

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY  
DAVID J. KEARS, Agency Director



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

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 4355 - 9801 San Leandro Street, Oakland, CA  
(3-12K gallon gasoline tanks removed in September 1988)

April 2, 1997

Mr. Andrew Clark-Clough  
City of Oakland  
1333 Broadway, Suite 333  
Oakland, CA 94612

Dear Mr. Clark-Clough:


This letter confirms the completion of 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 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, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Section 2721(e) of the California Code of Regulations.

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

Sincerely,

  
Mee Ling Tung, Director

cc: Chief, Division of Environmental Protection  
Kevin Graves, RWQCB  
Lori Casias, SWRCB (with attachment-case closure summary)  
Cheryl Gordon, UST Cleanup Fund  
files-ec (thrifty.4)

**CASE CLOSURE SUMMARY**  
**Leaking Underground Fuel Storage Tank Program** JAN 31 1997

**I. AGENCY INFORMATION**

Date: January 21, 1997

Agency name: Alameda County-HazMat Address: 1131 Harbor Bay Pkwy  
 City/State/Zip: Alameda, CA 94502 Phone: (510) 567-6700  
 Responsible staff person: Eva Chu Title: Hazardous Materials Spec.

**II. CASE INFORMATION**

Site facility name: Former Thrifty Station  
 Site facility address: 9801 San Leandro St, Oakland, CA 94603  
 RB LUSTIS Case No: N/A Local Case No./LOP Case No.: 4355  
 URF filing date: SWEEPS No: N/A

<u>Responsible Parties:</u>	<u>Addresses:</u>	<u>Phone Numbers:</u>
City of Oakland c/o Andrew Clark-Clough	1333 Broadway, Suite 333 Oakland, CA 94612	510/238-6361

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
1	12,000	Gasoline	Removed	Sep 1988
2	12,000	Gasoline	Removed	Sep 1988
3	12,000	Gasoline	Removed	Sep 1988

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and type of release: Unknown  
 Site characterization complete? YES  
 Date approved by oversight agency: 12/2/96  
 Monitoring Wells installed? Yes Number: 7  
 Proper screened interval? Yes  
 Highest GW depth below ground surface: 9.78' Lowest depth: 11.12' in MW-1  
 Flow direction: West, southwest  
 Most sensitive current use: Commercial  
 Are drinking water wells affected? No Aquifer name: Unknown  
 Is surface water affected? No Nearest affected SW name: NA  
 Off-site beneficial use impacts (addresses/locations): None

Report(s) on file? YES Where is report(s) filed? Alameda County  
 1131 Harbor Bay Pkwy  
 Alameda, CA 94502

**Treatment and Disposal of Affected Material:**

<u>Material</u>	<u>Amount</u> (include units)	<u>Action (Treatment</u> <u>or Disposal w/destination)</u>	<u>Date</u>
Tank	3 USTs	H & H in San Francisco	Sep 1988
Piping			
Soil	~100 cy	Aerated and reused onsite	Unknown

**Maximum Documented Contaminant Concentrations - - Before and After Cleanup**

Contaminant	Soil (ppm)		Water (ppb)	
	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>3</sup>	After <sup>4</sup>
TPH (Gas)	5,600	35	55,000	ND
TPH (Diesel)	135	ND	NA	NA
Benzene	NA	NA	1,500	ND
Toluene	NA	NA	6,100	ND
Ethylbenzene	NA	NA	750	ND
Xylenes	NA	NA	7,500	ND
Oil & Grease	167	ND		
Heavy metals				
Other <b>HVOCs</b>			2.1	ND

- NOTE: 1 soil from soil borings installed around USTs before their removal  
 2 soil collected after tank removal and overexcavation  
 3 grab water sample from borings advanced around USTs before their removal  
 4 from well MW-1 (10/90 and 1/91)

**Comments (Depth of Remediation, etc.):**

See Section VII, Additional Comments, etc...

**IV. CLOSURE**

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **Undetermined**  
 Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **Undetermined**  
 Does corrective action protect public health for current land use? **YES**  
 Site management requirements: **None**

Should corrective action be reviewed if land use changes? **YES**  
 Monitoring wells Decommissioned: **None, pending site closure**  
 Number Decommissioned: 0 Number Retained: 7  
 List enforcement actions taken: **None**

List enforcement actions rescinded: **NA**


V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu Title: Haz Mat Specialist


Signature:  Date: 1/22/97

Reviewed by

Name: Dale Klettke Title: Haz Mat Specialist

Signature:  Date: 1/22/97

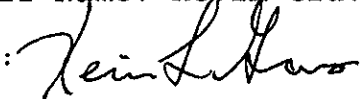
Name: Thomas Peacock Title: Supervisor

Signature:  Date: 1-21-97

VI. RWQCB NOTIFICATION

Date Submitted to RB: 1/22/97 RB Response: 

RWQCB Staff Name: Kevin Graves Title: AWRCE

Signature:  Date: 1/27/97

VII. ADDITIONAL COMMENTS, DATA, ETC.

When the City of Oakland was in the process of acquiring the property, the City had a subsurface investigation conducted to determine if soil and groundwater contamination existed on the property. Seven soil borings (B-1 through B-7) were drilled adjacent to the then existing USTs and pump islands to a depth of 18' bgs. Soil and "grab" groundwater samples were collected from each boring and analyzed for TPHg. Groundwater was also analyzed for BTEX (See Fig 1).

Hydrocarbon odors were noted in all the borings, strongest at or near the water table (~11.5' to 13.8' bgs). Laboratory analytical results confirmed elevated TPHg and BTEX in all samples. (See Table 1)

Three 12K gallon gasoline USTs were removed in September 1988. Soil samples were collected from beneath the USTs and from the excavation sidewalls. Based on analytical results of soil collected from the previous soil borings, the northwest and southwest sides of the original tank excavation were also overexcavated. Final confirmatory soil samples did not contain levels of TPH in excess of 100 ppm.

Groundwater was encountered in the excavation. Most of the water was pumped out and loose soil was removed from the excavation bottom before a 1.5 foot-thick layer of granular soil was placed in the excavation to "bridge" the wet soil beneath and to provide a firm base over which to compact the excavation backfill. Excavated soil was aerated and

subsequently re-used to backfill the pit. Soil with TOG levels >100 ppm was not used.

Monitoring wells were installed at the site and at an adjacent site (816 98th Ave). Four of the wells (MW-1, MW-2, MW-3, and MW-7) are located onsite and offsite, immediately up- and down-gradient of the former tank excavation. Soil samples collected from the borings did not contain remarkable levels of TPHg or BTEX (See Table 3).

Initial groundwater sampling (11/29/89) identified up to 6,200 ppb TPHg and 1,500 ppb benzene in well MW-1 (See Table 4 and 5). The last two sampling events (10/90 and 1/91) did not identify TPHg, BTEX, or VOCs from well MW-1. Well MW-3, located offsite and downgradient of the former tank excavation, continued to show low levels of TPHg and BTEX (See Table 6). However, the levels would not pose a risk to human health or the environment, based on ASTM's RBCA Tier 1 Look-Up Table.

In summary, case closure is recommended because:

- o the leak and ongoing sources have been removed;
- o the site has been adequately characterized;
- o the dissolved plume is not migrating;
- o no water wells, surface water, or other sensitive receptors are likely to be impacted; and,
- o the site presents no significant risk to human health or the environment.

San Leandro Street

APPROACH

APPROACH

SIDEWALK

98th AVENUE

APPROACH

8.5'  
17 ppm  
B 1,500 ppb  
T 340  
E 750  
X 940  
TPH 290  
CANOPY

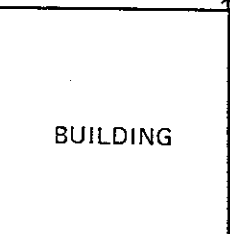
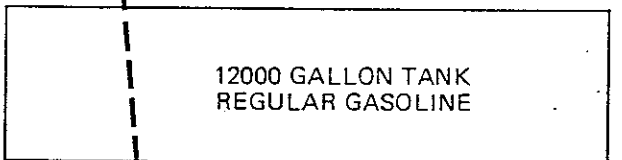
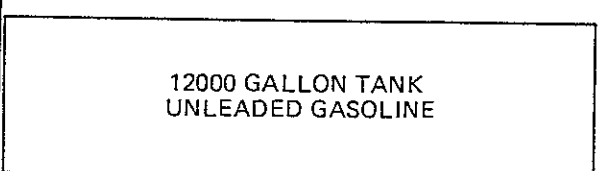
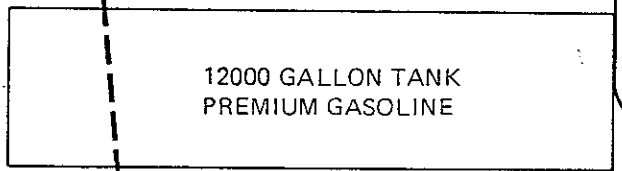
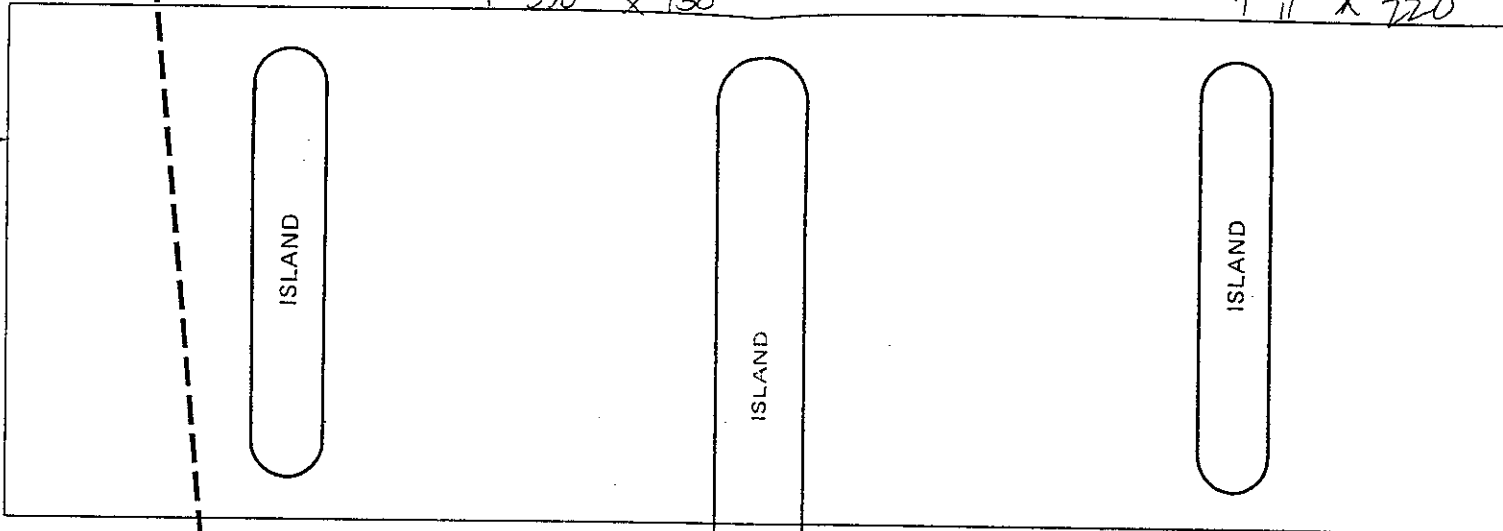


PROPOSED NEW PROPERTY LINE

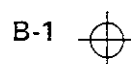
11.5' 280  
B 26  
T 390  
E 340  
X 730  
B-6 H2O 12



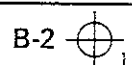
8.5'  
TPH = 150 ppm  
TPH in H2O = 70 ppm  
B 6.3  
E 40  
T 11  
X 720  
B-5



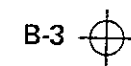
11.5'  
TPH = 240 ppm  
H2O TPH = 19 ppm  
B = 970 ppb  
T = 1,100 ppb  
E = 7.2 ppb  
X = 1,900 ppb



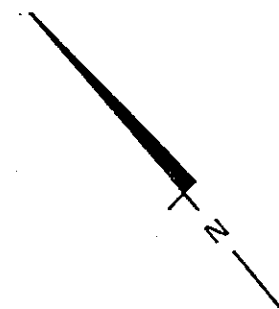
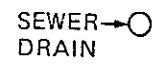
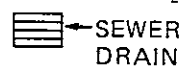
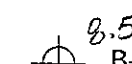
8.5' TPH = 5,600 ppm  
H2O TPH = 55 ppm  
B = 900 ppb  
T = 6,100 ppb  
E = 300 ppb  
X = 7,500 ppb  
B-2  
SEWER MANHOLE



11.5' TPH = 16.5 ppm  
H2O TPH = 11 ppm  
B 260 ppb  
T 40 ppb  
E 3.4  
X 506  
B-3

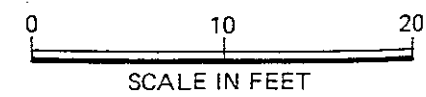


8.5'  
22 ppm TPH  
16 H2O  
B 340  
T 33  
E 4.8  
X 244  
B-4



EXPLANATION

B-1 BORING LOCATIONS



**Harding Lawson Associates**  
Engineers, Geologists  
& Geophysicists

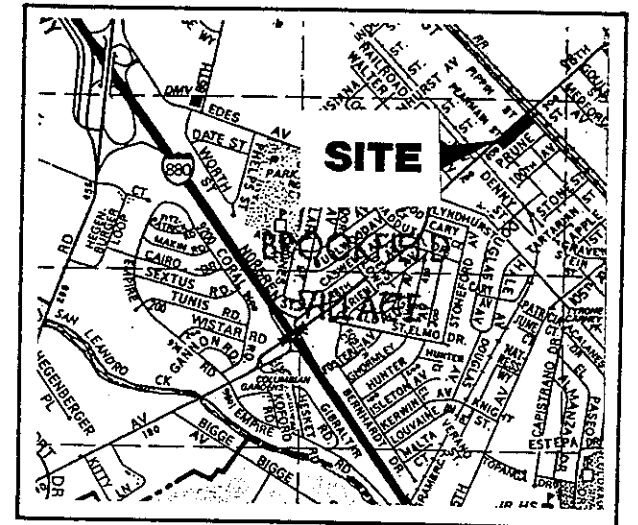
Site Plan  
9801 San Leandro Street  
Oakland, California

FIG 1

PLATE

2

DRAWN JAS	JOB NUMBER 9382,009.01	APPROVED 	DATE 10/87	REVISED	DATE
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VICINITY MAP

EXISTING HI-TECH  
AUTO BODY  
REPAIR SHOP

FORMER SERVICE  
STATION LOCATION

ELEVATION REFERENCE:  
TOP OF CURB AT FIRE HYDRANT.  
ASSUMED AT 100.00 FEET.

SAN LEANDRO STREET

98TH AVENUE

PEARMAN STREET

PIPPIN STREET

PRUNE STREET

MW6 MW5

MW3

MW2 MW1

MW7

P2

P3

FORMER SERVICE  
STATION LOCATION

89.0'

MACHINE SHOP  
1951

T & P MACHINE  
SHOP NOW

89.2'

FORMER DIESEL  
REPAIR SHOP

MACHINE SHOP  
1950

89.4'

89.8'

816-98th Ave site

89.6'

9801 San Leandro site

- PIEZOMETER
- TEST BORING/MONITORING WELL
- EXISTING STRUCTURE
- FORMER STRUCTURES AND ADDRESSES
- PREVIOUS TANK LOCATION
- PROPERTY LINE
- APPROXIMATE GROUNDWATER CONTOURS (feet) ON JANUARY 23, 1991.

APPROXIMATE SCALE (feet)



SITE PLAN

Fig 2

98TH AVENUE - OAKLAND, CA

PLATE

Subsurface Consultants

JCB NUMBER  
272.016

DATE  
9/5/90

APPROVED  
JVB

Ground water was observed at depths ranging from 11.5 to 13.8 feet. During ground-water sampling activities, petroleum hydrocarbon sheens were observed on ground-water surfaces from Borings B-2, B-3, B-5, and B-7.

LABORATORY RESULTS

One ground-water sample and one soil sample were submitted for laboratory analyses from each boring. The criteria used in selecting soil samples for testing was based upon evaluating a worst-case situation.

Soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPH) and ground-water samples were analyzed for TPH and for benzene, ethyl benzene, toluene, and xylenes (BETX). Analytical methods used are approved by the Environmental Protection Agency (EPA) and California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB).

Copies of the original laboratory reports are included in the Appendix. These results are summarized in the table below.

TABLE 1

Boring No.	Sample Depth (feet)	Concentration of Analytes (ppb)					
		Soil		Ground Water			
		TPH (as gasoline)	Benzene	Toluene	Ethyl Benzene	Xylenes	TPH (as gasoline)
B-1	11.5	240,000	970	1,100	7.2	1,900	19,000
B-2	8.5	5,600,000	990	6,100	300	7,500	55,000
B-3	11.5	16,500	260	40	3.4	506	11,000
B-4	8.5	22,000	730	33	4.8	244	16,000
B-5	8.5	156,000	6.3	11	140	220	7,100
B-6	11.5	280,000	26	390	340	730	12,000
B-7	8.5	17,000	1,500	340	750	940	28,000



Table 0.2 ANALYTICAL TEST RESULT SUMMARY

<u>Location</u>	<u>Sample Designation and Depth</u>	EPA 3550/8015 (modified)			
		<u>TPH (ppm)</u>	<u>Petroleum Gasoline</u>	<u>Hydrocarbon Diesel</u>	<u>Range Oil</u>
<u>Thrifty Site:</u>					
<u>Beneath Tanks</u>					
	T1NW @ 12'	ND	ND	ND	ND
	T1SE @ 12'	ND	ND	ND	ND
	T2NW @ 12'	ND	ND	ND	ND
	T2SE @ 12'	44	44	ND	ND
	T2W @ 11'	ND	ND	ND	ND
	T3NW @ 13'	ND	ND	ND	ND
	T3SE @ 13'	ND	ND	ND	ND
<u>Excavation Sides</u>					
<u>Original Excavation</u>					
	TNE @ 8'	ND	ND	ND	ND
	TNE @ 12'	54	54	ND	ND
	TNW @ 8'	ND	ND	ND	ND
	TNW @ 12'	763	461	135	167
	TSE @ 8'	ND	ND	ND	ND
	TSE @ 12'	16	16	ND	ND
	TSW @ 8'	ND	ND	ND	ND
	TSW @ 12'	48	48	ND	ND
<u>After Additional Excavation</u>					
	2TNW @ 8'	0.223	-1	-	-
	2TNW @ 12'	0.155	-1	-	-
	2TSW @ 8'	16	16	ND	ND
	2TSW @ 12'	35	35	ND	ND

**Table 2.3**  
**Summary of Analytical Tests for Fuel Constituents in Soil**

<u>Sample</u>	<u>TVH (ppm)<sup>1</sup></u>	<u>TEH (ppm)</u>	<u>TOG (ppm)</u>	<u>Benzene (ppm)</u>	<u>Toluene (ppm)</u>	<u>Total Xylenes (ppm)</u>	<u>Ethylbenzene (ppm)</u>
MW1 @ 4'	ND <sup>2</sup>	--- <sup>3</sup>	--	ND	ND	ND	ND
MW1 @ 9'	100	--	--	0.53	0.85	16.0	2.5
MW2 @ 6'	ND	--	--	ND	ND	ND	ND
MW2 @ 11'	ND	--	--	0.027	ND	0.041	0.015
MW3 @ 6'	ND	--	--	ND	ND	0.012	ND
MW3 @ 11'	31	--	--	0.66	0.35	4.5	0.74
<del>MW4 @ 5'</del>	<del>ND</del>	<del>ND</del>	<del>72</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>
<del>MW4 @ 10'</del>	<del>ND</del>	<del>ND</del>	<del>72</del>	<del>0.02</del>	<del>ND</del>	<del>0.01</del>	<del>ND</del>
<del>MW5 @ 6'</del>	<del>ND</del>	<del>ND</del>	<del>75</del>	<del>ND</del>	<del>ND</del>	<del>0.014</del>	<del>ND</del>
<del>MW5 @ 11'</del>	<del>46</del>	<del>ND</del>	<del>920</del>	<del>0.58</del>	<del>0.073</del>	<del>4.5</del>	<del>0.96</del>
<del>MW6 @ 6'</del>	<del>ND</del>	<del>ND</del>	<del>62</del>	<del>0.025</del>	<del>0.039</del>	<del>ND</del>	<del>ND</del>
<del>MW6 @ 11'</del>	<del>ND</del>	<del>ND</del>	<del>51</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>

**Table 2.4**  
**Summary of Analytical Tests for Fuel Constituents in Groundwater**

<u>Sample</u>	<u>TVH (ppb)<sup>4</sup></u>	<u>TEH (ppb)</u>	<u>TOG (ppb)</u>	<u>Benzene (ppb)</u>	<u>Toluene (ppb)</u>	<u>Total Xylenes (ppb)</u>	<u>Ethylbenzene (ppb)</u>
MW1	6200	--	--	1500	260	1300	350
MW2	110	--	--	ND	ND	ND	ND
MW3	110	--	--	6.4	1.4	ND	3.2
<del>MW4</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>
<del>MW5</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>6.1</del>	<del>4.2</del>	<del>1.4</del>	<del>ND</del>
<del>MW6</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>	<del>ND</del>

<sup>1</sup> Parts per million (mg/kg)

<sup>2</sup> None detected, see test data sheets in Appendix for detection limits

<sup>3</sup> Not tested for the materials listed

<sup>4</sup> Parts per billion (ug/L)

Table 2.5  
 Summary of Analytical Tests for Volatile Organic Compounds  
 in Groundwater

<u>Sample</u>	<u>1,2-dichloroethane (ppb)<sup>1</sup></u>	<u>Other VOC's</u>
MW1	2.1	ND <sup>2</sup>
MW2	ND	ND
MW3	ND	ND
MW4	ND	ND
MW5	ND	ND
MW6	ND	ND

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<sup>1</sup> Parts per billion (ug/L)

<sup>2</sup> None detected, see test data sheets in Appendix for detection limits

Table 26 TVH, TEH, BTXE and VOC Concentrations in Groundwater

Sample	Sample Date	TVH (ppb) <sup>2</sup>	TEH (ppm) <sup>3</sup>	Benzene (ppb)	Toluene (ppb)	Ethyl-Benzene (ppb)	Total Xylenes (ppb)	VOC <sup>1</sup> (ppb)
MW 1	11/29/89	6,200	-- <sup>4</sup>	1,500	260	350	1,300	2.1 <sup>5</sup>
	07/02/90	990	--	140	2.2	17	39	ND
	10/04/90	ND	--	ND	ND <sup>6</sup>	ND	ND	ND
	01/24/91	ND	--	ND	ND	ND	ND	ND
MW 2	11/29/89	110	--	ND	ND	ND	ND	--
	07/02/90	ND	--	ND	ND	ND	ND	ND
	10/04/90	ND	--	ND	ND	ND	ND	ND
	01/24/91	ND	--	ND	ND	ND	ND	ND
MW 3	11/29/89	110	--	6.4	1.4	3.2	ND	ND
	07/02/90	ND	--	ND	ND	ND	ND	ND
	10/04/90	ND	--	ND	ND	ND	ND	ND
	01/24/91	404	--	ND	4.3	ND	47.8	ND
	02/27/91	120	--	1.4	ND	1.2	7.8	--
MW 7	08/27/90	ND	ND	ND	ND	ND	ND	ND
	10/04/90	ND	--	ND	ND	ND	ND	ND
	01/24/91	ND	--	ND	ND	ND	ND	1.1 <sup>7</sup>

1 Volatile organic compounds

2 Parts per billion (ug/L)

3 Parts per million (mg/L)

4 Test not requested

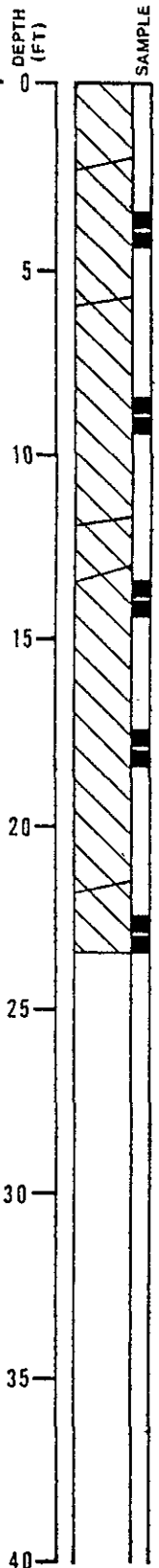
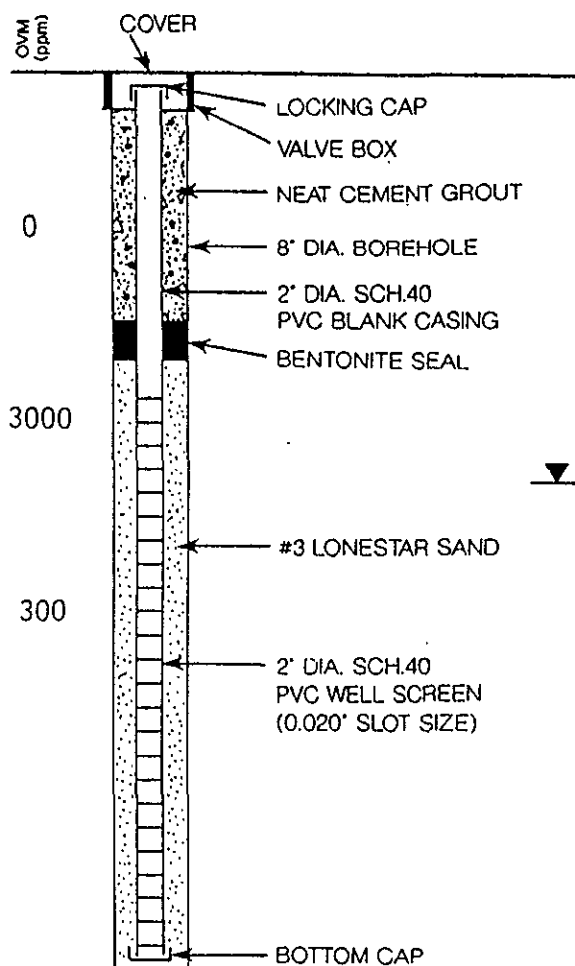
5 1,2-Dichloroethane. All others: none detected

6 None detected, see analytical test reports for detection limits

7 1,1-Dichloroethane. All others: none detected

# LOG OF TEST BORING MW-1

EQUIPMENT 8" Hollow Stem Auger  
 DATE DRILLED 10/30/89  
 ELEVATION 100.86 feet\*



DARK OLIVE BROWN SILTY CLAY (CL)  
 medium stiff, moist with gravel  
 DARK OLIVE GRAY SILTY CLAY (CL)  
 medium stiff, moist  
 MOTTLED BLUE-GRAY AND BROWN SILTY CLAY (CL)  
 medium stiff, moist, with petroleum odor  
 GROUNDWATER LEVEL DURING DRILLING  
 OLIVE SILTY CLAY (CL)  
 medium stiff, moist  
 MOTTLED BROWN AND OLIVE SANDY CLAY (CL)  
 stiff, moist, with fine grained sand, with gravel  
 MOTTLED BROWN AND LIGHT BROWN SANDY CLAY (CL)  
 medium stiff, wet, fine grained sand

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

HAMMER WEIGHT: 140 pounds  
 HAMMER DROP: 30 inches

\*ELEVATION REFERENCE: TOP OF CURB AT FIRE HYDRANT ON 98TH AVENUE (SEE SITE PLAN) ASSUMED AT 100.00 FEET.

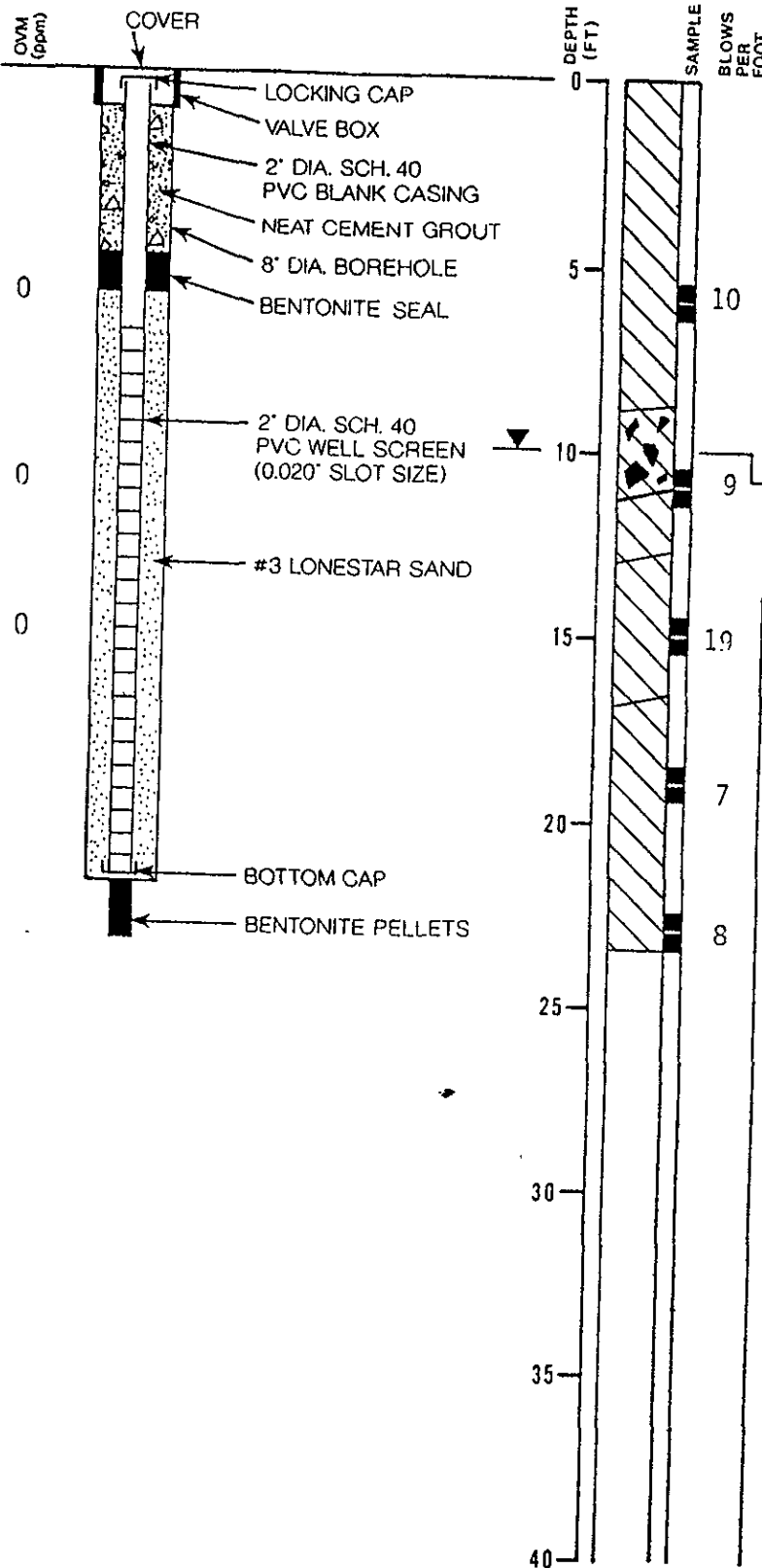
Subsurface Consultants

98th AVE, GROUNDWATER ASSESSMENT - OAK  
 JOB NUMBER 272.007  
 DATE 11/6/89  
 APPROVED *[Signature]*

PLATE  
**2**

# LOG OF TEST BORING MW-2

EQUIPMENT 8" Hollow Stem Auger  
 DATE DRILLED 10/30/89  
 ELEVATION 100.47 feet



DARK OLIVE-GRAY GRAVELLY CLAY (CL)  
 medium stiff, moist (fill)

BROWN CLAYEY GRAVEL (GC)  
 medium dense, wet (fill)

GROUNDWATER LEVEL DURING DRILLING

OLIVE GRAY GRAVELLY CLAY (CL)  
 medium stiff, wet with asphalt  
 concrete fragments (fill)

MOTTLED BROWN AND OLIVE SANDY  
 CLAY (CL)  
 stiff, wet, with fine grained sand

LIGHT BROWN SILTY CLAY (CL)  
 medium stiff, wet, with gravel

Subsurface Consultants

98th AVE, GROUNDWATER ASSESSMENT - OAK  
 JOB NUMBER 272.007  
 DATE 11/6/89

APPROVED  
*William H. White*

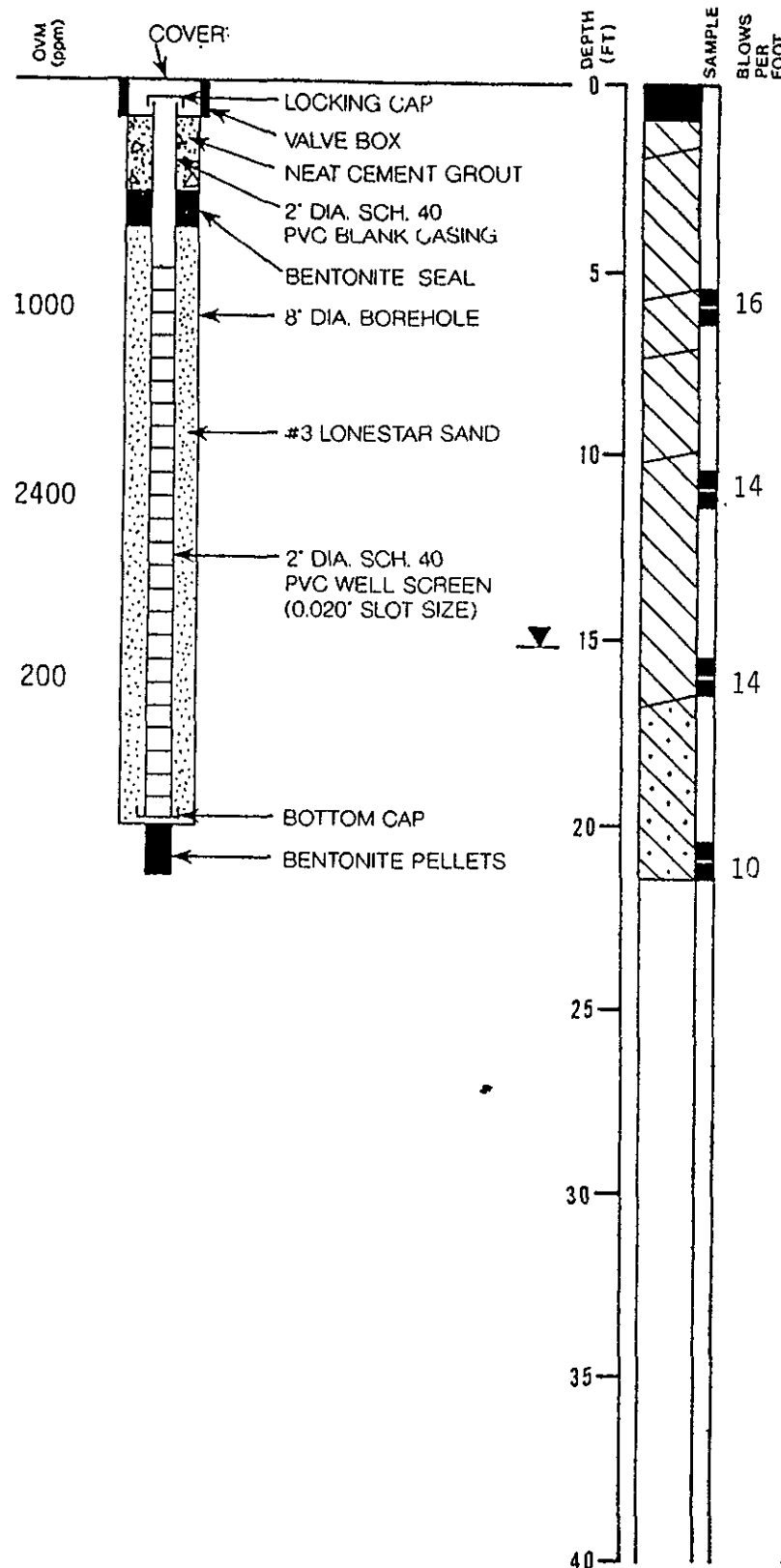
PLATE

3

Auger

# LOG OF TEST BORING MW-3

EQUIPMENT 8" Hollow Stem Auger  
 DATE DRILLED 10/31/89  
 ELEVATION 99.76 feet



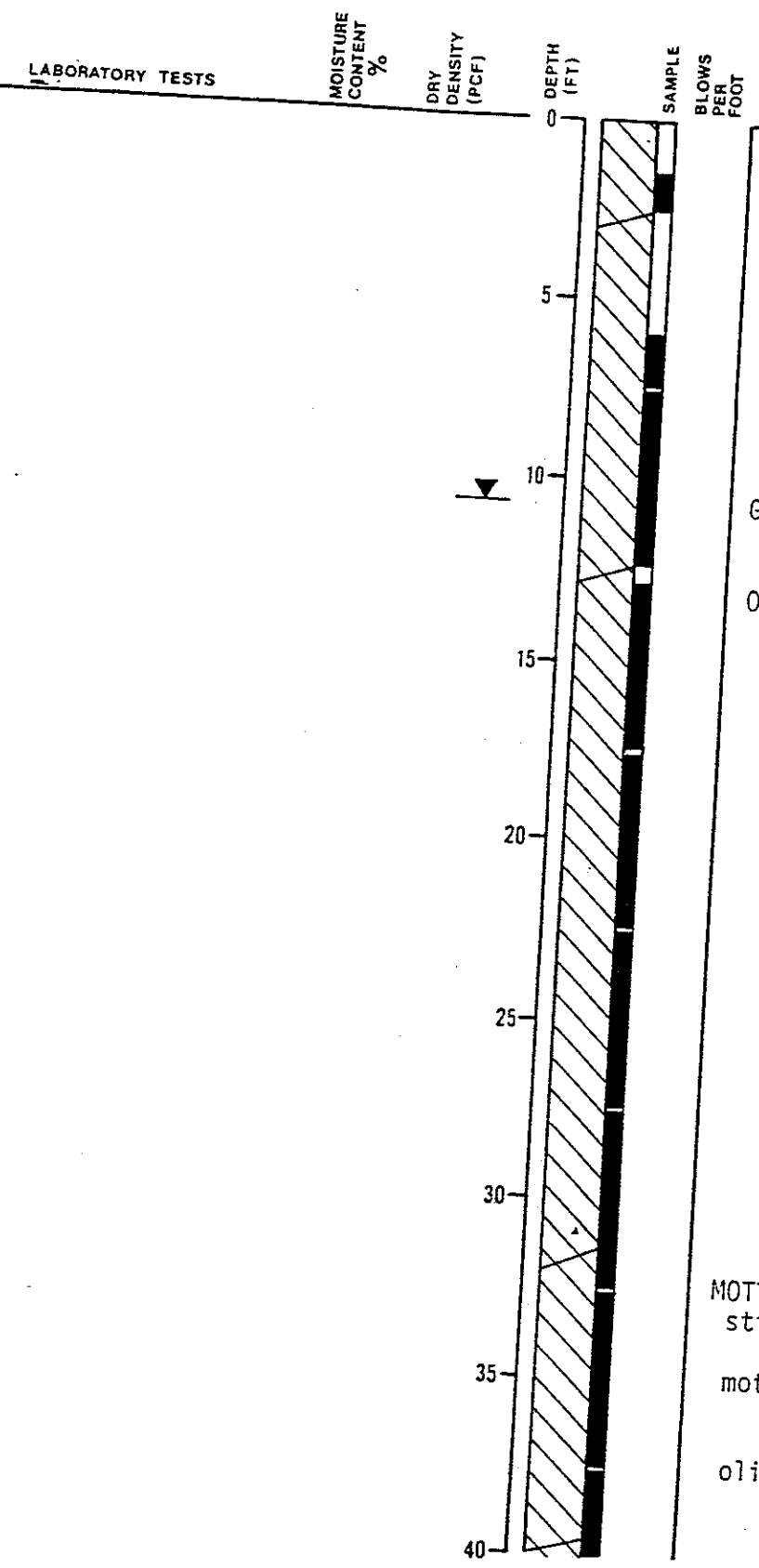
Subsurface Consultants

98th AVE, GROUNDWATER ASSESSMENT - OAK.  
 JOB NUMBER 272.007 DATE 11/6/89 APPROVED *Wally H. Alford*

PLATE 4

# LOG OF TEST BORING P-1

EQUIPMENT 8" Hollow Stem Auger  
 DATE DRILLED 2/14/89  
 ELEVATION 101.03 feet



DARK OLIVE-GRAY SANDY CLAY (CL)  
 stiff, moist, with gravel (fill)

OLIVE SILTY CLAY (CL)  
 stiff, moist, with petroleum odor below 7 feet

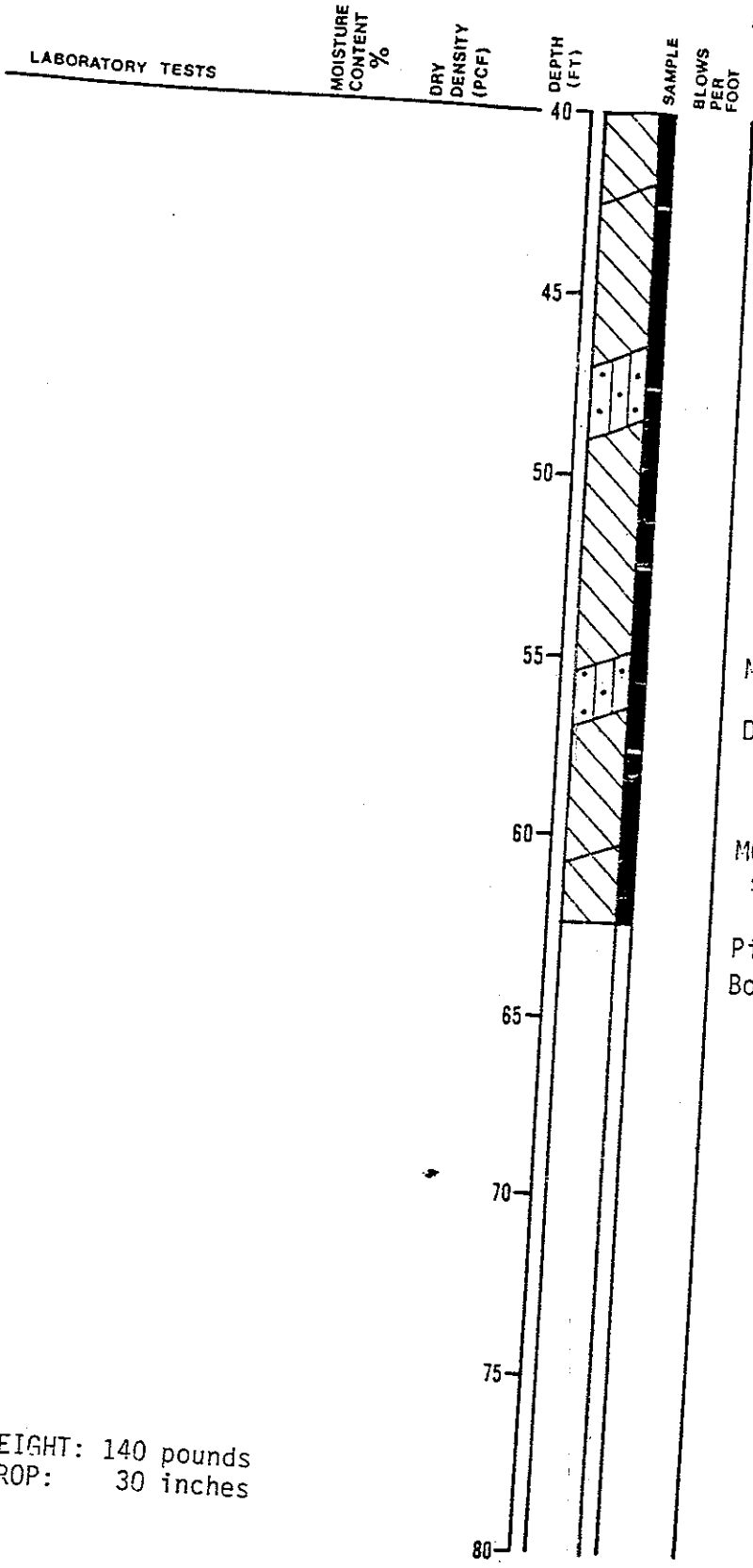
GROUNDWATER LEVEL (7/11/89)

OLIVE SILTY CLAY (CL)  
 stiff, wet, with some gravel

MOTTLED OLIVE AND GRAY SILTY CLAY (CL)  
 stiff, moist

mottled gray and olive below 35 feet

olive below 38 feet



MOTTLED OLIVE AND OLIVE-BROWN SANDY CLAY (CL)  
 stiff, wet, with gravel

MOTTLED OLIVE AND GRAY SILTY CLAY (CL)  
 stiff, wet

OLIVE SILTY SAND (SM)  
 medium dense, wet

MOTTLED GRAY AND OLIVE SILTY CLAY (CL)  
 stiff, wet

MOTTLED OLIVE AND GRAY SILTY SAND (SM)  
 medium dense, wet

DARK GRAY SILTY CLAY (CL)  
 stiff, wet

MOTTLED OLIVE AND GRAY SILTY CLAY (CL)  
 stiff, wet, with sand

Piezometer installed to 20 feet  
 Borehole grouted below 20 feet

HAMMER WEIGHT: 140 pounds  
 HAMMER DROP: 30 inches

Subsurface Consultants	98th AVENUE - OAKLAND, CA		PLATE <b>8</b>
	JOB NUMBER 272.007	DATE 2/21/89	