

ALAMEDA COUNTY
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



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

August 22, 2008

J.W. Silveira
C/o Virginia Tracy
J.W. Silveira Realty
499 Embarcadero
Oakland, CA 94606

Subject: Fuel Leak Case No. RO0000388, and Geotracker Global ID T0600101294, Harley Davidson, 744 East 12th Street, Oakland, CA – Case Closure

Dear Mr. Silveira:

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

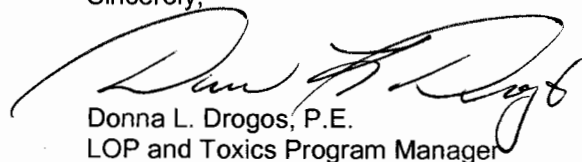
SITE INVESTIGATION AND CLEANUP SUMMARY

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

- Total petroleum hydrocarbons as gasoline remain in soil at concentrations up to 1,300 ppm.
- MTBE remains in shallow groundwater at concentrations up to 250 ppb.
- Case closure for the fuel leak site is granted for commercial land use only. If a change in land use to residential or other conservative scenario occurs at this property, Alameda County Environmental Health must be notified and the case needs to be re-evaluated.

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

Sincerely,



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

Enclosures:

1. Remedial Action Completion Certificate
2. Case Closure Summary

cc:

Ms. Cherie McCaulou
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

Mr. Leroy Griffin (w/enc)
City of Oakland Fire Department
250 Frank Ogawa Plaza
Suite 3341
Oakland, CA 94612

Mr. Paul King (w/o enc)
P & D Environmental
55 Santa Clara Avenue, Suite 240
Oakland, CA 94610

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



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REMEDIAL ACTION COMPLETION CERTIFICATION

August 22, 2008

J.W. Silveira
C/o Virginia Tracy
J.W. Silveira Realty
499 Embarcadero
Oakland, CA 94606

Subject: Fuel Leak Case No. RO0000388, and Geotracker Global ID T0600101294, Harley Davidson, 744 East 12th Street, Oakland, CA – Case Closure

Dear Mr. Silveira:

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

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

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

Sincerely,


Ariu Levi
Director
Alameda County Environmental Health

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

I. AGENCY INFORMATION

Date: October 18, 2005

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

II. CASE INFORMATION

Site Facility Name: Harley Davidson		
Site Facility Address: 744 East 12 th Street Oakland, CA		
RB Case No.: 01-2340	Local Case No.:	LOP Case No.: RO0000388
URF Filing Date: April 18, 1996	SWEEPS No.: ---	APN: 084A-0112-017-02
Responsible Parties	Addresses	Phone Numbers
J.W. Silveira	Virginia Tracey, Silveira Company, 499 Embarcadero, Oakland, CA 94606	510-834-9810

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	500	Gasoline	Removed	April 3, 1996
Piping			Most piping was removed. Short piping section adjacent to building left in place.	April 3, 1996

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Holes up to 1/2-inch in diameter observed during removal.	
Site characterization complete? Yes	Date Approved By Oversight Agency: -----

Monitoring wells installed? Yes	Number: 3	Proper screened interval? Yes
Highest GW Depth Below Ground Surface: 8'	Lowest Depth: 10'	Flow Direction: Southwest
Most Sensitive Current Use: Potential drinking water source.		

Summary of Production Wells in Vicinity: No potential receptor wells have been identified within 1/2-mile of the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain Groundwater Basin
Is surface water affected? No	Nearest SW Name: Oakland Inner Harbor
Off-Site Beneficial Use Impacts (Addresses/Locations): No	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health (and Oakland Fire Department)

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL			
Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	1 500-gallon UST	Removed	April 3, 1996
Piping	Unknown	Removed	April 3, 1996
Free Product	None	Not applicable	---
Soil	None	---	---
Groundwater	None	---	---

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONS BEFORE AND AFTER CLEANUP
 (Please see Attachments 1 through 5 for additional information on contaminant locations and concentrations)

Contaminant	Soil (ppm)		Water (ppb)	
	Before	After	Before	After
TPH (Gas)	1,300	1,300	<50	<50
TPH (Diesel)	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Oil & Grease	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed
Benzene	16	16	2.4	2.4
Toluene	60	60	<0.5	<0.5
Ethylbenzene	28	28	<0.5	<0.5
Xylenes	120	120	<0.5	<0.5
Heavy Metals *	6.8	6.8	Not Analyzed	Not Analyzed
MTBE **	0.95	0.95	250	250
Other (8240/8270)	Not Analyzed	Not Analyzed	Not Analyzed	Not Analyzed

*Lead concentration. No other metals were analyzed.
 **MTBE was the only fuel oxygenate analyzed.

Site History and Description of Corrective Actions:

One steel, single-walled 500-gallon UST and piping was removed on April 3, 1996. The tank was rusted with several holes on the top, corrosion holes along the seam, and a one-half inch hole in the bottom of the tank at the fill end (east). Soil below the tank was discolored and had a gasoline odor. Soil around the tank was overexcavated and five soil samples were collected from the walls and bottom of the excavation. TPH as gasoline was detected at a maximum concentration of 1,300 milligrams per kilogram (mg/kg) in a soil sample collected at a depth of 10 feet below ground surface (bgs).

Soil samples were collected from five soil borings and grab groundwater samples were collected from three soil borings in 1999. TPH and BTEX were not detected in any of the soil samples. MTBE was detected in two soil samples at concentrations of 0.032 mg/kg and 0.95 mg/kg. MTBE was detected in the three grab groundwater samples at concentrations of 3, 3.4, and 250 micrograms per liter. Groundwater monitoring wells were installed in three of the soil borings. Groundwater monitoring was conducted at the site for four quarters during 2000. MTBE was detected during each of the four quarters in the downgradient well. Concentrations decreased from 29 ug/L in February 2000 to 7.8 ug/L in December 2000.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? <input checked="" type="radio"/> Yes <input type="radio"/> No		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? <input checked="" type="radio"/> Yes <input type="radio"/> No		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: Case closure for the fuel leak site is granted for commercial land use. If a change in land use to residential or other conservative scenario occurs at this property, Alameda County Environmental Health must be notified and the case needs to be re-evaluated. This site is to be entered into the City of Oakland Permit Tracking System due to the residual contamination posing a nuisance for subsurface utility work.		
Should corrective action be reviewed if land use changes? Yes		
Was a deed restriction or deed notification filed? No		Date Recorded: --
Monitoring Wells Decommissioned: No	Number Decommissioned: 0	Number Retained: 3
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

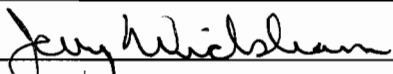
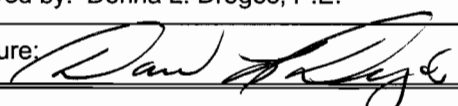
During the most recent groundwater monitoring event for the site in December 2000, MTBE was detected at a concentration of 7.8 micrograms per liter in a groundwater sample from the downgradient monitoring well. TPH as gasoline and BTEX were not detected during the December 2000 groundwater sampling event.

Residual soil contamination remains at the site beneath the public sidewalk. The site is to be closed for commercial land use only and entered into the City of Oakland Permit Tracking System due to potential nuisance for subsurface utility work.

Conclusion:

Alameda County Environmental Health staff believe that the low levels of residual contamination at the site do not pose a significant threat to water resources, public health and safety, and the environment based upon the information in our files to date. No further investigation or cleanup is necessary. ACEH staff recommend case closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Jerry Wickham	Title: Hazardous Materials Specialist
Signature: 	Date: 10/28/05
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: 	Date: 10/28/05

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
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB:
Signature: <i>Cherie McCaulou</i>	Date: 12/6/05

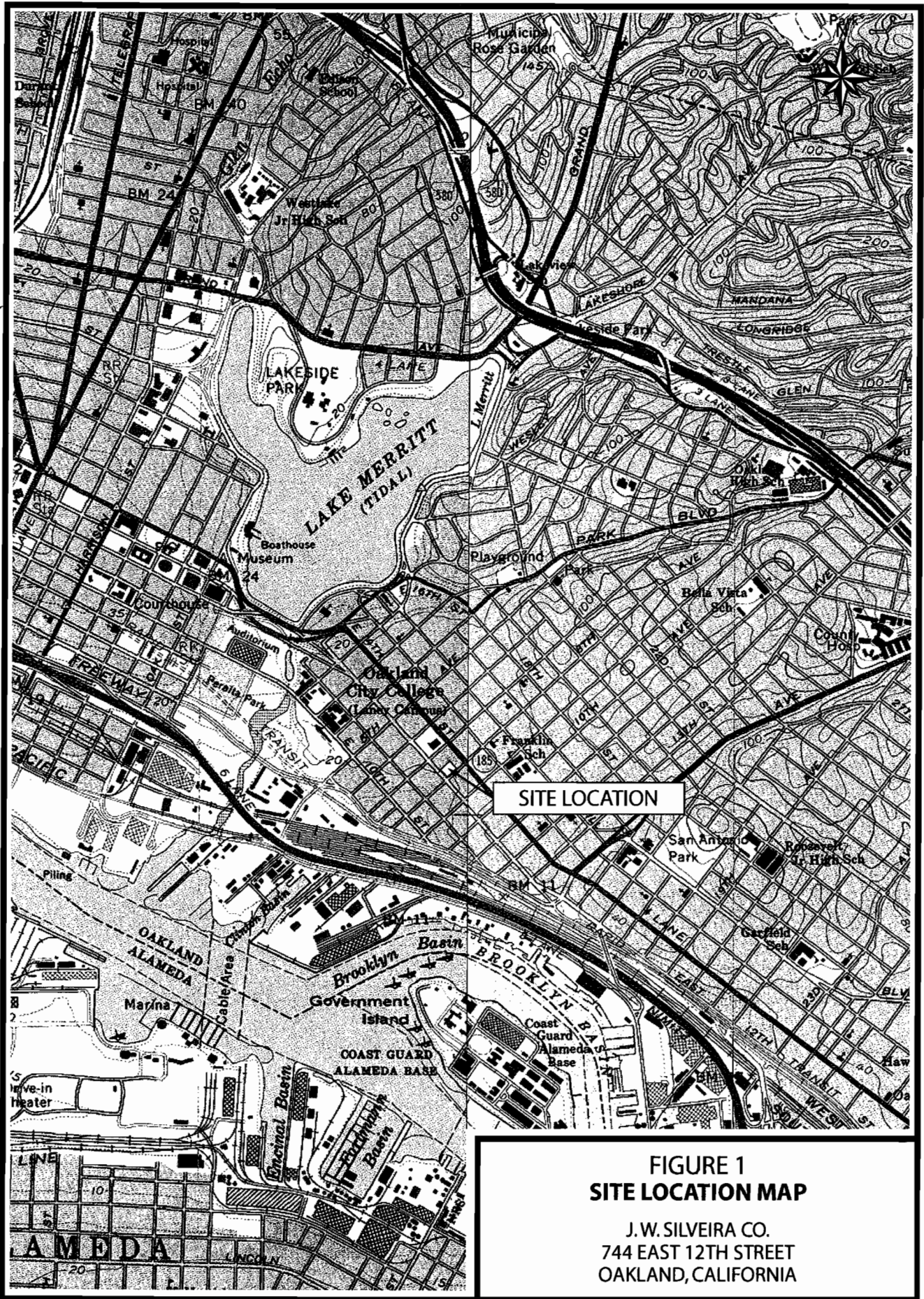
VIII. MONITORING WELL DECOMMISSIONING

Date Requested by ACEH: 12/07/05	Date of Well Decommissioning Report: 08/19/08	
All Monitoring Wells Decommissioned (Yes) No	Number Decommissioned: 3	Number Retained: 0
Reason Wells Retained: NA		
Additional requirements for submittal of groundwater data from retained wells: None		
ACEH Concurrence - Signature: <i>Jay Wildman</i>	Date: 08/22/08	

Attachments:

1. Site Location Map (1 page)
2. Site Plan; Monitoring Well and Soil Boring Locations; Tank Area Detail (3 pages)
3. Potentiometric Surface Map; Soil Concentration Map; Groundwater Concentration Map (3 pages)
4. Soil and Groundwater Analytical Data (6 pages)
5. Boring Logs and Well Completion Diagrams (8 pages)

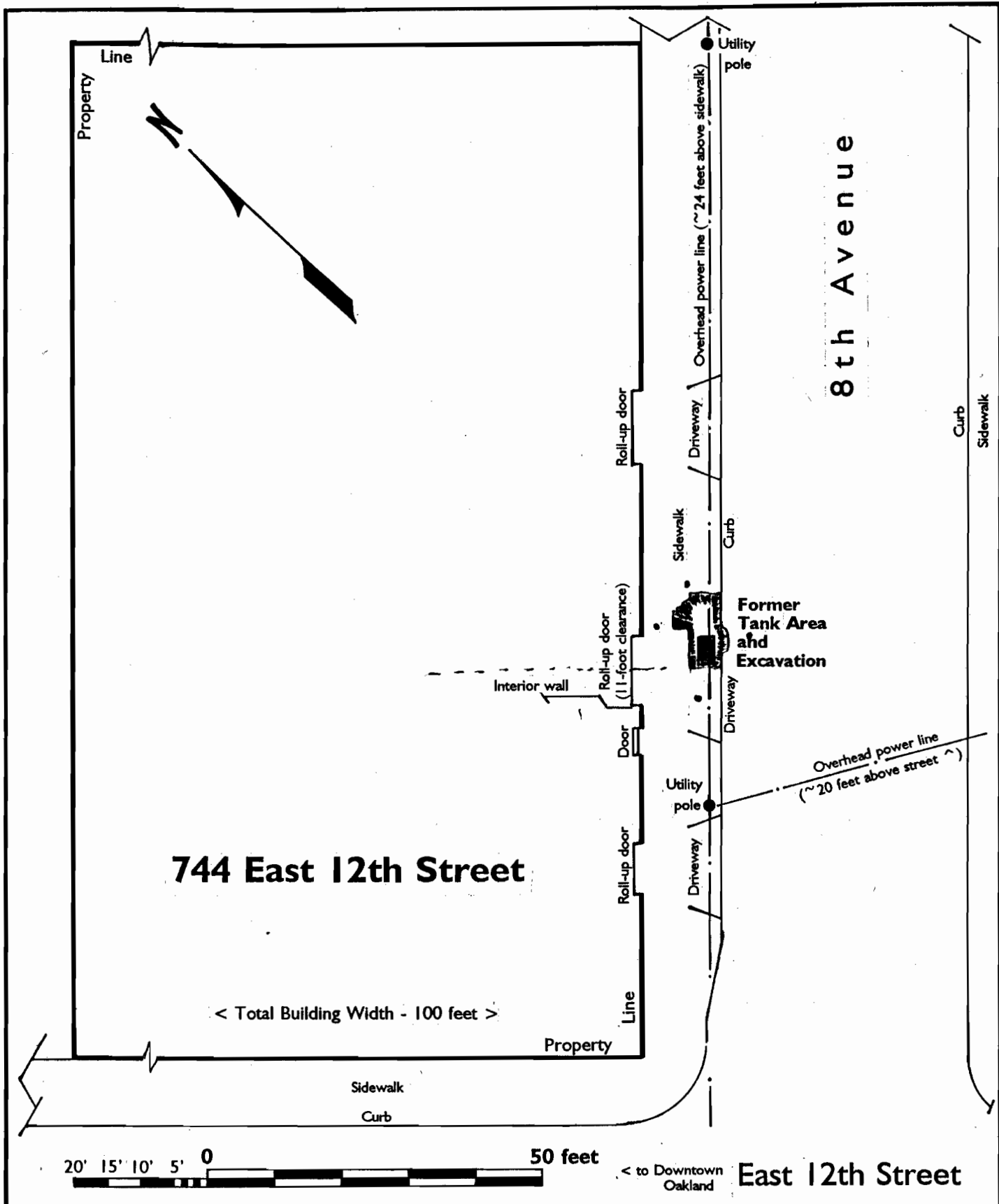
This document and the related CASE CLOSURE LETTER & REMEDIAL ACTION COMPLETION CERTIFICATE shall be retained by the lead agency as part of the official site file.



SITE LOCATION

FIGURE 1
SITE LOCATION MAP

J.W. SILVEIRA CO.
744 EAST 12TH STREET
OAKLAND, CALIFORNIA

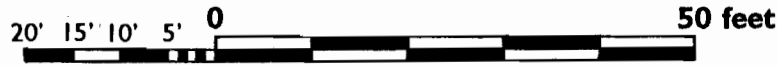


744 East 12th Street

< Total Building Width - 100 feet >

8th Avenue

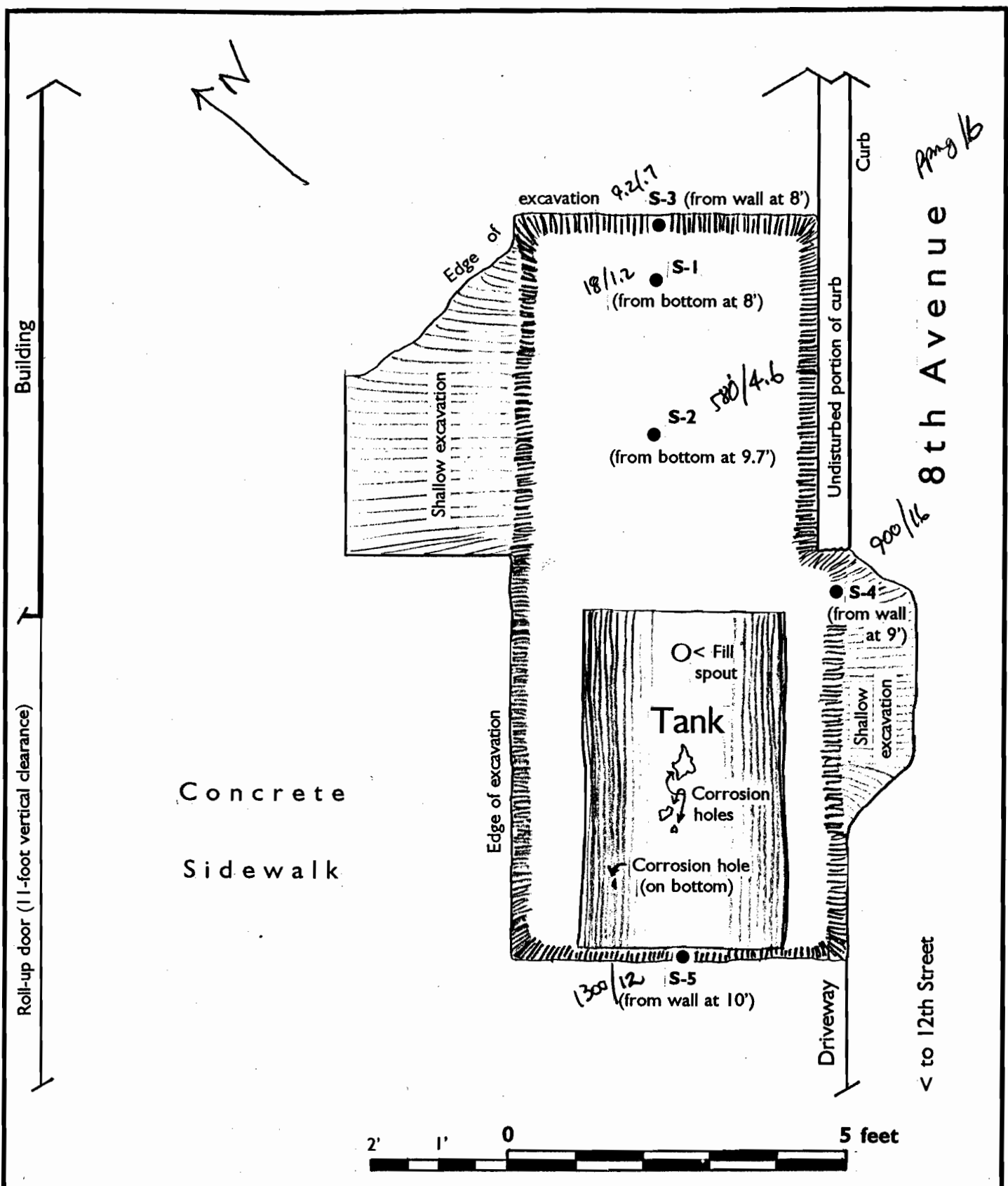
Former Tank Area and Excavation



< to Downtown Oakland East 12th Street

<p>EPIGENE INTERNATIONAL</p>	<p>Project # 96 - 149 744 EAST 12TH STREET, Oakland, California.</p>
<p>Fig. 2 SITE PLAN</p>	

Plan based on field measurements by Epigene International, Fremont, California, April 3, 1996.

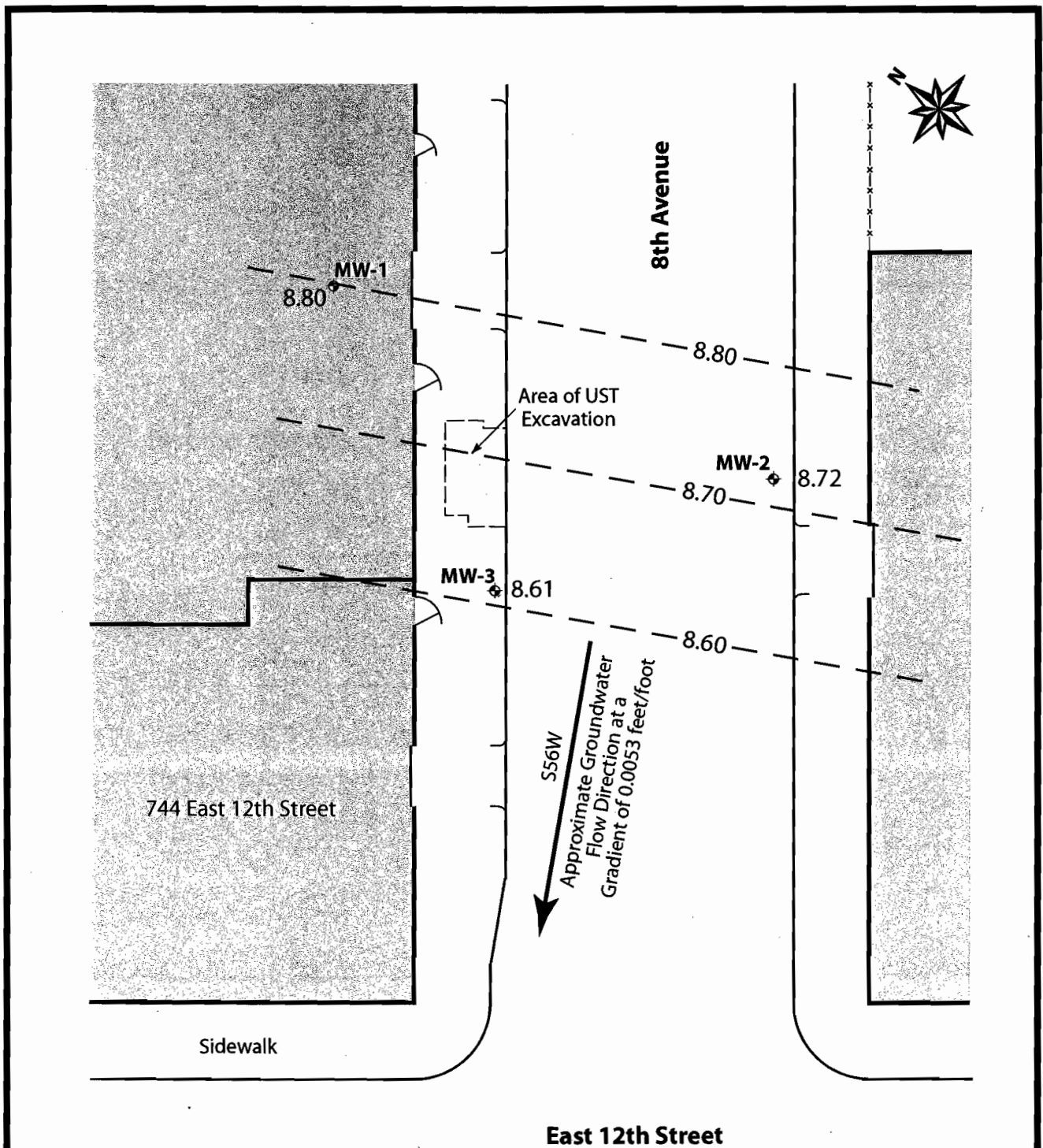


● Soil sample location.
 Soil samples taken **April 3, 1996.**

Drawing derived from field measurements taken by
 Epigene International, Fremont, California, April 3, 1996.

EPIGENE INTERNATIONAL	Project # 96 - 149 744 EAST 12TH STREET, Oakland, California.
----------------------------------	---------------------------------------------------------------------

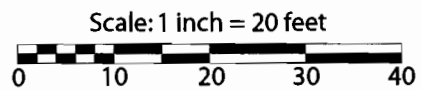
Fig. 3
TANK AREA DETAIL



Notes:

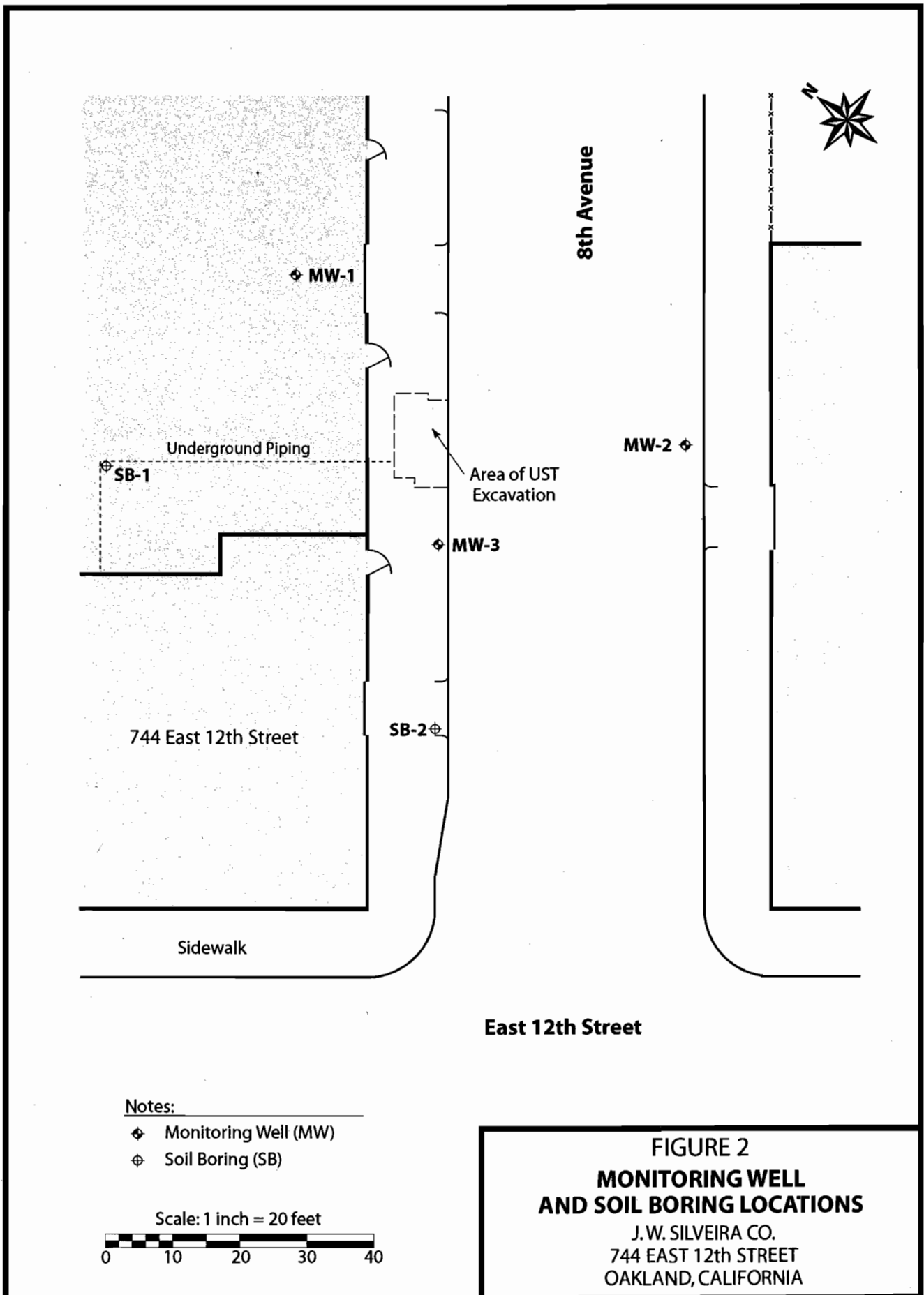
- ◆ Monitoring Well (MW)
- 8.61 Groundwater elevation in feet above mean sea level
- - - 8.70 - - - Groundwater elevation contour in feet above mean sea level

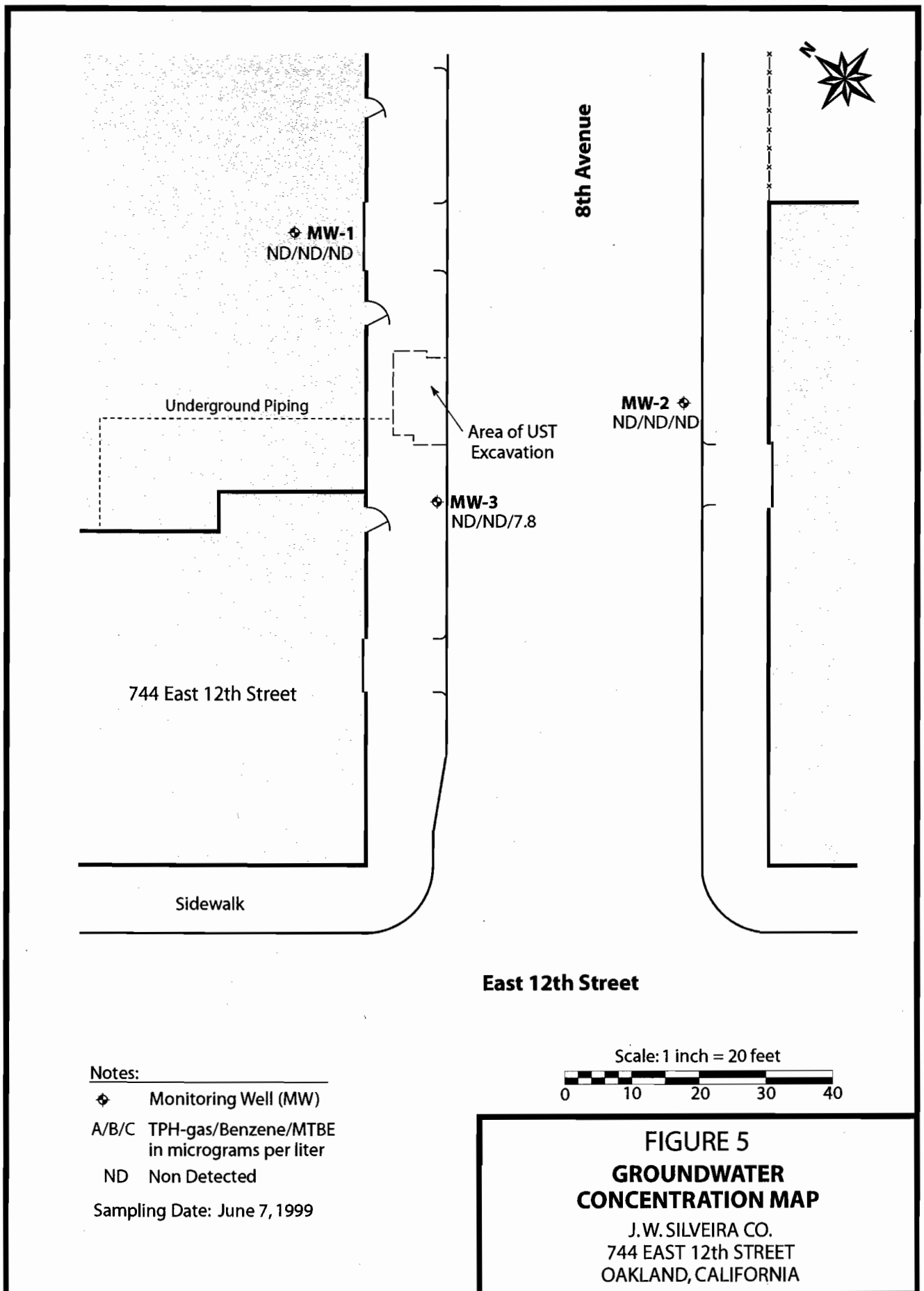
Sampling Date: December 18, 2000

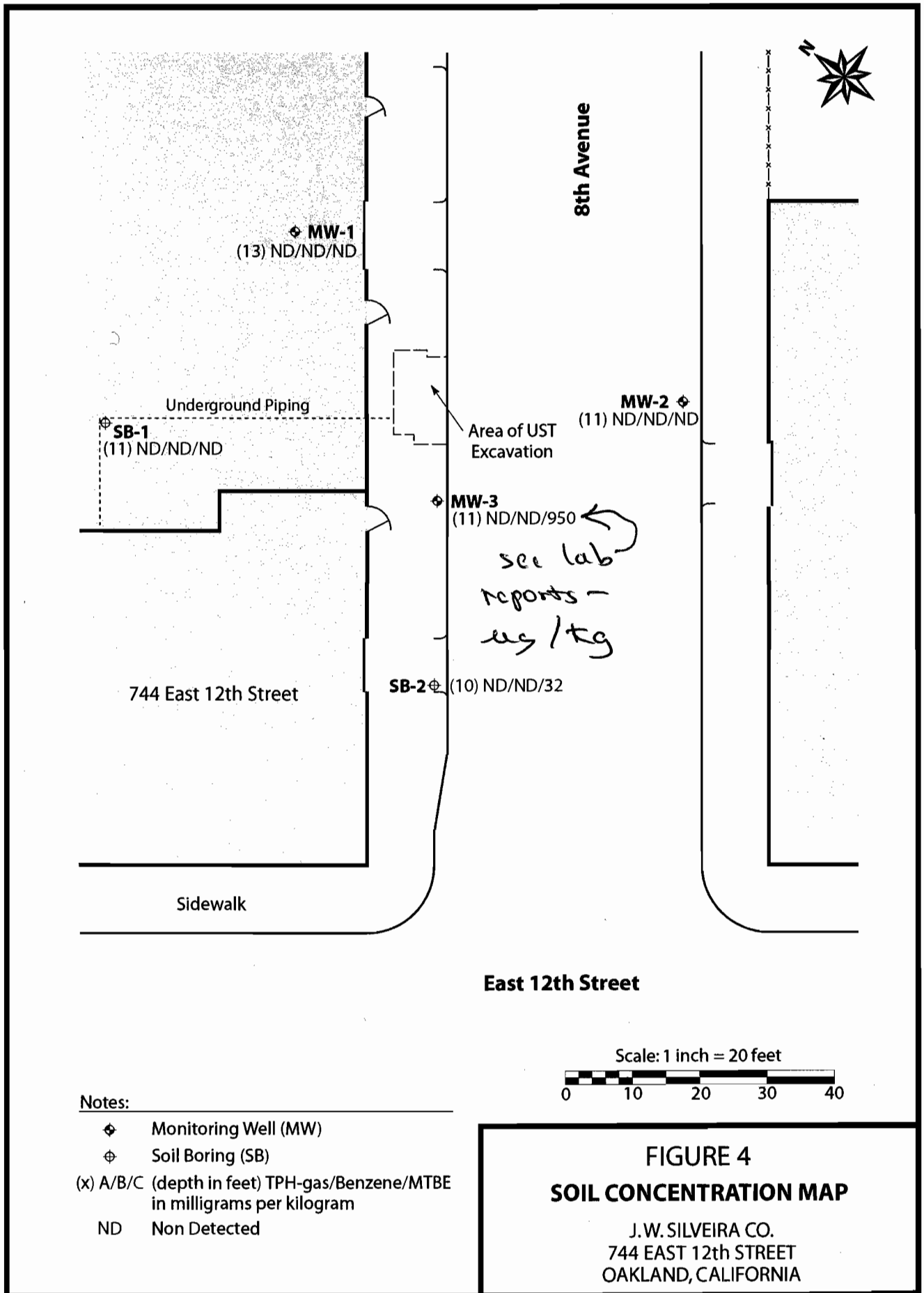


**FIGURE 3
POTENTIOMETRIC MAP**

J. W. SILVEIRA CO.
744 EAST 12TH STREET
OAKLAND, CALIFORNIA







Notes:

- ◆ Monitoring Well (MW)
- ⊕ Soil Boring (SB)
- (x) A/B/C (depth in feet) TPH-gas/Benzene/MTBE in milligrams per kilogram
- ND Non Detected

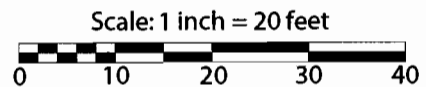


FIGURE 4
SOIL CONCENTRATION MAP
 J.W. SILVEIRA CO.
 744 EAST 12th STREET
 OAKLAND, CALIFORNIA

Table 1-Results of Soil Sample Analysis in PPM, 744 East 12th Street, Oakland

Sample No.	Depth	Location	TPHG	Benzene	Toluene	Ethylbenzene	Xylenes	Lead
S-1	7'	East Wall	18	1.2	0.54	0.49	12	5.6
S-2	10'	Center	580	4.6	30	13	61	6.8
S-3	8'	East Wall	9.2	0.70	0.61	0.31	1.1	12
S-4	9'	South Wall	900	16	6.1	17	48	3.4
S-5	10'	West Wall	1300	12	60	28	120	6.4

TABLE 2
MONITORING WELL MW-1
VOC AND TPH COMPOUNDS IN GROUNDWATER
2000 GROUNDWATER RESULTS
744 EAST 12TH STREET, OAKLAND

Date	TPH (ug/L)	VOC (ug/L)				
	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
Feb-00	ND	ND	ND	ND	ND	ND
May-00	ND	ND	ND	ND	ND	ND
Sep-00	ND	ND	ND	ND	ND	ND
Dec-00	ND	ND	ND	ND	ND	ND

Notes:

ug/L micrograms per Liter
 ND not detected
 TPH total petroleum hydrocarbons
 VOC volatile organic compound

TABLE 3
MONITORING WELL MW-2
VOC AND TPH COMPOUNDS IN GROUNDWATER
2000 GROUNDWATER RESULTS
744 EAST 12TH STREET, OAKLAND

Date	TPH (ug/L)	VOC (ug/L)				
	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
Feb-00	ND	ND	ND	ND	ND	ND
May-00	ND	ND	ND	ND	ND	ND
Sep-00	ND	ND	ND	ND	ND	ND
Dec-00	ND	ND	ND	ND	ND	ND

Notes:

- ug/L micrograms per Liter
- ND not detected
- TPH total petroleum hydrocarbons
- VOC volatile organic compound

TABLE 4
MONITORING WELL MW-3
VOC AND TPH COMPOUNDS IN GROUNDWATER
2000 GROUNDWATER RESULTS
744 EAST 12TH STREET, OAKLAND

Date	TPH (ug/L)	VOC (ug/L)				
	Gasoline	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
Feb-00	ND	2.4	ND	ND	ND	29
May-00	ND	0.59	ND	ND	ND	4.7
Sep-00	ND	ND	ND	ND	ND	1.8
Dec-00	ND	ND	ND	ND	ND	7.8

Notes:

ug/L micrograms per Liter
 ND not detected
 TPH total petroleum hydrocarbons
 VOC volatile organic compound

TABLE 2
VOC AND TPH COMPOUNDS IN GROUNDWATER
FROM MONITORING WELLS AND SOIL BORINGS, 1999
744 EAST 12TH STREET

Analyte	Monitoring Well			Soil Boring	
	MW-1	MW-2	MW-3	SB-1	SB-2
VOC ($\mu\text{g/L}$)					
Benzene	ND	ND	14	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	0.63
m,p-Xylenes	ND	ND	ND	ND	2.2
o-Xylene	ND	ND	ND	ND	0.74
MTBE	3	3.4	250	ND	33
TPH ($\mu\text{g/L}$)					
Gasoline	ND	ND	ND	ND	ND

Notes:

$\mu\text{g/L}$ micrograms per Liter
 ND Not Detected
 TPH Total Petroleum Hydrocarbons
 VOC Volatile Organic Compound

TABLE 3
VOC AND TPH COMPOUNDS IN SOIL
FROM MONITORING WELLS AND SOIL BORINGS, 1999
744 EAST 12TH STREET

Analyte	Location and Depth				
	MW-1 12.5-13 ft bgs	MW-2 10.5-11 ft bgs	MW-3 10.5-11 ft bgs	SB-1 10.5-11 ft bgs	SB-2 9.5-10 ft bgs
VOC ($\mu\text{g}/\text{Kg}$)					
Benzene	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND
m,p-Xylenes	ND	ND	ND	ND	ND
o-Xylene	ND	ND	ND	ND	ND
MTBE	ND	ND	950	ND	32
TPH (mg/Kg)					
Gasoline	ND	ND	ND	ND	ND

Notes:

bgs below ground surface
ft feet
 $\mu\text{g}/\text{Kg}$ micrograms per Kilogram
mg/Kg milligrams per Kilogram
ND Not Detected
TPH Total Petroleum Hydrocarbons
VOC Volatile Organic Compound

Tetra Tech EM Inc.

135 MAIN STREET, SUITE 1800
 SAN FRANCISCO, CA 94105
 415-543-4880

ENGINE ID: MW-1

SITE: 744 E 12th ST.

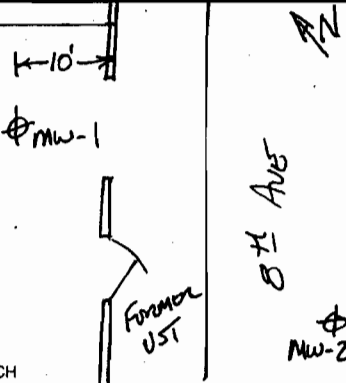
PROJECT:
 SILVEIRA - OAKLAND

PROJECT NO.: P1106

DATE: 6-2-99

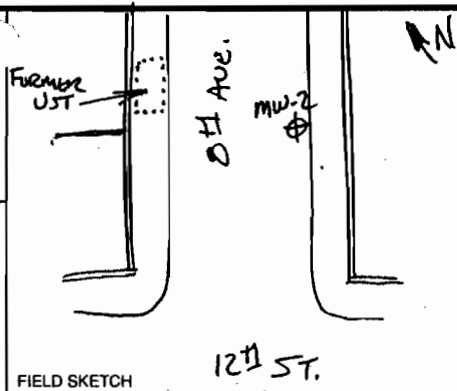
LOGGED BY: Roy Glenn

FIELD SKETCH



SAMPLE ID	SAMPLE TIME	SAMPLE DEPTH	PID READING	DRIVE INTERVAL INCHES RECOVERED	INCHES DRIVEN	DEPTH (ft bgs)	MW SCREENED INT.	USCS SOIL TYPE
						0		CONCRETE 6"
						1		CLAY, LIGHT BROWNISH GRAY (2.5 y 4/2), LOW PLASTICITY, DAMP, STIFF.
						2	CL	
						3		
					42/40	4		CLAY, LIGHT BROWNISH GRAY (2.5 y 4/2) w/ MOTTLED BLACK & REDDISH IRON STAINING 10%, LOW PLASTICITY, DAMP, STIFF
						5		
						6	CL	w/ 5% FINE GRAVEL 4-8mm
						7		
						8		w/ 10% WHITE BROKEN SHELS 2-8mm
						9		w/ 25% WHITE BROKEN SHELS 2-10mm
						10		No SHELS PRESENT AT 9.5' bgs.
						11	CL	SANDY-CLAY, LIGHT YELLOWISH BROWN (10YR 6/4), LOW PLASTICITY, MOIST, MEDIUM STIFF, w/ 15% FINE GRAVEL.
						12		
JW3-2	1200					13		w/ 40% FINE GRAVEL 4-6mm GRAVELY-SAND, BROWN (10YR 5/3), COARSE, SUB-ANGULAR, WELL GRADED SAND, WET, LOOSE, w/ 15% GRAVEL-FINE 2-8mm
						14		
						15	SW	
						16		
						17		SATURATED
						18		TD = 18.0 ft bgs.
						19		
						20		

Tetra Tech EM Inc.
 135 MAIN STREET, SUITE 1800
 SAN FRANCISCO, CA 94105
 415-543-4880



Boring ID: MW-2
 SITE: 744 E 12th ST.
 PROJECT: SILWEIRA - OAKLAND
 PROJECT NO.: P1106
 DATE: 6-2-99
 LOGGED BY: Roy Glenn

SAMPLE ID	SAMPLE TIME	SAMPLE DEPTH	PID READING	DRIVE INTERVAL	INCHES RECOVERED	INCHES DRIVEN	DEPTH (ft bgs)	MW SCREEN	USCS SOIL TYPE
							1		
							2		
						44/46	3		
							4		CL
							5		
						40/48	6		
							7		
							8		
							9		CL
						32/36	10		
JW3-φ1	1030						11		CL
							12		
						36/36	13		SM
							14		
							15		
						43/48	16		GM
							17		
							18		
							19		
							20		

FIELD SKETCH

ASPHALT 2 1/2"

CLAY, GREENISH-GRAY (56% lo), LOW PLASTICITY, DAMP, STIFF, w/5% VERY COARSE SAND.

LIGHT BROWNISH GRAY (2.5 y lo/2)

w/5% BLACK STAINING - OXIDE

CLAY, MOTTLED LIGHT BROWN (7.5 YR 6/3) w/BLACK & REDDISH IRON OXIDE STAINING-30%, LOW PLASTICITY, MOIST, MEDIUM STIFF.

SANDY-CLAY, LIGHT YELLOWISH BROWN (10 YR 6/4); LOW PLASTICITY, WET, SOFT.

SILTY-SAND, BROWN (10 YR 5/3), MEDIUM SAND, WELL BOUNDED, WELL GRADED, SATURATED, LOOSE

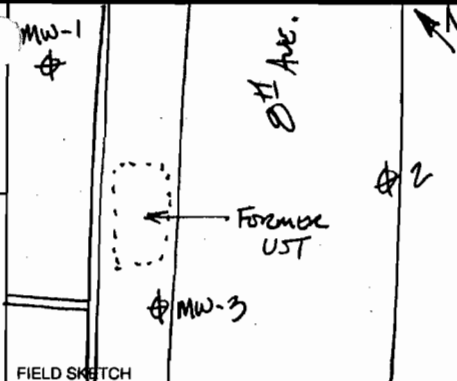
SILTY-GRAVEL, BROWN (10 YR 5/3), FINE, SUB BOUNDED, POORLY GRADED GRAVEL, SATURATED, LOOSE, w/10% COARSE SAND.

TD = 18 ft bgs.

Tetra Tech EM Inc.

135 MAIN STREET, SUITE 1800
 SAN FRANCISCO, CA 94105
 415-543-4880

Boring ID: MW-3
 SITE: 744 EAST 12th STREET
 PROJECT: SILVEIRA - OAKLAND
 PROJECT NO.: P1106
 DATE: 6-2-99
 LOGGED BY: Roy Glenn



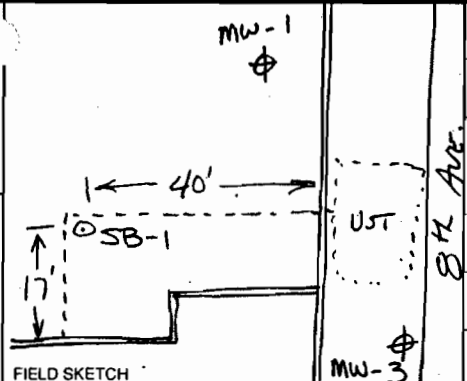
SAMPLE ID	SAMPLE TIME	SAMPLE DEPTH	PID READING	DRIVE INTERVAL	INCHES RECOVERED	INCHES DRIVEN	DEPTH (ft bgs)	MW Screen	USCS SOIL TYPE
							1		
							2		
				42/42			3		
							4		
							5		
							6		
				48/48			7		
							8		
							9		
							10		
JW3-φ3	1330			42/48			11		
							12		
							13		
				30/36			14		
							15		
							16		
				29/36			17		
							18		
							19		
							20		

CONCRETE 4 1/2"
 SILT, DARK BROWN (10YR 3/3), DAMP, SOFT
 ML
 CLAY, LIGHT BROWNISH GRAY (2.5Y 6/2), LOW PLASTICITY,
 DAMP, STIFF, w/ BLACK & IRON OXIDE STAINING 5%
 CL
 w/ 5% FINE GRAVEL 4-6 mm
 CL
 GRAVELY-CLAY, STAINED GRAYISH-GREEN (5G4 6/1),
 LOW PLASTICITY, DAMP, MEDIUM STIFF, w/ 35% FINE
 TO COARSE GRAVEL (0mm - 25mm, HYDROCARBON
 OILS PRESENT.
 MOIST
 SILTY-SAND, BROWN (10YR 5/3), MEDIUM SAND,
 SUB-ROUNDED, WELL GRADED, SATURATED, LOOSE
 SM
 w/ 10% COARSE SAND & VERY FINE GRAVEL
 TD = 18 ft bgs.

Tetra Tech EM Inc.

135 MAIN STREET, SUITE 1800
SAN FRANCISCO, CA 94105
415-543-4880

BOHNING ID: SB-1
SITE: 744 EAST 12TH ST.
PROJECT: SILVEIRA - OAKLAND
PROJECT NO.: P1106
DATE: 6-2-99
LOGGED BY: Roy Glenn



SAMPLE ID	SAMPLE TIME	SAMPLE DEPTH	PID READING	DRIVE INTERVAL	INCHES RECOVERED	INCHES DRIVEN	DEPTH (ft bgs)	USCS SOIL TYPE
							1	
							2	CL
							3	
							4	
							5	
							6	CL
							7	
							8	
							9	
							10	
JW3-4	1450						11	CL
							12	
							13	
							14	
							15	
							16	SW
							17	
							18	
							19	
							20	

FIELD SKETCH

CONCRETE 6"

CLAY, LIGHT BROWNISH GRAY (2.5 y_{6/2}), LOW PLASTICITY, DAMP, STIFF.

CLAY, MOTTLED LIGHT BROWNISH GRAY (2.5 y_{6/2}) w/BLACK & REDDISH IRON OXIDE STAINING 1.5%, LOW PLASTICITY, DAMP, STIFF, w/10% FINE GRAVEL

w/5% WHITE BROWN SHELLS 2-8 mm

SANDY-CLAY, LIGHT YELLOWISH BROWN (10 y_{6/4}), LOW PLASTICITY, MOIST, MEDIUM STIFF, w/5% FINE GRAVEL

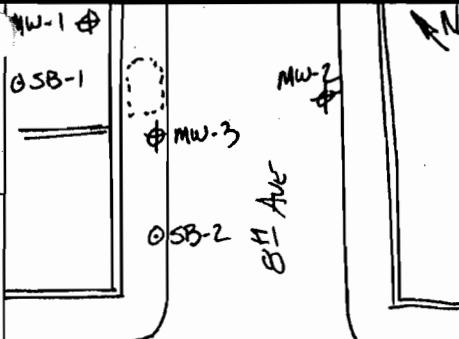
WET

w/30% FINE GRAVEL 4-8 mm

GRAVELY-SAND, BROWN (10 y_{6/5/3}), COARSE, SUB-ANGULAR, WELL GRADED SAND, WET, LOOSE, w/20% FINE GRAVEL.

SATURATED
TD = 18 ft bgs.

Tetra Tech EM Inc.
 135 MAIN STREET, SUITE 1800
 SAN FRANCISCO, CA 94105
 415-543-4880



ENG ID: SB-2
 SITE: 744 EAST 12th ST.
 PROJECT: SILVEIRA - OAKLAND
 PROJECT NO.: P1106
 DATE: 6-2-99
 LOGGED BY: Roy Glenn

SAMPLE ID	SAMPLE TIME	SAMPLE DEPTH	PID READING	DRIVE INTERVAL INCHES RECOVERED INCHES DRIVEN	DEPTH (ft bgs)	USCS SOIL TYPE	DESCRIPTION
					1		CONCRETE 3"
					2	CL	CLAY, LIGHT BROWNISH GRAY (2.5y4/2), LOW PLASTICITY, DAMP, STIFF.
					3		
					4		
					5	CL	CLAY, STAINED GRAYISH-GREEN (5GY4/1), LOW PLASTICITY, DAMP, MEDIUM STIFF w/15% FINE GRAVEL 5-8mm, HYDROCARBON ODOR PRESENT.
					6		
					7		
					8	CL	SANDY-CLAY, LIGHT YELLOWISH BROWN (10YR 4/4), LOW PLASTICITY, MOIST, MEDIUM STIFF.
					9		
JW3-06 1545					10		MOIST
					11		WET
					12	CL	GRAVELY-CLAY, BROWN (10YR 5/3), LOW PLASTICITY, DAMP, STIFF, w/20% FINE GRAVEL.
					13		
					14		
					15		
					16	SM	SILTY-SAND, BROWN (10YR 5/3), MEDIUM SAND, SUB-ROUNDED, WELL GRADED SAND, SATURATION, LOOSE
					17		
					18		TD = 18 ft bgs.
					19		
					20		

MONITORING WELL COMPLETION RECORD

DRILLING INFORMATION

DRILLING BEGAN:
 DATE 6-2-99 TIME 1100
 WELL INSTALLATION BEGAN:
 DATE 6-2-99 TIME 1230
 WELL COMPLETION FINISHED:
 DATE 6-2-99 TIME 1800
 DRILLING CO. FAST-TEK
 DRILLER TOM FORTNER
 LICENSE 589008
 DRILL RIG CME-25
 DRILLING METHOD:
 HOLLOW STEM AUGER
 AIR ROTARY

 DIAMETER OF AUGERS:
 ID 8 1/4" OD 3 3/4"

BENTONITE SEAL

AMOUNT CALCULATED 2.6 gal
 AMOUNT USED 3 gal
 PELLETS, SIZE _____
 CHIPS, SIZE 3/8"

 PRODUCT HOLE PLUG
 MFG. BY BARIOD INC.
 METHOD INSTALLED:
 POURED TREMIE
 AMOUNT OF WATER USED 2 gal

FILTER PACK

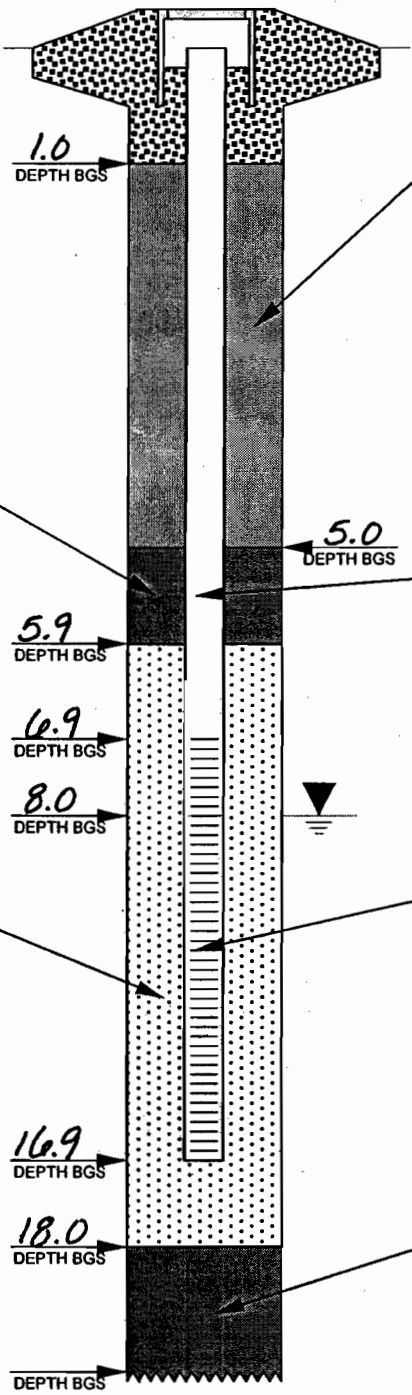
AMOUNT CALCULATED 31 gal
 AMOUNT USED 30 gal
 SAND, SIZE # 2/12
 FORMATION COLLAPSE:
 FROM _____ TO _____
 PRODUCT MONTEREY KILN DRIED SAND
 MFG. BY RMC LONESTAR
 METHOD INSTALLED:
 POURED TREMIE

SURVEY INFORMATION

TOC ELEVATION 18.17
 GROUND ELEVATION _____
 NORTHING CORD. _____
 EASTING CORD. _____
 DATE SURVEYED 7-12-99
 SURVEY CO. TTMI

SURFACE COMPLETION

FLUSH MOUNT
 ABOVE GROUND W/BUMPER POST
 CONCRETE ASPHALT



CENTRALIZERS

DEPTHS _____
 NO CENTRALIZERS USED

MONITORING WELL

MONITORING WELL NO. MW1
 PROJECT SILVEIRA - OAKLAND
 SITE 3-744 EAST 12th ST.
 BOREHOLE NO. _____
 WELL PERMIT NO. X9900416
 TOC TO BOTTOM OF WELL 16.9

ANNULAR SEAL

AMOUNT CALCULATED 10 gal
 AMOUNT USED 10 gal
 GROUT FORMULA
 PORTLAND CEMENT 63%
 BENTONITE 7%
 WATER 30%
 PREPARED MIX
 PRODUCT _____
 MFG. BY _____
 METHOD INSTALLED:
 POURED TREMIE

CASING

SCHEDULE 40 PVC

 PRODUCT _____
 MFG. BY TEMCO INC.
 CASING DIAMETER:
 ID 2.0 OD 2.4"
 LENGTH OF CASING 7'

WELL SCREEN

SCHEDULE 40 PVC

 PRODUCT _____
 MFG. BY TEMCO INC.
 CASING DIAMETER:
 ID 2.0 OD 2.4"
 SLOT SIZE .010 INCH
 LENGTH OF SCREEN 10'

BOREHOLE BACKFILL

AMOUNT CALCULATED _____
 AMOUNT USED _____
 BENTONITE CHIPS, SIZE _____
 BENTONITE PELLETS, SIZE _____
 SLURRY _____
 FORMATION COLLAPSE _____
 PRODUCT _____
 MFG. BY _____
 METHOD INSTALLED:
 POURED TREMIE

MONITORING WELL COMPLETION RECORD

DRILLING INFORMATION

DRILLING BEGAN:
 DATE 10-2-99 TIME 0800
 WELL INSTALLATION BEGAN:
 DATE 10-2-99 TIME 0930
 WELL COMPLETION FINISHED:
 DATE 10-2-99 TIME 1800
 DRILLING CO. FAST-TEK
 DRILLER TOM FORTNER
 LICENSE 589008
 DRILL RIG CME-25
 DRILLING METHOD:
 HOLLOW STEM AUGER
 AIR ROTARY

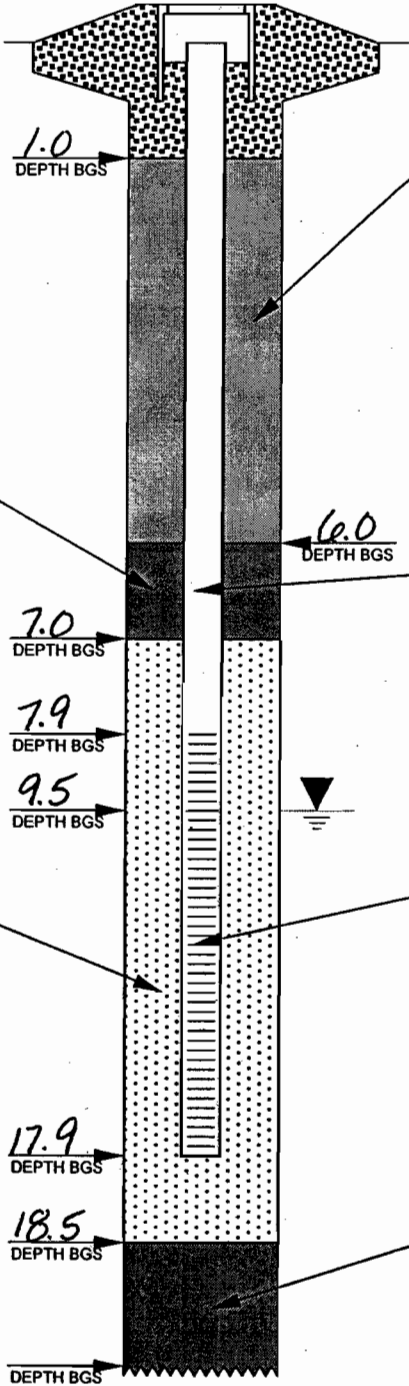
 DIAMETER OF AUGERS:
 ID 8 1/4" OD 3 3/4"

SURFACE COMPLETION

FLUSH MOUNT
 ABOVE GROUND W/BUMPER POST
 CONCRETE ASPHALT

MONITORING WELL

MONITORING WELL NO. MW 2
 PROJECT SILVEIRA-OAKLAND
 SITE 3 - 744 EAST 12TH ST
 BOREHOLE NO. _____
 WELL PERMIT NO. X9900416
 TOC TO BOTTOM OF WELL 17.9'



BENTONITE SEAL

AMOUNT CALCULATED 2.7 gal
 AMOUNT USED 2.7 gal
 PELLETS, SIZE _____
 CHIPS, SIZE 3/8"

 PRODUCT Hole Pkg-Wyoming
 MFG. BY BARIOD INC.
 METHOD INSTALLED:
 POURED TREMIE
 AMOUNT OF WATER USED 1.5 gal

ANNULAR SEAL

AMOUNT CALCULATED 13 gal
 AMOUNT USED 12 gal
 GROUT FORMULA
 PORTLAND CEMENT 63%
 BENTONITE 7%
 WATER 30%
 PREPARED MIX
 PRODUCT _____
 MFG. BY _____
 METHOD INSTALLED:
 POURED TREMIE

CASING

SCHEDULE 40 PVC

 PRODUCT _____
 MFG. BY Temco Inc.
 CASING DIAMETER:
 ID 2.0 OD 2.4
 LENGTH OF CASING 8.0'

FILTER PACK

AMOUNT CALCULATED 30 gal
 AMOUNT USED 30 gal
 SAND, SIZE # 20/30
 FORMATION COLLAPSE:
 FROM _____ TO _____
 PRODUCT Montarey Kin Drillo Sand
 MFG. BY RMC LOWESTAR
 METHOD INSTALLED:
 POURED TREMIE

WELL SCREEN

SCHEDULE 40 PVC

 PRODUCT _____
 MFG. BY Temco Inc.
 CASING DIAMETER:
 ID 2.0 OD 2.4
 SLOT SIZE .010"
 LENGTH OF SCREEN 10'

SURVEY INFORMATION

TOC ELEVATION 16.71
 GROUND ELEVATION _____
 NORTHING CORD. _____
 EASTING CORD. _____
 DATE SURVEYED T&E MI
 SURVEY CO. 7-12-99

CENTRALIZERS

DEPTHS _____
 NO CENTRALIZERS USED

BOREHOLE BACKFILL

AMOUNT CALCULATED _____
 AMOUNT USED _____
 BENTONITE CHIPS, SIZE _____
 BENTONITE PELLETS, SIZE _____
 SLURRY _____
 FORMATION COLLAPSE _____
 PRODUCT _____
 MFG. BY _____
 METHOD INSTALLED:
 POURED TREMIE

MONITORING WELL COMPLETION RECORD

DRILLING INFORMATION

DRILLING BEGAN:
 DATE 6-2-99 TIME 1400
 WELL INSTALLATION BEGAN:
 DATE 6-2-99 TIME 1530
 WELL COMPLETION FINISHED:
 DATE 6-2-99 TIME 1800
 DRILLING CO. FAST-TEK
 DRILLER Tom Forstner
 LICENSE 589008
 DRILL RIG CMB-25
 DRILLING METHOD:
 HOLLOW STEM AUGER
 AIR ROTARY

 DIAMETER OF AUGERS:
 ID 8 1/4" OD 3 3/4"

BENTONITE SEAL

AMOUNT CALCULATED 2.7 gal
 AMOUNT USED 2.5 gal
 PELLETS, SIZE _____
 CHIPS, SIZE 3/8"

 PRODUCT Hole-Plug Wyoming
 MFG. BY Barioc Inc.
 METHOD INSTALLED:
 POURED TREMIE
 AMOUNT OF WATER USED 1.5 gal

FILTER PACK

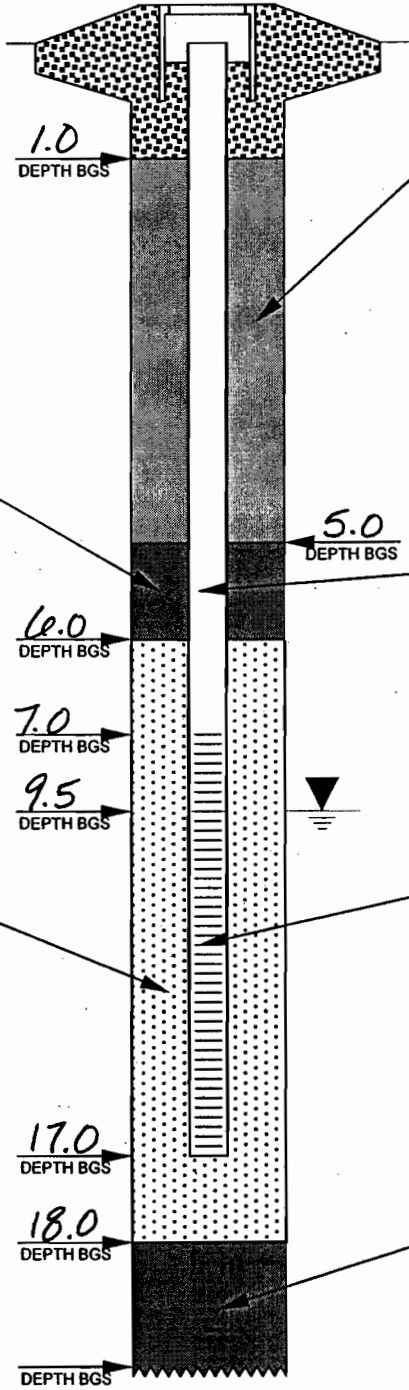
AMOUNT CALCULATED 30 gal
 AMOUNT USED 30 gal
 SAND, SIZE # 2/12
 FORMATION COLLAPSE:
 FROM _____ TO _____
 PRODUCT Monterey King Decks Sand
 MFG. BY RMC LoneStar
 METHOD INSTALLED:
 POURED TREMIE

SURVEY INFORMATION

TOC ELEVATION 16.35
 GROUND ELEVATION _____
 NORTHING CORD. _____
 EASTING CORD. _____
 DATE SURVEYED 7-12-99
 SURVEY CO. TEEMI

SURFACE COMPLETION

FLUSH MOUNT
 ABOVE GROUND W/BUMPER POST
 CONCRETE ASPHALT



CENTRALIZERS

DEPTHS _____
 NO CENTRALIZERS USED

MONITORING WELL

MONITORING WELL NO. MW 3
 PROJECT SILVEIRA - DAKLAND
 SITE 3, 744 EAST 12TH ST
 BOREHOLE NO. _____
 WELL PERMIT NO. X9900416
 TOC TO BOTTOM OF WELL 18.0

ANNULAR SEAL

AMOUNT CALCULATED 10 gal
 AMOUNT USED 10 gal
 GROUT FORMULA
 PORTLAND CEMENT 63%
 BENTONITE 7%
 WATER 30%
 PREPARED MIX
 PRODUCT _____
 MFG. BY _____
 METHOD INSTALLED:
 POURED TREMIE

CASING

SCHEDULE 40 PVC

 PRODUCT _____
 MFG. BY Temco
 CASING DIAMETER:
 ID 2.0 OD 2.4
 LENGTH OF CASING 7'

WELL SCREEN

SCHEDULE 40 PVC

 PRODUCT Temco Inc.
 MFG. BY _____
 CASING DIAMETER:
 ID 2.0 OD 2.4
 SLOT SIZE .010 IN
 LENGTH OF SCREEN 10 ft

BOREHOLE BACKFILL

AMOUNT CALCULATED _____
 AMOUNT USED _____
 BENTONITE CHIPS, SIZE _____
 BENTONITE PELLETS, SIZE _____
 SLURRY _____
 FORMATION COLLAPSE _____
 PRODUCT _____
 MFG. BY _____
 METHOD INSTALLED:
 POURED TREMIE