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GROUNDWATER MONITORING REPORT

Second Quarter 1993
Exxon Service Station No. 7-0236
6630 East 14th Street
Oakland, California

July 27, 93

73 Digital Drive
Novato, CA 94949
Phone: (415) 382-7400
FAX: (415) 382-7415

July 27, 1993

Ms. Marla Guensler
Exxon Company, U.S.A.
P.O. Box 4032
2300 Clayton Road
Concord, California 94524

Subject: Groundwater Monitoring, Second Quarter 1993, Exxon Service Station No. 7-0236,
6630 East 14th Street, Oakland, California

Ms. Guensler:

At the request of Exxon Company, U.S.A (Exxon), RESNA Industries, Inc. (RESNA) performed the second quarter 1993 groundwater monitoring event at the subject site. The location of the site is shown on the Site Vicinity Map (Plate 1). The purpose of quarterly monitoring is to evaluate fluctuations in hydrocarbon concentrations in groundwater below the site and to evaluate the groundwater flow direction and gradient.

BACKGROUND

The subject site is currently operated as an Exxon retail service station. Three underground fuel storage tanks and one underground used-oil storage tank are located on the property. In March 1991, Alton Geoscience (Alton) installed three on-site groundwater monitoring wells MW-1, MW-2, and MW-3. Samples collected by Alton indicate that petroleum hydrocarbons are present in soil and groundwater beneath the site (Alton, December 21, 1992, Project No. 30-0401-02). In March 1992, Alton installed two additional on-site groundwater monitoring wells MW-6 and MW-7, and two off-site groundwater monitoring wells MW-4 and MW-5 (Alton, December 21, 1992, Project No. 30-0401-02). Exxon initiated quarterly groundwater monitoring at the site in January 1992.

GROUNDWATER MONITORING

On June 4, 1993, RESNA personnel measured depth-to-water in each well, subjectively evaluated water for separate phase product, and purged and sampled groundwater from wells MW-1 and MW-4 through MW-7 for laboratory analysis. Monitoring wells MW-2 and MW-3 were not sampled because of the presence of a hydrocarbon sheen. Results of subjective analyses are included in Table 1. Field methods are described in Appendix A.

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170079.01

July 27, 1993
Exxon Service Station No. 7-0236, Oakland, California

RESNA compiled potentiometric data to evaluate the direction of groundwater flow beneath the site. Depth-to-water measurements taken on June 4, 1993, were used to calculate the groundwater elevation in each well. Cumulative depth-to-water and groundwater elevation data are presented in Table 1. Based on the June 4, 1993 data, the evaluated groundwater flow direction was to the southwest with an approximate gradient of 0.016 (Plate 2). This groundwater flow direction is generally consistent with the previous groundwater flow directions interpreted for this site. Since first quarter 1993, groundwater elevations increased an average of 0.47 feet in wells MW-2 and MW-3, and decreased an average of 0.97 feet in wells MW-1, MW-4, MW-5, and MW-6.

Laboratory Analysis

Pace Inc., a California-certified laboratory in Novato, California analyzed the groundwater samples from monitoring wells MW-1 and MW-4 through MW-7 for benzene, toluene, ethylbenzene, and total xylene isomers (BTEX) and total petroleum hydrocarbons as gasoline (TPHg) using modified Environmental Protection Agency (EPA) Methods 8015 and 8020, and for total petroleum hydrocarbons as diesel (TPHd) using EPA Method 8015. The Report of Laboratory Analysis and Chain of Custody Record are attached (Appendix B). A summary of present and historical groundwater analyses are presented in Table 1.

Results of RESNA's field observations and the laboratory analyses of water samples collected this event indicate that:

- A hydrocarbon sheen was observed in wells MW-2 and MW-3.
- Concentrations of TPHd, TPHg, and BTEX were not detected at or above their respective laboratory detection limits in the samples collected from wells MW-1 and MW-4 through MW-7.

A map showing the concentrations of hydrocarbons in groundwater samples collected from each well is attached (Plate 3).

RESNA recommends that signed copies of this report be forwarded to:

Mr. Lester Feldman
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street
Oakland, California 94612

Mr. Barney Chan
Alameda County,
Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, California 94621

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 report has been prepared for Exxon Company, U.S.A. and any reliance on this report by third parties shall be at such party's risk.

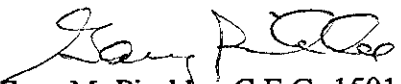
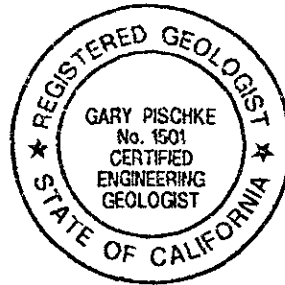
July 27, 1993
Exxon Service Station No. 7-0236, Oakland, California

Please call with any questions or comments regarding this letter report.

Sincerely,
RESNA Industries, Inc.



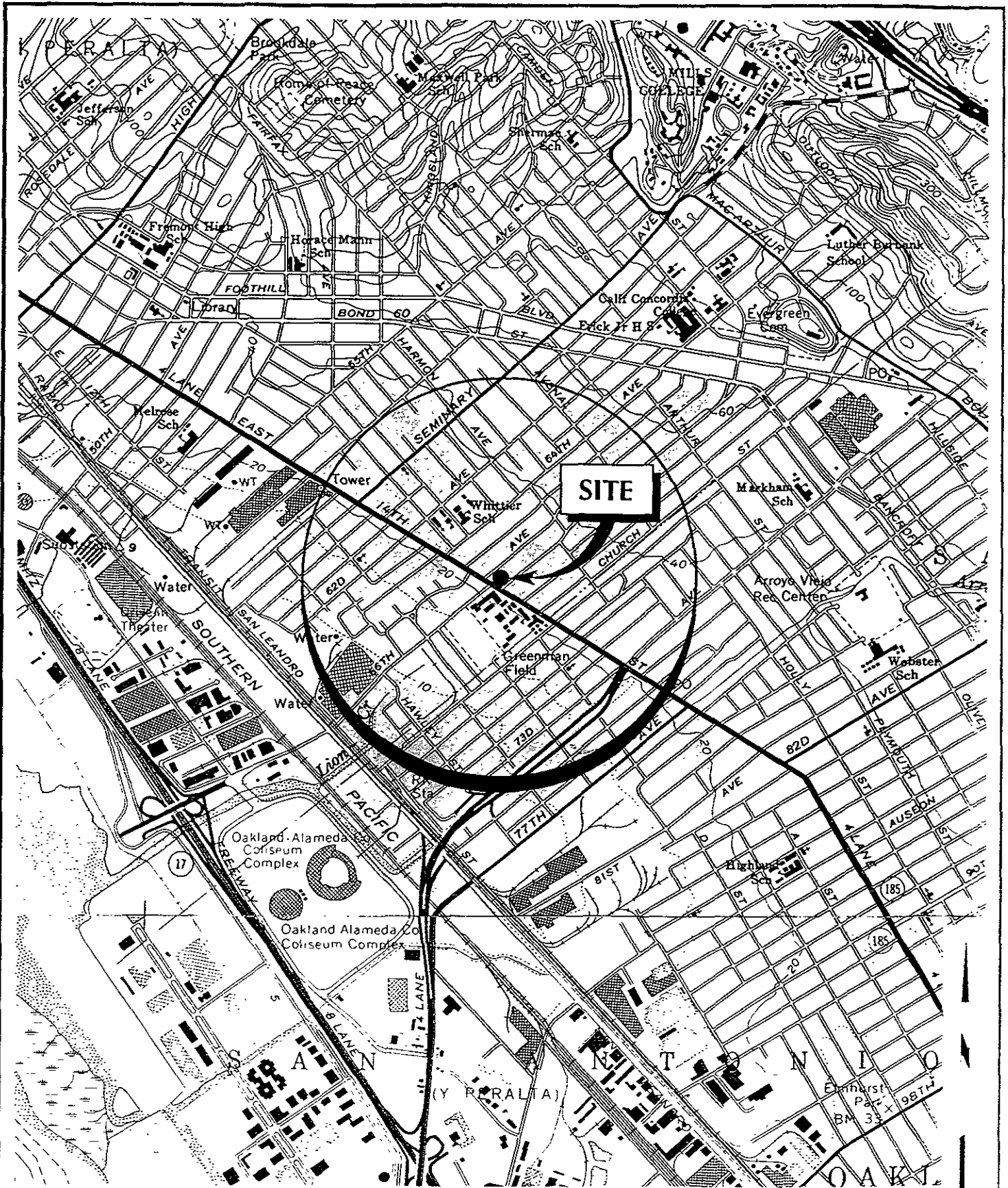
Mark P. Frye
Environmental Scientist



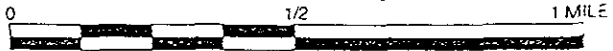
Gary M. Pischke, C.E.G. 1501
Senior Project Geologist

Attachments:

- Plate 1: Site Vicinity Map
- Plate 2: Potentiometric Surface Map (June 4, 1993)
- Plate 3: Concentrations of Hydrocarbons in Groundwater Samples (June 4, 1993)
- Table 1: Cumulative Groundwater Monitoring Data
- Appendix A: Groundwater Sampling Protocol
- Appendix B: Report of Laboratory Analysis and Chain of Custody Record



Source USGS Topographic Map 7.5 minute series, Oakland East Calif and San Leandro Calif quadrangles, 1980



PROJECT NO. 170079.01

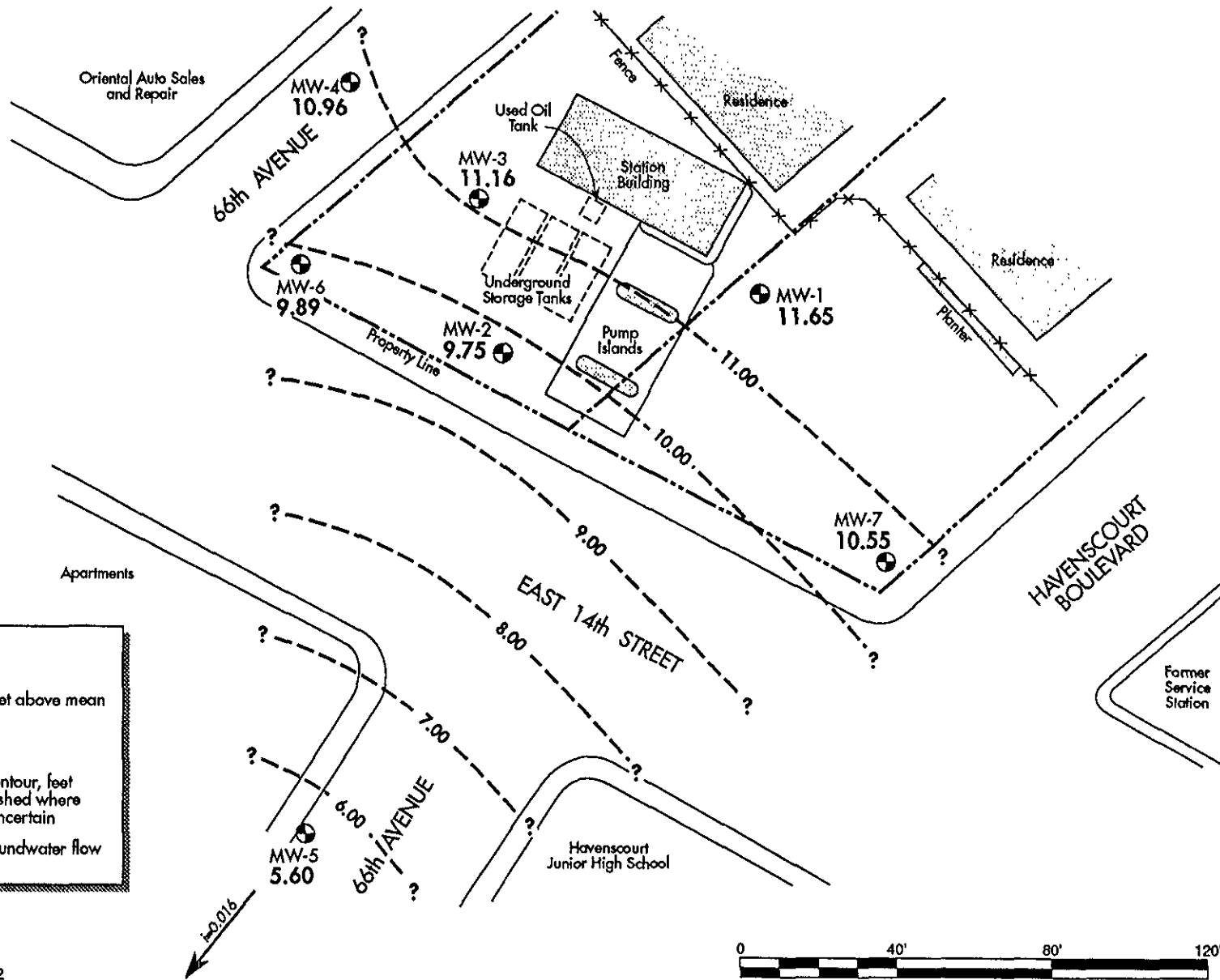
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SITE VICINITY MAP

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

PLATE

1



EXPLANATION	
	MW-1 11.65 Monitoring well and groundwater elevation, feet above mean sea level
NM	Not measured
10.00 - - - ?	Groundwater elevation contour, feet above mean sea level, dashed where inferred, queried where uncertain
	Estimated direction of groundwater flow with evaluated gradient

Map Source: Site Plan by Alton Geoscience, 1992



RESNA

PROJECT NO. 170079.01

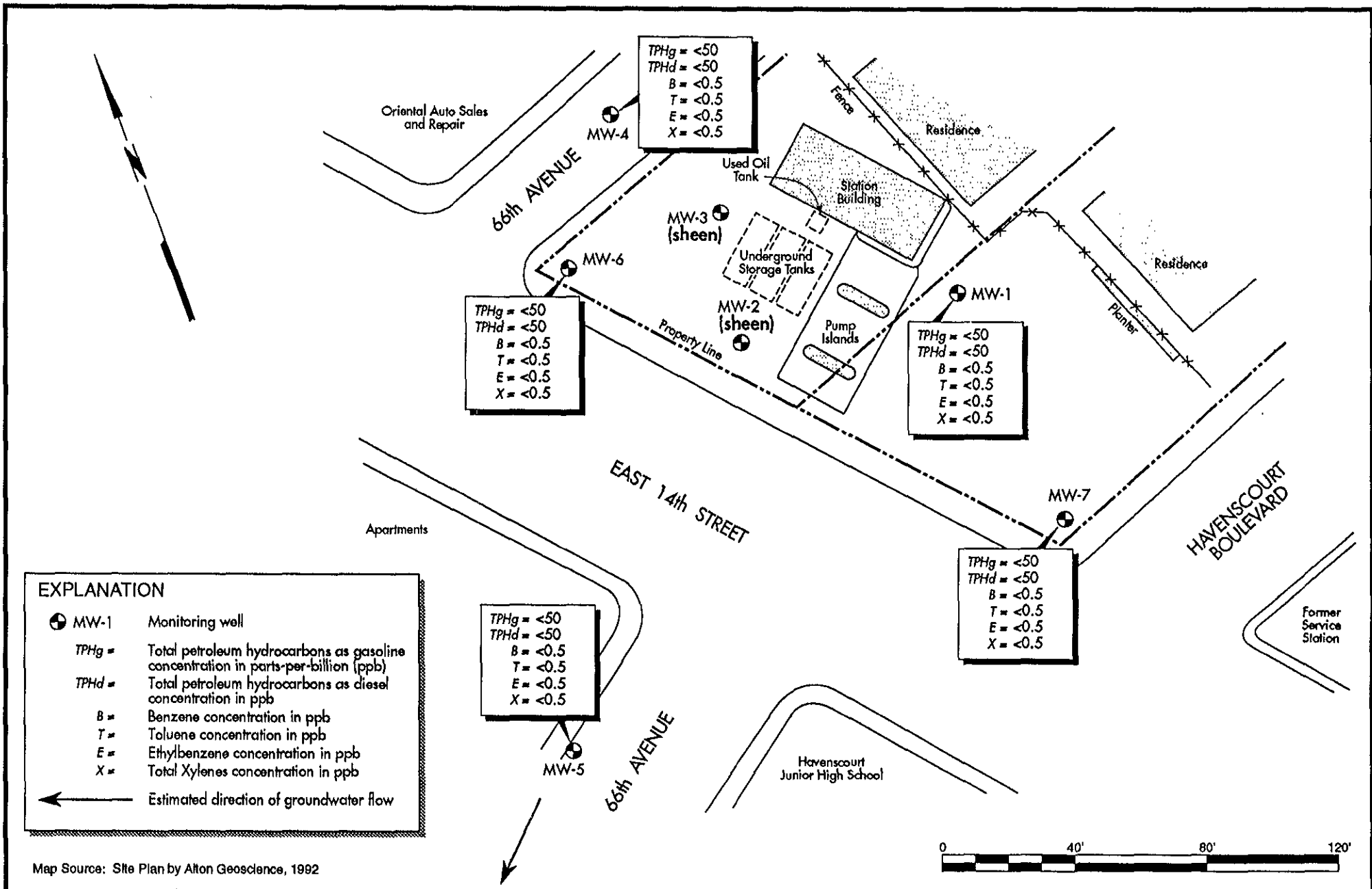
6/93

POTENTIOMETRIC SURFACE MAP—June 4, 1993

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

PLATE

2



RESNA

PROJECT NO. 170079.01 7/93

**CONCENTRATIONS OF HYDROCARBONS IN
GROUNDWATER SAMPLES—June 4, 1993**

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

PLATE
3

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Exxon Service Station No. 7-0236
6630 East 14th
Oakland, California
(Page 1 of 2)

Well ID# (TOC)	Sampling Date	SUBJ <----->	DTW ft	Elev.-W >-----<	TPHd <----->	TPHg <----->	B ppb	T <----->	E <----->	X <----->
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
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	--	--	--	--	--	--
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	--	--	--	--	--	--
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
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

See notes on page 2 of 2

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Exxon Service Station No. 7-0236
6630 East 14th
Oakland, California
(Page 2 of 2)

Well ID# (TOC)	Sampling Date	SUBJ	DTW Elev.-W		TPHd TPHg B T E X					
			ft		ppb					
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
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

Notes:

- ft = Feet
- SUBJ = Results of subjective evaluation, separate phase product thickness (PT) in feet
 - NP = separate phase product not present in well
 - sheen = separate phase product present as a sheen
 - emulsion = separate phase product present as an emulsion
 - NR = not recorded
- TOC = Elevation of top of well casing; datum is mean sea level
- DTW = Depth to water
- Elev.-W = Elevation of groundwater; datum is mean sea level
 - Elev.-W = TOC - (DTW + (PT * 0.8))
- ppb = Parts-per-billion
- TPHg = Total petroleum hydrocarbons as gasoline
- TPHd = Total petroleum hydrocarbons as diesel
- B = Benzene
- T = Toluene
- E = Ethylbenzene
- X = Total xylene isomers
- < = Less than the indicated detection limit established by the laboratory
- = Not sampled / not measured
- * = Well not accessible : well obstructed / wellhead cover damaged
- 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
- T = Total Oil and Grease (TOG) using EPA Method 5520 not detected at or above the laboratory detection limit of 5,000 ppb.

APPENDIX A
GROUNDWATER SAMPLING PROTOCOL

GROUNDWATER SAMPLING PROTOCOL

The static water level and separate phase product level, if present, in each well that contained water and/or separate phase product are measured with a ORS Interface Probe Model No. 106801, which is accurate to the nearest 0.01 foot. To calculate groundwater elevations and evaluate groundwater gradient, depth to water (DTW) levels are subtracted from wellhead elevations and corrected for product thickness, when necessary, by multiplying product thickness (PT) by a correction factor 0.8 and subtracting from the DTW level (Adjusted DTW = DTW - [PT x 0.8])

Water samples collected for subjective evaluation are collected by gently lowering approximately half the length of a clean Teflon[®] bailer past the air-water interface (if possible) and collecting a sample from near the surface of the water in the well. The samples were checked for measurable separate phase hydrocarbon product or sheen. Any separate phase product is removed from the well.

Before water samples are collected from the groundwater monitoring wells, the wells are purged until stabilization of the temperature, pH, and conductivity are obtained. Approximately four well casing volumes are purged before those characteristics stabilized. Water samples from the wells that do not obtain stability of the temperature, pH, and conductivity are considered to be "grab samples". The quantity of water purged from each well is calculated as follows:

1 well casing volume = $\pi r^2 h (7.48)$ where:

- r = radius of the well casing in feet.
- h = column of water in the well in feet (depth to bottom - depth to water)
- 7.48 = conversion constant from cubic feet to gallons

gallons of water purged/gallons in 1 well casing volume = well casing volumes removed.

After purging, each well was allowed to recharge to at least 80% of the initial water level. Water samples from wells that do not recover to at least 80% (due to slow recharging of the well) between purging and sampling are considered to be "grab samples". Water samples were collected with a Teflon bailer which had been cleaned with Alconox[®] and deionized water, and were carefully poured into 40-milliliter (ml) glass vials, which are filled so as to produce a positive meniscus. Each vial is preserved with hydrochloric acid, sealed with a cap containing a Teflon[®] septum, and subsequently examined for air bubbles to avoid headspace which would allow volatilization to occur. The samples are promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain of Custody Record, to a California-certified laboratory.

APPENDIX B

**REPORT OF LABORATORY ANALYSIS
AND CHAIN OF CUSTODY RECORD**

REPORT OF LABORATORY ANALYSIS

June 23, 1993

Mr. Mark Frye
RESNA
73 Digital Dr.
Novato, CA 94949

RE: PACE Project No. 430604.522
Client Reference: Exxon 7-0236 (EE)

Dear Mr. Frye:

Enclosed is the report of laboratory analyses for samples received June 04, 1993.

Footnotes are given at the end of the report.

If you have any questions concerning this report, please feel free to contact us.

Sincerely,



Michael Cohen
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

RESNA
73 Digital Dr.
Novato, CA 94949

June 23, 1993
PACE Project Number: 430604522

Attn: Mr. Mark Frye

Client Reference: Exxon 7-0236 (EE)

PACE Sample Number: 70 0086000
Date Collected: 06/04/93
Date Received: 06/04/93

Parameter	Units	MDL	MW-1	DATE ANALYZED
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	06/08/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	06/08/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	06/08/93
Benzene	ug/L	0.5	ND	06/08/93
Toluene	ug/L	0.5	ND	06/08/93
Ethylbenzene	ug/L	0.5	ND	06/08/93
Xylenes, Total	ug/L	0.5	ND	06/08/93

EXTRACTABLE FUELS EPA 3510/8015

Extractable Fuels, as Diesel	mg/L	0.05	ND	06/09/93
Date Extracted			06/08/93	

REPORT OF LABORATORY ANALYSIS

Mr. Mark Frye
 Page 2

June 23, 1993
 PACE Project Number: 430604522

Client Reference: Exxon 7-0236 (EE)

PACE Sample Number: 70 0086019
 Date Collected: 06/04/93
 Date Received: 06/04/93
 Client Sample ID: MW-4

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	06/08/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	06/08/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	06/08/93
Benzene	ug/L	0.5	ND	06/08/93
Toluene	ug/L	0.5	ND	06/08/93
Ethylbenzene	ug/L	0.5	ND	06/08/93
Xylenes, Total	ug/L	0.5	ND	06/08/93

EXTRACTABLE FUELS EPA 3510/8015

Extractable Fuels, as Diesel	mg/L	0.05	ND	06/09/93
Date Extracted			06/08/93	

REPORT OF LABORATORY ANALYSIS

Mr. Mark Frye
 Page 3

June 23, 1993
 PACE Project Number: 430604522

Client Reference: Exxon 7-0236 (EE)

PACE Sample Number: 70 0086027
 Date Collected: 06/04/93
 Date Received: 06/04/93
 Client Sample ID: MW-6

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	06/08/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	06/08/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	06/08/93
Benzene	ug/L	0.5	ND	06/08/93
Toluene	ug/L	0.5	ND	06/08/93
Ethylbenzene	ug/L	0.5	ND	06/08/93
Xylenes, Total	ug/L	0.5	ND	06/08/93

EXTRACTABLE FUELS EPA 3510/8015

Extractable Fuels, as Diesel	mg/L	0.05	ND	06/09/93
Date Extracted			06/08/93	



REPORT OF LABORATORY ANALYSIS

Mr. Mark Frye
Page 4

June 23, 1993
PACE Project Number: 430604522

Client Reference: Exxon 7-0236 (EE)

PACE Sample Number: 70 0086035
Date Collected: 06/04/93
Date Received: 06/04/93
Client Sample ID: MW-7

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):

Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	-	06/08/93
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PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	06/08/93
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Benzene	ug/L	0.5	ND	06/08/93
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Toluene	ug/L	0.5	ND	06/08/93
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Ethylbenzene	ug/L	0.5	ND	06/08/93
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Xylenes, Total	ug/L	0.5	ND	06/08/93
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EXTRACTABLE FUELS EPA 3510/8015

Extractable Fuels, as Diesel	mg/L	0.05	ND	06/09/93
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Date Extracted			06/08/93	
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REPORT OF LABORATORY ANALYSIS

Mr. Mark Frye
 Page 5

June 23, 1993
 PACE Project Number: 430604522

Client Reference: Exxon 7-0236 (EE)

PACE Sample Number: 70 0086043
 Date Collected: 06/04/93
 Date Received: 06/04/93
 Client Sample ID: MW-5

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):		-	06/08/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND 06/08/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):		-	06/08/93
Benzene	ug/L	0.5	ND 06/08/93
Toluene	ug/L	0.5	ND 06/08/93
Ethylbenzene	ug/L	0.5	ND 06/08/93
Xylenes, Total	ug/L	0.5	ND 06/08/93

EXTRACTABLE FUELS EPA 3510/8015

Extractable Fuels, as Diesel	mg/L	0.05	ND 06/09/93
Date Extracted			06/08/93

These data have been reviewed and are approved for release.



Darrell C. Cain
 Regional Director



REPORT OF LABORATORY ANALYSIS

Mr. Mark Frye
Page 6

FOOTNOTES
for pages 1 through 5

June 23, 1993
PACE Project Number: 430604522

Client Reference: Exxon 7-0236 (EE)

MDL Method Detection Limit
ND Not detected at or above the MDL.



REPORT OF LABORATORY ANALYSIS

Mr. Mark Frye
Page 7

QUALITY CONTROL DATA

June 23, 1993
PACE Project Number: 430604522

Client Reference: Exxon 7-0236 (EE)

EXTRACTABLE FUELS EPA 3510/8015
Batch: 70 21821

Samples: 70 0086000, 70 0086019, 70 0086027, 70 0086035, 70 0086043

METHOD BLANK:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>
Extractable Fuels, as Diesel	mg/L	0.05	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Reference Value</u>	<u>Recv</u>	<u>Dupl Recv</u>	<u>RPD</u>
Extractable Fuels, as Diesel	mg/L	0.05	1.00	88%	91%	3%

Mr. Mark Frye
 Page 8

QUALITY CONTROL DATA

June 23, 1993
 PACE Project Number: 430604522

Client Reference: Exxon 7-0236 (EE)

PURGEABLE FUELS AND AROMATICS

Batch: 70 21824
 Samples: 70 0086000

METHOD BLANK:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Reference Value</u>	<u>Recv</u>	<u>Dupl Recv</u>	<u>RPD</u>
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	1000	97%	97%	0%
Benzene	ug/L	0.5	40.0	103%	104%	0%
Toluene	ug/L	0.5	40.0	94%	95%	1%
Ethylbenzene	ug/L	0.5	40.0	90%	91%	1%
Xylenes, Total	ug/L	0.5	120	88%	88%	0%

Mr. Mark Frye
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QUALITY CONTROL DATA

June 23, 1993
 PACE Project Number: 430604522

Client Reference: Exxon 7-0236 (EE)

PURGEABLE FUELS AND AROMATICS

Batch: 70 21875

Samples: 70 0086019, 70 0086027, 70 0086035, 70 0086043

METHOD BLANK:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Reference Value</u>	<u>Recv</u>	<u>Dupl Recv</u>	<u>RPD</u>
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	1000	102%	103%	0%
Benzene	ug/L	0.5	40.0	103%	103%	0%
Toluene	ug/L	0.5	40.0	98%	98%	0%
Ethylbenzene	ug/L	0.5	40.0	94%	93%	1%
Xylenes, Total	ug/L	0.5	120	93%	90%	3%

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FOOTNOTES
for pages 7 through 9

June 23, 1993
PACE Project Number: 430604522

Client Reference: Exxon 7-0236 (EE)

MDL Method Detection Limit
ND Not detected at or above the MDL.
RPD Relative Percent Difference

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73 Digital Drive
Novato, CA 94949
Phone: (415) 382-7400
FAX: (415) 382-7415

Exxon Company, U.S.A.
QUARTERLY STATUS REPORT
April - June 1993
Date: June 25, 1993

RAS # 7-0236
6630 E 14th
Oakland, California
RESNA No. 170079

Work Performed During This Quarter

April through June 1993

- o Performed Quarterly Groundwater Monitoring for second quarter 1993 on June 4, 1993.

Quarterly Groundwater Sampling (6/4/93) Results (µg/L)

<u>Well No.</u>	<u>B</u>	<u>T</u>	<u>E</u>	<u>X</u>	<u>TPHg</u>	<u>TPHd</u>	<u>Historical Trend</u>
MW-1	<0.5	<0.5	<0.5	<0.5	<50	<50	Unchanged
MW-2	sheen						Unchanged
MW-3	sheen						Unchanged
MW-4	<0.5	<0.5	<0.5	<0.5	<50	<50	Unchanged
MW-5	<0.5	<0.5	<0.5	<0.5	<50	<50	Unchanged
MW-6	<0.5	<0.5	<0.5	<0.5	<50	<50	Unchanged
MW-7	<0.5	<0.5	<0.5	<0.5	<50	<50	Decrease

Separate Phase Product Recovery

Not Applicable

Work to be Performed Next Quarter

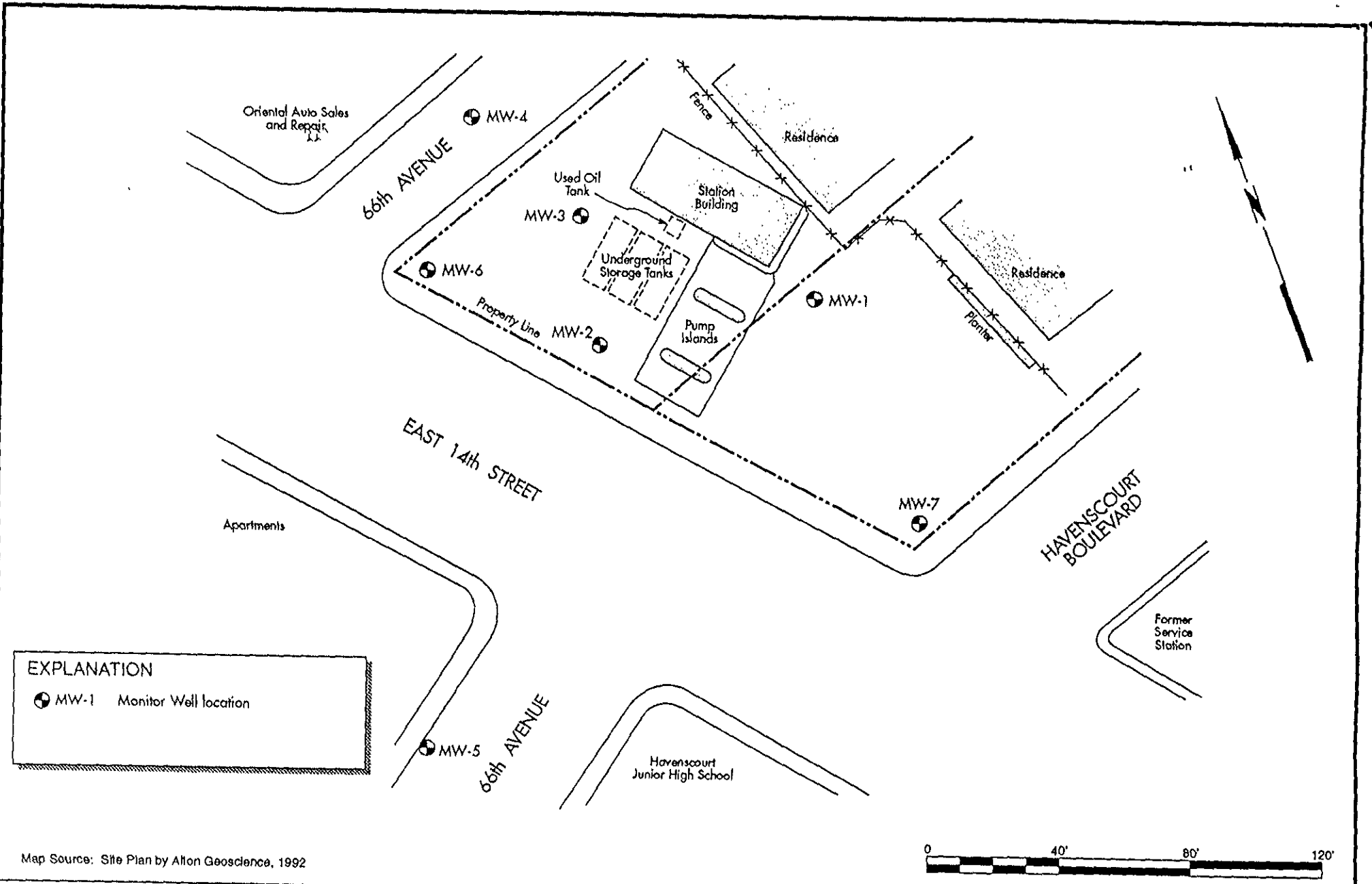
Estimated Completion Date: 9/30/93

- o Submit quarterly monitoring report and perform quarterly monitoring event.
- o Perform offsite source evaluation

Work to be Performed Next 12 Months

Estimated Completion Date: 6/30/94

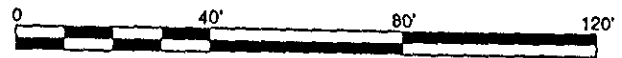
- o Continue quarterly groundwater monitoring and sampling program to evaluate the trends of gasoline hydrocarbons and groundwater flow direction and gradient.
- o Continue onsite evaluation of gasoline hydrocarbons in soil



EXPLANATION

⊕ MW-1 Monitor Well location

Map Source: Site Plan by Allon Geoscience, 1992



RESNA

PROJECT NO. 170079.01

1/93

GENERALIZED SITE PLAN

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

FIGURE
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