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
(510) 246-8798 FAX

February 6, 1998

Mr. Barney Chan
Hazardous Material Specialist
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, #250
Alameda, California 94502-6577

RE: Former Exxon RAS #7-3006/720 High Street, Oakland, California

Dear Mr. Chan:

Attached for your review and comment is a report entitled ***Quarterly Groundwater Monitoring and Remediation Status Report, Fourth Quarter 1997***, dated January 26, 1998, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the results of groundwater monitoring and sampling and remedial activities at the subject site.

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

Sincerely,

Marla D. Guensler
Senior Engineer

MDG/tjm

Attachment: ERI's Quarterly Groundwater Monitoring and Remediation Status Report, Fourth Quarter 1997, dated January 26, 1998

cc: w/ attachment
Mr. Stephen Hill - California Regional Water Quality Control Board - San Francisco Bay Region

w/o attachment
Mr. Marc A. Briggs - ERI

January 26, 1998
ERI 201011.R13

Ms. Marla D. Guensler
Exxon Company, U.S.A.
2300 Clayton Road, Suite 640
Concord, California 94524-2032

Subject: Quarterly Groundwater Monitoring and Remediation Status Report, Fourth Quarter 1997, Former Exxon Service 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 groundwater monitoring for the fourth quarter 1997 at the subject site (Plate 1). The purpose of ongoing remedial activities is to remove residual hydrocarbons from soil and dissolved hydrocarbons from groundwater. The purpose of quarterly monitoring is to evaluate fluctuations in hydrocarbon concentrations in groundwater, the capture zone caused by groundwater pumping, and the effectiveness of remedial actions.

GROUNDWATER MONITORING AND SAMPLING

On December 2, 1997, ERI measured the depth to water (DTW) in monitoring wells MW1 through MW4, and MW6 through MW15 and collected groundwater samples for laboratory analysis. Monitoring well MW5 was previously destroyed. ERI's groundwater sampling protocol is attached (Attachment A).

Based upon DTW measurements, the groundwater appears to flow southwest towards the interceptor trench beneath the site at a hydraulic gradient of 0.039 (Plate 2). Monitoring and sampling data for 1994 through 1997 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), methyl tertiary-butyl ether (MTBE), and total extractable petroleum hydrocarbons as diesel (TEPHd). The specific methods of analysis are listed in the notes in Table 1. The results of analysis are listed in Table 1 and are shown on Plate 2. The laboratory analysis reports and chain of custody records are attached (Attachment B).

SOIL AND GROUNDWATER REMEDIATION

Air-Sparging/Soil Vapor-Extraction

ERI initiated operation of the AS/SVE system in August 1996 utilizing the thermal/catalytic oxidizer. Cumulative operational and performance data are presented in Table 2. Copies of the Reports of Laboratory Analysis and Chain of Custody Records for soil vapor-extraction system samples collected during the reporting period are attached (Attachment B).

The AS/SVE system currently consists of six AS wells for air injection and vadose wells for SVE within an on-site interceptor trench, a water knock-out tank, a Thermtech VAC-25 thermal/catalytic oxidizer, a Gast air compressor, and a propane tank for supplemental fuel. The AS/SVE system is operated in a continuous mode within the trench.

Groundwater Extraction And Treatment

The groundwater remediation system (GRS) is designed to treat separate-phase and dissolved hydrocarbons in groundwater extracted from the interceptor trench beneath the site. Pneumatic pumps are installed in extraction wells RW2 and RW5 to recover groundwater from the interceptor trench. Subsurface and above-ground collection piping are used to transfer extracted groundwater to a holding tank. A transfer pump and poly-vinyl chloride (PVC) piping are used to direct the water stream from the holding tank through water filters, an airstripper, 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).

Between September 24, 1997 and December 29, 1997, the system recovered 45,050 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.

SUMMARY AND STATUS OF INVESTIGATION

Based on data collected to date, it appears the air-sparging/soil-vapor extraction (AS/SVE) system and groundwater remediation system (GRS) are removing residual hydrocarbons in soil and dissolved hydrocarbons in groundwater. ERI estimates approximately 191 pounds (approximately 31.4 gallons) of residual hydrocarbons were removed by the AS/SVE system during the reporting period, and approximately 3,142 pounds (approximately 516 gallons) since start-up. ERI estimates approximately 0.54 pounds of dissolved hydrocarbons were removed by the GRS during the reporting period, and 6.34 pounds (approximately 1.04 gallons) since start up. ERI will continue to operate the remedial systems and monitor groundwater at the site during the first quarter 1998.

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 and any reliance on this report by third parties shall be at such party's sole risk.

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

Sincerely,
Environmental Resolutions, Inc.

Marc A. Briggs
Project Manager

Keith A. Romstad
Branch Manager

Enclosures:

Table 1:	Cumulative Groundwater Monitoring and Sampling Data
Table 2:	Cumulative Hydrocarbon Removal and Emissions for Soil Vapor Extraction System
Table 3:	Operation and 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 7)

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHg	B	T	E	X	MTBE	TEPHd	VOCs
(TOC)	Date	<	feet	> <	parts per billion							>
MW1	1/20/94	NLPH	9.25	3.62								
(12.87)	02/02-03/94	NLPH	8.60	4.27	< 50	< 0.5	< 0.5	< 0.5	0.7	NA	70	NA
	3/10/94	NLPH	8.31	4.56								
	4/22/94	NLPH	7.95	4.92								
	05/10-11/94	NLPH	7.48	5.39	< 50	< 0.5	< 0.5	< 0.5	1.6	NA	100	NA
	6/27/94	NLPH	7.65	5.22								
	8/31/94	NLPH	9.39	3.48								
	9/29/94	NLPH	9.83	3.04	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	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								
	2/6/95	NLPH	5.71	7.16	< 50	0.52	< 0.5	< 0.5	< 0.5	100	NA	NA
	6/7/95	NLPH	7.62	5.25	< 50	< 0.5	< 0.5	< 0.5	< 0.5	3.5	81	NA
	9/18/95	NLPH	10.02	2.85	< 50	< 0.5	< 0.5	< 0.5	< 0.5	6	82	NA
	11/1/95	NLPH	10.74	2.13	< 50	< 0.5	< 0.5	< 0.5	< 0.5	8.9	160	NA
	2/14/96	NLPH	7.81	5.06	< 50	< 0.5	< 0.5	< 0.5	< 0.5	7.8	100	NA
	6/19/96	NLPH	7.47	5.40	< 50	< 0.5	< 0.5	< 0.5	< 0.5	7.1	93	NA
				Additional EHCss	< 50							
	9/24/96	NLPH	10.42	2.45	< 50	< 0.5	< 0.5	< 0.5	< 0.5	9.5	83	NA
	12/11/96	NLPH	8.50	4.37	< 50	< 0.5	< 0.5	< 0.5	< 0.5	7.2	81	NA
	3/19/97	NLPH	9.14	3.73	< 50	< 0.5	< 0.5	< 0.5	< 0.5	6.4	78	NA
	6/4/97	NLPH	9.82	3.05	< 50	< 0.5	< 0.5	< 0.5	< 0.5	6.0	58	NA
	9/2/97	NLPH	10.26	2.61	< 50	< 0.5	< 0.5	< 0.5	< 0.5	5.4	150	NA
	12/2/97	NLPH	9.32	3.55	< 50	< 0.5	< 0.5	< 0.5	< 0.5	5.1	88	NA
MW2	1/20/94	NM [NR]	NM									
(12.98)	02/02-03/94	NM [NR]	NM	---								
	3/10/94	[8 c.]	6.96	6.02								
	4/22/94	[10 c.]	NM	---								
	05/10-11/94	[5 c.]	NM	---								
	6/27/94	Sheen	7.10	5.88								
	8/31/94	Sheen	8.58	4.40								
	9/29/94	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								
	2/6/95	Sheen	5.00	7.98								
	6/7/95	Sheen	7.14	5.84								
	9/18/95	Sheen	10.82	2.16								
	11/1/95	Sheen	11.65	1.33								
	2/14/96	Sheen	8.39	4.59								
	6/19/96	Sheen	6.55	6.43								
	9/24/96	Sheen	11.56	1.42								
	12/11/96	Sheen	8.02	4.96								
	3/19/97	Sheen	8.63	4.35								
	6/4/97	Sheen	10.57	2.41								
	9/2/97	Sheen	11.51	1.47								
	12/2/97	NLPH	11.24	1.74	1,400	15	2.8	8.6	< 2.5	57	820	NA
MW3	1/20/94	Sheen	8.24	4.68								
(12.92)	02/02-03/94	Sheen	7.68	5.24								
	3/10/94	Sheen	7.24	5.68								
	4/22/94	Sheen	6.79	6.13								
	05/10-11/94	Sheen	6.43	6.49								
	6/27/94	0.01 [NR]	6.97	5.95								
	8/31/94	Sheen	8.41	4.51								
	9/29/94	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								
	2/6/95	Sheen	4.87	8.05								
	6/7/95	Sheen	7.05	5.87								
	9/18/95	Sheen	10.61	2.31								
	11/1/95	Sheen	11.58	1.34								

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHg	B	T	E	X	MTBE	TEPHd	VOCs
(TOC)	Date	<	feet	> <	parts per billion							>
MW3 (cont.)	2/14/96	Sheen	8.34	4.58								
(12.92)	6/19/96	Sheen	6.35	6.57								
	9/24/96	Sheen	11.45	1.47								
	12/11/96	NLPH	7.89	5.03	4,800	340	< 5.0	8.2	20	30	17,000*	NA
	3/19/97	NLPH	9.83	3.09	1,900	160	11	5.6	10	80	3,000	NA
	6/4/97	NLPH	10.43	2.49	920	15	2.8	2.4	< 2.0	11	8,000	NA
	9/2/97	Sheen	12.45	0.47								
	12/2/97	NLPH	11.21	1.71	920	10	2.1	< 1.0	2.7	21	6,700	NA
MW4												
(12.77)	1/20/94	NM [NR]	NM	---								
	02/02-03/94	NM [1 c.]	NM	---								
	3/10/94	[8 c.]	7.12	5.65								
	4/22/94	[10 c.]	NM	---								
	05/10-11/94	[5 c.]	NM	---								
	6/27/94	0.01 [NR]	6.50	6.27								
	8/31/94	0.02 [NR]	7.84	4.93								
	9/29/94	0.03 [NR]	8.43	4.34								
	10/25/94	Sheen	9.24	3.53								
	11/30/94	NM	6.77	6.00								
	12/27/94	Sheen	6.14	6.63								
	2/6/95	Sheen	4.87	7.90								
	6/7/95	Sheen	6.91	5.86								
	9/18/95	Sheen	9.59	3.18								
	11/1/95	Sheen	11.52	1.25								
	2/14/96	Sheen	8.56	4.21								
	6/19/96	Sheen	6.09	6.68								
	9/24/96	Sheen	10.20	2.57								
	12/11/96	Sheen	7.78	4.99								
	3/19/97	Sheen	8.56	4.21								
	6/4/97	Sheen	9.31	3.46								
	9/2/97	Sheen	10.00	2.77								
	12/2/97	NLPH	8.72	4.05	1,500	< 2.5	9.7	3.0	10	50	15,000	NA
MW5	7/18/89		Well Destroyed									
MW6	1/20/94	NM [NR]	NM	---								
(14.27)	02/02-03/94	NM [NR]	NM	---								
	3/10/94	[¼ c.]	7.82	6.45								
	4/22/94	[10 c.]	NM	---								
	05/10-11/94	[3 c.]	NM	---								
	6/27/94	Sheen	7.77	6.50								
	8/31/94	Sheen	9.02	5.25								
	9/29/94	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								
	2/6/95	Sheen	5.86	8.41								
	6/7/95	Sheen	8.07	6.20								
	9/18/95	Sheen	10.54	3.73								
	11/1/95	Sheen	11.41	2.86								
	2/14/96	Sheen	9.17	5.10								
	6/19/96	Sheen	7.13	7.14								
	9/24/96	Sheen	11.24	3.03								
	12/11/96	NLPH	9.20	5.07	9,100	2,100	22	160	260	< 100	2,900	NA
	3/19/97	NLPH	10.14	4.13	24,000	5,800	91	1,300	1,900	250	3,800	NA
	6/4/97	NLPH	10.58	3.69	20,000	4,400	< 50	540	480	270	3,300	NA
	9/2/97	NLPH	11.02	3.25	8,100	1,800	< 25	140	170	< 25	2,100	NA
	12/2/97	NLPH	10.45	3.82	6,800	1,100	< 20	77	74	< 100	2,300	NA
MW7	1/20/94	NLPH	8.67	6.17								
(14.84)	02/02-03/94	NLPH	8.47	6.37	2,900	79	5	8.2	21	NA	1,300	NA
			Additional Analysis TOG:		4,701							
	3/10/94	NLPH	8.24	6.60								
	4/22/94	NLPH	7.95	6.89								

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Well ID #	Sampling	SUBJ	DTW	Elev.	TPHg	B	T	E	X	MTBE	TEPHd	VOCs
(TOC)	Date	<	feet	> <	parts per billion							>
MW7 (cont.)	05/10-11/94	NLPH	7.53	7.31	2,400	88	5.6	5.2	15	NA	1,300	NA
(14.84)			Additional Analysis TOG:		1,400							
	6/27/94	NLPH	8.01	6.83								
	8/31/94	NLPH	9.19	5.65								
	9/29/94	NLPH	9.65	5.19	1,900	71	3.1	3.5	7.8	NA	56	NA
	10/25/94	NLPH	9.96	4.88	1,400	51	1.5	24	6.8	NA	89	NA
	11/30/94	NM	7.78	7.06						NA		
	12/27/94	NM	7.51	7.33								
	2/6/95	NLPH	5.79	9.05	2,500	130	< 10	< 10	< 10	NA	1,300	ND
			Additional Analysis EHCss		1,100							
	6/7/95	NLPH	7.73	7.11	2,400	91	5	7.6	14	39	1,200	NA
			Additional Analysis EHCss		1,000							
	9/18/95	NLPH	9.81	5.03	1,800	17	< 5.0	< 5.0	< 5.0	< 25	1,100	NA
			Additional Analysis EHCss		870							
	11/1/95	NLPH	10.56	4.28	3,000	2.7	11	25	< 2.5	< 13	1,700	NA
			Additional Analysis EHCss		1,400							
	2/14/96	NLPH	8.04	6.80	1,900	59	< 5.0	< 5.0	< 5.0	< 25	1,200	NA
			Additional Analysis EHCss		940							
	6/19/96	NLPH	7.33	7.51	2,000	96	< 5.0	< 5.0	5.6	< 25	1,400	ND
			Additional Analysis EHCss		1,000							
	9/24/96	NLPH	10.10	4.74	950	6.8	< 5.0	< 5.0	< 5.0	< 25	1,100	ND
			Additional Analysis EHCss		910							
	12/11/96	NLPH	8.50	6.34	2,500	50	< 2.0	6.4	30	< 10	1,600	ND
			Additional Analysis EHCss		1,100							
	3/19/97	NLPH	8.88	5.96	2,700	61	8.0	21	68	< 25	840	ND
			Additional Analysis EHCss		580							
	6/4/97	NLPH	9.38	5.46	1,900	45	< 2.0	5.3	13	< 2.5	1,000	ND
			Additional Analysis EHCss		780							
	9/2/97	NLPH	9.69	5.15	1,700	28	2.2	< 2.0	5.9	< 2.5	790	ND
			Additional Analysis EHCss		740							
	12/2/97	NLPH	8.65	6.19	2,000	33	2.2	2.0	5.8	14	1,100	NA
MW8	1/20/94	Sheen	8.90	4.55								
(13.45)	02/02-03/94	Sheen	8.58	4.87								
	3/10/94	Sheen	7.16	6.29								
	4/22/94	Sheen	7.34	6.11								
	05/10-11/94	Sheen	7.04	6.41								
	6/27/94	Sheen	6.01	7.44								
	8/31/94	Sheen	9.26	4.19								
	9/29/94	Sheen	9.76	3.69								
	10/25/94	Sheen	10.05	3.40								
	11/30/94	NM	7.68	5.77								
	12/27/94	Sheen	7.11	6.34								
	2/6/95	Sheen	5.39	8.06								
	6/7/95	Sheen	7.53	5.92								
	9/18/95	Sheen	9.84	3.61								
	11/1/95	Sheen	10.47	2.98								
	2/14/96	Sheen	8.27	5.18								
	6/19/96	Sheen	6.88	6.57								
	9/24/96	Sheen	10.13	3.32								
	12/11/96	Sheen	8.53	4.92								
	3/19/97	Sheen	9.09	4.36								
	6/4/97	Sheen	9.52	3.93								
	9/2/97	NLPH	9.72	3.73	20,000	57	< 50	850	660	< 50	8,000	ND
	12/2/97	NLPH	8.83	4.62	6,900	83	< 10	< 10	100	130	2,700	NA
MW9	1/20/94	NM	NM	---								
(14.64)	02/02-03/94	NM	NM	---								
	3/10/94	NLPH	6.90	7.74								
	4/22/94	NLPH	7.38	7.26								
	05/10-11/94	NLPH	6.96	7.68								
	6/27/94	NLPH	7.65	6.99								
	8/31/94	NLPH	8.87	5.77								
	9/29/94	NLPH	9.19	5.45	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA

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

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHg	B	T	E	X	MTBE	TEPHd	VOCs
(TOC)	Date	<	feet	> <	parts per billion							>
MW9 (cont.)	10/25/94	NLPH	9.66	4.98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
(14.64)	11/30/94	NM	8.38	6.26								
	12/27/94	NLPH	7.29	7.35								
	2/6/95	NLPH	5.74	8.90	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	56	NA
	6/7/95	NLPH	8.33	6.31	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	72	NA
	9/18/95	NLPH	9.28	5.36	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	60	NA
	11/1/95	NLPH	10.09	4.55	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	61	NA
	2/14/96	NLPH	6.26	8.38	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	83	NA
	6/19/96	NLPH	6.68	7.96	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	68	NA
			Additional Analysis EHCss		< 50							
	9/24/96	NLPH	9.72	4.92	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	12/11/96	NLPH	8.11	6.53	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	91	NA
	3/19/97	NLPH	7.72	6.92	< 50	0.83	< 0.5	< 0.5	< 0.5	< 2.5	140	NA
	6/4/97	NLPH	8.87	5.77	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	9/2/97	NLPH	9.44	5.20	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	140	NA
	12/2/97	NLPH	8.43	6.21	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	71	NA
MW10	1/20/94	NLPH	8.40	5.65								
(14.05)	02/02-03/94	NLPH	8.00	6.05	< 50	< 0.5	1	< 0.5	1.8	NA	< 50	NA
	3/10/94	NLPH	7.56	6.49								
	4/22/94	NLPH	7.35	6.70								
	05/10-11/94	NLPH	7.06	6.99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	6/27/94	NLPH	7.59	6.46								
	8/31/94	NLPH	8.73	5.32								
	9/29/94	NLPH	9.07	4.98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	10/25/94	NLPH	9.41	4.64	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	11/30/94	NM	7.62	6.43								
	12/27/94	NLPH	7.01	7.04								
	2/6/95	NLPH	5.60	8.45	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 50	NA	NA
	6/7/95	NLPH	7.12	6.93	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	9/18/95	NLPH	8.54	5.51	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	11/1/95	NLPH	9.44	4.61	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	2/14/96	NLPH	9.36	4.69	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	64	NA
	6/19/96	NLPH	7.32	6.73	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
			Additional Analysis EHCss		< 50							
	9/24/96	NLPH	9.07	4.98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	12/11/96	NLPH	7.73	6.32	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	67	NA
	3/19/97	NLPH	7.62	6.43	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	51	NA
	6/4/97	NLPH	8.38	5.67	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	9/2/97	NLPH	8.64	5.41	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	120	NA
	12/2/97	NLPH	7.22	6.83	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
MW11	1/20/94	NLPH	9.61	3.94								
(13.55)	02/02-03/94	NLPH	9.56	3.99	< 50	< 0.5	1	< 0.5	0.9	NA	160	NA
	3/10/94	NLPH	8.59	4.96								
	4/22/94	NLPH	8.47	5.08								
	05/10-11/94	NLPH	8.12	5.43	< 50	< 0.53	< 0.5	< 0.5	3.2	NA	1002	NA
	6/27/94	NLPH	8.65	4.90								
	8/31/94	NLPH	9.80	3.75								
	9/29/94	NLPH	10.16	3.39	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	10/25/94	NLPH	10.48	3.07	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	11/30/94	NM	8.55	5.00								
	12/27/94	NLPH	7.98	5.57								
	2/6/95	NLPH	6.49	7.06	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	160	NA
	6/7/95	NLPH	7.98	5.57	< 50	< 0.5	< 0.5	< 0.5	< 0.5	42	50	NA
	9/18/95	NLPH	10.12	3.43	< 50	< 0.5	< 0.5	< 0.5	< 0.5	32	56	NA
	11/1/95	NLPH	10.75	2.80	< 50	< 0.5	< 0.5	< 0.5	< 0.5	35	170	NA
	2/14/96	NLPH	8.03	5.52	< 50	< 0.5	< 0.5	< 0.5	< 0.5	37	76	NA
	6/19/96	NLPH	7.85	5.70	< 50	< 0.5	< 0.5	< 0.5	< 0.5	33	92	NA
			Additional Analysis EHCss		< 50							
	9/24/96	NLPH	10.45	3.10	< 50	< 0.5	< 0.5	< 0.5	< 0.5	40	58	NA
	12/11/96	NLPH	9.02	4.53	< 50	< 0.5	< 0.5	< 0.5	< 0.5	10	110	NA
	3/19/97	NLPH	9.16	4.39	< 50	< 0.5	< 0.5	< 0.5	< 0.5	6.9	100	NA

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHg	B	T	E	X	MTBE	TEPHd	VOCs
(TOC)	Date	<	feet	> <	parts per billion							>
MW11 (cont.)	6/4/97	NLPH	9.91	3.64	<50	<0.5	<0.5	<0.5	<0.5	5.6	<50	NA
(13.55)	9/2/97	NLPH	10.25	3.30	<50	<0.5	<0.5	<0.5	<0.5	4.5	150	NA
	12/2/97	NLPH	9.33	4.22	<50	<0.5	<0.5	<0.5	<0.5	5.8	70	NA
MW12	1/20/94	NLPH	7.81	4.80								
(12.61)	02/02-03/94	NLPH	7.22	5.39	48,000	4,000	2,700	2,900	9,900	NA	18,000	NA
	3/10/94	NLPH	6.16	6.45								
	4/22/94	NLPH	6.31	6.30								
	05/10-11/94	NLPH	6.16	6.45	46,000	30,003	1,600	2,900	9,100	NA	8,200	NA
	6/27/94	NLPH	6.55	6.06								
	8/31/94	NLPH	7.97	4.64								
	9/29/94	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								
	2/6/95	Sheen	4.44	8.17								
	6/7/95	Sheen	6.59	6.02								
	9/18/95	Sheen	8.96	3.65								
	11/1/95	Sheen	10.75	1.86								
	2/14/96	Sheen	7.73	4.88								
	6/19/96	Sheen	5.80	6.81								
	9/24/96	Sheen	9.14	3.47								
	12/11/96	Sheen	7.31	5.30								
	3/19/97	Sheen	9.96	2.65								
	6/4/97	Sheen	8.81	3.80								
	9/2/97	Sheen	8.93	3.68								
	12/2/97	NLPH	8.41	4.20	45,000	1,800	560	3,100	8,700	<250	3,900	NA
MW13	1/20/94	NLPH	9.08	5.12								
(14.20)	02/02-03/94	NLPH	8.75	5.45	41,000	3,800	1,500	2,700	9,500	NA	8,100	NA
	3/10/94	Sheen	7.46	6.74								
	4/22/94	Sheen	7.78	6.42								
	05/10-11/94	NLPH	7.61	6.59	39,000	3,400	930	2,400	8,900	NA	15,000	NA
	6/27/94	NLPH	7.97	6.23								
	8/31/94	NLPH	9.21	4.99								
	9/29/94	NLPH	9.61	4.59	57,000	2,100	470	2,600	8,100	NA	320	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								
	2/6/95	Sheen	5.89	8.31								
	6/7/95	Sheen	8.05	6.15								
	9/18/95	Sheen	9.94	4.26								
	11/1/95	Sheen	10.48	3.72								
	2/14/96	Sheen	8.88	5.32								
	6/19/96	Sheen	7.22	6.98								
	9/24/96	Sheen	10.27	3.93								
	12/11/96	Sheen	8.77	5.43								
	3/19/97	Sheen	9.46	4.74								
	6/4/97	Sheen	9.59	4.61								
	9/2/97	Sheen	9.68	4.52								
	12/2/97	NLPH	9.16	5.04	14,000	210	<50	920	1,000	<250	16,000	NA
MW14	1/20/94	NM	NM	---								
(15.18)	02/02-03/94	Not Accessible										
	3/10/94	NLPH	7.84	7.34								
	4/22/94	NLPH	8.00	7.18								
	05/10-11/94	NLPH	7.93	7.25	300	2.7	7.9	2	27	NA	11,002	NA
	6/27/94	NLPH	8.19	6.99								
	8/31/94	NLPH	9.44	5.74								
	9/29/94	NLPH	9.82	5.36	300	<0.5	<0.5	0.9	1.3	1,600	NA	NA
	10/25/94	NLPH	9.99	5.19	200	<0.5	<0.5	0.8	<0.5	210	NA	NA
	11/30/94	NM	8.16	7.02								
	12/27/94	Sheen	8.15	7.03								

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev.	TPHg	B	T	E	X	MTBE	TEPHd	VOCs
		<		> <				parts per billion				>
MW14 (cont.)	2/6/95	NLPH	7.18	8.00	360	< 1.0	< 1.0	< 1.0	< 1.0	NA	1,200	NA
(15.18)		Additional Analysis TOG		400								
	6/7/95	NLPH	7.70	7.48	670	< 0.5	< 0.5	3.6	< 0.5	< 2.5	1,100	NA
		Additional Analysis EHCss		450								
	9/18/95	NLPH	9.88	5.30	1,300	< 2.0	< 2.0	< 2.0	3	< 10	1,900	NA
		Additional Analysis EHCss		1,200								
	11/1/95	NLPH	10.56	4.62	1,100	< 2.5	< 2.5	3.2	3.1	< 13	2,700	NA
		Additional Analysis EHCss		1,600								
	2/14/96	NLPH	9.08	6.10	470	< 0.5	< 0.5	1.3	< 0.5	< 2.5	1,500	ND
		Additional Analysis EHCss		680								
	6/19/96	NLPH	8.50	6.68	610	< 2.5	< 2.5	< 2.5	< 2.5	< 12	2,000	ND
		Additional Analysis EHCss		670								
	9/24/96	NLPH	10.23	4.95	1,000	< 5.0	< 5.0	< 5.0	< 5.0	< 25	5,100	ND
		Additional Analysis EHCss		4,500								
	12/11/96	NLPH	9.09	6.09	1,100	< 2.0	< 2.0	< 2.0	3.3	< 10	2,100*	ND
		Additional Analysis EHCss		750								
	3/19/97	NLPH	7.99	7.19	690	0.65	1.7	2.5	8.3	< 2.5	1,400	ND
		Additional Analysis EHCss		470								
	6/4/97	NLPH	9.30	5.88	730	< 1.2	< 1.2	3.5	5.3	< 2.5	1,500	ND
		Additional Analysis EHCss		590								
	9/2/97	NLPH	9.92	5.26	910	< 5.0	< 5.0	< 5.0	5.9	< 5.0	1,900	ND
		Additional Analysis EHCss		1,300	570	0.85	< 0.5	< 0.5	1.7	< 2.5	1,200	NA
	12/2/97	NLPH	9.13	6.05								
MW15	1/20/94	NLPH	7.48	6.25								
(13.73)	02/02-03/94	NLPH	7.30	6.43	4,300	24	6.7	170	26	NA	1,200	NA
	3/10/94	NLPH	7.32	6.41								
	4/22/94	NLPH	6.67	7.06								
	05/10-11/94	NLPH	5.81	7.92	3,900	16	< 0.5	150	13	NA	1,400	NA
	6/27/94	NLPH	6.14	7.59								
	8/31/94	NLPH	7.20	6.53								
	9/29/94	NLPH	7.76	5.97	2,500	51	15	48	3.6	NA	420	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								
	2/6/95	Sheen	4.97	8.76								
	6/7/95	Sheen	7.14	6.59								
	9/18/95	Sheen	9.00	4.73								
	11/1/95	Sheen	10.67	3.06								
	2/14/96	Sheen	7.27	6.46								
	6/19/96	Sheen	6.65	7.08								
	9/24/96	Sheen	9.45	4.28								
	12/11/96	Sheen	7.77	5.96								
	3/19/97	Sheen	8.15	5.58								
	6/4/97	Sheen	8.62	5.11								

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ <	DTW feet	Elev. > <	TPHg	B	T	E	X	MTBE	TEPHd	VOCs >
							parts per billion					
MW15 (cont.)	9/2/97	NLPH	9.04	4.69	1,100	19	<2.0	11	4.9	23	480	NA
(13.73)	12/2/97	NLPH	8.43	5.30	1,700	20	<5.0	11	<5.0	58	600	NA

Notes:

SUBJ	=	Results of subjective evaluation, liquid-phase hydrocarbon thickness (HT) in feet
NLPH	=	No liquid-phase hydrocarbons present in well
TOC	=	Elevation of top of well casing; relative to mean sea level
DTW	=	Depth to water
Elev.	=	Elevation of groundwater. If liquid-phase hydrocarbons present, elevation adjusted using TOC - [DTW - (PT x 0.8)].
[ ]	=	amount recovered
gal.	=	gallons
c.	=	cups
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA method 5030/8015 (modified).
BTEX	=	Benzene, Toluene, Ethylbenzene, and total Xylenes analyzed using EPA method 5030/8020.
TEPHd	=	Total extractable petroleum hydrocarbons as diesel analyzed using EPA method 3510/8015 (modified).
MTBE	=	Methyl tertiary-butyl ether analyzed using EPA method 5030/8020.
VOCs	=	Volatile organic compounds/purgeable halocarbons analyzed using EPA method 601.
TOG	=	Total oil and grease analyzed using Standard Method 5520.
EHCss	=	Extractable Hydrocarbons as Stoddard Solvent analyzed using EPA method 8015.
NR	=	No liquid-phase hydrocarbons removed from well
NM	=	Not Measured
ND	=	Not Detected at or above the laboratory method detection limits
NA	=	Not Analyzed
---	=	Not Applicable
<	=	Less than the indicated detection limit shown by the laboratory
1	=	A peak eluting earlier than benzene and suspected to be methyl tertiary-butyl ether was present
*	=	TEPH note: Analyst notes samples resemble paint thinner more than Stoddard Solvent

TABLE 2
CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR
SOIL VAPOR EXTRACTION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

2010DATA.XLS
Revision: 1/27/98

DATE	SAMPLE ID	TEMP deg F	PRESS in H2O	AIR FLOW cu ft/min	HC Inf ppmv	HC Eff ppmv	HC Inf Conc* mg/cu M	LB HC for Period	LB HC Cumulative	Benzene Inf Conc* mg/cu M	LB Benzene per Period	LB Benzene Cumulative	LB Benzene Emitted per Day
1/9/95	A-INF	70		160			210			39			
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			
1/10/95	A-INF	70		160			110	2.30	2.3	22	0.438	0.4	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/11/95	A-INF	70		160			70	1.29	3.6	12	0.244	0.7	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/12/95	A-INF	70		160			< 10	< 0.57	4.2	< 0.1	< 0.087	< 0.8	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/13/95	A-INF	70		160			< 10	< 0.14	4.3	< 0.1	< 0.001	< 0.8	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/14/95	A-INF	70		160			< 10	< 0.14	4.5	< 0.1	< 0.001	< 0.8	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/15/95	A-INF	70		158			< 10	< 0.14	4.6	< 0.1	< 0.001	< 0.8	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/16/95	A-INF	70		151			< 10	< 0.14	4.7	< 0.1	< 0.001	< 0.8	
	A-INT						10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/17/95	A-INF	70		155			< 10	< 0.14	4.9	0.13	0.002	< 0.8	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/18/95	A-INF	70		155			100	0.77	5.6	12	0.084	< 0.9	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/19/95		70		155	15	0	68	1.17	6.8				
1/20/95		70		155	14.4	0	66	0.93	7.7				
2/1/95	A-INF	70		147			39	13.19	20.9	3.5	1.471	< 2.3	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0013
2/14/95		70		147									
2/17/95		70		155	9	0	41	8.67	29.6				
2/27/95		70		151									
3/13/95	A-INF	70		176			< 10	< 14.21	43.8	0.42	1.137	< 3.5	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0016
3/31/95		70		116	2.3	0	10	2.01	45.8				
4/4/95		70		84	129	0.8	587	76.68	122.5				
4/12/95	A-INF	70		176			95	24.88	147.4	6.4	1.616	< 5.1	
	A-INT						< 10			0.38			
	A-EFF						< 10			< 0.1			< 0.0016
4/19/95	A-INF	70		109			210	13.65	161.0	7.6	0.627	< 5.7	
	A-INT						47			12			
	A-EFF						< 10			< 0.1			< 0.0010
4/20/95	Replaced 2 ea x 500 lb canisters = 1000 lbs of Carbon												

TABLE 2
CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR
SOIL VAPOR EXTRACTION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

DATE	SAMPLE ID	TEMP deg F	PRESS in H2O	AIR FLOW cu ft/min	HC Inf ppmv	HC Eff ppmv	HC Inf Conc* mg/cu M	LB HC for Period	LB HC Cumulative	Benzene Inf Conc* mg/cu M	LB Benzene per Period	LB Benzene Cumulative	LB Benzene Emitted per Day
4/26/95	A-INF	70		84			400	18.49	179.5	9.1	0.640	< 6.4	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0008
5/1/95	Installed third 500 lb canister in series												
5/1/95	A-INF	70		168			Insufficient sample for analyses						
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0015
5/15/95		70		84									
5/19/95	A-INF	70		105			140	52.68	232.2	3.5	1.229	< 7.6	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0009
6/6/95	A-INF	70		178			36	20.12	252.3	0.22	0.535	< 8.1	
	A-INT						< 10			0.1			
	A-EFF						< 10			< 0.1			< 0.0016
6/8/95		70		164									
6/23/95	System Down - hydrocarbon vapor detector shut down												
6/27/95	Replaced one 500 lb carbon canister - restarted system												
6/27/95	A-INF	70		164			440	62.10	314.4	4.9	0.668	< 8.8	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0015
7/3/95	A-EFF						< 10			< 0.1			
7/10/95	Replaced one 500 lb carbon canister												
7/10/95	A-INF	70		168			230	64.89	379.3	2.8	0.746	< 9.5	
	A-INT						120			2.8			
	A-EFF						< 10			< 0.1			< 0.0015
7/19/95	Replaced 2 ea x 500 lb canisters = 1000 lbs of Carbon												
7/25/95	Collect samples and shut system down pending results												
7/25/95	A-INF	70		205			67	37.29	416.6	< 0.5	< 0.414	< 9.9	
	A-INT						< 100			< 1			
	A-EFF						< 10			< 0.1			< 0.0018
7/28/95	System down - could not restart												
7/31/95	Restart system												
7/31/95	A-INF	70		164			500	18.78	435.4	14	0.480	< 10.4	
	A-INT						12			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0015
8/9/95	Replaced one 500 lb carbon canister												
8/15/95	System down - Remove hydrocarbon vapor detector and send to manufacture for calibration												
9/11/95	Replaced hydrocarbon vapor detector - Restarted system												
9/13/95	System Down - hydrocarbon vapor detector shut down												
9/18/95	Replaced 2 ea x 500 lb canisters = 1000 lbs of carbon												
9/18/95	A-INF	70		164			980	196.08	631.5	13	3.577	< 14.0	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0015
9/20/95	System Down - hydrocarbon vapor detector shut down												
9/25/95	Restarted system												
9/25/95	A-INF	70		164			NA			2.4			
	A-INT						NA			< 0.1			
	A-EFF						NA			< 0.1			
10/13/95	Replaced 2 ea x 500 lb canisters = 1000 lbs of carbon												

TABLE 2
CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR
SOIL VAPOR EXTRACTION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

DATE	SAMPLE ID	TEMP deg F	PRESS in H2O	AIR FLOW cu ft/min	HC Inf ppmv	HC Eff ppmv	HC Inf Conc* mg/cu M	LB HC for Period	LB HC Cumulative	Benzene Inf Conc* mg/cu M	LB Benzene per Period	LB Benzene Cumulative	LB Benzene Emitted per Day
10/13/95	A-INF	70		168			2000	444.04	1,075.5	100	16.838	< 30.8	
	A-INT						< 10			< 0.05			
	A-EFF						< 10			< 0.05			< 0.0008
10/26/95	Replaced 2 ea x 500 lb canisters = 1000 lbs of carbon												
10/26/95		70		168	165	0	751	269.69	1,345.2				
11/6/95													
11/20/95	Replaced 2 ea x 500 lb canisters = 1000 lbs of carbon												
11/20/95	A-INF1	70		170			180	176.60	1,521.8	3.6	1.038	< 31.9	
	A-INF2						82			2			
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0015
11/26/95	System down												
12/4/95	Restart system	70		168	18.5	0.5	84	12.03	1,533.8				
12/18/95	A-INF	70		151			4600	469.45	2,003.3	50	10.105	< 42.0	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/2/96		70		147	51.7	8.2	235	485.04	2,488.3				
1/3/96	Shut system down, pending carbon change out												
1/8/96	changed out three carbon beds, #1, #2, #3			two carbon beds in-line									
1/8/96		70		151.2	105.4	0	480	28.72	2,517.0				
1/16/96	A-INF	70		142.8	62.3	0	180	7.50	2,524.5	< 0.1	< 0.000	< 42.0	
	A-EFF									< 0.1			< 0.0013
1/30/96		70		147	50.4	0	230	37.28	2,561.8				
2/14/96	A-INF	72		147	39.7	0	< 10	< 0.49	2,562.3	0.16	0.049	< 42.0	
	A-EFF						< 10			< 0.1			< 0.0013
2/27/96		70		136.5	1	0	5	1.20	2,563.5				
3/12/96	A-INF	70		136.5	2.2	0	< 10	< 1.25	2,564.8	< 0.1	< 0.045	< 42.1	
	A-EFF						< 10			< 0.1			< 0.0012
3/25/96	A-INF	70		147	2.4	0	< 10	< 1.65	2,566.4	< 0.1	< 0.017	< 42.1	
	A-EFF						< 10			< 0.1			< 0.0013
3/25/96	System shutdown to install Thermtech VAC-25 thermal/catalytic oxidizer												
8/5/96	Start-up system utilizing Thermtech VAC-25 thermal/catalytic oxidizer												
8/15/96	A-INF			110			410			4.7			
	A-EFF						< 10			< 0.05			< 0.0005
8/29/96				42	45.8	1.1	194	28.84	2,595.2				
9/6/96	A-INF			42			150	5.19	2,600.4	< 0.1	< 0.360	< 42.5	
	A-EFF						< 10			< 0.1			< 0.0004
9/9/96				42	96	4.4	406	3.15	2,603.6				
9/24/96				44.1	141	5.1	597	29.07	2,632.7				
10/3/96	A-INF			42			1300	32.98	2,665.6	< 1	< 0.056	< 42.5	
	A-EFF						< 10			< 0.1			< 0.0004
10/9/96				42	173	4.5	732	22.98	2,688.6				
10/14/96				44.1	105	4.4	444	11.37	2,700.0				
10/21/96				42	89.2	4.5	378	11.12	2,711.1				
10/30/96				42	58.3	0.7	247	10.59	2,721.7				
11/6/96	System down, unable to restart due to reset failure												
1/17/97	Replaced Thermalcouple, restarted unit												
1/31/97	A-INF			10.5			< 10	0.13	2,721.8	0.14	0.002	< 42.5	
	A-EFF						< 10			< 0.05			< 0.0000
2/6/97	A-INF			42			86	0.68	2,722.5	2.2	0.017	< 42.5	
	A-EFF						< 10			< 0.10			< 0.0004
2/14/97				42	25	2	106	2.89	2,725.4				

TABLE 2
CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR
SOIL VAPOR EXTRACTION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

DATE	SAMPLE ID	TEMP deg F	PRESS in H2O	AIR FLOW cu ft/min	HC Inf ppmv	HC Eff ppmv	HC Inf Conc* mg/cu M	LB HC for Period	LB HC Cumulative	Benzene Inf Conc* mg/cu M	LB Benzene per Period	LB Benzene Cumulative	LB Benzene Emitted per Day
2/18/97				42	95	0.8	402	3.83	2,729.2				
2/28/97				42	53	0	224	11.81	2,741.0				
3/5/97	A-INF			42			210	4.09	2,745.1	< 0.10	< 0.117	< 42.6	
	A-EFF						< 10			< 0.10			< 0.0004
3/12/97				50.4	62	0.7	262						
3/19/97				52.5	33	1	140						
3/26/97				50.4	35	1	148						
4/2/97	A-INF			52.5			170	22.56	2,767.7	4.0	< 0.243	< 42.9	
	A-EFF						< 10			< 0.10			< 0.0005
4/9/97				52.5	40	1	169						
4/16/97				52.5	58	3	245						
4/23/97				52.5	30	1	127						
4/30/97				52.5	30	2	127						
5/8/97	A-INF			46.2			340	40.67	2,808.4	4.8	0.702	< 43.6	
	A-EFF						< 10			< 0.10			< 0.0004
5/14/97				46.2	80	1	339						
5/21/97				46.2	20	1	85						
5/28/97				42	42	0	178						
6/4/97	A-INF			42			360	37.41	2,845.8	2.9	0.411	< 44.0	
	A-EFF						< 10			< 0.10			< 0.0004
6/11/97				42	40	0	169						
6/18/97				37.8	38	0	161						
6/25/97				39.9	36	0	152						
7/2/97	A-INF			39.9			350	36.54	2,882.3	5.4	0.427	< 44.4	
	A-EFF						< 10			< 0.10			< 0.0004
7/9/97				48.3	29.4	0	124						
7/18/97				58.8	14.7	0	62						
7/22/97				58.8	54.2	0	229						
7/30/97				52.5	36.1	0	153						
8/7/97	A-INF			52.5			160	38.07	2,920.4	< 0.50	< 0.440	< 44.9	
	A-EFF						13			< 0.10			< 0.0005
8/11/97				52.5	19.1	0	81						
8/20/97				39.9	13.1	0	55						
8/27/97				37.8	20.0	0	85						
9/3/97	A-INF			37.8			400	30.64	2,951.0	< 1.0	< 0.082	< 44.9	
	A-EFF						< 10			< 0.10			< 0.0003
9/10/97				29.4	800	4.0	3386						
9/17/97				37.8	131	1.1	554						
9/24/97				42	40	0	169						
10/8/97	A-INF			42			200	37.61	2,988.6	3.1	0.257	< 45.2	
	A-EFF						< 10			< 0.10			< 0.0004
10/15/97				46.2	50	0.9	212						
10/22/97				42	50	1.5	212						
10/30/97				37.8	30	0	127						
11/5/97				39.9	65	7.6	275						
11/12/97	A-INF			42			880	71.25	3,059.9	< 0.10	< 0.211	< 45.4	
	A-EFF						< 10			< 0.10			< 0.0004
11/20/97				37.8	33	3.2	138						
11/25/97				29.4	56	3.0	237						
12/3/97	A-INF			52.5			NA			NA	NA	NA	
	A-EFF						< 10			< 0.10			< 0.0005
12/10/97				42	19	0.5	80						

TABLE 2
CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR
SOIL VAPOR EXTRACTION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

DATE	SAMPLE ID	TEMP deg F	PRESS in H2O	AIR FLOW cu ft/min	HC Inf ppmv	HC Eff ppmv	HC Inf Conc* mg/cu M	LB HC for Period	LB HC Cumulative	Benzene Inf Conc* mg/cu M	LB Benzene per Period	LB Benzene Cumulative	LB Benzene Emitted per Day
12/17/97				46.2	16	0.6	68						
12/23/97				46.2	13	0.0	55						
12/29/97	A-INF			42			51	82.48	3,142.3	< 0.10	< 0.018	< 45.4	
	A-EFF						< 10			< 0.10			< 0.0004

Notes:

A-INF	= Air Influent	A-INF1	= Air Influent before stripper	HC	= Hydrocarbon
A-INT	= Air Intermediate	A-INF2	= Air Influent after stripper	ug/l	= micrograms per liter
A-EFF	= Air Effluent			mg/cuM	= milligrams per cubic meter
NA	= Not Analyzed			lb	= pounds
cu. ft/min	= cubic feet per minute			acfm	= actual cubic feet per minute
ppmv	= parts per million by volume			<	= less than the laboratory method detection limit

*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 C)

TABLE 3
OPERATION AND PERFORMANCE DATA FOR
GROUNDWATER REMEDIATION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Revised 1/27/98

Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data						TPHg Removed		Benzene Removed	
				TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]	Per Period [lb]	Cumlative [lb]	Per Period [lb]	Cumlative [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	0.0076				
1/10/95	--	--	--										
1/11/95	795	398	--	--	--	--	--	--	--				
1/13/95	1065	135	System shut down pending EBMUD arsenic revision (discharge limit of 0.0012 ppm)										
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	--	--	--	--	--	--	--				
3/7/95	1065	0	EBMUD arsenic revision (discharge limit of 0.05 ppm)										
3/13/95	10800	1623	W-INF	110	7.4	0.5	0.53	6	NA	0.1581	0.1581	0.0287	0.0287
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	<0.005				
3/21/95	11660	108	W-INF	<50	4.5	<0.5	<0.5	5.5	NA	0.0006	0.1587	0.0000	0.0288
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	0.0059				
			System shut down - 55-gallon liquid phase carbon canister (leak)										
3/30/95	11760	11	Replaced one 55-gallon liquid phase carbon canister (leak)										
4/4/95	11760		Replaced one 55-gallon liquid phase carbon canister (leak) - Started system										
4/4/95	12660	180	W-INF	220	66	11	4.8	16	NA	0.0011	0.1598	0.0003	0.0291
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	0.0096				
4/12/95	53200	5068	W-INF	770	110	19	<5.0	160	NA	0.1674	0.3273	0.0298	0.0588
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	<0.005				
4/19/95	73710	2930	W-INF	400	47	5.4	<0.5	40	NA	0.1001	0.4274	0.0134	0.0723
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	0.0055				
4/26/95	82820	1301	W-INF	1500	190	44	12	150	NA	0.0722	0.4996	0.0090	0.0813
			W-INT	200	31	3.2	<0.5	15	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	0.008				
5/9/95	83750	72	Replaced two 55-gallon liquid phase carbon canisters (leaks)										
5/26/95	97840	829	W-INF	680	210	16	5.8	28	NA	0.1366	0.6362	0.0251	0.1063
			W-INT	<50	0.94	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				

TABLE 3
OPERATION AND PERFORMANCE DATA FOR
GROUNDWATER REMEDIATION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]	TPHg Removed Per Period [lb]	TPHg Removed Cumlative [lb]	Benzene Removed Per Period [lb]	Benzene Removed Cumlative [lb]
6/6/95			Added two 55-gallon liquid phase carbon canisters in series										
6/6/95			Replaced one 55-gallon liquid phase carbon canister (leak)										
6/8/95			W-INF	2800	660	300	54	340	NA				
			W-INT1	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-INT2	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF1	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF2	<50	<0.5	<0.5	<0.5	<0.5	NA				
6/27/95	125010	849	W-INF1	4500	1700	99	35	220	NA	0.5871	1.2233	0.2165	0.3228
			W-INF2	810	420	20	7.9	58	NA				
			W-INT1	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-INT2	<50	0.53	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF2	<50	<0.5	<0.5	<0.5	<0.5	NA				
7/10/95	131370	489	Replaced two 55-gallon liquid phase carbon canisters										
7/11/95	131690	320	W-INF1	1600	530	15	<10	59	NA	0.1700	1.3933	0.0621	0.3850
			W-INF2	630	270	7.0	<5.0	25	NA				
			W-INT1	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-INT2	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	0.041				
			Additional Analyses: ND Purgeable Volatile Organics, ND Priority Pollutant Metals, except for 12 ppb nickel and 8.0 ppb zinc										
7/25/95	141550	704	System down pending results of air samples										
7/28/95			System Down - Could not Restart										
7/31/95			Restart System										
8/15/95			System Down - Remove hydrocarbon vapor detector and send to manufacturer for calibration										
9/11/95			Replaced hydrocarbon vapor detector - Restarted System										
9/13/95			System Down - hydrocarbon vapor detector shut down										
9/18/95			Restart System										
9/18/95	148550	244	W-INF1	1900	590	33	16	120	NA	0.2462	1.6395	0.0788	0.4637
			W-INF2	490	150	7.6	3.1	30	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
9/20/95			System Down - hydrocarbon vapor detector shut down										
9/25/95			Restart System										
9/28/95			System Down - hydrocarbon vapor detector shut down										

TABLE 3
OPERATION AND PERFORMANCE DATA FOR
GROUNDWATER REMEDIATION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data						TPHg Removed		Benzene Removed	
				TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]	Per Period [lb]	Cumlative [lb]	Per Period [lb]	Cumlative [lb]
10/13/95	151380	113	W-INF1	4900	1400	310	120	480	NA	0.0803	1.7197	0.0235	0.4872
			W-INF2	780	230	49	15	72	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	0.0079				
			Additional Analyses: ND Purgeable Volatile Organics										
10/26/95	154143	213											
11/6/95	157906	342											
11/20/95	159664	126	W-INF1	630	140	<5.0	6.9	22	NA	0.1911	1.9108	0.0532	0.5404
			W-INF2	230	36	1.6	2.2	7.6	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
11/27/95			System Down										
11/29/95	160361	77	Restart System										
12/4/95	161442	216											
12/18/95	168304	490	W-INF1	8900	1100	240	130	2200	NA	0.3435	2.2543	0.0447	0.5851
			W-INF2	3900	380	85	60	890	NA				
			W-INT	<50	1.3	<0.5	<0.5	5.1	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
1/2/96	171770	231											
1/8/96	173707	323											
1/16/96	178573	608	W-INF	490	53	1.8	3.9	35	NA	0.4023	2.6566	0.0494	0.6345
			W-INF2	150	8.1	<0.5	0.61	6.8	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
1/30/96	190030	818											
2/14/96	202610	839	W-INF1	840	220	25	<2.5	36	NA	0.1334	2.7900	0.0274	0.6619
			W-INF2	410	96	10	1.1	23	NA				
			W-INT	<50	0.58	1.8	<0.5	2.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
2/27/96	216100	1038											
3/12/96	SYSTEM DOWN UPON ARRIVAL												
3/12/96	216590	35	W-INF1	1700	410	110	26	130	NA	0.1481	2.9381	0.0367	0.6986
			W-INF2	420	94	24	5.9	33	NA				
			W-INT	<50	0.53	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				

TABLE 3
OPERATION AND PERFORMANCE DATA FOR
GROUNDWATER REMEDIATION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]	TPHg Removed Per Period [lb]	TPHg Removed Cumlative [lb]	Benzene Removed Per Period [lb]	Benzene Removed Cumlative [lb]
3/25/96	217460	67	W-INF1	100	6.6	<0.5	<0.5	7	NA	0.0065	2.9446	0.0015	0.7002
			W-INF2	<50	3.9	<0.5	<0.5	1.5	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
3/25/96	System shutdown, removal of blower/carbon to thermal oxidizer												
7/22/96	Start-up remediation system												
7/22/96	219802	20	W-INF1	3100	330	53	180	630	NA	0.0313	2.9759	0.0033	0.7034
			W-INF2	2500	330	41	140	480	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
8/1/96	System down on arrival, unable to obtain emission flow rate and samples. Notified BAAQMD												
8/1/96	247305	2750											
8/9/96			W-INF1	1500	550	6.0	12	69	NA				
			W-INF2	240	71	0.91	1.3	9.2	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
8/15/96	252600	378											
8/29/96	256508	279											
9/6/96	258828	290	W-INF1	<50	<0.5	<0.5	<0.5	<0.5	NA	0.5128	3.4887	0.0538	0.7573
			W-INF2	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
9/20/96	260063	88											
9/24/96	262422	590											
10/3/96	263150	81											
10/14/96	263232	7	System down, air compressor, unable to obtain samples. Notified EBMUD										
1/2/97	263232		Replaced compressor, restarted unit										
1/31/97	290045	925	W-INF	5,500	1,700	580	120	740	NA	0.6208	4.1095	0.1902	0.9475
			W-INT1	190	39	12	2.1	13	NA				
			W-INT2	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
2/6/97	313800	3959	W-INF1	5,100	910	160	45	910	NA	1.0504	5.1600	0.2586	1.2061
			W-INT2	570	62	12	2.9	86	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
2/14/97	323820	1253											
2/18/97	327856	1009											
2/28/97	335480	762											

TABLE 3
OPERATION AND PERFORMANCE DATA FOR
GROUNDWATER REMEDIATION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data						TPHg Removed		Benzene Removed	
				TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]	Per Period [lb]	Cumlative [lb]	Per Period [lb]	Cumlative [lb]
3/5/97	340178	940	W-INF1	980	100	5.0	2.1	54	NA	0.6690	5.8290	0.1111	1.3172
			W-INF2	<50	0.81	<0.5	<0.5	<0.5	NA				
			W-INT1	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
3/12/97	344977	686											
3/19/97	346176	171											
3/26/97	346927	107											
4/2/97	351729	686	W-INF	430	120	1.8	5.3	19	NA	0.0679	5.8969	0.0106	1.3278
			W-INT1	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
4/9/97	356009	611											
4/16/97	358700	384											
4/23/97			System down on arrival										
4/30/97	361241	182											
5/8/97	365440	525											
5/14/97	368270	472	System down, bad float on air stripper										
5/21/97	370444	311	W-INF	1,300	360	<5.0	16	21	NA	0.1351	6.0320	0.0375	1.3653
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
			System down, bad float on air stripper										
5/28/97	372219	254	System down, bad float on air stripper										
6/4/97			Replaced float, restarted system										
6/4/97	375230	430	W-INF1	1,600	510	5.8	17	16	NA	0.0579	6.0899	0.0174	1.3827
			W-INF2	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
6/11/97	378550	474	System down, faulty transfer pump										
7/22/97			Restarted system										
7/22/97	379120	14	W-INF1	1,300	520	6.2	6.2	34	NA	0.0466	6.1365	0.0165	1.3992
			W-INF2	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
7/29/97	379315	28											
8/7/97	385510	688	W-INF1	1,400	400	13	21	52	NA	0.0720	6.2085	0.0245	1.4238
			W-INF2	<50	2.0	<0.5	<0.5	<0.5	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
8/13/97	388390	480											

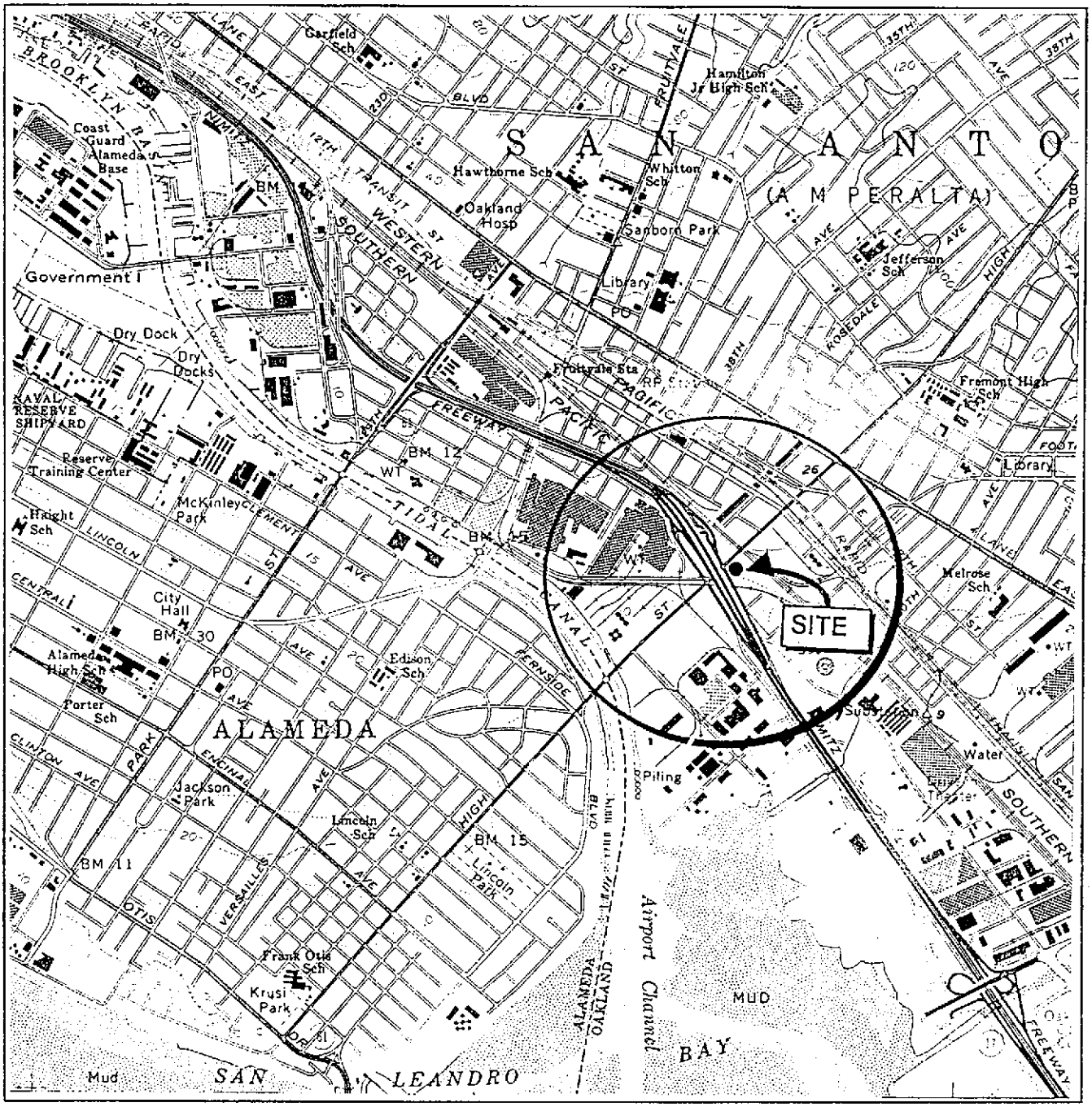
TABLE 3
OPERATION AND PERFORMANCE DATA FOR
GROUNDWATER REMEDIATION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]	TPHg Removed Per Period [lb]	TPHg Removed Cumlative [lb]	Benzene Removed Per Period [lb]	Benzene Removed Cumlative [lb]
8/20/97	391380	427											
8/27/97	393545	309											
9/3/97	395744	314											
9/10/97	397402	237	W-INF1	<50	<0.5	<0.5	<0.5	<0.5	NA	0.0719	6.2804	0.0199	1.4436
			W-INF2	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
9/17/97	399232	261											
9/24/97	400746	216											
10/8/97	403527	199	W-INF1	<50	0.53	<0.5	<0.5	<0.5	NA	0.0026	6.2829	0.00003	1.4437
			W-INF2	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
10/15/97	403935	58											
10/22/97	406161	318											
10/30/97	407795	204											
11/5/97	408668	146											
11/12/97	410116	207											
11/20/97	413391	409											
11/25/97	415500	422											
12/2/97	421667	881	W-INF1	660	180	10	8.2	13	NA	0.0537	6.3367	0.0137	1.4573
			W-INF2	410	110	5.3	5.3	8.9	NA				
			W-INT1	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-INT2	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
12/3/97	422595	928											
12/10/97	429205	944											
12/17/97	436179	996											
12/23/97	441533	892											
12/29/97	445796	711											

W-INF = W-INF1 = water influent before stripper or before tank
W-INF2 = water influent after stripper or after filters
W-INT = W-INT1 W-INT2 = water intermediate
W-EFF = W-EFF1 W-EFF2 = water effluent
TPHg = Total petroleum hydrocarbons as gasoline
gpd = gallons per day
gal = gallons

B = Benzene
T = Toluene
E = Ethylbenzene
X = Total Xylenes
< = less than the laboratory method detection limit
ug/L = micrograms per liter
mg/L = milligrams per Liter

NA = Not applicable
NS = Not sampled
ND = Not detected



Fn 20100001

N

APPROXIMATE SCALE

0 1/2 1

MILE

SOURCE: U.S.G.S. 7.5 minute topographic quadrangle map Oakland East, California (Photorevised 1990)

ERI ENVIRONMENTAL RESOLUTIONS, INC.

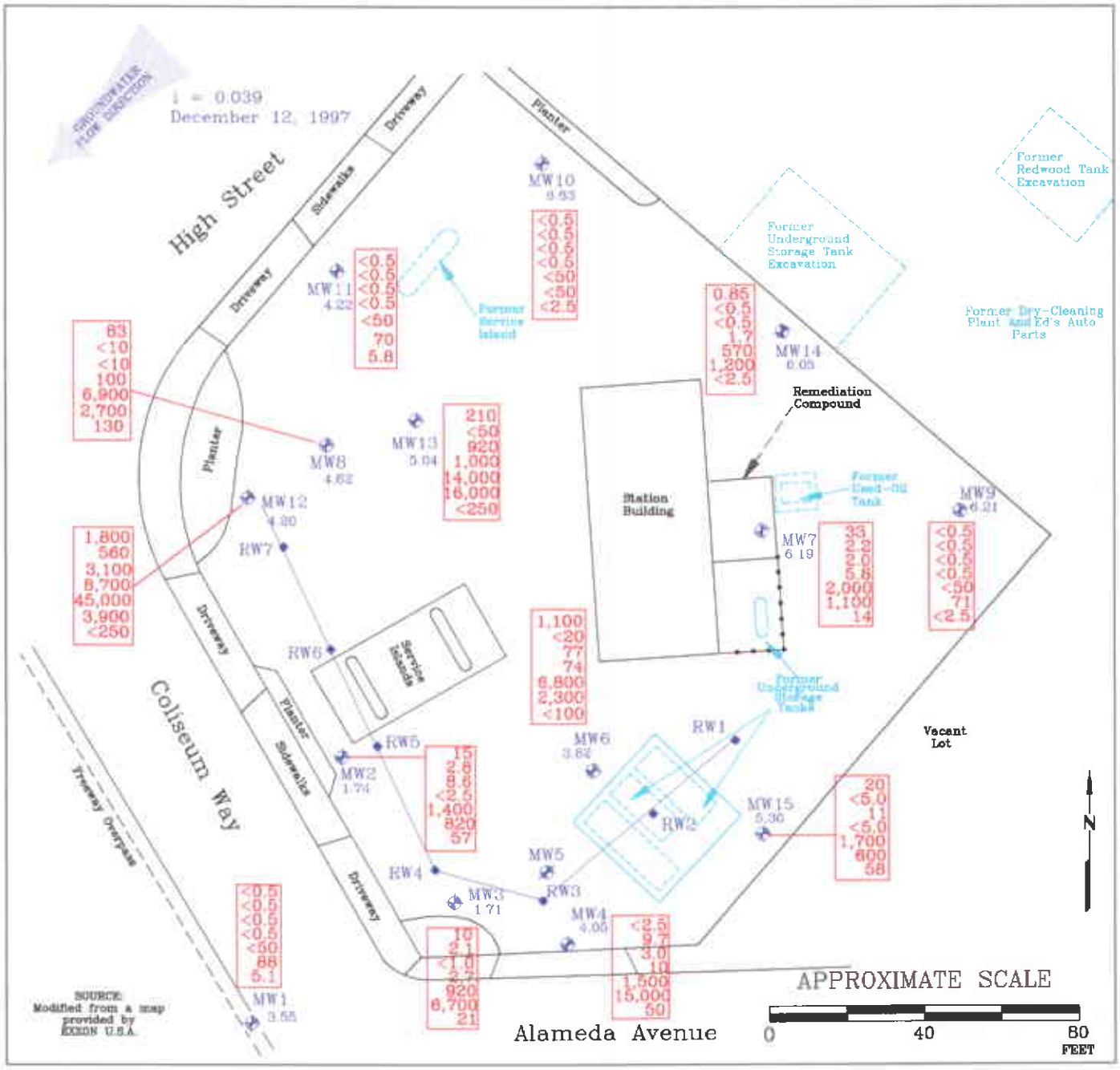
PROJECT ERI 2010

SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7-3006
720 High Street
Oakland, California

PLATE

1



FN 20100002

EXPLANATION

MW15 5.30 ⊕ Groundwater Monitoring Well
Groundwater Elevation

MW5 ⊕ Groundwater Monitoring Well (Destroyed)

RW7 • Recovery Monitoring Well

—— Interceptor Trench

Groundwater Concentrations in ug/L
Sampled December 12, 1997

1,800	Benzene
560	Toluene
3,100	Ethylbenzene
8,700	Xylene
45,000	Total Petroleum Hydrocarbons as gasoline
3,900	Total Extractable Petroleum Hydrocarbons as diesel
<250	Methyl tertiary-butyl ether
<	Less Than the Stated Laboratory Detection Level
ug/L	Micrograms per Liter

ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

FORMER EXXON SERVICE STATION 7-3006
720 High Street
Oakland, California

PROJECT NO.
2010

PLATE
2

January 28, 1997

ATTACHMENT A

GROUNDWATER SAMPLING PROTOCOL

GROUNDWATER SAMPLING PROTOCOL

The static water level and separate phase product level, if present, in each well that contained water and/or separate phase product are measured with a MMC Interface Probe, which is accurate to the nearest 0.01 foot. To calculate groundwater elevations and evaluate groundwater gradient, depth to water (DTW) levels are subtracted from wellhead elevations.

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

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

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

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

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

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

ATTACHMENT B

LABORATORY ANALYSIS REPORTS AND CHAIN OF CUSTODY RECORDS

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-8-MW10	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/10/97
Attention: Marc Briggs	Lab Number: 9712302-01	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

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

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

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Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-8-MW10	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712302-01	Reported: 12/18/97

QC Batch Number: GC121297BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	87

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW11	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/10/97
Attention: Marc Briggs	Lab Number: 9712302-02	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	70
Chromatogram Pattern: **Unidentified HC**		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	87

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
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	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW11	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712302-02	Reported: 12/18/97

QC Batch Number: GC121297BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	**2.5**	**5.8**
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

Richard Herling
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	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-8-MW1	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712302-03	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	88
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-8-MW1	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/15/97
Attention: Marc Briggs	Lab Number: 9712302-03	Reported: 12/18/97

QC Batch Number: GC121597BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	**2.5**	**5.1**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	102

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-14-MW9	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712302-04	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	71
Chromatogram Pattern: **Unidentified HC**		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-14-MW9	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712302-04	Reported: 12/18/97

QC Batch Number: GC121297BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	82

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-11-MW14	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712302-05	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	**1200**
Chromatogram Pattern: **Unidentified HC**		C9-C24

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

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-11-MW14	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/15/97
Attention: Marc Briggs	Lab Number: 9712302-05	Reported: 12/18/97

QC Batch Number: GC121597BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**570**
Methyl t-Butyl Ether	2.5	N.D.
Benzene	**0.50**	**0.85**
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	**0.50**	**1.7**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-9-MW15	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712302-06	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	600
Chromatogram Pattern:		
Unidentified HC		C9-C24

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

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-9-MW15	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712302-06	Reported: 12/18/97

QC Batch Number: GC121297BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**500**	**1700**
Methyl t-Butyl Ether	**25**	**58**
Benzene	**5.0**	**20**
Toluene	5.0	N.D.
Ethyl Benzene	**5.0**	**11**
Xylenes (Total)	5.0	N.D.
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	86

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW7	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712302-07	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

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

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

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW7	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/15/97
Attention: Marc Briggs	Lab Number: 9712302-07	Reported: 12/18/97

QC Batch Number: GC121597BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**100**	**2000**
Methyl t-Butyl Ether	**5.0**	**14**
Benzene	**1.0**	**33**
Toluene	**1.0**	**2.2**
Ethyl Benzene	**1.0**	**2.0**
Xylenes (Total)	**1.0**	**5.8**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-22-MW6	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712302-08	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	2300
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	99

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-22-MW6	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712302-08	Reported: 12/18/97

QC Batch Number: GC121297BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	2000	6800
Methyl t-Butyl Ether	100	N.D.
Benzene	20	1100
Toluene	20	N.D.
Ethyl Benzene	20	77
Xylenes (Total)	20	74
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	81

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-33-MW8	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712302-09	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	2700
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	92

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-33-MW8	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712302-09	Reported: 12/18/97

QC Batch Number: GC121297BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**1000**	**6900**
Methyl t-Butyl Ether	**50**	**130**
Benzene	**10**	**83**
Toluene	10	N.D.
Ethyl Benzene	10	N.D.
Xylenes (Total)	**10**	**100**
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

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-12-MW2	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712302-10	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	820
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	98

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-12-MW2	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/15/97
Attention: Marc Briggs	Lab Number: 9712302-10	Reported: 12/18/97

QC Batch Number: GC121597BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**250**	**1400**
Methyl t-Butyl Ether	**12**	**57**
Benzene	**2.5**	**15**
Toluene	**2.5**	**2.8**
Ethyl Benzene	**2.5**	**8.6**
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	105

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-15-MW3	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/13/97
Attention: Marc Briggs	Lab Number: 9712302-11	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	500	6700
Chromatogram Pattern: **Weathered Diesel**		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	117

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-15-MW3	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/15/97
Attention: Marc Briggs	Lab Number: 9712302-11	Reported: 12/18/97

QC Batch Number: GC121597BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**100**	**920**
Methyl t-Butyl Ether	**5.0**	**21**
Benzene	**1.0**	**10**
Toluene	**1.0**	**2.1**
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	**1.0**	**2.7**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	98

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-24-MW4	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/08/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/13/97
Attention: Marc Briggs	Lab Number: 9712462-12	Reported: 12/18/97

QC Batch Number: GC1208970HBPEXB
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	2500	15000
Chromatogram Pattern:		
Weathered Diesel		C9-C24

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

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-24-MW4	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/16/97
Attention: Marc Briggs	Lab Number: 9712462-12	Reported: 12/18/97

QC Batch Number: GC121697BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**250**	**1500**
Methyl t-Butyl Ether	**12**	**50**
Benzene	2.5	N.D.
Toluene	**2.5**	**9.7**
Ethyl Benzene	**2.5**	**3.0**
Xylenes (Total)	**2.5**	**10**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	120

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-8-MW12	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/09/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/10/97
Attention: Marc Briggs	Lab Number: 9712462-13	Reported: 12/18/97

QC Batch Number: GC1209970HBPEXA
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	100	3900
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	95

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-8-MW12	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712462-13	Reported: 12/18/97

QC Batch Number: GC121297BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	45000
Methyl t-Butyl Ether	250	N.D.
Benzene	50	1800
Toluene	50	560
Ethyl Benzene	50	3100
Xylenes (Total)	50	8700
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	124

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-9-MW13	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 12/09/97
	Analysis Method: EPA 8015 Mod	Analyzed: 12/10/97
Attention: Marc Briggs	Lab Number: 9712462-14	Reported: 12/18/97

QC Batch Number: GC1209970HBPEXA
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	500	16000
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	100

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

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Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-9-MW13	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/12/97
Attention: Marc Briggs	Lab Number: 9712462-14	Reported: 12/18/97

QC Batch Number: GC121297BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**5000**	**14000**
Methyl t-Butyl Ether	250	N.D.
Benzene	**50**	**210**
Toluene	50	N.D.
Ethyl Benzene	**50**	**920**
Xylenes (Total)	**50**	**1000**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	115

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
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	Client Project ID:	Exxon 7-3006, 201013X	
74 Digital Drive, Ste. 6	Matrix:	Liquid	
Novato, CA 94949			
Attention: Marc Briggs	Work Order #:	9712302 01-11	Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1208970HBPEXB
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3520
Analyst:	A. Porter
MS/MSD #:	BLK120897
Sample Conc.:	N.D.
Prepared Date:	12/8/97
Analyzed Date:	12/9/97
Instrument I.D.#:	GCHP5B
Conc. Spiked:	1000 µg/L
Result:	690
MS % Recovery:	69
Dup. Result:	700
MSD % Recov.:	70
RPD:	1.4
RPD Limit:	0-50

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

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 201013X
Matrix: Liquid
Work Order #: 9712462 12
Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1208970HBPEXB
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3520
Analyst:	A. Porter
MS/MSD #:	BLK120897
Sample Conc.:	N.D.
Prepared Date:	12/8/97
Analyzed Date:	12/9/97
Instrument I.D.#:	GCHP5B
Conc. Spiked:	1000 µg/L
Result:	690
MS % Recovery:	69
Dup. Result:	700
MSD % Recov.:	70
RPD:	1.4
RPD Limit:	0-50

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

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

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Environmental Resolutions	Client Project ID:	Exxon 7-3006, 201013X	
74 Digital Drive, Ste. 6	Matrix:	Liquid	
Novato, CA 94949			
Attention: Marc Briggs	Work Order #:	9712462 13-14	Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1209970HBPEXA
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3510
Analyst:	G. Fish
MS/MSD #:	971246213
Sample Conc.:	3900
Prepared Date:	12/9/97
Analyzed Date:	12/10/97
Instrument I.D.#:	GCHP5B
Conc. Spiked:	1000 µg/L
Result:	4700
MS % Recovery:	80
Dup. Result:	4600
MSD % Recov.:	70
RPD:	2.2
RPD Limit:	0-50

LCS #:	BLK120997
Prepared Date:	12/9/97
Analyzed Date:	12/10/97
Instrument I.D.#:	GCHP5A
Conc. Spiked:	1000 µg/L
LCS Result:	880
LCS % Recov.:	88

MS/MSD	50-150
LCS	60-140
Control Limits	

SEQUOIA ANALYTICAL

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Environmental Resolutions	Client Project ID:	Exxon 7-3006, 201013X	
74 Digital Drive, Ste. 6	Matrix:	Liquid	
Novato, CA 94949			
Attention: Marc Briggs	Work Order #:	9712302 01, 02, 04, 06, 08, 09	Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC121297BTEX03A	GC121297BTEX03A	GC121297BTEX03A	GC121297BTEX03A	GC121297BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab
MS/MSD #:	971214305	971214305	971214305	971214305	971214305
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/12/97	12/12/97	12/12/97	12/12/97	12/12/97
Analyzed Date:	12/12/97	12/12/97	12/12/97	12/12/97	12/12/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	8.4	8.4	8.5	24	74
MS % Recovery:	84	84	85	80	123
Dup. Result:	8.3	8.1	8.3	23	72
MSD % Recov.:	83	81	83	77	120
RPD:	1.2	3.6	2.4	4.3	2.7
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK121297	BLK121297	BLK121297	BLK121297	BLK121297
Prepared Date:	12/12/97	12/12/97	12/12/97	12/12/97	12/12/97
Analyzed Date:	12/12/97	12/12/97	12/12/97	12/12/97	12/12/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	7.4	7.5	7.5	21	65
LCS % Recov.:	74	75	75	70	108
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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Project Manager

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Environmental Resolutions	Client Project ID:	Exxon 7-3006, 201013X	
74 Digital Drive, Ste. 6	Matrix:	Liquid	
Novato, CA 94949			
Attention: Marc Briggs	Work Order #:	9712302 03	Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC121597BTEX02A	GC121597BTEX02A	GC121597BTEX02A	GC121597BTEX02A	GC121597BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab
MS/MSD #:	971266301	971266301	971266301	971266301	971266301
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Analyzed Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.8	9.8	10	31	62
MS % Recovery:	98	98	100	103	103
Dup. Result:	8.8	8.7	8.9	27	56
MSD % Recov.:	88	87	89	90	93
RPD:	11	12	12	14	10
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK121597	BLK121597	BLK121597	BLK121597	BLK121597
Prepared Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Analyzed Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.7	9.5	9.8	30	61
LCS % Recov.:	97	95	98	100	102
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

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Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 201013X
Matrix: Liquid
Work Order #: 9712302 05, 07, 10

Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC121597BTEX03A	GC121597BTEX03A	GC121597BTEX03A	GC121597BTEX03A	GC121597BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab
MS/MSD #:	971266301	971266301	971266301	971266301	971266301
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Analyzed Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	8.5	8.6	8.5	24	74
MS % Recovery:	85	86	85	80	123
Dup. Result:	8.2	8.3	8.3	23	72
MSD % Recov.:	82	83	83	77	120
RPD:	3.6	3.6	2.4	4.3	2.7
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK121597	BLK121597	BLK121597	BLK121597	BLK121597
Prepared Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Analyzed Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	7.4	7.5	7.5	21	65
LCS % Recov.:	74	75	75	70	108
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

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Environmental Resolutions	Client Project ID:	Exxon 7-3006, 201013X	
74 Digital Drive, Ste. 6	Matrix:	Liquid	
Novato, CA 94949			
Attention: Marc Briggs	Work Order #:	9712302 11	Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC121597BTEX21A	GC121597BTEX21A	GC121597BTEX21A	GC121597BTEX21A	GC121597BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab	A. Mirfaftab
MS/MSD #:	971266301	971266301	971266301	971266301	971266301
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Analyzed Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.6	9.8	10	29	57
MS % Recovery:	96	98	100	97	95
Dup. Result:	8.8	9.1	9.9	27	54
MSD % Recov.:	88	91	99	90	90
RPD:	8.7	7.4	1.0	7.1	5.4
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK121597	BLK121597	BLK121597	BLK121597	BLK121597
Prepared Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Analyzed Date:	12/15/97	12/15/97	12/15/97	12/15/97	12/15/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.7	10	10	30	57
LCS % Recov.:	97	100	10	100	95
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 201013X
Matrix: Liquid
Work Order #: 9712462 12

Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC121697BTEX02A	GC121697BTEX02A	GC121697BTEX02A	GC121697BTEX02A	GC121697BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	971277503	971277503	971277503	971277503	971277503
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/16/97	12/16/97	12/16/97	12/16/97	12/16/97
Analyzed Date:	12/16/97	12/16/97	12/16/97	12/16/97	12/16/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.8	9.8	9.9	31	62
MS % Recovery:	98	98	99	103	103
Dup. Result:	10	10	10	32	65
MSD % Recov.:	100	100	100	107	108
RPD:	2.0	2.0	1.0	3.2	4.7
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK121697	BLK121697	BLK121697	BLK121697	BLK121697
Prepared Date:	12/16/97	12/16/97	12/16/97	12/16/97	12/16/97
Analyzed Date:	12/16/97	12/16/97	12/16/97	12/16/97	12/16/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.4	9.3	9.5	29	60
LCS % Recov.:	94	93	95	97	100
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 201013X
Matrix: Liquid
Work Order #: 9712462 13, 14

Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC121297BTEX02A	GC121297BTEX02A	GC121297BTEX02A	GC121297BTEX02A	GC121297BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	971214305	971214305	971214305	971214305	971214305
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/12/97	12/12/97	12/12/97	12/12/97	12/12/97
Analyzed Date:	12/12/97	12/12/97	12/12/97	12/12/97	12/12/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	10	10	32	64
MS % Recovery:	100	100	100	107	107
Dup. Result:	9.1	9.0	9.2	28	58
MSD % Recov.:	91	90	92	93	97
RPD:	9.4	11	8.3	13	9.8
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK121297	BLK121297	BLK121297	BLK121297	BLK121297
Prepared Date:	12/12/97	12/12/97	12/12/97	12/12/97	12/12/97
Analyzed Date:	12/12/97	12/12/97	12/12/97	12/12/97	12/12/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	9.9	10	31	62
LCS % Recov.:	100	99	100	103	103
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
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.

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201013X
Lab Proj. ID: 9712302

Received: 12/03/97
Reported: 12/18/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 42 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

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 2
Address: 74 Digital Drive Suite G Novato Ca 94949			**Site Location:** 720 High Street
Project #: 7-3006	**Consultant Project #:** 201013X		**Consultant Work Release #:** 19432503
Project Contact: Marc Briggs	**Phone #:** 415 382 9105		**Laboratory Work Release #:**
EXXON Contact: Marla Guenster	**Phone #:** 510 246 8776		**EXXON RAS #:** 7-3006
Sampled by (print): Scott Graham	**Sampler's Signature:** Scott Graham		Oakland, Ca
Shipment Method:	**Air Bill #:**		

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☒ Standard (10 day) 971230102 **ANALYSIS REQUIRED** DE 3 1

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	MTBE		Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
W-8 -MW8	12/1/97	1335	Water	HCl ICE	3	1	X			X		
W-10 -MW11	"	1350	"	"	"	2	X			X		
W-8 -MW1	"	1405	"	"	"	3	X			X		
W-14 -MW9	"	1420	"	"	"	4	X			X		
W-11 -MW14	"	1435	"	"	"	5	X			X		
W-9 -MW15	"	1450	"	"	"	6	X			X		
W-10 -MW7	"	1505	"	"	"	7	X			X		
W-22-MW6	"	1520	"	"	"	8	X			X		
W-33-MW8	"	1630	"	"	"	9	X			X		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Scott Graham	12/3/97	1400	[signature] /SA	12/3	1400	
[signature] /SA	12/3/97					
			Tom Dann	12/3	1314	

Pink - Client
Yellow - Sequoia
White - Sequoia

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

EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Consultant's Name: Environmental Resolutions Inc — Page 2 of 4

Address: 74 Digital Dr Suite G Novato Ca 94949 — Site Location: 720 High Street

Project #: 7-3006 — Consultant Project #: 201013x — Consultant Work Release #: 19432503

Project Contact: Marc Briggs — Phone #: 415 382 9105 — Laboratory Work Release #:

EXXON Contact: Marla Guensler — Phone #: 510 246 8776 — EXXON RAS #: 7-3006

Sampled by (print): Scott Graham — Sampler's Signature: Scott Graham — Oakland, Ca

Shipment Method: — Air Bill #:

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☒ Standard (10 day) 971230Y

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	MTBE		Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
W-12-MW2	12/1/97	1540	Water	HCl ICE	3	10	X			X		
W-15-MW3	"	1550	"	"	"	11	X			X		
W-24-MW4	"	1605	"	"	"	12	X			X		
W-8-MW12	"	1615	"	"	"	13	X			X		
W-9-MW13	"	1530	"	"	"	14	X			X		
W-8-MW10	"	1340	"	ICE	2	15		X				
W-10-MW11	"	1355	"	"	"	16		X				
W-8-MW1	"	1410	"	"	"	17		X				
W-14-MW9	"	1425	"	"	"	18		X				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Scott Graham	12/3	1100	[signature] /SA	12/3	1100	
[signature] /SA	12/3					
			Teri Downs	12/3	1314	

White - Sequoia Yellow - Sequoia Pink - Client

DE 3 1 14

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

Page 3 of 4

Consultant's Name: Environmental Resolutions Inc			Site Location: 720 High Street
Address: 74 Digital Dr Suite G Novato Ca. 94949			Consultant Work Release #: 7932503
Project #: 7-3006	Consultant Project #: 201013X		Laboratory Work Release #:
Project Contact: Marc Briggs	Phone #: 415 382 9105		EXXON RAS #: 7-3006
EXXON Contact: Marla Guenslec	Phone #: 510 246 8776		Oakland, Ca
Sampled by (print): Scott Graham	Sampler's Signature: Scott Graham		
Shipment Method:	Air Bill #:		

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☒ Standard (10 day) 47130262

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
W-11-MW14	12/2/97	1440	Water	ICE	2	14 5		X				
W-9-MW15		1455				20 6		X				
W-10-MW7		1510				21 7		X				
W-22-MW6		1525				22 8		X				
W-33-MW8		1535				23 9		X				
W-12-MW2		1545				24 10		X				
W-15-MW3		1555				25 11		X				
W-24-MW4		1610				26 12		X				
W-8-MW12	"	1620	"	"	"	27 13		X				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Scott Graham / SA	12/3	1100	/ SA	12/3	1100	
	12/3					
			J. Downs	12/3	1314	

Pink - Client
Yellow - Sequoia
White - Sequoia

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

EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Page 4 of 4

Consultant's Name: Environmental Resolutions Inc			Site Location: 720 High Street
Address: 74 Digital Dr Suite G Novato Ca 94949			Consultant Work Release #: 19432503
Project #: 7-3006	Consultant Project #: 201013X		Laboratory Work Release #: [redacted]
Project Contact: Mara Briggs	Phone #: 415 382 9105		EXXON RAS #: 7-3006
EXXON Contact: Marla Guenster	Phone #: 510 246 8776		Oakland, Ca
Sampled by (print): Scott Graham	Sampler's Signature: Scott Graham		
Shipment Method:	Air Bill #:		

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☒ Standard (10 day) 97123074 167

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	Bacteria Point count	[redacted]	Temperature: DE 3 1 14 Inbound Seal: Yes No Outbound Seal: Yes No
W-9 -MW3	12/2/97	1535	Water	ICE	2	24 14		X				
W-15-MW3	/	1600	/	/	3					X		48 Hrs TAT
W-8-MW10	/	1342	/	/	3					X		✓ Tuman

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Scott Graham	12/3	1600	[signature] / SA	12/3	1107	
[signature] / SA	12/3					
			Jeri Downs	1314	12/3	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Received: 12/03/97
74 Digital Drive , Suite 6		
Novato, CA 94949	Lab Proj. ID: 9712462	Reported: 12/18/97
Attention: Marc Briggs		

LABORATORY NARRATIVE

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SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 10/08/97
74 Digital Drive , Suite 6	Sample Descript: W-Inf1	Received: 10/09/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/17/97
Attention: Marc Briggs	Lab Number: 9710688-01	Reported: 10/20/97

QC Batch Number: GC101797BTEX01A
Instrument ID: GCHP01

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**	**0.53**
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

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 10/08/97
74 Digital Drive , Suite 6	Sample Descript: W-Inf2	Received: 10/09/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/16/97
Attention: Marc Briggs	Lab Number: 9710688-02	Reported: 10/20/97

QC Batch Number: GC101697BTEX01A
Instrument ID: GCHP01

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	81

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 10/08/97
74 Digital Drive , Suite 6	Sample Descript: W-Int	Received: 10/09/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/16/97
Attention: Marc Briggs	Lab Number: 9710688-03	Reported: 10/20/97

QC Batch Number: GC101697BTEX01A
Instrument ID: GCHP01

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	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 10/08/97
74 Digital Drive , Suite 6	Sample Descript: W-Eff	Received: 10/09/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 10/16/97
Attention: Marc Briggs	Lab Number: 9710688-04	Reported: 10/20/97

QC Batch Number: GC101697BTEX01A
Instrument ID: GCHP01

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	85

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 201011X
Matrix: Liquid
Work Order #: 9710688 01-04

Reported: Oct 21, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC101697BTEX01A	GC101697BTEX01A	GC101697BTEX01A	GC101697BTEX01A	GC101697BTEX01A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	971063304	971063304	971063304	971063304	971063304
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/16/97	10/16/97	10/16/97	10/16/97	10/16/97
Analyzed Date:	10/16/97	10/16/97	10/16/97	10/16/97	10/16/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	7.4	8.2	7.9	23	46
MS % Recovery:	74	82	79	77	77
Dup. Result:	6.4	7.6	75	23	43
MSD % Recov.:	64	76	75	77	72
RPD:	14	7.6	5.2	0.0	6.7
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK101697	BLK101697	BLK101697	BLK101697	BLK101697
Prepared Date:	10/16/97	10/16/97	10/16/97	10/16/97	10/16/97
Analyzed Date:	10/16/97	10/16/97	10/16/97	10/16/97	10/16/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.1	10	10	30	60
LCS % Recov.:	91	100	100	100	100
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
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.

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

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: 74 Digital Drive Suite 6, Novato CA 94949			**Site Location:** 720 High St
Project #: 201011X	**Consultant Project #:** 201011X		**Consultant Work Release #:** 94326503
Project Contact: Marc Briggs	**Phone #:** 415 382 9105		**Laboratory Work Release #:**
EXXON Contact: Maria Gruenstein	**Phone #:** 510 ~~832~~ 246 8668		**EXXON RAS #:** 7-3006
Sampled by (print): Peter Petro	**Sampler's Signature:**		Oakland
Shipment Method:	**Air Bill #:**		

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

ANALYSIS REQUIRED 9710688

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
A-INF	10/8/97		Air	Ice	1		X					
A-Eff			Air	"	1		X					
W-WF1			Water	HCl/Ice	3	01	X					
W-WF2					3	02	X					
W-INT					3	03	X					
W-Eff	"		"	"	3	04	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	10/9/97	11:15		10/9/97	1015	
	10/9/97					
			J. Downs	10/9/97	1235	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Received: 10/09/97
74 Digital Drive , Suite 6		
Novato, CA 94949	Lab Proj. ID: 9710688	Reported: 10/20/97
Attention: Marc Briggs		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 7 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 7-3006	Sampled: 11/20/97
74 Digital Drive , Suite 6	Sample Descript: W-INF-RW2	Received: 11/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/04/97
Attention: Marc Briggs	Lab Number: 9711D27-01	Reported: 12/05/97

QC Batch Number: GC120497BTEX01A
Instrument ID: GCHP1

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**250**	**610**
Benzene	**2.5**	**18**
Toluene	**2.5**	**9.7**
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	**2.5**	**23**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	102

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

RECEIVED
DEC 15 1997

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 7-3006	Sampled: 11/20/97
74 Digital Drive , Suite 6	Sample Descript: W-INF-RW5	Received: 11/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/04/97
Attention: Marc Briggs	Lab Number: 9711D27-02	Reported: 12/05/97

QC Batch Number: GC120497BTEX01A
Instrument ID: GCHP1

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**400**
Benzene	**0.50**	**51**
Toluene	**0.50**	**2.3**
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	**0.50**	**1.7**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	106

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 7-3006
Matrix: Liquid
Work Order #: 9711D27 01, 02

Reported: Dec 10, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC120497BTEX01A	GC120497BTEX01A	GC120497BTEX01A	GC120497BTEX01A	GC120497BTEX01A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini
MS/MSD #:	9711C9702	9711C9702	9711C9702	9711C9702	9711C9702
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/4/97	12/4/97	12/4/97	12/4/97	12/4/97
Analyzed Date:	12/4/97	12/4/97	12/4/97	12/4/97	12/4/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	8.8	8.9	9.0	28	58
MS % Recovery:	88	89	90	93	97
Dup. Result:	8.8	8.9	9.0	28	58
MSD % Recov.:	88	89	90	93	97
RPD:	0.0	0.0	0.0	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK120497	BLK120497	BLK120497	BLK120497	BLK120497
Prepared Date:	12/4/97	12/4/97	12/4/97	12/4/97	12/4/97
Analyzed Date:	12/4/97	12/4/97	12/4/97	12/4/97	12/4/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	8.9	9.0	9.2	28	58
LCS % Recov.:	89	90	92	93	97
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
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.

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 7-3006
Matrix: Liquid
Work Order #: 9711C95 01-04

Reported: Dec 10, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC120497BTEX18A	GC120497BTEX18A	GC120497BTEX18A	GC120497BTEX18A	GC120497BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini
MS/MSD #:	9711C9101	9711C9101	9711C9101	9711C9101	9711C9101
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/4/97	12/4/97	12/4/97	12/4/97	12/4/97
Analyzed Date:	12/4/97	12/4/97	12/4/97	12/4/97	12/4/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	8.8	8.9	9.0	28	61
MS % Recovery:	88	89	90	93	102
Dup. Result:	9.2	9.4	9.3	29	64
MSD % Recov.:	92	94	93	97	107
RPD:	4.4	5.5	3.3	3.5	4.8
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK120497	BLK120497	BLK120497	BLK120497	BLK120497
Prepared Date:	12/4/97	12/4/97	12/4/97	12/4/97	12/4/97
Analyzed Date:	12/4/97	12/4/97	12/4/97	12/4/97	12/4/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	11	11	11	34	73
LCS % Recov.:	110	110	110	113	122
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
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.

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

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

9711027

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC			**Page** 1 **of** 1
Address: 74 DIGITAL DR # 6 NOVATO CA 94949			**Site Location:** 720 HIGH ST
Project #: 2010111X	**Consultant Project #:** 7-3006		**Consultant Work Release #:** 19432503
Project Contact: MARC BRIGGS	**Phone #:** (415) 382-9105		**Laboratory Work Release #:**
EXXON Contact: MARIA GUENSLER	**Phone #:** (510) 246-8776		**EXXON RAS #:** 7-3006
Sampled by (print): KURT DUDLEY	**Sampler's Signature:**		OAKLAND
Shipment Method: COURIER	**Air Bill #:**		10

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

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	ANALYSIS REQUIRED: TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
W-INF RW2	11/20/97	2:30	WATER	HCl/ICE	3	01	X					
W-INF RW5	〃	〃	〃	〃	3 〃	02	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	11/21/97	1035	/ SA	11/21/97		
	11/21/97					
				11/21/97	1210	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 7-3006	Received: 11/21/97
74 Digital Drive , Suite 6		
Novato, CA 94949	Lab Proj. ID: 9711D27	Reported: 12/05/97
Attention: Marc Briggs		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 6 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-Inf 1	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712298-01	Reported: 12/18/97

QC Batch Number: GC121197BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	660
Benzene	2.5	180
Toluene	2.5	10
Ethyl Benzene	2.5	8.2
Xylenes (Total)	2.5	13
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90

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

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SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-Inf 2	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712298-02	Reported: 12/18/97

QC Batch Number: GC121197BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	410
Benzene	2.5	110
Toluene	2.5	5.3
Ethyl Benzene	2.5	5.3
Xylenes (Total)	2.5	8.9
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	87

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-Int 1	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712298-03	Reported: 12/18/97

QC Batch Number: GC121197BTEX18A
Instrument ID: GCHP18

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

Richard Herling
Project Manager

Sequoia Analytical

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404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-Int 2	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712298-04	Reported: 12/18/97

QC Batch Number: GC121197BTEX18A
Instrument ID: GCHP18

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	86

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 12/02/97
74 Digital Drive , Suite 6	Sample Descript: W-Eff	Received: 12/03/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/11/97
Attention: Marc Briggs	Lab Number: 9712298-05	Reported: 12/18/97

QC Batch Number: GC121197BTEX18A
Instrument ID: GCHP18

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

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 201011X
Matrix: Liquid
Work Order #: 9712298 01-05

Reported: Dec 23, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC121197BTEX18A	GC121197BTEX18A	GC121197BTEX18A	GC121197BTEX18A	GC121197BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini	C. DeMartini
MS/MSD #:	971211405	971211405	971211405	971211405	971211405
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/11/97	12/11/97	12/11/97	12/11/97	12/11/97
Analyzed Date:	12/11/97	12/11/97	12/11/97	12/11/97	12/11/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	15	9.1	10	31	73
MS % Recovery:	150	91	100	103	122
Dup. Result:	15	9.0	9.2	30	71
MSD % Recov.:	150	90	92	100	118
RPD:	0.0	1.1	8.3	3.3	2.8
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK121197	BLK121197	BLK121197	BLK121197	BLK121197
Prepared Date:	12/11/97	12/11/97	12/11/97	12/11/97	12/11/97
Analyzed Date:	12/11/97	12/11/97	12/11/97	12/11/97	12/11/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	8.3	9.1	9.4	29	63
LCS % Recov.:	83	91	94	97	105
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
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.

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

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: 74 DIGITAL DR #6 NOVATO CA 94949			**Site Location:** 720 HIGH ST
Project #: 2010 11X	**Consultant Project #:** 7-3006		**Consultant Work Release #:** 194432503
Project Contact: MARC BRIGGS	**Phone #:** (415) 382-9105		**Laboratory Work Release #:**
EXXON Contact: MARLA GUENSLER	**Phone #:** (510) 246-8776		**EXXON RAS #:** 7-3006
Sampled by (print): KURT DUDLEY	**Sampler's Signature:** Kurt Dudley		OAKLAND
Shipment Method: COURIER	**Air Bill #:**		

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☑ Standard (10 day) 97122954

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: DE 3 1 15 Inbound Seal: Yes No Outbound Seal: Yes No
W-INF 1	12/2/97	7:30	WATER	HCl/Ice	3	1	X					
W-INF 2						2	X					
W-INT 1						3	X					
W-INT 2						4	X					
W-EFF						5	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Kurt Dudley	12/3	1107	[signature] ISA	12/3	1150	
[signature] ISA	12/3					
			[signature] / Sequoia	12/3/97	1315	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201011X

Lab Proj. ID: 9712298

Received: 12/03/97

Reported: 12/18/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 5 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, Z01011X	Sampled: 10/08/97
74 Digital Drive , Suite 6	Sample Descript: A-INF	Received: 10/09/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 10/09/97
Attention: Marc Briggs	Lab Number: 9710442-01	Reported: 10/10/97

QC Batch Number: GC100997BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	200
Benzene	0.10	3.1
Toluene	0.10	0.34
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	0.12
Chromatogram Pattern:		
Gas & Unidentified HC		<C8

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	131 Q

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

RECEIVED
OCT 15 1997

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, Z01011X	Sampled: 10/08/97
74 Digital Drive , Suite 6	Sample Descript: A-EFF	Received: 10/09/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 10/09/97
Attention: Marc Briggs	Lab Number: 9710442-02	Reported: 10/10/97

QC Batch Number: GC100997BTEX21A
Instrument ID: GCHP21

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	96

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, Z01011X
Matrix: Liquid
Work Order #: 9710442 -01, 02
Reported: Oct 10, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC100997BTEX21A	GC100997BTEX21A	GC100997BTEX21A	GC100997BTEX21A	GC100997BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9710304-02	9710304-02	9710304-02	9710304-02	9710304-02
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/9/97	10/9/97	10/9/97	10/9/97	10/9/97
Analyzed Date:	10/9/97	10/9/97	10/9/97	10/9/97	10/9/97
Instrument I.D.#:	GCHP-21	GCHP-21	GCHP-21	GCHP-21	GCHP-21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.3	9.1	8.9	27	53
MS % Recovery:	93	91	89	90	88
Dup. Result:	9.3	9.1	9.0	27	53
MSD % Recov.:	93	91	90	90	88
RPD:	0	0	1.1	0	0
RPD Limit:	0-25	0-25	0-25	0-25	0-25

LCS #:	BLK100997A	BLK100997A	BLK100997A	BLK100997A	BLK100997A
Prepared Date:	10/9/97	10/9/97	10/9/97	10/9/97	10/9/97
Analyzed Date:	10/9/97	10/9/97	10/9/97	10/9/97	10/9/97
Instrument I.D.#:	GCHP-21	GCHP-21	GCHP-21	GCHP-21	GCHP-21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	8.3	8.2	8.1	24	49
LCS % Recov.:	83	82	81	80	82

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

SEQUOIA ANALYTICAL

Richard Herling
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.

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

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

Page 1 of 1

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC		
Address: 74 Digital Drive Suite 6, Novato CA 94949		Site Location: 720 High St
Project #: 201011X	Consultant Project #: 201011X	Consultant Work Release #: 19432503
Project Contact: Marc Briggs	Phone #: 415 382 9105	Laboratory Work Release #:
EXXON Contact: Marla Gluesser	Phone #: 510 ~~832~~ 246 8868	EXXON RAS #: 7-3006
Sampled by (print): Peter Pedro	Sampler's Signature:	Oakland
Shipment Method:	Air Bill #:	

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

ANALYSIS REQUIRED 9710442

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
A-INF	10/8/97		Air	Ice	1	01	X					
A-Eff			Air	"	1	02	X					
W-INF1			Water	HCl/Ice	3		X					
W-WF2					3		X					
W-INT					3		X					
W-Eff	"		"	"	3		X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
[signature] /SR	10/9/97	11:15	[signature] /SR	10/9/97	1015	
[signature] /SA	10/9/97					
			J. Downs	10/9/97	1235	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, Z01011X	Received: 10/09/97
74 Digital Drive , Suite 6		
Novato, CA 94949	Lab Proj. ID: 9710442	Reported: 10/10/97
Attention: Marc Briggs		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 5 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 11/12/97
74 Digital Drive , Suite 6	Sample Descript: A-Inf	Received: 11/13/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 11/15/97
Attention: Marc Briggs	Lab Number: 9711679-01	Reported: 11/24/97

QC Batch Number: GC111597BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	880
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	2.1
Xylenes (Total)	0.10	3.0
Chromatogram Pattern:		
Gas & Unidentified HC		C6-C8

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

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DEC 1 1997

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 11/12/97
74 Digital Drive , Suite 6	Sample Descript: A-Eff	Received: 11/13/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 11/15/97
Attention: Marc Briggs	Lab Number: 9711679-02	Reported: 11/24/97

QC Batch Number: GC111597BTEX02A
Instrument ID: GCHP2

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	109

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
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Environmental Resolutions
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 201011X
Matrix: Liquid
Work Order #: 9711679 01, 02

Reported: Nov 24, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC111597BTEX02A	GC111597BTEX02A	GC111597BTEX02A	GC111597BTEX02A	GC111597BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	971112702	971112702	971112702	971112702	971112702
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/15/97	11/15/97	11/15/97	11/15/97	11/15/97
Analyzed Date:	11/15/97	11/15/97	11/15/97	11/15/97	11/15/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	11	10	11	33	71
MS % Recovery:	110	100	110	118	
Dup. Result:	10	10	10	32	69
MSD % Recov.:	100	100	100	107	115
RPD:	10	0.0	9.5	3.1	2.9
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK111597	BLK111597	BLK111597	BLK111597	BLK111597
Prepared Date:	11/15/97	11/15/97	11/15/97	11/15/97	11/15/97
Analyzed Date:	11/15/97	11/15/97	11/15/97	11/15/97	11/15/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	9.9	30	68
LCS % Recov.:	100	100	99	100	113
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
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.

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

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

EXXON COMPANY, U.S.A.

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CHAIN OF CUSTODY

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC			**Page** 1 **of** 1
Address: 74 DIGITAL DR # 6, NOVATO, CA 94949			**Site Location:** 720 HIGH ST.
Project #: 2010 11X	**Consultant Project #:** 7-3006		**Consultant Work Release #:** 19432503
Project Contact: MARK BRICKS	**Phone #:** (415) 382-9105		**Laboratory Work Release #:**
EXXON Contact: MARLA GUENSLER	**Phone #:** (510) 246-8776		**EXXON RAS #:** 7-3006
Sampled by (print): KURT DUDLEY	**Sampler's Signature:**		OAKLAND
Shipment Method: COURIER	**Air Bill #:**		

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

ANALYSIS REQUIRED 9711679

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
A - INF	11/12/97	11:00	AIR	NA	1	01	X					
A - EFF	KO	KO	KO	KO	KO	02	X					NO 13 11 45
A - TB	KO	KO	KO	KO	KO	03	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	11/13/97	10:10		11/13/97	10:10	
	11/13/97					
			Jeri Dunn / SEQ	11/13	1141	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201011X

Lab Proj. ID: 9711679

Received: 11/13/97

Reported: 11/24/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 5 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

Please Note: The sample A-TB (9711679-03) was received deflated.

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 12/03/97
74 Digital Drive , Suite 6	Sample Descript: A-Eff	Received: 12/04/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 12/09/97
Attention: Marc Briggs	Lab Number: 9712182-02	Reported: 12/15/97

QC Batch Number: GC120997BTEX02A
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	113

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Project ID:	Exxon 7-3006, 201011X	
74 Digital Drive, Ste. 6	Matrix:	Liquid	
Novato, CA 94949			
Attention: Marc Briggs	Work Order #:	9712182 02	Reported: Dec 17, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC120997BTEX02A	GC120997BTEX02A	GC120997BTEX02A	GC120997BTEX02A	GC120997BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9711F3901	9711F3901	9711F3901	9711F3901	9711F3901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	12/9/97	12/9/97	12/9/97	12/9/97	12/9/97
Analyzed Date:	12/9/97	12/9/97	12/9/97	12/9/97	12/9/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	11	10	11	32	74
MS % Recovery:	110	100	110	107	123
Dup. Result:	10	9.9	10	30	71
MSD % Recov.:	100	99	100	100	118
RPD:	9.5	1.0	9.5	6.5	4.1
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK120997	BLK120997	BLK120997	BLK120997	BLK120997
Prepared Date:	12/9/97	12/9/97	12/9/97	12/9/97	12/9/97
Analyzed Date:	12/9/97	12/9/97	12/9/97	12/9/97	12/9/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	10	31	71
LCS % Recov.:	100	100	100	103	118
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Richard Herling
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.

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

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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

9712182

Consultant's Name: ENVIRONMENTAL RESOLUTIONS			**Page** 1 **of** 1
Address: 74 DIGITAL DR #6 NOVATO CA 94949			**Site Location:** 720 HIGH ST
Project #: 201011X	**Consultant Project #:** 7-3006		**Consultant Work Release #:** 19432503
Project Contact: MARC BRIGGS	**Phone #:** (415) 382-9105		**Laboratory Work Release #:**
EXXON Contact: MARIA GUENSLER	**Phone #:** (510) 246-8776		**EXXON RAS #:** 7-3006
Sampled by (print): KURT DUDLEY	**Sampler's Signature:** Kurt Dudley		OAKLAND
Shipment Method: COURIER	**Air Bill #:**		

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☑ 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 EPA 8015	TRPH S.M. 5520			Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
A-INF	12/3/97	10:30	AIR	NA	1	01	X					
A-EFF	"	"	"	"	"	02	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Kurt Dudley	12/4/97	11:40	Ray Bourgi Sequoia	12/4/97	11:40	
Ray Bourgi Sequoia	12/4/97					
			[illegible] SRL RWC	12/4/97	1314	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Received: 12/04/97
74 Digital Drive , Suite 6		
Novato, CA 94949	Lab Proj. ID: 9712182	Reported: 12/15/97
Attention: Marc Briggs		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 4 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

Please Note: Though received inflated, the tedlar bag containing A-Inf was flat by the time of analysis.

The Sample A-Eff (9712182-02) was run past the industry standard three day hold time. However, no hold time is mandated for vapor samples.

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201011X
Sample Descript: A-Inf
Matrix: AIR
Analysis Method: 8015Mod/8020
Lab Number: 9712G80-01

Sampled: 12/29/97
Received: 12/30/97

Analyzed: 01/08/98
Reported: 01/09/98

QC Batch Number: GC010898BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	51
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	N.D.
Chromatogram Pattern:		
Unidentified HC		<C8
Surrogates	**Control Limits %**	**% Recovery**
Trifluorotoluene	70 – 130	214 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Richard Herling
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201011X
Sample Descript: A-Eff
Matrix: AIR
Analysis Method: 8015Mod/8020
Lab Number: 9712G80-02

Sampled: 12/29/97
Received: 12/30/97

Analyzed: 01/07/98
Reported: 01/09/98

QC Batch Number: GC010798BTEX03A
Instrument ID: GCHP3

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

Richard Herling
Project Manager

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

9712080

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC			**Page** 1 **of** 1
Address: 74 DIGITAL DR #6 NOVATO CA 94949			**Site Location:** 720 HIGH St
Project #: 201011X	**Consultant Project #:** 201011X		**Consultant Work Release #:** 19932503
Project Contact: MARC BRIGGS	**Phone #:** (415) 382-9105		**Laboratory Work Release #:**
EXXON Contact: MARIA GUENSLER	**Phone #:** (510) 246-8776		**EXXON RAS #:** 7-3000
Sampled by (print): KURT DUNDUEM	**Sampler's Signature:** Kurt Dundum		OAKLAND
Shipment Method: COURIER	**Air Bill #:**		

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

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	ANALYSIS REQUIRED: TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			
A-INF	12/29/97	9:30	AIR	NA	2		X					Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
A-EFF					1		X					
												DE 30 11

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Kurt Dunduem	12/30/97	1005	[signature] / SEQ	12/30/97	1005	
[signature]	12/31/97					
			[signature] / SER	12/30/97	1140	

White - Sequoia Yellow - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201011X
Lab Proj. ID: 9712G80

Received: 12/30/97
Reported: 01/09/98

LABORATORY NARRATIVE

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

Please Note: These samples were analyzed outside of the industry three day hold time.

SEQUOIA ANALYTICAL

Richard Herling
Project Manager

ATTACHMENT C

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

HYDROCARBON REMOVED FROM A VADOSE WELL
SOP-25
Rev: 10'C

Rev. 1/29/97

POUNDS OF HYDROCARBON IN AN VAPOR STREAM

INPUT DATA:
1) Vapor flow rate acfm (usually by Pitot tube)
2) Vapor pressure at the flow measuring device (in inches of H_2O) (use {-} for vacuum)
3) Vapor temperature at the flow measuring device.
4) Hydrocarbon content of vapor (usually in mg/M^3) 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) Vapor 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_2O	HC conc mg/M3	Vapor flow acfm	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 = 14.7psia, 760 mm Hg, or 407 in H_2O. T_{abs} = 460 + T deg F

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

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

$$\frac{\text{hr}}{\text{basis}} \times \frac{\text{min}}{\text{hr}} \times \frac{\text{cu ft}}{\text{min}} \times T_{Corr} \times P_{Corr} \times \frac{M^3}{\text{cu ft}} \times \frac{g}{M^3} \times \frac{\text{lb}}{g} = \frac{\text{lb}}{\text{basis}}$$

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

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^3. ppmv x molecular wt. /24.1 = mg/M^3. (Use 102 for gasoline)