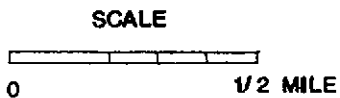




FIGURE 1



BASE- U.S.G.S TOPOGRAPHIC QUADRANGLE



**LOCATION MAP**

OWENS CORNING FIBERGLAS  
 2001. MARINA BOULEVARD  
 SAN LEANDRO, CALIFORNIA

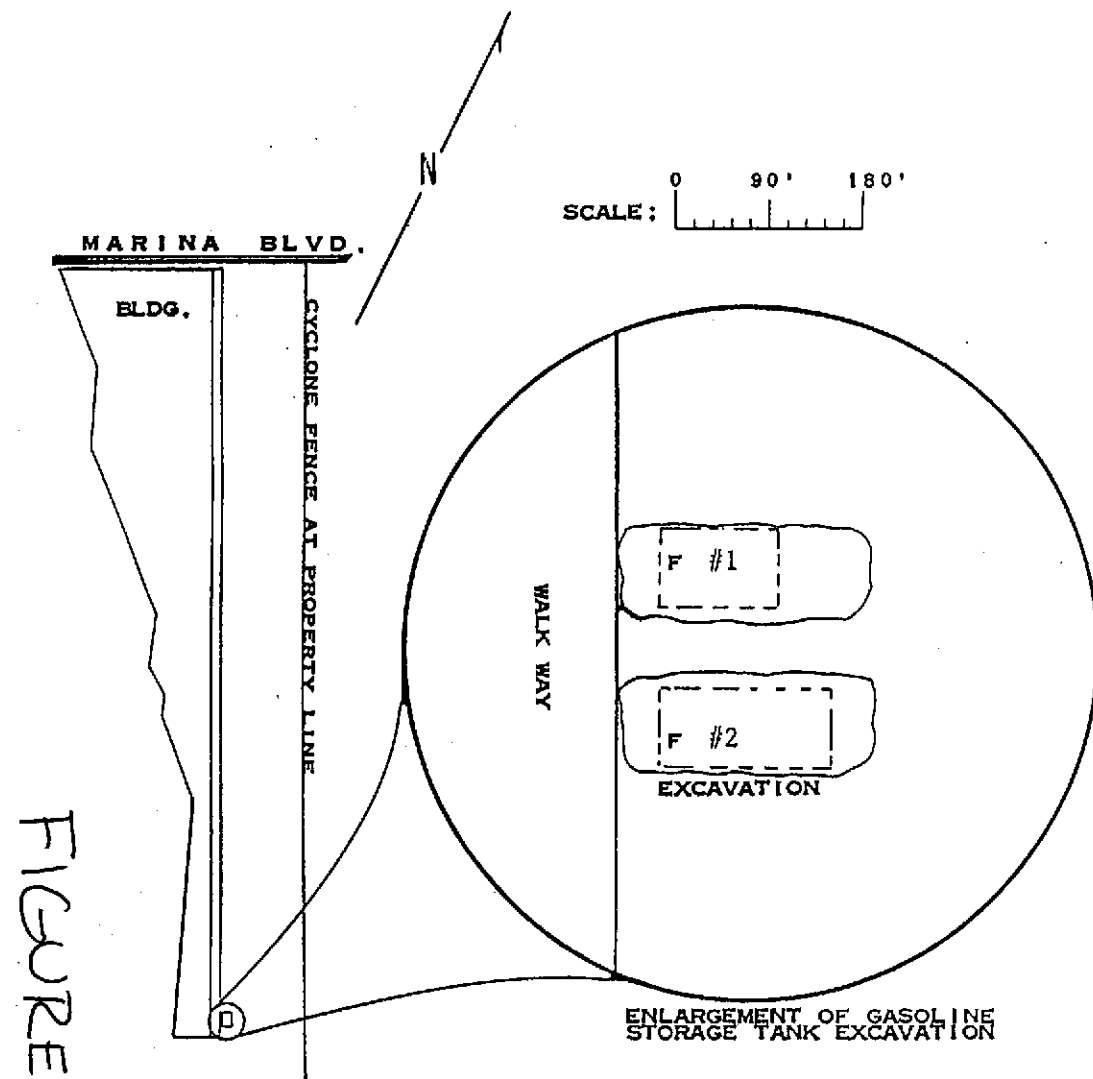
REVIEWED BY: 	APPROVED BY:
JOB #: 1719G	DRAWN BY: B.R.
DATE: 5/12/89	DRAWING #: FIG 1

**BLAINE  
TECH SERVICES**

SAMPLING REPORT 88069M2, 3-9-88, ZACCOR CORP., 2001 MARINA BLVD., SAN LEANDRO, CA

MAP REF: THOMAS BROS.  
ALAMEDA COUNTY  
P.24 E-2

SCALE: 0 90' 180'



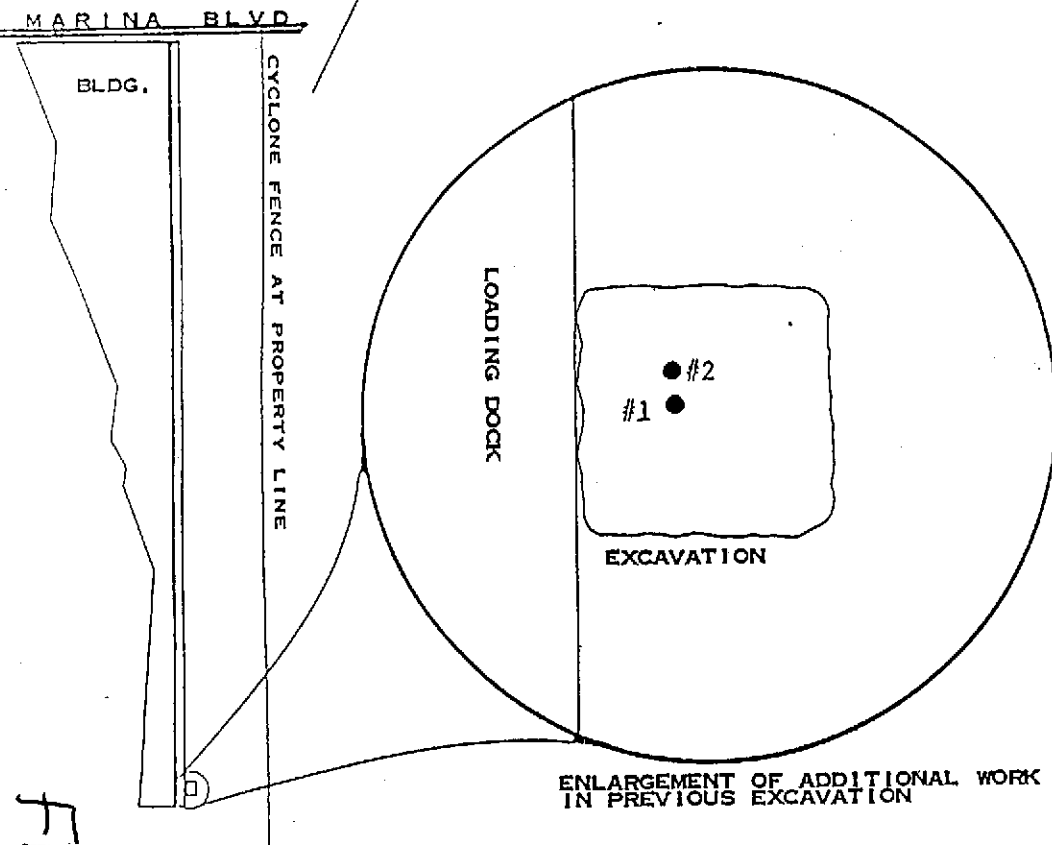
- #1 SOIL FROM 8' ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS (TPH) AS GASOLINE, AND BENZENE, TOLUENE AND XYLENES (BTX) AT ANATEC LABORATORY
- #2 SOIL FROM 8' ANALYSIS FOR TPH AS GASOLINE, AND BTX

SAMPLING PERFORMED BY HELEN MAWHINNEY  
DIAGRAM PREPARED BY BRENT ADAMS

FIGURE 2

MAP REF: THOMAS BROS.  
ALAMEDA COUNTY  
P. 24 E. 2

SCALE: 0 90' 180'

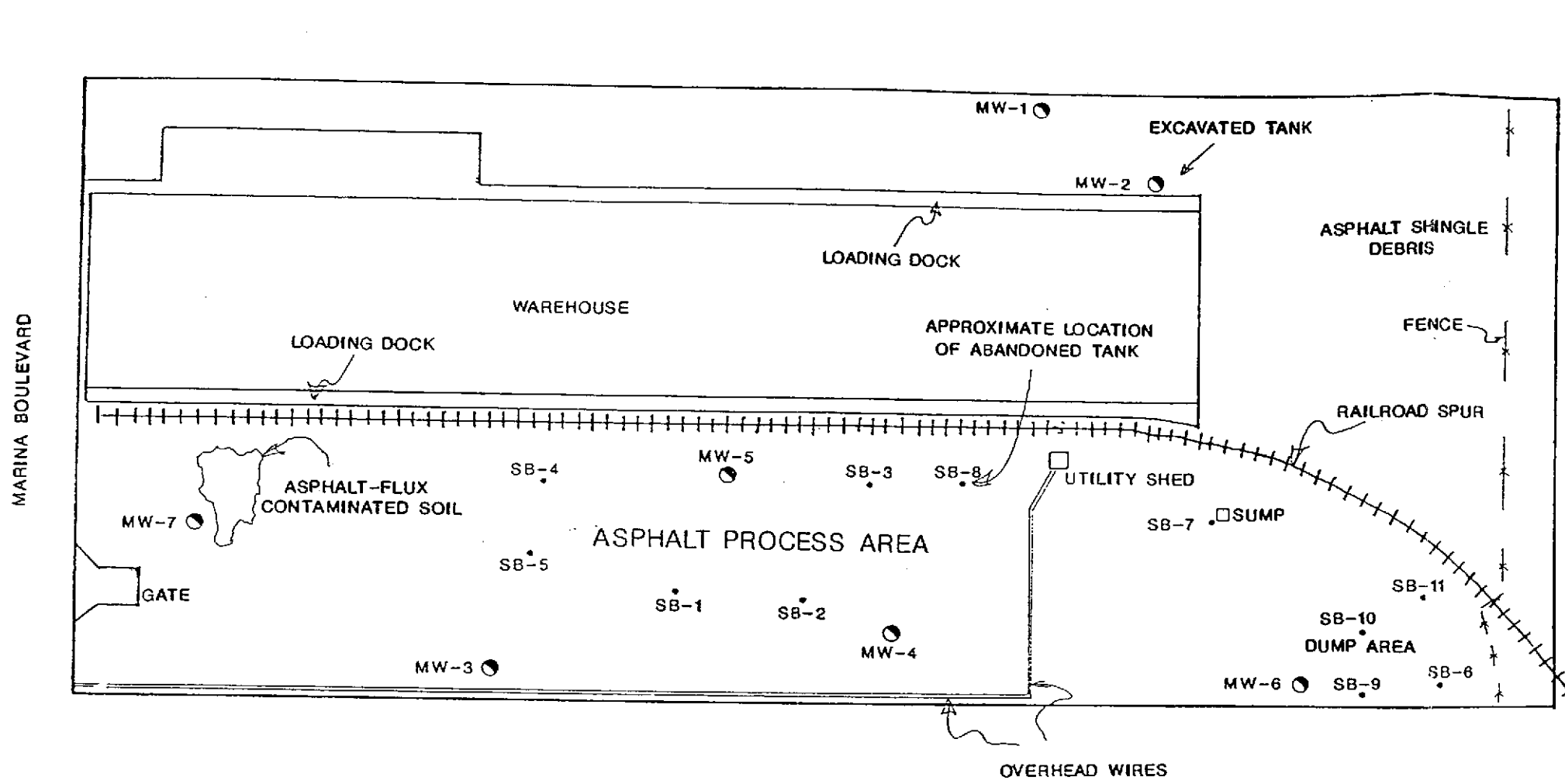


- #1 SOIL FROM 8' ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS (TPH) AS GASOLINE, AND BENZENE, TOLUENE, AND XYLENES (BTX) ANATEC
- #2 SOIL FROM 8' ANALYSIS FOR TPH AS GASOLINE, AND BTX ANATEC

SAMPLING PERFORMED BY STEPHEN CARTER  
DIAGRAM PREPARED BY BRENT ADAMS

ENLARGEMENT OF ADDITIONAL WORK  
IN PREVIOUS EXCAVATION

FIGURE 3

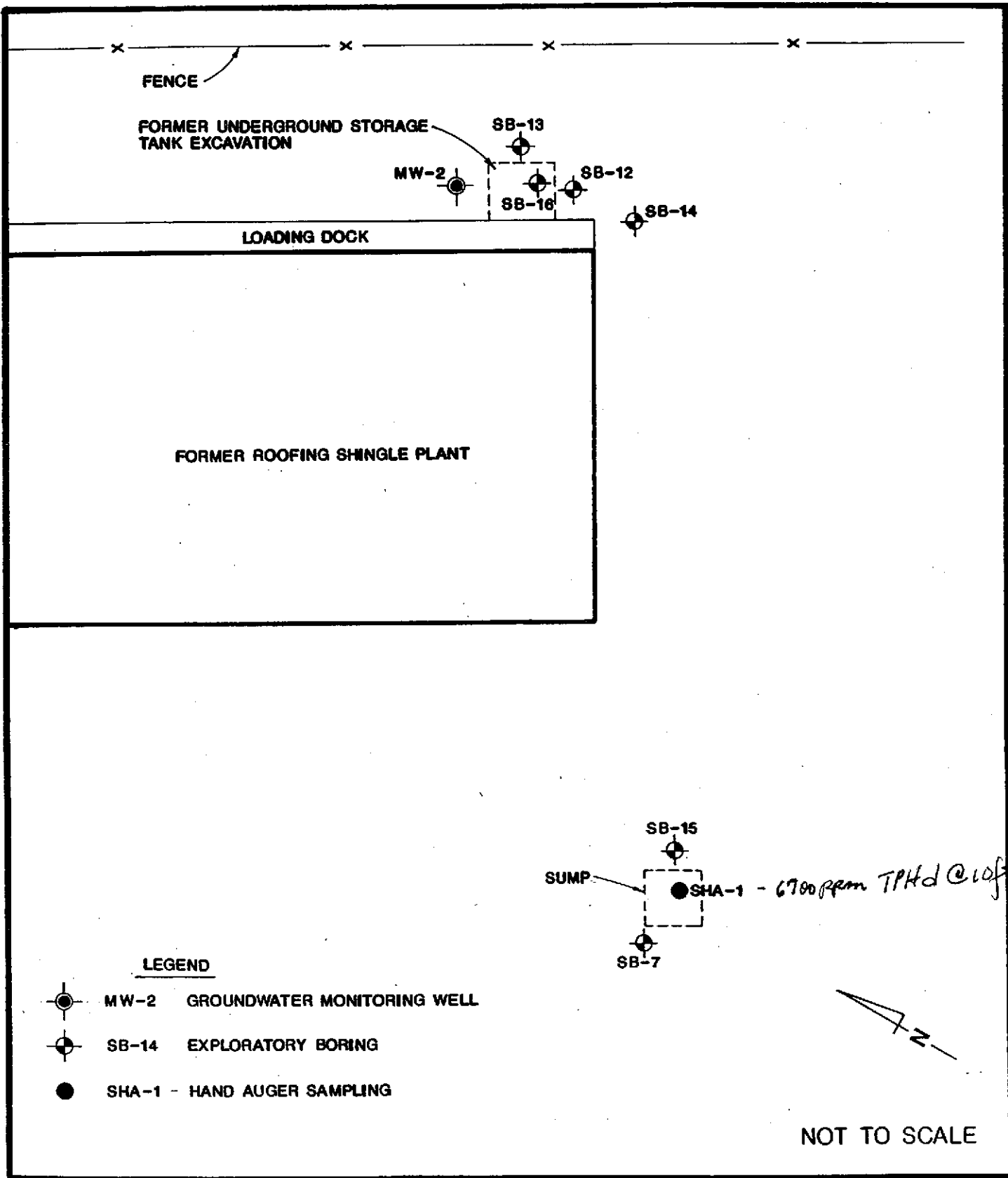


- MW-4      MONITORING WELL
- SB-5      SOIL BORING



<b>SITE PLAN</b>		REVIEWED BY:	APPROVED BY:
OWENS-CORNING FIBERGLAS			
2001 MARINA BOULEVARD		JOB #: 1649G	DRAWN BY: SC
SAN LEANDRO, CALIFORNIA		DATE: 6/27/88	DRAWING #: FIG 4a

FIGURE 4a



**SITE PLAN B**

OWENS/CORNING FIBERGLAS

2001 MARINA BOULEVARD

SAN LEANDRO, CALIFORNIA

REVIEWED BY:

JOB #:  
1719G

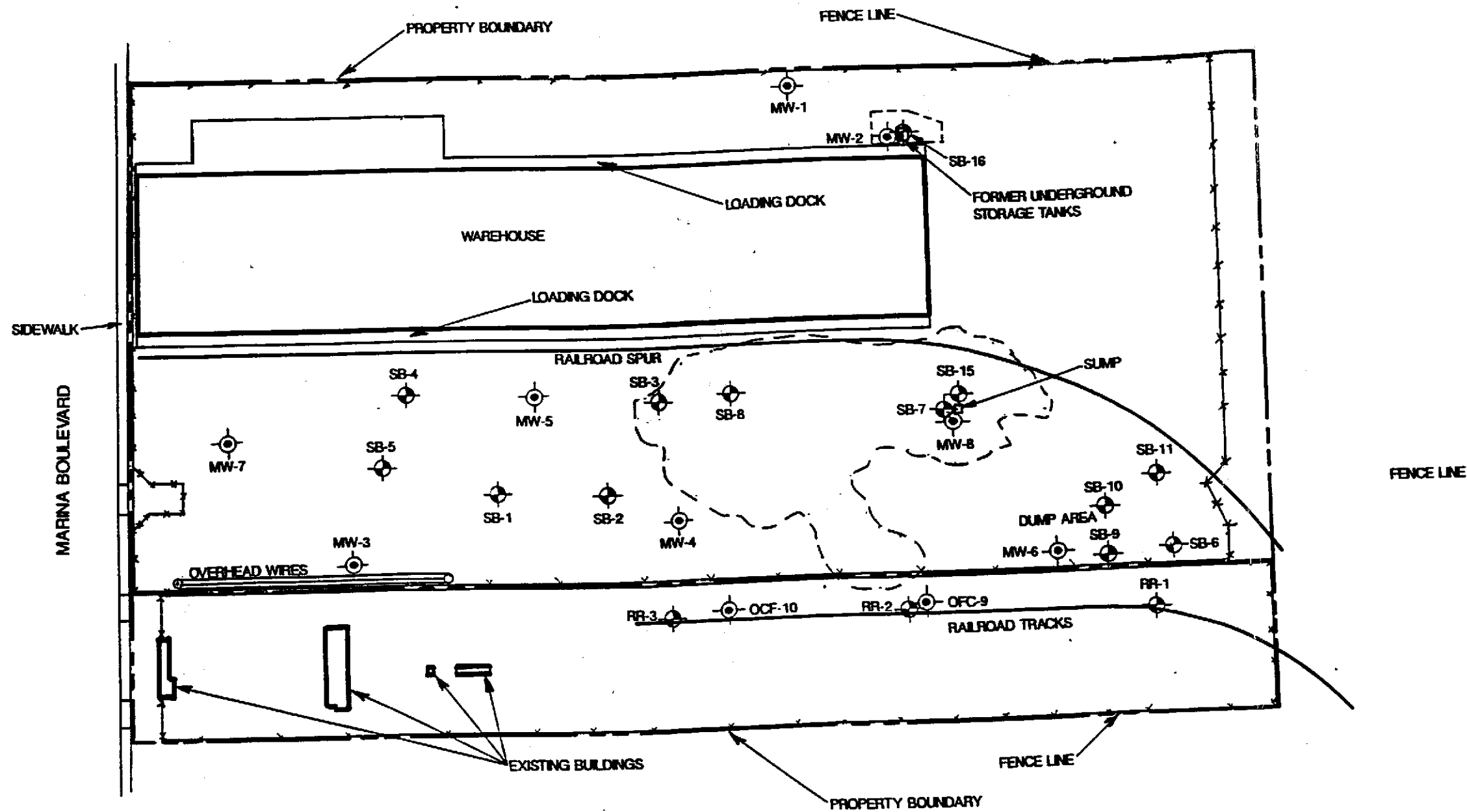
DATE:  
7-21-89

APPROVED BY:

DRAWN BY:  
J.C.

DRAWING FIG. #46

FIGURE 4b



**LEGEND**

- OCF-10, MW-8 MONITORING WELL
- ⊕ RR-3, SB-16 BORING
- ⋯ EXCAVATION AREAS

0 100  
APPROXIMATE SCALE IN FEET



**EXCELTECH**

**SITE PLAN**

OWENS/CORNING FIBERGLAS  
2001 MARINA BOULEVARD  
SAN LEANDRO, CALIFORNIA

REVIEWED BY: <i>RAS</i>	APPROVED BY:
DESIGNED BY:	DATE:
JOB #: 4751F	DRAWN BY: J.D.S.
DATE: 9/19/90	DRAWING #: FIG. 5

FIGURE 6  
 TPH-BO GROUNDWATER  
 CONCENTRATION MAP (2/9 AND 2/10/95)  
 OWENS-CORNING FIBERGLAS  
 2001 MARINA BOULEVARD  
 SAN LEANDRO, CALIFORNIA

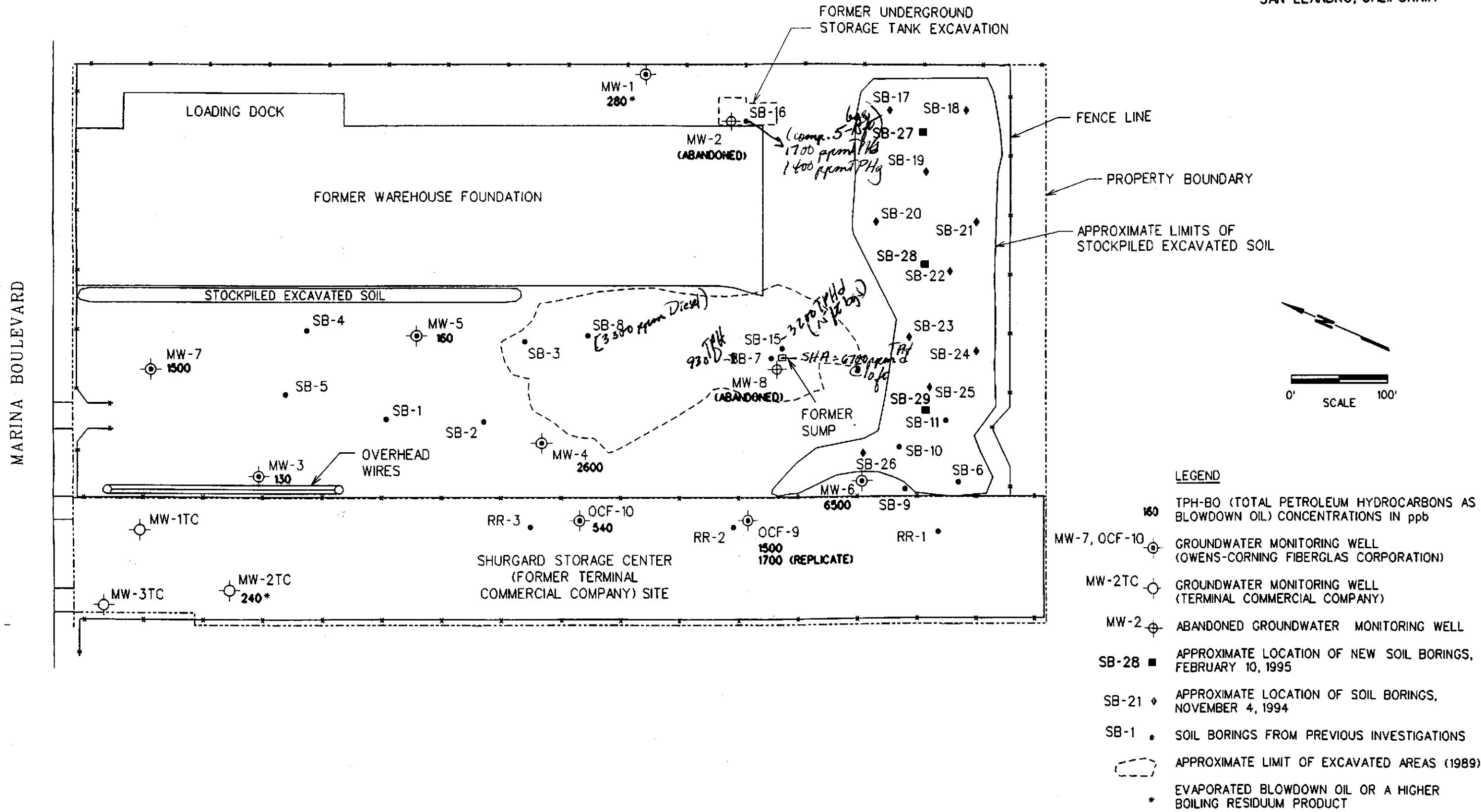






TABLE 1  
SOIL ANALYSES DATA (CONT.)

Owens Corning; 1649G

SAMPLE #	DATE SAMPLED	TPHD (ppm)	TPHG (ppm)	BENZENE (ppm)	TOLUENE (ppm)	XYLENES (ppm)	ETHYL BENZENE (ppm)	TOTAL LEAD (ppm)
SB-3-3	5/25/88	87	4	BDL	BDL	0.13	BDL	NA
SB-4-1	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-4-2	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-5-1	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-5-2	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-6-1	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-6-2	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-7-1	5/25/88	930	BDL	BDL	BDL	BDL	BDL	NA
SB-7-2	5/25/88	composite						
SB-7-3	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-7-4	5/25/88	composite						
SB-7-5	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-8-2	5/26/88	3,300	2.3	BDL	BDL	0.10	BDL	3.0
SB-8-3	5/26/88	570	BDL	BDL	BDL	BDL	BDL	8.0
SB-8-4	5/26/88	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SB-9	5/26/88	BDL	NA	NA	NA	NA	NA	NA
SB-10	5/26/88	BDL	NA	NA	NA	NA	NA	NA
SB-11	5/26/88	BDL	NA	NA	NA	NA	NA	NA

**TABLE 2  
GROUND-WATER ANALYSES DATA**

Owens Corning 1649G

WELL	DATE	TPHD (ppb)	TPHG (ppb)	BENZENE (ppb)	TOLUENE (ppb)	XYLENES (ppb)	ETHYLBENZENE (ppm)	TOTAL LEAD (ppb)	WELL ELEV. (ft.)	DEPTH TO WATER (ft.)
MW-1	5/31/88	BDL	BDL	BDL	BDL	BDL	BDL	120	22.55	12.16
MW-2	5/31/88	NA	460	BDL	BDL	15	6.4	110	21.34	13.13
MW-3	5/31/88	BDL	59	BDL	BDL	BDL	BDL	NA	26.79	17.21
MW-4	5/31/88	BDL	49	BDL	BDL	BDL	1.3	NA	26.09	16.19
MW-5	5/31/88	BDL	BDL	BDL	BDL	BDL	BDL	NA	25.40	16.63
MW-6	5/31/88	BDL	50	BDL	BDL	BDL	1.2	NA	24.85	16.68
MW-7	5/31/88	BDL	BDL	BDL	BDL	BDL	BDL	NA	25.02	16.25

TVH = Total Volatile Hydrocarbons as Gasoline  
 TEH = Total Extractable Hydrocarbons as Diesel  
 ppb = parts per billion  
 BDL = Below Detection Limit

Note: For detection limits, refer to laboratory reports

**Current Department of Health Services Action Levels**

Benzene 0.7 ppb  
 Toluene 100 ppb  
 Xylenes 620 ppb

Note: Subject to change as reviewed by Department of Health Services

TABLE 3  
SOIL ANALYSES DATA

Sample Number	Date Sampled	Sample Depth (ft.)	TPHD (ppm)	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Total Xylenes (ppm)	Total Lead (ppm)
SB7-1 SB7-2	5/25/88	5-10	930	BDL	BDL	BDL	BDL	BDL	N.A.
MW2-1	5/23/88	6.5	N.A.	BDL	BDL	BDL	BDL	BDL	BDL
MW2-2	5/23/88	11.5	N.A.	16	0.015	0.036	0.21	0.59	4.8
SB12-1	5/22/89	5	ND	3	ND	ND	ND	ND	8.03
SB12-2	5/22/89	10	26	ND	ND	ND	ND	ND	3.36
SB12-3	5/22/89	15	27	89	ND	ND	ND	ND	5.56
SB13-1	5/22/89	5	ND	ND	ND	ND	ND	ND	10.4
SB13-2	5/22/89	10	ND	ND	ND	ND	ND	ND	2.66
SB14-1	5/22/89	5	ND	ND	ND	ND	ND	ND	2.66
SB14-2	5/22/89	10	ND	1	ND	ND	ND	ND	8.03
SB14-3	5/22/89	15	13	57	ND	ND	ND	ND	7.91
SB15-1	5/22/89	5	1,200	3	ND	ND	ND	ND	3.9
SB15-2	5/22/89	10	ND	1	ND	ND	ND	ND	3.46
SB15-3	5/22/89	15	3,200	47	ND	ND	ND	ND	6.13

Ensco Environmental Services, Inc.  
Project No. 1719G

Owens/Corning Fiberglas  
2001 Marina Boulevard  
San Leandro, CA

3

TABLE (Continued)  
SOIL ANALYSES DATA

Sample Number	Date Sampled	Sample Depth (ft.)	TPHD (ppm)	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Total Xylenes (ppm)	Total Lead (ppm)
SB16-1	Composite	5.5	1,700	1,400	ND	ND	15	110	24.1
SB16-2		10							
SB16-3		15							
SHA-1 → sump.	5/23/89	10	6,700	19	ND	ND	ND	ND	14

TPHD = Total petroleum hydrocarbons as diesel  
 TPHG = Total petroleum hydrocarbons as gasoline  
 ND = Not detected  
 N.A. = Not available  
 BDL = Below detection limits  
 ppm = Parts per million  
 Note: See lab reports for detection limits

TABLE 4  
GROUNDWATER ANALYSES DATA

Sample Number	Date Sampled	TPHD (ppb)	TPHG (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Total Lead (ppb)	Depth To Water (ft.)
BB-J1	5/22/89	ND	ND	ND	ND	ND	ND	---	---
MW-1	5/31/88 5/22/89	BDL ND	BDL ND	BDL ND	BDL ND	BDL ND	BDL ND	120 8	13.57
MW-2	5/31/88 5/22/89	-- ND	460 50	BDL ND	BDL ND	6.4 ND	15 ND	110 12	12.48
MW-3	5/22/89	---	---	---	---	---	---	11	18.85
MW-4	5/25/89	---	---	---	---	---	---	44	18.20
MW-5	5/22/89	---	---	---	---	---	---	13	17.92
MW-6	5/22/89	---	---	---	---	---	---	13	17.14
MW-7	5/22/89	---	---	---	---	---	---	8	16.90

TPHD = Total petroleum hydrocarbons as diesel  
 TPHG = Total petroleum hydrocarbons as gasoline  
 BDL = Below detection limit  
 ND = Not detected  
 ppb = Parts per billion  
 --- = Analysis not requested

# San Leandro Soil Sampling Results

Sample Number	Date Sampled	Sample Depth (Ft.)	TPHD (ppm)	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Total Xylenes (ppm)	Total Lead (ppm)
MW-1-1	5/23/88	4	BDL	BDL	BDL	BDL	BDL	BDL	4.2
MW-1-2	5/23/88	9	BDL	BDL	BDL	BDL	BDL	BDL	5.5
MW-2-1	5/23/88	6.5	NA	BDL	BDL	BDL	BDL	BDL	BDL
MW-2-2	5/23/88	11.5	NA	16	0.015	0.036	0.21	0.59	4.8
MW-3-1	5/24/88	4	BDL	BDL	BDL	BDL	BDL	BDL	NA
MW-3-2	5/24/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
MW-4-1	5/24/88	4	5.8	BDL	BDL	BDL	BDL	BDL	NA
MW-4-2	5/24/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
MW-5-1	5/24/88	4	BDL	BDL	BDL	BDL	BDL	BDL	NA
MW-5-2	5/24/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
MW-6-1	5/24/88	4	BDL	BDL	BDL	BDL	BDL	BDL	NA
MW-6-2	5/24/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
MW-7-1	5/25/88	4	BDL	BDL	BDL	BDL	BDL	BDL	NA
MW-7-2	5/25/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
MW-8-1	10/18/89	6	2400	11	ND	ND	ND	ND	8.81
MW-8-2	10/18/89	11	ND	ND	ND	ND	ND	ND	4.28
MW-8-3	10/18/89	16	580	ND	ND	ND	ND	ND	8.3
SB-1-1	5/23/88	4	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-1-2	5/23/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-2-1	5/25/88	4	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-2-2	5/25/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-2-3	5/25/88	14	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-3-1	5/25/88	4	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-3-2	5/25/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-3-3	5/25/88	14	87	4	BDL	BDL	BDL	0.13	NA
SB-4-1	5/25/88	4	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-4-2	5/25/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-5-1	5/25/88	4	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-5-2	5/25/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-6-1	5/25/88	4	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-6-2	5/25/88	9	BDL	BDL	BDL	BDL	BDL	BDL	NA
SB-7-1 composite	5/25/88		930	BDL	BDL	BDL	BDL	BDL	NA
SB-7-2 composite	5/25/88								

TPHD - Total Petroleum Hydrocarbons as Diesel  
 TPHG - Total Petroleum Hydrocarbons as Gasoline  
 NA - No Sample Analysis  
 ND - Not Detected  
 BDL - Below Detection Limits

# San Leandro Soil Sampling Results

Sample Number	Date Sampled	Sample Depth (Ft.)	TPHD (ppm)	TPHG (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl Benzene (ppm)	Total Xylenes (ppm)	Total Lead (ppm)	
SB-7-3	composite	5/25/88	BDL	BDL	BDL	BDL	BDL	BDL	NA	
SB-7-4	composite	5/25/88								
SB-7-5		5/25/88	4	BDL	BDL	BDL	BDL	BDL	NA	
SB-8-2		5/26/88	4	3300	2.3	BDL	BDL	BDL	0.1	3
SB-8-3		5/26/88	9	570	BDL	BDL	BDL	BDL		8
SB-8-4		5/26/88	14	BDL	BDL	BDL	BDL	BDL		NA
SB-9		5/26/88	1-2	BDL	NA	NA	NA	NA	NA	NA
SB-10		5/26/88	1-2	BDL	NA	NA	NA	NA	NA	NA
SB-11		5/26/88	1-2	BDL	NA	NA	NA	NA	NA	NA
SB-12-1		5/22/89	5	ND	3	ND	ND	ND	ND	8.03
SB-12-2		5/22/89	10	26	ND	ND	ND	ND	ND	3.36
SB-12-3		5/22/89	15	27	89	ND	ND	ND	ND	5.56
SB-13-1		5/22/89	5	ND	ND	ND	ND	ND	ND	10.4
SB-13-2		5/22/89	10	ND	ND	ND	ND	ND	ND	2.66
SB-14-1		5/22/89	5	ND	ND	ND	ND	ND	ND	2.66
SB-14-2		5/22/89	10	ND	1	ND	ND	ND	ND	8.03
SB-14-3		5/22/89	15	13	57	ND	ND	ND	ND	7.91
SB-15-1		5/22/89	5	1200	3	ND	ND	ND	ND	3.9
SB-15-2		5/22/89	10	ND	1	ND	ND	ND	ND	3.46
SB-15-3		5/22/89	15	3200	47	ND	ND	ND	ND	6.13
SB-16-1	composite	5/22/89	5.5							
SB-16-2	composite	5/22/89	10	1700	1400	ND	ND	15	110	24.1
SB-16-3	composite	5/22/89	15							
SHA-1		5/22/89	10	6700	19	ND	ND	ND	ND	14

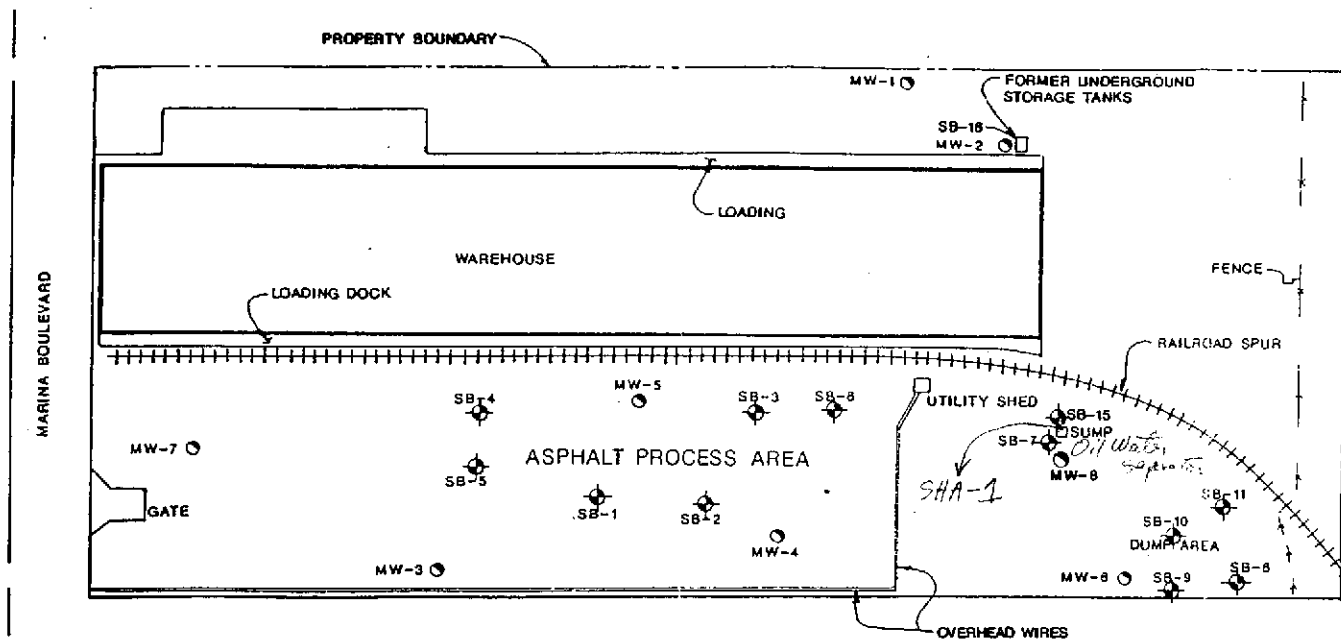
TPHD - Total Petroleum Hydrocarbons as Diesel  
 TPHG - Total Petroleum Hydrocarbons as Gasoline  
 NA - No Sample Analysis  
 ND - Not Detected  
 BDL - Below Detection Limits

# San Leandro Groundwater Monitoring Results

Sample Number	Date Sampled	TPHD (ppb)	TPHG (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Total Lead (ppb)	Well Elevation (Ft.)	Depth to Water (Ft.)
MW-1	5/31/88	BDL	BDL	BDL	BDL	BDL	BDL	120	22.55	12.16
MW-1	5/22/89	ND	ND	ND	ND	ND	ND	8	22.55	13.57
MW-2	5/31/88	---	460	BDL	BDL	6.4	15	110	21.34	13.13
MW-2	5/22/89	ND	50	ND	ND	ND	ND	12	21.34	12.48
MW-3	5/31/88	BDL	59	BDL	BDL	BDL	BDL	---	26.79	17.21
MW-3	5/22/89	---	---	---	---	---	---	11	26.79	18.85
MW-4	5/31/88	BDL	49	BDL	BDL	1.3	BDL	---	26.09	16.19
MW-4	5/22/89	---	---	---	---	---	---	44	26.09	18.85
MW-5	5/31/88	BDL	BDL	BDL	BDL	BDL	BDL	---	25.4	16.63
MW-5	5/22/89	---	---	---	---	---	---	13	25.4	17.92
MW-6	5/31/88	BDL	50	BDL	BDL	1.2	BDL	---	24.85	16.68
MW-6	5/22/89	---	---	---	---	---	---	13	24.85	17.14
MW-7	5/31/88	BDL	BDL	BDL	BDL	BDL	BDL	---	25.02	16.25
MW-7	5/22/89	---	---	---	---	---	---	8	25.02	16.9
MW-8	11/1/89	2300	80	ND	0.8	ND	ND	20	22.4	15

TPHD - Total Petroleum Hydrocarbons as Diesel  
 TPHG - Total Petroleum Hydrocarbons as Gasoline  
 --- - No Sample Analysis  
 ND - Not Detected  
 BDL - Below Detection Limits





**LEGEND**

- MW-4 GROUNDWATER MONITORING WELL
- ⊕ SB-5 EXPLORATORY BORING

▭ EXISTING BUILDING



0 100  
SCALE IN FEET



<b>SITE PLAN A</b>		REVIEWED BY:	APPROVED BY:
OWENS/CORNING FIBERGLAS			
2001 MARINA BOULEVARD		JOB #	DRAWN BY
SAN LEANDRO, CALIFORNIA		1719G	SC
		DATE	DRAWING #
		11/14/89	FIG. 2



**ensco**  
**environmental**  
**services, Inc.**

PROJECT NAME: Owens Corning

BORING NO. MW-1

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-23-88

LOGGED BY: SC

**EXPLORATORY BORING LOG**

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1				Fill: Coarse gravel baserock		
2			CL	SILTY CLAY, very dark brown (10YR 2/2), trace sand, low plasticity, damp		
3				-- increase in silt at 3'		
4						
5				INTERBEDDED SILTY SAND, CLAYEY SAND, AND CLAY:		
6	MW1 -1	9		SILTY SAND, dark brown (10YR 3/3), predominantly fine, 15% coarse sand to fine gravel, medium dense, damp, becomes coarser at 6 to 6.5', CLAYEY SAND, olive brown (2.5Y 4/4), predominantly fine sand, trace medium to coarse sand, fines are mostly clay, rare rootholes, very rare shell fragments, very loose, very moist to wet. CLAY, very dark gray (10YR 3/1), trace sand, few rootholes, high plasticity, very stiff, moist		
7						
8						
9						
10			SM SC CH			
11	MW1 -2	5			▽	
12						
13						
14						
15						
16	MW1 -3	10				
17						
18						
19						
20						
21	MW1 -4	8	CL	SANDY CLAY, light olive brown (2.5Y 5/4), 20 to 30% fine to medium sand, trace silt, rare to few rootholes are wet, rare shell fragments, low plasticity, stiff, wet		

BOTTOM OF BOREHOLE = 21.5'

SUPERVISED AND APPROVED BY R.G./C.E.G.



ensco  
environmental  
services, Inc.

PROJECT NAME: Owens Corning

BORING NO. MW-2

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-23-81

EXPLORATORY BORING LOG

LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1			XXXXX	PAVEMENT SECTION: 8" asphalt cover		
2			CH	SANDY CLAY, black, 15 to 25% sand, moderate to high plasticity, faint odor, damp to moist		
3						
4						
5						
6	MW2 -1	11		INTERBEDDED GRAVELLY SAND, SANDY CLAY, AND SILTY CLAY: GRAVELLY SAND, brown (10YR 4/3), predominantly medium sand, trace fine sand, trace coarse sand, 20% fine gravel, medium dense, damp; SANDY CLAY, very dark gray (2.5Y N3/), 25 TO 35% fine to coarse sand, few to common rootholes, rare root remains, rare shell fragments, moderate to high plasticity, stiff, very moist, -- at shoe: grades to dark olive gray (5Y 3/2) with faint product odor; SILTY CLAY, dark gray (5Y 4/1), few rootholes wet, faint odor, low to moderate plasticity, stiff, wet, grades to very dark gray (5Y 3/1) at shoe		
7						
8						
9						
10						
11	MW2 -2	8	SP CH CL			
12						
13						
14						
15						
16	MW2 -3	9			▽	
17				-- strong odor in cuttings		
18						
19						
20						
21	MW2 -4	8		as above -- color to dark olive gray (5Y 3/2), becomes sandy, 15 to 20% fine sand BOTTOM OF BOREHOLE = 21.5'		

SUPERVISED AND APPROVED BY R.G./C.E.G.



ensco  
environmental  
services, Inc.

PROJECT NAME: Owens Corning

BORING NO. MW-3

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-24-88

EXPLORATORY BORING LOG

LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1				Fill: gravelly sand to sandy gravel with minor clay alternating with light brown sand and black sandy clay		
2						
3						
4						
5				SILTY SAND, brown (7.5YR 4/2), predominantly fine, 20% fine gravel, abundant roots, loose, damp		
6	MW3 -1	9				
7				SILTY SAND, dark yellowish brown (10YR 4/4), predominantly fine sand, rare roots, loose damp		
8						
9						
10			SM CL SP SC	SANDY CLAY, dark brown (10YR 3/3), 20 to 30% fine sand, moderate plasticity, firm, damp		
11	MW3 -2	3				
12				SAND, yellowish brown (10YR 5/4), predominantly fine sand, trace medium sand, trace silt, very loose, moist		
13						
14						
15				CLAYEY SAND, brown (10YR 5/3), predominantly fine sand, trace medium sand, locally 25 to 40% clay, rare organic debris, loose, wet	▽	
16	MW3 -3	10				
17				SAND, brown (10YR 5/3), predominantly fine sand, trace medium to coarse sand, loose, wet		
18			SP			
19						
20						
21	MW3 -4	16	CH	CLAY, very dark gray (10YR 3/1), trace fine to medium sand, rare roots, rare rootholes, high plasticity, stiff, moist		
				BOTTOM OF BOREHOLE = 21.5'		

SUPERVISED AND APPROVED BY R.G./C.E.G.



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**services, Inc.**

PROJECT NAME: Owens Corning

BORING NO. MW-4

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-24-88

**EXPLORATORY BORING LOG**

LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lps.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1				Fill: Clayey sand with minor gravel, brown, damp		
2						
3			CH	CLAY, black (10YR 3/3), trace sand, moderate to high plasticity, damp		
4				-- pea gravel		
5						
6	MW4 -1	14		SILTY SAND, dark brown (10YR 4/3), predominantly fine sand, rare organic debris, medium dense, damp		
7						
8				-- becomes clayey		
9						
10						
11	MW4 -2	10	SP SM CL	INTERBEDDED CLAY AND SAND: CLAY, dark grayish brown (2.5Y 4/2) with common orange mottling, very rare rootholes very rare root hairs, trace organic staining, low plasticity, stiff, very moist; SAND, olive brown (2.5Y 4/4), predominantly fine to medium sand, trace silt, loose, damp, becomes wet at 11'; boundry is gradational	▽	
12						
13						
14						
15						
16	MW4 -3	6		as above -- clay becomes silty, trace fine gravel, loose to firm, saturated		
17						
18						
19						
20	MW4 -4	18	CH	CLAY, very dark brown (10YR 2/2), trace fine to medium sand, rare coarse sand, rare roots, few rootholes, very stiff, moist		
21				BOTTOM OF BOREHOLE = 21.5'		

SUPERVISED AND APPROVED BY R.G./C.E.G.



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PROJECT NAME: Owens Corning

BORING NO. MW-5

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-24-81

EXPLORATORY BORING LOG

LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lps.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1				Fill: Sandy clay and silty gravelly sand, dark brown, damp		
2			CH	CLAY, black, trace sand, moderate to high plasticity, damp		
3						
4						
5			SP	SAND, dark brown, (10YR 3/3), predominantly coarse sand, trace fine gravel, loose, damp		
6	MW5 -1	6		-- becomes silty, predominantly fine sand		
7				-- becomes clayey		
8						
9						
10						
11	MW5 -2	5	SP / CL	INTERBEDDED CLAY AND SAND: CLAY, dark grayish brown (2.5Y 4/2) with common orange mottling, very rare rootholes very rare root hairs, trace organic staining, low plasticity, stiff, very moist; SAND, olive brown (2.5Y 4/4), predominantly fine to medium sand, trace silt, loose, damp, becomes wet at 11'; boundary is gradational		
12						
13						
14						
15						
16	MW5 -3	5			▽	
17						
18						
19						
20	MW5 -4	11	CH	CLAY, very dark grayish brown (10YR 3/2), trace fine to medium sand, few to common rootholes mostly wet, stiff, wet		
21				BOTTOM OF BOREHOLE = 21.5'		

SUPERVISED AND APPROVED BY R.G./C.E.G.



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PROJECT NAME: Owens Corning

BORING NO. MW-6

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-24-88

EXPLORATORY BORING LOG

LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft./lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1				Fill: Sandy silt, black, trace fine gravel, damp		
2						
3				-- becomes gravelly at 3'		
4			SW- SP	GRAVELLY SAND to SANDY GRAVEL, dark yellowish brown (10YR 3/4), 40 to 60% fine gravel, 40 to 60% fine to coarse sand, loose, damp		
5						
6	MW6 -1	9				
7				CLAYEY SAND, olive brown (2.5Y 4/4), sand is predominantly fine, few roots, rare empty rootholes, trace organic staining, loose, damp		
8						
9						
10						
11	MW6 -2	17	SP/ CL CH	INTERBEDDED CLAY AND SAND: CLAY, grayish brown (10YR 5/2), trace sand, common black organic staining, common rootholes, very stiff, damp; SANDS, light yellowish brown (2.5Y 6/4), fine sand, trace silt, common roots, few rootholes, moderate to high plasticity, medium dense, damp		
12						
13						
14						
15						
16	MW6 -3	16		SILTY CLAY, olive gray (5Y 4/2), trace fine to coarse sand, low to moderate plasticity, few roots, few rootholes, stiff, moist to wet  -- sand becomes olive brown, wet	▽	
17						
18						
19						
20	MW6 -4	17	CH	CLAY, black (5Y 2.5/2), trace fine to coarse sand, few to common rootholes some wet, few roots, high plasticity, very stiff, moist to wet		
21				BOTTOM OF BOREHOLE = 21.5'		

SUPERVISED AND APPROVED BY R.G./C.E.G.



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PROJECT NAME: Owens Corning

BORING NO. MW-7

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-24-88

**EXPLORATORY BORING LOG**

LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1				PAVEMENT SECTION: 6" asphalt cover		
2			CL	CLAY, black, high plasticity, no odor, damp		
3						
4			CL	SANDY CLAY, dark brown (10YR 3/3), common fine sand, abundant silt, low to moderate plasticity, damp		
5				-- clay becomes black (as above)		
6	MW7 -1	8	SP	SAND, yellowish brown (10YR 5/4), predominantly fine sand, trace silt, clayey at 5 to 5.5 feet with few rootholes and few roots, loose, damp		
7						
8						
9						
10						
11	MW7 -2	7		-- becomes clayey, wet, transition to	▽	
12						
13			CH	CLAY, very dark grayish brown (10YR 3/2), slight orange mottling, trace fine sand, trace silt, very rare rootholes, highly plastic, firm to stiff, moist		
14						
15						
16	MW7 -3	16	SP	SAND, as above, becomes clayey at 15.5		
17			SW	GRAVELLY SAND, olive brown (2.5Y 4/4), fine to coarse sand, 20 to 30% fine gravel, gravel and sands subangular to angular, medium dense, damp		
18						
19						
20			CH	SILTY CLAY, very dark grayish brown (2.5Y 3/2), locally sandy, trace organic staining, firm, wet		
21	MW7 -4	9	CH	CLAY, black (5Y 2.5/1), rare sand, few rootholes, high plasticity, stiff, damp		
			CH	BOTTOM OF BOREHOLE = 21.5'		

SUPERVISED AND APPROVED BY R.G./C.E.G.



# EXPLORATORY BORING LOG



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PROJECT NAME: Owens Corning Fiberglas  
 2001 Marina Blvd.  
 San Leandro, CA

BORING NO. MW-8

DATE DRILLED: 10/18/89

PROJECT NUMBER: 1719G

LOGGED BY: C.V.

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1						
2						
3						
4						
5						
6	MW-8-1	11	ML	CLAYEY SILT, dark black gray(5B 4/1), 10-20% silt, stiff, damp		
7			SM	SILTY SAND, dark black gray (5B 4/1), 10-15% silt, very fine to fine sand, medium dense, damp		
8						
9						
10						
11	MW-8-2	9	CL	SILTY CLAY, dark gray (5Y 4/1), 20-30% silt, low plasticity, firm, damp		
12			SM	SILTY SAND, dark gray (5Y 4/1), 10-15% silt, very fine to coarse sand, loose, moist to wet		
13			CH	CLAY, black (7.5YR 2/0), trace coarse sand, high plasticity, stiff, damp		
14						
15					▼	
16	MW-8-3	12	CL	SANDY CLAY, dark green gray (5GY 4/1), 5-10% silt, 20-30% very fine to medium sand, damp to moist		
17			CH	CLAY, dark green gray (5GY 4/1), high plasticity, stiff, damp		
18			CL	GRAVELLY CLAY, dark green gray (5GY 4/1), 15-20% fine gravel, 10-15% fine sand, 10-15% silt, stiff, wet		▼
19						
20		14 (SP)	CH	CLAY, dark green gray (5GY 4/1), trace sand, high plasticity, stiff, moist		
21		10 (SP)		abundant rootholes, 20-30% fine to medium sand, damp		
Bottom of boring = 21.5 feet						

Note: S P - standard penetration sampler

REVIEWED BY R.G./C.E.G.



# EXPLORATORY BORING LOG

PROJECT NAME: Owens Corning Fiberglas  
 2011 Marina Blvd.  
 San Leandro, CA

BORING NO. OCF9  
 DATE DRILLED: 8/27/90  
 LOGGED BY: K.P.

PROJECT NUMBER: 4751F

DEPTH (ft.)	SAMPLE No.	BLOWS/FOOT	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVM READING ppm
1				BACKFILL: Pea Gravel		
2						
3						
4						
5						
6	OCF 9-1	7	ML	SILT, yellowish brown (10YR 5/4), homogenous, >90% silt, medium stiff, dry		2.9
7						
8						
9						
10						
11	OCF 9-2	12	ML	CLAYEY SILT, yellowish brown (10YR 5/4), ~ 20-30% clay, medium plasticity, ~ 10% gravel, fine to medium clasts, angular to subangular, stiff, moist		4.8
12						
13						
14						
15						
16	OCF 9-3	16	CH	SILTY CLAY, very dark gray (10YR 3/1), ~ 10-20% silt, high plasticity, rare mica flakes, very stiff, moist to wet		6.7
17						
18						
19						
20				as above		
21		16				

Bottom of Boring = 21.5 feet

REVIEWED BY R.G./C.E.G.



# EXPLORATORY BORING LOG

PROJECT NAME: Owens Corning Fiberglas  
 2011 Marina Blvd.  
 San Leandro, CA

BORING NO. OCF10  
 DATE DRILLED: 8/27/90  
 LOGGED BY: K.P.

PROJECT NUMBER: 4751F

DEPTH (ft.)	SAMPLE No.	BLOWS/FOOT	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OMV READING ppm
1				FILL: Gravel for railroad ties, compacted		
2						
3						
4						
5						
6	OCF 10-1	11	ML	CLAYEY SILT, dark brown (7.5YR 3/4), ~ 10-20% clay, medium plasticity, stiff, slightly damp		1.1
7						
8						
9						
10						
11	OCF 10-2	9	SM	SILTY SAND, yellowish brown (10YR 5/4), fine loose sand, homogenous, loose, dry		4.4
12						
13						
14						
15						
16	OCF 10-3	18	CL	SILTY CLAY, dark brown (10YR 3/3), ~ 10-20% silt, high plasticity, very stiff, moist		5.9
17						
18						
19						
20				- color change to very dark gray (10YR 3/1)		
21						
				Bottom of Boring = 21.5 feet		

REVIEWED BY R.G./C.E.G.



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PROJECT NAME: Owens Corning

PROJECT NUMBER: 1649 G

p 1 of 2

BORING NO. SB-1

DATE DRILLED: 5-23-88

**EXPLORATORY BORING LOG**

LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
			XXXXX	6" Asphalt cover		
1			CL	SILTY CLAY, black (5YR 2.5/1), trace sand, trace fine gravel, damp		
2						
3			ML	CLAYEY SILT, very dark grayish brown, (10YR 3/2) trace fine to coarse sand, rare rootholes, damp		
4				--becomes lighter in color		
5						
6	SB1 -1	6	SP	SAND, olive brown (2.5Y 4/4), 60% fine sand, 30% medium to coarse sand, 10% fine gravel, trace silt, sand angular to sub-rounded, loose, damp, becomes 95% fine sand at 6-6.5'		
7						
8						
9						
10				-- increase in silt, interbedded lens of coarse sand to fine gravel		
11	SB1 -2	4	CL	SILTY CLAY, olive gray (5Y 5/2), with slight orange mottling, trace organic staining, moderate plasticity, soft, wet	▽	
12						
13						
14						
15						
16	SB1 -3	9	SP/CL	INTERBEDDED SILTY CLAY, SAND, and SANDY CLAY: SAND, olive brown (2.5Y 4/4) predominantly fine sand, loose, wet; SILTY CLAY, as above, become stiff; SANDY CLAY, olive brown (2.5Y 4/4), 30 to 40% fine sand, stiff, wet		
17						
18						
19						
20	SB1 -4	9	CH	CLAY, very dark grayish brown (5Y 3/2), trace silt, trace sand, rare root debris, rare rootholes, rootholes wet, very stiff, moist 2' water in hole		
21						

SUPERVISED AND APPROVED BY R.G./C.E.G.



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PROJECT NAME: Owens Corning

PROJECT NUMBER: 1649 G

p 2 of 2

BORING NO. SB-1

DATE DRILLED 5-23-88

**EXPLORATORY BORING LOG** LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lps.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
22	SB1 -5	22		-- becomes sandy with gravel		
23			SW	CLAYEY SAND, brown (10YR 4/3), 60% fine to coarse sand, 20% fine gravel, angular to sub-rounded, dense, very moist to wet		
24						
25	SB1 -6	23	SW	SAND, predominantly medium to coarse, minor fine, trace fine gravel, sub-angular to sub-rounded, medium dense, wet		
26						
27						
28						
29						
30						
31						
32				BOTTOM OF BOREHOLE = 31.5'		
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						

SUPERVISED AND APPROVED BY R.G./C.E.G.



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PROJECT NAME: Owens Corning

BORING NO. SB-2

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-25-88

**EXPLORATORY BORING LOG**

LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1	SB2 -1	15		Fill: gravelly sand, brown		
2			CL	SILTY CLAY, black (5YR 2.5/1), trace sand, trace fine gravel, damp		
5			SC	CLAYEY SAND, dark olive gray (5Y 2/2), fine sand, trace coarse sand, fines predominantly clay, rare rootholes, medium dense, moist		
7	SB2 -2	17	SP /SC /CL	SAND, olive (5Y 4/4), predominantly fine sand, 10% medium sand, 10% coarse sand and fine gravel, subangular, medium dense, damp -- becomes gravelly at 7'		
10				INTERBEDDED SAND, CLAYEY SAND, and SILTY CLAY: SAND, as above; CLAYEY SAND, as above; SILTY CLAY, olive gray (5Y 4/2) mottled with dark gray (5Y 4/1) trace fine sand, very stiff, moist to wet		
11				-- at 11' fine sands become dark greenish gray (5GY 4/1) with moderate petroleum odor (diesel?)		
15				-- as above, clayey soils are stained dark greenish gray, overall moderate odor, sands are saturated		
16	SB2 -3	8				
17	BOTTOM OF BOREHOLE = 16.5'					
18						
19						
20						
21						

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PROJECT NAME: Owens Corning

BORING NO. SB-3

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-25-88

LOGGED BY: SC

**EXPLORATORY BORING LOG**

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lps.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING PPM
1				Fill: gravelly sand, brown		
2						
3			CH	SILTY CLAY, black (5YR 2.5/1), moderate plasticity, faint odor, damp		
4			SW	GRAVELLY SAND, 50% coarse sand, 25% fine to medium sand, 25% fine gravel, sands sub-angular to angular, loose, damp, increase in fine sand by 6'		
5		4				
6	SB3 -1					
7				CLAYEY SAND, olive brown (2.5Y 4/4) , 75% fine sand, fines predominantly clay, soft, damp		
8						
9						
10						
11	SB3 -2	3	SP/ SC/ CH	INTERBEDDED SAND, CLAYEY SAND, and CLAY: CLAYEY SAND, as above; SAND, predominantly fine, coarsens downward, moist, grades to: CLAY, black (5Y 2.5/1) trace fine to coarse sand, few rootholes, moderate plasticity, soft, very moist to wet	▽	
12						
13						
14						
15						
16	SB3 -3	8	CH	SILTY CLAY, dark olive gray (5Y 3/2) mottled with dark gray (2.5Y 4/0), few rootholes, some are stained orange, moderate plasticity, faint odor, firm, wet		
17						
18				BOTTOM OF BOREHOLE = 16.5'		
19						
20						
21						

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PROJECT NAME: Owens Corning

BORING NO. SB-4

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-25-8

LOGGED BY: SC

**EXPLORATORY BORING LOG**

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1				Fill: gravelly sand, brown		
2				Fill: clay, black, faint odor, trace sand, damp		
3				Fill: sandy gravel, fine to coarse rounded gravel		
4						
5			SP	SAND, dark yellowish brown (10YR 3/4), predominantly fine sand, trace medium to coarse sand, medium dense, damp, silty at 5-5.5'		
6	SB4 -1	14				
7						
8						
9						
10			SP SM CL	INTERBEDDED SAND, SILTY SAND, and SANDY CLAY: SAND, medium to coarse sand, loose, wet; SILTY SAND, predominantly fine, dark yellowish brown (10YR 3/4), loose, wet; CLAY, black (5Y 2.5/1), trace fine to coarse sand, trace fine gravel, rare rootholes, moderate to high plasticity, firm, very moist to wet	▽	
11	SB4 -2	7				
12						
13						
14						
15						
16	SB4 -3	5		as above, clay becomes silty, olive brown (2.5Y 4/4) with minor orange staining around rare root remains, firm, saturated		
17						
18				BOTTOM OF BOREHOLE = 16.5'		
19						
20						
21						

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PROJECT NAME: Owens Corning

BORING NO. SB-5

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-25-88

EXPLORATORY BORING LOG

LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1			XXXXX	PAVEMENT SECTION: 6" oiled rock		
2				Fill: gravelly sand, brown		
3			CH	SILTY CLAY, black (2.5Y N2/), high plasticity, slight, odor, damp		
4						
5	SB5 -1	14	SP	SAND, very dark grayish brown (2.5Y 3/2), predominantly fine, trace medium to coarse sand, trace silt, few to common rootholes, medium dense, damp		
6						
7			SW	GRAVELLY SAND, olive brown (2.5Y 4/4), fine to coarse angular sand, 25% fine gravel, medium dense, damp		
8				-- becomes clayey at 7'		
9						
10						
11	SB5 -2	6	SP/CH	INTERBEDDED SAND and CLAY: SAND, olive brown (5Y 4/4), predominantly medium sand, 10 to 15% fine sand, trace coarse sand, loose, wet; CLAY, dark olive gray (5Y 3/2) trace sand, trace organic staining, few rootholes, moderate to high plasticity, firm, wet, grades to: CLAY, black (5Y 2.5/1), trace sand, few rootholes, firm, moist	▽	
12						
13						
14						
15						
16	SB5 -3	6		same as above -- interbeds of saturated fine sand in 6" lenses, gravelly sand at shoe		
17						
18				BOTTOM OF BOREHOLE = 16.5'		
19						
20						
21						

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PROJECT NAME: Owens Corning

BORING NO. SB-6

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-25-88

LOGGED BY: SC

**EXPLORATORY BORING LOG**

DEPTH (ft.)	SAMPLE No.	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1			ML	SANDY SILT, very dark brown (10YR 2/2), 20 to 30% fine to coarse sand, damp		
2						
3						
4				-- color change to dark brown (7.5YR 3/2) -- fine gravel in cuttings		
5		6				
6	SB6 -1		SW / SC / SP	INTERBEDDED GRAVELLY SAND, SAND, and CLAYEY SAND, GRAVELLY SAND: medium to coarse sand, trace fine sand, 20% fine subangular gravel, loose, damp; CLAYEY SAND, brown (10YR 4/3), 60% fine sand, trace organic debris, loose, damp; SAND, dark yellowish brown (10 YR 4/4), fine, loose, damp		
7						
8						
9						
10						
11	SB6 -2	9		INTERBEDDED SAND and SANDY CLAY: SAND, as above, become clayey at shoe; SANDY CLAY, dark brown (10YR 3/3), 20 to 30% fine sand, few roots and rootholes, trace black organic staining, trace orange staining, trace organic debris, stiff, very moist		
12						
13						
14						
15						
16	SB6 -3	11		as above -- clay becomes very dark grayish brown (10YR 3/2), few rootholes are wet	▽	
17						
18				BOTTOM OF BOREHOLE = 16.5'		
19						
20						
21						

SUPERVISED AND APPROVED BY R.G./C.E.G.



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PROJECT NAME: Owens Corning

PROJECT NUMBER: 1649 G

p 1 of 2

BORING NO. SB-7

DATE DRILLED: 5-23-88

LOGGED BY: SC

**EXPLORATORY BORING LOG**

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1			GW	SANDY GRAVEL, fine to coarse, fine to coarse sand, tar visible in cuttings		
2			CL	SILTY CLAY, very dark gray (2.5Y 3/0) trace coarse sand strong petroleum odor, stiff, moist (with oil?)		
3						
4						
5			SW	SAND, very dark gray (5Y 3/1), fine to coarse, moderate to strong odor, visible moisture is possibly oil, medium dense, damp to moist		
6	SB7 -1	12		-- becomes clayey at 6'		
7						
8						
9						
10					▽	
11	SB7 -2	8	SP /CL /SW	INTERBEDDED SAND and SILTY CLAY: SAND, very dark gray (5Y 3/1), fine, moderate petroleum odor, loose, saturated, becomes well graded at shoe with trace fine gravel; SILTY CLAY, very dark gray (5Y 3/1), rare roots, rare rootholes are wet, low to moderate plasticity, firm, wet; transition between sand and clay is transitional over 3 to 6 inches		
12						
13						
14						
15						
16	SB7 -3	10		as above -- predominantly silty clay with minor sandy clay, slight to moderate odor, sample yields oil sheen when placed in water		
17						
18						
19						
20						
21	SB7 -4	14	CH	CLAY, black (5Y 2.5/1) rootholes common, few to common roots, high plasticity, slight odor, stiff, moist to wet		

SUPERVISED AND APPROVED BY R.G./C.E.G.



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services, Inc.

PROJECT NAME: Owens Corning

PROJECT NUMBER: 1649 G

p 2 of 2  
BORING NO. SB-7

DATE DRILLED: 5-23-88

EXPLORATORY BORING LOG LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lbs.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
22						
23						
24			CH			
25				as above -- color to olive (5Y 4/3), becomes silty, rare coarse sand, few rootholes are wet and stained gray, faint petroleum odor		
26	SB1 -5	22				
27						
28				BOTTOM OF BOREHOLE = 26.5'		
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						

SUPERVISED AND APPROVED BY R.G./C.E.G.



ensco  
environmental  
services, Inc.

PROJECT NAME: Owens Corning

BORING NO. SB-8

PROJECT NUMBER: 1649 G

DATE DRILLED: 5-23-88

EXPLORATORY BORING LOG

LOGGED BY: SC

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT 140 ft/lps.	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1				Fill: sandy clay, black, slight odor, damp		
2						
3						
4				-- cobbles or debris 3' to 4.5'		
5				-- brick in shoe		
6	SB8 -1	9				
7			SP	SANDS, dark grayish brown (2.5Y 4/2), fine sand, slight odor, loose, damp		
8				-- strong odor in cuttings		
9						
10						
11	SB8 -2	5	CL	SANDY CLAY, very dark gray (5Y 3/1), 25 to 35% fine sand, rare roots, low plasticity, visable product, firm, moist		
12			CH	CLAY, black (2.5Y N2/), trace fine to coarse sand, rare roots, high plasticity, firm, damp		
13						
14						
15					▽	
16	SB8 -3	10	CL	SILTY CLAY, dark gray (5Y 4/1), few rootholes, slight to moderate odor, visable oil in rootholes and surrounding area, stiff, moist to wet		
17						
18			CH	CLAY, olive brown (2.5Y 4/4) with dark gray (N 4/) mottling, few rootholes, rare roots, trace organic debris, oil common in rootholes at 15.5', trace oil in rootholes at 16.5', slight odor, stiff, moist		
19						
20						
21	SB8 -4	8		as above -- becomes sandy, saturated in shoe, rootholes wet		
				BOTTOM OF BOREHOLE = 21.5'		

SUPERVISED AND APPROVED BY R.G./C.E.G.

# Monitoring Well Detail

PROJECT NUMBER 1649G  
 PROJECT NAME Owens Corning  
 COUNTY Alameda  
 WELL PERMIT NO. 88191

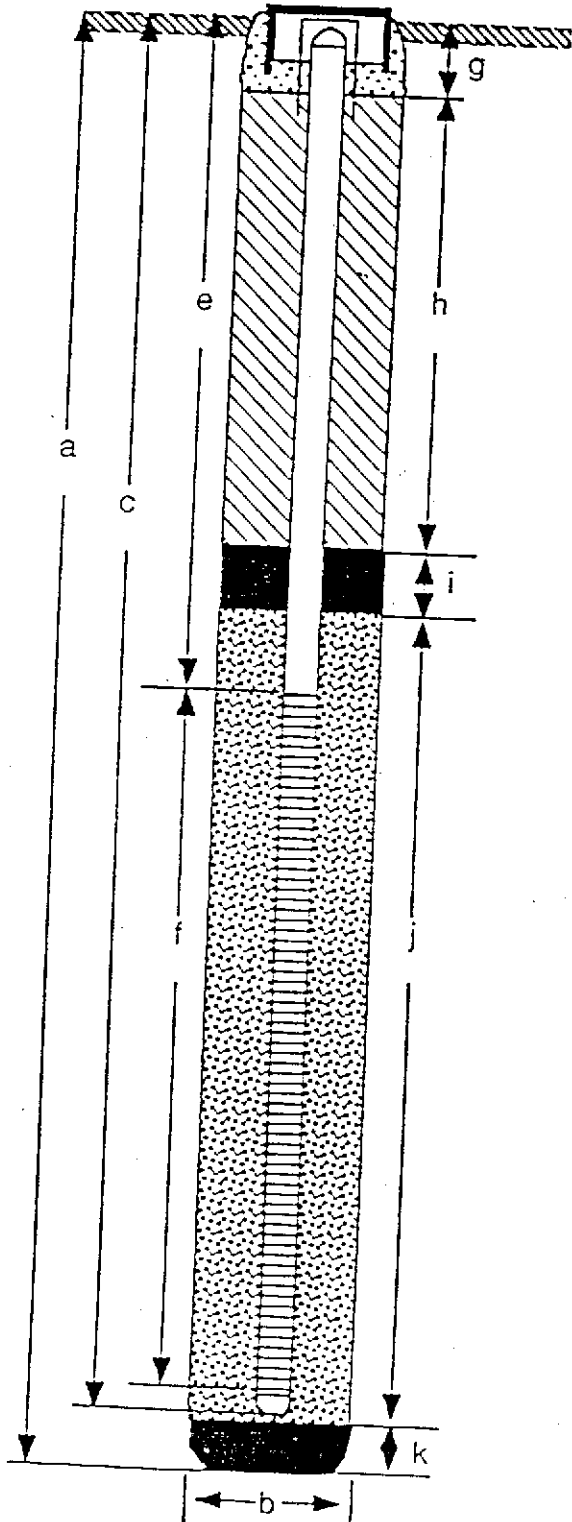
BORING / WELL NO. MW-1  
 TOP OF CASING ELEV. 22.55  
 GROUND SURFACE ELEV. ---  
 DATUM Mean Sea Level

## EXPLORATORY BORING

a. Total Depth 21.5 ft.  
 b. Diameter 8.25 in.  
 Drilling method Hollow Stem Auger

## WELL CONSTRUCTION

c. Casing length 20 ft.  
 Material Schedule 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 8 ft.  
 f. Perforated length 12 ft.  
 Perforated interval from 20 to 8 ft.  
 Perforation type machine slot  
 Perforation size 0.010 in.  
 g. Surface seal --- ft.  
 Seal Material n/a  
 h. Backfill 5 ft.  
 Backfill material Grout  
 i. Seal 1 ft.  
 Seal Material Bentonite  
 j. Gravel pack 14 ft.  
 Pack material 2/12 Monterey Type Sand  
 k. Bottom seal --- ft.  
 Seal material n/a  
 l. Steel Protective Casing With Locking Cover, padlock



# Monitoring Well Detail

PROJECT NUMBER 1649G  
 PROJECT NAME Owens Corning  
 COUNTY Alameda  
 WELL PERMIT NO. 88191

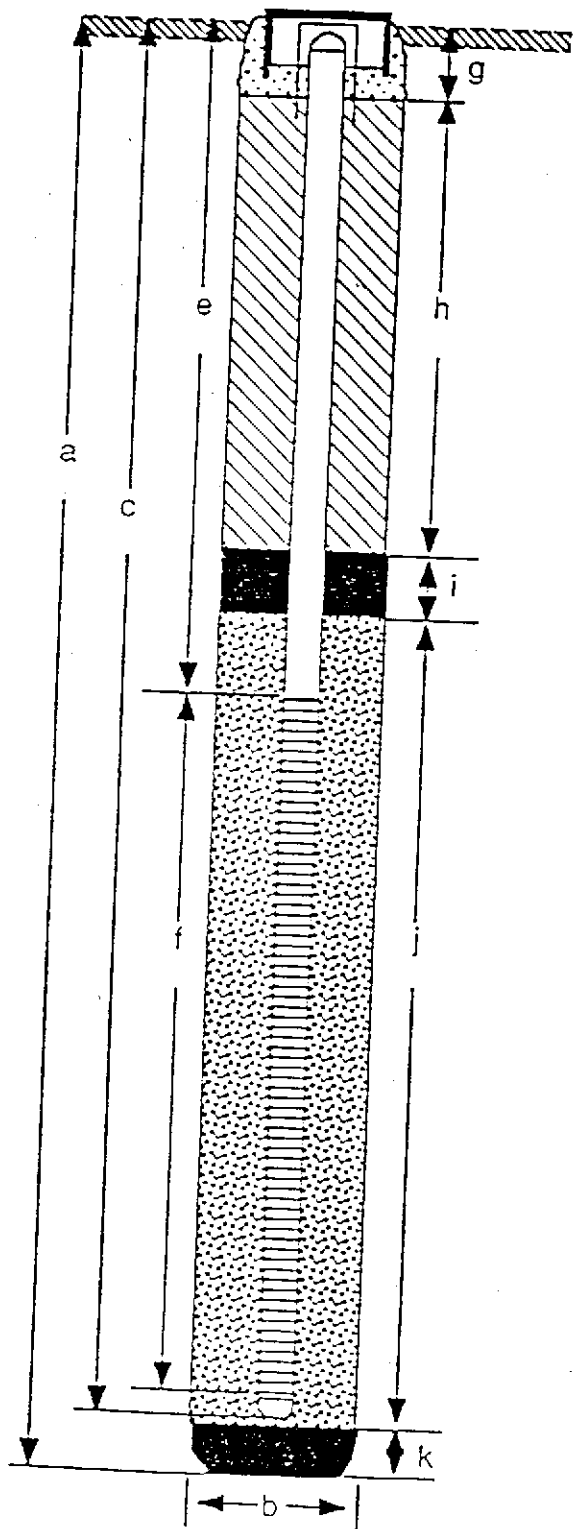
BORING / WELL NO. MW-2  
 TOP OF CASING ELEV. 21.34  
 GROUND SURFACE ELEV. 21.91  
 DATUM Mean Sea Level

## EXPLORATORY BORING

a. Total Depth 21.5 ft.  
 b. Diameter 8.25 in.  
 Drilling method Hollow Stem Auger

## WELL CONSTRUCTION

c. Casing length 20 ft.  
 Material Schedule 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 8 ft.  
 f. Perforated length 12 ft.  
 Perforated interval from 20 to 8 ft.  
 Perforation type machine slot  
 Perforation size 0.010 in.  
 g. Surface seal 1 ft.  
 Seal Material concrete  
 h. Backfill 4 ft.  
 Backfill material Grout  
 i. Seal 1 ft.  
 Seal Material Bentonite  
 j. Gravel pack 14 ft.  
 Pack material 2/12 Monterey Type Sand  
 k. Bottom seal -- ft.  
 Seal material n/a  
 l. Steel Protective Casing With Locking Cover, padlock, F-8 christy box



# Monitoring Well Detail

PROJECT NUMBER 1649G  
 PROJECT-NAME Owens Corning  
 COUNTY Alameda  
 WELL PERMIT NO. 88191

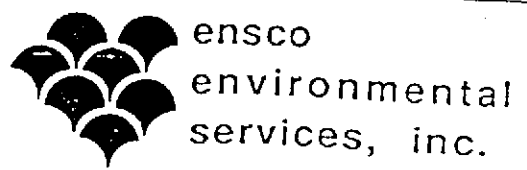
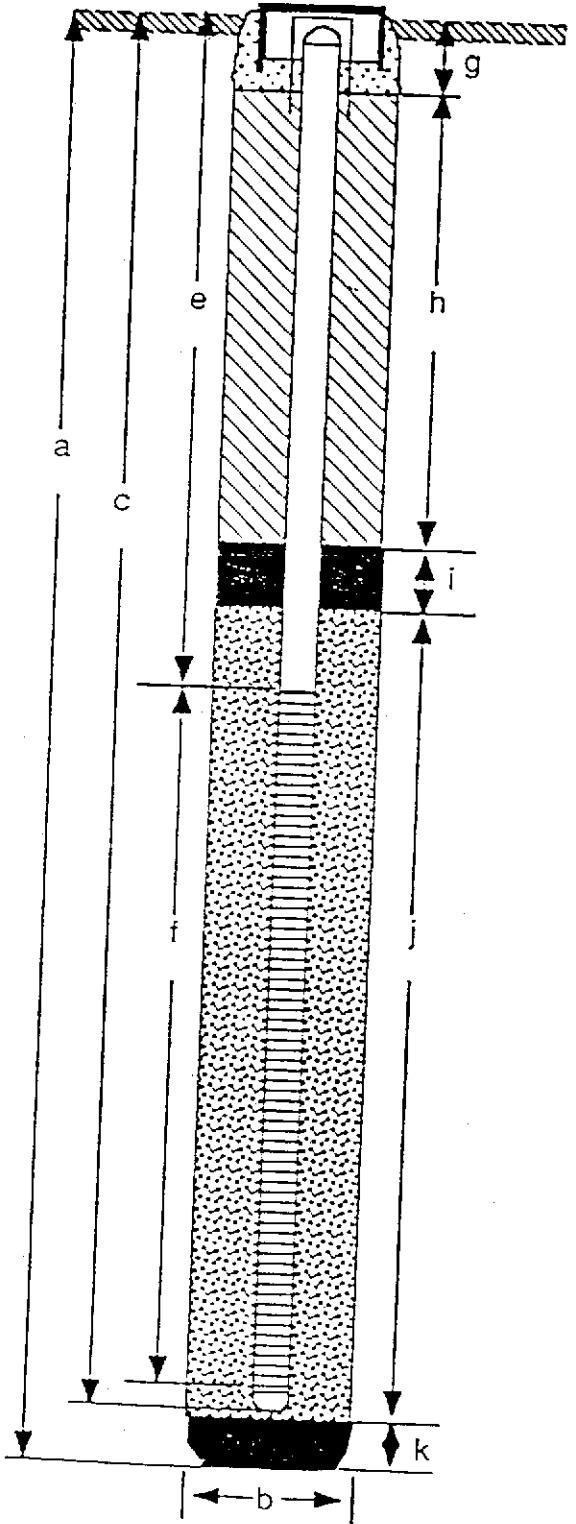
BORING / WELL NO. MW-3  
 TOP OF CASING ELEV. 26.79  
 GROUND SURFACE ELEV. ---  
 DATUM Mean Sea Level

## EXPLORATORY BORING

a. Total Depth 21.5 ft.  
 b. Diameter 8.25 in.  
 Drilling method Hollow Stem Auger

## WELL CONSTRUCTION

c. Casing length 20 ft.  
 Material Schedule 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 10 ft.  
 f. Perforated length 12 ft.  
 Perforated interval from 20 to 8 ft.  
 Perforation type machine slot  
 Perforation size 0.010 in.  
 g. Surface seal --- ft.  
 Seal Material n/a  
 h. Backfill 6 ft.  
 Backfill material Grout  
 i. Seal 1 ft.  
 Seal Material Bentonite  
 j. Gravel pack 13 ft.  
 Pack material 2/12 Monterey Type Sand  
 k. Bottom seal --- ft.  
 Seal material n/a  
 l. Steel Protective Casing With Locking Cover, padlock





# Monitoring Well Detail

PROJECT NUMBER 1649G  
 PROJECT NAME Owens Corning  
 COUNTY Alameda  
 WELL PERMIT NO. 88191

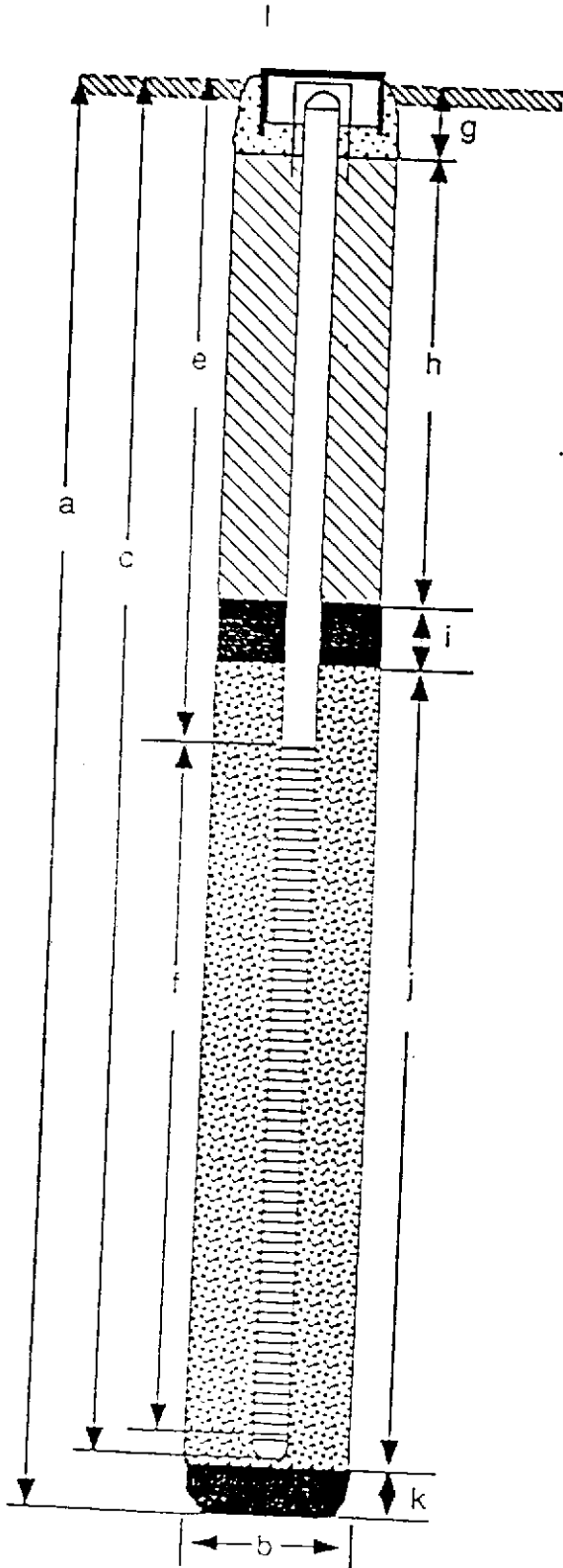
BORING / WELL NO. MW-4  
 TOP OF CASING ELEV. 26.09  
 GROUND SURFACE ELEV. ---  
 DATUM Mean Sea Level

## EXPLORATORY BORING

a. Total Depth 21.5 ft.  
 b. Diameter 8.25 in.  
 Drilling method Hollow Stem Auger

## WELL CONSTRUCTION

c. Casing length 20 ft.  
 Material Schedule 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 8 ft.  
 f. Perforated length 12 ft.  
 Perforated interval from 20 to 8 ft.  
 Perforation type machine slot  
 Perforation size 0.010 in.  
 g. Surface seal --- ft.  
 Seal Material n/a  
 h. Backfill 5 ft.  
 Backfill material Grout  
 i. Seal 1 ft.  
 Seal Material Bentonite  
 j. Gravel pack 14 ft.  
 Pack material 2/12 Monterey Type Sand  
 k. Bottom seal --- ft.  
 Seal material n/a  
 l. Steel Protective Casing With Locking Cover, padlock



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# Monitoring Well Detail

PROJECT NUMBER 1649G  
 PROJECT NAME Owens Corning  
 COUNTY Alameda  
 WELL PERMIT NO. 88191

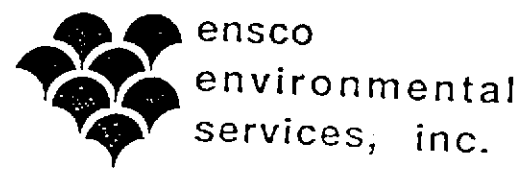
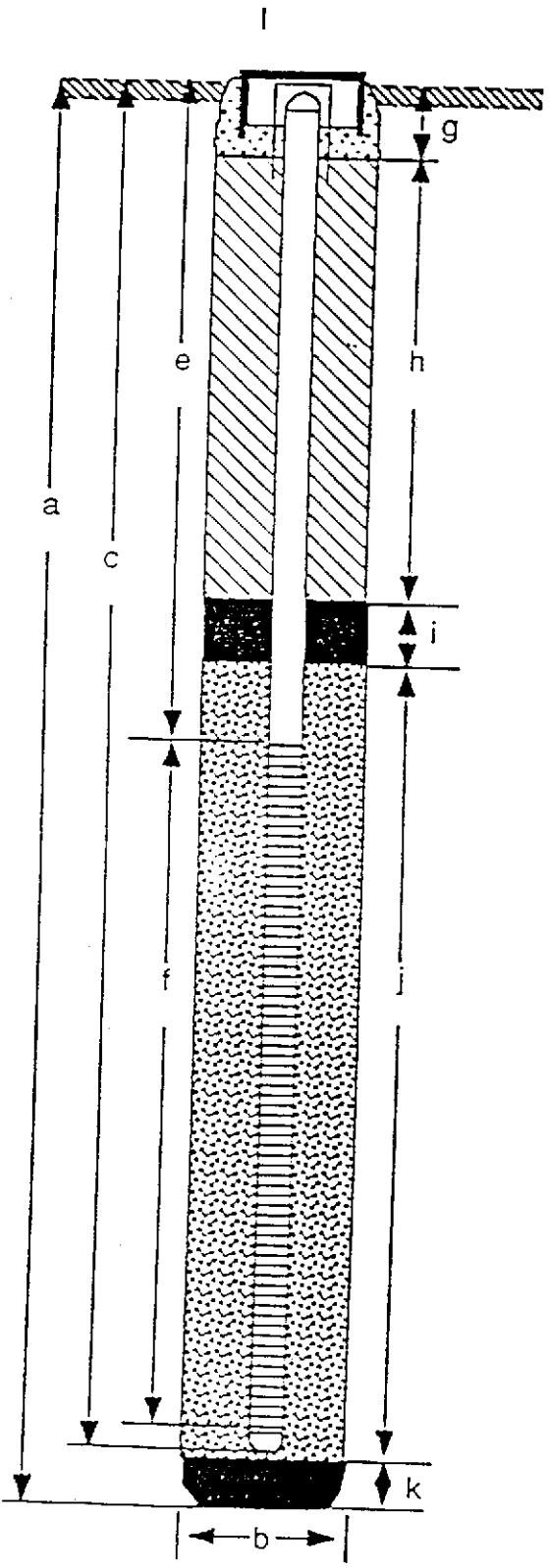
BORING / WELL NO. MW-5  
 TOP OF CASING ELEV. 25.40  
 GROUND SURFACE ELEV. ---  
 DATUM Mean Sea Level

## EXPLORATORY BORING

a. Total Depth 21.5 ft.  
 b. Diameter 8.25 in.  
 Drilling method Hollow Stem Auger

## WELL CONSTRUCTION

c. Casing length 20 ft.  
 Material Schedule 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 7.5 ft.  
 f. Perforated length 12.5 ft.  
 Perforated interval from 20 to 7.5 ft.  
 Perforation type machine slot  
 Perforation size 0.010 in.  
 g. Surface seal --- ft.  
 Seal Material n/a  
 h. Backfill 4.5 ft.  
 Backfill material Grout  
 i. Seal 1 ft.  
 Seal Material Bentonite  
 j. Gravel pack 14.5 ft.  
 Pack material 2/12 Monterey Type Sand  
 k. Bottom seal --- ft.  
 Seal material n/a  
 l. Steel Protective Casing With Locking Cover, padlock



# Monitoring Well Detail

PROJECT NUMBER 1649G  
 PROJECT NAME Owens Corning  
 COUNTY Alameda  
 WELL PERMIT NO. 88191

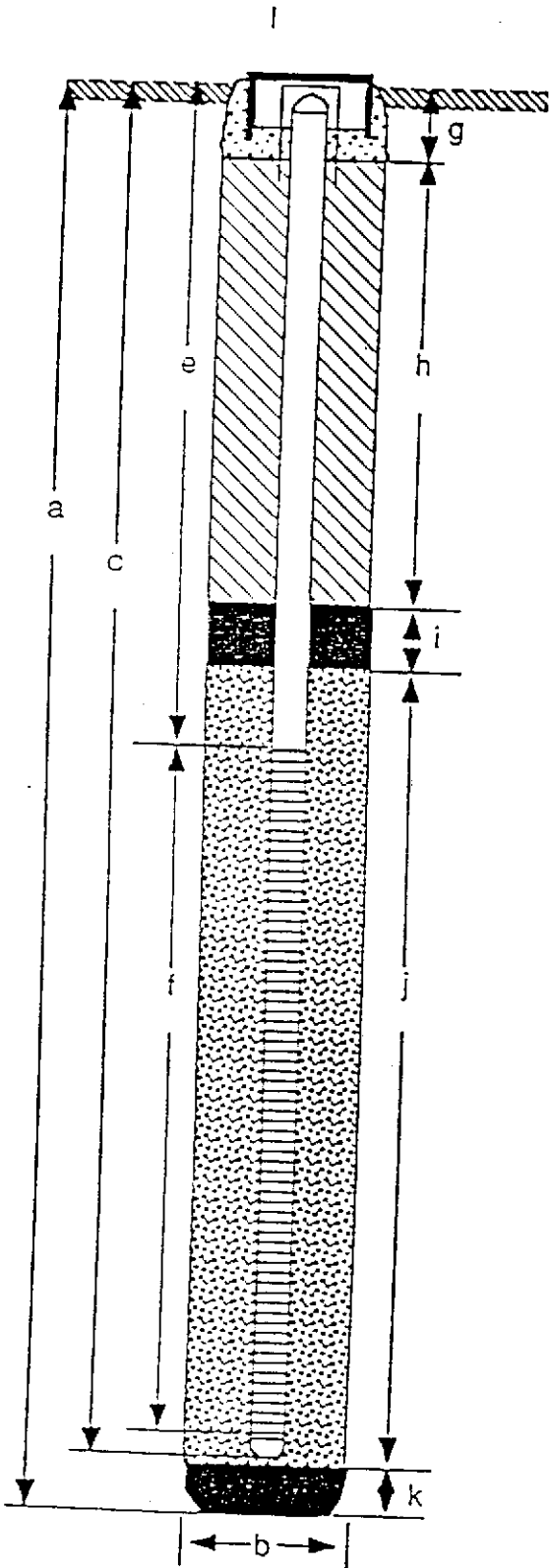
BORING / WELL NO. MW-6  
 TOP OF CASING ELEV. 24.85  
 GROUND SURFACE ELEV. ---  
 DATUM Mean Sea Level

## EXPLORATORY BORING

a. Total Depth 21.5 ft.  
 b. Diameter 8.25 in.  
 Drilling method Hollow Stem Auger

## WELL CONSTRUCTION

c. Casing length 20 ft.  
 Material Schedule 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 8 ft.  
 f. Perforated length 12 ft.  
 Perforated interval from 20 to 8 ft.  
 Perforation type machine slot  
 Perforation size 0.010 in.  
 g. Surface seal --- ft.  
 Seal Material n/a  
 h. Backfill 5 ft.  
 Backfill material Grout  
 i. Seal 1 ft.  
 Seal Material Bentonite  
 j. Gravel pack 14 ft.  
 Pack material 2/12 Monterey Type Sand  
 k. Bottom seal --- ft.  
 Seal material n/a  
 l. Steel Protective Casing With Locking Cover, padlock



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# Monitoring Well Detail

PROJECT NUMBER 1649G  
 PROJECT NAME Owens Corning  
 COUNTY Alameda  
 WELL PERMIT NO. 88191

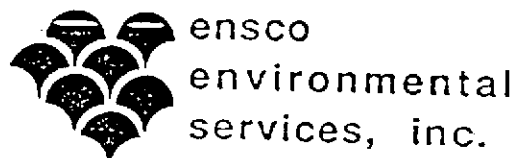
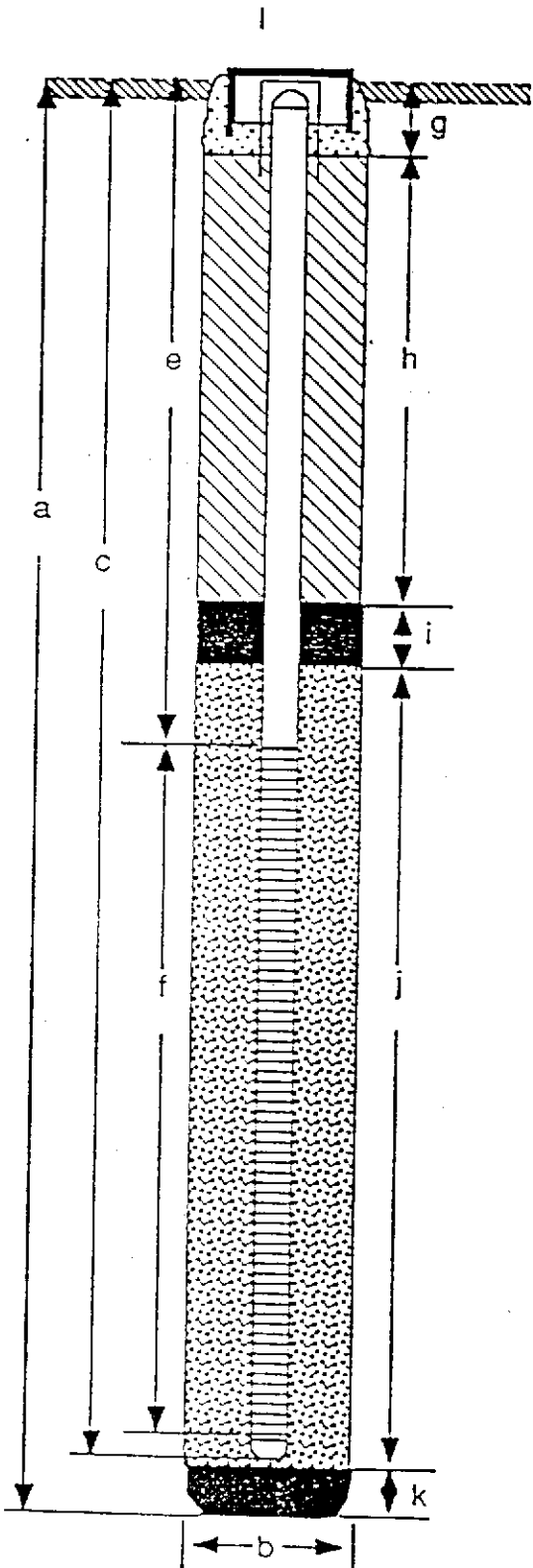
BORING / WELL NO. MW-7  
 TOP OF CASING ELEV. 25.02  
 GROUND SURFACE ELEV. 25.97  
 DATUM Mean Sea Level

## EXPLORATORY BORING

a. Total Depth 21.5 ft.  
 b. Diameter 8.25 in.  
 Drilling method Hollow Stem Auger

## WELL CONSTRUCTION

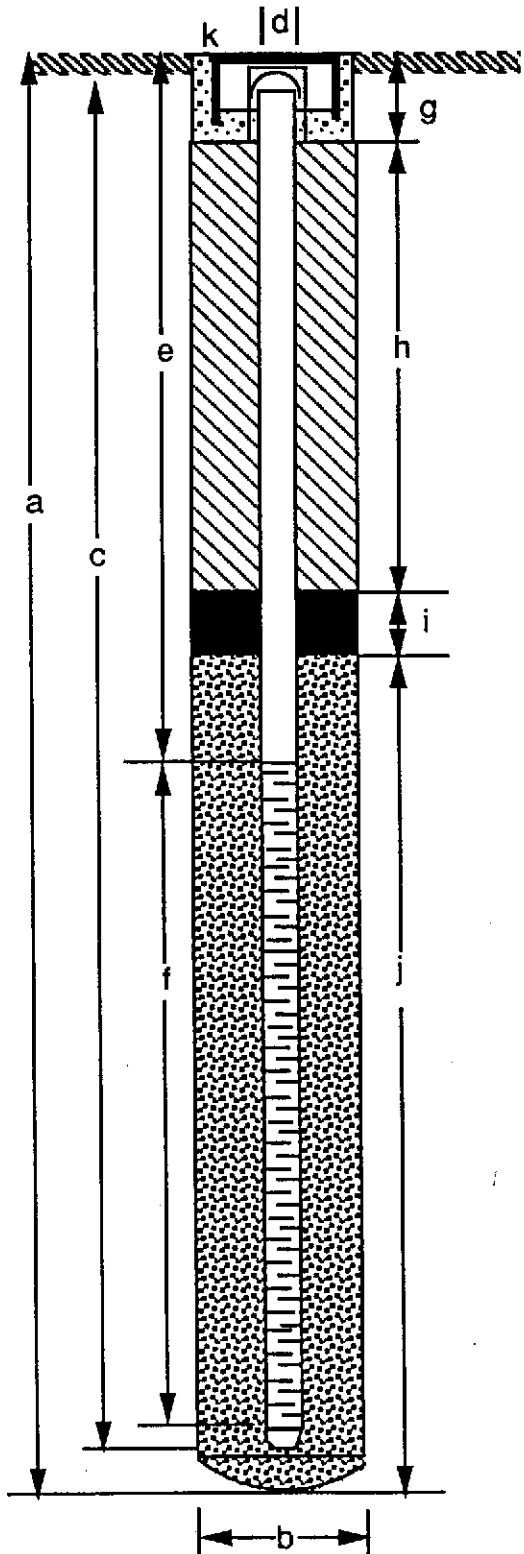
c. Casing length 20 ft.  
 Material Schedule 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 8 ft.  
 f. Perforated length 12 ft.  
 Perforated interval from 20 to 8 ft.  
 Perforation type machine slot  
 Perforation size 0.010 in.  
 g. Surface seal 1 ft.  
 Seal Material concrete  
 h. Backfill 4 ft.  
 Backfill material Grout  
 i. Seal 1 ft.  
 Seal Material Bentonite  
 j. Gravel pack 14 ft.  
 Pack material 2/12 Monterey Type Sand  
 k. Bottom seal --- ft.  
 Seal material n/a  
 l. Steel Protective Casing With Locking Cover, padlock, F-8 christy box



# Monitoring Well Detail

PROJECT NUMBER 4751F  
 PROJECT NAME Owens Corning  
 COUNTY Alameda  
 WELL PERMIT NO. 90507

BORING / WELL NO. OCF-9  
 TOP OF CASING ELEV. ---  
 GROUND SURFACE ELEV. ---  
 DATUM ---



## EXPLORATORY BORING

a. Total depth 21.5 ft.  
 b. Diameter 8 in.  
 Drilling method Hollow Stem Auger

## WELL CONSTRUCTION

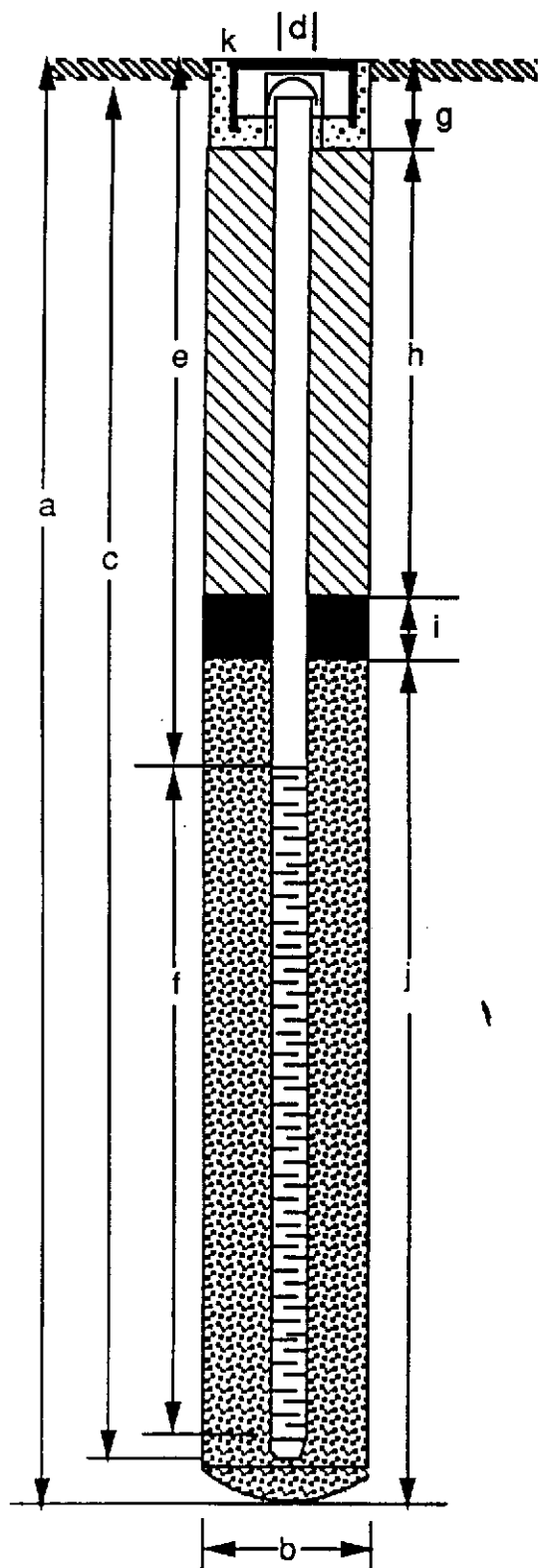
c. Casing length 24.5 ft.  
 Material Sch. 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 14 ft.  
 f. Perforated length 7.5 ft.  
 Perforated interval from 14 to 21.5 ft.  
 Perforation type Machine Slotted  
 Perforation size 0.020 in.  
 g. Surface seal 2 ft.  
 Seal material 2'-15' Bentonite, 1.5-0' Cement  
 h. Backfill 10 ft.  
 Backfill material Neat Cement Grout  
 i. Seal 1 ft.  
 Seal material Bentonite  
 j. Gravel pack 8.5 ft.  
 Pack material Clean 2/12 Sand  
 k. 5 foot standpipe set into bentonite and cement, 2 ft. below grade, 3 ft. above grade



# Monitoring Well Detail

PROJECT NUMBER 4751F  
 PROJECT NAME Owens Corning  
 COUNTY Alameda  
 WELL PERMIT NO. 90507

BORING / WELL NO. OCF-10  
 TOP OF CASING ELEV. ---  
 GROUND SURFACE ELEV. ---  
 DATUM ---



## EXPLORATORY BORING

- a. Total depth 21.5 ft.  
 b. Diameter 8 in.  
 Drilling method Hollow Stem Auger

## WELL CONSTRUCTION

- c. Casing length 24.5 ft.  
 Material Sch. 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 14 ft.  
 f. Perforated length 7.5 ft.  
 Perforated interval from 14 to 21.5 ft.  
 Perforation type Machine Slotted  
 Perforation size 0.020 in.  
 g. Surface seal 2 ft.  
 Seal material 2'-1.5' Bentonite, 1.5'-0' Cement  
 h. Backfill 10 ft.  
 Backfill material Neat Cement Grout  
 i. Seal 1 ft.  
 Seal material Bentonite  
 j. Gravel pack 8.5 ft.  
 Pack material Clean 2/12 Sand  
 k. 5 foot standpipe set into bentonite and cement, 2 ft. below grade, 3 ft. above grade



# Monitoring Well Detail

PROJECT NUMBER 1719G  
 PROJECT NAME Owens Corning Fiberglas  
 COUNTY Alameda  
 WELL PERMIT NO. \_\_\_\_\_

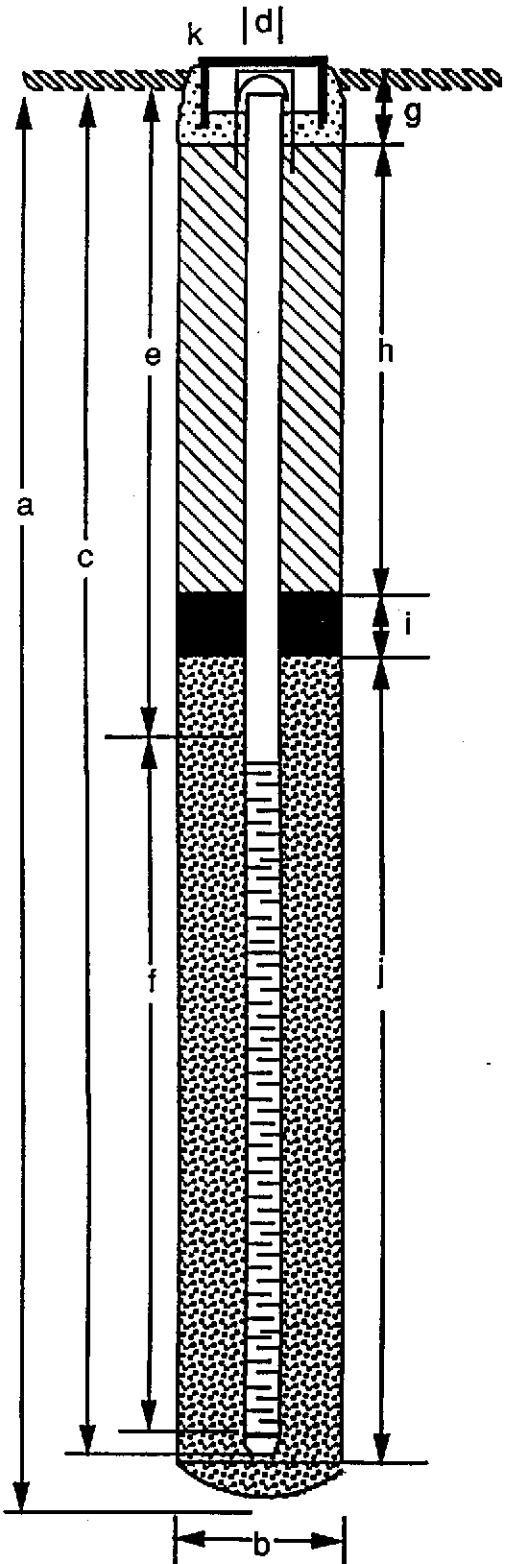
BORING / WELL NO. MW-8  
 TOP OF CASING ELEV. 22.40  
 GROUND SURFACE ELEV. 22.70  
 DATUM Mean Sea Level

## EXPLORATORY BORING

- a. Total Depth 20 ft.  
 b. Diameter 8 in.  
 Drilling method hollow stem auger

## WELL CONSTRUCTION

- c. Casing length 20 ft.  
 Material schedule 40 PVC  
 d. Diameter 2 in.  
 e. Depth to top perforations 10 ft.  
 f. Perforated length 10 ft.  
 Perforated interval from 10 to 20 ft.  
 Perforation type machine slotted  
 Perforation size 0.010 in.  
 g. Surface seal 1 ft.  
 Seal Material concrete  
 h. Backfill 6 ft.  
 Backfill material neat cement  
 i. Seal 1 ft.  
 Seal Material \_\_\_\_\_  
 j. Gravel pack 12 ft.  
 Pack material #2/12 Sand  
 k. G-5 traffic box, steel locking  
cover, padlock



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**services, inc.**



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# EXPLORATORY BORING LOG



PROJECT NAME: Owens Corning Fiberglas  
2001 Marina Blvd.  
San Leandro, CA

BORING NO. MW-8

DATE DRILLED: 10/18/89

PROJECT NUMBER: 1719G

LOGGED BY: C.V.

DEPTH (ft.)	SAMPLE No	BLOWS/FOOT	UNIFIED SOIL CLASSIFICATION	SOIL DESCRIPTION	WATER LEVEL	OVA READING ppm
1	MW-8-1	11	ML	CLAYEY SILT, dark black gray(5B 4/1), 10-20% silt, stiff, damp		
2			SM	SILTY SAND, dark black gray (5B 4/1), 10-15% silt, very fine to fine sand, medium dense, damp		
3	MW-8-2	9	CL	SILTY CLAY, dark gray (5Y 4/1), 20-30% silt, low plasticity, firm, damp		
4			SM	SILTY SAND, dark gray (5Y 4/1), 10-15% silt, very fine to coarse sand, loose, moist to wet		
5			CH	CLAY, black (7.5YR 2/0), trace coarse sand, high plasticity, stiff, damp		
6	MW-8-3	12	CL	SANDY CLAY, dark green gray (5GY 4/1), 5-10% silt, 20-30% very fine to medium sand, damp to moist	 	
7			CH	CLAY, dark green gray (5GY 4/1), high plasticity, stiff, damp		
8			CL	GRAVELLY CLAY, dark green gray (5GY 4/1), 15-20% fine gravel, 10-15% fine sand, 10-15% silt, stiff, wet		
9			CH	CLAY, dark green gray (5GY 4/1), trace sand, high plasticity, stiff, moist		
10		10 (SP)		abundant rootholes, 20-30% fine to medium sand, damp		
				Bottom of boring = 21.5 feet		

Note: S P - standard penetration sampler

REVIEWED BY R.G./C.E.G.

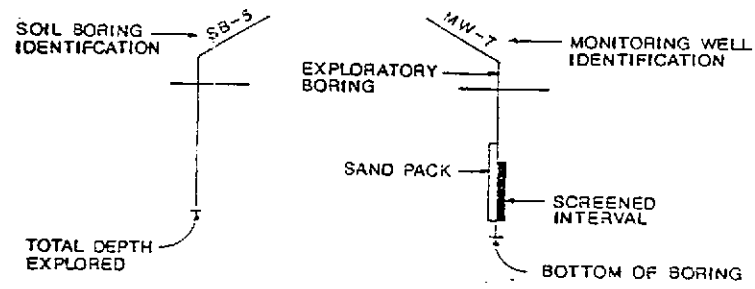
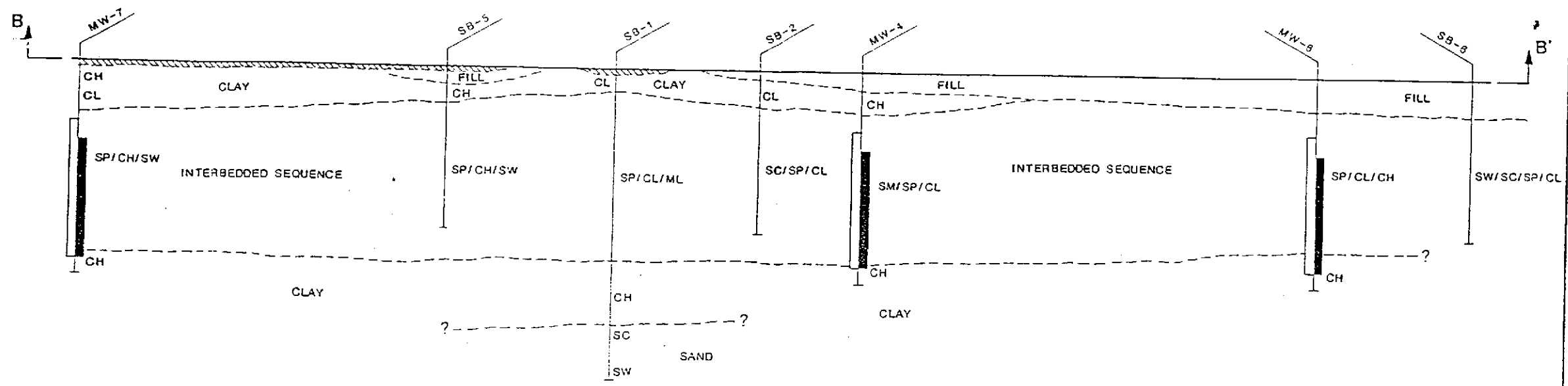
APPENDIX B

APPENDIX C

APPENDIX D

APPENDIX E




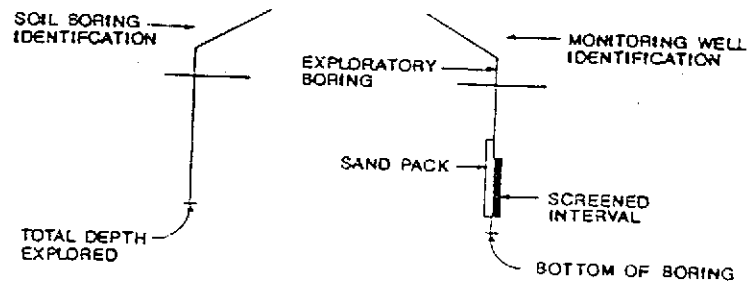
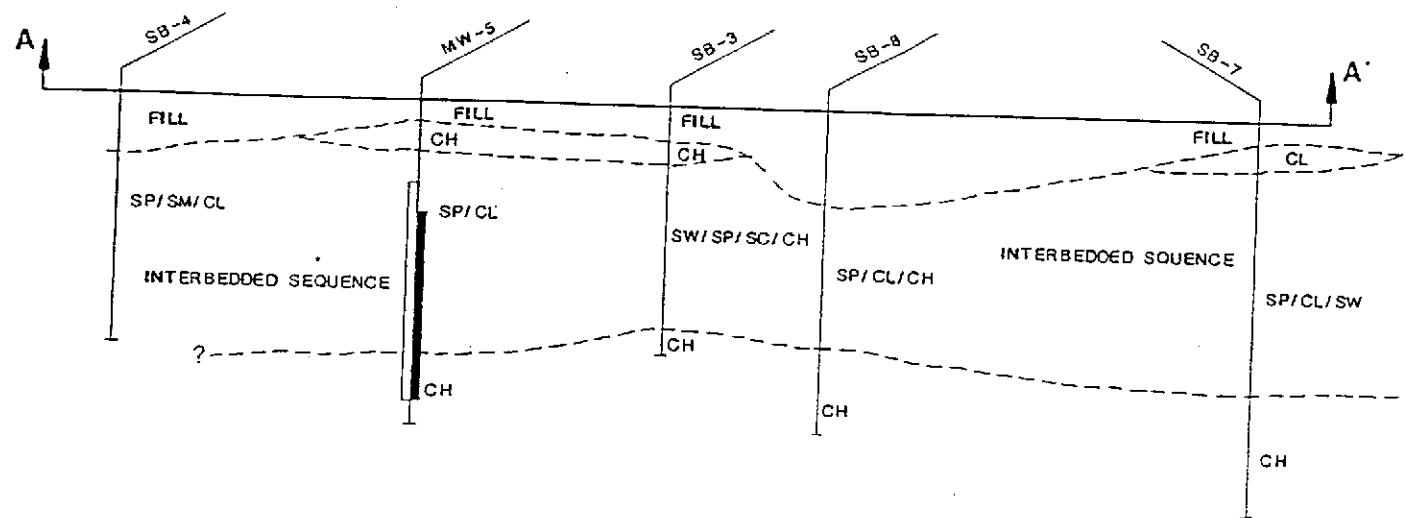


PAVEMENT SECTION, ASPHALT CONCRETE  
OILED ROCK

- CH CLAY, HIGH PLASTICITY
  - CL CLAY, LOW PLASTICITY
  - SC CLAYEY SAND
  - SP SAND, POORLY GRADED
  - SW SAND, WELL GRADED
  - SM SILTY CLAY
  - ML SILT, LOW PLASTICITY
  - SC/SP/CL INTERBEDDED SEQUENCE WITH OBSERVED SOILS NOTED
- SCALE:  
HORIZONTAL: 1 INCH = 60 FEET  
VERTICAL: 1 INCH = 10 FEET

NOTE:  
Stratigraphic contact lines represent approximate boundaries between soil types and the transitions may be gradual.

	<b>GEOLOGIC CROSS-SECTION B-B'</b>		REVIEWED BY:	APPROVED BY:
	OWENS-CORNING FIBERGLAS			
	2001 MARINA BOULEVARD		DATE # 1649G	DESIGNED BY J.C.
SAN LEANDRO, CALIFORNIA		DATE 6-24-88	DRAWN BY FIG 5	



- CH CLAY, HIGH PLASTICITY
- CL CLAY, LOW PLASTICITY
- SC CLAYEY SAND
- SP SAND, POORLY GRADED
- SW SAND, WELL GRADED
- SM SILTY CLAY
- ML SILT, LOW PLASTICITY

SC/SP/CL INTERBEDDED SEQUENCE WITH OBSERVED SOILS NOTED

SCALE:

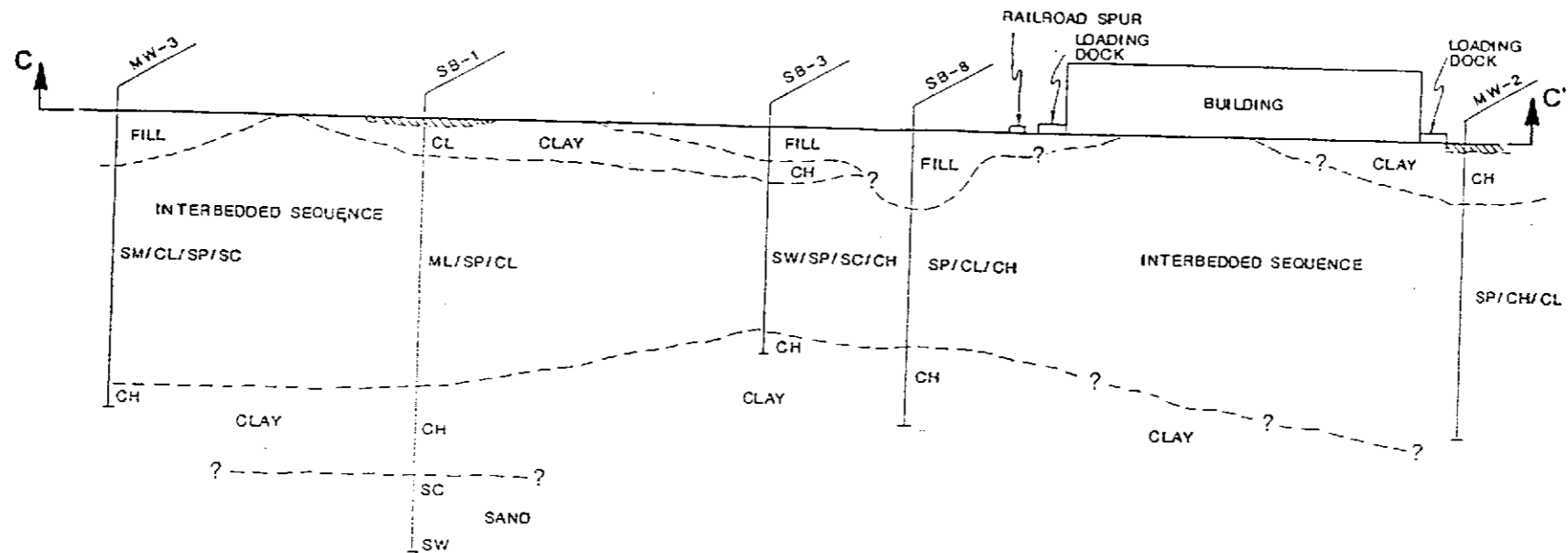
HORIZONTAL: 1 INCH = 80 FEET  
 VERTICAL: 1 INCH = 10 FEET

**NOTE**  
 Stratigraphic contact lines represent approximate boundaries between soil types and the transitions may be gradual.



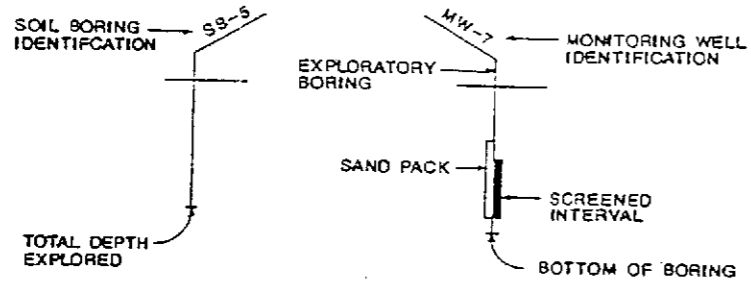
**GEOLOGIC CROSS-SECTION A-A'**

OWENS-CORNING FIBERGLAS		REVIEWED BY:	APPROVED BY:
2001 MARINA BOULEVARD		JOB #:	DRAWN BY:
SAN LEANDRO, CALIFORNIA		1649G	J.C.
		DATE:	DRAWING #:
		7-6-88	FIG 4



- CH CLAY, HIGH PLASTICITY
- CL CLAY, LOW PLASTICITY
- SC CLAYEY SAND
- SM SILTY CLAY
- SP SAND, POORLY GRADED
- SW SAND, WELL GRADED
- ML SILT, LOW PLASTICITY

SC/SP/CL INTERBEDDED SEQUENCE WITH OBSERVED SOILS NOTED



PAVEMENT SECTION, ASPHALT CONCRETE  
OILED ROCK

SCALE:

HORIZONTAL: 1 INCH = 80 FEET  
VERTICAL: 1 INCH = 10 FEET

**NOTE:**

Stratigraphic contact lines represent approximate boundaries between soil types and the transitions may be gradual.



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**GEOLOGIC CROSS-SECTION C-C'**

OWENS-CORNING FIBERGLAS

2001 MARINA BOULEVARD

SAN LEANDRO, CALIFORNIA

REVIEWED BY:

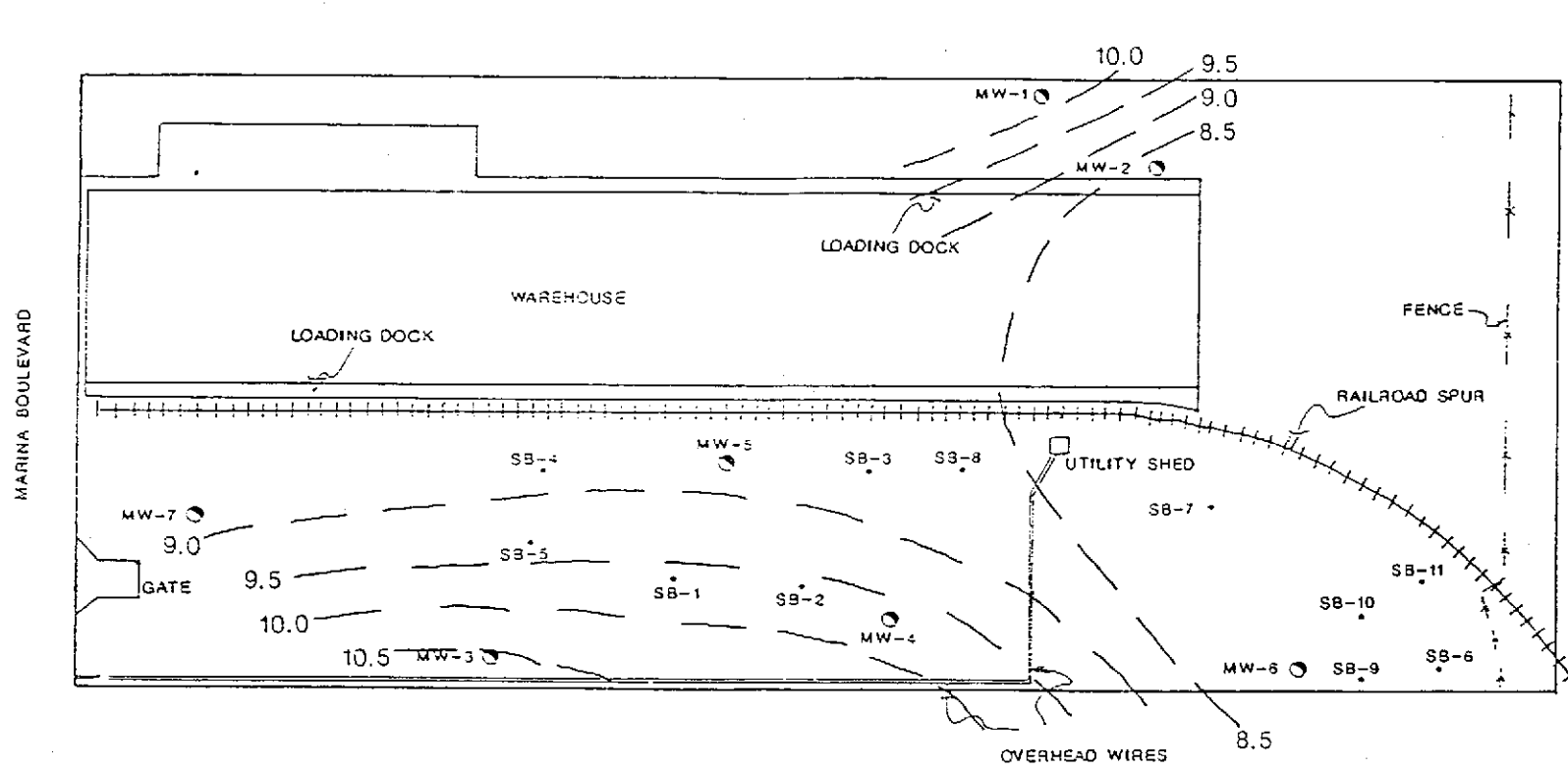
APPROVED BY:

DATE  
1649G

DATE  
J.C.

DATE  
6-24-88

DATE  
FIG 6



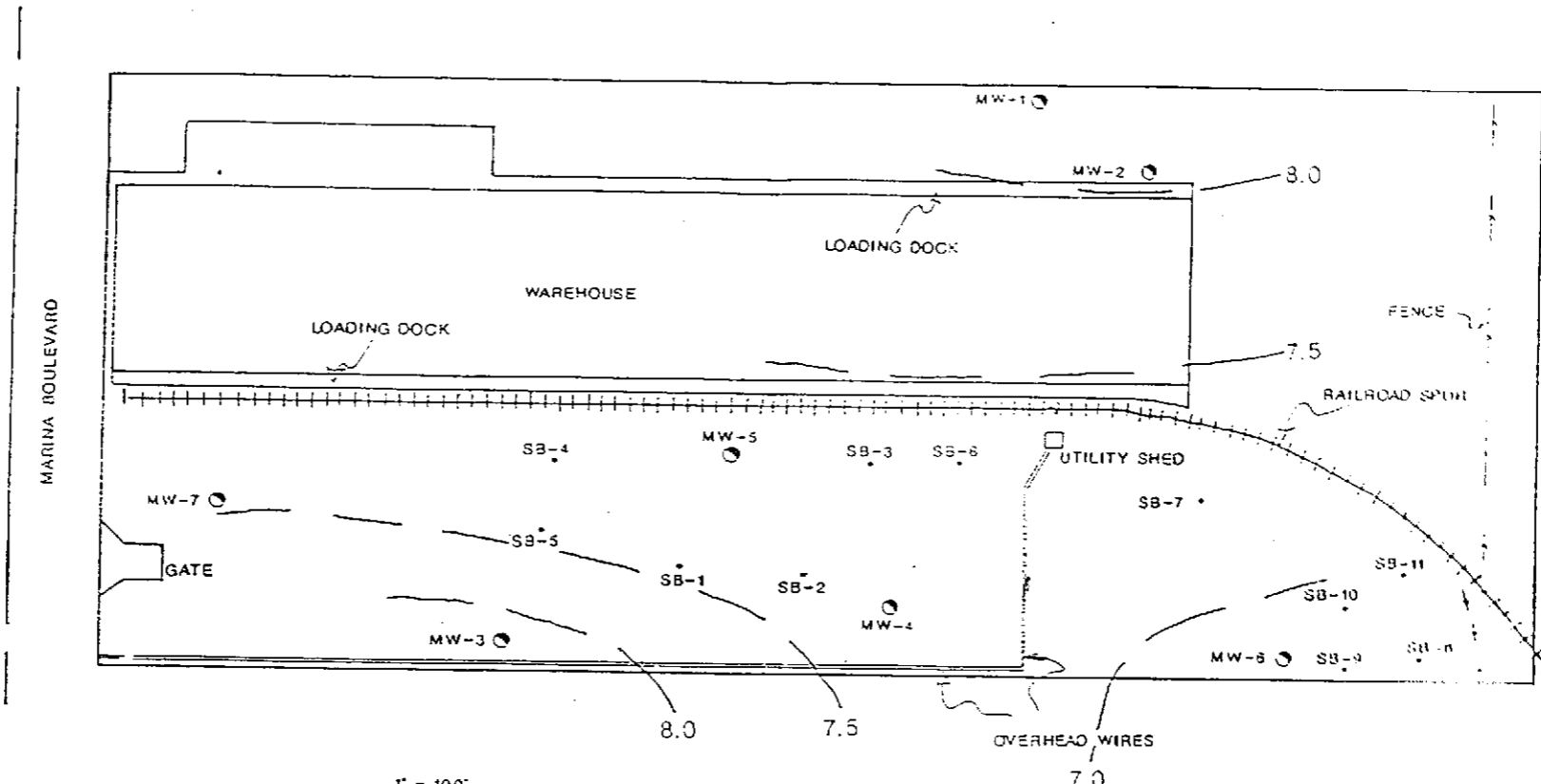
1" = 100'



- MW-4 MONITORING WELL
- SB-5 SOIL BORING
- 8.5 GROUND-WATER CONTOUR AND ELEVATION



<b>GROUND-WATER CONTOUR MAP</b>		REVIEWED BY:	APPROVED BY:
OWENS-CORNING FIBERGLAS			
2001 MARINA BOULEVARD		JOB # 1649G	DRAWN BY SC
SAN LEANDRO, CALIFORNIA		DATE 6/27/88	DRAWING # FIG 7



- MW-1 MONITORING WELL
- SB-1 SOIL BORING
- GROUND-WATER CONTOUR AND ELEVATION MEASURED JUNE 22, 1988



<b>GROUND-WATER CONTOUR MAP</b>		REVIEWED BY:	APPROVED BY:
OWENS-CORNING FIBERGLAS			
2001 MARINA BOULEVARD		DATE:	DRAWN BY:
SAN LEANDRO, CALIFORNIA		6/27/88	SC
			DRAWING #:
			FIG 8