

ENVIRONMENTAL RESOLUTIONS, INC.

ST NO 1068

April 10, 1995
ERI 200913.R01

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

operating
station

Subject: Quarterly Groundwater Monitoring, First Quarter 1995, Exxon Service Station
7-0236, 6630 East 14th Street, Oakland, California.

Ms. Guensler:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI) performed the first quarter 1995 groundwater monitoring event at the subject site (Plate 1). The objectives of groundwater monitoring are to evaluate: groundwater elevations, gradient and flow direction, the presence and thickness of any sheen or liquid phase hydrocarbons, and the distribution of dissolved hydrocarbons in groundwater.

GROUNDWATER MONITORING AND SAMPLING

On March 27, 1995, ERI measured depth to water in monitoring wells MW1 through MW7, and collected groundwater samples from wells MW1 through MW7 for laboratory analysis. ERI's groundwater sampling protocol is attached.

The groundwater appears to flow southwest with a hydraulic gradient of 0.028 (Plate 2). The flow direction beneath the site is consistent with last quarter. Historical and recent monitoring data are summarized in Table 1.

LABORATORY ANALYSES AND RESULTS

Groundwater samples were submitted to Sequoia Analytical (California State Certification Number 1210) in Redwood City, California, under chain of custody protocol. The samples were analyzed for benzene, toluene, ethylbenzene, total xylenes, total petroleum hydrocarbons as gasoline (TPHg), and total petroleum hydrocarbons as diesel (TPHd) using the methods listed in the notes in Table 1. The laboratory analysis reports and chain of custody records are attached.

Cumulative results of laboratory analysis of groundwater samples are summarized in Table 1.

Analytical results of groundwater samples collected during the recent sampling event indicate the following:

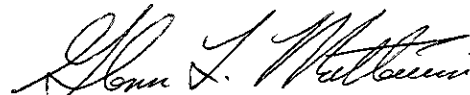
- TPHg was detected in wells MW2, MW3, and MW6 at concentrations up to 6,300 parts per billion (ppb);
- Benzene was detected in wells MW2 and MW3 at concentrations up to 210 ppb;
- TPHd was detected in wells MW2, MW3, MW4, MW6, and MW7 at concentrations up to 1,700 ppb; and,
- Dissolved gasoline hydrocarbons were not detected in wells MW1, MW4, MW5, and MW7.
- Dissolved diesel hydrocarbons were not detected in wells MW1 and MW5.

LIMITATIONS

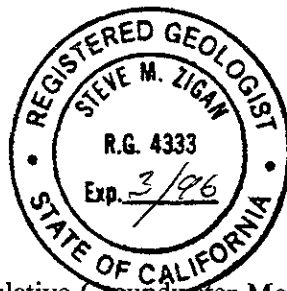
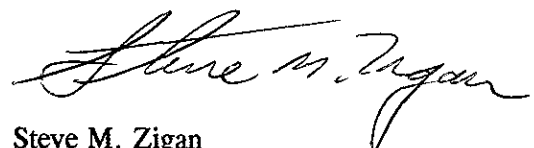
This report was prepared in accordance with generally accepted standards of environmental geological practice in California at the time this investigation was performed. This report has been prepared for Exxon Company, U.S.A. and any reliance on this report by third parties shall be at such party's sole risk.

Please call (415) 382-5995 with any questions or comments regarding this report.

Sincerely,
Environmental Resolutions, Inc.



Glenn L. Matteucci
Staff Geologist

Steve M. Zigan
R.G. 4333

Attachments: Table 1: Cumulative Groundwater Monitoring And Sampling Data

Plate 1: Site Vicinity Map

Plate 2: Generalized Site Plan

Attachment A: Groundwater Sampling Protocol

Attachment B: Laboratory Analysis Reports and Chain of Custody Records

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
 Exxon Service Station 7-0236
 6630 East 14th Street, Oakland, California
 (Page 1 of 5)

Well ID # (TOC)	Sampling Date	SUBJ <	DTW feet	Elev. >	TPHd <	TPHg parts per billion	B >	T	E	X
MW1 (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	NLPH	7.38	12.82	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/04/93	NLPH	8.55	11.65	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/02/93	NLPH	10.85	9.35	<50	<50	<0.5	<0.5	<0.5	<0.5
	11/16/93	NLPH	12.43	7.77	<50	<50	<0.5	<0.5	<0.5	<0.5
	02/04/94	NLPH	9.10	11.10	<50	<50	<0.5	<0.5	<0.5	<0.5
	04/29/94	NLPH	8.45	11.75	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	NLPH	10.73	9.47	<50	<50	<0.5	<0.5	<0.5	<0.5
	12/14/94	NLPH	7.35	12.85	<50	<50	<0.5	<0.5	<0.5	<0.5
	03/27/95	NLPH	7.06	13.14	<50	<50	<0.5	<0.5	<0.5	<0.5
	MW2 (19.15)	03/15/91 (H,T)	NR	9.05	10.10	120	1,700	190	2.6	12
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*)		NLPH	11.44	7.71	3,300	8,500	75	27	51	32
02/04/94		NLPH	10.41	8.74	2,700	4,400	120	16	22	7.7
04/29/94 (C,M*)		NLPH	9.51	9.64	2,000	380	5.9	0.6	1.6	<0.5
09/20/94		NLPH	10.57	8.58	1,800**	19,000	190	29***	110	27***
12/14/94		sheen	8.90	10.25	---	---	---	---	---	---
03/27/95		NLPH	7.72	11.43	1,700	6,300	210	15	250	43

See notes on Page 5 of 5

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
 Exxon Service Station 7-0236
 6630 East 14th Street, Oakland, California
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Well ID # (TOC)	Sampling Date	SUBJ < >	DTW feet	Elev. > <	TPHd <	TPHg	B parts per billion	T >	E	X
MW3 (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	NLPH	10.22	9.37	690	840	2.7	3.6	5.4	2.9
	11/16/93	NLPH	11.44	8.15	310	650	<0.5	11	7.7	2.4
	02/04/94	NLPH	9.27	10.32	340	870	0.6	14	1.2	0.8
	04/29/94	NLPH	8.10	11.49	290	790	<0.5	<0.5	0.8	1.0
	09/20/94	NLPH	10.10	9.49	91**	1,900	<0.5	<0.5	11	4.4
	12/14/94	NLPH	8.00	11.59	190	1,700	17	22	<0.5	<0.5
	03/27/95	NLPH	7.23	12.36	1,100	1,500	5.0	3.1	6.3	3.6
	MW4 (19.46)	04/06/92	NR	7.76	11.70	<50	<50	<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		NLPH	7.53	11.93	<50	<50	<0.5	<0.5	<0.5	<0.5
06/04/93		NLPH	8.50	10.96	<50	<50	<0.5	<0.5	<0.5	<0.5
09/02/93		NLPH	10.30	9.16	<50	<50	<0.5	<0.5	<0.5	<0.5
11/16/93*		---	---	---	---	---	---	---	---	---
02/04/94		NLPH	8.82	10.64	<50	<50	<0.5	<0.5	<0.5	<0.5
04/29/94(D)		NLPH	8.55	10.91	100	<50	<0.5	<0.5	<0.5	<0.5
09/20/94		NLPH	10.21	9.25	<50	<50	<0.5	<0.5	<0.5	<0.5
12/14/94		NLPH	7.04	12.42	<50	<50	<0.5	<0.5	<0.5	<0.5
03/27/95		NLPH	6.38	13.08	140	<50	<0.5	<0.5	<0.5	<0.5

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TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
 Exxon Service Station 7-0236
 6630 East 14th Street, Oakland, California
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Well ID # (TOC)	Sampling Date	SUBJ < >	DTW feet	Elev. > <	TPHd < >	TPHg parts per billion	B >	T >	E >	X >
MW5 (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	NLPH	10.27	6.68	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/04/93	NLPH	11.35	5.60	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/02/93	NLPH	13.15	3.80	<50	<50	<0.5	<0.5	<0.5	<0.5
	11/16/93	NLPH	14.35	2.60	<50	<50	<0.5	<0.5	<0.5	<0.5
	02/04/94	NLPH	11.83	5.12	60	<50	<0.5	<0.5	<0.5	<0.5
	04/29/94	NLPH	11.15	5.80	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	NLPH	12.79	4.16	<50	<50	<0.5	<0.5	<0.5	<0.5
12/14/94	NLPH	9.95	7.00	<50	<50	<0.5	<0.5	<0.5	<0.5	
03/27/95	NLPH	9.09	7.86	<50	<50	<0.5	<0.5	<0.5	<0.5	
MW6 (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	NLPH	8.26	10.53	<50	<50	<0.5	<0.5	<0.5	<0.5
	06/04/93	NLPH	8.90	9.89	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/02/93	NLPH	9.92	8.87	60	<50	<0.5	<0.5	<0.5	<0.5
	11/16/93	NLPH	10.65	8.14	<50	<50	<0.5	<0.5	<0.5	<0.5
	02/04/94	NLPH	9.26	9.53	80	<50	<0.5	<0.5	<0.5	<0.5
	04/29/94	NLPH	8.33	10.46	110	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	NLPH	9.23	9.56	<50	<50	<0.5	<0.5	<0.5	<0.5
12/14/94	sheen	7.87	10.92	---	---	---	---	---	---	
03/27/95	NLPH	7.63	11.16	54	56	<0.5	<0.5	<0.5	<0.5	

See notes on Page 5 of 5

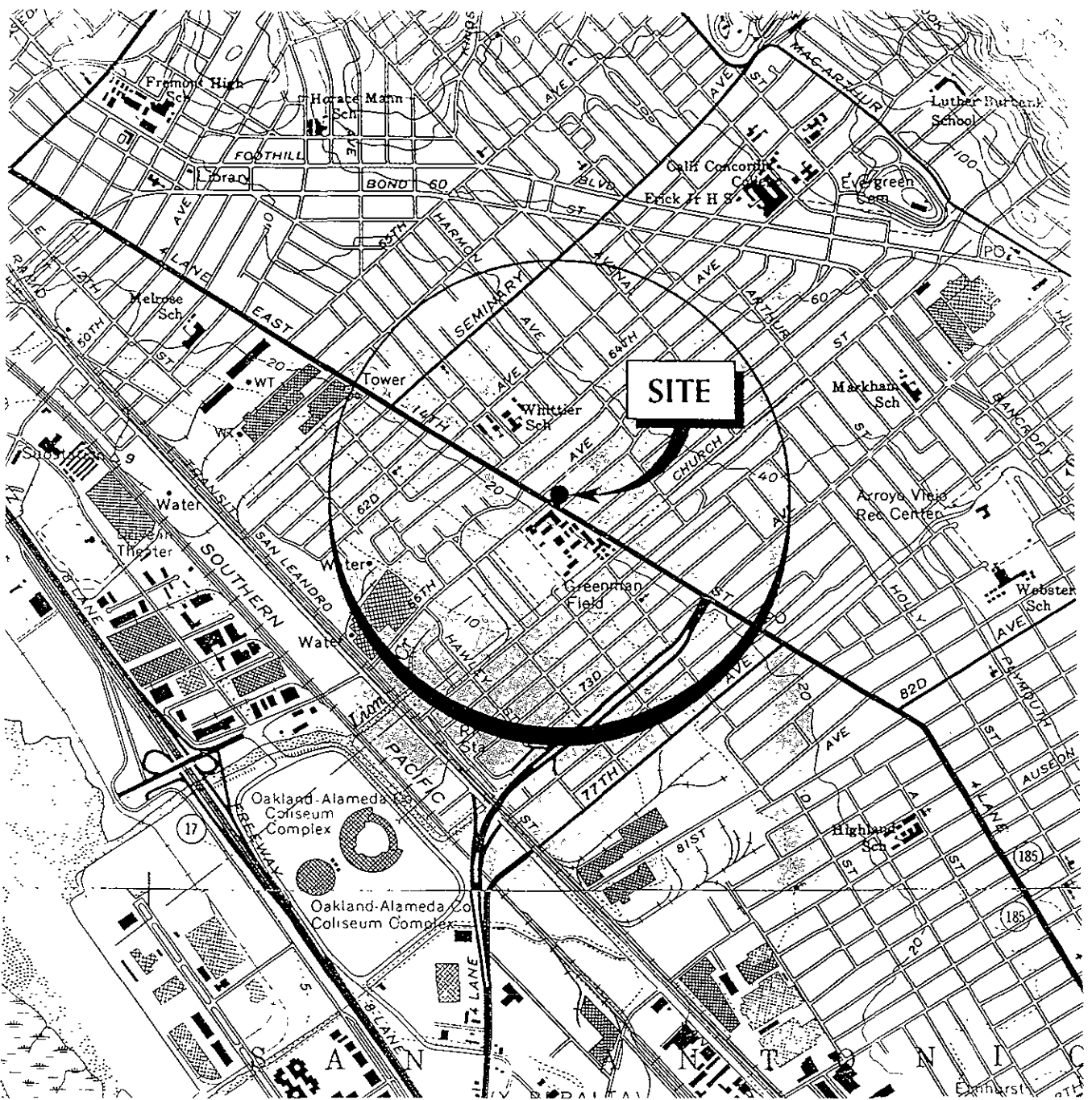
TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
 Exxon Service Station 7-0236
 6630 East 14th Street, Oakland, California
 (Page 4 of 5)

Well ID # (TOC)	Sampling Date	SUBJ < >	DTW feet	Elev.	TPHd < >	TPHg	B parts per billion	T	E	X
MW7 (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	NLPH	8.68	10.55	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/02/93	NLPH	10.80	8.43	<50	<50	<0.5	<0.5	<0.5	<0.5
	11/16/93	NLPH	12.38	6.85	<50	<50	<0.5	<0.5	<0.5	<0.5
	02/04/94	NLPH	9.28	9.95	<50	<50	<0.5	<0.5	<0.5	<0.5
	04/29/94	NLPH	9.19	10.04	<50	<50	<0.5	<0.5	<0.5	<0.5
	09/20/94	NLPH	10.85	8.38	<50	<50	<0.5	<0.5	<0.5	<0.5
	12/14/94	NLPH	8.44	10.79	<50	<50	<0.5	<0.5	<0.5	<0.5
	03/27/95	NLPH	7.54	11.69	280	<50	<0.5	<0.5	<0.5	<0.5

See notes on Page 5 of 5

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
 Exxon Service Station 7-0236
 6630 East 14th Street, Oakland, California
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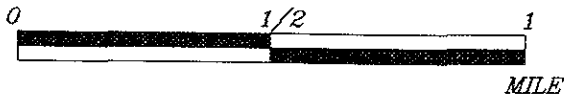
Notes:		
NLPH	=	Liquid phase hydrocarbons not present in well
TOC	=	Elevation of top of well casing; related to mean
SUBJ	=	Results of subjective evaluation, liquid phase hydrocarbon thickness (FT) in feetsea level (MSL) sheen = Liquid phase hydrocarbons present as a sheen
NR	=	not recorded
DTW	=	Depth to water
Elev.	=	Elevation of groundwater; relative to MSL
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
-	=	Not sampled/Not measured
*	=	Well not accessible : well obstructed / wellhead cover damaged / well paved over
**	=	Lighter hydrocarbons contribute to diesel range quantitation
***	=	Results obtained pqst technical holding time (10/08/94) due to dilution requirements
C	=	High boiling point hydrocarbons are present in sample.
D	=	Sample pattern does not match diesel standard pattern.
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	=	Methly tert-butyl ether detected at approximately 2,500 ppb
M*	=	A compound suspected to be Methly 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.



20090001



APPROXIMATE SCALE



Source: U.S.G.S. 7-5 minute topographic quadrangle map Oakland East and San Leandro, Calif. 1980



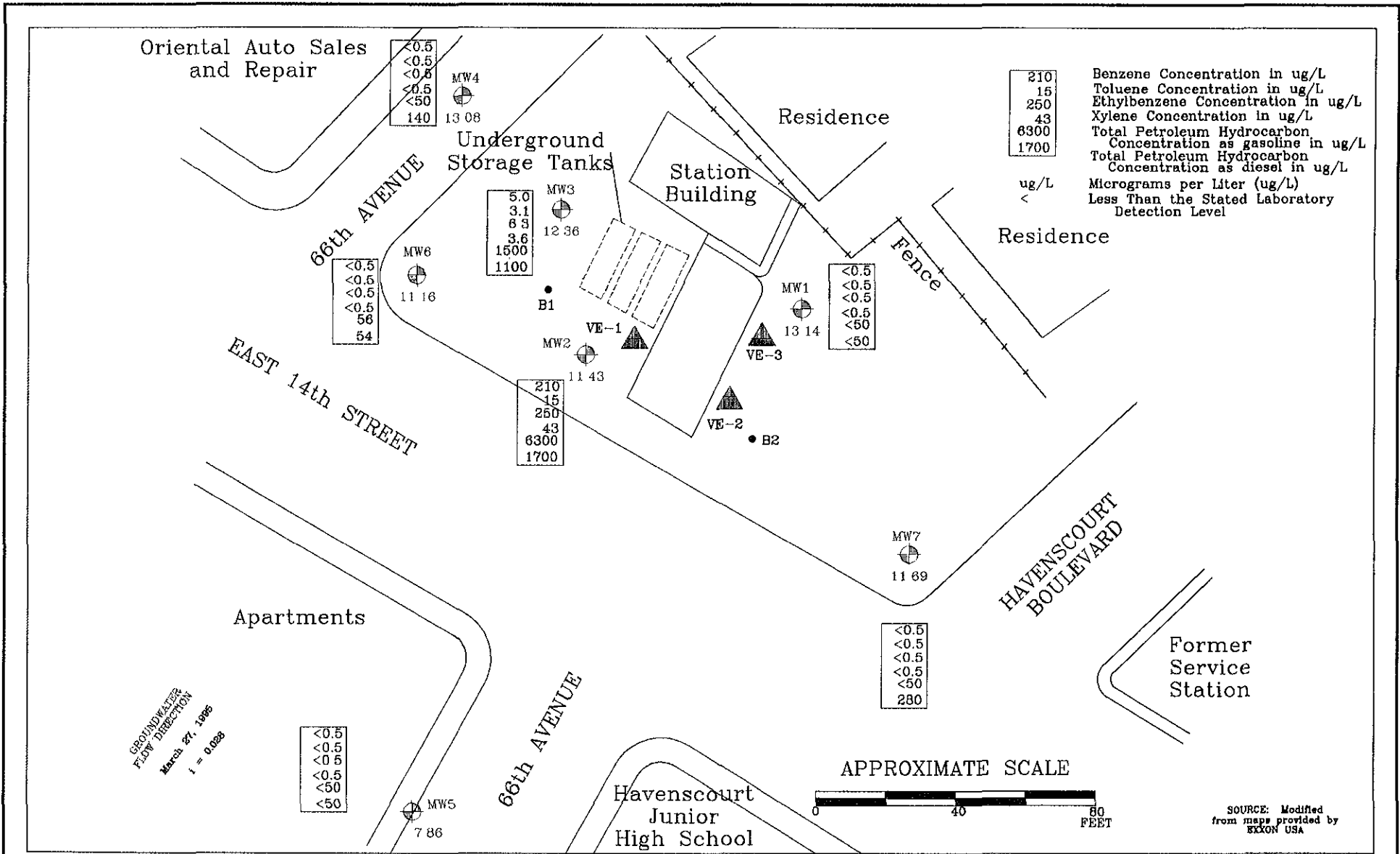
PROJECT ERI 2009

SITE VICINITY MAP

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

PLATE

1







FN 20090002



GENERALIZED SITE PLAN

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

EXPLANATION

-  Existing Monitoring Well and groundwater elevation
-  Vapor Extraction Well
-  Boring Location
-  Sheen



PROJECT NO.

2009

PLATE

2

04/03/95

ATTACHMENT A
GROUNDWATER SAMPLING PROTOCOL

GROUNDWATER SAMPLING PROTOCOL

The static water level and liquid phase hydrocarbons level, if present, in each well that contained water and/or liquid phase hydrocarbons are measured with a ORS Interface Probe, 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.

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 liquid phase hydrocarbons 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. A minimum of three 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 new, disposable Teflon bailer. Samples 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.

ATTACHMENT B

**LABORATORY ANALYSIS REPORTS
AND CHAIN OF CUSTODY RECORDS**

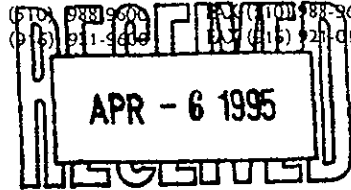


Sequoia
Analytical

680 Chesapeake Drive
404 N Wiget Lane
819 Stnker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(415) 364-9600 FAX (415) 364-9233
(916) 933-9600 FAX (415) 921-0100
(916) 931-9600 FAX (415) 921-0100



Environmental Resolutions
359 Bel Marin Keys, Suite 20
Novato, CA 94949

Client Proj. ID: 2009-13, Exxon 7-0236
Sample Descript: W-BB-MW1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9503K55-01

Sampled: 03/27/95
Received: 03/28/95
Analyzed: 03/29/95
Reported: 03/31/95

Attention: Marc Briggs

QC Batch Number: GC032995BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	110

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

VMT Clark

Vickie Tague Clark
Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: W-6-MW1 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503K55-02	Sampled: 03/27/95 Received: 03/28/95 Analyzed: 03/29/95 Reported: 03/31/95
Attention: Marc Briggs		

QC Batch Number: GC032995BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	112

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: W-6-MW1 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503K55-02	Sampled: 03/27/95 Received: 03/28/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 03/31/95
Attention: Marc Briggs		

QC Batch Number: GC0329950HBPEXZ
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	96

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: W-7-MW4 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503K55-03	Sampled: 03/27/95 Received: 03/28/95 Analyzed: 03/29/95 Reported: 03/31/95
Attention: Marc Briggs		

QC Batch Number: GC032995BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	109

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: W-7-MW4 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503K55-03	Sampled: 03/27/95 Received: 03/28/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 03/31/95
Attention: Marc Briggs		


QC Batch Number: GC0329950HBPEXZ
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	140 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	98

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



 Vickie Tague Clark
 Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: W-9-MW5 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503K55-04	Sampled: 03/27/95 Received: 03/28/95 Analyzed: 03/29/95 Reported: 03/31/95
-------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

QC Batch Number: GC032995BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	107

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: W-9-MW5 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503K55-04	Sampled: 03/27/95 Received: 03/28/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 03/31/95
-------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------

QC Batch Number: GC0329950HBPEXZ
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.

Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	101

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: W-7-MW7 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503K55-05	Sampled: 03/27/95 Received: 03/28/95 Analyzed: 03/29/95 Reported: 03/31/95
Attention: Marc Briggs		

QC Batch Number: GC032995BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	98

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: W-7-MW7 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503K55-05	Sampled: 03/27/95 Received: 03/28/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 03/31/95
Attention: Marc Briggs		


QC Batch Number: GC0329950HBPEXZ
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	280 C9-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 86

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



 Vickie Tague Clark
 Project Manager





Environmental Resolutions Client Proj. ID: 2009-13, Exxon 7-0236 Sampled: 03/27/95
359 Bel Marin Keys, Suite 20 Sample Descript: W-8-MW2 Received: 03/28/95
Novato, CA 94949 Matrix: LIQUID
Attention: Marc Briggs Analysis Method: 8015Mod/8020 Analyzed: 03/29/95
Lab Number: 9503K55-06 Reported: 03/31/95

QC Batch Number: GC032995BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Table with 3 columns: Analyte, Detection Limit ug/L, Sample Results ug/L. Rows include TPHH as Gas (500, 6300), Benzene (5.0, 210), Toluene (5.0, 15), Ethyl Benzene (5.0, 250), Xylenes (Total) (5.0, 43), and Chromatogram Pattern (Gas).

Table with 3 columns: Surrogates, Control Limits %, % Recovery. Row for Trifluorotoluene shows 70, 130, and 104.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Handwritten signature of Vickie Tague Clark
Vickie Tague Clark
Project Manager





Environmental Resolutions
359 Bel Marin Keys, Suite 20
Novato, CA 94949

Client Proj. ID: 2009-13, Exxon 7-0236
Sample Descript: W-8-MW2
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9503K55-06

Sampled: 03/27/95
Received: 03/28/95
Extracted: 03/29/95
Analyzed: 03/31/95
Reported: 03/31/95

Attention: Marc Briggs

QC Batch Number: GC0329950HBPEXZ
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	1700
Chromatogram Pattern: Unidentified HC		C9-C24

Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	102

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: W-7-MW6 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9503K55-07	Sampled: 03/27/95 Received: 03/28/95 Analyzed: 03/29/95 Reported: 03/31/95
-------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------

QC Batch Number: GC032995BTEX03A
Instrument ID: GCHP03


Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	56
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210



Vickie Tague Clark
Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: W-7-MW6 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503K55-07	Sampled: 03/27/95 Received: 03/28/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 03/31/95
Attention: Marc Briggs		

QC Batch Number: GC0329950HBPEXZ
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	54 C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	104

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager





Environmental Resolutions Client Proj. ID: 2009-13, Exxon 7-0236 Sampled: 03/27/95
359 Bel Marin Keys, Suite 20 Sample Descript: M-8-MW3 Received: 03/28/95
Novato, CA 94949 Matrix: LIQUID
Attention: Marc Briggs Analysis Method: 8015Mod/8020 Analyzed: 03/31/95
Lab Number: 9503K55-08 Reported: 03/31/95

QC Batch Number: GC033195BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Table with 3 columns: Analyte, Detection Limit ug/L, Sample Results ug/L. Rows include TPPH as Gas (200, 1500), Benzene (2.0, 5.0), Toluene (2.0, 3.1), Ethyl Benzene (2.0, 6.3), Xylenes (Total) (2.0, 3.6), and Chromatogram Pattern (Gas).

Table with 3 columns: Surrogates, Control Limits %, % Recovery. Row: Trifluorotoluene (70, 130, 114).

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

VMT Clark
Vickie Tague Clark
Project Manager





Environmental Resolutions 359 Bel Marin Keys, Suite 20 Novato, CA 94949	Client Proj. ID: 2009-13, Exxon 7-0236 Sample Descript: M-8-MW3 Matrix: LIQUID Analysis Method: EPA 8015 Mod Lab Number: 9503K55-08	Sampled: 03/27/95 Received: 03/28/95 Extracted: 03/29/95 Analyzed: 03/31/95 Reported: 03/31/95
-------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------

QC Batch Number: GC0329950HBPEXZ
Instrument ID: GCHP5A


Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	50	1100 C9-C24

Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	111

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210


Vickie Tague Clark
Project Manager





Environmental Resolutions
359 Bel Marin Keys, Suite 20
Novato, CA 94949

Client Project ID: 2009-13, Exxon 7-0236
Matrix: Liquid

Attention: Marc Briggs

Work Order #: 9503K55 -02-8

Reported: Apr 4, 1995

QUALITY CONTROL DATA REPORT

Analyte: Diesel
QC Batch#: GC0329950HBPEXZ
Analy. Method: EPA 8015M
Prep. Method: EPA 3520

Analyst: B. Ali
MS/MSD #: 950317601
Sample Conc.: 190
Prepared Date: 3/29/95
Analyzed Date: 4/1/95
Instrument I.D.#: GCHP5
Conc. Spiked: 600 µg/L

Result: 620
MS % Recovery: 72

Dup. Result: 550
MSD % Recov.: 60

RPD: 12
RPD Limit: 0-50

LCS #: BLK032995

Prepared Date: 3/29/95
Analyzed Date: 4/1/95
Instrument I.D.#: GCHP5
Conc. Spiked: 600 µg/L

LCS Result: 570
LCS % Recov.: 95

MS/MSD
LCS 38-122
Control Limits

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503K55.EEE <1>





Environmental Resolutions
359 Bel Marin Keys, Suite 20
Novato, CA 94949

Client Project ID: 2009-13, Exxon 7-0236
Matrix: Liquid

Attention: Marc Briggs

Work Order #: 9503K55-01-7

Reported: Apr 4, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC032995BTEX03A	GC032995BTEX03A	GC032995BTEX03A	GC032995BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9503E0204	9503E0204	9503E0204	9503E0204
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/29/95	3/29/95	3/29/95	3/29/95
Analyzed Date:	3/29/95	3/29/95	3/29/95	3/29/95
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	10	31
MS % Recovery:	100	100	100	103
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	0.0	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

MS/MSD	71-133	72-128	72-130	71-120
LCS				
Control Limits				

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503K55.EEE <2>





Environmental Resolutions
359 Bel Marin Keys, Suite 20
Novato, CA 94949

Client Project ID: 2009-13, Exxon 7-0236
Matrix: Liquid

Attention: Marc Briggs

Work Order #: 9503K55-08

Reported: Apr 4, 1995

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC033195BTEX02A	GC033195BTEX02A	GC033195BTEX02A	GC033195BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9503J5802	9503J5802	9503J5802	9503J5802
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/31/95	3/31/95	3/31/95	3/31/95
Analyzed Date:	3/31/95	3/31/95	3/31/95	3/31/95
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.9	9.0	9.0	27
MS % Recovery:	89	90	90	90
Dup. Result:	9.0	9.1	9.1	27
MSD % Recov.:	90	91	91	90
RPD:	1.1	1.1	1.1	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	-	-	-	-
Prepared Date:	-	-	-	-
Analyzed Date:	-	-	-	-
Instrument I.D.#:	-	-	-	-
Conc. Spiked:	-	-	-	-
LCS Result:	-	-	-	-
LCS % Recov.:	-	-	-	-

MS/MSD				
LCS	71-133	72-128	72-130	71-120
Control Limits				

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9503K55.EEE <3>





Sequoia Analytical
680 Chesapeake Dr.
Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.

P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

Consultant's Name: <u>ENVIRONMENTAL RESOLUTIONS INC</u>		Page <u>1</u> of <u>3</u>
Address: <u>359 DEL MARIN KEYS SUITE 20 NOVATO</u>		Site Location: <u>OAKLAND</u>
Project #:	Consultant Project #: <u>2009-13</u>	Consultant Work Release #: <u>19432502</u>
Project Contact: <u>MARC BIGGS</u>	Phone #: <u>415 382 905</u>	Laboratory Work Release #:
EXXON Contact: <u>MARIA GUESLER</u>	Phone #: <u>510 246 8768</u>	EXXON RAS #: <u>7-0236</u>
Sampled by (print): <u>PETER PETRO</u>	Sampler's Signature: <u>[Signature]</u>	<u>6630 EAST 14th ST</u>
Shipment Method:	Air Bill #:	

TAT: 24 hr 48 hr 72 hr 96 hr Standard (10 day) 5 DAY

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	ANALYSIS REQUIRED			Temperature: _____	
							TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	Inbound Seal: Yes No	Outbound Seal: Yes No
<u>9503K55</u>											
<u>W-BB-MW1</u>	<u>3/27</u>	<u>14:42</u>	<u>WATER</u>	<u>HL</u>	<u>1</u>		<u>X</u>				
<u>W-6-MW1</u>		<u>14:45</u>			<u>3</u>		<u>X</u>				
<u>W-BB-MW4</u>		<u>14:22</u>			<u>1</u>		<u>Hard</u>				
<u>W-7-MW4</u>		<u>14:25</u>			<u>3</u>		<u>X</u>				
<u>W-BB-MW5</u>		<u>14:02</u>			<u>1</u>		<u>Hard</u>				
<u>W-9-MW5</u>		<u>14:05</u>			<u>3</u>		<u>X</u>				
<u>W-BB-MW7</u>		<u>14:58</u>			<u>1</u>		<u>Hard</u>				
<u>W-7-MW7</u>		<u>15:00</u>			<u>3</u>		<u>X</u>				
<u>W-BB-MW12</u>	<u>MP</u>	<u>15:18</u>	<u>MP</u>	<u>MP</u>	<u>1</u>		<u>Hard</u>				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<u>[Signature]</u>	<u>3/28</u>	<u>12:25</u>	<u>[Signature] / Seq.</u>	<u>3-24-95</u>	<u>12:25</u>	
<u>[Signature] / Seq.</u>	<u>3-28-95</u>	<u>1:45</u>				
					<u>1:15</u>	

Pink - Client

Yellow - Sequoia

White - Sequoia



Sequoia Analytical
680 Chesapeake Dr.
Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.

P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

Consultant's Name: <u>ENVIRONMENTAL RESOLUTIONS INC</u>		Page <u>2</u> of <u>5</u>
Address: <u>359 BEL MARIN KEYS BLVD, SUITE 20 MONATO</u>		Site Location: <u>ARLAND</u>
Project #:	Consultant Project #: <u>2009-13</u>	Consultant Work Release #: <u>19432502</u>
Project Contact: <u>MARC BRIGGS</u>	Phone #: <u>415 382-9105</u>	Laboratory Work Release #:
EXXON Contact: <u>MARIA GROSSER</u>	Phone #: <u>510 246 8768</u>	EXXON RAS #: <u>7-0236</u>
Sampled by (print): <u>PETER PETERO</u>	Sampler's Signature: <u>[Signature]</u>	<u>6630 E. 14th STREET</u>
Shipment Method:	Air Bill #:	

TAT: 24 hr 48 hr 72 hr 96 hr Standard (10 day) 5 DAY

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	Temperature _____	
										Inbound Seal	Yes No
<u>9503KES</u>											
<u>W-8-MW2</u>	<u>3/27</u>	<u>15:20</u>	<u>WATER</u>	<u>ICE</u>	<u>3</u>		<u>X</u>	<u>1</u>			
<u>W-BB-MW6</u>		<u>15:52</u>			<u>1</u>		<u>Hold</u>				
<u>W-7-MW6</u>		<u>15:54</u>			<u>3</u>		<u>X</u>				
<u>W-BB-MW3</u>		<u>15:34</u>			<u>1</u>		<u>Hold</u>				
<u>W-8-MW3</u>	<u>1/1</u>	<u>15:36</u>		<u>1/1</u>	<u>3</u>		<u>X</u>				
<u>W-6-MW1</u>	<u>3/27</u>	<u>14:47</u>	<u>WATER</u>	<u>ICE</u>	<u>2</u>			<u>X</u>			
<u>W-7-MW4</u>		<u>14:27</u>						<u>X</u>			
<u>W-9-MW5</u>		<u>14:09</u>						<u>X</u>			
<u>W-7-MW7</u>	<u>1/1</u>	<u>15:02</u>	<u>1/1</u>	<u>1/1</u>	<u>1/1</u>			<u>X</u>			

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<u>[Signature]</u>	<u>3/28/95</u>	<u>12:25</u>	<u>[Signature]</u>	<u>3-28</u>	<u>12:25</u>	
<u>[Signature]</u>	<u>3-28-95</u>	<u>1:45</u>				
				<u>3/28/95</u>	<u>13:45</u>	

Pink - Client
Yellow - Sequoia
White - Sequoia

