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STD
1068

To: Dale Kletke

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From: Marc Briggs

Date: December 4, 1996

Subject: 7-0236

Pages: few

NOTES:

Here is copy of Remedial Action Plan for your files.



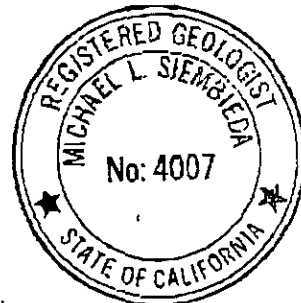
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REMEDIAL ACTION PLAN
for
Non-Attainable Groundwater Quality Zone
at
Exxon Service Station 7-0236
6630 East 14th Street
Oakland, California

Prepared for
Exxon Company, U.S.A.
by
RESNA Industries

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May 12, 1994
Report 170079.03



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REMEDIAL ACTION PLAN
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Non-Attainable Groundwater Quality Zone
at
Exxon Service Station 7-0236
6630 East 14th Street
Oakland, California

1.0 INTRODUCTION

At the request of Exxon Company, U.S.A., (Exxon), RESNA Industries (RESNA) has prepared this Remedial Action Plan (RAP) to obtain non-attainable groundwater quality zone status for Exxon Service Station 7-0236 in Oakland, California. Previous environmental investigations have identified residual hydrocarbons in soil and a limited aerial extent of dissolved hydrocarbons in groundwater.

The purpose of this RAP is to summarize the results of environmental investigations performed to date and to discuss criteria that can be applied at this site to remediate hydrocarbons in soil and monitor degradation of hydrocarbons in groundwater in a non-attainable groundwater quality zone.

2.0 BACKGROUND

Exxon Station 7-0236 is an operating retail gasoline station located on the northern side of East 14th Street between Havenscourt Boulevard and 66th Avenue in Oakland, California, as depicted on the Site Vicinity Map (Plate 1). Structures at the site include a service station building with two multi-pump fuel dispenser islands and three underground fuel storage tanks



and one used-oil storage tank. The site is located in a mixed residential and light business district. Havenscourt Junior High School is located to the south, across East 14th Street from the site. The approximate locations of the station facilities, existing underground storage tanks (USTs) and pump islands, the current use of adjacent lots, and other pertinent site features are shown on the Generalized Site Plan (Plate 2).

3.0 SCOPE OF PREVIOUS INVESTIGATIONS

Twelve soil borings have been drilled at or near the site. Seven of these borings were converted into groundwater monitoring wells, three were converted into vapor-extraction wells, and two soil borings were backfilled. The initial three monitoring wells were installed in March 1991. Four additional wells were installed in March 1992, and the three vapor-extraction wells were installed in November 1993.

Exxon initiated quarterly groundwater monitoring at the site in January 1992.

In March and October 1993 a records search and a site reconnaissance were performed to evaluate potential hydrocarbon sources within one-quarter mile of the site (RESNA, November 22, 1993).

In December 1993, a vapor-extraction test was performed at the site to evaluate the feasibility of using vapor-extraction as a remedial measure. In December 1993, a groundwater pumping test was also performed onsite to assess the aquifer parameters (RESNA, February 14, 1994).

A Summary of the investigations is presented below:

- o Sediments beneath the site consist of low permeability clay, silty clay, and gravely silt.
- o Groundwater was encountered at depths ranging from approximately 6.5 to 15.0 feet below ground surface during quarterly groundwater monitoring. The groundwater flow direction at the site has been consistently to the southwest.



- o Cumulative groundwater monitoring data from January 1992 through March 1994 (RESNA, March 31, 1994) indicates the lateral extent of dissolved gasoline hydrocarbons are limited to the vicinity of the underground storage tanks, and have not migrated to offsite downgradient well MW-5.
- o Residual gasoline and diesel hydrocarbons (TPHg, TPHd, and BTEX) were not detected in soil samples from boring B-1 (drilled near the underground storage tanks) and only low concentrations of TPHd were detected in soil samples collected from boring VE-2. Residual gasoline and/or diesel hydrocarbons (TPHg, TPHd, and BTEX) were detected in borings VE-1, VE-3, and B-2 (drilled near the pump islands). The maximum concentration of TPHg was 150 parts per million (ppm), and the maximum concentration of TPHd was 200 ppm. Results are presented in Table 1 - Hydrocarbon Concentrations in Soil Samples from Borings.
- o Results of the VET indicated that the maximum achievable flowrates from wells VE-1, VE-2, and VE-3 ranged from 31 to 79 actual cubic feet per minute (acfm). The vacuum responses observed were either negligible or too low for use in radius of influence (ROI) evaluation.
- o The distribution of TPHg vapor measured in soil gas suggests that the majority of source TPHg exists beneath the existing USTs, however, vapor extraction of residual gasoline hydrocarbons does not appear to be a feasible remedial alternative.
- o Data gathered during the step drawdown test performed at the site indicated that the sustainable flowrate is approximately 0.1 gallons per minute (gpm) or 144 gallons per day (gpd). Because of the low sustainable flowrate observed during the step draw-down test, RESNA concludes that groundwater pumping is not a feasible remedial alternative for removing dissolved petroleum hydrocarbons from groundwater.
- o The sustainable flowrate of 144 gpd observed during the step drawdown test is below the minimum 200 gpd specified in the Regional Water Quality Control Board-San Francisco Bay Region's Internal Memo (November 20, 1992) to consider groundwater as suitable, or potentially suitable, for municipal or domestic water supply.
- o In a letter (dated March 7, 1994), the CRWQCBSFBR agreed that vapor-extraction and pumping groundwater are not appropriate remedial alternatives and that Exxon should continue monitoring and submitting quarterly reports and develop a plan to document that other wells do not become impacted.



Based on the results of the investigations it appears that sediments at the site are generally fine grained with low permeability, the shallow groundwater at the site has limited potential use because of the low yield, pumping and treating groundwater from beneath the site does not appear to be a feasible remedial alternative and vapor-extracting residual hydrocarbons in soil beneath the site will have limited practical application. Also, the available data indicates that relatively low concentrations of residual hydrocarbons beneath the site appear to be limited to soil beneath the USTs and near the pump islands. Therefore, RESNA recommends the California Regional Quality Control Board-San Francisco Bay Region (CRWQCBSFBR) consider this site for a non-attainable groundwater quality zone status.

4.0 RECOMMENDED REMEDIAL ACTION

Based on the results of the assessments and our evaluation of site conditions, remedial alternatives at this time, and our opinion that the site qualifies as a non-attainable groundwater quality zone, we recommend limited source removal and groundwater monitoring to assess the reduction in concentrations of hydrocarbons by natural degradation, dispersion, and other attenuation reactions and document that other wells do not become impacted.

4.1 Source Removal and Groundwater Monitoring

The following tasks will be required.

- 1) Excavate and remove the underground storage tanks, dispensers, and product lines. Perform additional excavation lateral and vertical to 100 ppm or to the groundwater surface to remove hydrocarbon impacted soil that could be considered a continuing source.
- 2) Aerate the excavated soil onsite or remove the soil to an appropriate landfill.
- 3) Destroy the vapor-extraction wells.
- 4) Restore the site.
- 5) Perform semi-annual groundwater monitoring for two years. If analytic results remain constant or decline, RESNA recommends applying for closure of the site to further environmental work.



4.1.1 Excavation

Soil with residual gasoline hydrocarbons occurs beneath the tanks and the dispenser islands at depths to the top of groundwater. Because of the relatively shallow depths and limited lateral extent these conditions are conducive for removal of hydrocarbon impacted soil by excavation. This alternative will require the removal of the existing fuel USTs and dispenser islands. The extent of soil impacted by petroleum hydrocarbons beneath the USTs and dispenser islands is not known. Therefore, RESNA recommends removing hydrocarbon impacted soil vertically to groundwater or to 100 ppm TPH, and laterally to 100 ppm TPH. RESNA will collect confirmation samples at the limits of the excavation. RESNA estimates that up to approximately 550 cubic yards of soil may require excavation and treatment onsite by either uncontrolled aeration, vapor extraction of soil stockpiles or direct disposal without pre-treatment. However, based on our existing data and including removal of backfill material, we expect closer to 400 cubic yards of soil to be removed.

4.1.2 Groundwater Monitoring

At this time, petroleum hydrocarbons have been detected in groundwater at the site. However, after the proposed removal of the source of hydrocarbons we expect the concentrations to decrease. Therefore, at this time, we recommend that Exxon monitor the groundwater gradient and quality semi-annually for a two year period. Data obtained during the monitoring will be used to verify: 1) the groundwater gradient; 2) that dissolved gasoline and BTEX do not migrate further offsite; and 3) that the dissolved gasoline and BTEX concentrations in groundwater decrease with the remediation of the overlying soil. If after the two year time period levels of petroleum hydrocarbons remain stable or decrease it is recommended that a closure plan be prepared and submitted to the regulatory agencies to destroy the existing wells and close the site to further environmental work.

5.0 LIMITATIONS

This report was prepared in accordance with generally accepted standards of environmental geological practice in California at the time this investigation was performed. This investigation was conducted solely for the purpose of evaluating environmental conditions of the soil and ground water with respect to hydrocarbon product, and selected chemicals on the site. No soil



engineering or geotechnical references are implied or should be inferred. Evaluation of the geologic conditions at the site for the purpose of this investigation is made from a limited number of observation points. Subsurface conditions may vary away from the data points available. Additional work, including further subsurface investigation, can reduce the inherent uncertainties associated with this type of investigation.

6.0 REFERENCES

California Regional Water Quality Control Board, San Francisco Bay Region. August 10, 1990. Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites.

Exxon Company, U.S.A. June 1991. Phase II Environmental Investigation Scope of Work-Amendments Specific to California.

Alton Geoscience. April 29, 1991. Preliminary Site Investigation Report, Exxon Service Station 7-0236, 6630 East 14th Street, Oakland, California.

California Regional Water Quality Control Board, San Francisco Bay Region. November 20, 1992. Internal Memo from Steven Ritchie.

Alton Geoscience. June 17, 1992. Supplemental Site Investigation Final Report, Exxon RAS 7-0236, 6630 East 14th Street, Oakland, California.

RESNA Industries Inc. October 13, 1993. Work Plan for Supplemental Environmental Investigation at Exxon Station 7-0236, 6630 East 14th Street, Oakland, California. Plan 170079.06.

RESNA Industries Inc. November 22, 1993. Records Search and Reconnaissance, Exxon Service Station 7-0236, 6630 East 14th Street, Oakland, California.

RESNA Industries Inc. March 31, 1994. Groundwater Monitoring Report, Exxon Station 7-0236, 6630 East 14th Street, Oakland, California, RESNA Project 170079.01.

California Regional Water Quality Control Board, San Francisco Bay Region. August 10, 1990. Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites.

Exxon Company, U.S.A. June 1991. Phase II Environmental Investigation Scope of Work - Amendments Specific to California.



TABLE 1
HYDROCARBON CONCENTRATIONS IN
SOIL SAMPLES FROM BORINGS
Exxon Service Station 7-0236
Oakland, California
6630 East 14th Street
(page 1 of 2)

Sample Number	Depth	TPHd	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes
MW-1	6'	NA	<1.0	<0.003	<0.003	<0.003	<0.003
MW-1	11'	NA	<1.0	<0.003	<0.003	<0.003	<0.003
MW-1	16'	NA	<1.0	<0.003	<0.003	<0.003	<0.003
MW-2	6'	NA	2.0	0.008	0.018	<0.003	0.025
MW-2	11'	NA	98.0	0.074	0.12	0.24	0.19
MW-2	16'	NA	<1.0	0.051	<0.003	0.018	0.009
MW-3	6'	NA	<1.0	0.009	<0.003	<0.003	0.1
MW-3	11'	NA	<1.0	<0.003	<0.003	<0.003	0.018
MW-3	16'	NA	<1.0	<0.003	<0.003	<0.003	0.004
MW-4	5'	<5.0	<1.0	<0.005	<0.005	<0.005	<0.005
MW-4	15'	<5.0	<1.0	<0.005	<0.005	<0.005	<0.005
MW-5	5'	<5.0	<1.0	<0.005	<0.005	<0.005	<0.005
MW-5	15'	<5.0	<1.0	<0.005	<0.005	<0.005	<0.005
MW-6	5'	<5.0	<1.0	<0.005	<0.005	<0.005	<0.005
MW-6	15'	<5.0	<1.0	<0.005	<0.005	<0.005	<0.005
MW-7	5'	<5.0	<1.0	<0.005	<0.005	<0.005	<0.005
MW-7	15'	23	18	<0.005	<0.005	<0.005	<0.005
B-1	6.2'	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005
B-1	11.5'	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005
B-2	8'	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005
B-2	11'	4.6	<5.0	<0.005	<0.005	<0.005	<0.005

See notes on page 2



TABLE 1
 HYDROCARBON CONCENTRATIONS IN
 SOIL SAMPLES FROM BORINGS
 Exxon Service Station 7-0236
 Oakland, California
 6630 East 14th Street
 (page 2 of 2)

Sample Number	Depth	TPHd	TPHg	Benzene	Ethyl-Toluene	Total benzene	Xylenes
VE-1	8'	4.8	8.5	0.024	0.014	0.057	0.023
VE-1	11.3'	200	47	<0.005	<0.005	<0.005	2.5
VE-2	6'	<1.0	7.2	<0.005	<0.005	<0.005	<0.005
VE-2	11.2'	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005
VE-3	6'	<1.0	<5.0	<0.005	<0.005	<0.005	<0.005
VE-3	11.3'	1.7	150	<0.005	<0.005	<0.005	<0.005

Notes:

Soil sample: results in parts per million

TPHg: Total petroleum hydrocarbons as gasoline

TPHd: Total petroleum hydrocarbons as diesel

NA: Not analyzed



TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
 Exxon Station 7-0236
 6630 East 14th
 Oakland, California
 (Page 1 of 3)

Well ID# (TOC)	Sampling Date	SUBJ ←-----	DTW feet-----	Elev. ----->	TPHd ←-----	TPHg -----	B T E X			
							parts per billion ----->			
MW-1 (20.20)	03/15/91	NR	7.44	12.76	--	<50	<0.3	0.5	0.3	1.3
	01/15/92 (H,T)	NR	10.60	9.60	<300	<50	<0.5	0.7	<0.5	0.9
	03/23/92 (H,T)	NR	6.38	13.82	<50	<50	<0.5	<0.5	<0.5	<0.5
	04/06/92	NR	7.55	12.65	--	--	--	--	--	--
	07/08/92 (H,T)	NR	9.85	10.35	<50	<50	<0.5	<0.5	<0.5	<0.5
	10/13/92 (H,T)	NR	12.95	7.25	<50	<50	<0.5	<0.5	<0.5	<0.5
	03/09/93	NP	7.38	12.82	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/04/93	NP	8.55	11.65	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/02/93	NP	10.85	9.35	<50	<50	<0.5	<0.5	<0.5	<0.5
	11/16/93	NP	12.43	7.77	<50	<50	<0.5	<0.5	<0.5	<0.5
	02/04/94	NP	9.10	11.10	<50	<50	<0.5	<0.5	<0.5	<0.5
MW-2 (19.15)	03/15/91 (H,T)	NR	9.05	10.10	120	1,700	190	2.6	12	64
	01/15/92 (H,T)	NR	11.60	7.55	1,000	6,800	81	<10	320	170
	03/23/92 (H,T)	NR	9.42	9.73	3,000	7,100	740	30	810	490
	04/06/92	NR	9.09	10.06	--	--	--	--	--	--
	07/08/92	NR	10.08	9.07	2,100	7,000	250	14	300	160
	10/13/92	NR	12.06	7.09	1,900	3,200	97	2.6	97	53
	03/09/93	sheen	9.71	9.44	--	--	--	--	--	--
	06/04/93	sheen	9.40	9.75	--	--	--	--	--	--
	09/02/93 (M)	sheen	10.46	8.69	3,700	11,000	210	18	260	59
	11/16/93 (M*)	NP	11.44	7.71	3,300	8,500	75	27	51	32
	02/04/94	NP	10.41	8.74	2,700	4,400	120	16	22	7.7
MW-3 (19.59)	03/15/91 (H,T)	NR	7.84	11.75	160	3,100	2.2	1.9	100	84
	01/15/92 (H,T)	NR	10.30	9.29	<300	250	0.7	6.8	1.5	1.5
	03/23/92 (H,T)	NR	6.84	12.75	440	640	<0.5	12	25	6.5
	04/06/92	NR	7.84	11.75	--	--	--	--	--	--
	07/08/92 (H,T)	NR	8.63	10.96	960	2,900	<0.5	2.6	12	63.7
	10/13/92 (H)	NR	12.10	7.49	400	1,100	5.5	<0.5	4.6	1.1
	03/09/93	sheen	9.05	10.54	--	--	--	--	--	--
	06/04/93	sheen	8.43	11.16	--	--	--	--	--	--
	09/02/93	NP	10.22	9.37	690	840	2.7	3.6	5.4	2.9
	11/16/93	NP	11.44	8.15	310	650	<0.5	11	7.7	2.4
	02/04/94	NP	9.27	10.32	340	870	0.6	14	1.2	0.8

See notes on page 3 of 3



TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
 Exxon Station 7-0236
 6630 East 14th
 Oakland, California
 (Page 2 of 3)

Well ID# (FOC)	Sampling Date	SUBJ	DTW Elev.		TPHd TPHg B T E X					
			feet		parts per billion					
MW-4 (19.46)	04/06/92	NR	7.76	11.70	<50	<50	<0.5	<0.5	<0.5	<0.5
	07/08/92	NR	9.56	9.90	<50	<50	<0.5	<0.5	<0.5	<0.5
	10/13/92	NR	12.09	7.37	<80	<50	<0.5	<0.5	<0.5	<0.5
	03/09/93	NP	7.53	11.93	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/04/93	NP	8.50	10.96	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/02/93	NP	10.30	9.16	<50	<50	<0.5	<0.5	<0.5	0.5
	11/16/93 *	---	---	---	---	---	---	---	---	---
	02/04/94	NP	8.82	10.64	<50	<50	<0.5	<0.5	<0.5	<0.5
MW-5 (16.95)	04/06/92	NR	10.66	6.29	<50	<50	<0.5	<0.5	<0.5	<0.5
	07/08/92 *	---	---	---	---	---	---	---	---	---
	10/13/92	NR	15.02	1.93	<50	69	<0.5	<0.5	<0.5	<0.5
	03/09/93	NP	10.27	6.68	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/04/93	NP	11.35	5.60	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/02/93	NP	13.15	3.80	<50	<50	<0.5	<0.5	<0.5	<0.5
	11/16/93	NP	14.35	2.60	<50	<50	<0.5	<0.5	<0.5	<0.5
	02/04/94	NP	11.83	5.12	60	<50	<0.5	<0.5	<0.5	<0.5
MW-6 (18.79)	04/06/92 (H)	NR	8.29	10.50	<50	<50	<0.5	<0.5	<0.5	<0.5
	07/08/92 (H,T)	NR	9.22	9.57	<50	<50	<0.5	<0.5	<0.5	<0.5
	10/13/92	NR	11.51	7.28	<50	<50	<0.5	<0.5	<0.5	<0.5
	03/09/93	NP	8.26	10.53	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/04/93	NP	8.90	9.89	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/02/93	NP	9.92	8.87	60	<50	<0.5	<0.5	<0.5	<0.5
	11/16/93	NP	10.65	8.14	<50	<50	<0.5	<0.5	<0.5	<0.5
	02/04/94	NP	9.26	9.53	80	<50	<0.5	<0.5	<0.5	<0.5
MW-7 (19.23)	04/06/92	NR	8.34	10.89	<50	<50	<0.5	<0.5	<0.5	<0.5
	07/08/92	NR	10.30	8.93	<50	<50	<0.5	<0.5	<0.5	<0.5
	10/13/92	NR	12.91	6.32	94	670	0.8	<0.5	<0.5	2.5
	03/09/93 *	---	---	---	---	---	---	---	---	---
	06/04/93	NP	8.68	10.55	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/02/93	NP	10.80	8.43	<50	<50	<0.5	<0.5	<0.5	<0.5
	11/16/93	NP	12.38	6.85	<50	<50	<0.5	<0.5	<0.5	<0.5
	02/04/94	NP	9.28	9.95	<50	<50	<0.5	<0.5	<0.5	<0.5

See notes on page 3 of 3

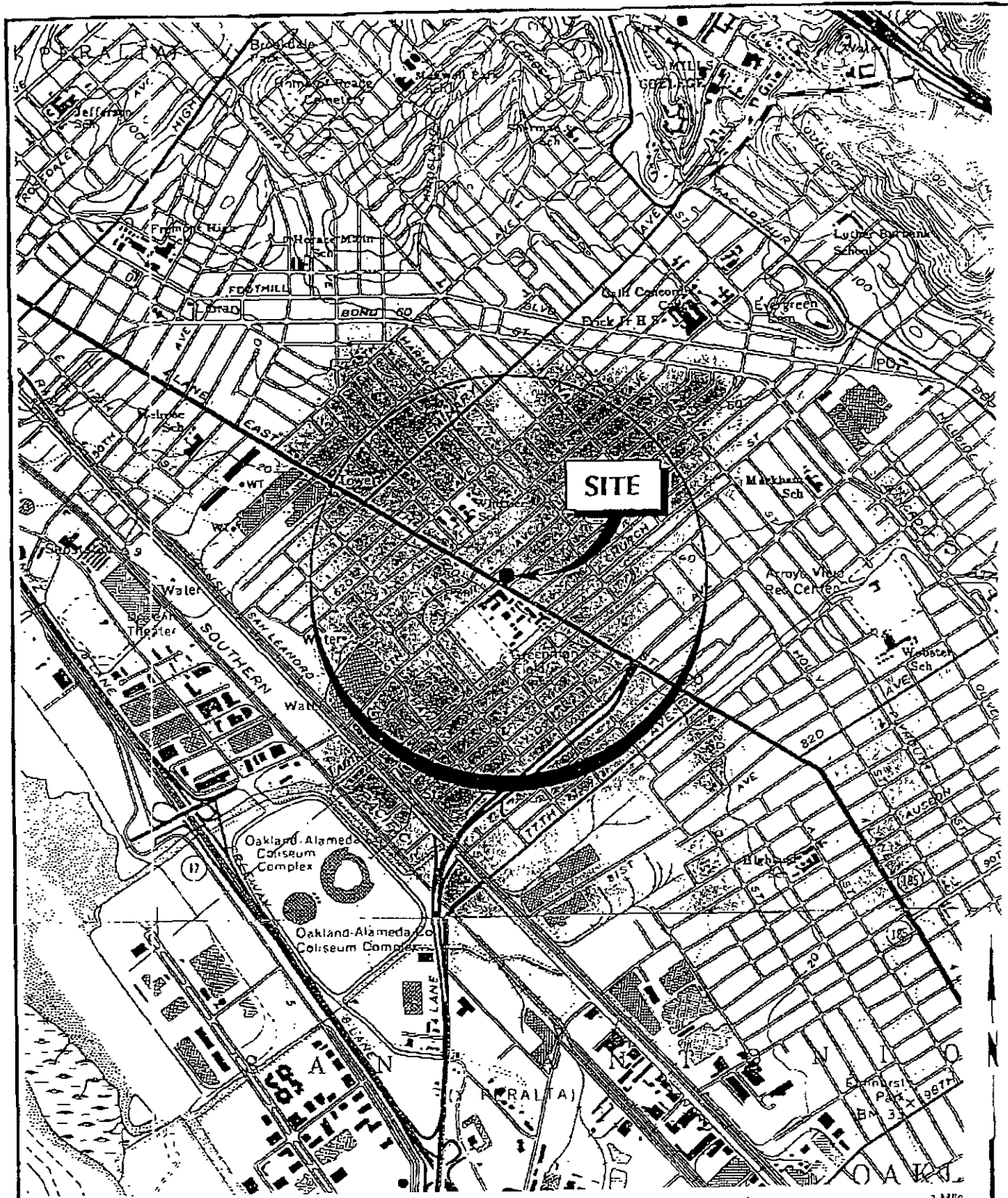


TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
 Exxon Service Station No. 7-0236
 6630 East 14th
 Oakland, California
 (Page 3 of 3)

Well ID#	Sampling (TOC) Date	SUBJ	DTW feet	Elev.	TPHd	TPHg	B	T	E	X
		<----->			parts per billion----->					
Maximum Contaminate Levels (MCLs) DHS					---	---	1.0	---	680	1,750
Drinking Water Action Level (DWAL) DHS					---	---	---	100	---	---

Notes:

- TOC = Elevation of top of well casing; related to mean sea level (MSL)
 SUBJ = Results of subjective evaluation, liquid phase hydrocarbon thickness (PT) in feet
 NP = Liquid phase hydrocarbons not present in well
 sheen = Liquid phase hydrocarbons present as a sheen
 NR = not recorded
 DTW = Depth to water
 Elev. = Elevation of groundwater; relative to MSL
 Elev. = TOC - (DTW + (PT * 0.8))
 TPHg = Total petroleum hydrocarbons as gasoline analyzed using modified EPA method 5030/8015
 BTEX = Benzene, toluene, ethylbenzene, total xylene isomers analyzed using modified EPA method 5030/8020
 < = Less than the laboratory detection limit
 DHS = Department of Health Services, State of California, October 1990
 — = Not sampled / Not measured
 * = Well not accessible : well obstructed / wellhead cover damaged / well paved over
 H = EPA Method 8010 compounds not detected at or above their respective laboratory detection limits
 Exceptions: MW-2, 03/15/91, Methylene chloride detected at 1 ppb
 MW-3, 03/15/91, Methylene chloride detected at 21 ppb
 M = Methyl tert-butyl ether detected at approximately 2,500 ppb
 M* = A compound suspected to be Methyl tert-butyl ether was present
 T = Total Oil and Grease (TOG) using EPA Method 5520 not detected at or above the laboratory detection limit of 5,000 ppb.



Source: USGS Topographic Map, 7.5 minute series, Oakland East, Calif and San Leandro, Calif quadrangles 1090



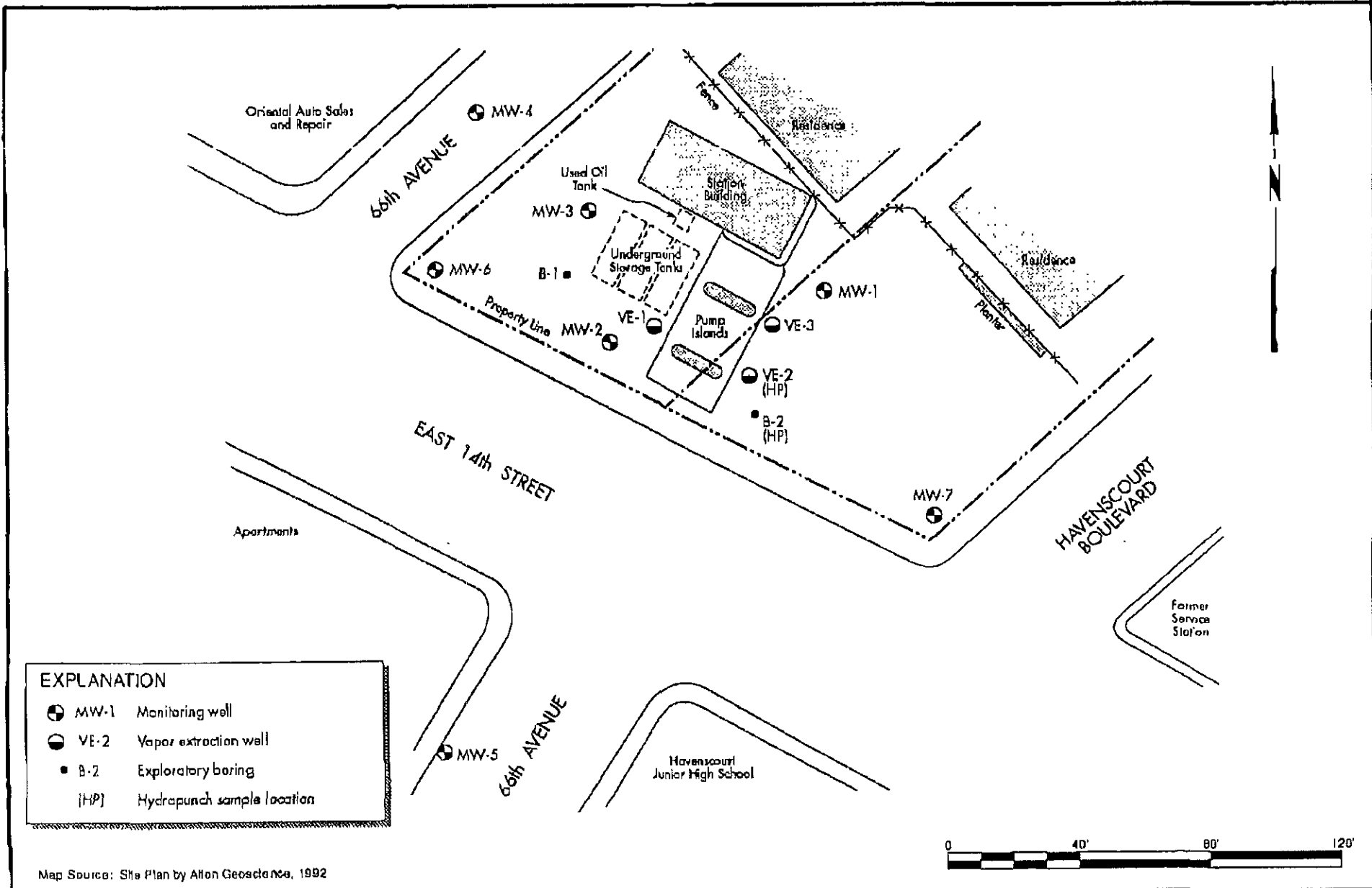
PROJECT NO. 170079.06

1/94

SITE VICINITY MAP
Exxon Service Station No. 7-0236
6630 East 14th Street
Oakland, California

PLATE

1



EXPLANATION	
	MW-1 Monitoring well
	VE-2 Vapor extraction well
	B-2 Exploratory boring
	[HP] Hydrapunch sample location

Map Source: Site Plan by Alton Geoscience, 1992

	GENERALIZED SITE PLAN Exxon Service Station No. 7-0236 6630 East 14th Street Oakland, California	PLATE 2
	PROJECT NO. 170079.06	1/94

Exxon Company, U.S.A.
QUARTERLY STATUS REPORT
 July - September 1994
 Date: October 19, 1994
 (Page 1 of 2)

RAS # 7-0236
 6630 East 14th Street
 Oakland, California
 ERI No. 2009

Work Performed During This Quarter

July - September 1994

- Performed Quarterly Groundwater Monitoring for third quarter 1994 on September 20, 1994.

Quarterly Groundwater Sampling (09/20/94) Results (g/L)

<u>Well No.</u>	<u>TPHd</u>	<u>TPHg</u>	<u>B</u>	<u>T</u>	<u>E</u>	<u>X</u>	<u>Historical Trend</u>
MW-1	<50	<50	<0.5	<0.5	<0.5	<0.5	Unchanged
MW-2	1,800	19,000	190	29	110	27	Increased
MW-3	91	1,900	<0.5	<0.5	11	4.4	Increased
MW-4	<50	<50	<0.5	<0.5	<0.5	<0.5	Decreased
MW-5	<50	<50	<0.5	<0.5	<0.5	<0.5	Unchanged
MW-6	<50	<50	<0.5	<0.5	<0.5	<0.5	Unchanged
MW-7	<50	<50	<0.5	<0.5	<0.5	<0.5	Unchanged

Separate Phase Product Recovery

Not Applicable

Work to be Performed Next Quarter

Estimated Completion Date: 12/31/94

- Submit Quarterly Groundwater Monitoring report for third quarter 1994 to Exxon.
- Perform quarterly groundwater monitoring event for fourth quarter 1994 and submit report to Exxon.

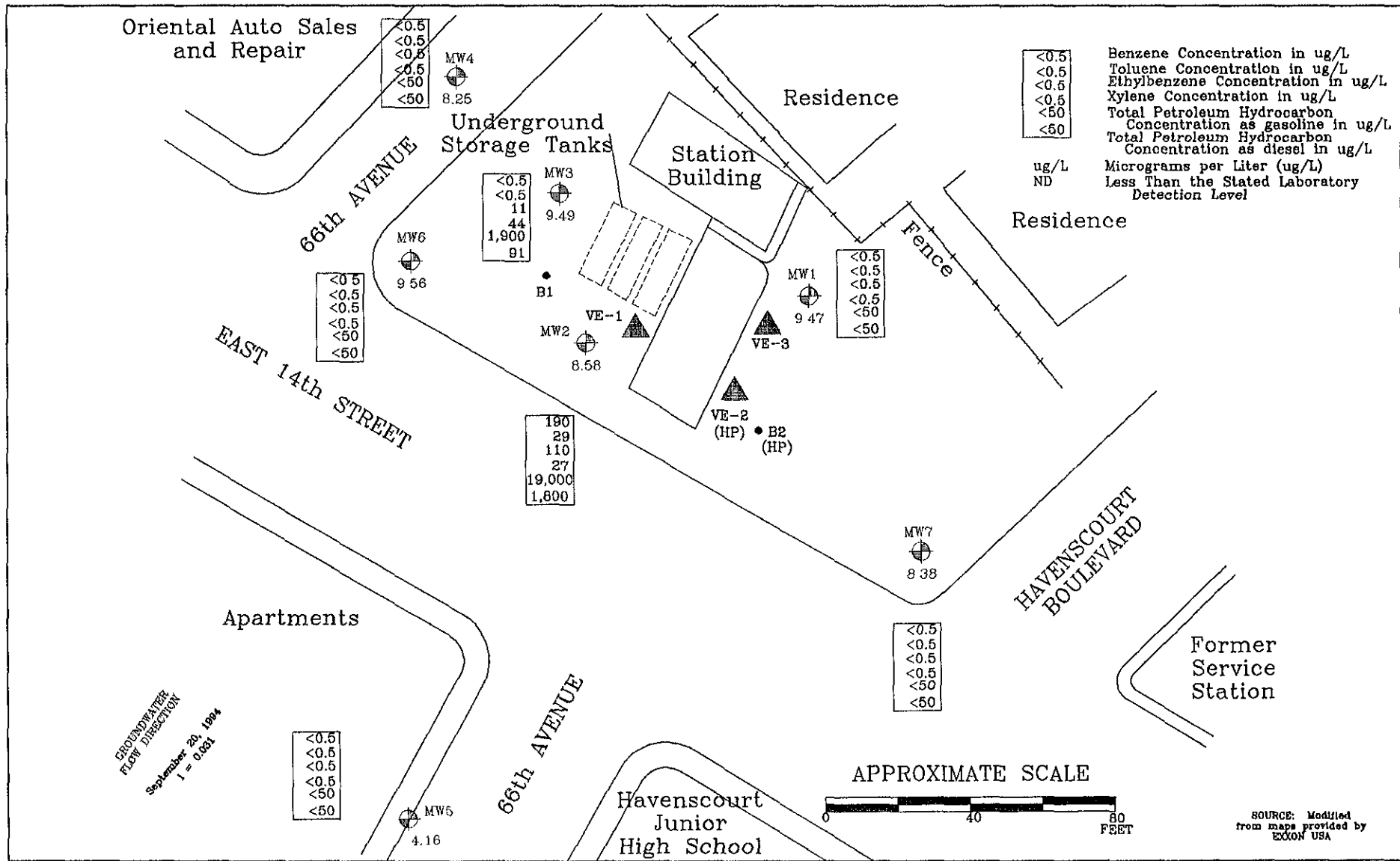
Exxon Company, U.S.A.
QUARTERLY STATUS REPORT
July - September 1994
Date: October 19, 1994
(Page 2 of 2)

RAS # 7-0236
6630 East 14th Street
Oakland, California
ERI No. 2009

Work to be Performed Next 12 Months

Estimated Completion Date: 09/30/95

- Perform groundwater monitoring and sampling program to evaluate the trends of gasoline hydrocarbons and groundwater flow direction and gradient.






FN 20090002



GENERALIZED SITE PLAN

EXXON SERVICE STATION 7-0236
 6630 E. 14th Street
 Oakland, California

EXPLANATION

-  MW-7 Existing Monitoring Well
-  VE-3 Vapor Extraction Well
-  B2 Exploratory Boring



PROJECT NO.

2009

PLATE

2

08/31/84