

ALAMEDA COUNTY  
HEALTH CARE SERVICES  
AGENCY



DAVID J. KEARS, Agency Director

February 19, 1997  
STID 4212  
page 1 of 2

ENVIRONMENTAL HEALTH SERVICES  
ENVIRONMENTAL PROTECTION  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577  
(510) 567-6700

Attn: Tara Lynch  
Mobil Oil Corp.  
3225 Gallows Rd., Room 6W319  
Fairfax VA 22037-0001

Attn: Steve Mitchell  
Great Western Bank  
Environmental Mgmt  
285 Hamilton Ave., Suite 325  
Palo Alto CA 94301

**REMEDIAL ACTION COMPLETION CERTIFICATION**

RE: Former Mobil Station 04-EWB, 1975 Webster St., Oakland CA 94612  
Case File Number 4212

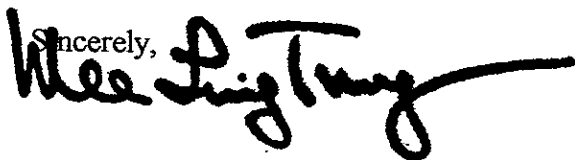
Dear Ms. Lynch and Mr. Mitchell,

This letter confirms the completion of site investigation and remedial action for the underground storage tanks formerly located at the above referenced site. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks is 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, Division 3, Chapter 16, 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

01-0454

ENVIRONMENTAL  
PROTECTION  
96 NOV 15 PM 3: 51

**CASE CLOSURE SUMMARY**  
**Leaking Underground Fuel Storage Tank Program**

**I. AGENCY INFORMATION**

Date: 10/4/96

Agency name: **Alameda County-HazMat** Address: **1131 Harbor Bay Pky**  
City/State/Zip: **Alameda CA 94502** Phone: **(510) 567-6700**  
Responsible staff person: **Jennifer Eberle** Title: **Hazardous Materials Spec.**

**II. CASE INFORMATION**

Site facility name: **Former Mobil station 04-EWB**  
Site facility address: **1975 Webster St., Oakland CA 94612**  
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **4212**  
ULR filing date: **not filed** SWEEPS No: **N/A**

**Responsible Parties:** **Addresses:** **Phone Numbers:**  
Attn: Tara Lynch, Mobil Oil Corp, 3225 Gallows Rd., Room 6W319, Fairfax VA 22037-0001 (703-849-5316)  
Attn: Steve Mitchell, Great Western Bank, Environmental Mgmt, 285 Hamilton Ave., Suite 325, Palo Alto CA 94301 (property owner) (415-853-2680)

<u>Tank No:</u>	<u>Size in gal.:</u>	<u>Contents:</u>	<u>Closed in-place or removed?:</u>	<u>Date:</u>
three	unknown	gasoline	reportedly removed	1970

**III. RELEASE AND SITE CHARACTERIZATION INFORMATION**

Cause and type of release: unknown  
Site characterization complete? YES  
Monitoring Wells installed? YES Number: 4  
Proper screened interval? YES  
Highest GW depth below ground surface: (GWE): 1.21' in MW4 on 9/18/94  
Lowest GW depth: (GWE): 4.53' in MW2 on 3/24/96  
Flow direction: generally northeast  
Most sensitive current use at present: parking lot  
Are drinking water wells affected? NO Aquifer name: n/a  
Is surface water affected? Probably not Nearest SW name: Lake Merritt is approx 3,000' east of the site  
Off-site beneficial use impacts (addresses/locations): n/a

## Leaking Underground Fuel Storage Tank Program

Report(s) on file? **YES** Where is report(s) filed?  
**Alameda County, 1131 Harbor Bay Pky, Alameda Ca 94502**

### Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount</u> <u>(include units)</u>	<u>Action (Treatment</u> <u>of Disposal w/destination)</u>	<u>Date</u>
Tank	unknown	unknown	Reportedly 1970
Soil	10 cubic yards (drill cuttings)	disposed to McKittrick CA	5/12/92
Purge water	116 gal	disposed to McKittrick CA	2/28/95
	16 gal	disposed to McKittrick CA	6/27/96

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

Contaminant	Soil (ppm)		Water (ppb)	
	Before*	After**	Before#	After##
TPH (Gas)	17,000		210	150
TPH (Diesel)	1.6		130	200
Benzene	4.5		ND	0.66
Toluene	1.9		ND	ND
Ethylbenzene	9.6		ND	0.62
Xylene	68		ND	1.7
Total lead	63		NA	NA
Oil & Grease	1,600		ND	NA
TPH-hf	NA		320	ND^

\* from MSE investigation conducted in 2/90; see Table 1

\*\* there are no "after" soil samples because there was no excavation or overexcavation. Further borings were drilled in different areas of the site; see Table 2

# from initial QM on 5/9/92; see Table 4

## from final QM on 3/24/96; see Table 4

^ from last sampling of TPH-hf on 3/6/94; see Table 4

## Leaking Underground Fuel Storage Tank Program

### 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: NA

Should corrective action be reviewed if land use changes? YES

Monitoring wells Decommissioned: Not yet

Number Decommissioned: ~~0~~ 4 Number Retained: ~~1~~ 0

List enforcement actions taken: none

List enforcement actions rescinded: none

### V. ADDITIONAL COMMENTS, DATA, ETC.

MSE Environmental Inc. (MSE) was contracted by a law firm to conduct test borings and do a ground penetrating radar (GPR) survey of this site in 1989. MSE also conducted a historical search which referred to a Phase I Environmental survey dated 6/8/90. The Phase I indicated that a permit was obtained in 1937 to construct a Super Service Station. An aerial photo dated 1965 revealed a gas station. The MSE report also states that "the City of Oakland Fire Prevention Bureau had one permit on file for the excavation and removal of 3 gasoline USTs."

MSE's 1989 GPR survey concluded that no USTs were likely to exist at the site. See Figure 1. Five borings were drilled in 1990; 15 soil samples and one grab groundwater sample were collected. See Figure 2 and Table 1. Results indicated maximum soil concentrations of 17,000 mg/kg TPHg (TB-2-5'), 4.50 mg/kg benzene (TB-3-10'), 1,600 mg/kg TPH-d (TB-3-10'), and 63 mg/kg total lead (TB-3-10'). Groundwater collected from TB-2 included concentrations of ND BTEX, ND TPHg, and ND TPHd. The DTW was not reported.

MSE reportedly performed a soil gas survey on 4/21/90. Results indicated two types of hydrocarbons, gasoline and possibly kerosene; however, quantitative data was not collected. MSE also reportedly drilled six borings on 5/16/90 (SB-1 to SB-6). Results indicated a light hydrocarbon (HC) resembling gasoline in the NE portion of the site from 3-7'bgs, and a heavier HC in the NW portion of the site between 4-9'bgs. This information came from Appendix A in the 6/29/92 "Site Investigation" report by Alton-Geoscience. These two MSE reports are not included in the County file.

In 1992, Mobil Oil Corporation (Mobil) retained Alton-Geoscience (A-G) to conduct a preliminary site investigation. Mobil occupied the site from 1941 to 1970, when the USTs were reportedly removed (no samples collected). The site has been used as a parking lot since 1970. A-G reported that the property west of the site was occupied by a service station from 1914 through 1982, while the property to the east, across Webster St. was occupied by a service station from 1972 through 1980. See Figure 3.

## Leaking Underground Fuel Storage Tank Program

On 3/28/92, A-G supervised a geophysical investigation to confirm that all USTs had been removed. Results were inconclusive; the GPR only went to a depth of 3.5 to 4'bgs. See Figure 4.

In April 1992, A-G drilled 10 soil borings (SB-1 through SB-10); the last four of which were completed as groundwater wells MW1 through MW4. Soils from 0-14'bgs were a relatively homogeneous layer of sand with some clays and silts, underlain by organic clay (Bay Mud) from approximately 14 to at least 24'bgs, in turn underlain by clayey sandy gravel to clayey gravelly sand from approximately 25' to the total depths explored.

Maximum soil concentrations were 520 mg/kg TPHg (MW3/SB9-5'), 45 mg/kg TPHd (MW3/SB9-5'), 910 mg/kg TRPH (MW1/SB7-5.5'), 77 mg/kg TPH-hydraulic fluid (SB5-5'), and 0.78 mg/kg benzene (MW3/SB9-5'). See Table 1. Groundwater concentrations are recorded in Table 2. Note that TDS was analyzed in two samples: results were 1,100 mg/L and 3,000 mg/L. Figure 5 shows the extent of HC concentrations in soil.

Since no borings were drilled in the vicinity of the magnetic anomaly supervised by A-G, the County requested hand borings directly in this area. Two borings were hand-augered to a depth of 5' bgs on 6/15/93. Soil samples were collected from 4 to 4.5'bgs. Results indicated ND TPHg, ND BTEX, ND TPHd, ND TPH-hf, and one hit of 12 mg/kg O&G by Method 413.2 (IR). No USTs were encountered.

Groundwater has been sampled since 5/9/92. See Table 3. The general flow direction has been northeast, in the general direction of Lake Merritt.

To summarize, the reasons that this case should be closed are as follows:

- \* The sources have reportedly been removed (three USTs).
- \* The site has been adequately characterized. During three separate subsurface investigations, 40 soil samples have been collected. Since May 1992, 16 rounds of groundwater samples have been conducted.
- \* Groundwater results from the last QM indicate that BTEX was ND or below the MCLs, while TPHg and TPHd were at very low concentrations; MTBE was ND.
- \* Although it is evident that soil and groundwater have been impacted from past releases of petroleum hydrocarbons at this site (26+ years ago), it appears that the residual soil and groundwater contamination is generally contained onsite. The groundwater contaminant plume is of low concentration, stable, and expected to diminish with time due to natural attenuation.
- \* There are no sensitive human or environmental receptors in the site vicinity: Lake Merritt lies approximately 3,000 feet from the site (a significant and unlikely distance for a hydrocarbon plume to travel), and the site is used as a paved parking lot.

## Leaking Underground Fuel Storage Tank Program

- \* There is likely no significant risk to human health. The maximum concentration of benzene in soil ever discovered at the site was 4.5 mg/kg, collected during MSE's 1990 investigation. This was at a depth of 10' bgs. Since the average DTW was approximately 6' bgs, as determined during A-G's 1992 investigation, this may not be the best sample to use to compare to ASTM RBCA numbers. However, 4.5 mg/kg benzene would not exceed the Risk Based Screening Level (RBSL) for the soil to outdoor air pathway, commercial scenario, 10-4 target level (13.25 mg/kg). The second highest benzene concentration was 2.4 mg/kg at a depth of 5' bgs (TB-4), also collected during MSE's 1990 investigation. This concentration also would not exceed the Risk Based Screening Level (RBSL) for the soil to outdoor air pathway, commercial scenario, 10-4 target level (13.25 mg/kg). Note that the benzene concentrations from samples collected subsequently (1992) were all ND, with the exception of 0.78 and 0.012 mg/kg in MW3/SB9.
- \* The closure letter will require agency notification if there is a proposal for a change in land use, site activity, or structural configuration of the site (e.g. new construction or excavation activities).

### VI. LOCAL AGENCY REPRESENTATIVE DATA

Name: Jennifer Eberle Title: Hazardous Materials Specialist

Signature:  Date: 10-24-96

#### Reviewed by

Name: Amy Leech Title: Hazardous Materials Specialist

Signature:  Date: 10/24/96


Name: Tom Peacock Title: Manager of LOP

Signature:  Date: 11-4-96

### VII. RWQCB NOTIFICATION

Date Submitted to RWQCB: 11-4-96 RWQCB Response: 

RWQCB Staff Name: Kevin Graves Title: Associate Water Resources Control Engineer

Date: 11/14/96 

$$TRPH - (TPH-g + TPH-d) = 0 + G$$

Table 1

30-0622

~~TABLE~~  
 Analytical Results of Soil Sampling  
 Former Mobil Station 04-EWB  
 1975 Webster Street, Oakland, California

*as hydraulic fluid*

Concentrations in parts per million (ppm)

SAMPLE ID	DATE OF SAMPLING	SAMPLE DEPTH(ft)	TPH-G	TPH-D	TPH-HF <i>includes TPH-G</i>	B	T	E	X	Pb	LAB	
TB-1	02/17/90	COMPOSITE	ND<10	---	ND<10	---	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<5	PA
TB-2	02/17/90	COMPOSITE	2200 *	---	330	---	0.67	0.39	5.3	43	ND<5	PA
TB-2	02/17/90	5	17000 *	---	---	---	2	1.6	36	210	---	PA
TB-2	02/17/90	10	ND<10	---	---	---	ND<0.005	0.091	ND<0.005	ND<0.010	---	PA
TB-2	02/17/90	15	ND<10	---	---	---	ND<0.005	0.067	ND<0.005	ND<0.010	---	PA
TB-3	02/17/90	7	110'	---	230	---	0.95	0.048	1.8	2.2	48	PA
TB-3	02/17/90	10	61	---	1600	---	4.5	0.054	0.41	0.24	63	PA
TB-3	02/17/90	15	ND<10	---	ND<10	---	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<5	PA
TB-4	02/17/90	5	3400 **	---	610	---	2.4	1.9	9.6	68	ND<5	PA
TB-4	02/17/90	10	ND<10	---	ND<10	---	ND<0.005	ND<0.005	ND<0.005	0.013	ND<5	PA
TB-4	02/17/90	15	ND<10	---	ND<10	---	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<5	PA
TB-5	02/17/90	COMPOSITE	ND<10	---	ND<10	---	ND<0.005	ND<0.005	ND<0.005	ND<0.010	ND<5	PA
SB-1	04/04/92	4.5- 5.0	ND<1.0	---	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-1	04/04/92	10.0-10.5	ND<1.0	1.1	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-1	04/04/92	15.0-15.5	ND<1.0	---	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-1	04/04/92	21.0-21.5	---	---	ND<1.0	---	---	---	---	---	---	---
SB-2	04/04/92	2.5- 3.0	ND<1.0	ND<1.0	---	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-2	04/04/92	10.5-11.0	ND<1.0	ND<1.0	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-2	04/04/92	19.5-20.0	ND<1.0	---	---	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-3	04/04/92	5.0- 5.5	ND<1.0	---	---	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-3	04/04/92	6.0- 6.5	---	ND<1.0	ND<1.0	---	---	---	---	---	---	---
SB-3	04/04/92	11.0-11.5	ND<1.0	ND<1.0	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-4	04/04/92	3.0- 3.5	ND<1.0	1.8 ***	85	6.7	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-4	04/04/92	11.0-11.5	---	---	ND<1.0	---	---	---	---	---	---	---
SB-4	04/04/92	16.0-16.5	ND<1.0	15 ***	ND<1.0	3.4	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-5	04/04/92	5.0- 5.5	3.3	17 ***	560	77	ND<0.0050	0.0063	0.0090	0.017	---	SEQ
SB-5	04/04/92	11.0-11.5	ND<1.0	2.6 ***	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-5	04/04/92	16.0-16.5	ND<1.0	2.1	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ

TPH not be  
 7# TPH-g and/or  
 TPH-d

# Table 1

30-0622

Analytical Results of Soil Sampling  
 Former Mobil Station 04-EWB  
 1975 Webster Street, Oakland, California

as  
 hyl. fluid

Concentrations in parts per million (ppm)

SAMPLE ID	DATE OF SAMPLING	SAMPLE DEPTH(ft)	TPH-G	TPH-D	TPH <sup>inc. TPH-G</sup>	TPH-HF	B	T	E	X	Pb	LAB
SB-6	04/04/92	4.5- 5.0	120 ****	18	180	5.1	ND<0.0050	ND<0.0050	ND<0.0050	0.68	---	SEQ
SB-6	04/04/92	10.5-11.0	ND<1.0	ND<1.0	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
SB-6	04/04/92	16.0-16.5	ND<1.0	2.1	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
MW-1 (SB-7)	04/04/92	5.5- 6.0	ND<1.0	1.8	910	20 <sup>0</sup>	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
MW-1 (SB-7)	04/04/92	10.5-11.0	ND<1.0	ND<1.0	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
MW-2 (SB-8)	04/04/92	5.5- 6.0	ND<1.0	ND<1.0	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
MW-2 (SB-8)	04/04/92	10.5-11.0	ND<1.0	ND<1.0	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
MW-3 (SB-9)	04/05/92	5.0- 5.5	520 <sup>0</sup>	45 ***	130	3.5	0.78	2.7	1.7	2.4	---	SEQ
MW-3 (SB-9)	04/05/92	8.5- 9.0	16 <sup>0</sup>	8.2 ***	26	---	0.012	0.088	0.059	0.12	---	SEQ
MW-3 (SB-9)	04/05/92	13.5-14.0	ND<1.0	3.7	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
MW-4 (SB-10)	04/05/92	5.0- 5.5	ND<1.0	ND<1.0	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ
MW-4 (SB-10)	04/05/92	10.5-11.0	ND<1.0	ND<1.0	ND<1.0	---	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.0050	---	SEQ

EXPLANATION OF ABBREVIATIONS:

TPH-G	:total petroleum hydrocarbons as gasoline	---	:not measured/not analyzed
TPH-D	:total petroleum hydrocarbons as diesel	*	:sample reported by laboratory as not matching gasoline standard chromatogram
TOG	:total oil and grease	**	:sample chromatogram resembled aged gasoline or possibly aviation fuel
TPH-HF	:total petroleum hydrocarbons as hydraulic fluid	***	:sample reported by laboratory as not appearing to contain diesel
B	:benzene	****	:sample reported by laboratory as not appearing to contain gasoline
T	:toluene	PAI	:Performance Analytical, Inc.
E	:ethylbenzene	SEQ	:Sequoia Analytical Labs
X	:total xylenes		
Pb	:lead		
ND	:not detected at or above reported detection limit		
NA	:not applicable/not available		

3.9 ppm  
 2-methylnaphthalene

Note: Analysis for semi-volatile organic compounds (SVOCs) of SB-9 at 5 fbg detected 3.9 ppm 2-methylnaphthalene.



# Table 2

30-0622

~~XXXXXXXXXX~~  
 Analytical Results of Ground Water Monitoring and Sampling  
 Former Mobil Station 04-EWB  
 1975 Webster Street, Oakland, California

Concentrations in parts per billion (ppb)

WELL ID	DATE OF SAMPLING/ MONITORING	TOP OF CASING ELEVATION	DEPTH TO WATER	GROUND WATER ELEVATION	TPH-G	TPH-D	TPH-HF	TOG	B	T	E	X	SVOCs	TDS (mg/l)	Salinity	Lead (mg/l)
MW-1	05/09/92	8.03	5.56	2.47	ND<30	52	320	ND<5	ND<0.30	ND<0.30	ND<0.30	ND<0.30	---	---	---	---
MW-1	05/25/92	8.03	5.70	2.33	---	---	---	---	---	---	---	---	---	---	---	---
UG MW-2	05/09/92	9.37	6.70	2.67	ND<30	130	250*	ND<5	ND<0.30	ND<0.30	ND<0.30	ND<0.30	---	---	---	---
MW-2	05/25/92	9.37	6.89	2.48	---	---	---	---	---	---	---	---	ND	1100	1.0	0.022
DG MW-3	05/09/92	7.71	5.42	2.29	210*	130**	290	ND<5	ND<0.30	ND<0.30	ND<0.30	ND<0.30	---	---	---	---
MW-3	05/25/92	7.71	5.65	2.06	---	---	---	---	---	---	---	---	a) 12 b) 5.7 c) 17 d) 6.7	3000	2.6	0.0097
MW-4	05/09/92	8.68	6.01	2.67	ND<30	ND<50	280	ND<5	ND<0.30	ND<0.30	ND<0.30	ND<0.30	---	---	---	---
MW-4	05/25/92	8.68	6.34	2.34	---	---	---	---	---	---	---	---	---	---	---	---

*total*  
Lead (mg/l)

EXPLANATION OF ABBREVIATIONS:

TPH-G :total petroleum hydrocarbons quantified as gasoline  
 TPH-D :total petroleum hydrocarbons quantified as diesel  
 TPH-HF :total petroleum hydrocarbons quantified as hydraulic fluid  
 TOG :total oil and grease  
 B :benzene  
 T :toluene  
 E :ethylbenzene  
 X :total xylenes

TDS :total dissolved solids  
 ND :not detected  
 NA :not applicable/not available  
 --- :not analyzed/not measured  
 \* :sample reported as not appearing to contain gasoline  
 \*\* :sample reported as not appearing to contain diesel

Semi-Volatile Organic Compounds (SVOCs)  
 a)\* 2-pentene, 4,4-dimethyl  
 b): benzene, 2-methyl-1-methylenepropyl  
 c): 1-H-Inden-1-one, 2,3-dihydro,3-methyl  
 d)\* Hexadeconic acid

- Notes: 1) Top of casing elevations were surveyed in reference to City of Oakland Survey Station 31/C-2 in the concrete walk on the east side of Broadway, 6.3 feet east of the east curb of Broadway and 67 feet north of the north curb of 26th Street.  
 2) Samples MW-2 and MW-3 were additionally analyzed for "Hydrocarbon fuel fingerprint" using modified EPA Method 8015. Both of the samples were found to contain hydrocarbons in several ranges, including gasoline, stoddard solvent, kerosene, paint thinner, aviation fuel, and diesel ranges. However, based on comparisons with chromatograms of these standards, none of these fuels could be absolutely identified as being present in the samples.  
 3) Analysis were performed by Sequoia Analytical Laboratories

~~Table 1~~ Table 3

### Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-EWB

Well ID	Date	Top of Casing Elevation	Depth to Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	TPH-HF (ppb)	TOG (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	
MW-1	05/09/92	8.03	5.56	2.47	ND	52	320	ND	ND	ND	ND	ND	—	
	05/25/92		5.70	2.33	—	—	—	—	—	—	—	—	—	
	08/29/92		5.59	2.44	ND	72	**	ND	—	ND	ND	ND	ND	—
	01/10/93		4.83	3.20	ND	ND	—	ND	ND	ND	ND	ND	ND	—
	04/25/93		5.10	2.93	ND	—	—	—	ND	ND	ND	ND	ND	—
	05/02/93		5.20	2.83	—	—	ND	—	—	—	—	—	—	—
	06/13/93		6.05	1.98	—	—	—	—	—	—	—	—	—	—
	07/18/93		5.50	2.53	—	—	—	—	—	—	—	—	—	—
	08/22/93		5.60	2.43	—	—	—	—	—	—	—	—	—	—
	09/12/93		5.69	2.34	ND	ND	—	ND	ND	ND	ND	ND	ND	—
	12/05/93		5.65	2.38	ND	160	—	—	—	ND	ND	ND	ND	—
	03/06/94		—	—	ND	ND	—	ND	ND	ND	ND	ND	ND	—
	06/26/94		5.54	2.49	140	100	—	—	—	2.4	6.1	8.2	26	—
	09/18/94		5.82	2.21	ND	ND	—	—	—	ND	ND	ND	ND	—
	12/18/94		5.13	2.90	ND	ND	—	—	—	ND	0.53	0.61	1.9	—
	03/05/95		5.07	2.96	270	240	—	—	—	11	22	7.9	31	—
03/24/96	4.63	3.40	ND	85	—	—	—	ND	ND	ND	0.72	ND		
MW-2	05/09/92	9.37	6.70	2.67	ND	130	250	ND	ND	ND	ND	ND	—	
	05/25/92		6.89	2.48	—	—	—	—	—	—	—	—	—	
	08/29/92		6.35	3.02	ND	150	**	ND	—	ND	ND	ND	ND	—
	01/10/93		5.92	3.45	ND	59	**	ND	ND	ND	ND	ND	ND	—
	04/25/93		5.15	4.22	ND	—	—	—	ND	ND	ND	ND	ND	—
	05/02/93		5.80	3.57	—	—	ND	ND	—	—	—	—	—	—
	06/13/93		5.27	4.10	—	—	—	—	—	—	—	—	—	—
	07/18/93		6.34	3.03	—	—	—	—	—	—	—	—	—	—
	08/22/93		6.56	2.81	—	—	—	—	—	—	—	—	—	—
	09/12/93		6.69	2.68	ND	ND	—	ND	ND	ND	ND	ND	ND	—
	12/05/93		7.12	2.25	ND	190	—	—	—	ND	ND	ND	ND	—
	03/06/94		—	—	560	750	—	ND	ND	52	ND	41	3.4	—
	06/26/94		6.68	2.69	ND	ND	—	—	—	ND	ND	ND	0.84	—
	09/18/94		7.29	2.08	ND	ND	—	—	—	ND	ND	ND	ND	—
	12/18/94		6.56	2.81	ND	ND	—	—	—	ND	ND	ND	ND	—
	03/05/95		5.65	3.72	ND	72	—	—	—	1.9	4.2	1.6	6.3	—
03/24/96	4.84	4.53	ND	ND	—	—	—	ND	ND	ND	1.7	ND		

~~Table 1~~ **Table 3**

## Summary of Groundwater Monitoring and Analysis

Former Mobil Station 04-EWB

Well ID	Date	Top of Casing Elevation	Depth to Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	TPH-HF (ppb)	TOG (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	
MW-3	05/09/92	7.71	5.42	2.29	210 *	130 **	290	ND	ND	ND	ND	ND	—	
	05/25/92		5.65	2.06	—	—	—	—	—	—	—	—	—	—
	08/29/92		6.04	1.67	ND	150 **	ND	—	ND	ND	ND	ND	ND	—
	01/10/93		4.40	3.31	920 #	1,900 ##	ND	ND	3.4	0.50	4.4	1.7	—	—
	04/25/93		5.60	2.11	930	—	—	ND	3.6	ND	ND	3	—	—
	05/02/93		5.20	2.51	—	1,200	ND	—	—	—	—	—	—	—
	06/13/93		5.41	2.30	—	—	—	—	—	—	—	—	—	—
	07/18/93		5.83	1.88	—	—	—	—	—	—	—	—	—	—
	08/22/93		6.00	1.71	—	—	—	—	—	—	—	—	—	—
	09/12/93		6.08	1.63	200	620	ND	ND	ND	0.79	ND	0.79	—	—
	12/05/93		5.66	2.05	2,000	1,400	##	—	23	ND	6.1	ND	—	—
	03/06/94		—	—	7,800	2,400	ND	2.7	7.0	ND	510	ND	—	—
	06/26/94		5.59	2.12	210	370	—	—	ND	ND	ND	0.67	—	—
	09/18/94		6.29	1.42	130	310	—	—	ND	ND	ND	ND	—	—
	12/18/94		4.44	3.27	500	890	—	—	1.6	ND	1.7	1.5	—	—
	03/05/95		4.64	3.07	990	1,400	—	—	1.4	1.0	1.0	1.7	—	—
	03/24/96		4.77	2.94	150	200	—	—	0.66	ND	0.62	ND	ND	—
MW-4	05/09/92	8.68	6.01	2.67	ND	ND	280	ND	ND	ND	ND	ND	—	
	05/25/92		6.34	2.34	—	—	—	—	—	—	—	—	—	
	08/29/92		7.05	1.63	ND	ND	ND	—	ND	ND	ND	ND	—	
	01/10/93		5.12	3.56	ND	ND	ND	ND	ND	ND	ND	ND	—	
	04/25/93		5.75	2.93	ND	—	—	ND	ND	ND	ND	ND	—	
	05/02/93		5.70	2.98	—	ND	ND	—	—	—	—	—	—	
	06/13/93		5.97	2.71	—	—	—	—	—	—	—	—	—	
	07/18/93		6.57	2.11	—	—	—	—	—	—	—	—	—	
	08/22/93		7.00	1.68	—	—	—	—	—	—	—	—	—	
	09/12/93		7.23	1.45	ND	ND	ND	ND	ND	ND	ND	ND	—	
	12/05/93		6.86	1.82	ND	150	—	—	ND	ND	ND	ND	—	
	03/06/94		—	—	ND	240	ND	ND	ND	ND	ND	ND	—	
	06/26/94		6.34	2.34	ND	ND	—	—	ND	ND	0.56	1.4	—	
	09/18/94		7.47	1.21	ND	ND	—	—	ND	ND	ND	ND	—	

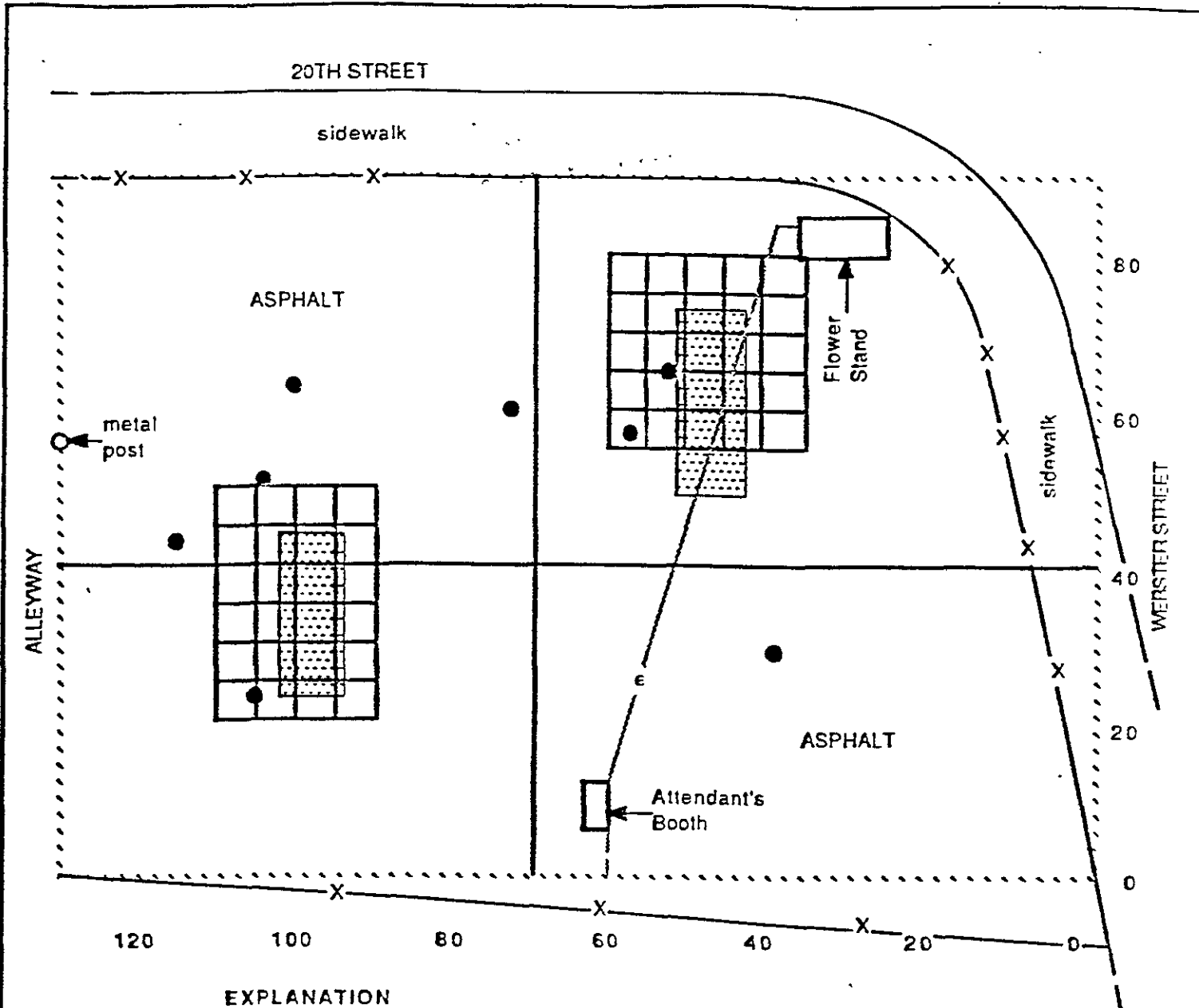
~~Table 1~~ Table 3

**Summary of Groundwater Monitoring and Analysis**

Former Mobil Station 04-EWB

Well ID	Date	Top of Casing Elevation	Depth to Water	Ground-water Elevation	TPH-G (ppb)	TPH-D (ppb)	TPH-HF (ppb)	TOG (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)
MW-4	12/18/94		4.76	3.92	ND	ND	—	—	ND	ND	ND	0.91	—
(con't)	03/05/95		5.04	3.64	ND	ND	—	—	1.6	3.8	1.5	5.0	—
	03/24/96		5.80	2.88	ND	ND	—	—	ND	ND	ND	0.96	ND

- NOTES:
- ppb = parts per billion
  - TPH-G = total petroleum hydrocarbons as gasoline
  - TPH-D = total petroleum hydrocarbons as diesel
  - TPH-HF = total petroleum hydrocarbons as hydraulic fluid
  - TDS = total dissolved solids
  - ND = not detected at or above detection limits
  - = not measured/not analyzed
  - \* = non-gasoline mixture
  - \*\* = non-diesel mixture
  - # = gasoline and non-gasoline mixture
  - ## = diesel and non-diesel mixture
  - SVOCs = semi-volatile organic compounds
  - a = 2-pentene, 4,4-dimethyl
  - b = benzene, 2-methyl-1-methylenepropyl
  - c = 1-H-Inden-1-one, 2,3-dihydro,3-methyl
  - d = Hexadecanoic acid



**EXPLANATION**

	Magnetics Survey Boundary	<b>CONDUITS</b>
	Magnetically Anomalous Area	e Electric
	Ground Penetrating Radar Traverse	
	Surface Trace of Conduit	
	Proposed Exploratory Boring Site	
	Fence	

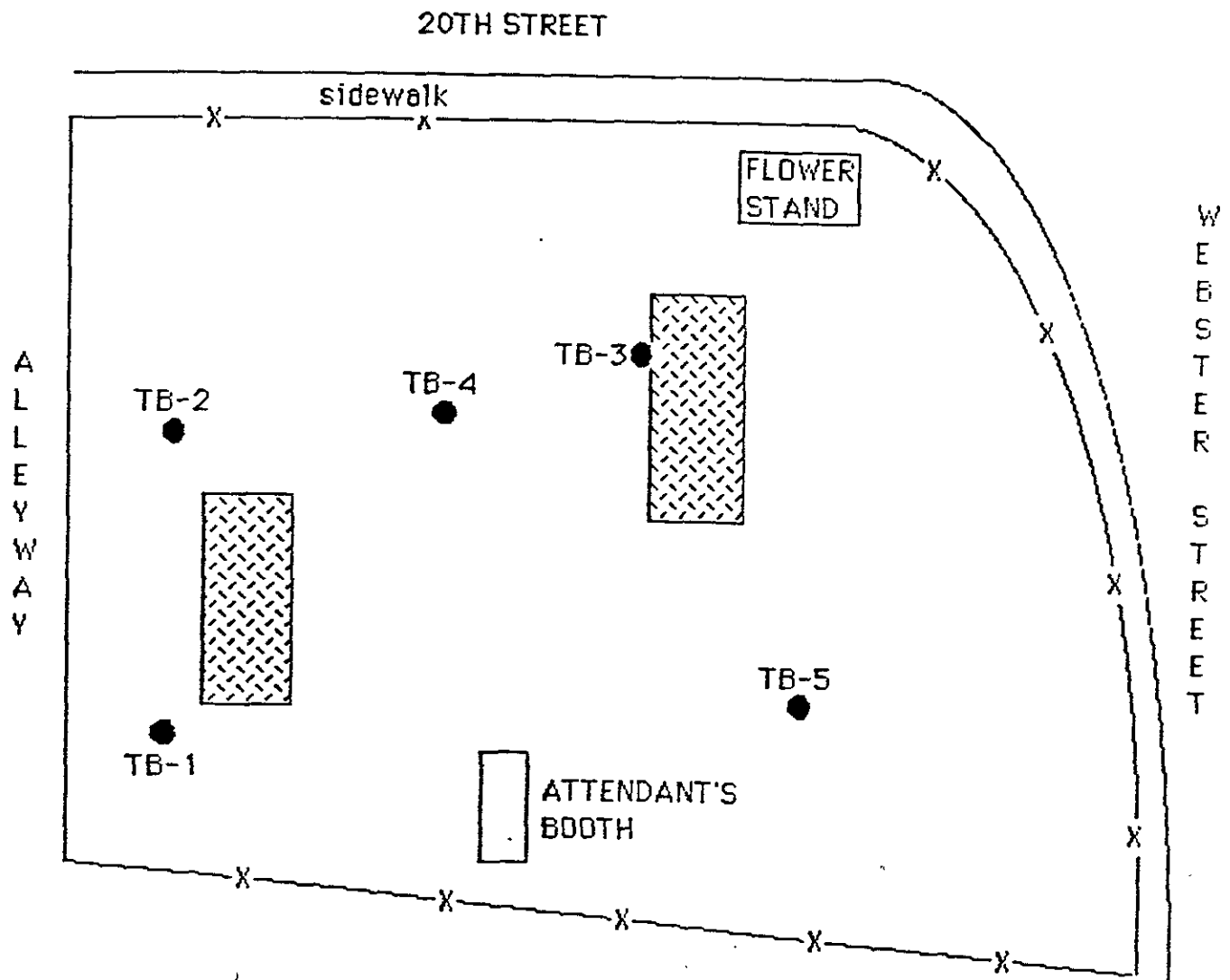
0 20  
  
 ONE INCH EQUALS TWENTY FEET  
 SCALE IS APPROXIMATE




Fig. 1

**MSE**  
 MSE ENVIRONMENTAL, INC.

<b>FIGURE 1</b>		DRAWING NUMBER
<b>AREAS OF MAGNETICS SURVEY</b>		
SCALE	APPROVED BY	DRAWN BY
DATE		REVISION



 Suspected Areas Of Pre- Existing  
Underground Storage Tanks

*Fig 2*



MSE ENVIRONMENTAL, INC.

FIGURE 2  
TEST BORINGS

SCALE

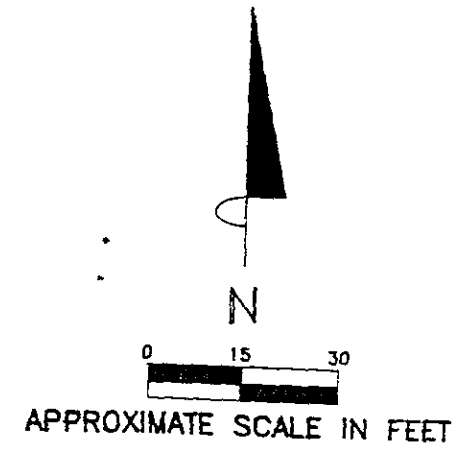
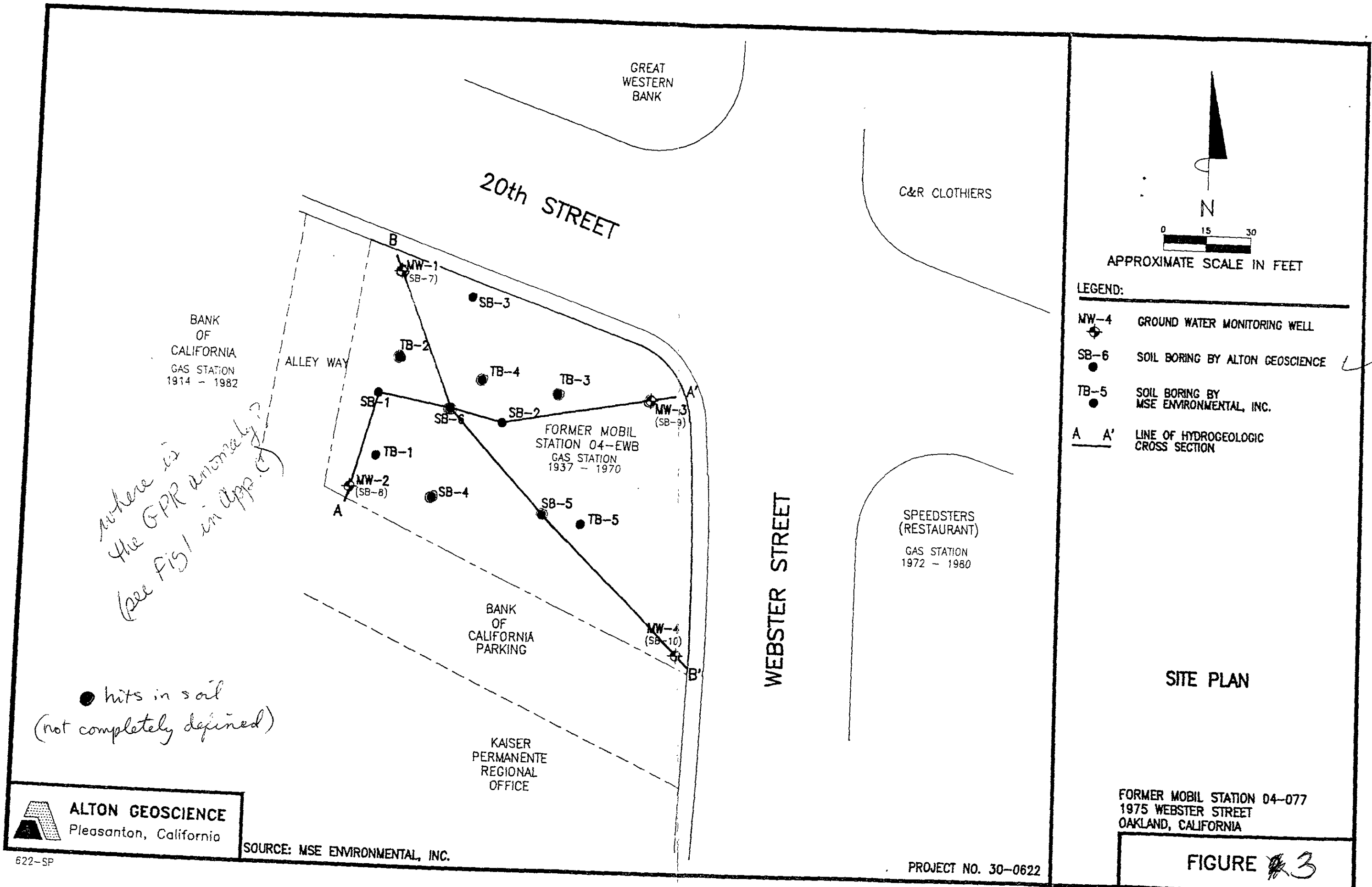
DATE

APPROVED BY:

DRAWING NUMBER

DRAWN BY:

REVISED



- LEGEND:**
- MW-4 GROUND WATER MONITORING WELL
  - SB-6 SOIL BORING BY ALTON GEOSCIENCE
  - TB-5 SOIL BORING BY MSE ENVIRONMENTAL, INC.
  - A A' LINE OF HYDROGEOLOGIC CROSS SECTION

**SITE PLAN**

FORMER MOBIL STATION 04-077  
 1975 WEBSTER STREET  
 OAKLAND, CALIFORNIA

**FIGURE 3**

**ALTON GEOSCIENCE**  
 Pleasanton, California

SOURCE: MSE ENVIRONMENTAL, INC.

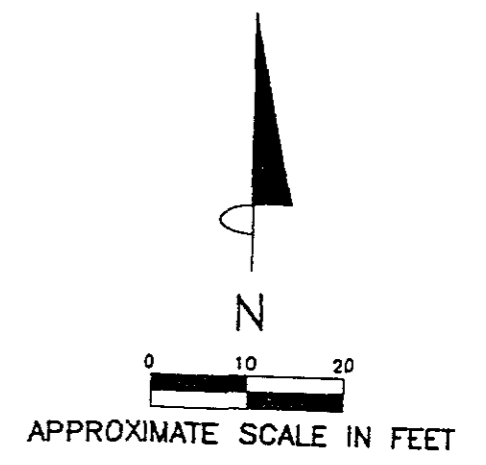
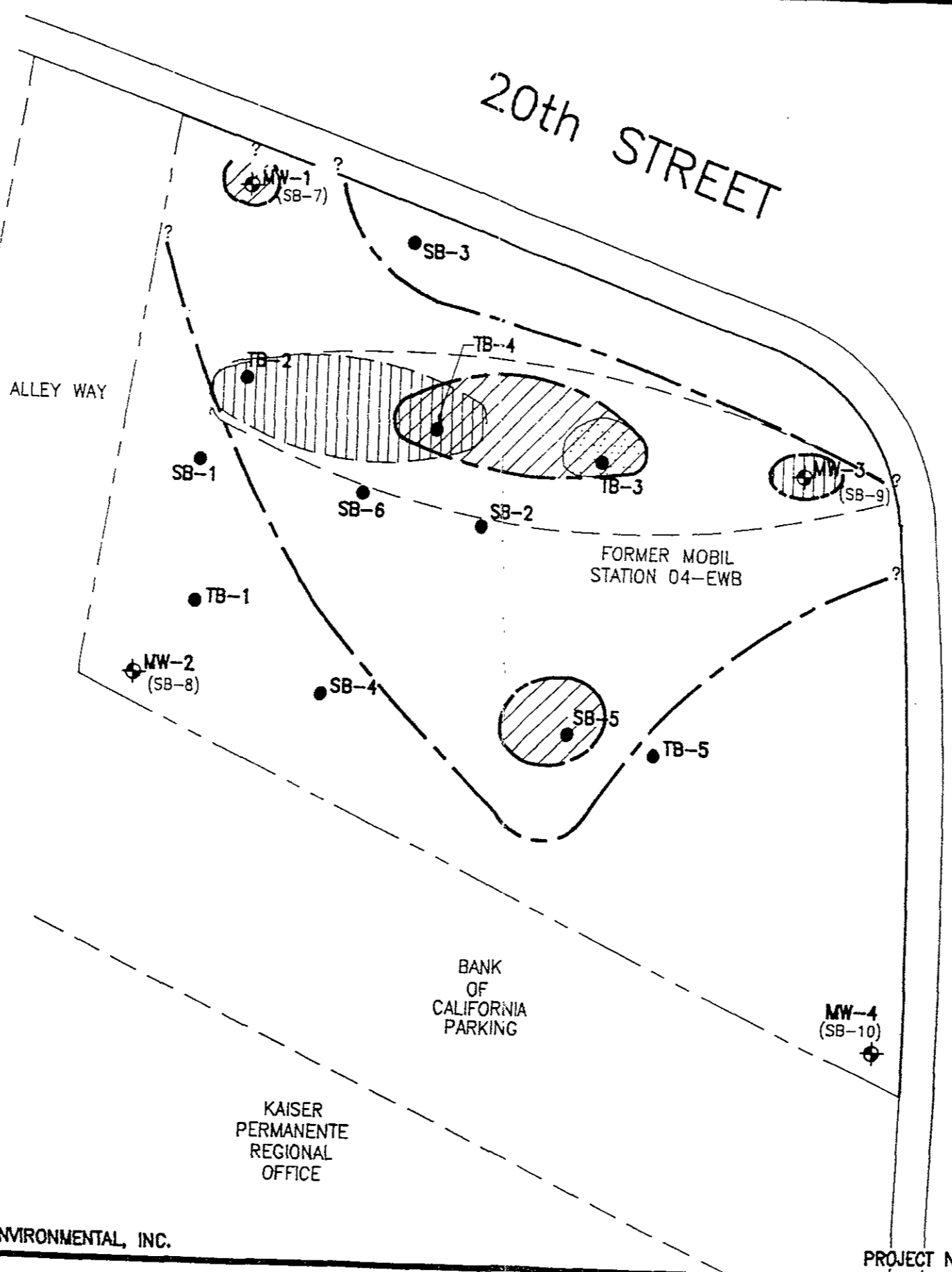
622-SP

PROJECT NO. 30-0622

TABLE			
SAMPLE I.D.	DEPTH	TPH	TRPH
TB-1 *	COMP.	ND	ND
TB-2 *	COMP.	2200	330
	5	17000	NA
	10	ND	NA
	15	ND	NA
TB-3 *	7	110	230
	10	61	1600
	15	ND	ND
TB-4 *	5	3400	610
	10	ND	ND
	15	ND	ND
TB-5 *	COMP.	ND	ND
SB-1	4.5	ND	ND
	10.0	ND	ND
	15.0	ND	ND
	21.0	NA	ND
SB-2	2.5	ND	NA
	10.5	ND	ND
	19.5	ND	NA
SB-3	5.0	ND	NA
	8.0	NA	ND
	11.0	ND	ND
SB-4	3.0	ND	85
	11.0	NA	ND
	18.0	ND	ND
SB-5	5.0	3.3	560
	11.0	ND	ND
	16.0	ND	ND
SB-6	4.5	18	180
	10.5	ND	ND
	18.5	ND	ND
MW-1 (SB-7)	5.5	ND	910
	10.5	ND	ND
MW-2 (SB-8)	5.5	ND	ND
	10.5	ND	ND
MW-3 (SB-9)	5.0	520	130
	8.5	16	28
	13.5	ND	ND
MW-4 (SB-10)	5.0	ND	ND
	10.5	ND	ND

\* MSE Environmental 1990

BANK OF CALIFORNIA



- LEGEND:**
- MW-4 GROUND WATER MONITORING WELL
  - TB-5 SOIL BORING BY MSE ENVIRONMENTAL, INC.
  - SB-6 SOIL BORING BY ALTON GEOSCIENCE
  - TPH TOTAL PETROLEUM HYDROCARBONS
  - TRPH TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
  - ppm PARTS PER MILLION
  - Fbg FEET BELOW GRADE
- APPROXIMATE EXTENT OF TRPH**
- TRPH > 100ppm from 0-5 Fbg
  - TRPH > 500ppm from 0-5 Fbg
  - TRPH > 500ppm from 5-10 Fbg
- APPROXIMATE EXTENT OF TPH**
- TPH > 100ppm from 0-5 Fbg
  - TPH > 500ppm from 0-5 Fbg

NOTE:  
RESULTS REPORTED FOR TPH REFLECT LABORATORY ANALYSIS FOR LOW TO MEDIUM BOILING POINT HYDROCARBONS QUANTIFIED AGAINST A GASOLINE STANDARD

**HYDROCARBON CONCENTRATIONS IN SOIL**

FORMER MOBIL STATION 04-EWB  
1975 WEBSTER STREET  
OAKLAND, CALIFORNIA

**ALTON GEOSCIENCE**  
Pleasanton, California

SOURCE: MSE ENVIRONMENTAL, INC.

PROJECT NO. 30-0622

**FIGURE 5**



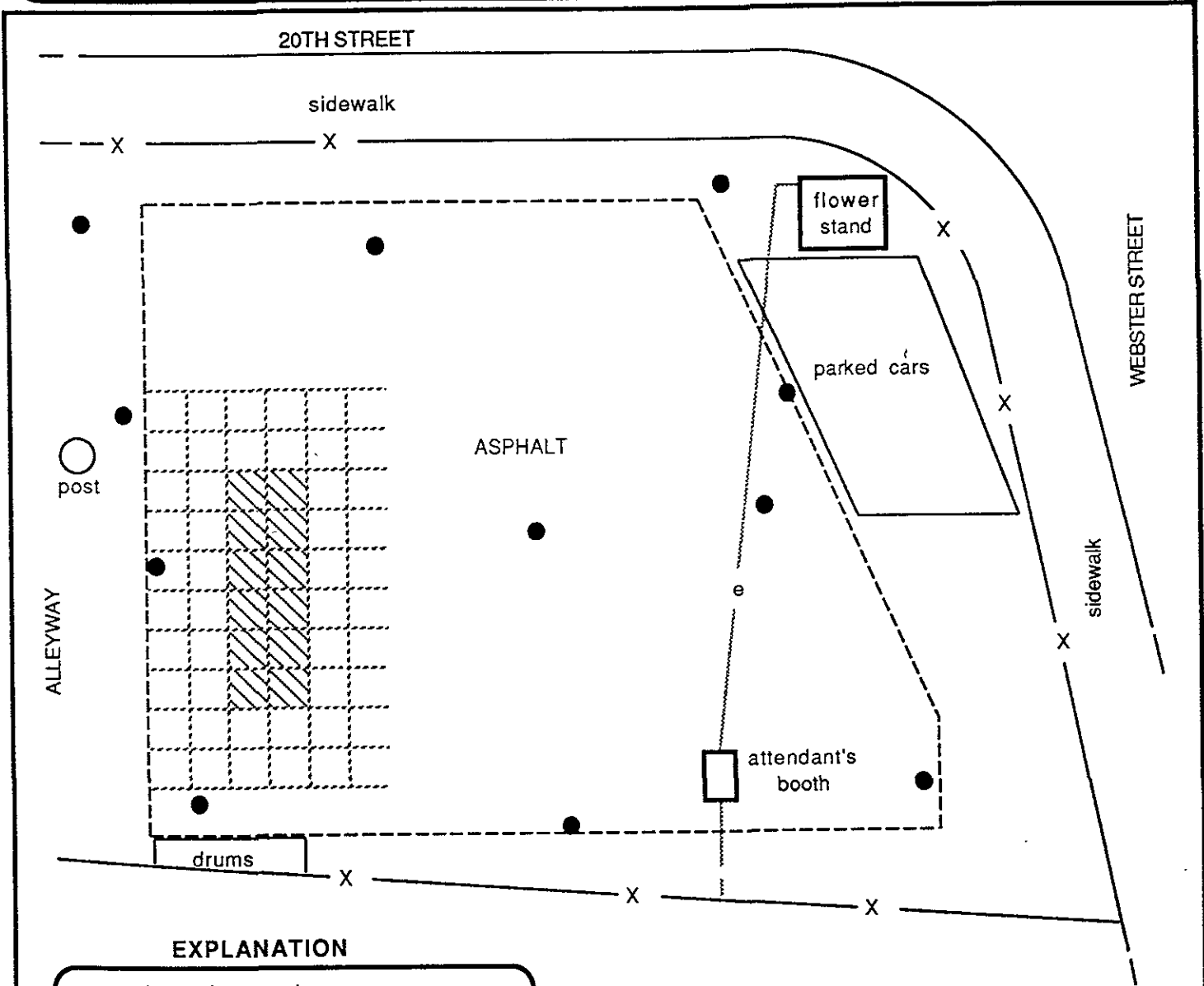
**FIGURE ONE**

AREA OF GEOPHYSICAL INVESTIGATION  
ON A PORTION OF THE PARKING LOT ON  
THE SOUTHWEST CORNER OF 20TH AND  
WEBSTER STREETS, OAKLAND, CA



**SPECTRUM** Environmental Services Inc.

Environmental Geophysics  
1000 N. Maclay Ave., San Fernando, CA 91340



**EXPLANATION**

	Area of magnetics investigation	e Electric
	Magnetic anomaly	
	Ground penetrating radar traverse	
	Surface trace of subsurface conduit	
	Proposed exploratory boring site	
	Fence	



0 20  
Scale: One inch equals approximately twenty feet

Fig. 4

B-92032801G  
T. Brennan  
Date of Investigation:  
March 28, 1992

Not all below ground facilities may be represented on this map. Do not install borings except where they have been specifically investigated by Spectrum.