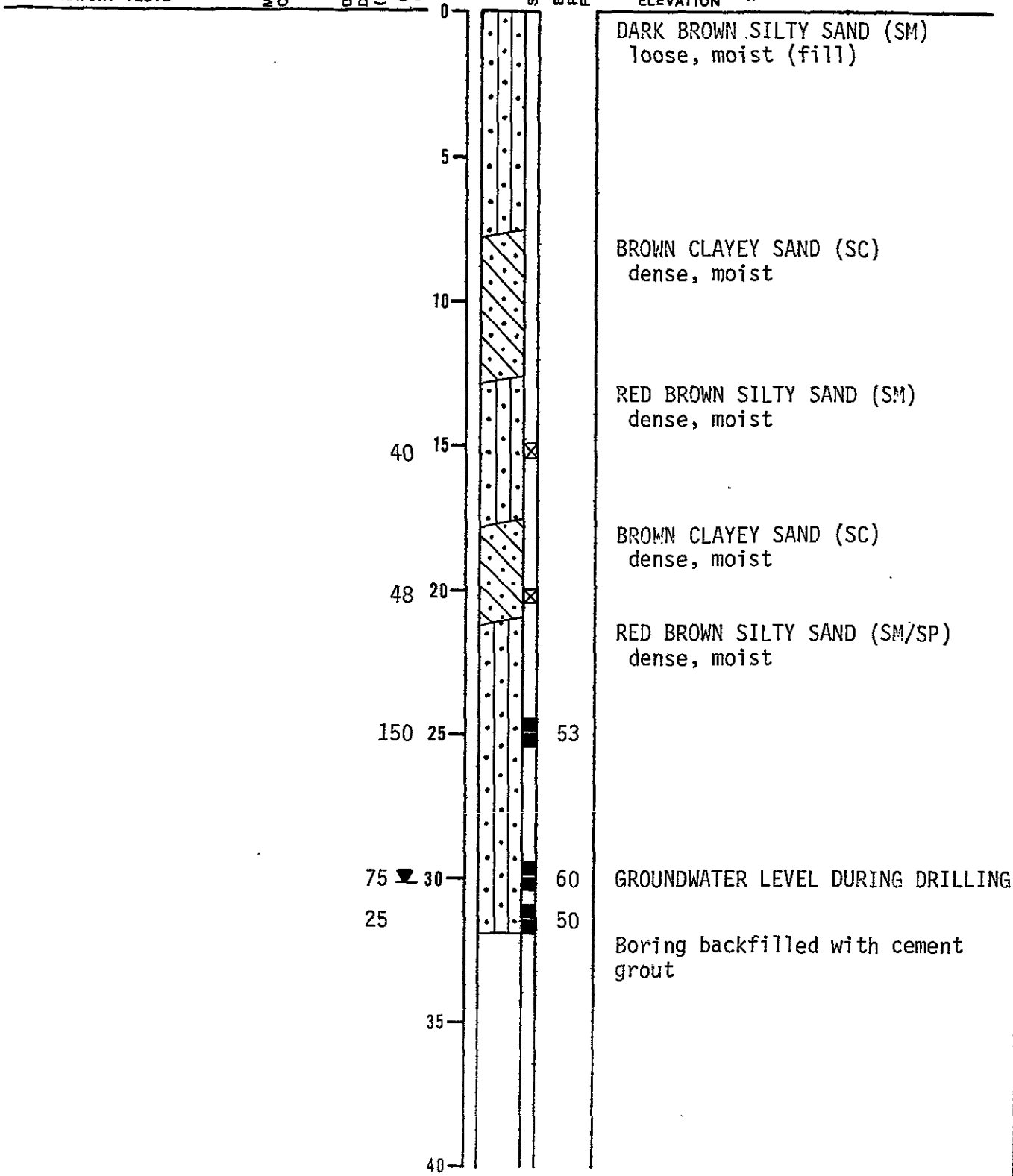
EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 5/14/91
ELEVATION *



Subsurface Consultants	12TH ST. & MARTIN LUTHER KING JR. WAY		PLATE A-15
	JOB NUMBER 272.021	DATE 5/23/91	APPROVED JVB

LOG OF TEST BORING 17

EQUIPMENT 8" Hollow Stem Auger
DATE DRILLED 5/14/91
ELEVATION *



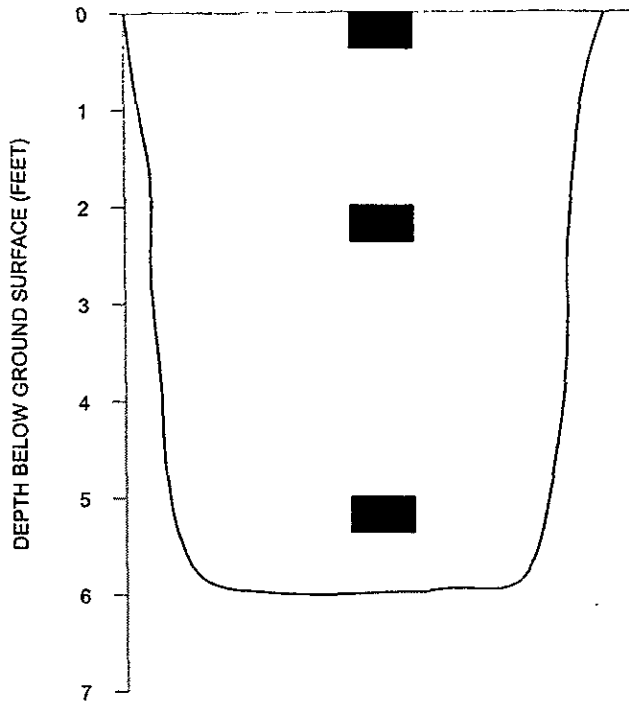
Subsurface Consultants

12TH ST. & MARTIN LUTHER KING JR. WAY

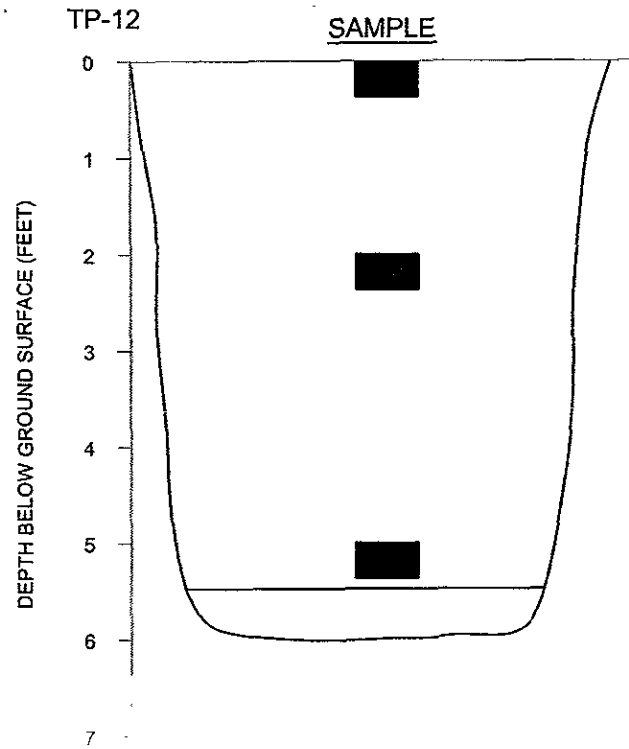
JOB NUMBER 272.021 | DATE 5/23/91 | APPROVED JVB

PLATE A-16

TP-11



TP-12



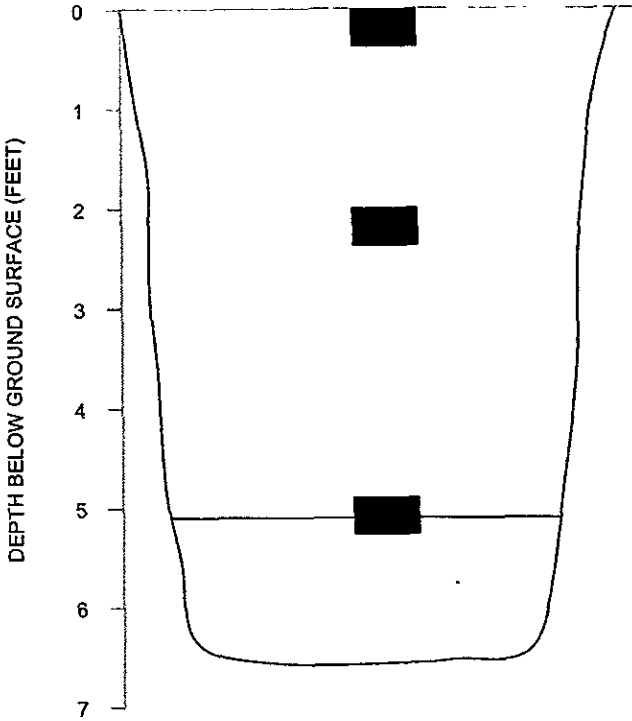
TEST PIT LOGS

MLK JR WAY BETWEEN 11TH AND 12TH STREETS
OAKLAND, CALIFORNIA

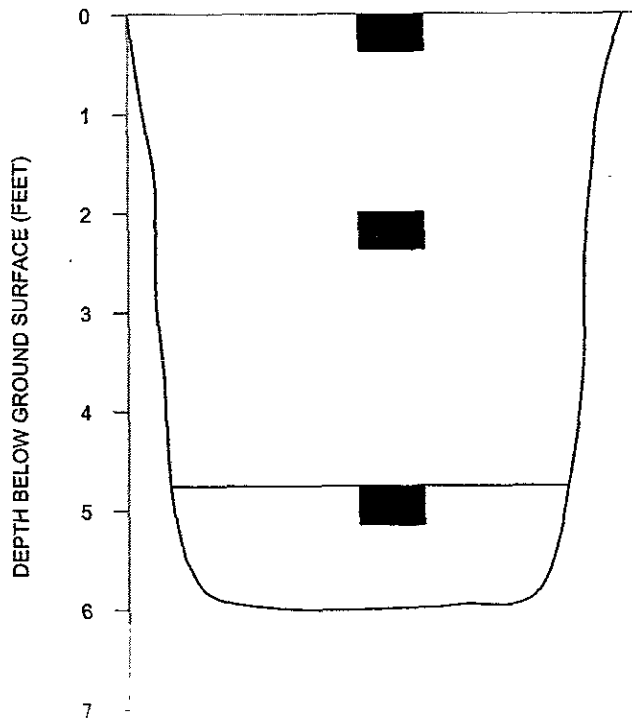
Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY	DATE	TEST PIT
CFY	9/13/00	TP-11 & TP-12
JOB NUMBER	FILE NUMBER	
272.054	A272.054.04	

TP-9



TP-10



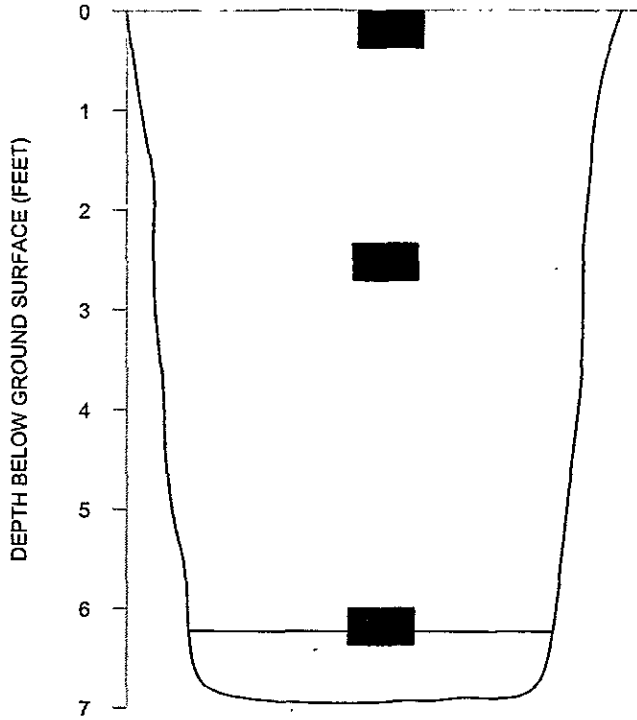
TEST PIT LOGS

MLK JR WAY BETWEEN 11TH AND 12TH STREETS
OAKLAND, CALIFORNIA

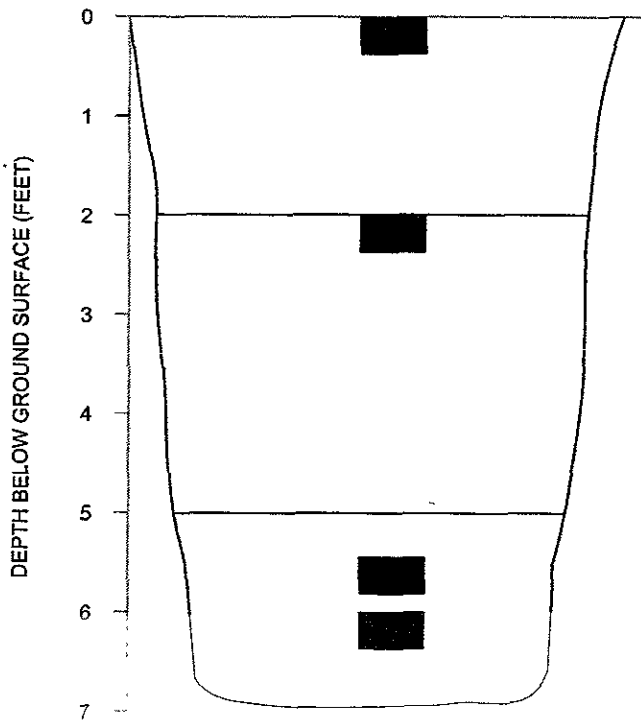
Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY	DATE	TEST PIT
CFY	9/13/00	TP-9 & TP-10
JOB NUMBER	FILE NUMBER	
272.054	A272 054 04	

TP-7



TP-8

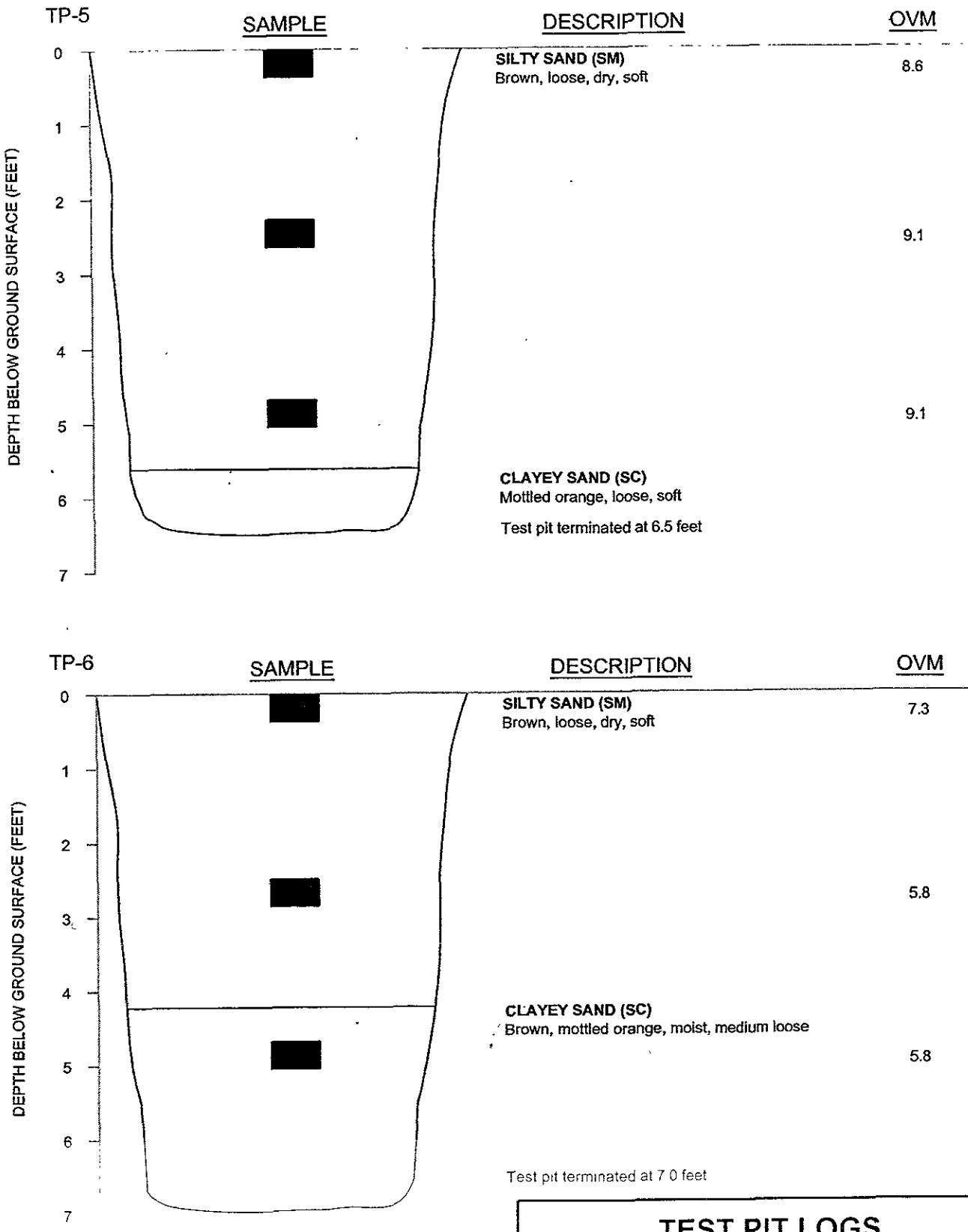


TEST PIT LOGS

MLK. JR. WAY BETWEEN 11TH AND 12TH STREETS
OAKLAND, CALIFORNIA

Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY	DATE	TEST PIT
CFY	9/13/00	TP-7 & TP-8
JOB NUMBER	FILE NUMBER	
272.054	A272.054.04	



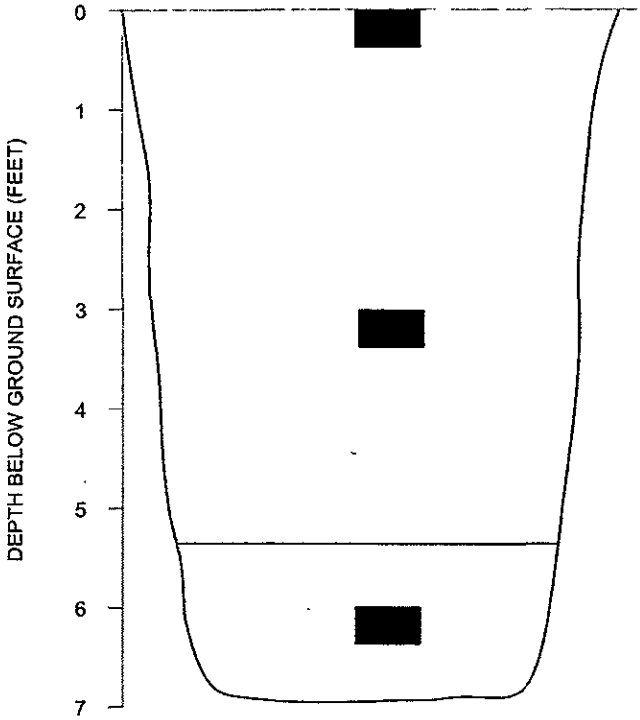
TEST PIT LOGS

MLK. JR. WAY BETWEEN 11TH AND 12TH STREETS
OAKLAND, CALIFORNIA

DRAWN BY	DATE	TEST PIT
CFY	9/13/00	TP-5 & TP-6
JOB NUMBER	FILE NUMBER	
272 054	A272 054.04	

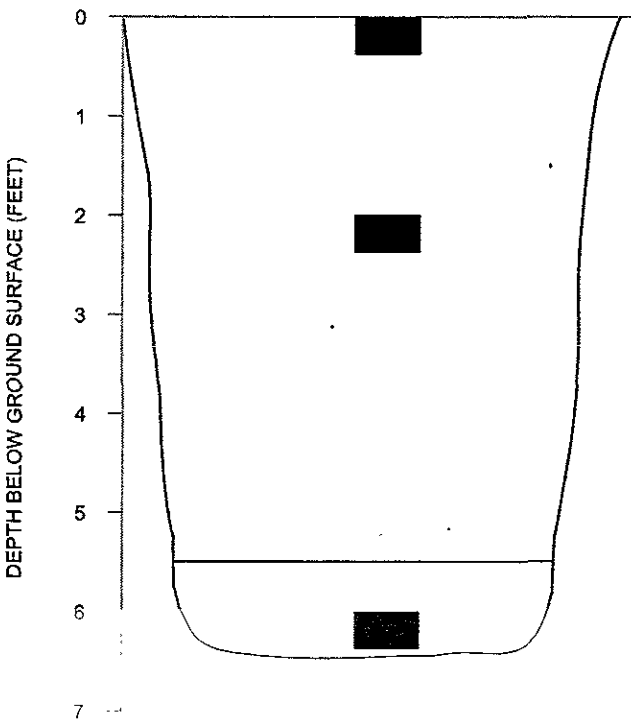
SCI Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

TP-3



SAMPLE	DESCRIPTION	OVM
	SILTY SAND WITH GRAVEL (SM) Brown, loose, dry, bricks in upper 1 feet	4.1
	Grades to poorley graded silty sand, brown, loose, dry, soft	11.3
	CLAYEY SAND (SC) Brown, mottled, tan, moist, loose, soft	13.9
	Test pit terminated at 7.0 feet	

TP-4



SAMPLE	DESCRIPTION	OVM
	SILTY SAND (SM) Brown, loose, dry, very soft	6.5
	SILTY SAND (SM) Poorly graded, brown, loose	13.9
	CLAYEY SAND (SC) Brown with mottled orange brown, loose, moist	13 4
	Test pit terminated at 6 5 feet	

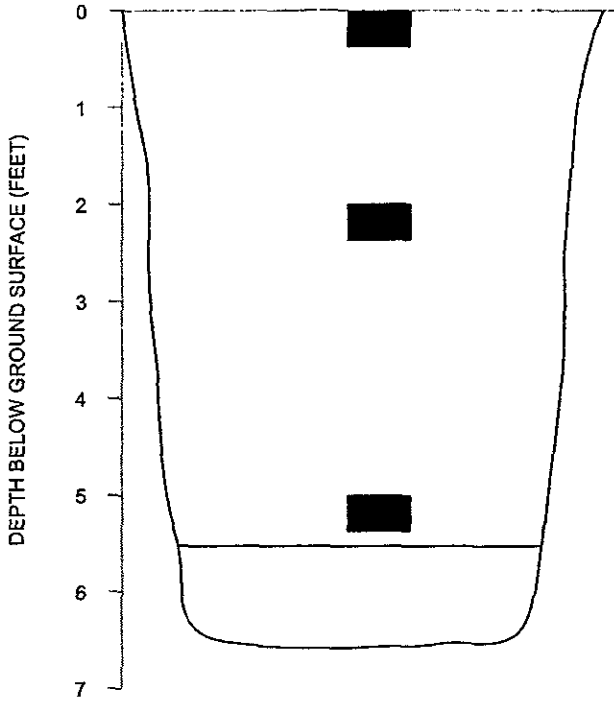
TEST PIT LOGS

MLK. JR. WAY BETWEEN 11TH AND 12TH STREETS
OAKLAND, CALIFORNIA

Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

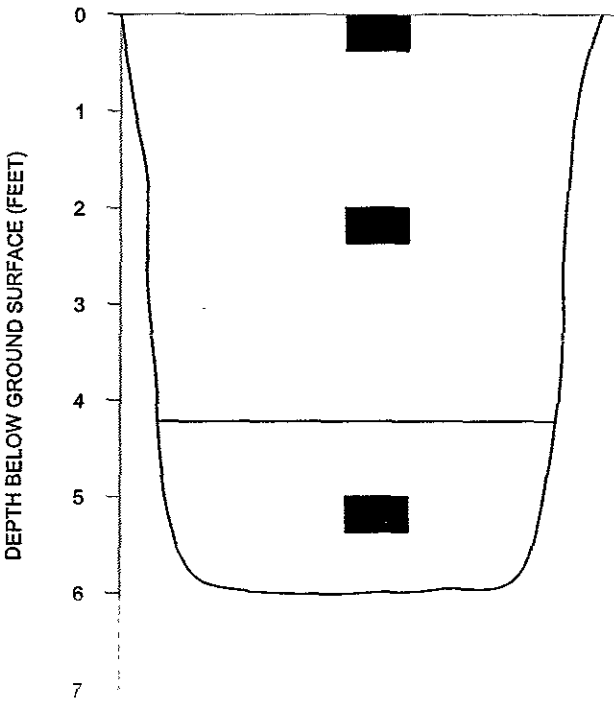
DRAWN BY	DATE	TEST PIT
CFY	9/13/00	TP-3 & TP-4
JOB NUMBER	FILE NUMBER	
272.054	A272.054 04	

TP-1



SAMPLE	DESCRIPTION	OVM
	SILTY SAND WITH GRAVEL (SM) Brown, loose, dry	7.3
	Grades to poorley graded silty sand (SM), Brown, loose, dry	7.0
	Color Change to tannish brown	
	CLAYEY SAND (SC)	7.5
	Test pit terminated at 6.5 feet	

TP-2



SAMPLE	DESCRIPTION	OVM
	SILTY SAND WITH GRAVEL (SM) Brown, loose, dry	4.1
	SILTY SAND (SM) Poorly graded, brown, loose	5.2
	CLAYEY SAND (SC) Brown with mottled orange brown, loose, moist	5.6
	Test pit terminated at 6.0 feet	

TEST PIT LOGS

MLK. JR. WAY BETWEEN 11TH AND 12TH STREETS
OAKLAND, CALIFORNIA

Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers

DRAWN BY	DATE	TEST PIT
CFY	9/13/00	TP-1 & TP-2
JOB NUMBER	FILE NUMBER	
272 054	A272 054.04	