

# **EXXON COMPANY, U.S.A.**

P.O. BOX 4032 • CONCORD, CA 94524-4032

MARKETING DEPARTMENT • ENVIRONMENTAL ENGINEERING

MARLA D. GUENSLER  
SENIOR ENGINEER

(510) 246-8776  
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June 28, 1995

Mr. Barney Chan  
Alameda County Health Agency, Division of Hazardous Materials  
Department of Environmental Health  
80 Swan Way, Room 350  
Oakland, CA 94621

**RE: Former Exxon RAS #7-3006/720 High St., Oakland, CA**

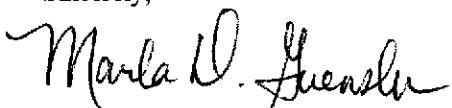
Dear Mr. Chan:

Attached for your review and comment is a letter report entitled *Quarterly Groundwater Monitoring and Remediation Status Report, First Quarter 1995* for the above referenced site. This report, prepared by Environmental Resolutions, Inc., of Novato, California, details the results of the groundwater monitoring sampling and remediation sampling events which occurred in the first quarter 1995.

The combined soil vapor extraction/groundwater pump and treat remediation system has been effective since its startup in January 1995. Exxon will continue operation of the system as well as quarterly monitoring and sampling.

If you have any questions or comments, please contact me at (510) 246-8776.

Sincerely,



Marla D. Guensler  
Senior Engineer

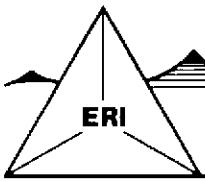
MDG/jb

attachment: ERI Report Dated June 26, 1995

cc: w/attachment:  
Mr. Richard Hiett - San Francisco Bay Region CRWQCB

w/o attachment:  
Mr. Marc Briggs - ERI, Novato

1124017056  
1124017056



June 26, 1995  
ERI 201013.R01

Ms. Marla Guensler  
Exxon Company, U.S.A.  
P.O. Box 4032  
Concord, California 94524-2032

Subject: Quarterly Groundwater Monitoring and Remediation Status Report, First Quarter 1995, Former Exxon Station 7-3006, 720 High Street, Oakland, California.

Ms. Guensler:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI) performed remedial activities and the first quarter groundwater sampling at the subject site (Plate 1). The purpose of ongoing remedial activities at the site is to remediate soil and groundwater impacted by petroleum hydrocarbons. The purpose of quarterly monitoring is to evaluate fluctuations in hydrocarbon concentrations in groundwater, to evaluate the capture zone caused by groundwater pumping, and to evaluate the effectiveness of remedial actions.

#### **GROUNDWATER MONITORING AND SAMPLING**

On February 6, 1995, ERI measured the depth to water (DTW) in monitoring wells MW1 through MW4, and MW6 through MW15 and subjectively analyzed water in these wells for the presence of liquid phase hydrocarbons. Monitoring well MW5 was previously destroyed. Groundwater samples were collected from wells MW1, MW7, MW9, MW10, MW11, and MW14 for laboratory analysis. Wells MW2 through MW4, MW6, MW8, MW12, MW13, and MW15 had a sheen and therefore were not purged or sampled. ERI's groundwater sampling protocol is attached (Attachment A).

ERI compiled potentiometric data to evaluate the direction of groundwater flow beneath the site. Depth-to-water measurements were used to calculate the groundwater elevation in each well. Based on the data, the groundwater appears to flow southwest beneath the site towards the groundwater interceptor trench with an approximate gradient of 0.009 (Plate 2). The groundwater flow direction is generally consistent with previous groundwater flow directions interpreted for this site. 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 total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, total xylenes (BTEX), and total extractable petroleum hydrocarbons as diesel (TEPHd). Samples collected from MW7 and MW14 were also analyzed for Stoddard Solvent and purgable halocarbons. The specific methods of analysis are listed in the notes in Table 1. The laboratory analysis reports and chain of custody records are attached.

Subjective analyses and analytical results of groundwater samples collected during the February 6, 1995 sampling event indicate the following:

- Hydrocarbon sheens were noted in wells MW2 through MW4, MW6, MW8, MW12, MW13, and MW15;
- Concentrations of TPHg were detected in wells MW7 and MW14 at 2,500 ppb and 360 ppb, respectively. According to laboratory notes, the sample patterns appear to be weathered gasoline and a non gasoline mixture, respectively;
- Concentrations of benzene were detected in wells MW1 and MW7 at 0.52 ppb and 130 ppb, respectively;
- Concentrations of TEPHd were detected in wells MW1, MW7, MW9, MW11 and MW14 up to 1,300 ppb. According to laboratory notes, the sample patterns have discrete peaks and a non-diesel mix;
- Concentrations of Stoddard Solvent were detected in wells MW7 and MW14 at 1,100 ppb and 400 ppb, respectively. According to laboratory notes, the sample patterns appear to be unidentified hydrocarbons;
- Gasoline and diesel hydrocarbons were not detected in well MW10; and,
- Purgeable halocarbons were not detected in wells MW7 or MW14.

## SOIL AND GROUNDWATER REMEDIATION

### Soil Vapor Extraction

The soil vapor extraction system (VES) consists of eight air sparging wells for air injection, vadose wells for vapor extraction, a water knock-out tank, the ERI 3000 vacuum blower unit, and vapor-phase carbon adsorbers. The system is equipped with a catalytic hydrocarbon detector between carbon adsorbers #2 and #3 which automatically shuts the system down when concentrations in the vapors stream exceed the set point. Additionally, the system is equipped with a high liquid level shutdown to turn the system off if the water level in the knock-out tank reaches the specified level. The air sparging system is operated in a continuous mode.

ERI initiated operation of the VES on January 9, 1995. Vapor samples were collected daily through January 18, 1995. ERI submitted a Source Test Report (dated January 20, 1995) to the Bay Area Air Quality Management District (BAAQMD) requesting vapor sampling be changed to bi-weekly. The BAAQMD approved a revised monitoring schedule in their letter dated January 30, 1995.

Operational data are presented in Table 2. Copies of the Reports of Laboratory Analysis and Chain of Custody Records for vapor treatment system samples collected during first quarter 1995 are attached (Attachment B). Copies of the Reports of Laboratory Analysis and Chain of Custody

Records for vapor treatment system start-up samples (January 9, 1995 through January 18, 1995) are reported in the Source Test Report (ERI, January 20, 1995).

Analytical results of vapor samples collected during start-up in January 1995 indicated the following:

- Concentrations of TPHg and benzene were detected up to 210 micrograms per liter (ug/l) and 39 ug/l, respectively, in the combined influent vapor sample; and,
- Hydrocarbons were not detected at or above the stated laboratory detection limits in the intermediate or stack effluent vapor samples.

Analytical results of vapor samples collected during February 1995 indicated the following:

- Concentrations of TPHg and benzene were detected up to 39 ug/l and 3.5 ug/l, respectively, in the combined influent vapor samples; and,
- Hydrocarbons were not detected at or above the stated laboratory detection limits in the intermediate or stack effluent vapor samples.

Analytical results of vapor samples collected during March 1995 indicated the following:

- Concentrations of TPHg were not detected at or above the stated laboratory detection limits, and benzene was detected up to 0.42 ug/l in the combined influent vapor sample; and,
- Hydrocarbons were not detected at or above the stated laboratory detection limits in the stack effluent vapor samples.

#### Groundwater Extraction And Treatment

The groundwater remediation system (GRS) is designed to treat separate-phase and dissolved petroleum hydrocarbons in groundwater extracted from the upper-water bearing zone beneath the site. Pneumatic pumps are installed in extraction wells RW-2 and RW-5 to recover groundwater from an interceptor trench. Subsurface and above-ground collection piping are used to transfer extracted groundwater to a holding tank. A transfer pump and PVC piping are used to direct the water stream from the holding tank through water filters, an air stripper, and subsequently through liquid-phase granular activated carbon (GAC) canisters connected in series. The treated groundwater is discharged to the sanitary sewer regulated by East Bay Municipal Utilities District (EBMUD).

Operation of the system began on January 9, 1995. On January 11, 1995, ERI shut down operation of the system because of arsenic levels detected in initial effluent samples. The system was non-operational from January 11, 1995 to March 13, 1995. ERI received notification of a revised arsenic discharge limit from EBMUD and restarted the system on March 13, 1995.

Between January 9, 1995 and March 30, 1995, the system recovered approximately 1,176 gallons of groundwater from beneath the site.

System flow rates, total volume extracted, and influent, intermediate, and effluent sample concentrations are presented in Table 3. Copies of the Reports of Laboratory Analysis and Chain of Custody Records for water treatment system samples collected during first quarter 1995 are attached (Attachment B).

Analytical results of water samples collected during January 1995 indicated the following:

- Concentrations of TPHg and benzene were detected at 3,400 ppb and concentrations of benzene were detected at 630 ppb in the influent groundwater sample;
- Hydrocarbons were not detected at or above the stated laboratory detection limits in the effluent groundwater samples; and,
- Concentrations of arsenic were detected at 0.0076 parts per million (ppm) in the effluent groundwater sample. The water sample was reanalyzed and concentrations of arsenic were detected at 0.0077 ppm in the effluent groundwater sample.

Based on the arsenic level detected immediately after start-up, ERI shut down the system and notified EBMUD. In a letter dated January 24, 1995 to EBMUD, ERI requested a revision to the arsenic limit in the discharge permit. EBMUD approved the requested revision for the arsenic limit to 0.05 parts per million (ppm) in a letter dated March 3, 1995. On March 13, 1995, ERI restarted the system. Water samples were not collected during February 1995 because the system was not operational pending authorization from EBMUD.

Analytical results of water samples collected during March 1995 indicated the following:

- Concentrations of TPHg and benzene were detected up to 110 ppb and 7.4 ppb, respectively, in the influent groundwater sample;
- Concentrations of arsenic were detected up to 0.0059 in the effluent groundwater sample; and,
- Hydrocarbons were not detected at or above the stated laboratory detection limits in the intermediate or effluent groundwater samples.

A semi-annual report on operations of the groundwater extraction and treatment system was sent to the East Bay Municipal Utilities District as required by the Wastewater Discharge Permit issued for the site (ERI, February 1995). On March 30, 1995, one 55-gallon liquid phase absorber was replaced. The system is currently operating within permit conditions.

## SUMMARY AND STATUS OF INVESTIGATION

Based on data collected to date, it appears the system is effectively removing residual hydrocarbons in soil and dissolved hydrocarbons in groundwater. ERI estimates approximately 35 pounds of hydrocarbons have been removed by the vapor extraction system during the first quarter of 1995 (Attachment C and Table 2). ERI also estimates the groundwater extraction system removed less than 1 pound of hydrocarbons during the first quarter 1995 (Table 3). The vapor extraction and

groundwater extraction systems were each functioning as of the beginning of the second quarter 1995. ERI will continue to operate the remedial systems and monitor groundwater at the site in second quarter 1995.

## LIMITATIONS

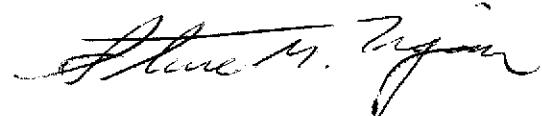
This report was prepared in accordance with generally accepted standards of environmental geological practice in California at the time this investigation was performed. This report has been prepared for Exxon Company, U.S.A. and any reliance on this report by third parties shall be at such party's sole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

If you have any questions or comments regarding this report, please call (415) 382-5995.

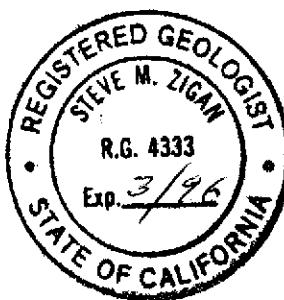
Sincerely,  
Environmental Resolutions, Inc.



Glenn L. Matteucci  
Staff Geologist



Steve M. Zigan  
R.G. 4333



Enclosures: Table 1: Cumulative Groundwater Monitoring and Sampling Data  
Table 2: Operational and Performance Data for Soil Vapor Extraction System  
Table 3: Operational Performance Data for Groundwater Remediation System

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  
Attachment C: ERI SOP-25 "Hydrocarbons Removed from a Vadose Well"

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California

(Page 1 of 31)

Well ID # (TOC)	Sampling Date	SUBJ < . . . . .	DTW feet ..... >	Elev. ..... >	TPHg < . . . . .	B	T	E parts per billion	X	TEPHd	VOCs	TOG ..... >
<b>MW1</b>												
MW1 (12.87)	05/88	NM	NM	---	240	90	5	15	25	NA	ND	NA
	04/25/89	NLPH	7.55	5.32#								
	04/27/89	Sheen	10.16	2.71#								
	09/06/89	Sheen	10.88	1.99#								
	09/22/89	NLPH	11.06	1.81#								
	11/01/89	NLPH	10.82	2.05#								
	11/15/89	NLPH	11.07	1.80#								
	12/06/89	NLPH	10.33	2.54	630	12	5.6	3.7	25	240	NA	NA
	02/20/90	NLPH	8.81	4.06#								
	04/19/90	NLPH	9.33	3.54	<20	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	07/03/90	NLPH	8.44	4.43	130	6	<0.5	<0.5	<0.5	160	NA	NA
	07/26/90	NLPH	8.99	3.88#								
	08/20/90	NLPH	9.50	3.37#								
	09/19/90	NLPH	9.99	2.88#								
	11/27/90	NLPH	10.62	2.25	<50	0.7	<0.5	<0.5	<0.5	<100	NA	NA
	01/17/91	NLPH	10.31	2.56#								
	03/26/91	NLPH	7.79	5.08	<50	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	05/02/91	NLPH	8.88	3.99#								
	06/20/91	NLPH	9.62	3.25	<50	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	08/07/91	NLPH	10.20	2.67#								
	09/17/91	NLPH	10.40	2.47	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	11/13/91	NLPH	10.20	2.67#								
	12/10/91	NLPH	10.23	2.64	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	01/21/92	NLPH	9.32	3.55#								
	03/25/92	NLPH	9.30	3.57	<50	1.5	<0.5	<0.5	<0.5	<50	NA	NA

See Notes on page 31 of 31

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006

720 High Street, Oakland, California

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Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < ..... >	TPHg < ..... >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW1 cont. (12.87)	06/22/92	NLPH	8.46	4.41	110	4.9	7.9	3.7	21	75	NA	NA
	09/24/92	NLPH	9.61	3.26	<50	<0.5	0.6	<0.5	<0.5	<50	NA	NA
	10/14/92	NLPH	9.85	3.02#								
	11/16/92	NLPH	9.65	3.22#								
	12/08/92	NLPH	9.30	3.57	170	10	<0.5	<0.5	0.6	51	NA	NA
	01/27/93	NLPH	6.13	6.74#								
	02/18/93	NLPH	6.07	6.80#								
	03/10/93	NLPH	6.12	6.75	<50	<0.5	<0.5	<0.5	<0.5	140	NA	NA
	04/06/93	NLPH	5.84	7.03#								
	05/28/93	NLPH	7.27	5.60#								
	06/10/93	NLPH	7.40	5.47	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	07/17/93	NLPH	8.08	4.79#								
	08/11/93	NLPH	8.54	4.33	<50	<0.5	<0.5	<0.5	<0.5	<50 <sup>2</sup>	ND	NA
				NA	<5*	<5*	<5*	<5*	<5*		ND	NA
	09/01/93	NLPH	8.80	4.07#								
	10/26/93	NLPH	9.41	3.46	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	11/12/93	NLPH	9.48	3.39#								
	12/27/93	NLPH	8.62	4.25#								
	01/20/94	NLPH	9.25	3.62#								
	02/02-03/94	NLPH	8.60	4.27	<50	<0.5	<0.5	<0.5	0.7	70	NA	NA
	03/10/94	NLPH	8.31	4.56#								
	04/22/94	NLPH	7.95	4.92#								
	05/10-11/94	NLPH	7.48	5.39	<50	<0.5	<0.5	<0.5	1.6	100	NA	NA
	06/27/94	NLPH	7.65	5.22#								
	08/31/94	NLPH	9.39	3.48#								
	09/29/94	NLPH	9.83	3.04	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA

See Notes on page 31 of 31

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
720 High Street, Oakland, California

(Page 3 of 31)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < ..... >	TPHg < ..... >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW1 cont. (12.87)	10/25/94	NLPH	10.19	2.68	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	11/30/94	NLPH	8.97	3.90#								
	12/27/94	NLPH	7.44	5.43#								
	02/06/95	NLPH	5.71	7.16	<50	0.52	<0.5	<0.5	<0.5	100	NA	NA
MW2 (12.98)	09/87	NM	NM	---		1,445	233	810	56	209	NA	NA
	05/88	LPH	NM	---								
	04/25/89	2.16[NR]	9.27	5.44#								
	07/19/89	1.56[NR]	10.81	3.42#								
	07/27/89	0.13[NR]	10.18	2.90#								
	09/06/89	0.09[NR]	10.89	2.16#								
	09/22/89	0.56[NR]	11.56	1.87#								
	11/01/89	0.09[NR]	10.85	2.20#								
	11/15/89	0.07[NR]	11.05	1.99#								
	12/06/89	0.13[NR]	10.23	2.85#								
	02/20/90	0.29 [NR]	8.86	4.35#								
	04/19/90	0.10 [NR]	9.09	3.97#								
	07/03/90	0.05 [NR]	8.75	4.27#								
	07/26/90	0.10 [NR]	8.71	4.35#								
	08/20/90	0.02 [NR]	9.25	3.75#								
	09/19/90	0.02 [NR]	9.79	3.21#								
	11/27/90	0.07 [NR]	10.40	2.64#								
	01/17/91	0.05 [NR]	10.03	2.99#								
	03/26/91	0.08 [NR]	8.98	4.06#								
	05/02/91	0.02 [NR]	8.73	4.27#								
	06/20/91	0.02 [NR]	9.11	3.89#								
	08/07/91	0.04 [NR]	10.00	3.01#								

See Notes on page 31 of 31

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 4 of 31)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev.	TPHg < ..... >	B	T	E	X	TEPHd	VOCs	TOG >
MW2 cont. (12.98)	09/17/91	0.02 [NR]	10.11	2.89#								
	11/13/91	0.02 [NR]	9.88	3.12#								
	12/10/91	0.03 [NR]	9.02	3.98#								
	01/21/92	0.03 [NR]	9.08	3.92#								
	03/25/92	0.03 [NR]	6.00	7.00#								
	06/22/92	0.01 [½ c.]	8.46	4.53#								
	09/24/92	Sheen [NR]	9.08	3.90#								
	10/14/92	0.02 [½ c.]	9.34	3.66#								
	11/16/92	0.02 [½ c.]	9.16	3.84#								
	12/08/92	0.02 [½ c.]	8.93	4.07#								
	01/27/93	Sheen	5.76	7.22#								
	02/18/93	0.01 [NR]	4.21	8.78#								
	03/10/93	Sheen	6.75	6.23#								
	04/06/93	Sheen	5.37	7.61#								
	05/28/93	NM [2 c.]	NM	---								
	06/10/93	NM [½ c.]	NM	---								
	07/17/93	NM [2 c.]	NM	---								
	08/11/93	NM [½ c.]	NM	---								
	09/01/93	NM [½ c.]	NM	---								
	10/26/93	Sheen	NM	---								
	11/12/93	NM [NR]	NM	---								
	12/27/93	NM [NR]	NM	---								
	01/20/94	NM [NR]	NM	---								
	02/02-03/94	NM [NR]	NM	---								
	03/10/94	[8 c.]	6.96	6.29#								
	04/22/94	[10 c.]	NM	---								
	05/10-11/94	[5 c.]	NM	---								
	06/27/94	Sheen	7.10	5.88#								

See Notes on page 31 of 31

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 5 of 31)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < ..... >	TPHg < ..... >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW2 cont. (12.98)	08/31/94	Sheen	8.58	4.40#								
	09/29/94	Sheen	9.11	3.87#								
	10/25/94	Sheen	7.76	5.22#								
	11/30/94	NM	7.33	5.65#								
	12/27/94	Sheen	6.77	6.21#								
	02/06/95	Sheen	5.00	7.98								
MW3 (12.92)	09/87	NM [NR]	NM	---	2,101	360	1,062	68	298	660	NA	NA
	05/88	NM [NR]	NM	---	8,700	3,980	280	240	600	NA	NA	NA
	04/25/89	0.08 [NR]	7.57	5.43#								
	07/19/89	0.66 [NR]	10.33	3.14#								
	07/27/89	Not Accessible										
	09/06/89	0.07 [NR]	11.22	1.78#								
	09/22/89	0.28 [NR]	11.38	1.78#								
	11/01/89	0.01 [NR]	10.90	2.05#								
	11/15/89	0.11 [NR]	11.18	1.85#								
	12/06/89	Sheen	10.29	2.65#								
	02/20/90	0.04 [NR]	8.73	4.24#								
	04/19/90	0.09 [NR]	9.20	3.81#								
	07/03/90	0.03 [NR]	8.50	4.46#								
	07/26/90	0.04 [NR]	8.58	4.39#								
	08/20/90	0.01 [NR]	9.21	3.74#								
	09/19/90	0.35 [NR]	10.02	3.20#								
	11/27/90	0.42 [NR]	10.72	2.56#								
	01/17/91	0.10 [NR]	10.05	2.97#								
	03/26/91	0.10 [NR]	7.65	5.37#								
	05/02/91	0.03 [NR]	8.54	4.42#								

See Notes on page 31 of 31

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 6 of 31)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev.	TPHg	B	T	E	X	TEPHd	VOCs	TOG
		< . . . . .	..... >		< . . . . .	.....		parts per billion	.....			>
MW3 cont. (12.92)	06/20/91	0.03 [NR]	8.89	4.07#								
	08/07/91	0.03 [NR]	9.99	2.97#								
	09/17/91	0.22 [NR]	10.32	2.80#								
	11/13/91	0.24 [NR]	10.14	2.99#								
	12/10/91	0.11 [NR]	10.10	2.93#								
	01/21/92	0.06 [NR]	9.07	3.92#								
	03/25/92	0.04 [NR]	5.96	7.01#								
	06/22/92	0.02 [½ c.]	8.07	4.89#								
	09/24/92	Sheen	9.29	3.65#								
	10/14/92	0.02 [½ c.]	9.49	3.47#								
	11/16/92	0.02 [½ c.]	9.29	3.67#								
	12/08/92	0.02 [½ c.]	9.08	3.88#								
	01/27/93	Sheen	5.65	7.29#								
	02/18/93	Sheen	4.63	8.31#								
	03/10/93	Sheen	5.53	7.41#								
	04/06/93	Sheen	5.10	7.84#								
	05/28/93	Sheen	6.50	6.44#								
	06/10/93	Sheen	6.65	6.29#								
	07/17/93	Sheen	7.03	5.91#								
	08/11/93	Sheen	7.56	5.38	5,100	1,300	12	87	47	3,200	ND	NA
						2,000*	<2.5*	160*	60*			
	09/01/93	0.01 [NR]	8.20	4.75#								
	10/26/93	Sheen	8.88	4.06#								
	11/12/93	Sheen	8.96	3.98#								
	12/27/93	Sheen	9.03	3.91#								
	01/20/94	Sheen	8.24	4.70#								
	02/02-03/94	Sheen	7.68	5.26#								
	03/10/94	Sheen	7.24	5.68#								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < . . . . . >	TPHg < . . . . . >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW3 cont (12.92)	04/22/94	Sheen	6.79	6.13#								
	05/10-11/94	Sheen	6.43	6.49#								
	06/27/94	0.01 [NR]	6.97	5.95#								
	08/31/94	Sheen	8.41	4.51#								
	09/29/94	Sheen	8.97	3.95#								
	10/25/94	Sheen	9.43	3.49#								
	11/28/94	NM	7.19	5.73#								
	12/27/94	Sheen	6.64	6.28#								
	02/06/95	Sheen	4.87	8.05								
MW4 (12.77)	09/87	NM [NR]	NM	---	92,500	70	7	10	16	740	NA	NA
	05/88	LPH	NM	---								
	04/25/89	0.16 [NR]	7.26	5.64#								
	07/19/89	0.72 [NR]	10.32	3.03#								
	07/27/89	Not Accessible										
	09/06/89	0.07 [NR]	11.40	1.43#								
	09/22/89	0.19 [NR]	11.64	1.28#								
	11/01/89	Sheen	11.00	1.77#								
	11/15/89	0.10 [NR]	11.18	1.67#								
	12/06/89	Sheen	10.25	2.52#								
	02/20/90	NLPH	8.40	4.37#								
	04/19/90	0.03 [NR]	9.04	3.75#								
	07/03/90	Sheen	8.00	4.77#								
	07/26/90	0.04 [NR]	8.57	4.23#								
	08/20/90	0.01 [NR]	9.08	3.70#								
	09/19/90	0.03 [NR]	9.76	3.03#								
	11/27/90	0.09 [NR]	10.83	2.01#								

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TABLE 1  
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
 Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SUBJ < . . . . . >	DTW feet . . . . .	Elev. < . . . . . >	TPHg < . . . . . >	B	T	E	X	TEPHd	VOCs	TOG >
MW4 cont. (12.77)	01/17/91	0.20 [NR]	9.96	2.97#								
	03/26/91	0.09 [NR]	6.20	6.64#								
	05/02/91	0.04 [NR]	7.50	5.30#								
	06/20/91	0.04 [NR]	7.79	5.01#								
	08/07/91	0.05 [NR]	9.81	3.00#								
	09/17/91	0.10[NR]	10.02	2.83#								
	11/13/91	0.12[NR]	9.90	2.97#								
	12/10/91	0.10[NR]	9.92	2.93#								
	01/21/92	0.08[NR]	9.50	3.33#								
	03/25/92	0.03[NR]	5.01	7.78#								
	06/22/92	0.02 [ $\frac{1}{2}$ c.]	7.34	5.45#								
	09/24/92	Sheen	9.03	3.74#								
	10/14/92	0.02 [ $\frac{1}{2}$ c.]	9.27	3.52#								
	11/16/92	0.02 [ $\frac{1}{2}$ c.]	9.09	3.70#								
	12/08/92	0.02 [ $\frac{1}{2}$ c.]	10.24	2.55#								
	01/27/93	0.04 [NR]	4.95	7.85#								
	02/18/93	0.01 [NR]	4.89	7.89#								
	03/10/93	Sheen	6.40	6.37#								
	04/06/93	Sheen	4.36	8.41#								
	05/28/93	NM [2 c.]	NM	--								
	06/10/93	NM [2 c.]	NM	--								
	07/17/93	NM [2/5 gal.]	NM	--								
	08/11/93	NM [ $\frac{1}{4}$ gal.]	NM	--								
	09/01/93	NM [ $\frac{1}{4}$ gal.]	NM	--								
	10/26/93	NM [NR]	NM	--								
	11/12/93	NM [NR]	NM	--								
	12/27/93	NM [NR]	NM	--								
	01/20/94	NM [NR]	NM	--								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SUBJ < ..... >	DTW feet	Elev. ..... >	TPHg < ..... >	B	T	E parts per billion	X	TEPHd	VOCs	TOG ..... >
MW4 cont. (12.77)	02/02-03/94	NM [1 c.]	NM	---								
	03/10/94	[8 c.]	7.12	5.65#								
	04/22/94	[10 c.]	NM	---								
	05/10-11/94	[5 c.]	NM	---								
	06/27/94	0.01 [NR]	6.50	6.27#								
	08/31/94	0.02 [NR]	7.84	4.93#								
	09/29/94	0.03 [NR]	8.43	4.37#								
	10/25/94	Sheen	9.24	3.53#								
	11/30/94	NM	6.77	6.00#								
	12/27/94	Sheen	6.14	6.63#								
MW5 (8.38)	02/06/95	Sheen	4.87	7.90								
	09/87	NM	NM	---	26,660	560	1,710	1,580	7,150	37,220	NA	NA
	05/88	LPH	NM	---								
	04/25/89	NLPH	8.06	0.32#								
	07/18/89	Well Destroyed										
MW6 (14.27)	05/88	NM	NM	---	29,300	12,820	550	1,440	5,500	NA	NA	NA
	04/25/89	NLPH	8.02	6.25#								
	09/06/89	0.08 [NR]	13.64	0.69#								
	09/22/89	0.07 [NR]	13.79	0.54#								
	11/01/89	Sheen	12.78	1.49#								
	11/15/89	Sheen	12.91	1.36#								
	12/06/89	NLPH	11.84	2.43	9,000	370	13	2.6	430	4,800	NA	NA
	02/20/90	NLPH	9.08	5.19#								
	04/19/90	NLPH	9.72	4.55	27,000	3,000	120	490	2,100	26,000	NA	NA

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California

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Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < ..... >	TPHg < ..... >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW6 cont. (14.27)	07/03/90	NLPH	8.00	6.27	30,000	5,500	1,400	1,200	3,100	13,000	NA	NA
	07/26/90	NLPH	8.70	5.57#								
	08/20/90	NLPH	9.62	4.65#								
	09/19/90	Sheen	10.25	4.02#								
	11/27/90	Sheen	10.82	3.45	15,000	4,400	120	800	2,300	7,600	NA	NA
	01/17/91	NLPH	9.93	4.34#								
	03/26/91	NLPH	8.45	5.82	55,000	10,000	380	1,600	6,900	<100	NA	NA
	05/02/91	NLPH	8.90	5.37#								
	06/20/91	Sheen	9.47	4.80#								
	08/07/91	Sheen	10.10	4.17#								
	09/17/91	Sheen	10.21	4.06	17,000	4,500	160	890	3,100	NA	NA	NA
	11/13/91	Sheen	9.62	4.65#								
	12/10/91	Sheen	9.59	4.68	32,000	6,000	290	1,400	4,700	1,200	NA	NA
	01/21/92	Sheen	9.25	5.02#								
	03/25/92	NLPH	6.88	7.39	21,000	8,000	250	1,700	5,000	2,700	NA	NA
	06/22/92	NLPH	7.38	6.89	43,000	11,000	150	2,100	5,000	1,700	NA	NA
	09/24/92	NLPH	8.70	5.57	45,000	9,800	270	1,700	3,600	2,000	NA	NA
	10/14/92	Sheen	8.91	5.36#								
	11/16/92	NLPH	8.75	5.52#								
	12/08/92	Sheen	8.51	5.76#								
	01/27/93	NLPH	5.69	8.58#								
	02/18/93	0.10 [½ c.]	4.90	9.45#								
	03/10/93	0.05 [¼ c.]	6.07	8.24#								
	04/06/93	Sheen	4.98	9.29#								
	05/28/93	NM [3 c.]	NM	---								
	06/10/93	NM [3 c.]	NM	---	130,000	9,800	650	5,100	12,000	38,000	NA	23,000
	07/17/93	NM [NR]	NM	---								
	08/11/93	NM [NR]	NM	---								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < ..... >	TPHg < ..... >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW6 cont (14.27)	09/01/93	NM [½ c.]	NM	---								
	10/26/93	NM [NR]	NM	---								
	11/12/93	NM [NR]	NM	---								
	12/27/93	NM [NR]	NM	---								
	01/20/94	NM [NR]	NM	---								
	02/02-03/94	NM [NR]	NM	---								
	03/10/94	[¼ c.]	7.82	6.45#								
	04/22/94	[10 c.]	NM	---								
	05/10-11/94	[3 c.]	NM	---								
	06/27/94	Sheen	7.77	6.50#								
	08/31/94	Sheen	9.02	5.25#								
	09/29/94	Sheen	9.51	4.76#								
	10/25/94	Sheen	9.93	4.34#								
	11/30/94	NM	8.05	6.22#								
	12/27/94	NM	7.54	6.73#								
	02/06/95	Sheen	5.86	8.41								
MW7 (14.84)	09/87	NM	NM	—	1,531	258	2	<2	42	2,790	ND	NA
	05/88	NM	NM	---	NA	300*	<10*	<10*	<10*	19	ND	NA
	04/25/89	NLPH	8.66	6.18#								
	09/06/89	Sheen	11.72	3.12#								
	09/22/89	NLPH	11.89	2.95#								
	12/06/89	NLPH	10.46	4.38	1,700	220	5.3	5	8.6	2,500	ND	<5,000
	02/20/90	NLPH	8.44	6.40#								
	04/19/90	NLPH	9.54	5.30	2,700	220	8.6	7	20	3,500	ND	NA
	07/03/90	NLPH	7.45	7.39	2,500	380	13	16	35	910	ND	NA
	07/26/90	NLPH	8.08	6.76#								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California

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Well ID # (TOC)	Sampling Date	SUBJ < . . . . .	DTW feet . . . . .	Elev. >	TPHg < . . . . .	B	T	E parts per billion . . . . .	X	TEPHd	VOCs	TOG >
MW7 cont. (14.84)	08/20/90	NLPH	8.82	6.02#								
	09/19/90	NLPH	9.01	5.83#								
	11/27/90	NLPH	9.54	5.30	2,300	630	16	32	29	1,300	2.4 <sup>1</sup>	NA
	01/17/91	NLPH	8.50	6.34#								
	03/26/91	NLPH	5.92	8.92	3,500	420	18	17	27	<100	ND	NA
	05/02/91	NLPH	7.72	7.12#								
	06/20/91	NLPH	8.19	6.65	3,100	270	8.8	33	19	<100	NA	NA
	08/07/91	NLPH	8.70	6.14#								
	09/17/91	NLPH	8.77	6.07	2,400	390	10	15	18	NA	NA	NA
	11/13/91	NLPH	8.51	6.33#								
	12/10/91	NLPH	8.58	6.26	1,700	290	5.3	7.1	<0.5	530	NA	NA
	01/21/92	NLPH	8.32	6.52#								
	03/25/92	NLPH	9.27	5.57	1,500	320	7.2	16	19	760	NA	NA
	06/22/92	NLPH	6.97	7.87	3,100	260	5.8	21	27	830	NA	NA
	09/24/92	NLPH	8.00	6.84	3,900	160	4.6	3.7	13	660	NA	NA
	10/14/92	NLPH	8.15	6.69#								
	11/16/92	NLPH	7.92	6.92#								
	12/08/92	NLPH	7.75	7.09	17,000	1,100	35	77	46	540	NA	NA
	01/27/93	NLPH	5.09	9.75#								
	02/18/93	NLPH	4.51	10.33#								
	03/10/93	NLPH	4.78	10.06	3,500	160	6.2	22	19	640	**	<5000
	04/06/93	NLPH	4.48	10.36#								
	05/28/93	NLPH	5.44	9.40#								
	06/10/93	NLPH	5.60	9.24	1,600	140	6.5	22	61	570	NA	NA
	07/17/93	NLPH	6.33	8.51#								
	08/11/93	NLPH	6.87	7.97	2,700	130	1.3	13	12	370	ND	NA
	09/01/93	NLPH	7.12	7.72#		140*	5*	12*	10*	2,000 <sup>c</sup>		

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SUBJ < . . . . . >	DTW feet	Elev. < . . . . . >	TPHg < . . . . . >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW7 cont. (14.84)	10/26/93	NLPH	7.67	7.17	2,500	90	4.7	6.6	15	1,000	NA	NA
	11/12/93	NLPH	7.69	7.15#								
	12/27/93	NLPH	7.42	7.42#								
	01/20/94	NLPH	8.67	6.17#								
	02/02-03/94	NLPH	8.47	6.37	2,900	79	5.0	8.2	21	1300	NA	NA 470 <sup>2</sup>
	03/10/94	NLPH	8.24	6.60#								
	04/22/94	NLPH	7.95	6.89#								
	05/10-11/94	NLPH	7.53	7.31#	2,400	88	5.6	5.2	15	1,300	NA	NA 1,400 <sup>2</sup>
	06/27/94	NLPH	8.01	6.83#								
	08/31/94	NLPH	9.19	5.65#								
	09/29/94	NLPH	9.65	5.19	1,900	71	3.1	3.5	7.8	56	NA	NA
	10/25/94	NLPH	9.96	4.88	1,400	51	1.5	24	6.8	89 <sup>7</sup>	NA	NA
	11/30/94	NM	7.78	7.06#								
	12/27/94	NM	7.51	7.33#								
	02/06/95	NLPH	5.79	9.05	2,500	130	<10	<10	<10	1,300	ND	1,100 <sup>2</sup>
MW8 (13.45)	09/87	NM	NM	---	1,325	81	74	42	182	NA	NA	NA
	05/88	LPH	NM	---								
	04/25/89	0.66 [NR]	8.31	5.67#								
	07/19/89	1.25 [NR]	10.97	3.48#								
	07/27/89	0.08 [NR]	10.34	3.17#								
	09/06/89	0.17 [NR]	11.09	2.50#								
	09/22/89	0.36 [NR]	11.58	2.16#								
	11/01/89	NLPH	11.03	2.42#								
	11/15/89	0.01 [NR]	11.25	2.21#								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California

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Well ID # (TOC)	Sampling Date	SUBJ < . . . . .	DTW feet . . . . .	Elev. >	TPHg < . . . . .	B	T	E parts per billion . . . . .	X	TEPHd	VOCs	TOG >
MW8 cont. (13.45)	12/06/89	Sheen	10.30	3.15	42,000	2,600	630	210	3,700	34,000	NA	NA
	02/20/90	0.01 [NR]	8.00	5.46#								
	04/19/90	NLPH	8.50	4.95	49,000	2,100	820	1,100	4,800	53,000	NA	NA
	07/03/90	NLPH	7.55	5.90	44,000	4,000	1,500	2,000	6,300	32,000	NA	NA
	07/26/90	NLPH	7.86	5.59#								
	08/20/90	NLPH	8.92	4.53#								
	09/19/90	NLPH	9.55	3.90#								
	11/27/90	0.01 [NR]	10.29	3.17#								
	01/17/91	Sheen	9.97	3.48#								
	03/26/91	Sheen	8.45	5.00#								
	05/02/91	Sheen	8.85	4.60#								
	06/20/91	Sheen	9.45	4.00#								
	08/07/91	Sheen	10.00	3.45#								
	09/17/91	Sheen	10.11	3.34	57,000	14,000	7,800	3,100	12,000	NA	NA	NA
	11/13/91	Sheen	9.63	3.82#								
	12/10/91	Sheen	9.66	3.79	66,000	9,500	5,000	3,100	12,000	1,400	NA	NA
	01/21/92	Sheen	9.35	4.10#								
	03/25/92	Sheen	8.02	5.43#								
	06/22/92	Sheen	7.01	6.44#								
	09/24/92	Sheen	8.33	5.12#								
	10/14/92	Sheen	8.65	4.80#								
	11/16/92	Sheen	8.27	5.18#								
	12/08/92	Sheen	8.25	5.20#								
	01/27/93	Sheen	5.22	8.23#								
	02/18/93	Sheen	4.27	9.18#								
	03/10/93	Sheen	5.30	8.15#								
	04/06/93	Sheen	4.56	8.89#								
	05/28/93	Sheen	5.62	7.83#								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < ..... >	TPHg < ..... >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW8 cont. (13.45)	06/10/93	Sheen	5.75	7.70#								
	07/17/93	Sheen	6.43	7.02#								
	08/11/93	Sheen	6.99	6.46	53,000	4,200	1,300	2,600	7,200	2,600	ND	NA
						4,900*	1,600*	3,300*	8,200*	370*		
	09/01/93	Sheen	7.33	6.12#								
	10/26/93	Sheen	7.98	5.47#								
	11/12/93	Sheen	8.07	5.38#								
	12/27/93	NM	NM	--								
	01/20/94	Sheen	8.90	4.55#								
	02/02-03/94	Sheen	8.58	4.87#								
	03/10/94	NLPH	7.16	6.29#								
	04/22/94	Sheen	7.34	6.11#								
	05/10-11/94	Sheen	7.04	6.41#								
	06/27/94	Sheen	6.01	7.44#								
	08/31/94	Sheen	9.26	4.19#								
	09/29/94	Sheen	9.76	3.72#								
	10/25/94	Sheen	10.05	3.40								
	11/30/94	NM	7.68	5.77#								
	12/27/94	Sheen	7.11	6.34#								
	02/06/95	Sheen	5.39	8.06								
MW9 (14.64)	05/88	NM	NM	--	<50	<0.5	1	<1	<1	NA	ND	NA
	04/25/89	NLPH	8.25	6.39#								
	09/06/89	Not Accessible										
	09/22/89	Not Accessible										
	12/06/89	NLPH	10.12	4.52	100	1.8	3.7	1.4	8.8	110	ND	<5000
	02/20/90	NLPH	9.38	5.26#								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
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Well ID # (TOC)	Sampling Date	SUBJ < . . . . .	DTW feet . . . . .	Elev. >	TPHg < . . . . .	B .....	T	E parts per billion . . . . .	X	TEPHd	VOCs	TOG >
MW9 cont. (14.64)	04/19/90	NLPH	9.40	5.25	<20	<0.5	<0.5	<0.5	<0.5	<100	ND	NA
	07/03/90	NLPH	8.79	5.85	<20	<0.5	<0.5	<0.5	<0.5	<100	ND	NA
	07/26/90	NLPH	8.70	5.94#								
	08/20/90	NLPH	9.09	5.55#								
	09/19/90	NLPH	9.52	5.12#								
	11/27/90	NLPH	9.89	4.75	<50	<0.5	<0.5	<0.5	<0.5	<100	ND	NA
	01/17/91	Not Accessible										
	03/26/91	Not Accessible										
	05/02/91	NLPH	9.10	5.54#								
	06/20/91	NLPH	8.76	5.88	<50	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	08/07/91	NLPH	9.37	5.27#								
	09/17/91	NLPH	9.57	5.07	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	11/13/91	NLPH	9.46	5.18#								
	12/10/91	NLPH	9.30	5.34	<50	<0.5	<0.5	<0.5	<0.5	52	NA	NA
	01/21/92	NLPH	9.68	4.96#								
	03/25/92	NLPH	8.93	5.71	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	06/22/92	NLPH	7.45	7.19	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	09/24/92	NLPH	8.69	5.95	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	10/14/92	NLPH	8.83	5.81#								
	11/16/92	NLPH	8.80	5.84#								
	12/08/92	NLPH	8.70	5.94	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	01/27/93	NM	NM	---								
	02/18/93	NLPH	9.22	5.42#								
	03/10/93	NLPH	5.25	9.39	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	04/06/93	NLPH	5.07	9.57#								
	05/28/93	NLPH	6.08	8.56#								
	06/10/93	NLPH	6.27	8.37	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	07/17/93	NLPH	7.09	7.55#								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California

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Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < . . . . . >	TPHg < . . . . . >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW9 cont. (14.64)	08/11/93	NLPH	7.60	7.04	<50	<0.5 <5*	<0.5 <5*	<0.5 <5*	<0.5 <5*	<50 <50 <sup>d</sup>	ND	NA
	09/01/93	NLPH	7.95	6.69#								
	10/26/93	NLPH	8.44	6.20	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	11/12/93	NLPH	8.44	6.20#								
	12/27/93	NLPH	8.37	6.27#								
	01/20/94	NM	NM	---								
	02/02-03/94	NM	NM	---								
	03/10/94	NLPH	6.90	7.74#								
	04/22/94	NLPH	7.38	7.26#								
	05/10-11/94	NLPH	6.96	7.68#								
	06/27/94	NLPH	7.65	6.99#								
	08/31/94	NLPH	8.87	5.77#								
	09/29/94	NLPH	9.19	5.45	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	10/25/94	NLPH	9.66	4.98	<50	<.05	<0.5	<0.5	<0.5	<50	NA	NA
	11/30/94	NM	8.38	6.26#								
	12/27/94	NLPH	7.29	7.35#								
	02/06/95	NLPH	5.74	8.90	<50	<0.5	<0.5	<0.5	<0.5	56	NA	NA
MW10 (14.05)	12/06/89	NLPH	10.46	3.59	320	3.7	14	5.6	32	<100	NA	NA
	02/20/90	NLPH	8.12	5.93#								
	04/19/90	NLPH	8.54	5.51	<20	<0.5	<0.5	<0.5	<0.5	<100	ND	NA
	07/03/90	NLPH	7.88	6.17	<20	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	07/26/90	NLPH	8.19	5.86#								
	08/20/90	NLPH	10.33	3.72#								
	09/19/90	NLPH	9.49	4.56#								
	11/27/90	NLPH	9.89	4.16	<50	<0.5	<0.5	<0.5	<0.5	<100	NA	NA

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California

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Well ID # (TOC)	Sampling Date	SUBJ < . . . . .	DTW feet . . . . . >	Elev. .....	TPHg < . . . . .	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW10 cont. (14.05)	01/17/91	NLPH	9.19	4.86#								
	03/26/91	NLPH	7.48	6.57	<50	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	05/02/91	NLPH	8.16	5.89#								
	06/20/91	NLPH	8.75	5.30	<50	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	08/07/91	NLPH	9.53	4.52#								
	09/17/91	NLPH	9.72	4.33	<50	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	11/13/91	NLPH	10.02	4.03#								
	12/10/91	NLPH	9.12	4.93	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	01/21/92	NLPH	8.31	5.74#								
	03/25/92	NLPH	5.70	8.35	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	06/22/92	NLPH	7.50	6.55	<50	<0.5	0.6	<0.5	0.8	<50	NA	NA
	09/24/92	NLPH	8.68	5.37	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	10/14/92	NLPH	8.88	5.17#								
	11/16/92	NLPH	8.70	5.35#								
	12/08/92	NLPH	8.31	5.74	<50	<0.5	<0.5	<0.5	0.9	<50	NA	NA
	01/27/93	NLPH	5.49	8.56#								
	02/18/93	NLPH	4.26	9.79#								
	03/10/93	NLPH	5.40	8.65	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	04/06/93	NLPH	5.28	8.77#								
	05/28/93	NLPH	6.22	7.83#								
	06/10/93	NLPH	6.49	7.56	<50	<0.5	0.6	0.7	1.2	<50	NA	NA
	07/17/93	NLPH	6.79	7.26#								
	08/11/93	NLPH	7.20	6.85	<50	<0.5	<0.5	0.5	1.4	<50	ND	NA
					<5*	<5*	<5*	<5*	<5*	<50 <sup>2</sup>		
	09/01/93	NLPH	8.03	6.02#								
	10/26/93	NLPH	8.38	5.67	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	11/12/93	NLPH	8.49	5.56#								
	12/27/93	NLPH	8.22	5.83#								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SUBJ < . . . . .	DTW feet . . . . .	Elev. >	TPHg < . . . . .	B .....	T .....	E parts per billion .....	X .....	TEPHd .....	VOCs .....	TOG >
MW10 cont. (14.05)	01/20/94	NLPH	8.40	5.65#								
	02/02-03/94	NLPH	8.00	6.05	<50	<0.5	1.0	<0.5	1.8	<50	NA	NA
	03/10/94	NLPH	7.56	6.49#								
	04/22/94	NLPH	7.35	6.70#								
	05/10-11/94	NLPH	7.06	6.99	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	06/27/94	NLPH	7.59	6.46#								
	08/31/94	NLPH	8.73	5.32#								
	09/29/94	NLPH	9.07	4.98	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	10/25/94	NLPH	9.41	4.64	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	11/30/94	NM	7.62	6.43#								
	12/27/94	NLPH	7.01	7.04#								
	02/06/95	NLPH	5.60	8.45	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
MW11 (13.55)	12/06/89	NLPH	10.62	2.93	78	5.9	6.3	<0.5	48,000	<100	NA	NA
	02/20/90	NLPH	9.20	4.35#								
	04/19/90	NLPH	9.80	3.75	<20	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	07/03/90	NLPH	8.90	4.65	<20	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	07/26/90	NLPH	9.36	4.19#								
	08/20/90	NLPH	9.90	3.65#								
	09/19/90	NLPH	10.39	3.16#								
	11/27/90	NLPH	10.97	2.58	<50	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	01/17/91	NLPH	10.76	2.79#								
	03/26/91	NLPH	8.80	4.75	<50	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	05/02/91	NLPH	9.38	4.17#								
	06/20/91	NLPH	10.16	3.39	<50	<0.5	<0.5	<0.5	<0.5	<100	NA	NA
	08/07/91	NLPH	10.69	2.86#								
	09/17/91	NLPH	10.80	2.75	<50	<0.5	0.7	<0.5	<0.5	NA	NA	NA

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SUBJ < . . . . . >	DTW feet	Elev. < . . . . . >	TPHg < . . . . . >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW11 cont. (13.55)	11/13/91	NLPH	10.44	3.11#								
	12/10/91	NLPH	10.48	3.07	<50	0.7	<0.5	<0.5	<0.5	<50	NA	NA
	01/21/92	NLPH	10.10	3.45#								
	03/25/92	NLPH	7.30	6.25	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	06/22/92	NLPH	9.02	4.53	84	1.5	3.1	1.4	9.6	57	NA	NA
	09/24/92	NLPH	9.91	3.64	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	10/14/92	NLPH	10.11	3.44#								
	11/16/92	NLPH	9.79	3.76#								
	12/08/92	NLPH	9.77	3.78	<50	<0.5	<0.5	<0.5	<0.5	310	NA	NA
	01/27/93	NLPH	5.67	7.88#								
	02/18/93	NLPH	5.06	8.49#								
	03/10/93	NLPH	6.40	7.15	<50	<0.5	<0.5	<0.5	<0.5	240	NA	NA
	04/06/93	NLPH	6.42	7.13#								
	05/28/93	NLPH	7.65	5.90#								
	06/10/93	NLPH	7.80	5.75	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	07/17/93	NLPH	8.42	5.13#								
	08/11/93	NLPH	8.87	4.68	<50	0.5 <5*	0.7 <5*	1.2 <5*	2.7 <5*	<50	ND	NA
	09/01/93	NLPH	9.09	4.46#								
	10/26/93	NLPH	9.70	3.85	<50	<0.5	<0.5	<0.5	<0.5	80	NA	NA
	11/12/93	NLPH	9.72	3.83#								
	12/27/93	NLPH	9.56	3.99#								
	01/20/94	NLPH	9.61	3.94#								
	02/02-03/94	NLPH	9.56	3.99	<50	<0.5	1.0	<0.5	0.9	160	NA	NA
	03/10/94	NLPH	8.59	4.96#								
	04/22/94	NLPH	8.47	5.08#								
	05/10-11/94	NLPH	8.12	5.43	<50	<0.5*	<0.5	<0.5	3.2	100 <sup>7</sup>	NA	NA
	06/27/94	NLPH	8.65	4.90#								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < . . . . . >	TPHg < . . . . . >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW11 cont (13.55)	08/31/94	NLPH	9.80	3.75#								
	09/29/94	NLPH	10.16	3.39	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	10/25/94	NLPH	10.48	3.07	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	11/30/94	NM	8.55	5.00#								
	12/27/94	NLPH	7.98	5.57#								
	02/06/95	NLPH	6.49	7.06	<50	<0.5	<0.5	<0.5	<0.5	160	NA	NA
MW12 (12.61)	12/06/89	NLPH	8.00	4.61	85,000	6,700	6,300	1,800	7,800	4,000	NA	NA
	02/20/90	NLPH	6.33	6.28#								
	04/19/90	NLPH	7.18	5.43	110,000	6,600	7,400	1,800	11,000	97,000	NA	NA
	07/03/90	NLPH	7.41	5.20	92,000	11,000	11,000	3,100	13,000	50,000	NA	NA
	07/26/90	NLPH	6.54	6.07#								
	08/20/90	NLPH	7.23	5.38#								
	09/19/90	NLPH	7.77	4.84#								
	11/27/90	NLPH	8.15	4.46	69,000	11,000	10,000	3,100	12,000	NA	NA	NA
	01/17/91	NLPH	8.06	4.55#								
	03/26/91	NLPH	7.21	5.40	100,000	15,000	16,000	2,400	11,000	<100	NA	NA
	05/02/91	Sheen	7.60	5.01#								
	06/20/91	Sheen	8.02	4.59#								
	08/07/91	Sheen	8.25	4.36#								
	09/17/91	Sheen	8.20	4.41	82,000	22,000	18,000	3,900	16,000	NA	NA	NA
	11/13/91	Sheen	7.77	4.84#								
	12/10/91	Sheen	7.75	4.86	99,000	18,000	16,000	3,000	11,000	1,700	NA	NA
	01/21/92	Sheen	7.08	5.53#								
	03/25/92	Sheen	4.93	7.68#								
	06/22/92	Sheen	6.04	6.57#								
	09/24/92	NLPH	6.94	5.67	570,000	62,000	46,000	15,000	57,000	3,100	NA	NA

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SURJ < . . . . . >	DTW feet	Elev. < . . . . . >	TPHg < . . . . . >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW12 cont. (12.61)	10/14/92	Sheen	7.21	5.40#								
	11/16/92	Sheen	7.00	5.61#								
	12/08/92	Sheen	6.70	5.91#								
	01/27/93	Sheen	4.16	8.45#								
	02/18/93	Sheen	4.01	8.60#								
	03/10/93	Sheen	3.94	8.67#								
	04/06/93	Sheen	3.69	8.92#								
	05/28/93	Sheen	4.66	7.95#								
	06/10/93	Sheen	4.78	7.83#								
	07/17/93	Sheen	5.42	7.19#								
	08/11/93	Sheen	5.83	6.78	94,000	10,000	8,300	2,800	13,000	2,400	ND	NA
						13,000*	11,000*	4,000*	15,000*	190 <sup>e</sup>		
	09/01/93	Sheen	6.22	6.39#								
	10/26/93	NLPH	6.82	5.79	68,000	11,000	8,500	3,400	13,000	17,000	NA	NA
	11/12/93	NLPH	6.88	5.73#								
	12/27/93	NLPH	8.04	4.57#								
	01/20/94	NLPH	7.81	4.80#								
	02/02-03/94	NLPH	7.22	5.39	48,000	4,000	2,700	2,900	9,900	18,000	NA	NA
	03/10/94	NLPH	6.16	6.45#								
	04/22/94	NLPH	6.31	6.30#								
	05/10-11/94	NLPH	6.16	6.45	46,000	3,000 <sup>a</sup>	1,600	2,900	9,100	8,200	NA	NA
	06/27/94	NLPH	6.55	6.06#								
	08/31/94	NLPH	7.97	4.64#								
	09/29/94	Sheen	8.52	4.09#								
	10/25/94	Sheen	8.74	3.87#								
	11/30/94	NM	8.73	3.88#								
	12/30/94	NLPH	6.17	6.44#								
	02/06/95	Sheen	4.44	8.17								

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California

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Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < . . . . . >	TPHg < . . . . . >	B	T	E	X	TEPHd	VOCs	TOG >		
<hr/>														
MW13 (14.20)	12/06/89	NLPH	9.35	4.85	\$2,000	2,100	2,000	1,400	6,100	31,000	NA	NA		
	02/20/90	NLPH	7.73	6.47#										
	04/19/90	NLPH	8.68	5.52	\$9,000	1,800	1,500	1,400	7,200	54,000	NA	NA		
	07/03/90	NLPH	8.00	6.20	\$3,000	4,500	3,100	2,200	7,800	26,000	NA	NA		
	07/26/90	NLPH	7.95	6.25#										
	08/20/90	NLPH	8.66	5.54#										
	09/19/90	NLPH	9.13	5.07#										
	11/27/90	NLPH	9.49	4.71	20,000	4,500	1,100	880	3,300	1,600	NA	NA		
	01/17/91	NLPH	9.61	4.59#										
	03/26/91	NLPH	9.25	4.95	72,000	10,000	8,300	1,700	6,900	<100	NA	NA		
	05/02/91	NLPH	9.31	4.89#										
	06/20/91	NLPH	9.73	4.47	44,000	5,600	3,100	750	2,600	<100	NA	NA		
	08/07/91				Not Accessible									
	09/17/91	NLPH	9.72	4.48	40,000	11,000	6,500	2,400	8,100	NA	NA	NA		
	11/13/91	NLPH	9.06	5.14#										
	12/10/91	NLPH	9.04	5.16	72,000	11,000	7,400	2,500	9,400	3,700	NA	NA		
	01/21/92	NLPH	8.41	5.79#										
	03/25/92	Sheen	5.72	8.48#										
	06/22/92	Sheen	7.31	6.89#										
	09/24/92	NLPH	8.30	5.90	\$6,000	9,500	6,100	2,400	10,000	2,900	NA	NA		
	10/14/92	Sheen	8.56	5.64#										
	11/16/92	Sheen	8.36	5.84#										
	12/08/92	Sheen	8.10	6.10#										
	01/27/93	NM	NM	--										
	02/18/93	Sheen	4.89	9.31#										
	03/10/93	Sheen	5.32	8.88#										
	04/06/93	Sheen	5.10	9.10#										

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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
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Well ID # (TOC)	Sampling Date	SUBJ < . . . . . >	DTW feet	Elev. < . . . . . >	TPHg < . . . . . >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW13 cont (14.20)	05/28/93	Sheen	6.00	8.20#								
	06/10/93	Sheen	6.15	8.05#								
	07/17/93	Sheen	6.82	7.38#								
	08/11/93	Sheen	7.31	6.89	62,000	5,600	2,700	2,300	11,000	2,500	NA	ND
						7,700*	3,700*	3,500*	14,000*	360 <sup>e</sup>		
	09/01/93	Sheen	7.62	6.58#								
	10/26/93	NLPH	8.22	5.98	46,000	5,200	3,200	2,500	11,000	15,000	NA	NA
	11/12/93	NLPH	8.29	5.91#								
	12/27/93	NM	NM	---								
	01/20/94	NLPH	9.08	5.12#								
	02/02-03/94	NLPH	8.75	5.45	41,000	3,800	1,500	2,700	9,500	8,100	NA	NA
	03/10/94	Sheen	7.46	6.74#								
	04/22/94	Sheen	7.78	6.42#								
	05/10-11/94	NLPH	7.61	6.59	39,000	3,400	930	2,400	8,900	15,000	NA	NA
	06/27/94	NLPH	7.97	6.23								
	08/31/94	NLPH	9.21	4.99								
	09/29/94	NLPH	9.61	4.59	57,000	2,100	470	2,600	8,100	320	NA	NA
	10/25/94	Sheen	9.93	4.27								
	11/30/94	NM	8.16	6.04#								
	12/27/94	NM	7.61	6.59#								
	02/06/95	Sheen	5.89	8.31								
MW14 (15.18)	11/27/90	NLPH	9.88	5.30	390	<0.5	<0.5	3.6	3.7	120	NA	NA
	01/17/91	NLPH	9.13	6.05#								
	03/26/91	NLPH	8.51	6.67	200	<0.5	1.5	0.8	3.6	<100	NA	NA
	05/02/91	NLPH	8.45	6.73#								
	06/20/91	NLPH	8.38	6.80	110	<0.5	<0.5	<0.5	<0.5	<100	NA	NA

See Notes on page 31 of 31

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California  
 (Page 25 of 31)

See Notes on page 31 of 31

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California

(Page 26 of 31)

Well ID # (TOC)	Sampling Date	SUBJ < . . . . .	DTW feet . . . . . >	Elev. 7.25	TPHg < . . . . .	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW14 cont. (15.18)	05/10-11/94	NLPH	7.93	7.25	300	2.7	7.9	2.0	27	1,100 <sup>7</sup>	NA	NA
	06/27/94	NLPH	8.19	6.99#								210 <sup>2</sup>
	08/31/94	NLPH	9.44	5.74#								NA
	09/29/94	NLPH	9.82	5.36	300	<0.5	<0.5	0.9	1.3	1,600 <sup>7</sup>	NA	NA
	10/25/94	NLPH	9.99	5.19	200	<0.5	<0.5	0.8	<0.5	210 <sup>7</sup>	NA	NA
	11/30/94	NM	8.16	6.61#								
	12/27/94	Sheen	8.15	7.03#								
	02/06/95	NLPH	7.18	8.00	360	<1.0	<1.0	<1.0	<1.0	1,200	ND	400 <sup>2</sup>
MW15 (13.73)	11/27/90	NLPH	8.67	5.06	2,700	210	5.5	600	250	340	NA	NA
	01/17/91	NLPH	8.03	5.70#								
	03/26/91					Not Accessible						
	05/02/91	NLPH	7.09	6.64#								
	06/20/91	NLPH	7.06	6.67	380	<0.5	<0.5	<0.5	1.3	<100	NA	NA
	08/07/91	NLPH	7.59	6.14#								
	09/17/91	NLPH	7.89	5.84	490	2.9	1.7	33	1.3	NA	NA	NA
	11/13/91	NLPH	9.07	4.66#								
	12/10/91	NLPH	8.60	5.13	1,600	14	1.1	66	9.8	300	NA	NA
	01/21/92	NLPH	9.15	4.58#								
	03/25/92	NLPH	8.10	5.63	3,400	150	13	690	250	1,400	NA	NA
	06/22/92	NLPH	5.80	7.93	6,600	99	<0.5	670	180	860	NA	NA
	09/24/92	NLPH	7.21	6.52	3,600	120	7	480	47	740	NA	NA
	10/14/92	NLPH	7.40	6.33#								
	11/16/92	NLPH	7.55	6.18#								
	12/08/92	NLPH	7.42	6.31	1,600	43	1.6	170	23	430	NA	NA
	01/27/93	NLPH	4.37	9.36#								

See Notes on page 31 of 31

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 27 of 31)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < . . . . . >	TPHg < . . . . . >	B	T	E parts per billion	X	TEPHd	VOCs	TOG >
MW15 cont. (13.73)	02/18/93	Sheen	4.14	9.59#								
	03/10/93	Not Accessible										
	04/06/93	Sheen	3.16	10.57#								
	05/28/93	NLPH	4.47	9.26#								
	06/10/93	Sheen	4.59	9.14#								
	07/17/93	NLPH	5.51	8.22#								
	08/11/93	Sheen	6.13	7.60	4,800	49	<2.5	410	34	710	ND	NA
						70'	<5'	640'	26'	300 <sup>d</sup>		
	09/01/93	Sheen	6.45	7.28#								
	10/26/93	NLPH	7.16	6.57	3,400	79	<2.5	115	32	970	NA	NA
	11/12/93	NLPH	7.82	5.91#								
	12/27/93	NLPH	7.50	6.23#								
	01/20/94	NLPH	7.48	6.25#								
	02/02-03/94	NLPH	7.30	6.43	4,300	24	6.7	170	26	1,200	NA	NA
	03/10/94	NLPH	7.32	6.41#								
	04/22/94	NLPH	6.67	7.06#								
	05/10-11/94	NLPH	5.81	7.92	3,900	16	<0.5	150	13	1,400	NA	NA
	06/27/94	NLPH	6.14	7.59#								
	08/31/94	NLPH	7.20	6.53#								
	09/29/94	NLPH	7.76	5.97	2,500	51	15	48	3.6	420	NA	NA
	10/25/94	Sheen	8.19	5.54#								
	11/30/94	NM	8.57	5.16#								
	12/27/94	NLPH	6.49	7.24#								
	02/06/95	Sheen	4.97	8.76								

See Notes on page 31 of 31

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California  
 (Page 28 of 31)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. ..... >	TPHg < .....	B	T	E	X	TEPHd	VOCs	TOG ..... >
--------------------	------------------	------	-------------	------------------	-----------------	---	---	---	---	-------	------	----------------

VW1 (14.01)	02/18/93	NLPH	4.52	9.49#								
	03/10/93	NLPH	5.25	8.76#								
	04/06/93	NLPH	5.06	8.95#								
	05/28/93	NLPH	5.52	8.49#								
	06/10/93	NLPH	5.62	8.39#								
	07/17/93	NLPH	6.23	7.78#								
	08/11/93	Dry										
	09/01/93	Dry										
	10/26/93	Dry										
	11/12/93	Dry										
	12/27/93	NM	NM	---								
	01/20/94	Dry										
	02/02-03/94	NLPH	5.58	8.43#								
	03/10/94	NLPH	6.19	7.82#								
	04/22/94	NLPH	5.96	8.05#								
	05/10-11/94	NLPH	5.66	8.35#								
	06/27/94	NLPH	5.99	8.02#								
	08/31/94	NLPH	3.92	10.09#								
	09/29/94	NM	NM	---								
	10/25/94	Sheen	5.80	8.21								
	11/30/94	NM	6.21	7.80								
	12/27/94	NM	NM	---								
	02/06/95	NM	NM	---								

See Notes on page 31 of 31

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California

(Page 29 of 31)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < ..... >	TPHg < ..... >	B	T	E	X	TEPHd	VOCs	TOG >
VW2 (14.09)	02/18/93	NLPH	4.41	9.68#								
	03/10/93	NLPH	5.17	8.92#								
	04/06/93	NLPH	5.04	9.05#								
	05/28/93	NLPH	5.46	8.63#								
	06/10/93	NLPH	5.60	8.49#								
	07/17/93	NLPH	6.38	7.71#								
	08/11/93	NLPH	7.90	6.19#								
	09/01/93	0.01	7.31	6.79#								
	10/26/93	Dry										
	11/12/93	Dry										
	12/27/93	Dry										
	01/20/94	NLPH	7.75	6.34#								
	02/02-03/94	Dry										
	03/10/94	NLPH	6.85	7.24#								
	04/22/94	NLPH	7.30	6.79#								
	05/10-11/94	NLPH	7.20	6.89#								
	06/27/94	NLPH	7.29	6.80#								
	08/31/94	NLPH	7.75	6.34#								
	09/29/94	NM	NM	---								
	10/25/94	NLPH	7.76	6.33								
	11/30/94	NM	7.77	6.32								
	12/27/94	NM	NM	---								
	02/06/95	NM	NM									

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California  
 (Page 30 of 31)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev.	TPHg	B	T	E	X	TEPHd	VOCs	TOG
		< . . . . .	feet . . . . .	>	< . . . . .	parts per billion . . . . .						>

VW3 (13.37)	02/18/93	NLPH	4.62	8.69#
	03/10/93	NLPH	4.41	8.90#
	04/06/93	NLPH	4.10	9.21#
	05/28/93	NLPH	4.98	8.33#
	06/10/93	NLPH	4.98	8.33#
	07/17/93	NLPH	5.57	7.74#
	08/11/93	NLPH	7.69	5.62#
	09/01/93	0.01	6.78	6.54#
	10/26/93	Dry		
	11/12/93	Dry		
	12/27/93	NLPH	7.24	6.13#
	01/20/93	NLPH	7.49	5.88#
	02/02-03/94	NLPH	7.15	6.22#
	03/10/94	NLPH	6.21	7.16#
	04/22/94	NLPH	6.34	7.03#
	05/10-11/94	NLPH	5.92	7.45#
	06/27/94	NLPII	6.66	6.71#
	08/31/94	NLPH	7.55	5.82#
	09/29/94	NM	NM	--
	10/25/94	NLPH	7.57	5.80
	11/30/94	NM	6.97	6.40
	12/27/94	NM	NM	---
	02/06/95	NM	NM	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California  
 (Page 31 of 31)

Notes:

SUBJ	= Results of subjective evaluation, liquid-phase hydrocarbon thickness (HT) in feet	NA	= Not Analyzed = Not Applicable
LPH	= Liquid-phase hydrocarbons present, thickness not measured	<	= Less than the indicated detection limit shown by the laboratory
NLPH	= No liquid phase hydrocarbons present in well	#	= Well monitored but not sampled
TOC	= Elevation of top of well casing; relative to mean sea level	1	= Chloromethane
DTW	= Depth to water	2	= Analyzed for Stoddard Solvent using EPA method 5030/8015.
Elev.	= Elevation of groundwater. If liquid-phase hydrocarbons present, elevation adjusted using TOC - [DTW - (PT x 0.8)].	3	= Additional Analysis on MW1 - Fecal Coliform Most Probable Number (MPN)/100 ml.
[ ]	= amount recovered	4	= VOCs Detected using EPA Method 624 - 16,000 ppb Benzene, 480 ppb Toluene, 4,500 ppb Ethylbenzene, 9,900 ppb total Xylenes.
gal.	= gallons		VOCs Detected using EPA Method 625 - 1,800 ppb Naphthalene, 600 ppb 2-Methylnaphthalene, Bis(2-ethylhexyl) phthalate
c.	= cups		= Stoddard Solution detected in the sample at approximately 320 ppb
TPHg	= Total petroleum hydrocarbons as gasoline analyzed using modified EPA method 5030/8015.	5	= Analyzed for Stoddard Solvent using modified EPA method 5030/8015.
BTEX	= Benzene, Toluene, Ethylbenzene, and total Xylenes analyzed using modified EPA method 5030/8020.	6	Sample chromatogram was not representative of a Stoddard Solvent pattern. Pattern was representative of the heavier hydrocarbons found in a gasoline pattern.
TEPHd	= Total extractable petroleum hydrocarbons as diesel analyzed using EPA method 3510/8015.	DHS	= Department of Health Services, State of California, October 1990
VOCs	= Volatile organic compounds analyzed using EPA method 601.	7	= Not diesel standard pattern/Discrete peaks/Non-diesel mix
TOG	= Total oil and grease analyzed using Standard Method 5520.	8	= A peak eluting earlier than benzene and suspected to be methyl tert-butyl ether was present
*	= Analyzed using EPA method 624 (volatile organic compounds).		
NR	= No liquid-phase hydrocarbons removed from well		
NM	= Not Measured		
ND	= Not Detectable		

**TABLE 2**  
**OPERATIONAL AND PERFORMANCE DATA FOR**  
**SOIL VAPOR EXTRACTION SYSTEM**  
**Former Exxon 7-3006**  
**720 High Street**  
**Oakland, California**

Date	Flowrate	Sample	HC	Benzene	HC	HC	Benzene	Benzene	Benzene
		ID	Conc [ug/l] or [mg/cuM]	Conc [ug/l] or [mg/cuM]	Extracted per period *[lb]	Extracted Cumulative *[lb]	Extracted per period *[lb]	Extracted Cumulative *[lb]	Emitted per day *[lb]
	[acfim]								
1/9/95	158	A-INF	210	39	--	--	--	--	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					
1/10/95	158	A-INF	110	22	2	2	0.43	0.43	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
1/11/95	158	A-INF	70	12	1	4	0.24	0.67	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
1/12/95	158	A-INF	<10	0.1	1	4	0.09	0.76	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
1/13/95	160	A-INF	<10	<0.1	0	4	0.00	0.76	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
1/14/95	160	A-INF	<10	<0.1	0	4	0.00	0.76	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
1/15/95	158	A-INF	<10	<0.1	0	5	0.00	0.76	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
1/16/95	158	A-INF	<10	<0.1	0	5	0.00	0.77	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
1/17/95	155	A-INF	<10	0.13	0	5	0.00	0.77	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
1/18/95	155	A-INF	100	12	1	6	0.08	0.85	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
1/20/95	155								
2/1/95	147	A-INF	39	3.5	13	19	1.47	2.32	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
2/13/95	147								
2/17/95	168	A-INF	32	3.4	8	27	0.78	3.10	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.001
2/27/95	151								
3/13/95	176	A-INF	<10	0.42	8	35	0.71	3.81	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					0.002
3/31/95	116								

Notes:

A-INF = Air Influent

acfim = actual cubic feet per minute

HC = Hydrocarbon

A-INT = Air Intermediate

ug/l = micrograms per liter

A-EFF = Air Effluent

mg/cuM = milligrams per cubic meter

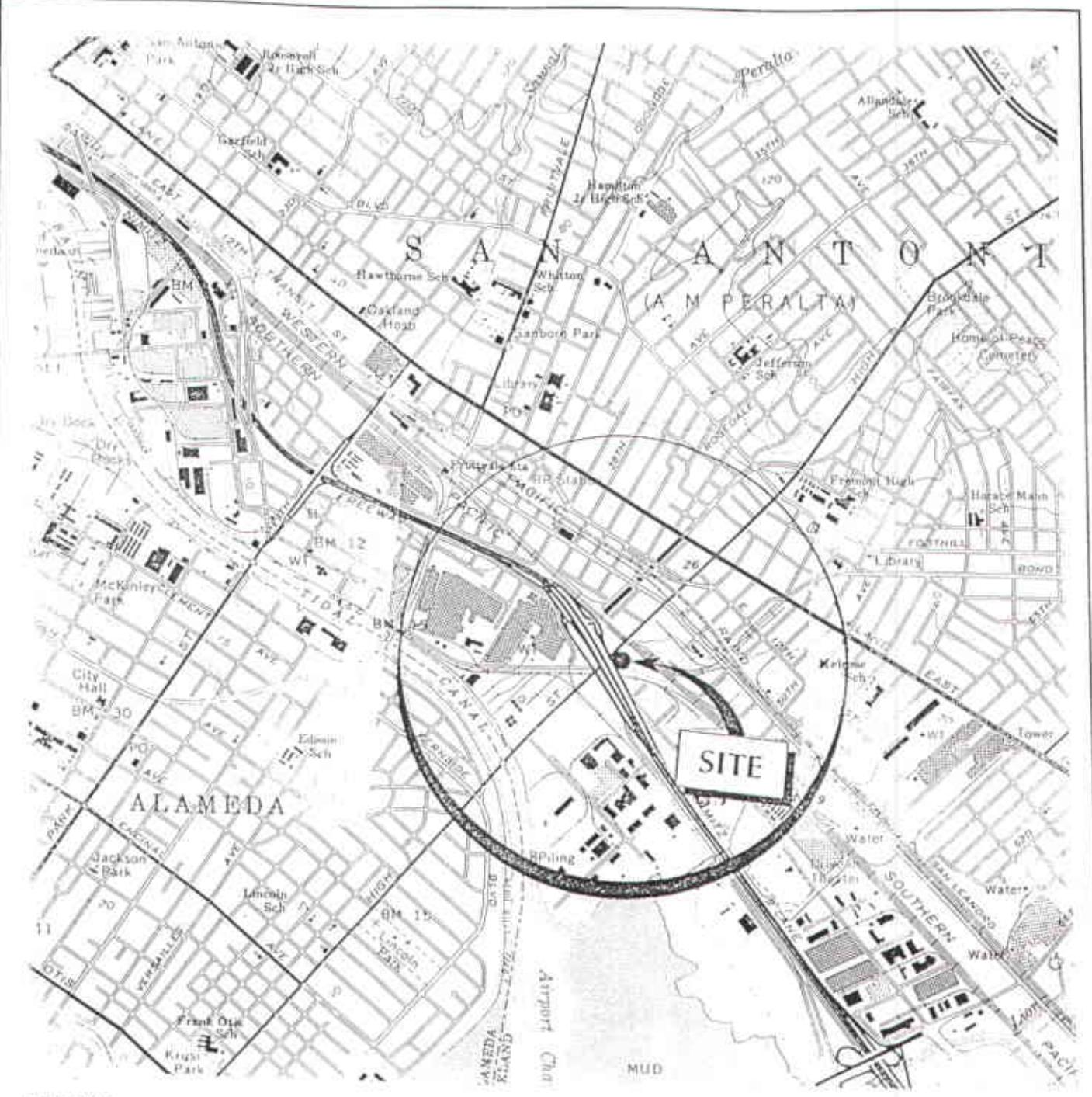
lb = pounds

\*If value is below laboratory detection limit, detection limit value is used.

\*Values calculated using ERI SOP-25 "Hydrocarbons Removed from a Vadose Well" (Attachment)

**TABLE 3**  
 OPERATIONAL PERFORMANCE DATA FOR  
 GROUND WATER REMEDIATION SYSTEM  
 Former Exxon Service Station, 7-3006  
 720 High Street  
 Oakland, California  
 Page 1 of 1

Date	Total	Average	Sample	TPHg	B	T	E	X	Metals	TPHg Removed		Benzene Removed	
	Flow [gal]	Flowrate [gpd]	ID							Per Period [lb]	Cumulative [lb]	Per Period [lb]	Cumulative [lb]
1/9/95	0		W-INF	3400	630	190	100	460	NA				
	--	--	W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
	--	--	W-EFF	<50	<0.5	<0.5	<0.5	<0.5	ND				
1/10/95	--	--	--										
1/11/95	795	398	--	--	--	--	--	--	--	--			
1/13/95	1065	135	System	shut	down	pending	arsenic	revision	--				
1/23/95	1065	0	--	--	--	--	--	--	--	--			
2/13/95	1065	0	--	--	--	--	--	--	--	--			
2/14/95	1065	0	--	--	--	--	--	--	--	--			
2/17/95	1065	0	--	--	--	--	--	--	--	--			
2/27/95	1065	0	--	--	--	--	--	--	--	--			
3/13/95	1080	1	W-INF	110	7.4	0.5	0.53	6	NA	0.02	0.02	0.0029	0.0029
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
3/21/95	1166	11	W-INF	<50	4.5	0.5	0.5	5.5	NA	0.0001	0.0159	0.0000	0.0029
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
3/30/95	1176		Replaced one 55-gallon liquid phase adsorber										
<b>NOTES:</b>													
W-INF = water influent				B	= Benzene				NA	= Not applicable			
W-INT = water intermediate				T	= Toluene				NS	= Not sampled			
W-EFF = water effluent				E	= Ethylbenzene				ND	= Not detected			
TPHg = Total petroleum hydrocarbons as gas				X	= Total Xylenes				( )	= Sample reanalyzed			



20100001

APPROXIMATE SCALE



Source: U.S.G.S. 7-5 minute topographic quadrangle map  
Oakland/San Leandro, California  
Photorevised 1980



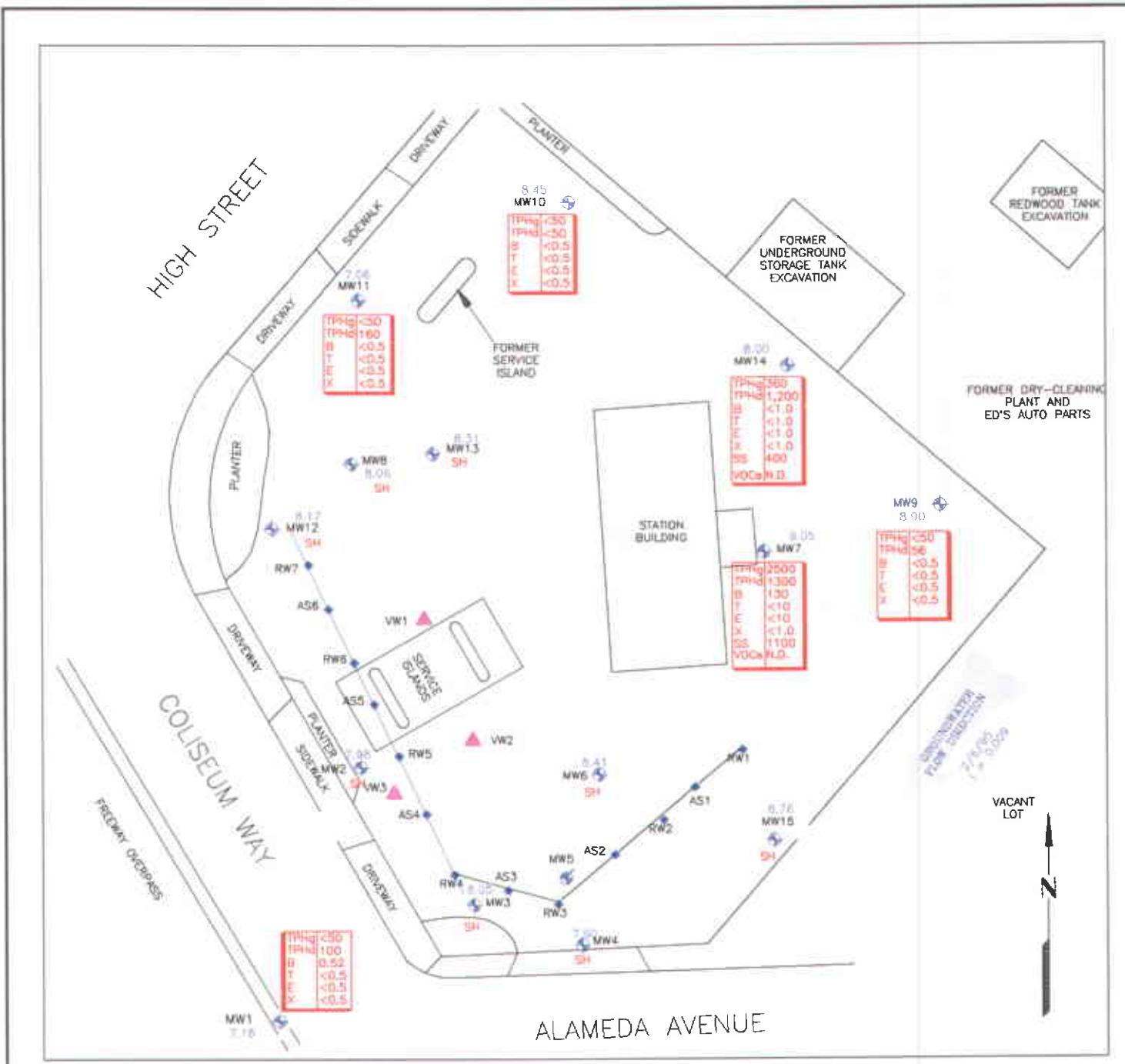
PROJECT

ERI 2010

**SITE VICINITY MAP**  
FORMER EXXON SERVICE STATION 7-3006  
720 High Street  
Oakland, California

PLATE

1



FN 20100002

## EXPLANATION

MW15 Monitoring well

MW5 Monitoring well (destroyed)

VW3 Vapor wall

RW7 Recovery

#### **Interceptor Trench**

AS6 ■ Air Sampling/Vapor

100	2500
1000	1300
10	120
1	60
0.1	60
0.01	60

= Concentrations of Petroleum Hydrocarbons  
in groundwater in parts per billion,  
February 6, 1995

9.05 = Elevation of groundwater in feet  
above mean sea level. (7/6/95)

= Interpreted magnitude of hydraulic gradient

ss = Stoddard solvent

VOCs = Volatile Organic Compounds

APPROXIMATE SCALE



SOURCE:  
Modified from a map  
provided by  
EXXON U.S.A.



# **GENERALIZED SITE PLAN**

FORMER EXXON SERVICE STATION 7-3006  
720 HIGH STREET  
Oakland, California

**PROJECT NO.**

2010

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2

**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 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<sup>\*</sup> 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. 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:

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

- 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

$$\text{gallons of water purged/gallons in 1 well casing volume} = \text{well casing volumes removed.}$$

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, 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<sup>\*</sup> 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**



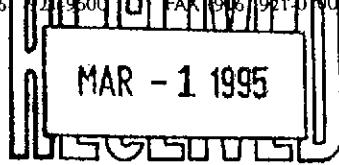
Sequoia  
Analytical

680 Chesapeake Drive  
1900 Bates Avenue, Suite L  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Concord, CA 94520  
Sacramento, CA 95834

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FAX (415) 364-9233  
FAX (510) 646-9680  
FAX (916) 721-0100



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

Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-BB-MW1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9502426-01

Sampled: 02/06/95  
Received: 02/07/95  
Analyzed: 02/11/95  
Reported: 02/15/95

QC Batch Number: GC021195BTEX20A  
Instrument ID: GCHP20

### 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	74

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager



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

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-6-MW1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9502426-02

Sampled: 02/06/95  
Received: 02/07/95  
Analyzed: 02/12/95  
Reported: 02/15/95

Attention: Marc Briggs  
QC Batch Number: GC021295BTEX17A  
Instrument ID: GCHP17

### 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	0.52
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70                    130	% Recovery 95

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

SEQUOIA ANALYTICAL - ELAP #1210

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

Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-6-MW1  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9502426-02

Sampled: 02/06/95  
Received: 02/07/95  
Extracted: 02/09/95  
Analyzed: 02/12/95  
Reported: 02/15/95

QC Batch Number: GC0209950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	100
Chromatogram Pattern: Discrete Peaks	.....	...
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	111

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

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Environmental Resolutions  
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Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-12-MW9  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9502426-04

Sampled: 02/06/95  
Received: 02/07/95  
Analyzed: 02/11/95  
Reported: 02/15/95

QC Batch Number: GC021195BTEX20A  
Instrument ID: GCHP20

### 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	95

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

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
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Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-12-MW9  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9502426-04

Sampled: 02/06/95  
Received: 02/07/95  
Extracted: 02/09/95  
Analyzed: 02/12/95  
Reported: 02/15/95

QC Batch Number: GC0209950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Discrete Peaks	..... 50 .....	..... 56 .....
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 102

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

SEQUOIA ANALYTICAL - ELAP #1210

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

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-6-MW10  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9502426-06

Sampled: 02/06/95  
Received: 02/07/95  
Analyzed: 02/11/95  
Reported: 02/15/95

QC Batch Number: GC021195BTEX20A  
Instrument ID: GCHP20

### 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	106

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

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Environmental Resolutions  
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Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-6-MW10  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9502426-06

Sampled: 02/06/95  
Received: 02/07/95  
Extracted: 02/09/95  
Analyzed: 02/12/95  
Reported: 02/15/95

QC Batch Number: GC0209950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 127

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

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
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Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-8-MW11  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9502426-08

Sampled: 02/06/95  
Received: 02/07/95  
  
Analyzed: 02/12/95  
Reported: 02/15/95

QC Batch Number: GC021195BTEX20A  
Instrument ID: GCHP20

### 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	106

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

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
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Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-8-MW11  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9502426-08

Sampled: 02/06/95  
Received: 02/07/95  
Extracted: 02/09/95  
Analyzed: 02/12/95  
Reported: 02/15/95

QC Batch Number: GC0209950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	160
Chromatogram Pattern: Non Diesel Mix		C12-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 139

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

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Environmental Resolutions  
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Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-10-MW14  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9502426-10

Sampled: 02/06/95  
Received: 02/07/95  
Analyzed: 02/12/95  
Reported: 02/15/95

QC Batch Number: GC021195BTEX02A  
Instrument ID: GCHP02

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	360
Benzene	1.0	N.D.
Toluene	1.0	N.D.
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.0	N.D.
Chromatogram Pattern: Non Gas Mix		>C8
Surrogates		Control Limits %
Trifluorotoluene	70	130
		% Recovery
		96

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

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
  
Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-10-MW14  
Matrix: LIQUID  
Analysis Method: EPA 601  
Lab Number: 9502426-10

Sampled: 02/06/95  
Received: 02/07/95  
  
Analyzed: 02/10/95  
Reported: 02/15/95

QC Batch Number: GC020995060109A  
Instrument ID: GCHP9

### Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	0.50	N.D.
Bromoform	0.50	N.D.
Bromomethane	1.0	N.D.
Carbon Tetrachloride	0.50	N.D.
Chlorobenzene	0.50	N.D.
Chloroethane	1.0	N.D.
2-Chloroethylvinyl ether	1.0	N.D.
Chloroform	0.50	N.D.
Chloromethane	1.0	N.D.
Dibromochloromethane	0.50	N.D.
1,2-Dichlorobenzene	0.50	N.D.
1,3-Dichlorobenzene	0.50	N.D.
1,4-Dichlorobenzene	0.50	N.D.
1,1-Dichloroethane	0.50	N.D.
1,2-Dichloroethane	0.50	N.D.
1,1-Dichloroethene	0.50	N.D.
cis-1,2-Dichloroethene	0.50	N.D.
trans-1,2-Dichloroethene	0.50	N.D.
1,2-Dichloropropane	0.50	N.D.
cis-1,3-Dichloropropene	0.50	N.D.
trans-1,3-Dichloropropene	0.50	N.D.
Methylene chloride	5.0	N.D.
1,1,2,2-Tetrachloroethane	0.50	N.D.
Tetrachloroethene	0.50	N.D.
1,1,1-Trichloroethane	0.50	N.D.
1,1,2-Trichloroethane	0.50	N.D.
Trichloroethene	0.50	N.D.
Trichlorofluoromethane	0.50	N.D.
Vinyl chloride	1.0	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	Control Limits % 70                    130	% Recovery 83

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

**SEQUOIA ANALYTICAL** - ELAP #1210

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
  
Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-10-MW14  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9502426-10

Sampled: 02/06/95  
Received: 02/07/95  
Extracted: 02/09/95  
Analyzed: 02/13/95  
Reported: 02/15/95

QC Batch Number: GC0209950HBPEXZ  
Instrument ID: GCHP4A

#### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	1200
Chromatogram Pattern: Non Diesel Mix	.....	C9-C24
Surrogates n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 130

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

SEQUOIA ANALYTICAL - ELAP #1210

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Environmental Resolutions  
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Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-10-MW14  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9502426-10

Sampled: 02/06/95  
Received: 02/07/95  
Extracted: 02/09/95  
Analyzed: 02/13/95  
Reported: 02/15/95

QC Batch Number: GC0209950HBPEXZ  
Instrument ID: GCHP4A

#### Fuel Fingerprint : Stoddard Solvent

Analyte	Detection Limit ug/L	Sample Results ug/L
Extract HC as Stoddard Solvent	.....	400
Chromatogram Pattern:	.....	C9-C14
Unidentified HC	.....	
<b>Surrogates</b>	<b>Control Limits %</b>	<b>% Recovery</b>
n-Pentacosane (C25)	50	130
	150	

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

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
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Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-7-MW7  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9502426-12

Sampled: 02/06/95  
Received: 02/07/95  
  
Analyzed: 02/11/95  
Reported: 02/15/95

QC Batch Number: GC021095BTEX17A  
Instrument ID: GCHP17

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	2500
Benzene	10	130
Toluene	10	N.D.
Ethyl Benzene	10	N.D.
Xylenes (Total)	10	N.D.
Chromatogram Pattern: Weathered Gas	.....	C6-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	84

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

SEQUOIA ANALYTICAL - ELAP #1210

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
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Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-7-MW7  
Matrix: LIQUID  
Analysis Method: EPA 601  
Lab Number: 9502426-12

Sampled: 02/06/95  
Received: 02/07/95  
  
Analyzed: 02/10/95  
Reported: 02/15/95

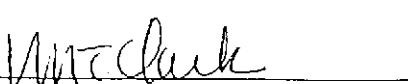
QC Batch Number: GC020995060109A  
Instrument ID: GCHP9

### Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	2.5	N.D.
Bromoform	2.5	N.D.
Bromomethane	5.0	N.D.
Carbon Tetrachloride	2.5	N.D.
Chlorobenzene	2.5	N.D.
Chloroethane	5.0	N.D.
2-Chloroethylvinyl ether	5.0	N.D.
Chloroform	2.5	N.D.
Chloromethane	5.0	N.D.
Dibromochloromethane	2.5	N.D.
1,2-Dichlorobenzene	2.5	N.D.
1,3-Dichlorobenzene	2.5	N.D.
1,4-Dichlorobenzene	2.5	N.D.
1,1-Dichloroethane	2.5	N.D.
1,2-Dichloroethane	2.5	N.D.
1,1-Dichloroethene	2.5	N.D.
cis-1,2-Dichloroethene	2.5	N.D.
trans-1,2-Dichloroethene	2.5	N.D.
1,2-Dichloropropane	2.5	N.D.
cis-1,3-Dichloropropene	2.5	N.D.
trans-1,3-Dichloropropene	2.5	N.D.
Methylene chloride	25	N.D.
1,1,2,2-Tetrachloroethane	2.5	N.D.
Tetrachloroethene	2.5	N.D.
1,1,1-Trichloroethane	2.5	N.D.
1,1,2-Trichloroethane	2.5	N.D.
Trichloroethene	2.5	N.D.
Trichlorofluoromethane	2.5	N.D.
Vinyl chloride	5.0	N.D.
Surrogates		
1-Chloro-2-fluorobenzene	Control Limits % 70	% Recovery 130 81

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

SEQUOIA ANALYTICAL - ELAP #1210

  
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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
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Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-7-MW7  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9502426-12

Sampled: 02/06/95  
Received: 02/07/95  
Extracted: 02/09/95  
Analyzed: 02/13/95  
Reported: 02/15/95

QC Batch Number: GC0209950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	50
Chromatogram Pattern:	.....	.....
Non Diesel Mix	.....	C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	122

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

SEQUOIA ANALYTICAL - ELAP #1210

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FAX (510) 686-9689  
FAX (916) 921-0100

Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
  
Attention: Marc Briggs

Client Proj. ID: 2010-4, Exxon 7-3006  
Sample Descript: W-7-MW7  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9502426-12

Sampled: 02/06/95  
Received: 02/07/95  
Extracted: 02/09/95  
Analyzed: 02/13/95  
Reported: 02/15/95

QC Batch Number: GC0209950HBPEXZ  
Instrument ID: GCHP4A

### Fuel Fingerprint : Stoddard Solvent

Analyte	Detection Limit ug/L	Sample Results ug/L
Extract HC as Stoddard Solvent	.....	1100
Chromatogram Pattern:		
Unidentified HC	.....	C9-C14
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	122

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 1900 Bates Avenue, Suite L 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Concord, CA 94520 Sacramento, CA 95834	(415) 364-9600 (510) 686-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 686-9689 FAX (916) 921-0100
---	---	--	--

Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Marc Briggs

Client Project ID: 2010-4, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9502426 -01, 04, 06, 08

Reported: Feb 27, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch #:	GC021195BTEX20A	GC021195BTEX20A	GC021195BTEX20A	GC021195BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	A. Mirafab	A. Mirafab	A. Mirafab	A. Mirafab
MS/MSD #:	950480008	950480008	950480008	950480008
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/11/95	2/11/95	2/11/95	2/11/95
Analyzed Date:	2/11/95	2/11/95	2/11/95	2/11/95
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.0	8.1	8.2	24
MS % Recovery:	80	81	82	80
Dup. Result:	8.6	8.6	8.7	27
MSD % Recov.:	86	86	87	90
RPD:	7.2	6.0	5.9	12
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 Control Limits	71-133	72-128	72-130	71-120

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



**Sequoia  
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---	---	--	--

Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Marc Briggs

Client Project ID: 2010-4, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9502426-02

Reported: Feb 27, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC021295BTEX17A	GC021295BTEX17A	GC021295BTEX17A	GC021295BTEX17A
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 #:	950223801	950223801	950223801	950223801
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/12/95	2/12/95	2/12/95	2/12/95
Analyzed Date:	2/12/95	2/12/95	2/12/95	2/12/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	9.6	9.5	28
MS % Recovery:	94	96	95	93
Dup. Result:	9.5	10	9.8	29
MSD % Recov.:	95	100	98	97
RPD:	1.1	4.1	3.1	3.5
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  
Control Limits

71-133            72-128            72-130            71-120

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



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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Marc Briggs

Client Project ID: 2010-4, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9502426-10

Reported: Feb 27, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC021195BTEX02A	GC021195BTEX02A	GC021195BTEX02A	GC021195BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	950252901	950252901	950252901	950252901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/11/95	2/11/95	2/11/95	2/11/95
Analyzed Date:	2/11/95	2/11/95	2/11/95	2/11/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.5	8.7	8.8	26
MS % Recovery:	85	87	88	87
Dup. Result:	8.6	8.7	8.8	26
MSD % Recov.:	86	87	88	87
RPD:	1.2	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**

*M.C.*  
Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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**Environmental Resolutions**  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Marc Briggs

Client Project ID: 2010-4, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9502426-12

Reported: Feb 27, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC021095BTEX17A	GC021095BTEX17A	GC021095BTEX17A	GC021095BTEX17A
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 #:	9501H8901	9501H8901	9501H8901	9501H8901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/10/95	2/10/95	2/10/95	2/10/95
Analyzed Date:	2/10/95	2/10/95	2/10/95	2/10/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.6	10	9.8	29
MS % Recovery:	96	100	98	97
Dup. Result:	9.7	9.9	9.9	30
MSD % Recov.:	97	99	99	100
RPD:	1.0	1.0	1.0	3.4
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 Control Limits	71-133	72-128	72-130	71-120

Please Note:

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**SEQUOIA ANALYTICAL**

  
Vickie Tague Clark  
Project Manager



Sequoia  
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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Marc Briggs

Client Project ID: 2010-4, Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9502426-02, 04, 06, 08, 10, 12

Reported: Feb 27, 1995

## QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0209950HBPEXZ  
Analy. Method: EPA 8015M  
Prep. Method: EPA 3520

Analyst: B. Ali  
MS/MSD #: 950242606  
Sample Conc.: N.D.  
Prepared Date: 2/9/95  
Analyzed Date: 2/12/95  
Instrument I.D.#: GCHP4  
Conc. Spiked: 600 µg/L

Result: 330  
MS % Recovery: 55

Dup. Result: 260  
MSD % Recov.: 43

RPD: 24  
RPD Limit: 0-50

LCS #:

Prepared Date: -  
Analyzed Date: -  
Instrument I.D.#: -  
Conc. Spiked: -

LCS Result: -  
LCS % Recov.: -

MS/MSD

LCS

38-122

Control Limits

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

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  
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 819 Striker Avenue, Suite 8      Sacramento, CA 95834      (916) 921-9600      FAX (916) 921-0100

Environmental Resolutions  
 359 Bel Marin Keys, Suite 20  
 Novato, CA 94949  
 Attention: Marc Briggs

Client Project ID: 2010-4, Exxon 7-3006  
 Matrix: Liquid  
 Work Order #: 9502426-10, 12

Reported: Feb 27, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC020995060109A	GC020995060109A	GC020995060109A
Analy. Method:	EPA 601	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030

Analyst:	T. Costello	T. Costello	T. Costello
MS/MSD #:	950224101	950224101	950224101
Sample Conc.:	N.D.	26	N.D.
Prepared Date:	2/9/95	2/9/95	2/9/95
Analyzed Date:	2/9/95	2/9/95	2/9/95
Instrument I.D. #:	GCHP9	GCHP9	GCHP9
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Result:	26	50	25
MS % Recovery:	104	96	100
Dup. Result:	26	50	24
MSD % Recov.:	104	96	96
RPD:	0.0	0.0	4.1
RPD Limit:	0-50	0-50	0-50

LCS #:	BLK020995	BLK020995	BLK020995
Prepared Date:	2/9/95	2/9/95	2/9/95
Analyzed Date:	2/9/95	2/9/95	2/9/95
Instrument I.D. #:	GCHP9	GCHP9	GCHP9
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	26	25	24
LCS % Recov.:	104	100	96

MS/MSD LCS Control Limits	28-167	35-146	38-150
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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.

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

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager



Sequoia Analytical  
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Redwood City, CA 94063  
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# EXXON COMPANY, U.S.A.

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

## CHAIN OF CUSTODY

Page 2 of 2

Consultant's Name: ENVIRONMENTAL RESOLUTIONS

Address: 359 BSL MARIN KEYS BLVD, SUITE 70, BURLINGAME

Project #: 2010-4

Consultant Project #:

Site Location: 720 HIGH ST OAKLAND

Consultant Work Release #: 19432503

Project Contact: MDC Briggs

Phone #: 415-382-9105

Laboratory Work Release #:

EXXON Contact: MS. MARLA GUNNISON

Phone #: 510-746-8768

EXXON RAS #: 7-3006

Sampled by (print): PETER PETRO

Sampler's Signature: *Peter Petro*

Shipment Method:

Air Bill #:

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

### ANALYSIS REQUIRED

9502426

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	EPA 601	EPA 3510/ 8015	Temperature: 60°C
W-BB-MW11	2/6	15:51	WATER	ice	1	7 A	HOLD					Stoddard Solvent
W-B-MW11	2/6	15:54		ice	3	8 A-E	X					Precipitate HACARONS
W-B-MW11		15:57		ice	2							
W-BB-MW14		16:26		ice	1	9 A	HOLD					
W-10-MW14		16:31		ice	6	10 A-I	X	NO		X		
W-10-MW14		16:34		ice	3			X	NO			
W-BB-MW17		16:54		ice	1	11 A	HOLD					
W-7-MW17		16:57		ice	6	12 A-I	X	NO		X		
W-7-MW17	2/6	16:59	WATER	ice	3			X	NO			X

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<i>Peter Petro</i>	2/7/95	14:55	<i>JOL</i>	2/7	3:00	
	2/7/95	4:20	<i>Phm</i>	2/7	16:18	

Pink - Client

Yellow - Sequoia

4

White - Sequoia



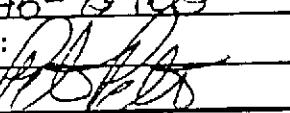
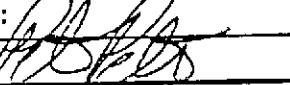
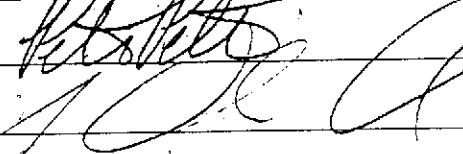
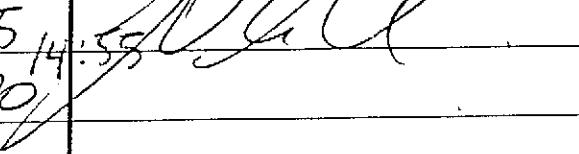
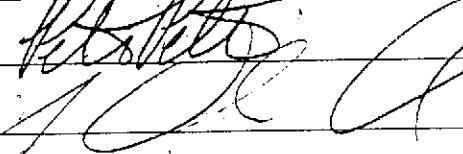
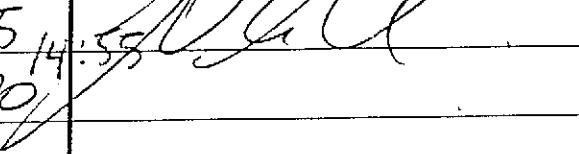
Sequoia Analytical  
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**EXXON COMPANY, U.S.A.**

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

## **CHAIN OF CUSTODY**

Page 1 of 2

Consultant's Name: ENVIRONMENTAL RESOLUTIONS												Page 1 of 2	
Address: 359 BEL MARIN KEYS BLD, SUITE 70, REDWOOD CITY, CA												Site Location: 770 HIGH ST OAKLAND	
Project #: 2010-4		Consultant Project #:										Consultant Work Release #: 19432503	
Project Contact: MARC BRIGGS		Phone #: 415-382-9105										Laboratory Work Release #:	
EXXON Contact: MS MARLA GUENSLER		Phone #: 510-246-8768										EXXON RAS #: 7-3006	
Sampled by (print): PETER PISTRO		Sampler's Signature: 											
Shipment Method:		Air Bill #: 											
TAT: <input type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> 72 hr <input type="checkbox"/> 96 hr <input checked="" type="checkbox"/> Standard (10 day)								ANALYSIS REQUIRED <span style="float: right;">9502426</span>					
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: <span style="float: right;">100</span>
(U)-BR-MW1	2/6	16:06	WATER	ice bag	1	1 A	X						Inbound Seal: Yes No
W-6-MW1	/	16:08	/	pp	3	2 A-E	X						Outbound Seal: Yes No
(U)-6-MW1	/	16:13	/	ice	2			X					
W-BB-MW9	/	15:13	/	ice bag	1	3 A	Hold						
W-1Z-MW9	/	15:16	/	pp	3	4 A-E	X						
W-1Z-MW9	/	15:18	/	ice	2			X					
W-BB-MW10	/	15:34	/	ice bag	1	5 A	Hold						
W-6-MW10	/	15:37	/	pp	3	6 A-E	X						
W-6-MW10	2/6	15:38	WATER	ice	2			X					
REINQUISITION BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION				Date	Time	Additional Comments				
	2/7/95	14:55					2/7	3:00					
	2/7/95	4:20											



Sequoia  
Analytical

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Concord, CA 94520  
Sacramento, CA 95834

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(510) 685-9204 FAX (510) 685-9619  
(916) 921-9600 FAX (916) 921-0101

JAN 31 1995

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

Client Proj. ID: Exxon, 3006  
Lab Proj. ID: 9501428

Sampled: 01/09/95  
Received: 01/10/95  
Analyzed: see below

Attention: Keith Romstad

Reported: 01/23/95

### LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9501428-07 Sample Desc : LIQUID,W-EFF-ARS				
Arsenic	mg/L	01/11/95	0.0050	0.0076
Lab No: 9501428-08 Sample Desc : LIQUID,W-EFF-ARS				
Arsenic	mg/L	01/13/95	0.0050	0.0077

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233  
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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Keith Romstad

Client Proj. ID: Exxon, 3006  
Sample Descript: W-INF  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9501428-01

Sampled: 01/09/95  
Received: 01/10/95  
Analyzed: 01/11/95  
Reported: 01/11/95

QC Batch Number: GC011195BTEX03A  
Instrument ID: GCHP03

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	3400
Benzene	500	630
Toluene	5.0	190
Ethyl Benzene	5.0	100
Xylenes (Total)	5.0	460
Chromatogram Pattern:	.....	Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	119

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



# Sequoia Analytical

680 Chesapeake Drive	Redwood City, CA 94063	(415) 364-9600	FAX (415) 364-9233
1900 Bates Avenue, Suite L	Concord, CA 94520	(510) 686-9600	FAX (510) 686-9689
819 Striker Avenue, Suite 8	Sacramento, CA 95834	(916) 921-9600	FAX (916) 921-0100

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

Attention: Keith Romstad

Client Proj. ID: Exxon\_3006  
Sample Descript: W-INT  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9501428-02

Sampled: 01/09/95  
Received: 01/10/95  
  
Analyzed: 01/10/95  
Reported: 01/11/95

QC Batch Number: GC011095BTEX02A  
Instrument ID: GCHPn3

## 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	82

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

SEQUOIA ANALYTICAL ELAB. #1210

W.M. Clark

Vickie Tague Clark  
Project Manager

Page:



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

Client Proj. ID: Exxon, 3006  
Sample Descript: W-EFF  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9501428-03

Sampled: 01/09/95  
Received: 01/10/95  
Analyzed: 01/10/95  
Reported: 01/11/95

Attention: Keith Romstad  
QC Batch Number: GC011095BTEX02A  
Instrument ID: GCHP02

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

#### Analyte

TPPH as Gas  
Benzene  
Toluene  
Ethyl Benzene  
Xylenes (Total)  
Chromatogram Pattern:

Detection Limit  
ug/L

Sample Results  
ug/L

50 N.D.  
0.50 N.D.  
0.50 N.D.  
0.50 N.D.  
0.50 N.D.

#### Surrogates

Trifluorotoluene

Control Limits %  
70 130

% Recovery  
80

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



# SEQUOIA ANALYTICAL CHAIN OF CUSTODY

- 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX (415) 364-9233  
 819 West Striker Ave. • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100  
 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Company Name: ENVIRONMENTAL RESOURCES			Project Name: 3006, 720 HIGH ST OAKLAND		
Address: 359 BSC MARIN KAYS BLVD, SUITE 200			Billing Address (if different): MARIA GENEVIEVE release # 19432503 Exxon (corporation)		
City: NOVATO	State: CA	Zip Code: 94949			
Telephone: 415 382 9105 FAX #: 582 1886			P.O. #: 2010-5		
Report To: Steve Ukegel		Sampler: PGRO	QC Data: <input checked="" type="checkbox"/> Level A (Standard) <input type="checkbox"/> Level B <input type="checkbox"/> Level C <input type="checkbox"/> Level D		

Turnaround  10 Working Days  3 Working Days  2 - 8 Hours  
 Time:  7 Working Days  2 Working Days  
 5 Working Days  24 Hours

- Drinking Water  
 Waste Water  
 Other

### Analyses Requested

Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Pink - Client  
Yellow - Sequoia  
White - Sequoia

Page \_\_\_\_\_ of \_\_\_\_\_



Sequoia  
Analytical

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1900 Bates Avenue, Suite L  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
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Sacramento, CA 95834

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(916) 921-9600 FAX (916) 921-0100

FEB 13 1995

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

Client Proj. ID: 2010-5, Exxon 7-3006  
Sample Descript: A-Inf  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9502055-01

Sampled: 02/01/95  
Received: 02/02/95  
Analyzed: 02/03/95  
Reported: 02/03/95

QC Batch Number: GC020395BTEX20A  
Instrument ID: GCHP20

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	39
Benzene	0.10	3.5
Toluene	0.10	1.8
Ethyl Benzene	0.10	0.88
Xylenes (Total)	0.10	5.3
Chromatogram Pattern:	.....	Gas

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

Vickie Tague Clark  
Project Manager



Sequoia  
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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Steve Weigel

Client Proj. ID: 2010-5, Exxon 7-3006  
Sample Descript: A-Int  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9502055-02

Sampled: 02/01/95  
Received: 02/02/95  
Analyzed: 02/03/95  
Reported: 02/03/95

QC Batch Number: GC020395BTEX03A  
Instrument ID: GCHP03

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	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



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Analytical

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

Attention: Steve Weigel

Client Proj. ID: 2010-5, Exxon 7-3006  
Sample Descript: A-Eff  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9502055-03

Sampled: 02/01/95  
Received: 02/02/95  
Analyzed: 02/02/95  
Reported: 02/03/95

QC Batch Number: GC020295BTEX20A  
Instrument ID: GCHP20

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	85

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Steve Weigel

Client Project ID: 2010-5, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9502055 -01

Reported: Feb 6, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC020395BTEX20A	GC020395BTEX20A	GC020395BTEX20A	GC020395BTEX20A
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 #:	9501F1802	9501F1802	9501F1802	9501F1802
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/3/95	2/3/95	2/3/95	2/3/95
Analyzed Date:	2/3/95	2/3/95	2/3/95	2/3/95
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.6	9.6	9.6	29
MS % Recovery:	96	96	96	97
Dup. Result:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	4.1	4.1	4.1	3.4
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 Control Limits	71-133	72-128	72-130	71-120

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



**Sequoia  
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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Steve Weigel

Client Project ID: 2010-5, Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9502055-02

Reported: Feb 6, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC020295BTEX20A	GC020295BTEX20A	GC020295BTEX20A	GC020295BTEX20A
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 #:	9501E9003	9501E9003	9501E9003	9501E9003
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/2/95	2/2/95	2/2/95	2/2/95
Analyzed Date:	2/2/95	2/2/95	2/2/95	2/2/95
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	11	10	32
MS % Recovery:	100	110	100	107
Dup. Result:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	0.0	9.5	0.0	6.5
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 Control Limits	71-133	72-128	72-130	71-120
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Please Note:

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**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



**Sequoia  
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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Steve Weigel

Client Project ID: 2010-5, Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9502055-03

Reported: Feb 6, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC020395BTEX03A	GC020395BTEX03A	GC020395BTEX03A	GC020395BTEX03A
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 #:	9501F1802	9501F1802	9501F1802	9501F1802
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/3/95	2/3/95	2/3/95	2/3/95
Analyzed Date:	2/3/95	2/3/95	2/3/95	2/3/95
Instrument I.D. #:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.8	9.7	10	30
MS % Recovery:	98	97	100	100
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	2.0	3.0	0.0	3.3
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 Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL  
  
Vickie Tague Clark  
Project Manager

Please Note:

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Sequoia  
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DEPARTMENT  
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(916) 921-9600 FAX (916) 921-0100  
**MAR 13 1995**

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

Attention: Steve Weigel

Client Proj. ID: 2010-5, Exxon  
Sample Descript: A-INT  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9502B52-01

Sampled: 02/17/95  
Received: 02/17/95  
Analyzed: 02/17/95  
Reported: 02/28/95

QC Batch Number: GC021795BTEX17A  
Instrument ID: GCHP17

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	113

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Steve Weigel

Client Proj. ID: 2010-5, Exxon  
Sample Descript: A-EFF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9502B52-02

Sampled: 02/17/95  
Received: 02/17/95  
Analyzed: 02/17/95  
Reported: 02/28/95

QC Batch Number: GC021795BTEX02A  
Instrument ID: GCHP02

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	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

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233  
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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Steve Weigel

Client Proj. ID: 2010-5, Exxon  
Sample Descript: A-INF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9502B52-03

Sampled: 02/17/95  
Received: 02/17/95  
Analyzed: 02/17/95  
Reported: 02/28/95

QC Batch Number: GC021795BTEX02A  
Instrument ID: GCHP02

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	32
Benzene	0.10	3.4
Toluene	0.10	0.31
Ethyl Benzene	0.10	0.58
Xylenes (Total)	0.10	2.7
Chromatogram Pattern:	.....	Gas
Surrogates		
Trifluorotoluene	Control Limits % 70                  130	% Recovery 115

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Steve Weigel

Client Project ID: 2010-5, Exxon  
Matrix: Liquid

Work Order #: 9502B52-01

Reported: Mar 9, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC021795BTEX17A	GC021795BTEX17A	GC021795BTEX17A	GC021795BTEX17A
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 #:	950254803	950254803	950254803	950254803
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/17/95	2/17/95	2/17/95	2/17/95
Analyzed Date:	2/17/95	2/17/95	2/17/95	2/17/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.9	10	9.9	30
MS % Recovery:	99	100	99	100
Dup. Result:	10	10	9.9	30
MSD % Recov.:	100	100	99	100
RPD:	1.0	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 LCS Control Limits	71-133	72-128	72-130	71-120	
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**SEQUOIA ANALYTICAL**  
  
Vickie Taague Clark  
Project Manager

FCPC

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**

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Steve Weigel

Client Project ID: 2010-5, Exxon  
Matrix: Liquid

Work Order #: 9502B52-02-3

Reported: Mar 9, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC021795BTEX02A	GC021795BTEX02A	GC021795BTEX02A	GC021795BTEX02A
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 #:	950254803	950254803	950254803	950254803
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/17/95	2/17/95	2/17/95	2/17/95
Analyzed Date:	2/17/95	2/17/95	2/17/95	2/17/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
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:	9.7	9.8	9.9	29
MSD % Recov.:	97	98	99	97
RPD:	3.0	2.0	1.0	6.7
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 Control Limits	71-133	72-128	72-130	71-120
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**SEQUOIA ANALYTICAL**  
  
Vickie Tague Clark  
Project Manager

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 CHAIN OF CUSTODY

680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600 FAX  
 819 West Striker Ave. • Sacramento, CA 95834 • (916) 921-9600 FAX  
 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX

Company Name: ERI	357 Bel Marin Keys Blvd #20	Project Name: 2030-5
Address: Novato	Billing Address (if different):	
City: Novato	State: CA	Zip Code: 94941
Telephone: 415 382 5994	FAX #: 415 382 1856	P.O. #:
Report To: Steve Weigel	Sampler: Steve Weigel	QC Data: <input type="checkbox"/> Level A (Standard) <input type="checkbox"/> Level B <input type="checkbox"/> Level C

Turnaround	<input type="checkbox"/> 10 Working Days	<input checked="" type="checkbox"/> 3 Working Days	<input type="checkbox"/> 2 - 8 Hours	<input type="checkbox"/> Drinking Water
Time:	<input type="checkbox"/> 7 Working Days	<input type="checkbox"/> 2 Working Days	<input type="checkbox"/> Other	<input type="checkbox"/> Waste Water
	<input type="checkbox"/> 5 Working Days	<input type="checkbox"/> 24 Hours		

**EXXON**

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	Analyses Requested	
						TPHs	BTEX
1. A-INF	2-17-95 13:05	Air	1	Tedlar Bag		X	X
2. A-INT	2-17-95 13:10	Air	1	Tedlar Bag		X	X
3. A-EFF	2-17-95 13:11	Air	1	Tedlar Bag		X	X
4.							
5.							
6.							
7.							
8.							
9.							
10.							

Relinquished By: Steve Weigel	Date: 2-17-95	Time: 13:50	Received By:	Date: Tim
Relinquished By:	Date:	Time:	Received By:	Date: Tim
Relinquished By:	Date:	Time:	Received By Lab:	Date: Tim

Is sample still in container?  Yes  No

Samples on Ice?  Yes  No Method of Shipment



Sequoia  
Analytical

680 Chesapeake Drive      Redwood City, CA 94063  
1900 Bates Avenue, Suite L      Concord, CA 94520  
819 Striker Avenue, Suite 8      Sacramento, CA 95834

(415) 364-9600      FAX (415) 364-9233  
(510) 686-9440      FAX (510) 686-9619  
(916) 901-9600      FAX (916) 921-0100

MAR 20 1995

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

Client Proj. ID: 2010-11, Exxon 7-3006  
Lab Proj. ID: 9503994

Sampled: 03/13/95  
Received: 03/14/95  
Analyzed: see below

Attention: Mark Briggs

Reported: 03/15/95

### LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503994-06				
Sample Desc : LIQUID,W-Eff				
Arsenic	mg/L	03/14/95	0.0050	N.D.

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233  
1900 Bates Avenue, Suite L Concord, CA 94520 (510) 686-9600 FAX (510) 686-9689  
819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Mark Briggs

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: A-Inf  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9503994-01

Sampled: 03/13/95  
Received: 03/14/95  
Analyzed: 03/14/95  
Reported: 03/15/95

QC Batch Number: GC031495BTEX03A  
Instrument ID: GCHP03

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	0.42
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	0.16
Chromatogram Pattern:	.....	Gas
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	106

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Mark Briggs

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: A-Int  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9503994-02

Sampled: 03/13/95  
Received: 03/14/95  
Analyzed: 03/14/95  
Reported: 03/15/95

QC Batch Number: GC031495BTEX03A  
Instrument ID: GCHP03

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	103

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233  
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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
  
Attention: Mark Briggs

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: A-Eff  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9503994-03

Sampled: 03/13/95  
Received: 03/14/95  
  
Analyzed: 03/14/95  
Reported: 03/15/95

QC Batch Number: GC031495BTEX20A  
Instrument ID: GCHP20

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	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



Sequoia  
Analytical

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Attention: Mark Briggs

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-Inf  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9503994-04

Sampled: 03/13/95  
Received: 03/14/95  
Analyzed: 03/15/95  
Reported: 03/15/95

QC Batch Number: GC031495BTEX21A  
Instrument ID: GCHP21

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	110
Benzene	0.50	7.4
Toluene	0.50	N.D.
Ethyl Benzene	0.50	0.53
Xylenes (Total)	0.50	6.0
Chromatogram Pattern:	.....	Gas
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 105

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager

Page:

5



Sequoia  
Analytical

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

Attention: Mark Briggs

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-Int  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9503994-05

Sampled: 03/13/95  
Received: 03/14/95  
Analyzed: 03/15/95  
Reported: 03/15/95

QC Batch Number: GC031495BTEX21A  
Instrument ID: GCHP21

### 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	93

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
  
Attention: Mark Briggs

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-Eff  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9503994-06

Sampled: 03/13/95  
Received: 03/14/95  
  
Analyzed: 03/15/95  
Reported: 03/15/95

QC Batch Number: GC031495BTEX21A  
Instrument ID: GCHP21

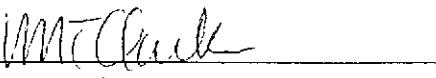
### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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	100

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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

Attention: Mark Briggs

Client Project ID: 2010-11, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9503994 -01, 2

Reported: Mar 16, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC031495BTEX03A	GC031495BTEX03A	GC031495BTEX03A	GC031495BTEX03A
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 #:	950344105	950344105	950344105	950344105
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/14/95	3/14/95	3/14/95	3/14/95
Analyzed Date:	3/14/95	3/14/95	3/14/95	3/14/95
Instrument I.D. #:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	9.4	9.4	27
MS % Recovery:	94	94	94	90
Dup. Result:	10	9.9	9.8	29
MSD % Recov.:	100	99	98	97
RPD:	6.2	5.2	4.2	7.1
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
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SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

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**

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Environmental Resolutions  
 359 Bel Marin Keys, Suite 20  
 Novato, CA 94949  
 Attention: Mark Briggs

Client Project ID: 2010-11, Exxon 7-3006  
 Matrix: Liquid  
 Work Order #: 9503994-03

Reported: Mar 16, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC031495BTEX20A	GC031495BTEX20A	GC031495BTEX20A	GC031495BTEX20A
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 #:	950344106	950344106	950344106	950344106
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/14/95	3/14/95	3/14/95	3/14/95
Analyzed Date:	3/14/95	3/14/95	3/14/95	3/14/95
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	12	11	34
MS % Recovery:	110	120	110	113
Dup. Result:	10	11	11	32
MSD % Recov.:	100	110	110	107
RPD:	9.5	8.7	0.0	6.1
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 Control Limits	71-133	72-128	72-130	71-120

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**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
 Project Manager



**Sequoia  
Analytical**

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Mark Briggs

Client Project ID: 2010-11, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9503994-04-6

Reported: Mar 16, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC031495BTEX21A	GC031495BTEX21A	GC031495BTEX21A	GC031495BTEX21A
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 #:	950344106	950344106	950344106	950344106
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/14/95	3/14/95	3/14/95	3/14/95
Analyzed Date:	3/14/95	3/14/95	3/14/95	3/14/95
Instrument I.D. #:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.9	10	10	30
MS % Recovery:	99	100	100	100
Dup. Result:	8.7	10	9.3	27
MSD % Recov.:	87	100	93	90
RPD:	13	0.0	7.3	11
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
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SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

Please Note:

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Sequoia  
Analytical

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Mark Briggs

Client Project ID: 2010-11, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9503994-06

Reported: Mar 16, 1995

## QUALITY CONTROL DATA REPORT

Analyte: Arsenic

QC Batch#: ME0314957000MDB  
Anal. Method: EPA 206.2  
Prep. Method: EPA 3020

Analyst: W. Thant  
MS/MSD #: 950395401  
Sample Conc.: N.D.  
Prepared Date: 3/14/95  
Analyzed Date: 3/14/95  
Instrument I.D.#: MTJA1  
Conc. Spiked: 0.050 mg/L

Result: 0.013  
MS % Recovery: 26

Dup. Result: 0.013  
MSD % Recov.: 26

RPD: 0.0  
RPD Limit: 0-30

LCS #: BLK031495

Prepared Date: 3/14/95  
Analyzed Date: 3/14/95  
Instrument I.D.#: MTJA1  
Conc. Spiked: 0.050 mg/L

LCS Result: 0.055  
LCS % Recov.: 110

MS/MSD	
LCS	75-125
Control Limits	

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

Please Note:

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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: ENVIRONMENTAL RESOLUTIONS INC

Page 1 of 1

Address: 359 BEL MARIN KEY'S BLVD, SUITE 20

Site Location: 720 HIGH ST, OAKLAND

Project #: 2010-11

Consultant Project #:

Consultant Work Release #: 19432503

Project Contact: MARK BRIGGS

Phone #: 415 382-9105

Laboratory Work Release #:

EXXON Contact: MARIA GRENZER

Phone #: 510-246-8768

EXXON RAS #: 7-3006

Sampled by (print): PETER PETRO

Sampler's Signature:

Shipment Method:

Air Bill #:

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

### ANALYSIS REQUIRED

9503994

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel S.M. 5520	TRPH EPA 8015	<i>metals</i> <del>arsenic</del> ANALYSIS		Temperature: _____
A-10F	3/13/	17:00	Air/	None	1		X		- 01		Arsenic	
A-INT		17:05			1		X		- 02		IF reported CONCENTRATION	
A-EFF		17:10	AP	AP	1		X		- 03		exceeds 0.05ppm (mg/L)	
W-INF			H2O	key HCl	3		X		- 04		Please NOTIFY ERI	
W-INT				key HCl	3		X		- 05		IMMEDIATELY.	
W-EFF				key HCl	3		X		- 06			
W-EFF	AP	17:15	AP	key	1				X			

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	3-14-95	12:25		3-14-95	12:25	
Charles Q/Sig.	3-14-95	1:45		3-14-95	1:45	

Pink - Client

Yellow - Sequoia

White - Sequoia



Sequoia  
Analytical

680 Chesapeake Drive      Redwood City, CA 94063  
404 N. Wiget Lane      Walnut Creek, CA 94598  
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(510) 388-3600      FAX (510) 388-9673  
(916) 321-9600      FAX (916) 321-0100

APR - 3 1995

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

Client Proj. ID: 2010-11, Exxon 7-3006

Sampled: 03/21/95  
Received: 03/22/95  
Analyzed: see below

Attention: Marc Briggs

Lab Proj. ID: 9503G16

Reported: 03/29/95

### LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9503G16-04				
Sample Desc : LIQUID,W-Eff-ARS				
Arsenic: Low D.L.	mg/L	03/28/95	0.0050	0.0059

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

**SEQUOIA ANALYTICAL - ELAP #1210**

*Vickie Tague Clark*

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

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

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-INF  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9503G16-01

Sampled: 03/21/95  
Received: 03/22/95  
Analyzed: 03/25/95  
Reported: 03/29/95

QC Batch Number: GC032495BTEX17A  
Instrument ID: GCHP17

### 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	4.5
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	5.5
Chromatogram Pattern:	.....	Gas
Surrogates		
Trifluorotoluene	Control Limits % 70                  130	% Recovery 88

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Marc Briggs

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-INT  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9503G16-02

Sampled: 03/21/95  
Received: 03/22/95  
Analyzed: 03/25/95  
Reported: 03/29/95

QC Batch Number: GC032495BTEX17A  
Instrument ID: GCHP17

### 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	90

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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819 Striker Avenue, Suite 8      Sacramento, CA 95834      (916) 921-9600      FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-EFF  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9503G16-03

Sampled: 03/21/95  
Received: 03/22/95  
Analyzed: 03/25/95  
Reported: 03/29/95

QC Batch Number: GC032495BTEX02A  
Instrument ID: GCHP02

### 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	84

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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819 Striker Avenue, Suite 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100

Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Marc Briggs

Client Project ID: 2010-11, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9503G16-04

Reported: Mar 30, 1995

## QUALITY CONTROL DATA REPORT

Analyte: Arsenic

QC Batch#: ME0327957000MDA  
Analy. Method: EPA 206.2  
Prep. Method: EPA 3020

Analyst: J. Martinez  
MS/MSD #: 9503G0801  
Sample Conc.: N.D.  
Prepared Date: 3/27/95  
Analyzed Date: 3/28/95  
Instrument I.D.#: MTJA3  
Conc. Spiked: 0.050 mg/L

Result: 0.047  
MS % Recovery: 94

Dup. Result: 0.047  
MSD % Recov.: 94

RPD: 0.0  
RPD Limit: 0-30

LCS #: BLK032795

Prepared Date: 3/27/95  
Analyzed Date: 3/28/95  
Instrument I.D.#: MTJA3  
Conc. Spiked: 0.050 mg/L

LCS Result: 0.048  
LCS % Recov.: 96

MS/MSD  
LCS  
Control Limits  
75-125

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

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**

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Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Marc Briggs

Client Project ID: 2010-11, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9503G16-01-2

Reported: Mar 30, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC032495BTEX17A	GC032495BTEX17A	GC032495BTEX17A	GC032495BTEX17A
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 #:	9503D5015	9503D5015	9503D5015	9503D5015
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/24/95	3/24/95	3/24/95	3/24/95
Analyzed Date:	3/24/95	3/24/95	3/24/95	3/24/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.9	9.7	9.8	30
MS % Recovery:	99	97	98	100
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	1.0	3.0	2.0	3.3
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 Control Limits	71-133	72-128	72-130	71-120
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Please Note:

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**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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

Attention: Marc Briggs

Client Project ID: 2010-11, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9503G16-03

Reported: Mar 30, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC032495BTEX02A	GC032495BTEX02A	GC032495BTEX02A	GC032495BTEX02A
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 #:	9503D5015	9503D5015	9503D5015	9503D5015
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/24/95	3/24/95	3/24/95	3/24/95
Analyzed Date:	3/24/95	3/24/95	3/24/95	3/24/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.3	8.9	9.0	27
MS % Recovery:	93	89	90	90
Dup. Result:	9.7	9.6	9.8	30
MSD % Recov.:	97	96	98	100
RPD:	4.2	7.6	8.5	11
RPD Limit:	0-50	0-50	0-50	0-50

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

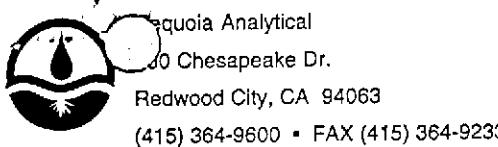
MS/MSD	71-133	72-128	72-130	71-120
LCS Control Limits				

SEQUOIA ANALYTICAL

*Vickie Tague Clark*  
Vickie Tague Clark  
Project Manager

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.



## EXXON COMPANY, U.S.A.

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

## 'CHAIN OF CUSTODY'

Consultant's Name: Environmental Resolutions INC (ERI)							Page 1 of 1			
Address: 359 Bel Marin Keys Blvd, Ste 20 Novato CA							Site Location: 720 High St Oakland, CA			
Project #: <del>2010-11</del> 7-3006		Consultant Project #: 2010-11			Consultant Work Release #: 19432503					
Project Contact: Marc Briggs		Phone #: 415 382 9105			Laboratory Work Release #:					
EXXON Contact: Marla Guensler		Phone #: 510 246 8768			EXXON RAS #: 7-3006					
Sampled by (print): Steve Weigel		Sampler's Signature: Steve Weigel								
Shipment Method:		Air Bill #:								
TAT: <input type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> 72 hr <input type="checkbox"/> 96 hr <input checked="" type="checkbox"/> Standard (10 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 S.M. 5520 EPA 8015	Arsenic	Temperature: _____
W-INF	3-21-95	17:40	Water		3	950361C1	X			if > 0.005 notify ERI
W-INT					3	2	X			immediately
W-EFF					3	3	X			
W-EFF-ARS				HNO <sub>3</sub>	1	4			X	
RELINQUISHED BY / AFFILIATION      ACCEPTED / AFFILIATION      Date      Time      Additional Comments										
Steve Weigel / ERI		Date 3-22-95	Time 12:45	Marked Key			Date 3-22-95	Time 12:45		
Marked Q / Seq.		Date 3-22-95	Time 2:40	NY			Date 3/22/95	Time 16:00		

Phk - Client

Yellow - Sequoia

White - Sequoia

**ATTACHMENT C**

**ERI SOP-25 "HYDROCARBONS REMOVED  
FROM A VADOSE WELL"**

**HYDROCARBON REMOVED  
FROM A VADOSE WELL**  
**SOP-25**

Rev. JG/C

**POUNDS OF HYDROCARBON IN AN AIR  
STREAM**

**INPUT DATA:**

- 1) Air flow rate acfm (usually by Pitot tube)
- 2) Air pressure at the flow measuring device (in inches of H<sub>2</sub>O) (use {-} for vacuum)
- 3) Air temperature at the flow measuring device.
- 4) Hydrocarbon content of air (usually in mg/M<sup>3</sup>) for ppmv you need molecular weight.
- 5) Length of time (usually hours) over which flow rate occurred)

From periodic measurements, a calculation of total pounds of hydrocarbons removed from a well or from a system are calculated. The input data listed above are measured at a point in time. To calculate quantities removed, some assumptions must be made about what was happening between measurements. The following assumptions will be used for the sake of consistency:

**ASSUMPTIONS:**

- 1) Air flow for the period equals the average of the initial and final reading for the period.
- 2) Pressure and temperature for the entire period will be the final reading.
- 3) Hydrocarbon concentration for the period equals the average of the initial and final reading.
- 4) The hours of operation can be taken from an hour meter, an electric meter or will be assumed to be equal to the time between measurements.
- 5) If the unit is found down - try to determine how many hours it did operate and use the data taken for the previous period to make the calculations. Restart the unit and then take data to start the next period.

**SAMPLE DATA AND CALCULATIONS**

Date	Time	Temp deg F	Press in H <sub>2</sub> O	HC conc mg/M <sup>3</sup>	Air flow acf m	Calc. lb. rem.
1/6/95	11:00	70	-46	2000	120	
1/7/95	13:00	55	-50	1350	90	
1/8/95	10:00	80	-13	750	100	7.4

Calculate the pounds of hydrocarbon removed from the system during the basis period from 13:00 (1:00 pm) on the 7th to 10 am on the 8th. Pressure and temperature of the measurements (at the flow meter) must be corrected to the P and T used to report the HC concentration (which are P = 1 atm and T = 70 deg F). 1 atm = 14.7 psia, 760 mm Hg, or 407 in H<sub>2</sub>O. T<sub>abs</sub> = 460 + T deg F

Hours of operation = 21, T = 80, P = -13, HC = (1350+750)/2 = 1050 mg/M<sup>3</sup>. Flow = 95

$$21 \times 60 \times 95 \times \frac{(460+70)}{(460+80)} \times \frac{(407-13)}{407} \times \frac{28.3}{1000} \times \frac{1050}{1000} \times \frac{1}{454} = 7.4 \text{ lb}$$

hr	min	cu ft		T <sub>corr</sub>		P <sub>corr</sub>		$\frac{\text{M}^3}{\text{cu ft}}$	$\times \frac{\text{g}}{\text{M}^3}$	$\times \frac{\text{lb}}{\text{g}}$	$= \frac{\text{lb}}{\text{basis}}$
-----	-----	-----	x	-----	x	-----	x	-----	x	-----	-----
basis	hr	min		T <sub>corr</sub>		P <sub>corr</sub>		$\frac{\text{M}^3}{\text{cu ft}}$	$\times \frac{\text{g}}{\text{M}^3}$	$\times \frac{\text{lb}}{\text{g}}$	$= \frac{\text{lb}}{\text{basis}}$

$$21 \times 60 \times 95 \times 0.98 \times 0.97 \times 0.0283 \times 1.050 \times 1/454 = 7.4 \text{ lb.}$$

cumulative lbs. (the running total) = the sum of all the previous periods.

Note: If results are given in ppm, an assumption about the molecular weight of the hydrocarbon must be made to get mg/M<sup>3</sup>. ppmv x molecular wt. /22.4 = mg/M<sup>3</sup>. (Use 102 for gasoline)