

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY

ALEX BRISCOE, Agency Director



DEPARTMENT OF ENVIRONMENTAL HEALTH
OFFICE OF THE DIRECTOR
1131 HARBOR BAY PARKWAY
ALAMEDA, CA 94502
(510) 567-6777
FAX (510) 337-9135

June 30, 2010

John Schroeter
EBMUD
375 11th Street, Mail Stop 704
Oakland, CA 94607-4240

William Wilkins
Oakland Redevelopment Agency
250 Frank Ogawa Plaza, Suite 3330
Oakland, CA 94612

Mark Gomez
Office of Public Works
250 Frank Ogawa Plaza, Suite 3330
Oakland, CA 94612

Subject: Fuel Leak Case No. RO0002947 and GeoTracker Global ID T0600191509, City of Oakland
Redevelopment / EBMUD, 383 11th Street, Oakland, CA 94607

Dear Messrs. Schroeter, Wilkins, & 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 (ACEH) is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

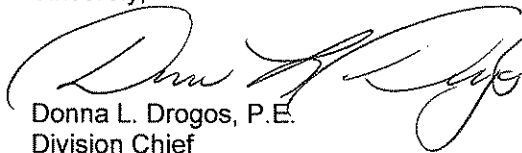
SITE INVESTIGATION AND CLEANUP SUMMARY

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

- Post excavation soil samples not collected. However, site was excavated to facilitate three floors of sub-grade parking.

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

Sincerely,


Donna L. Drogos, P.E.
Division Chief

Enclosures:

1. Remedial Action Completion Certificate
2. Case Closure Summary

cc:

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

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

Paresh Khatri (w/orig enc), D. Drogos (w/enc), T. Le-Khan (w/enc)

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REMEDIAL ACTION COMPLETION CERTIFICATE

Subject: Fuel Leak Case No. RO0002947 and GeoTracker Global ID T0600191509, City of Oakland
Redevelopment / EBMUD, 383 11th Street, Oakland, CA 94607

Dear Messrs. Schroeter, Wilkins, & Gomez:

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

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

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

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Ariu Levi'.

Ariu Levi
Director
Alameda County Environmental Health

Case Closure Procedures

SITE RO 2947

1. Closure prepared by: PK
2. Date Closure prepared: 4/28/2010
3. Date closure presented to Supervisor: _____
4. Date approved by Supervisor: 6/23/2010
5. Landowner Notification (date) Yes / No
6. Date sent to RWQCB: 6/24/2010
7. GT2 Enforcement Action (date) 6/30/2010
8. RWQCB Concurrence & date: (Yes) / No
9. MWs onsite?
If no, go to step #12 Yes (No)
10. Sent MW Decommission Letter? (date) NA
11. MW Decommission Report received? (date) NA
12. Prepare Remedial Action Completion Certificate (date) 6/30/2010
13. Prepare No Further Action Completion Certificate (date) 6/30/2010
14. Scan all docs and upload to GT2 (date) _____
15. Move the PDF doc to "Caseworker Electronic Files" to filed in the electronic case file (date) _____

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

I. AGENCY INFORMATION

Date: June 22, 2010

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

II. CASE INFORMATION

Site Facility Name: City of Oakland Redevelopment Agency / EBMUD		
Site Facility Address: 383 11 th Street, Oakland, California 94607		
RB Case No.: ---	STID No.: ---	LOP Case No.: RO0002947
URF Filing Date: ---	Global ID No.: T0600191509	APN: 2-59-23-1

Responsible Parties	Addresses	Phone Numbers
Mr. John Schroeter EBMUD	375 11 Street, Mail Stop 704 Oakland, CA 94607-4240	510-287-0345
Mr. William Wilkins Oakland Redevelopment Agency	250 Frank H. Ogawa Plaza, Suite 3330 Oakland, CA 94612	510-238-6358
Mr. Mark Gomez Office of Public Works	250 Frank H. Ogawa Plaza, Suite 3330 Oakland, CA 94612	510-238-7314

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	850-gallon	Gasoline	Removed	4/23/1987
2	550-gallon	Gasoline	Removed	4/23/1987
3	550-gallon	Gasoline	Removed	4/23/1987
4	250-gallon	Waste oil	Removed	4/23/1987
Piping			Removed	4/23/1987

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Tanks exhibited external corrosion		
Site characterization complete? Yes	Date Approved By Oversight Agency: ---	
Monitoring wells installed? Yes	Number: 9	Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 23.62 ft bgs	Lowest Depth: 32.35 ft bgs	Flow Direction: Gradient is flat, but assumed westerly
Most Sensitive Current Use: Potential drinking water source.		

Summary of Production Wells in Vicinity: No water supply wells were identified within a ¼ mile radius of the site (see RO0000037).	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain Groundwater Basin
Is surface water affected? No	Nearest SW Name: Lake Merritt located approximately 2,500 feet to the east of the subject site.
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health & Oakland Fire Prevention Bureau

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	One 850-gallon Two 550-gallon One 250-gallon	Disposal, Unreported destination	4/23/1987
Piping	Unknown	Disposal, Unreported destination	4/23/1987
Free Product	None reported	---	---
Soil	Unknown	---	1/29/1993
Groundwater	None reported	---	---

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

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	16,000 (MW-1, 5/26/1987)	See note 4	138,040 (B6, 10/8/1987)	<50
TPH (Diesel)	<10	<10	NA	NA
TPH (Motor Oil)	5,700 (UK-1, 4/23/1987)	See note 4	NA	NA
Benzene	48 (MW-1, 5/26/1987)	See note 4	11,025 (B6, 10/8/1987)	<0.2
Toluene	110 (MW-1, 5/26/1987)	See note 4	6,800 (MW-1, 5/28/1987)	<0.2
Ethylbenzene	28 (B5, 10/9/1987)	See note 4	1,675 (B6, 10/8/1987)	<0.2
Xylenes	200 (UK-1, 4/23/1987)	See note 4	12,150 (B6, 10/8/1987)	<0.2
MTBE	NA ³	NA ³	NA ²	<5 ¹
Heavy Metals (Cd, Cr, Pb, Ni, Zn)	NA	NA	NA	NA
Other (8260/8240)	NA	NA	510 (MW-1, 5/26/1987)	NA

¹ Other VOCs analyzed (groundwater µg/L after cleanup): <5 µg/L MtBE, TBA, DIPE, ETBE, TAME, EDB, 1,2-DCA all not analyzed

² Other VOCs analyzed (groundwater ppb before cleanup): 180 µg/L EDB, 510 µg/L 1,2-DCA, MtBE, TBA, DIPE, ETBE, TAME & EtOH all not analyzed;

³ Other VOCs analyzed: MtBE, TBA, DIPE, ETBE, TAME, EDB, 1,2-DCA, & EtOH all not analyzed.

⁴ Post excavation soil samples not collected, however, site was excavated to facilitate three floors of sub-grade parking
NA - Not Analyzed

Site History and Description of Corrective Actions:

The City of Oakland Redevelopment Agency / EBMUD (the subject site) is located at 383 11th Street in Oakland, California, (**Figure 1**). Land use in the immediate vicinity is commercial. Four USTs were located on 11th Street near the corner of Webster Street in downtown Oakland, California. Following the UST removals, subsurface investigations consisting of exploratory borings and monitoring well installations and remedial actions consisting of groundwater extraction and onsite soil treatment and over-excavation were conducted at the site. In the early 1990's, the Pacific Renaissance Plaza site was developed within the block boundaries of Franklin, Webster, 9th and 11th Streets. Tenth Street formerly existed between 9th and 11th Street but was incorporated into the project when the block was redeveloped by EBMUD as the EBMUD building and the Pacific Renaissance Plaza.

Four USTs located in a common excavation consisting of one 250-gallon waste oil, one 850-gallon gasoline, and two 550-gallon gasoline, were removed from the site on April 23, 1987. The tanks were located under sidewalk on 11th Street near the Webster Street intersection. Soil sample analytical results detected TPH-g and benzene at concentrations of 11,000 mg/kg and 21 mg/kg, respectively in soil sample UK-3. A groundwater sample was not collected. The USTs are illustrated on **Figure 2** and analytical results summarized on **Table 1**.

On May 26, 1987, two borings (B1 and B2) and one groundwater monitoring well (MW-1) was installed at the site. Soil sample analytical results detected TPH-g and benzene at concentrations of 16,000 mg/kg and 48 mg/kg, respectively. Groundwater sample analytical results detected TPH-g and benzene at concentrations of 66,000 µg/L and 4,900 µg/L, respectively. The sampling locations are illustrated on **Figure 3** and analytical results summarized on **Tables 2 and 3**.

On October 9, 1987, borings B3 through B8 were installed to characterize the site. Soil sample analytical results detected 2,800 mg/kg TPH-g [B5 @25.5 to 26 ft bgs] and 14 mg/kg benzene [B3 @ 30 to 30.5 ft bgs]. Groundwater sample analytical results detected 138,040 µg/L TPH-g and 11,025 µg/L benzene [B6]. The sampling locations are illustrated on **Figure 4** and analytical results summarized on **Tables 4 and 5**.

In March 1988, a groundwater treatment system was installed at the site. No additional reports of documents are available in the case file. However, this site was redeveloped in conjunction with the Pacific Renaissance Plaza site (RO0000037). Although few reports that document the work at the EBMUD site are within in the Pacific Renaissance Plaza case file, the case closure document for Pacific Renaissance Plaza indicates that the site remediation was conducted for the entire block, which includes this site. In addition, according to EBMUD, significant excavation was performed for site to facilitate three floors of sub-grade parking (Figure 5). Additional details are available in the Pacific Renaissance Plaza (RO0000037) case file.


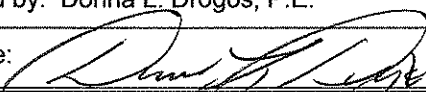
IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a significant risk to human health based upon current land use and conditions.		
<p>Site Management Requirements: Case closure for this fuel leak site is granted for the current commercial land use only. If any change in land use to any residential or other conservative land use scenario is proposed at this site, Alameda County Environmental Health (ACEH) must be notified as required by Government Code Section 65850.2.2. ACEH will re-evaluate the case upon receipt of approved development/construction plans.</p> <p>Excavation or construction activities in areas of residual contamination require planning and implementation of appropriate health and safety procedures by the responsible party (or current property owner/developer) prior to and during excavation and construction activities.</p> <p>This site is to be entered into the City of Oakland Permit Tracking System due to the residual contamination on site.</p>		
Should corrective action be reviewed if land use changes? Yes.		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: Yes	Number Decommissioned: 9	Number Retained: 0
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: --		

V. ADDITIONAL COMMENTS, DATA, ETC.

<p>Considerations and/or Variances:</p> <ul style="list-style-type: none"> Fuel oxygenates other than MTBE were not analyzed. <p>Conclusion:</p> <p>Alameda County Environmental Health staff believe that the levels of residual contamination do not pose a significantly threat to water resources, public health and safety, and the environment under the current commercial land use based upon the information available in our files to date. No further investigation or cleanup for the fuel leak case is necessary unless a change in land use to any residential or other conservative land use scenario occurs at the site. ACEH staff recommend closure for the site.</p>
--

VI. LOCAL AGENCY REPRESENTATIVE DATA

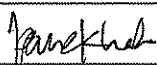
Prepared by: Paresh Khatri	Title: Hazardous Materials Specialist
Signature: 	Date: June 22, 2010
Approved by: Donna L. Drogos, P.E.	Title: Division Chief
Signature: 	Date: 06/23/10

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

VII. REGIONAL BOARD NOTIFICATION

Regional Board Staff Name: Cherie McCaulou	Title: Engineering Geologist
Notification Date:	

VIII. MONITORING WELL DECOMMISSIONING

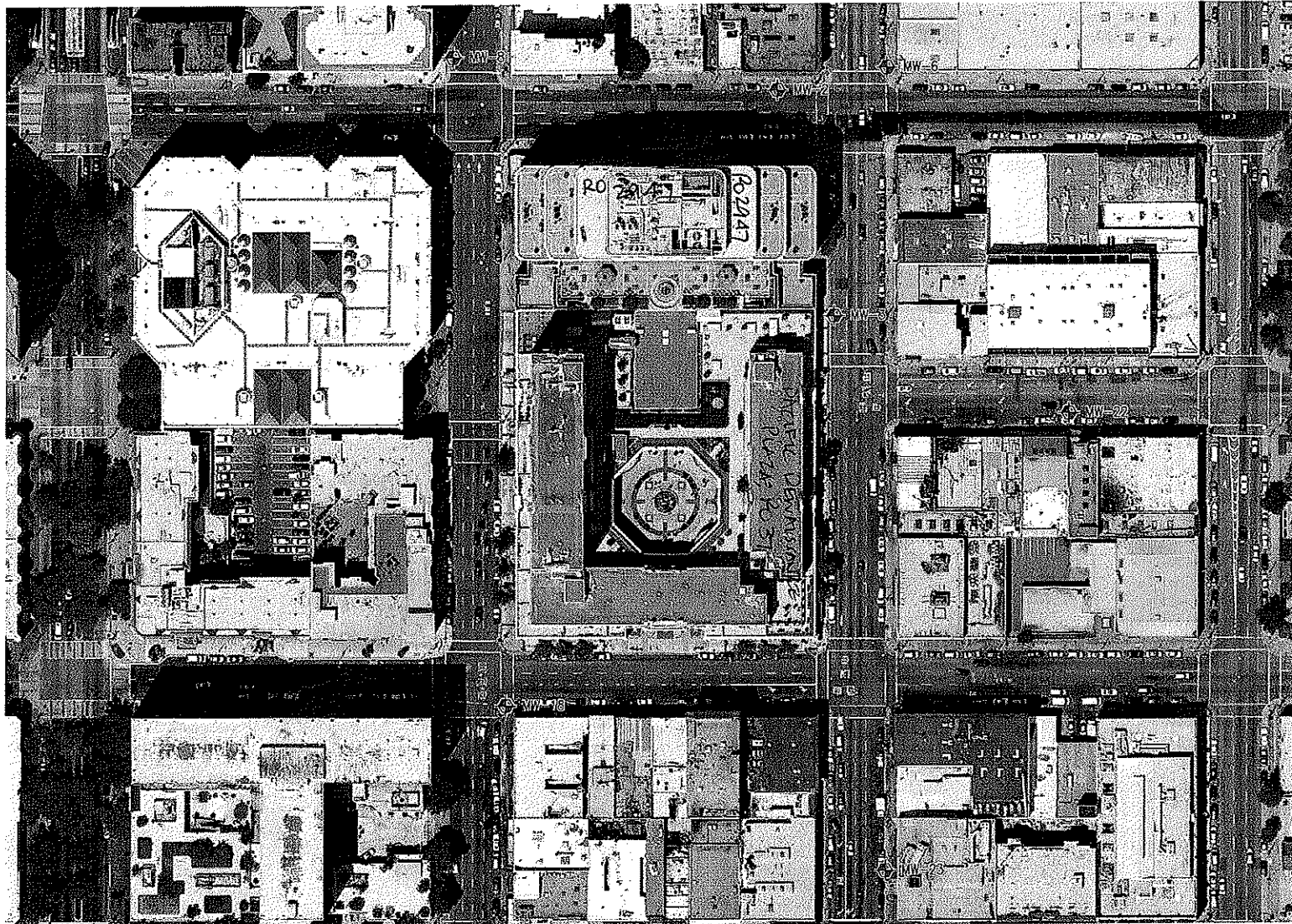
Date Requested by ACEH: 7/15/2008	Date of Well Decommissioning Report: 6/26/2009	
All Monitoring Wells Decommissioned: Yes	Number Decommissioned: 9	Number Retained: 0
Reason Wells Retained: MWs decommissioned as part of RO0000037 case closure.		
Additional requirements for submittal of groundwater data from retained wells: None		
ACEH Concurrence - Signature: 		Date: 6/22/2010

Attachments:

1. Site Figures 1 through 5
2. Analytical Tables 1 through 5
3. Boring Logs (15 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.

C:\p000000\272\272.179\Drawings\272_179_06.dwg 6-24-09 10:03:12 AM vjmg



LEGEND

MW-1 APPROXIMATE LOCATION OF MONITORING WELL

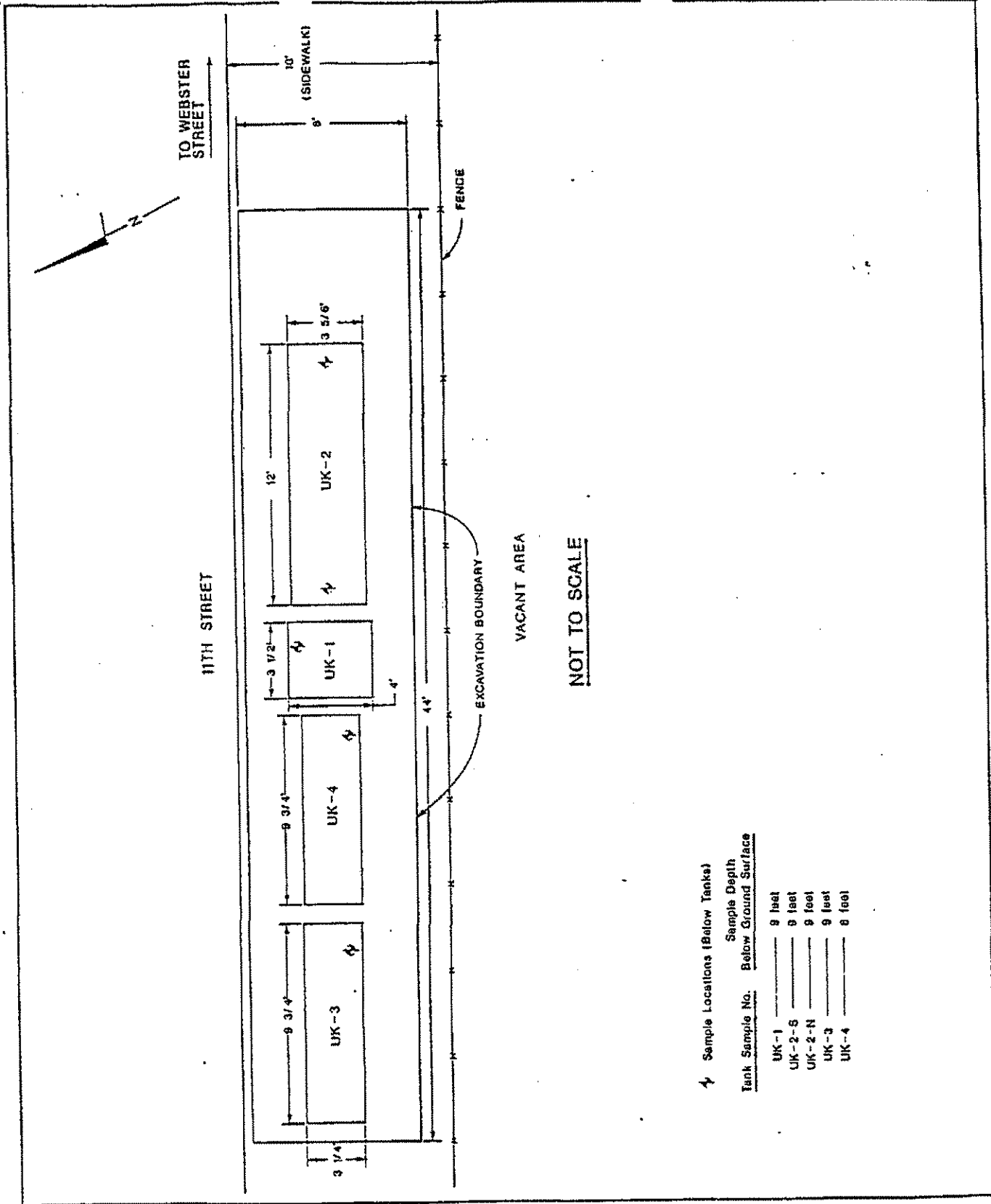
NORTH

0 100 200
FEET

SITE PLAN
Renaissance Plaza Project
Oakland, California

BASE MAP SOURCE: This aerial photo was obtained from Google Earth Pro.

FIGURE 1



NOT TO SCALE

↑ Sample Locations (Below Tanks)

Tank Sample No.	Sample Depth Below Ground Surface
UK-1	9 feet
UK-2-S	9 feet
UK-2-N	9 feet
UK-3	9 feet
UK-4	8 feet



Harding Lawson Associates
Engineers, Geologists
& Geophysicists

SITE PLAN
Chinatown Redevelopment Project
Oakland, California

PLATE
2

DRAWN
CAJ

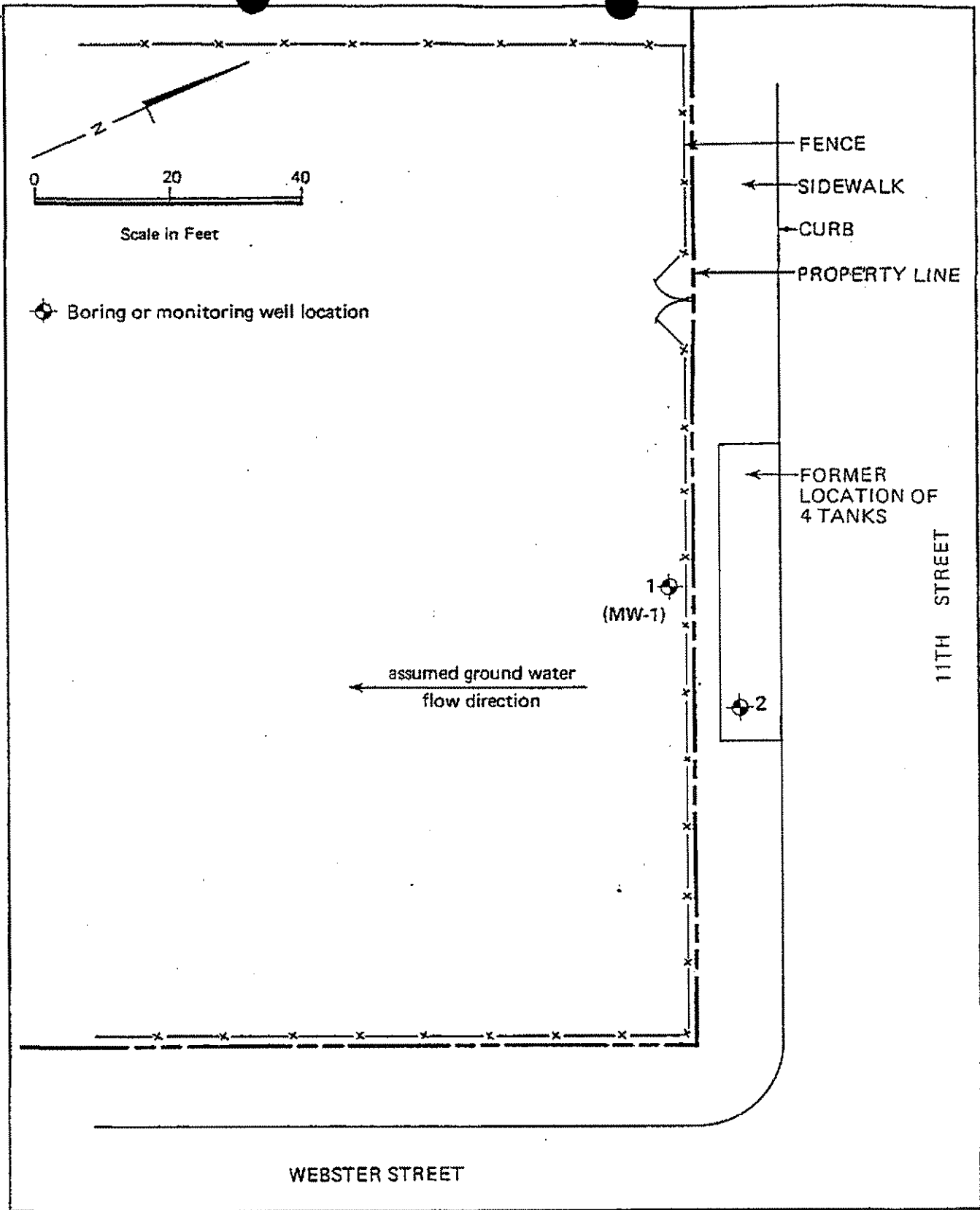
JOB NUMBER
9382.005.02

APPROVED
[Signature]

DATE
5/87

REVISED

DATE



Harding Lawson Associates
Engineers and Geoscientists

Boring Location Map
Oakland Chinatown Tanks
Oakland, California

PLATE

3

DRAWN
MG

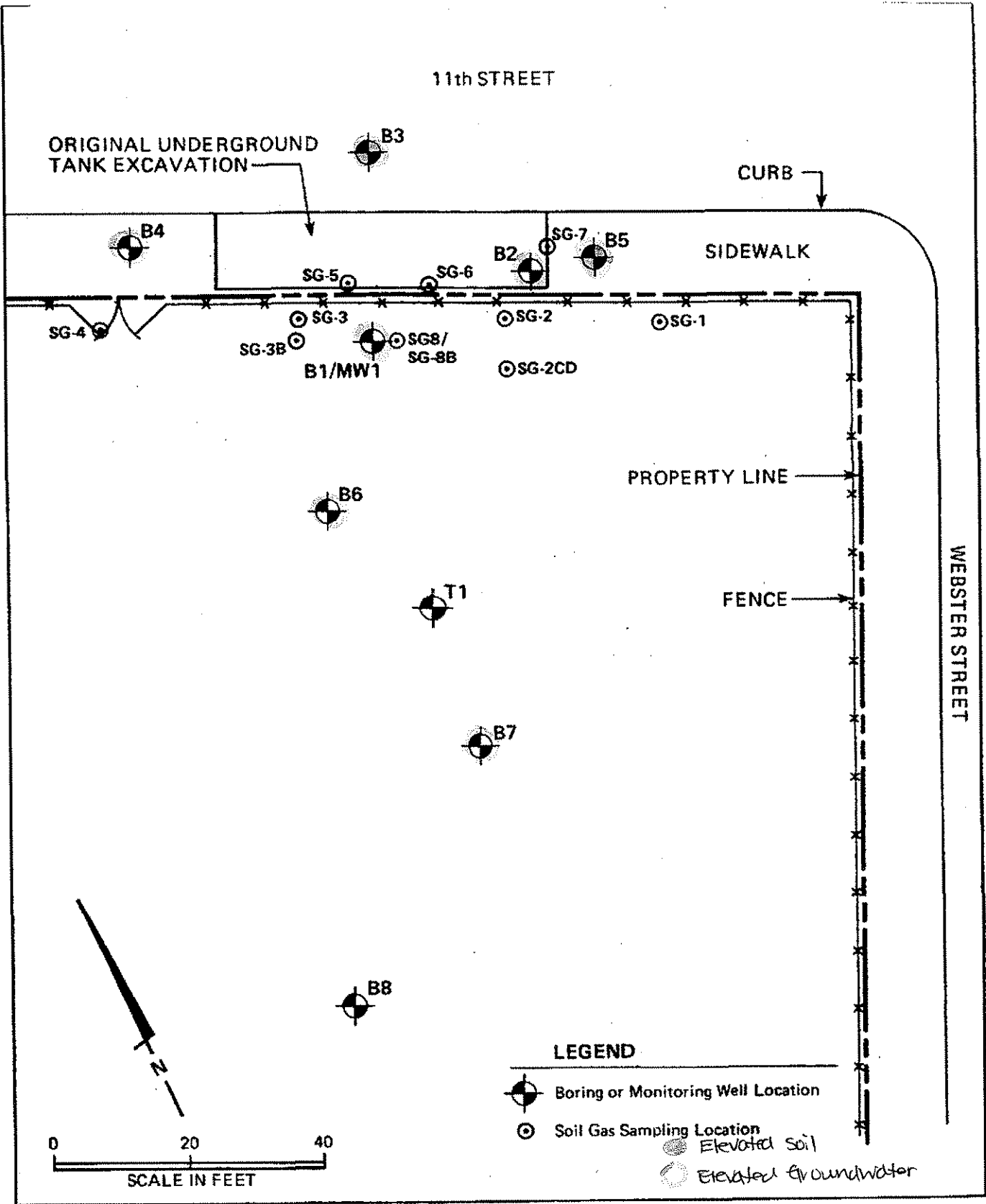
JOB NUMBER
09382,005.02

APPROVED
D. Long

DATE
6/87

REVISED

DATE



HLA Harding Lawson Associates
Engineers and Geoscientists

Site Plan
Oakland Chinatown Tanks
Oakland, California

DRAFT 4 PLATE

DRAWN JAS	JOB NUMBER 09382,008.01	APPROVED <i>[Signature]</i>	DATE 10/87	REVISED	DATE
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FORMER
LOCATION OF
TANKS

11th STREET

TPH	B	EB	T	X
28,500	6,935	580	188	663

TPH	B	EB	T	X
77,100	9,725	1,350	5,375	6,050

CURB



TPH	B	EB	T	X
57,800	3,465	1,315	2,655	4,480



TPH	B	EB	T	X
72,000	11,000	ND	6,100	6,000



TPH	B	EB	T	X
138,040	11,025	1,675	6,275	12,150

PROPERTY LINE

FENCE

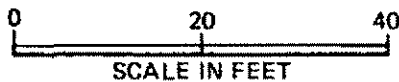
SIDEWALK

WEBSTER STREET

TPH	B	EB	T	X
29,440	3,365	418	108	623



TPH	B	EB	T	X
3,900	34.5	35.0	41.5	219



LEGEND

NOTE: Concentrations given in parts per billion (ppb)

TPH = Total Petroleum Hydrocarbons

B = Benzene

EB = Ethylbenzene

T = Toluene

X = Xylenes

ND = Not Detected



Boring or Monitoring Well Location

PLATE

HLA Harding Lawson Associates
Engineers and Geoscientists

Groundwater Chemistry Distribution Map
Oakland Chinatown Tanks.
Oakland, California

DRAFT 10

DRAWN
JAS

JOB NUMBER
09382,008.01

APPROVED
[Signature]

DATE
10/87

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DATE

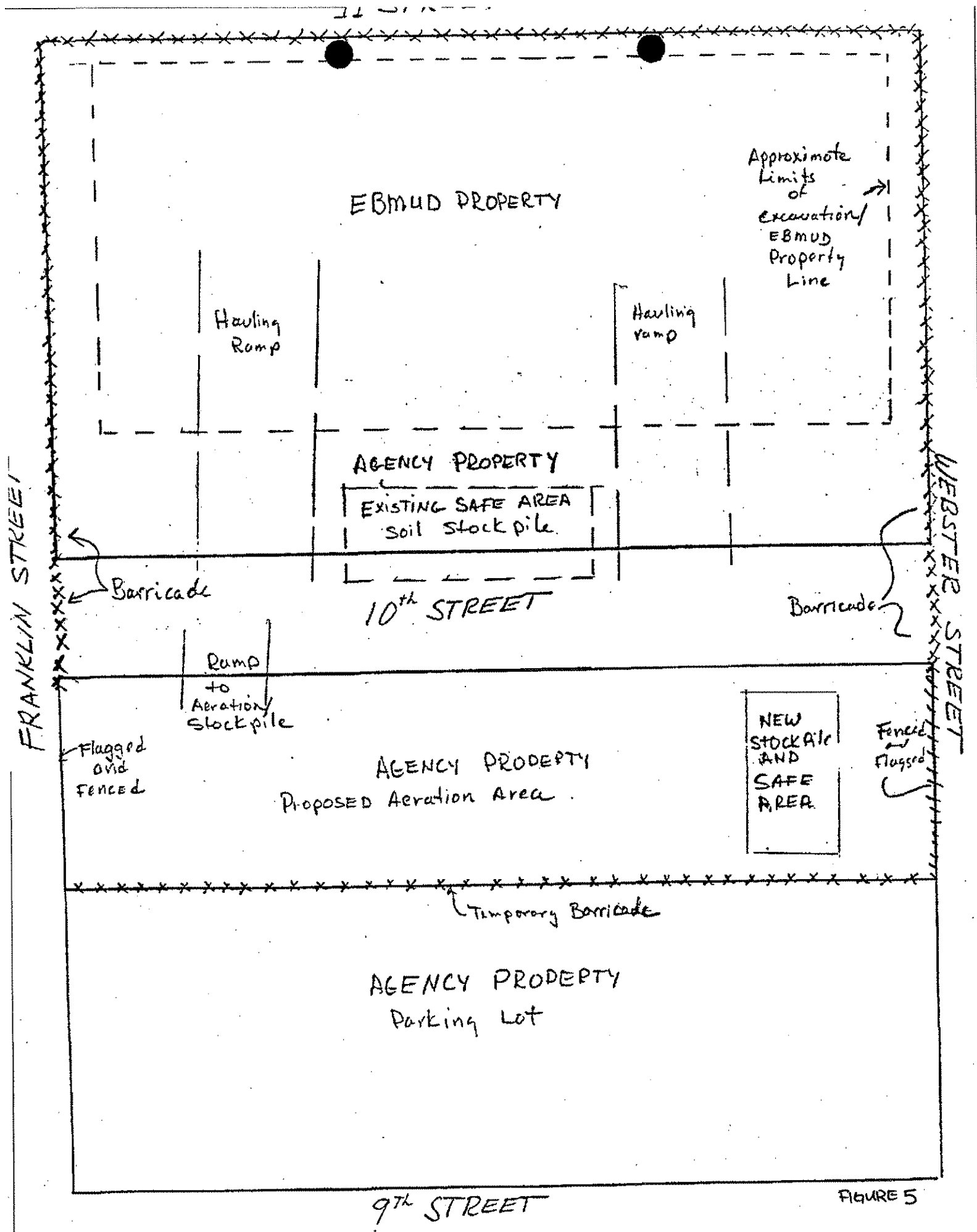
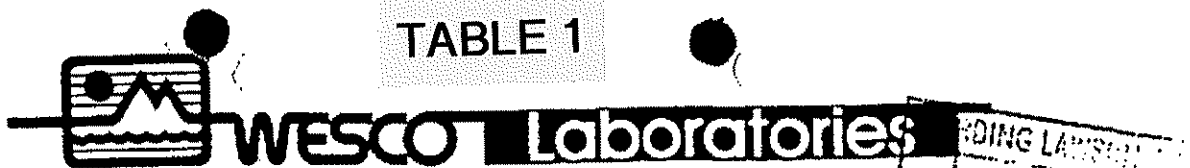


FIGURE 5

TABLE 1



Date: May 5, 1987

Client Job/P.O. #: 9382,005.02

Client: Harding Lawson Associates

Date Collected: April 23, 1987

Submitted by: Sarah Prowell

Date Submitted: April 23, 1987

Report to: Barry Robson 415-892-0821

& Type of Samples: 5 soils

WESCO Job#: HLA8725-L

Site: City of Oakland

page 1 of 1

Lab No.	Client ID	Benzene mg/kg	Toluene mg/kg	Xylene mg/kg	Gasoline mg/kg
7-7901	UK-1	0.017	0.73	0.52	---
7-7902	UK-2-S	2.5	18	76	3600
7-7903	UK-2-N	6.4	5.9	82	3200
7-7904	UK-3	21	30	280	11000
7-7905	UK-4	12	16	200	4600
	METHOD(S)	Note 1	Note 1	Note 1	Note 2

Lab No.	Client ID	Ethyl Benzene mg/kg	All 8010 Compounds mg/kg	Method 11 Extractable Hydrocarbons mg/kg	Oil & Grease mg/kg
7-7901	UK-1	0.12	<0.015	4200*	5700
	METHOD(S)	Note 1	Note 1	Note 3	Note 4

NOTES: Note 1: EPA-5020/8020
 Note 2: EPA-5020/8015
 Note 3: SFRWQCB Method 11
 Note 4: EPA-3550/APHA 503E

*Quantified as Motor Oil

M. L. Webb

Analytical supervisor

TABLE 2



WESCO Laboratories

HARDING LAWSON ASSOCIATES
 JUN 12 1987

Date: June 11, 1987

Client Job/P.O. #: 9382,005.02

Client: Harding Lawson Associates

Date Collected: May 26, 1987

Submitted by: Dave Hochmuth

Date Submitted: May 27, 1987

Report to: Dave Hochmuth

& Type of Samples: 4 soils

WESCO Job#: HLA8733-L

Site: Oakland Chinatown

page 1 of 1

Lab No.	Client ID	Benzene mg/kg	Toluene mg/kg	Xylene mg/kg	Gasoline mg/kg
7-8481	MW04	0.012	<0.001	<0.001	0.43
7-8482	Boo2	9.8	22	74	3700
7-8483	Boo3	1.6	5.5	42	2400
7-8484	Boo4	48	110	190	16000

METHOD(S) Note 1 Note 1 Note 1 Note 1

NOTES: Note 1: EPA 5020/8020/8015

Michael Webb

Analytical supervisor

TABLE 3



Date: June 15, 1987

Client Job/P.O. #: 9382,005.02

Client: Harding Lawson Associates

Date Collected: May 27, 1987

Submitted by: Greg Sengelmann

Date Submitted: May 28, 1987

Report to: Dave Hochmuth

& Type of Samples: 2 waters

WESCO Job#: HLA 8735-L, 2nd EDIT

Site: Oakland Chinatown Tanks

page 1 of 1

Lab No.	Client ID	Gasoline mg/l	Benzene mg/l	Toluene mg/l	Xylene mg/l	Ethylbenzene mg/l
7-8496	8721-0101	66	4.9	6.8	6.1	(0.005)
	METHOD(S)	Note 1	Note 2	Note 2	Note 2	Note 2

Lab No.	Client ID	1,2-DCA	Trichloro- ethylene mg/l	1,2-dichloro- propane mg/l	1,1,2-tri- chloroethane mg/l	chloro- benzene mg/l
7-8497	8721-0101	0.51	0.036	0.003	0.002	0.051
	METHOD(S)	Note 3	Note 3	Note 3	Note 3	Note 3

Lab No.	Client ID	2-chloro ethyl vinyl ether mg/l	All other EPA 601 Compounds mg/l	dibromoethane (EDB)* mg/l	Freon 113 mg/l
7-8497	8721-0101	(0.005)	(0.001)	0.18	(0.001)
	METHOD(S)	Note 3	Note 3	Note 3	Note 3

NOTES: Note 1: EPA Methods 5020/8015

Note 2: EPA Method 602

Note 3: EPA Method 601

*: Confirmed by liquid/liquid extraction; second column, GC/ECD

M. L. Webb
Analytical supervisor

12/87

Table 4. Laboratory Results of Chemical Analyses of Soil Samples(1)

Boring No.	Sample Depth (feet)	Date Sampled	Total Petroleum Hydrocarbons (as gasoline)	Benzene	Ethyl-Benzene	Toluene	Xylenes
B3	15.5 - 16.0	10/9/87	ND(2)	0.5	ND	0.6	ND
B3	20.5 - 21.0	10/9/87	ND	0.5	ND	ND	ND
B3	25.5 - 26.0	10/9/87	2,000,000	5,800	14,600	13,400	50,000
B3	30.0 - 30.5	10/9/87	2,500,000	14,000	21,000	10,000	47,100
B3	35.5 - 36.0	10/9/87	31,000	350	350	450	850
B4	15.5 - 16.0	10/9/87	ND	ND	ND	ND	ND
B4	20.5 - 21.0	10/9/87	ND	ND	ND	3.0	ND
B4	25.5 - 26.0	10/9/87	120.0	11.7	1.0	ND	24.3
B4	30.0 - 30.5	10/9/87	1,400.0	740.0	556.0	61.8	606.0
B4	35.5 - 36.0	10/9/87	860.0	525.0	29.5	14.0	198.0
B5	20.5 - 21.0	10/9/87	ND	ND	ND	0.5	ND
B5	25.5 - 26.0	10/9/87	2,800,000	8,300	28,000	10,000	197,000
B5	30.0 - 30.5	10/9/87	29,000	21	270	100	880
B5	35.5 - 36.0	10/9/87	470,000	13,047	1,232	492	6,594
B6	21.0 - 21.5	10/8/87	ND	ND	ND	ND	ND
B6	30.0 - 30.5	10/8/87	870,000	4,800	5,600	6,000	24,900
B7	25.5 - 26.0	10/8/87	1,100	4.9	1.9	0.7	3.4
B8	20.5 - 21.0	10/8/87	ND	ND	ND	ND	ND
B8	35.5 - 36.0	10/8/87	330.0	1.4	1.0	18.7	4.5

1 Concentrations in parts per billion
 2 Not detected

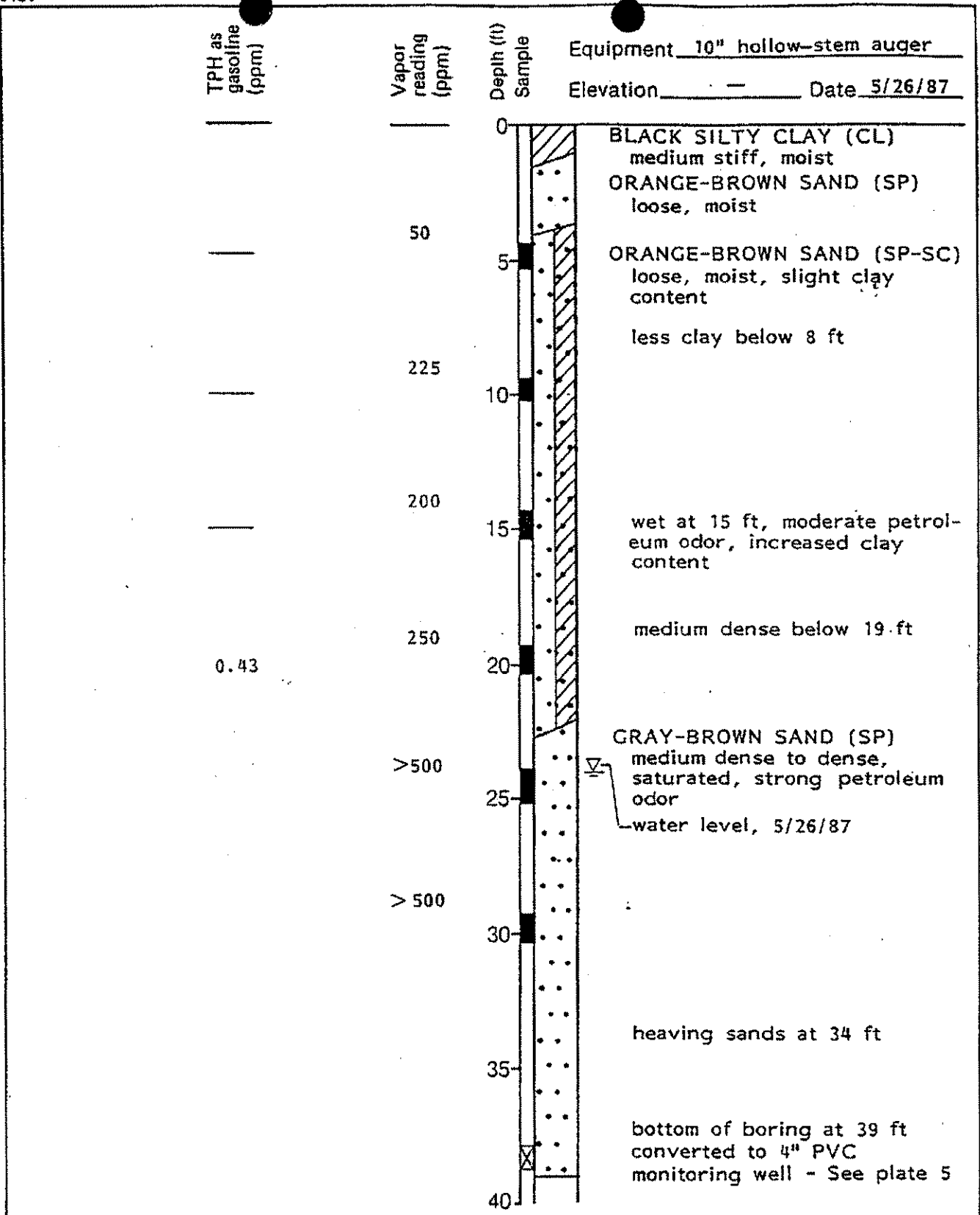
Table 5. Laboratory Results of Chemical Analyses of Ground-Water Samples(1)

Monitoring Well No. or Boring No.	Date Sampled	Total Petroleum Hydrocarbons (as gasoline)	Benzene	Ethyl- Benzene	Toluene	Xylenes	Other Purgeable Priority Pollutants
MW-1	8/28/87	72,000	11,000	ND(2)	6,100	6,000	ND
B3	10/9/87	77,100	9,725	1,350	5,375	6,050	NA(3)
B4	10/9/87	28,500	6,935	580	188	663	NA
B5	10/9/87	57,800	3,465	1,315	2,655	4,480	NA
B6	10/8/87	138,040	11,025	1,675	6,275	12,150	NA
B7	10/8/87	29,440	3,365	418	108	623	NA
B8	10/8/87	3,900	34.5	35.0	41.5	219	NA

1 Concentrations in parts per billion

2 Not detected

3 Not analyzed



Harding Lawson Associates
Engineers, Geologists
& Geophysicists

Log of Boring 1
Oakland Chinatown Tanks
Oakland, California

PLATE

2

DRAWN

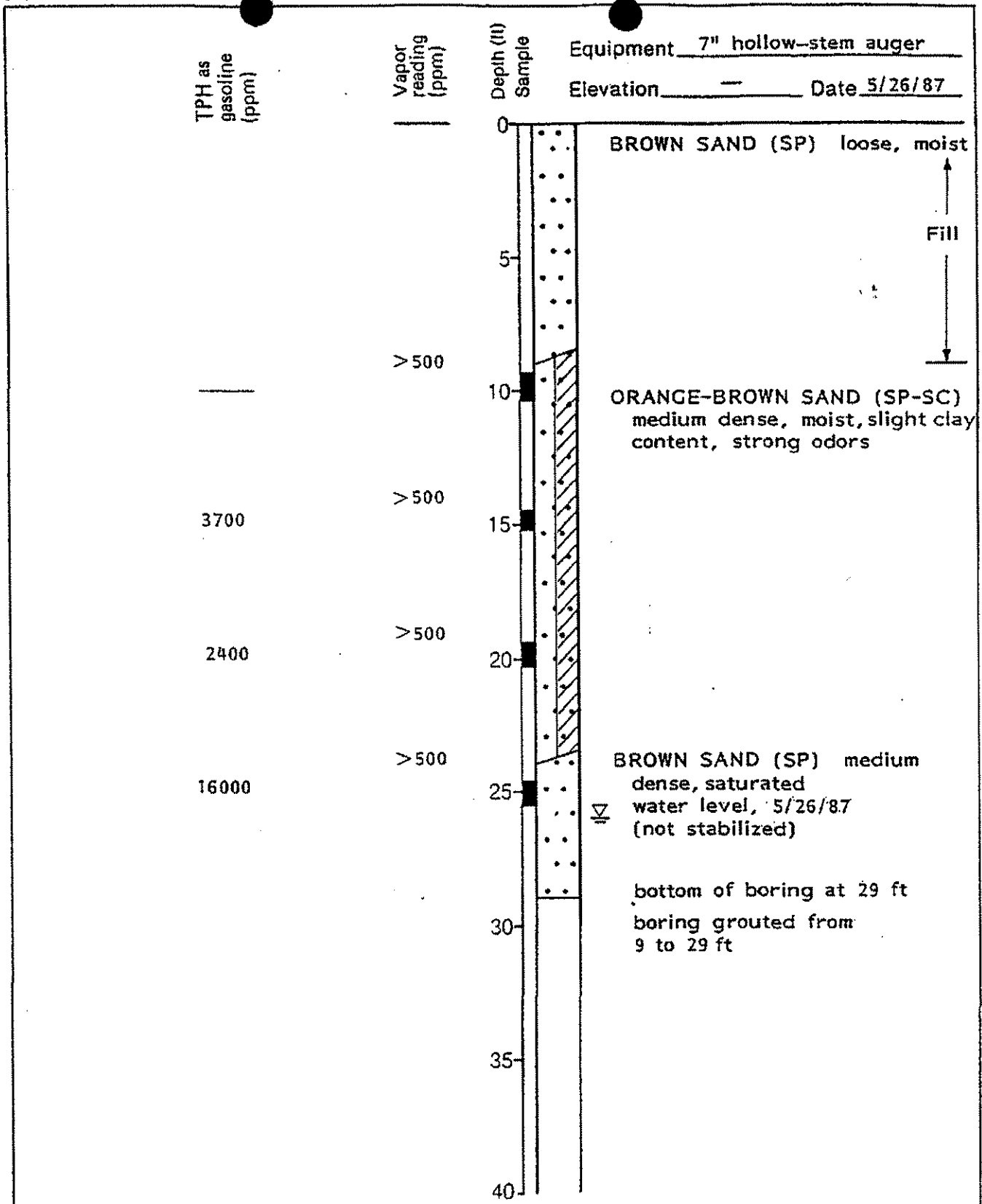
JOB NUMBER
9382,005.02

APPROVED
D. Knoff

DATE
6/87

REVISED

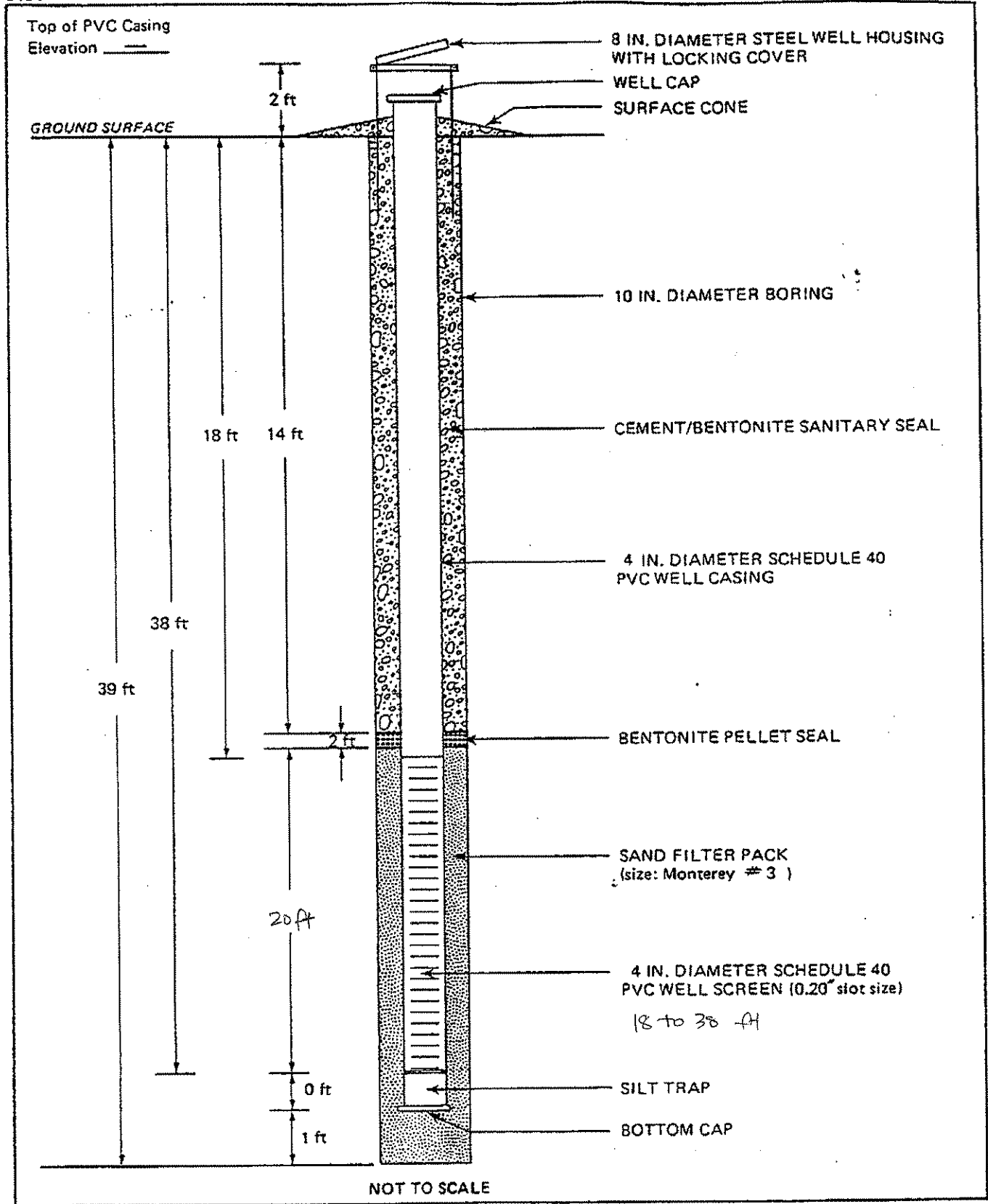
DATE



Harding Lawson Associates
 Engineers, Geologists
 & Geophysicists

Log of Boring 2
 Oakland Chinatown Tanks
 Oakland, California

PLATE
3



Harding Lawson Associates
Engineers, Geologists
& Geophysicists

Well Construction Detail for
Monitoring Well 1
Oakland Chinatown Tanks
Oakland, California

PLATE

5

DRAWN

JOB NUMBER

9382,005.02

APPROVED

D. Gray

DATE

6/87

REVISED

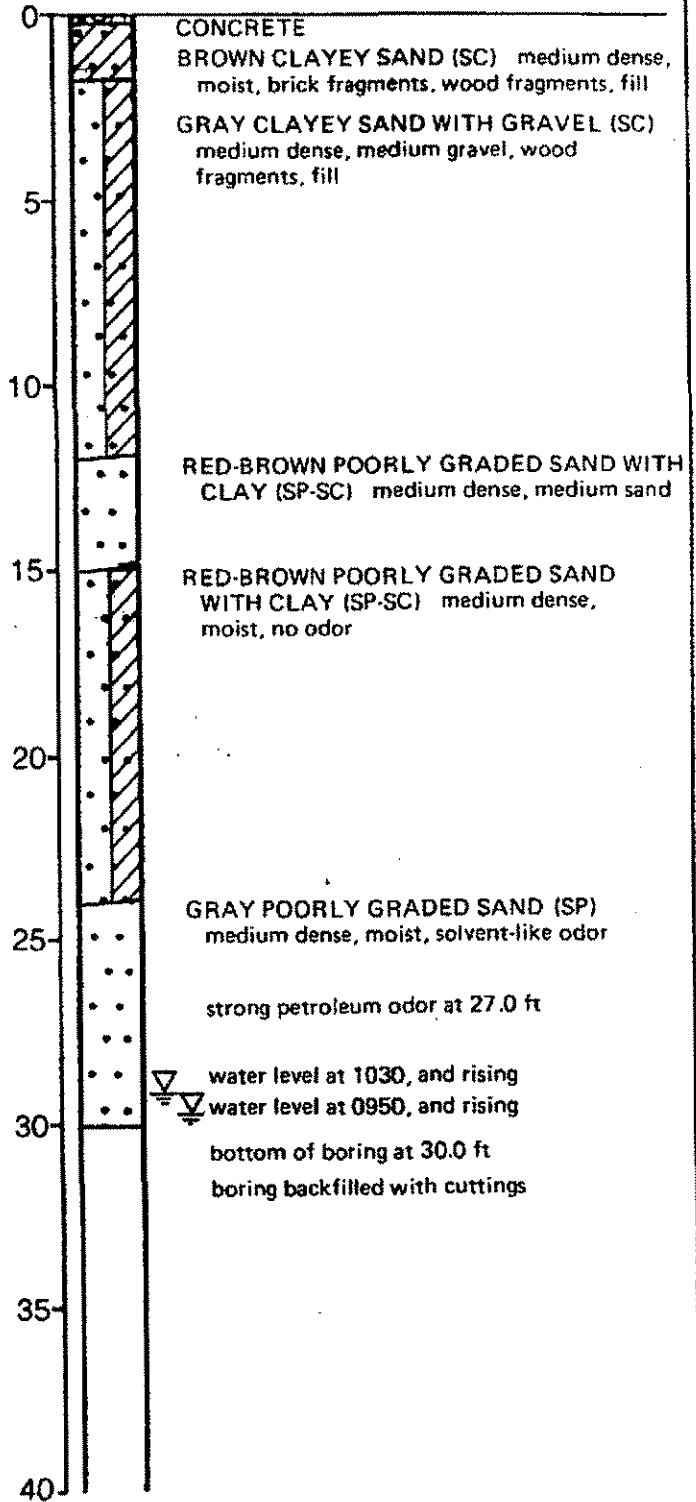
DATE

FORM GW1

Depth (ft)
Sample

Equipment Texoma 700
30" Continuous Flight Auger

Elevation Date 9/25/87



Harding Lawson Associates
Engineers and Geoscientists

Log of Boring T-1
Oakland Chinatown Tanks
Oakland, California

DRAFT 3

DRAWN
JAS

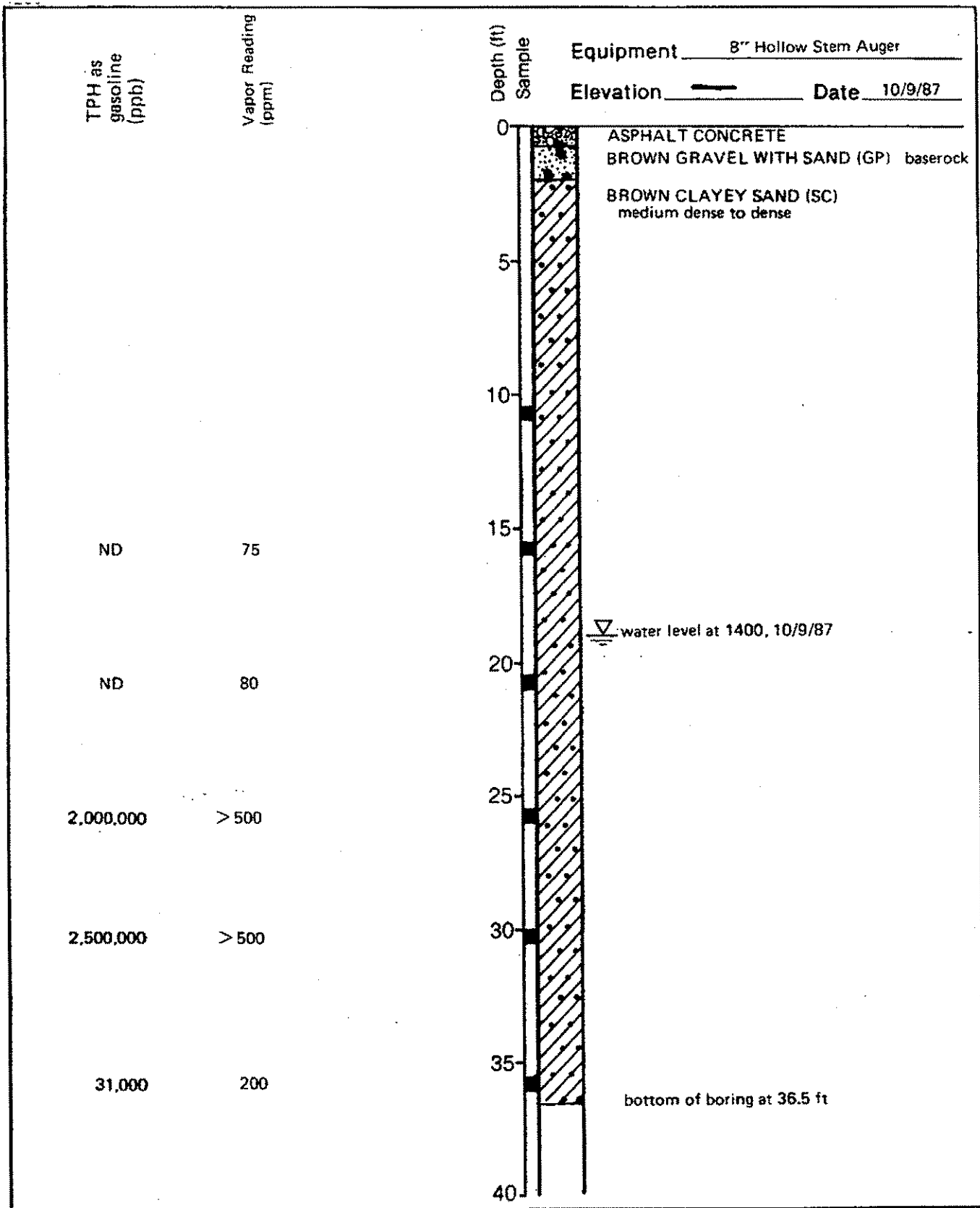
JOB NUMBER
09382,008.01

APPROVED
[Signature]

DATE
10/87

REVISED

DATE



HLA **Harding Lawson Associates**
Engineers and Geoscientists

Log of Boring B-3
Oakland Chinatown Tanks
Oakland, California

DRAFT 4

DRAWN JAS	JOB NUMBER 09382,008.01	APPROVED <i>[Signature]</i>	DATE 10/87	REVISED	DATE
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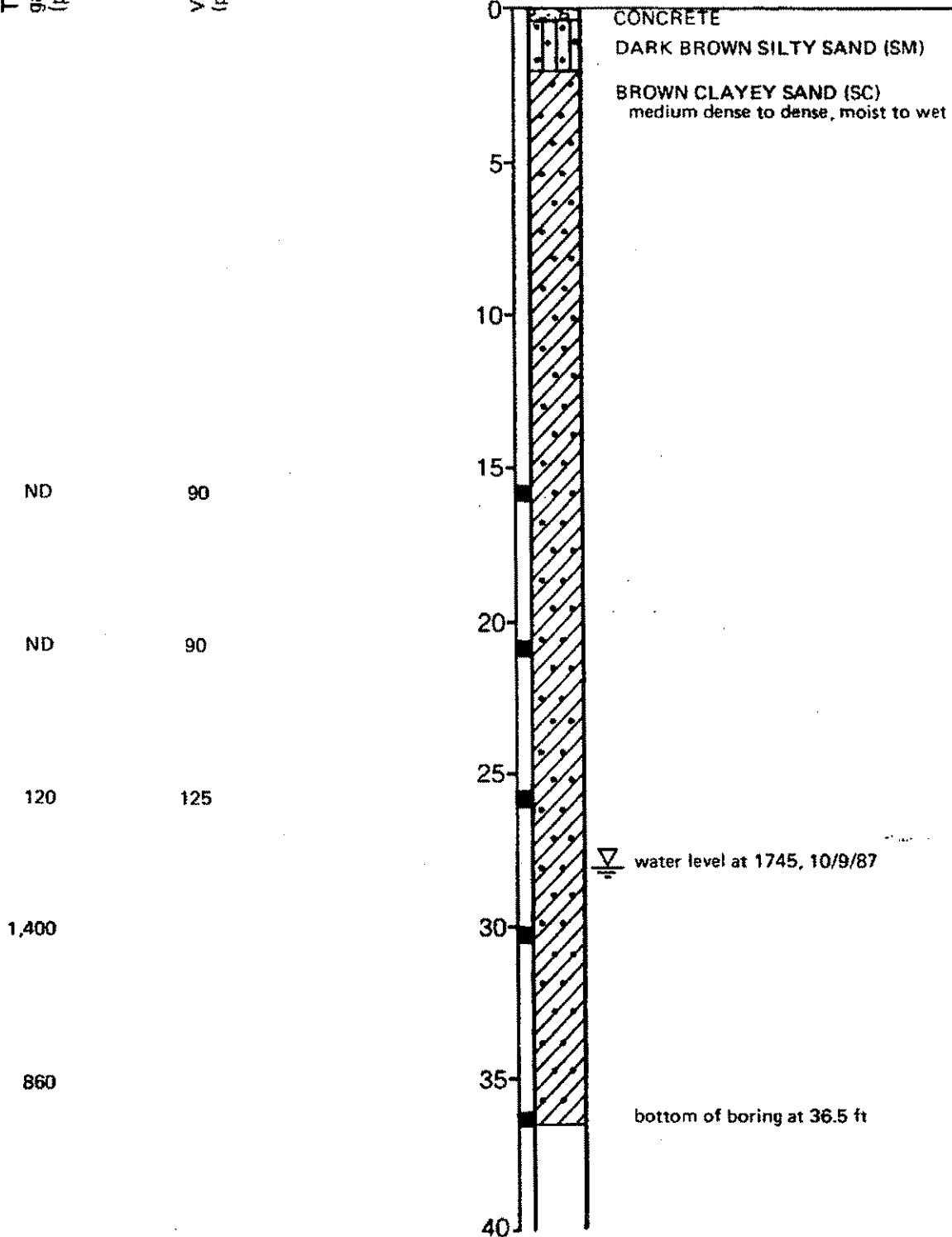
TPH as gasoline (ppb)

Vapor Reading (ppm)

Depth (ft)
Sample

Equipment 8" Hollow Stem Auger

Elevation Date 10/9/87



Harding Lawson Associates
Engineers and Geoscientists

Log of Boring B-4
Oakland Chinatown Tanks
Oakland, California

DRAFT

PLATE **5**

DRAWN
JAS

JOB NUMBER
09382,008.01

APPROVED
[Signature]

DATE
10/87

REVISED DATE

TPH as gasoline (ppb)

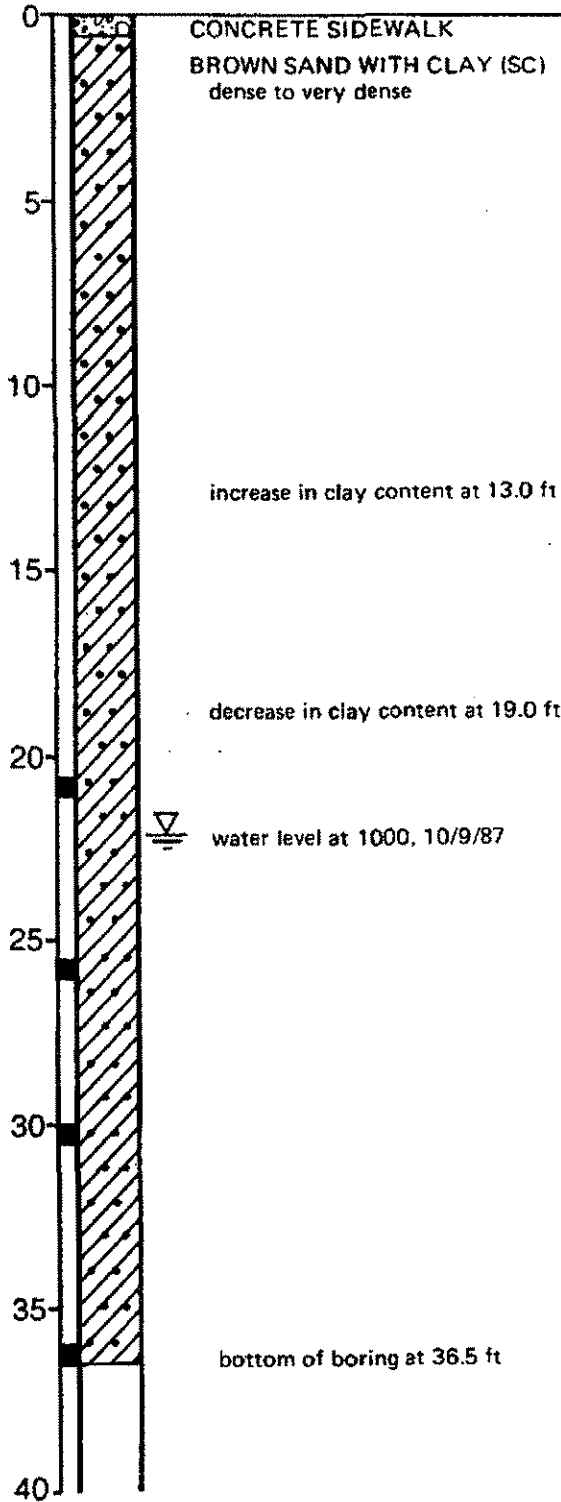
Vapor Reading (ppm)

Depth (ft)
Sample

Equipment 8" Hollow Stem Auger

Elevation Date 10/9/87

ND	60
2,800,000	> 500
29,000	> 500
470,000	



Harding Lawson Associates
Engineers and Geoscientists

Log of Boring B-5
Oakland Chinatown Tanks
Oakland, California

DRAFT **6**

DRAWN
JAS

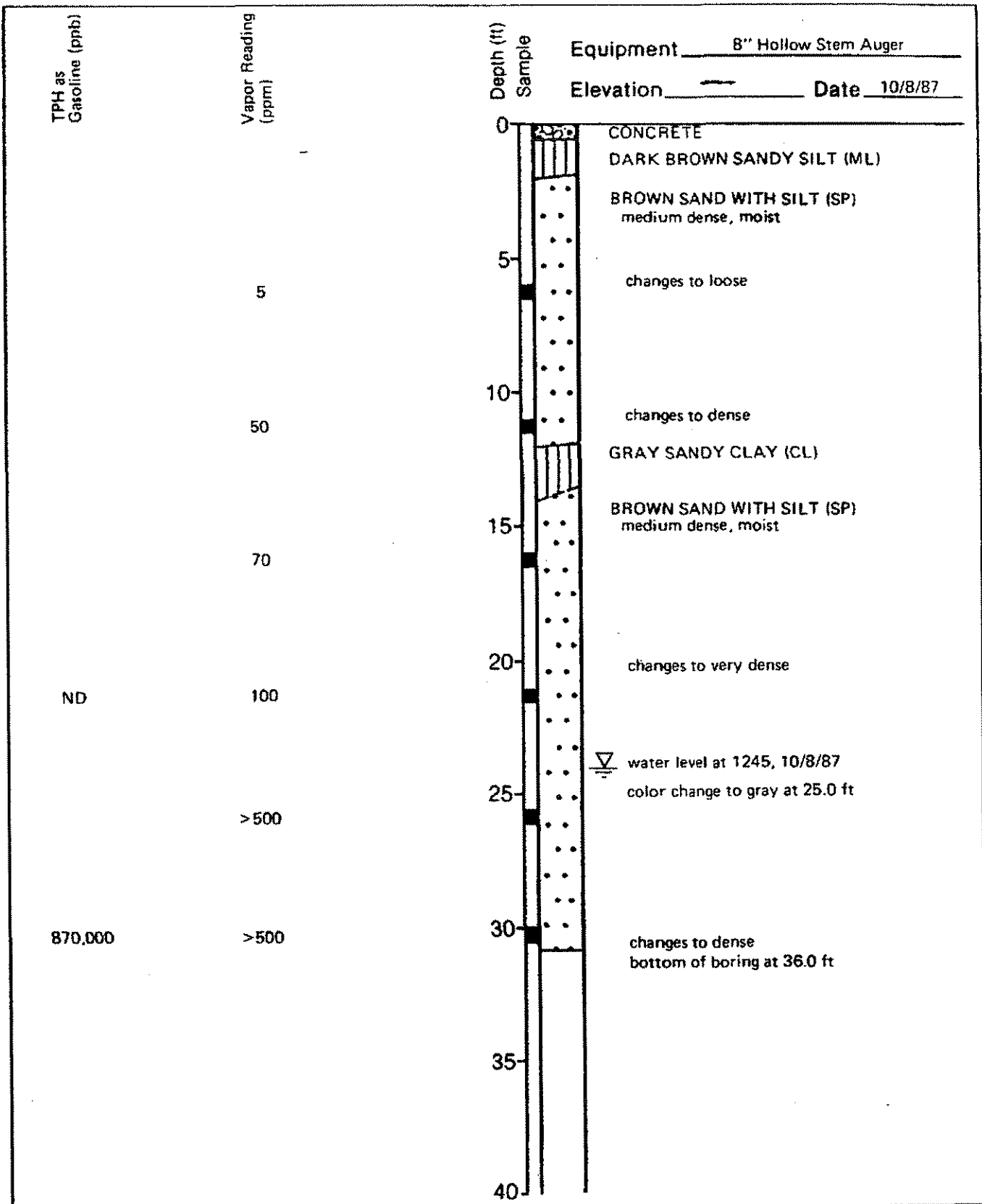
JOB NUMBER
09382.008.01

APPROVED
JAS

DATE
10/87

REVISION

DATE

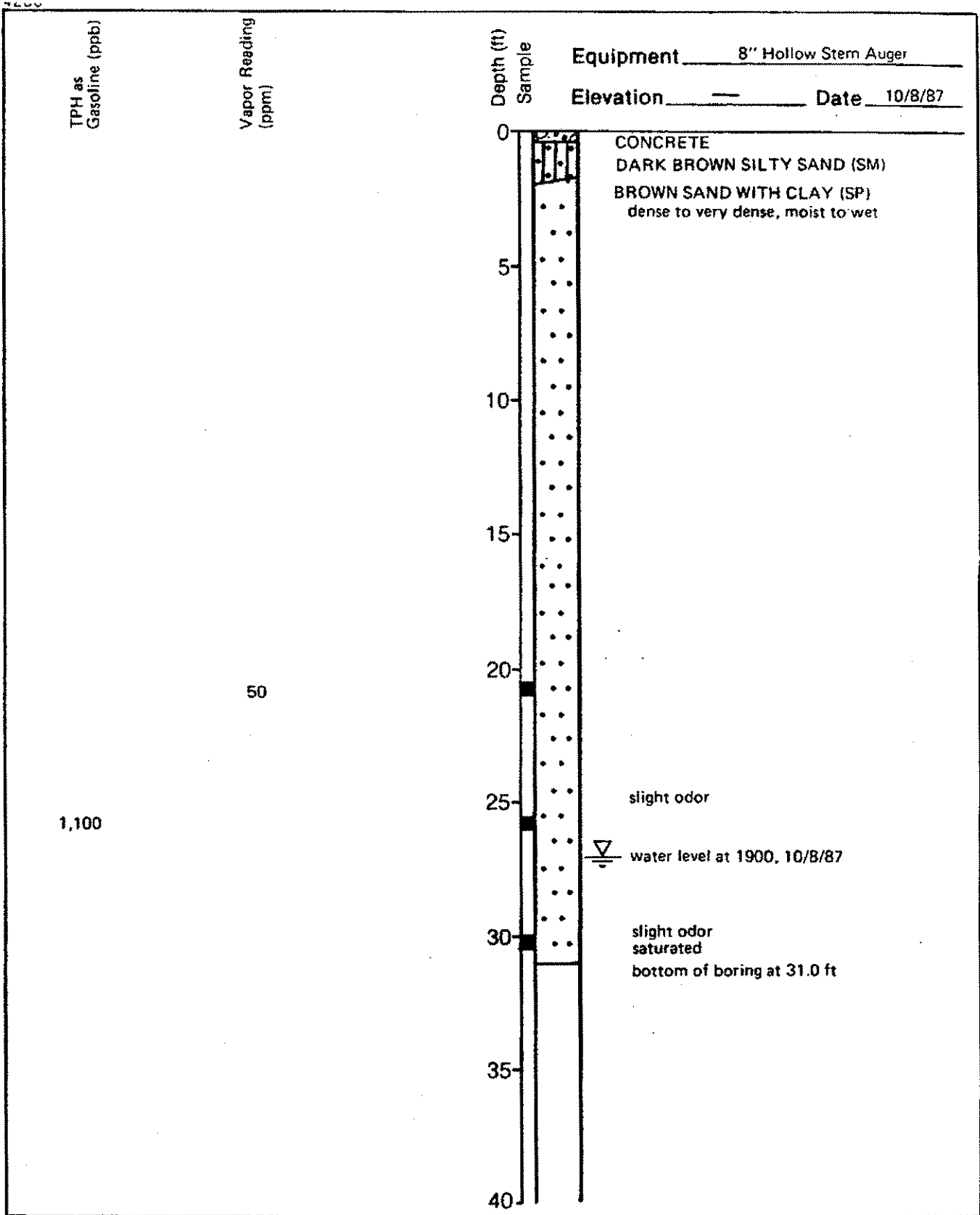


HLA Harding Lawson Associates
Engineers and Geoscientists

Log of Boring B-6
Oakland Chinatown Tanks
Oakland, California

DRAFT 7

DRAWN JAS	JOB NUMBER 09382,008.01	APPROVED <i>[Signature]</i>	DATE 10/87	REV. NO.	DATE
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HLA **Harding Lawson Associates**
 Engineers and Geoscientists

Log of Boring B-7
 Oakland Chinatown Tanks
 Oakland, California

DRAFT 8

DRAWN JAS	JOB NUMBER 09382,008.01	APPROVED <i>[Signature]</i>	DATE 10/87	REV. SET	DATE
--------------	----------------------------	--------------------------------	---------------	----------	------

TPH as Gasoline (ppb)

Vapor Reading (ppm)

Depth (ft)
Sample

Equipment 8" Hollow Stem Auger

Elevation _____ Date 10/8/87

ND

50

0

CONCRETE
DARK BROWN SILTY SAND (SM)
BROWN SAND WITH CLAY (SC)

5

10

15

20

very dense

changes to mottled gray-brown at 23.0 ft

25

changes to medium dense

▽ water level at 1615, 10/8/87

90

30

changes to very dense

330

60

35

changes to dense,
bottom of boring at 30.8 ft

40



Harding Lawson Associates
Engineers and Geoscientists

Log of Boring B-8
Oakland Chinatown Tanks
Oakland, California

PLATE

DRAFT 9

DRAWN
JAS

JOB NUMBER
09382,008.01

APPROVED
JHL

DATE
10/87

REVISED

DATE

Top of PVC Casing
Elevation 39.55 ft

Equipment CME 55 Hollow Stem Auger

Elevation 40.1 ft Date 12/8/87

GROUND SURFACE See below for
Well Top Detail

12 IN. DIAMETER STEEL WELL
HOUSING WITH LOCKING COVER
WATERPROOF WELL CAP

REINFORCED CONCRETE WELL
HOUSING ENCLOSURE
BENTONITE-CEMENT SEAL

12 IN. DIAMETER BORING

4 IN. DIAMETER SCHEDULE 40
PVC WELL CASING

BENTONITE PELLET SEAL

SAND FILTER PACK
(size: Monterey #3)

4 IN. DIAMETER SLOTTED
SCHEDULE 40 PVC WELL SCREEN
(0.020 in. slot size)

BOTTOM CAP

Depth (ft)
Sample

0
ASPHALT
ENGINEERED FILL
DARK YELLOWISH BROWN (10YR 4/4-6/5) CLAYEY
SAND (SC) medium dense, moist, very fine
grained

5
10
DARK YELLOWISH BROWN (10YR 5/6) SAND WITH
CLAY (SP-SC) dense, moist, very fine to
fine grained

15
OLIVE (5Y 4/2) SAND WITH CLAY (SP-SC) medium
dense, moist, very fine to fine grained

20
DARK YELLOWISH BROWN (10YR 5/6) CLAYEY SAND
(SC) very dense, moist, very fine grained

25
OLIVE (5Y 5/2-4/2) SAND (SP) dense, wet,
fine grained

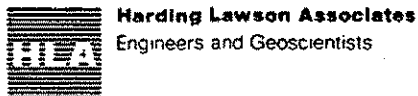
30
35
BROWN (10YR 4/3) SAND (SP) hard, poorly
sorted, fine grained

40
BROWN (10YR 5/3) SANDY CLAY (CL) with
gravel, medium stiff, wet, fine sand and
gravel

45
OLIVE (5Y 4/3) CLAY WITH SILT (CL) moist

bottom of boring at 45.5 ft

50



Harding Lawson Associates
Engineers and Geoscientists

Log of Boring and Well Completion Detail MW-2
City of Oakland Chinatown Redevelopment Area
Ground-Water Investigation
Oakland, California

PLATE

A1

DRAWN

JOB NUMBER
9382, 012.02

APPROVED

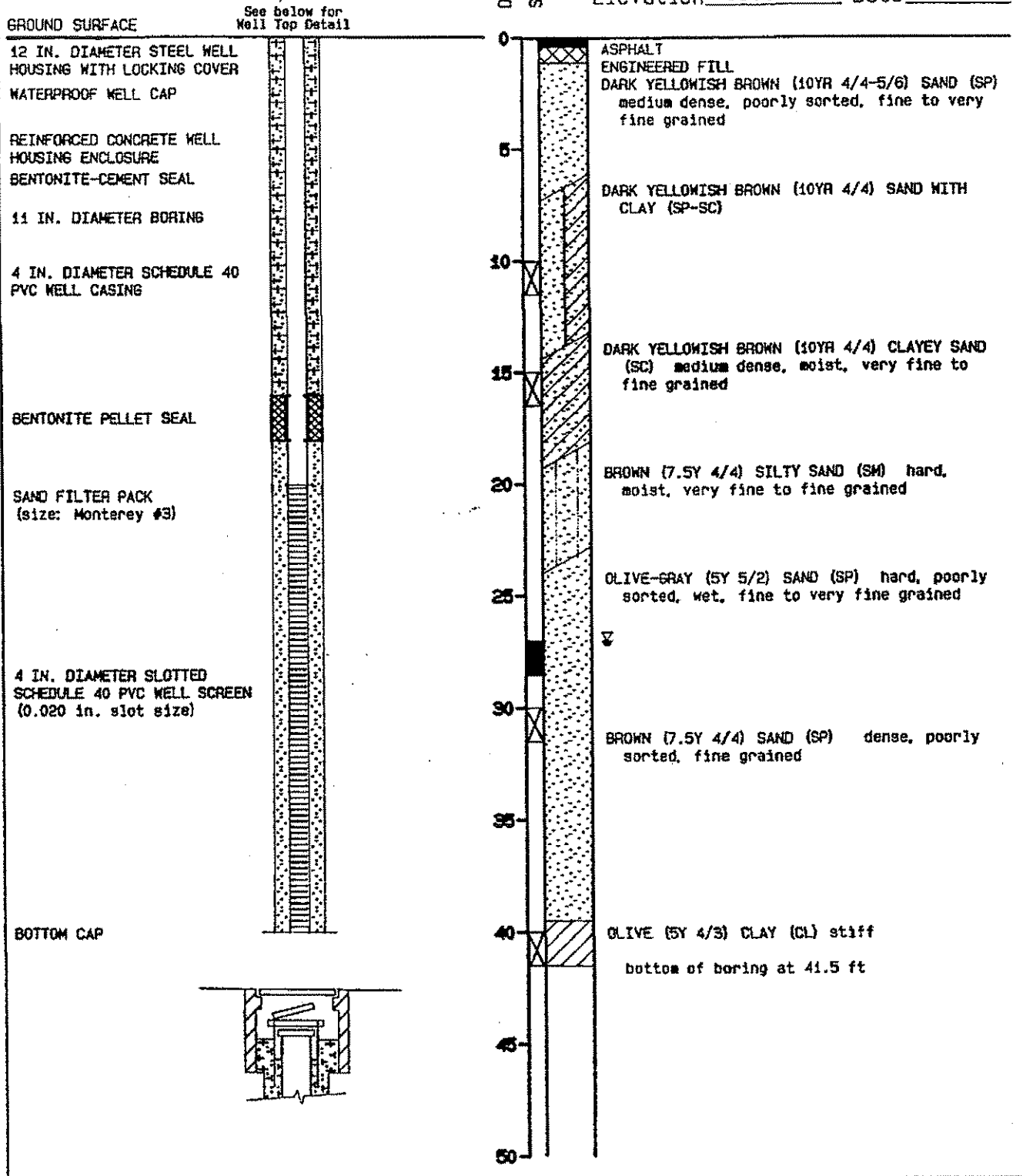
DATE
1/88

REVISED

DATE

Top of PVC Casing
Elevation 39.35 ft

Equipment CME 55 Hollow Stem Auger
Elevation 39.0 ft Date 12/10/87



Harding Lawson Associates
Engineers and Geoscientists

Log of Boring and Well Completion Detail MW-3
City of Oakland Chinatown Redevelopment Area
Ground-Water Investigation
Oakland, California

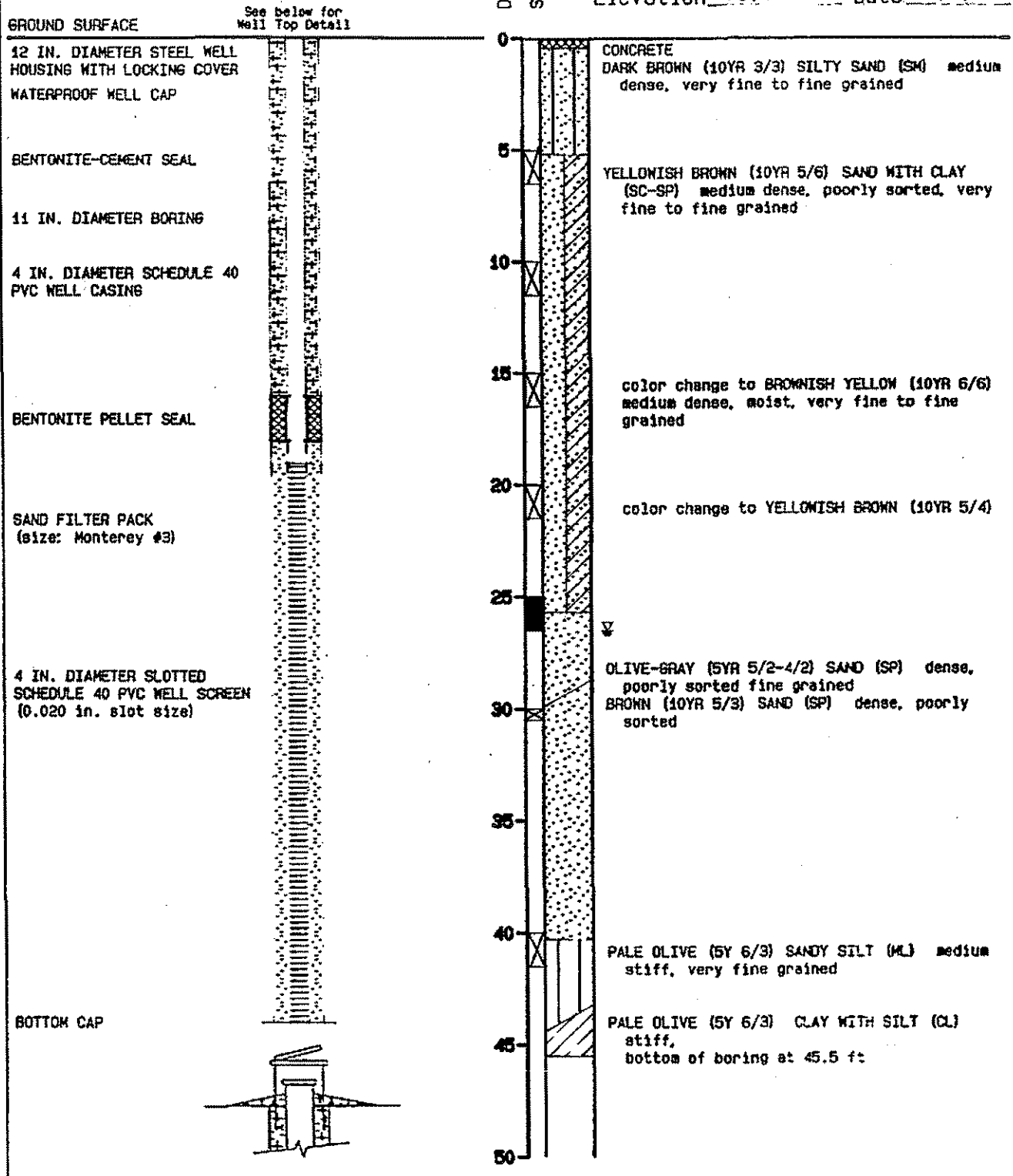
PLATE

A2

DRAN	JOB NUMBER	APPROVED	DATE	REVISION	DATE
	9382, 012.02		1/88		

Top of PVC Casing
Elevation 41.71 ft

Equipment CME 55 Hollow Stem Auger
Elevation 40.4 ft Date 12/9/87



Harding Lawson Associates
Engineers and Geoscientists

Log of Boring and Well Completion Detail MW-4
City of Oakland Chinatown Redevelopment Area
Ground-Water Investigation
Oakland, California

P.L.F.E

A3

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
	9382, 012, 02		1/88		

Top of PVC Casing
Elevation 37.86 ft

Equipment CME 55 Hollow Stem Auger
Elevation 38.5 ft Date 12/12/87

GROUND SURFACE

See below for
Well Top Detail

12 IN. DIAMETER STEEL WELL
HOUSING WITH LOCKING COVER
WATERPROOF WELL CAP

REINFORCED CONCRETE WELL
HOUSING ENCLOSURE
BENTONITE-CEMENT SEAL

12 IN. DIAMETER BORING

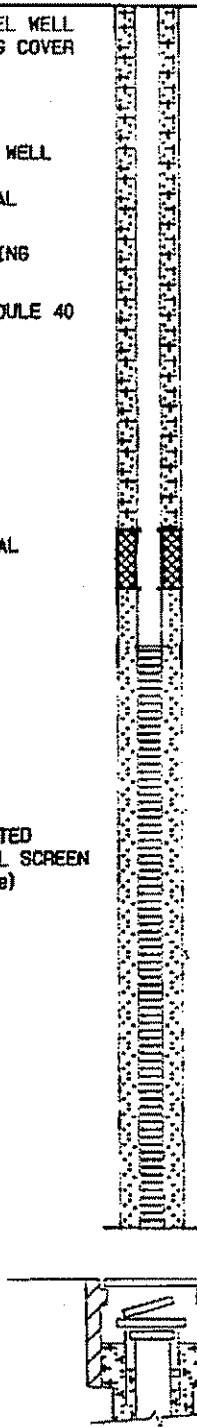
4 IN. DIAMETER SCHEDULE 40
PVC WELL CASING

BENTONITE PELLET SEAL

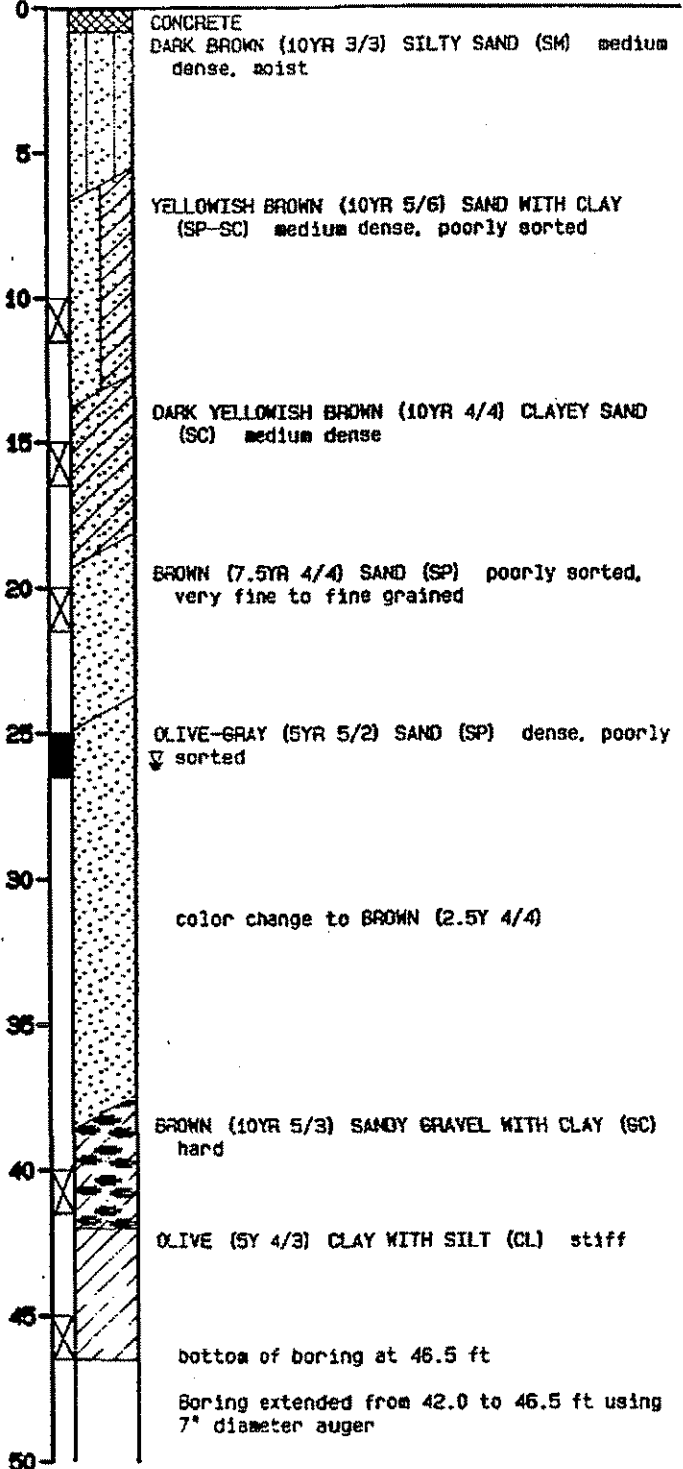
SAND FILTER PACK
(size: Monterey #3)

4 IN. DIAMETER SLOTTED
SCHEDULE 40 PVC WELL SCREEN
(0.020 in. slot size)

BOTTOM CAP



Depth (ft)
Sample



Harding Lawson Associates
Engineers and Geoscientists

Log of Boring and Well Completion Detail MW-5
City of Oakland Chinatown Redevelopment Area
Ground-Water Investigation
Oakland, California

PLATE

A4

Khatri, Paresh, Env. Health

From: Cherie McCaulou [CMccaulou@waterboards.ca.gov]
Sent: Wednesday, June 30, 2010 11:09 AM
To: Khatri, Paresh, Env. Health
Subject: Re: RO0002947; Closure Summary for City of Oakland RedevelopmentAgency/EBMUD (T0600191509)

Paresh - Thanks for the notification. We have no objection to ACEH's recommendation for case closure of Case #RO02947 (Oakland Redevelopment Agency).

Sincerely,

Cherie McCaulou
Engineering Geologist
San Francisco Bay Regional Water Quality Control Board
cmccaulou@waterboards.ca.gov
510-622-2342

>>> "Khatri, Paresh, Env. Health" <paresh.khatri@acgov.org> 6/24/2010 8:45 AM >>>
Hello Cherie,

Attached is a closure summary for RO0002947; City of Oakland Redevelopment Agency/EBMUD located at 383 11th Street in Oakland to comply with the RWQCB's 30-day review period. If no comments from the RWQCB are received within the 30-day review period, ACEH's will proceed with case closure.

Please contact me should you have any comments or questions regarding the subject site.

Sincerely,

Paresh C. Khatri
Hazardous Materials Specialist
Alameda County Environmental Health
Local Oversight Program
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Phone: (510) 777-2478
Fax: (510) 337-9335

E-mail: Paresh.Khatri@acgov.org

<http://www.acgov.org/aceh/lop/lop.htm>

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