

ENVIRONMENTAL RESOLUTIONS, INC.

February 4, 1999
ERI 222913.R05

Ms. Marla D. Guensler
Exxon Company, U.S.A.
P.O. Box 4032
Concord, California 94524-4032

Subject: Quarterly Groundwater Monitoring, First Quarter 1999, Exxon Service Station
7-0235, 2225 Telegraph Avenue, Oakland, California.

Ms. Guensler:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI) performed the first quarter 1999, groundwater monitoring and sampling 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 concentrations of dissolved hydrocarbons in groundwater and groundwater flow direction and gradient.

GROUNDWATER MONITORING AND SAMPLING

On January 11, 1999, ERI measured depth to water (DTW) in monitoring wells MW6B, and MW6E through MW6I, and RW1 through RW3A, and collected groundwater samples from MW6B, MW6E, MW6H, MW6I, RW2 and RW3A. Sampling of monitoring wells MW6F and MW6G, and recovery well RW1, was discontinued as per a letter dated June 1, 1998, from the Alameda County Health Care Services (the County). Work was performed in accordance with ERI's groundwater sampling protocol provided in Attachment A.

Based on DTW measurements, the groundwater appears to flow towards the southeast in the southern portion of the site and towards the northwest in the northern portion of the site, with an average calculated hydraulic gradient of 0.012 (Plate 2). Historical and recent monitoring data are summarized in Table 1.

LABORATORY ANALYSES AND RESULTS

Groundwater samples were submitted to Sequoia Analytical Laboratories (California State Certification Number 1210) in Redwood City, California, under chain of custody protocol. The samples were analyzed for benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary butyl ether (MTBE), total purgeable petroleum hydrocarbons as gasoline (TPPHg) using the methods listed in the notes in Table 1. The laboratory analysis reports and chain of custody records are provided in Attachment B. Historical and recent results of laboratory analyses of groundwater samples are summarized in Table 1. The results of analyses of groundwater samples collected during the recent sampling event are shown on Plate 2.

ERI recommends forwarding copies of this report to:

Ms. Pamela Evans
Alameda County Health Care Services Agency -
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

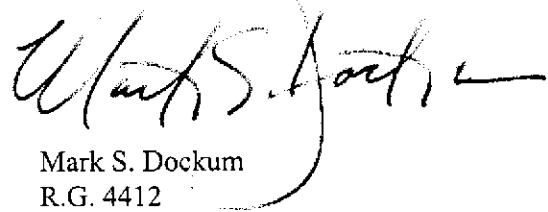
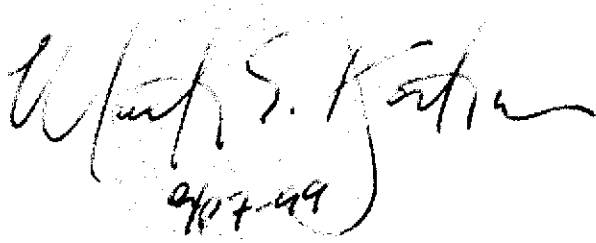
Mr. Stephen Hill
California Regional Water Quality Control Board -
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

LIMITATIONS

This report was prepared in accordance with generally accepted standards of environmental 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.

If you have any questions or comments regarding this report, please call (415) 382-5991.

Sincerely,
Environmental Resolutions, Inc.



Mark S. Dockum
R.G. 4412
C.E.G. 1675

- Enclosures: 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 Reports and Chain of Custody Record

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
 Exxon Service Station 7-0235
 2225 Telegraph Avenue
 Oakland, California
 (Page 1 of 3)

Well ID # (TOC)	Sampling Date	SUBJ	DTW		Elev.	TPPHg	MTBE	B	T	E	X
			feet								
<----->											
ug/L											
MW-6B (17.48)	11/26/96	NLPH	12.26	5.22	5.22	<50	<30	<0.5	<0.5	<0.5	<0.5
	2/27/97	NLPH	11.73	5.75	5.75	<50	<30	<0.5	<0.5	<0.5	0.80
	5/21/97	NLPH	12.70	4.78	4.78	<50	<30	<0.5	<0.5	<0.5	<0.5
	8/18/97	NLPH	12.89	4.59	4.59	380	<30	4.3	<0.5	1.2	1.5
	3/13/98	NLPH	11.15	6.33	6.33	360	<6.2	93	4.9	4.1	12
	4/20/98	NLPH	11.49	5.99	5.99	110	5.5	19	1.3	1.5	3.9
	7/21/98	NLPH	12.18	9.19	9.19	<50	8.7	0.84	0.59	<0.5	<0.5
	10/6/98	NLPH	12.70	8.67	8.67	190	6.0	2.4	0.56	0.51	1.2
	1/11/99	NLPH	12.48	8.89	8.89	50	3.9	1.2	<0.5	<0.5	0.95
MW-6E (17.63)	11/26/96	NLPH	12.94	4.69	4.69	<50	<30	1.1	<0.5	<0.5	<0.5
	2/27/97	NLPH	12.28	5.35	5.35	<50	<30	<0.5	<0.5	<0.5	<0.5
	5/21/97	NLPH	13.60	4.03	4.03	160	<5	10	1.4	5.5	4.8
	8/18/97	NLPH	13.75	3.88	3.88	66	<30	<0.5	<0.5	<0.5	<0.5
	3/13/98	NLPH	11.36	6.27	6.27	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	4/20/98	NLPH	11.88	5.75	5.75	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	7/21/98	NLPH	13.10	8.48	8.48	1,200	<10	81	3.1	28	77
	10/6/98	NLPH	13.55	8.03	8.03	<50	6.6	1.4	0.51	<0.5	0.97
	1/11/99	NLPH	13.40	8.18	8.18	<50	5.1	<0.5	<0.5	<0.5	<0.5
MW-6F (18.58)	11/26/96	NLPH	13.29	5.29	5.29	<50	<30	<0.5	<0.5	<0.5	<0.5
	2/27/97	---	---	---	---	---	---	---	---	---	---
	5/21/97	NLPH	14.18	4.40	4.40	---	---	---	---	---	---
	8/18/97	NLPH	14.69	3.89	3.89	---	---	---	---	---	---
	3/13/98	NLPH	10.93	7.65	7.65	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	4/20/98	NLPH	11.77	6.81	6.81	---	---	---	---	---	---
	7/21/98	NLPH	13.62	8.89	8.89	---	---	---	---	---	---
	10/6/98	NLPH	13.52	8.99	8.99	---	---	---	---	---	---
	1/11/99	NLPH	14.06	8.45	8.45	---	---	---	---	---	---
MW-6G (16.82)	11/26/96	NLPH	11.12	5.70	5.70	<50	<30	<0.5	<0.5	<0.5	<0.5
	2/27/97	---	---	---	---	---	---	---	---	---	---
	5/21/97	NLPH	11.76	5.06	5.06	---	---	---	---	---	---
	8/18/97	NLPH	12.23	4.59	4.59	---	---	---	---	---	---
	3/13/98	NLPH	9.13	7.69	7.69	<50	4.4	<0.5	<0.5	<0.5	<0.5
	4/20/98	NLPH	9.73	7.09	7.09	---	---	---	---	---	---
	7/21/98	NLPH	11.15	9.57	9.57	---	---	---	---	---	---
	10/6/98	NLPH	11.91	8.81	8.81	---	---	---	---	---	---
	1/11/99	NLPH	12.00	8.08	8.08	---	---	---	---	---	---
MW-6H (16.58)	11/26/96	NLPH	11.87	4.71	4.71	1,200	<30	320	110	22	85
	2/27/97	NLPH	11.58	5.00	5.00	1,800	<200	760	31	8.4	44
	5/21/97	NLPH	12.23	4.35	4.35	1,100	81	640	18	5.4	45
	8/18/97	NLPH	12.29	4.29	4.29	870	26	200	3.6	2.4	7.4

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Exxon Service Station 7-0235

2225 Telegraph Avenue

Oakland, California

(Page 2 of 3)

Well ID # (TOC)	Sampling Date	SUBJ	DTW		Elev.	TPPHg	MTBE	B	T	E	X
			feet								
(20.47)	3/13/98	NLPH	11.44	5.14	5.300	<125	1,900	720	100	470	
	4/20/98	NLPH	11.58	5.00	6,000	2,700	1,500	600	91	440	
	7/21/98	NLPH	11.97	8.5	2,200	1,600	740	44	15	63	
	10/6/98	NLPH	12.23	8.24	5,400	3,000	1,900	<25	<25	76	
	1/11/99	NLPH	12.17	8.30	2,600	4,300	1,200	<12	<12	20	
MW-61 (16.26)	11/26/96	NLPH	12.45	3.81	<50	<30	<0.5	<0.5	<0.5	<0.5	
	2/27/97	NLPH	12.24	4.02	<50	<30	<0.5	<0.5	<0.5	<0.5	
	5/21/97	NLPH	12.82	3.44	<50	<30	<0.5	<0.5	<0.5	<0.5	
	8/18/97	NLPH	12.81	3.45	<50	<30	<0.5	<0.5	<0.5	<0.5	
	3/13/98	---	---	---	---	---	---	---	---	---	
(20.24)	4/20/98	NLPH	12.14	4.12	<50	<2.5	<0.5	<0.5	<0.5	<0.5	
	7/21/98	NLPH	12.59	7.65	<50	<2.5	<0.5	<0.5	<0.5	<0.5	
	10/6/98	NLPH	12.81	7.43	---	---	---	---	---	---	
	1/11/99	NLPH	12.74	7.50	<50	<2.5	<0.5	<0.5	<0.5	<0.5	
RW-1 (20.24)	Not Monitored 6/16/92 through 10/6/98.										
	1/11/99	NLPH	12.37	7.87	---	---	---	---	---	---	
RW-2 (20.44)	Not Monitored 6/16/92 through 4/20/98.										
	7/21/98	NLPH	12.65	7.79	3,500	170	240	100	41	96	
	10/6/98	NLPH	13.06	7.38	3,200	200	120	48	56	120	
	1/11/99	NLPH	12.88	7.56	3,300	350	150	17	35	40	
RW-3A (21.75)	Not Monitored 6/16/92 through 4/20/98.										
	7/21/98	NLPH	13.08	8.67	280	16	97	<1.2	<1.2	<1.2	
	10/6/98	NLPH	13.72	8.03	78	26	26	0.89	<0.5	<0.5	
	1/11/99	NLPH	12.00	9.75	1,000	230	490	5.0	<5.0	7.4	

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

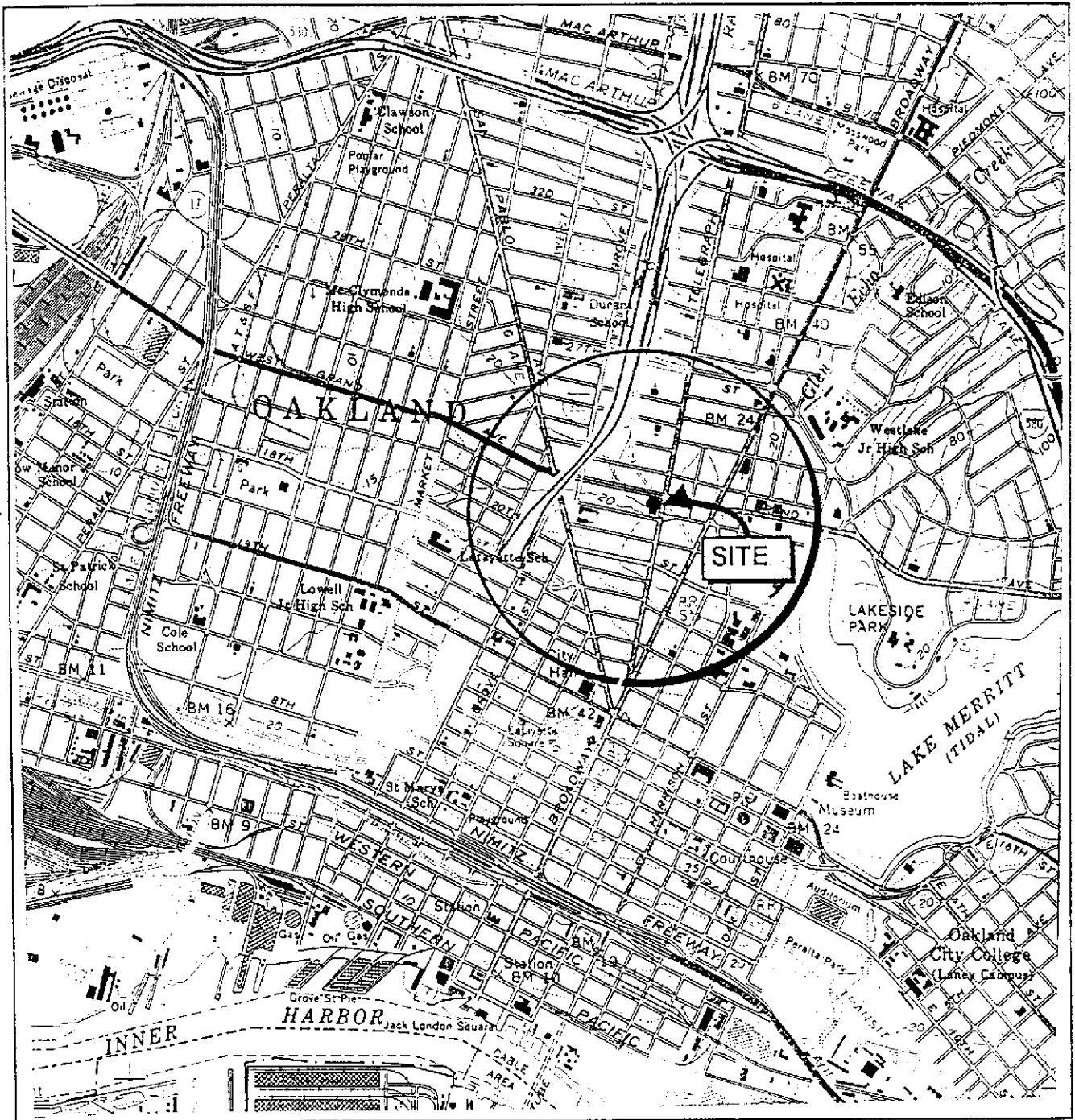
Exxon Service Station 7-0235

2225 Telegraph Avenue

Oakland, California

(Page 3 of 3)

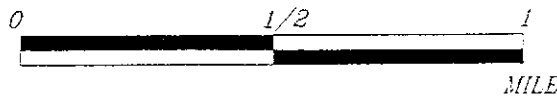
Notes:		
SUBJ	=	Results of subjective evaluation
NLPH	=	No liquid-phase hydrocarbons present in well
TOC	=	Elevation of top of well casing; relative to mean sea level
DTW	=	Depth to water
Elev.	=	Elevation of groundwater surface; relative to mean sea level
TPPHg	=	Total purgeable petroleum hydrocarbons as gasoline analyzed using EPA method 5030/8015 (modified).
MTBE	=	Methyl tertiary butyl ether analyzed using EPA method 5030/8020.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes using EPA method 5030/8020.
<	=	Less than the indicated detection limit shown by the laboratory
---	=	Not measured or sampled
*	=	DTW taken after purging of other nearby wells; measurement suspect
ug/L	=	Micrograms per liter



FN. 22290001



APPROXIMATE SCALE



Source: U.S.G.S. 7.5 minute topographic quadrangle map Oakland West, California (Photorevised 1980)



PROJECT ERI 2229

SITE VICINITY MAP

EXXON SERVICE STATION 7-0235
2225 Telegraph Avenue
Oakland, California

PLATE

1

Groundwater Concentrations in ug/L
Sampled January 11, 1999

3,300	Total Purgeable Petroleum Hydrocarbons as gasoline
350	Methyl Tertiary Butyl Ether
150	Benzene
17	Toluene
35	Ethylbenzene
40	Xylenes

< Less Than the Stated Laboratory Detection Limit

ug/L Micrograms per Liter

NS Not Sampled

GROUNDWATER FLOW DIRECTION

1 = 0.012
January 11, 1999

W. GRAND AVENUE

1,000
230
190
5.0
<5.0
7.4

2,800
4,300
1,200
<12
<12
20

GROUNDWATER FLOW DIRECTION

1 = 0.012
January 11, 1999

TELEGRAPH AVENUE

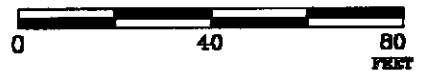


FN 22290002

EXPLANATION

- MW6H Groundwater Monitoring Well
- 7.83 Groundwater elevation in feet above mean sea level
- RW3A Recovery Well
- VWS Vapor/Vadose Well

APPROXIMATE SCALE



GENERALIZED SITE PLAN

EXXON SERVICE STATION 7-0235
2225 Telegraph Avenue
Oakland, California

PROJECT NO.

2229

PLATE

2

January 27, 1999



ATTACHMENT 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 MMC 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.

Groundwater samples collected for subjective evaluation are collected by slowly 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 are checked for measurable free-phase hydrocarbons or sheen. Any free-phase hydrocarbons are removed from the well.

Before water samples are collected from the groundwater monitoring wells, the wells are purged until the temperature, pH, and conductivity have stabilized, or until a minimum of three well casing volumes are purged. 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:

one 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
π	=	ratio of the circumference of a circle to its diameter

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

After purging, each well is allowed to recharge to at least 80% of the initial water level. Water samples from wells that do not recover at least 80% (due to slow recharging of the well) between purging and sampling are considered to be "grab samples". Water samples are collected with a new, disposable Teflon® bailer. The groundwater is 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 REPORTS
AND CHAIN OF CUSTODY RECORD**

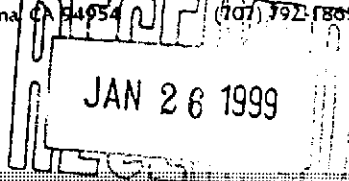


**Sequoia
Analytical**

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404 N. Wiget Lane
819 Striker Avenue, Suite 8
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Redwood City, CA 94063 (650) 364-9600
Walnut Creek, CA 94598 (925) 988-9600
Sacramento, CA 95834 (916) 921-9600
Petaluma, CA 94954 (707) 792-1805

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342



Environmental Resolutions
74 Digital Drive, Suite 6
Novato, CA 94949
Attention: Mark Dockum

Client Proj. ID: Exxon#7-0235/222913X

Received: 01/12/99

Lab Proj. ID: 9901501

Reported: 01/22/99

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of // pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

EQUOIA ANALYTICAL

Project Manager

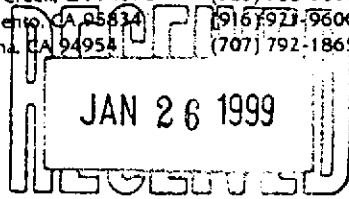


**Sequoia
Analytical**

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Petaluma, CA 94954 (707) 792-1865

FAX (650) 364-9233
FAX (925) 988-9673
FAX (916) 921-0100
FAX (707) 792-0342



Environmental Resolutions
74 Digital Drive, Suite 6
Novato, CA 94949

Client Proj. ID: Exxon#7-0235/222913X
Sample Descript: W-12-MWGI
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9901501-01

Sampled: 01/11/99
Received: 01/12/99
Analyzed: 01/20/99
Reported: 01/22/99

QC Batch Number: GC012099BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	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	100

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

SEQUOIA ANALYTICAL - ELAP #1210

Project Manager



Environmental Resolutions
74 Digital Drive, Suite 6
Novato, CA 94949

Client Proj. ID: Exxon#7-0235/222913X
Sample Descript: W-13-MWGE
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9901501-02

Sampled: 01/11/99
Received: 01/12/99
Analyzed: 01/20/99
Reported: 01/22/99

QC Batch Number: GC012099BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	5.1
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	100

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

SEQUOIA ANALYTICAL - ELAP #1210

Project Manager



Environmental Resolutions
74 Digital Drive, Suite 6
Novato, CA 94949

Client Proj. ID: Exxon#7-0235/222913X
Sample Descript: W-14-RW3A
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9901501-03

Sampled: 01/11/99
Received: 01/12/99
Analyzed: 01/21/99
Reported: 01/22/99

QC Batch Number: GC012199BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	1000
Methyl t-Butyl Ether	25	230
Benzene	5.0	490
Toluene	5.0	5.0
Ethyl Benzene	5.0	N.D.
Xylenes (Total)	5.0	7.4
Chromatogram Pattern:		GAS

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Project Manager



Environmental Resolutions 74 Digital Drive, Suite 6 Novato, CA 94949	Client Proj. ID: Exxon#7-0235/222913X Sample Descript: W-12-MW6B Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9901501-04	Sampled: 01/11/99 Received: 01/12/99 Analyzed: 01/21/99 Reported: 01/22/99
--	--	---

QC Batch Number: GC012199BTEX03A
Instrument ID: GCHP03


Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	50
Methyl t-Butyl Ether	2.5	3.9
Benzene	0.50	1.2
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	0.95
Chromatogram Pattern:		GAS

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	111

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

SEQUOIA ANALYTICAL - ELAP #1210



Project Manager





Environmental Resolutions 74 Digital Drive, Suite 6 Novato, CA 94949	Client Proj. ID: Exxon#7-0235/222913X Sample Descript: W-14-RW2 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9901501-05	Sampled: 01/11/99 Received: 01/12/99 Analyzed: 01/21/99 Reported: 01/22/99
--	---	---

QC Batch Number: GC012199BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	3300
Methyl t-Butyl Ether	25	350
Benzene	5.0	150
Toluene	5.0	17
Ethyl Benzene	5.0	35
Xylenes (Total)	5.0	40
Chromatogram Pattern:		GAS

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	122

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

SEQUOIA ANALYTICAL - ELAP #1210

Project Manager





Environmental Resolutions
74 Digital Drive, Suite 6
Novato, CA 94949

Client Proj. ID: Exxon#7-0235/222913X
Sample Descript: W-12-MW6H
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9901501-06

Sampled: 01/11/99
Received: 01/12/99
Analyzed: 01/21/99
Reported: 01/22/99

GC Batch Number: GC012199BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1250	2600
Methyl t-Butyl Ether	62	4300
Benzene	12	1200
Toluene	12	N.D.
Ethyl Benzene	12	N.D.
Xylenes (Total)	12	20
Chromatogram Pattern:		GAS
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	112

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

EQUOIA ANALYTICAL - ELAP #1210

Project Manager



Sequoia Analytical

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Environmental Resolutions
74 Digital Drive, Suite 6
Novato, CA 94949
Attention: Mark Dockum

Client Project ID: Exxon 7-0235/222913X

QC Sample Group: 9901501

Reported: Jan 22, 1999

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8015
Analyst: N.H.

ANALYTE Gasoline

QC Batch #: GC012099BTEX03A

Sample No.: 9901491-2
Date Prepared: 1/20/99
Date Analyzed: 1/20/99
Instrument I.D.#: GCHP03

Sample Conc., ug/L: N.D.
Conc. Spiked, ug/L: 250

Matrix Spike, ug/L: 240
% Recovery: 96

Matrix
pike Duplicate, ug/L: 240
% Recovery: 96

relative % Difference: 0.0

RPD Control Limits: 0-25

LCS Batch#: GC012099BTEX03A

Date Prepared: 1/20/99
Date Analyzed: 1/20/99
Instrument I.D.#: GCHP03

Conc. Spiked, ug/L: 250

LCS Recovery, ug/L: 240
LCS % Recovery: 96

Percent Recovery Control Limits:

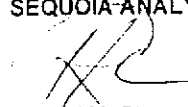
MS/MSD	60-140
LCS	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

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


Ronald M. Chew
Project Manager



Environmental Resolutions
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Novato, CA 94949
Attention: Mark Dockum

Client Project ID: Exxon 7-0235/222913X

QC Sample Group: 9901501

Reported: Jan 22, 1999

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8020
Analyst: BTF

ANALYTE Benzene Toluene Ethylbenzene Xylenes

QC Batch #: GC012199BTEX06A

Sample No.: GW9901477-02

	Benzene	Toluene	Ethylbenzene	Xylenes
Date Prepared:	1/21/99	1/21/99	1/21/99	1/21/99
Date Analyzed:	1/21/99	1/21/99	1/21/99	1/21/99
Instrument I.D.#:	GCHP06	GCHP06	GCHP06	GCHP06
Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	10	10	10	30
Matrix Spike, ug/L:	9.7	9.2	9.4	28
% Recovery:	97	92	94	93
Matrix pike Duplicate, ug/L:	9.8	9.4	9.6	28
% Recovery:	98	94	96	93
relative % Difference:	1.0	2.2	2.1	0.0
RPD Control Limits:	0-25	0-25	0-25	0-25

LCS Batch#: GC012199BTEX06A

	Benzene	Toluene	Ethylbenzene	Xylenes
Date Prepared:	1/21/99	1/21/99	1/21/99	1/21/99
Date Analyzed:	1/21/99	1/21/99	1/21/99	1/21/99
Instrument I.D.#:	GCHP06	GCHP06	GCHP06	GCHP06
Conc. Spiked, ug/L:	10	10	10	30
LCS Recovery, ug/L:	11	9.7	9.7	29
LCS % Recovery:	106	97	97	97

Percent Recovery Control Limits:

MS/MSD	Benzene	Toluene	Ethylbenzene	Xylenes
	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

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Novato, CA 94949
Attention: Mark Dockum

Client Project ID: Exxon 7-0235/222913X

QC Sample Group: 9901501

Reported: Jan 22, 1999

QUALITY CONTROL DATA REPORT

Matrix: Liquid
Method: EPA 8020
Analyst: BTF

ANALYTE Benzene Toluene Ethylbenzene Xylenes

QC Batch #: GC012199BTEX03A

Sample No.: GW9901573-05

Date Prepared:	1/21/99	1/21/99	1/21/99	1/21/99
Date Analyzed:	1/21/99	1/21/99	1/21/99	1/21/99
Instrument I.D.#:	GCHP03	GCHP03	GCHP03	GCHP03
Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	10	10	10	30
Matrix Spike, ug/L:	8.8	9.2	9.5	28
% Recovery:	88	92	95	95
Matrix Duplicate, ug/L:	9.1	9.5	9.8	29
% Recovery:	91	95	98	97
Relative % Difference:	3.4	3.2	3.1	2.1
RPD Control Limits:	0-25	0-25	0-25	0-25

LCS Batch#: GC012199BTEX03A

Date Prepared:	1/21/99	1/21/99	1/21/99	1/21/99
Date Analyzed:	1/21/99	1/21/99	1/21/99	1/21/99
Instrument I.D.#:	GCHP03	GCHP03	GCHP03	GCHP03
Conc. Spiked, ug/L:	10	10	10	30
LCS Recovery, ug/L:	9.0	8.8	9.0	27
LCS % Recovery:	90	88	90	90

Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

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.

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Redwood City, CA 94063
(650) 364-9600 • FAX (650) 364-9233

EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

9901501

Consultant's Name: <u>Environmental Resolutions, Inc.</u>		Page <u>1</u> of <u>1</u>
Address: <u>74 Digital Dr. #6, Novato Ca 94949</u>		Site Location: <u>2225 Telegraph Ave</u>
Project #:	Consultant Project #: <u>2229138</u>	Consultant Work Release #: <u>19802887</u>
Project Contact: <u>Mack Dockum</u>	Phone #: <u>(415) 382-9105</u>	Laboratory Work Release #:
EXXON Contact: <u>Marla Guenster</u>	Phone #: <u>(925) 246-8776</u>	EXXON RAS #: <u>7-0235</u>
Sampled by (print): <u>Jim Chappell</u>	Sampler's Signature: <u>Jim Chappell</u>	<u>Oakland, Ca</u>
Shipment Method:	Air Bill #:	

TAT: 24 hr 48 hr 72 hr 96 hr Standard (10 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	MTBE	Inbound Seal: Yes No	Outbound Seal: Yes No
<u>W-12-MW6I</u>	<u>1-11-99</u>	<u>13:45</u>	<u>Water</u>	<u>HCL</u>	<u>3</u>		<u>X</u>			<u>X</u>		
<u>W-13-MW6E</u>		<u>13:50</u>										
<u>W-14-RW3A</u>		<u>13:55</u>										
<u>W-12-MW6B</u>		<u>14:00</u>										
<u>W-4-RWZ</u>		<u>14:05</u>										
<u>W-12-mw6H</u>	<u>v/c</u>	<u>14:10</u>	<u>v/c</u>	<u>v/c</u>	<u>v/c</u>		<u>v/c</u>			<u>v/c</u>		

01 X
02 X
03 X
04 X
05 X
06 X

9 12 1 41

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<u>Jim Chappell / ERI</u>			<u>C. Anderson / Sequoia</u>	<u>1/12/99</u>	<u>1051</u>	
<u>C. Anderson</u>	<u>1/12</u>					
			<u>Sequoia</u>	<u>1/12/99</u>	<u>1341</u>	

Pink - Client

Yellow - Sequoia

White - Sequoia