EXXON COMPANY, U.S.A.
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MARKETING DEPARTMENT • ENVIRONMENTAL ENGINEERING

MARLA D. GUENSLER
SENIOR ENVIRONMENTAL ENGINEER

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May 16, 1997

Mr. Barney Chan
Hazardous Materials 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 letter report entitled ***Quarterly Groundwater Monitoring and Remediation Status Report, First Quarter 1997,*** dated May 14, 1997, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the results of the quarterly groundwater monitoring 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 Environmental Engineer

MDG/tjm

Attachment: ERI's Quarterly Groundwater Monitoring and Remediation Status Report, First Quarter 1997, dated May 14, 1997

cc: w/attachment
Mr. Scott Owen - Bay Area Air Quality Management District
Mr. Kevin Graves - California Regional Water Quality Control Board, San Francisco Bay Region

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

ENVIRONMENTAL RESOLUTIONS, INC.

May 14, 1997
ERI 201011.R09

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, First 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 first quarter 1997 at the subject site (Plate 1). The purpose of ongoing remedial activities at the site 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 March 19, 1997, ERI measured the depth to water (DTW) in monitoring wells MW1 through MW4, and MW6 through MW15 and subjectively analyzed water in these wells for the presence of liquid-phase hydrocarbons. Monitoring well MW5 was previously destroyed. Monitoring wells MW2, MW4, MW8, MW12, MW13, and MW15 had a sheen. Therefore, these wells were not purged or sampled. 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 (Plate 2). Because air-sparging/soil vapor-extraction (AS/SVE) is in progress, groundwater elevations may not reflect the groundwater flow direction. 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 tert-butyl ether (MTBE), total extractable petroleum hydrocarbons as diesel (TEPHd), extractable hydrocarbons as stoddard solvent (EHCss), and purgeable halocarbons. 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 air-sparging/soil vapor-extraction (AS/SVE) system in August 1996 utilizing the thermal/catalytic oxidizer. ERI submitted a Source Test Report (dated September 11, 1996) to the Bay Area Air Quality Management District (BAAQMD). 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 first quarter 1997 are attached (Attachment B).

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

Groundwater Extraction And Treatment

The groundwater remediation system (GRS) is designed to treat separate-phase and dissolved petroleum 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 January 1, 1997 and March 26, 1997, the system recovered 83,695 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

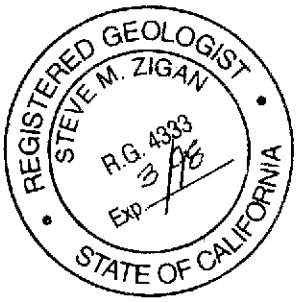
Based on data collected to date, it appears the AS/SVE system and GRS are removing residual hydrocarbons in soil and dissolved hydrocarbons in groundwater. ERI estimates approximately 41.4 pounds (approximately 6.8 gallons) of hydrocarbons were removed by the AS/SVE system during the first quarter 1997, and 2,763.1 pounds (approximately 453.0 gallons) since start-up. ERI estimates approximately 2.34 pounds (approximately 0.3.8 gallons) of hydrocarbons were removed by the GRS during the first quarter 1997, and 5.9 pounds (approximately 0.97 gallons) since start-up.

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

Steve M. Zigan
R.G. 4333
H.G. 133

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

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
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								
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								
	2/14/96	Sheen	8.34	4.58								
	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

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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							>
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								
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

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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				>
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								
	05/10-11/94	NLPH	7.53	7.31	2,400	88	5.6	5.2	15	NA	1,300	NA
			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							
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								

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							>
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
	10/25/94	NLPH	9.66	4.98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	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
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

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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	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
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								

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							>
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								
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								
	2/6/95	NLPH	7.18	8.00	360	< 1.0	< 1.0	< 1.0	< 1.0	NA	1,200	NA
		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**								

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	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								

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 tert-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 tert-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: 5/12/97

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				

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
2/1/95	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												
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												

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
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			

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	Replaced 2 ea x 500 lb canisters = 1000 lbs of carbon												
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	< 0.000	42.0	
	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

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
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				
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	6.86	2,752.0				
3/19/97				52.5	33	1	140	6.50	2,758.5				
3/26/97				50.4	35	1	148	4.65	2,763.1				

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 5/12/97

Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data						TPHg Removed		Benzene Removed	
				TPH[g [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 [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]
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			Sytem 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	0.0038	0.5889
			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										
			W-INF2										
			W-INT										
			W-EFF										
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	0.3473	3.0039	0.0734	0.6624
			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	3.0104	0.0015	0.6639
			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	3.0417	0.0033	0.6672
			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	3.5545	0.0538	0.7210
			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										
1/1/97	263232		Replaced compressor, restarted unit										
1/31/97	290045	894	W-INF	5,500	1,700	580	120	740	NA	0.6208	4.1753	0.1902	0.9112
			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	5.2258	0.2586	1.1698
			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

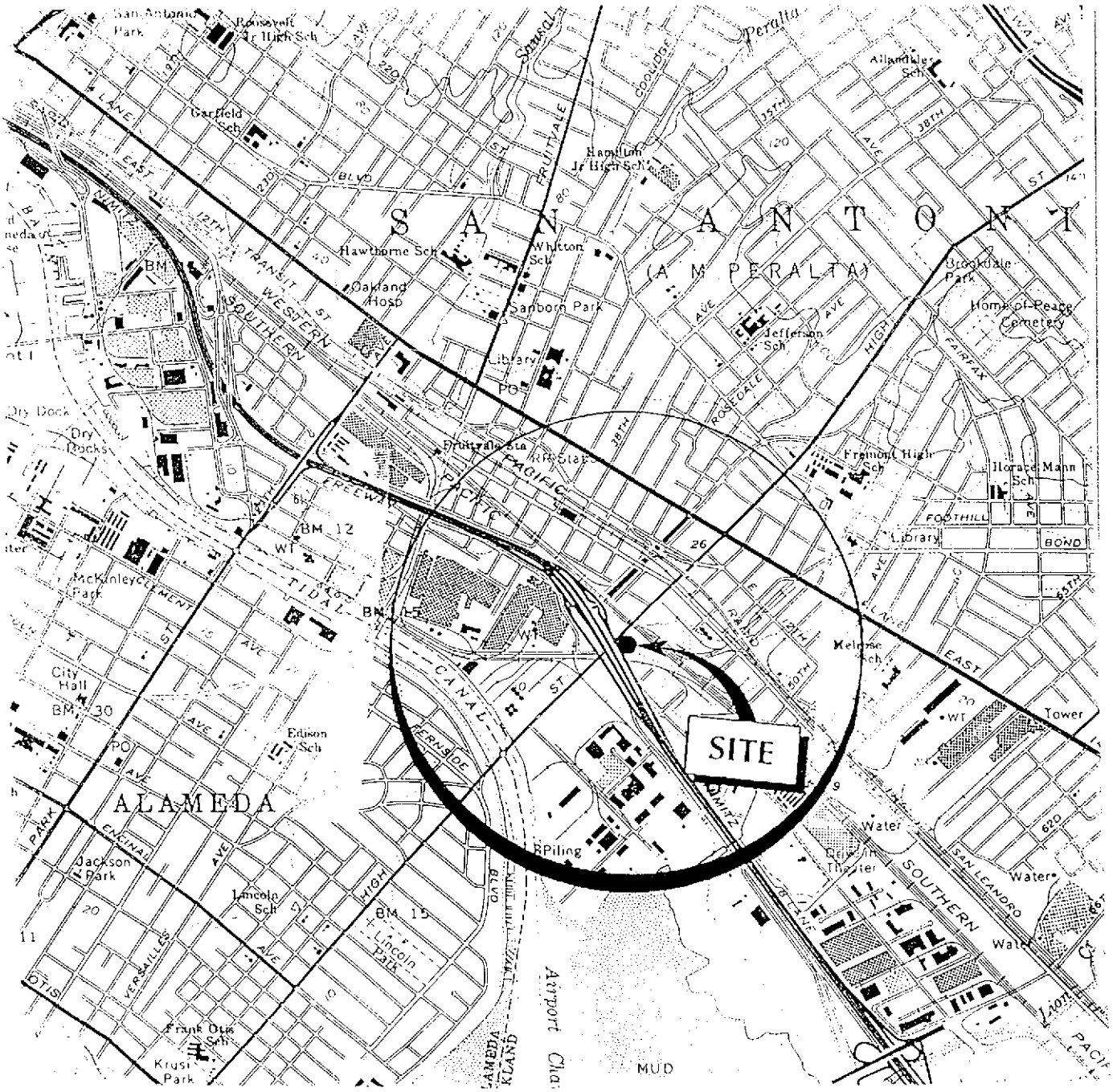
				Analytical Data									
										TPHg Removed		Benzene Removed	
Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]	Per Period [lb]	Cumlative [lb]	Per Period [lb]	Cumlative [lb]
3/5/97	340178	940	W-INF1	980	100	5.0	2.1	54	NA	0.6690	5.8948	0.1111	1.2810
			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											

W-INF = W-INF1 = water influent before stripper
W-INF2 = water influent after stripper
W-INT = W-INT1 W-INT2 = water intermediate
W-EFF = W-EFF1 W-EFF2 = water effluent
TPHg = Total petroleum hydrocarbons as gasoline

B = Benzene
T = Toluene
E = Ethylbenzene
X = Total Xylenes
< = less than the laboratory method detection limit

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

ug/L = micrograms per liter
mg/L = milligrams per Liter
gpd = gallons per day
gal = gallons



20100001

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APPROXIMATE SCALE

0 1/2 1

MILE

Source: U.S.G.S. 7.5 minute topographic quadrangle map Oakland/San Leandro, California Photorevised 1980

ERI ENVIRONMENTAL RESOLUTIONS, INC.

PROJECT ERI 2010

SITE VICINITY MAP

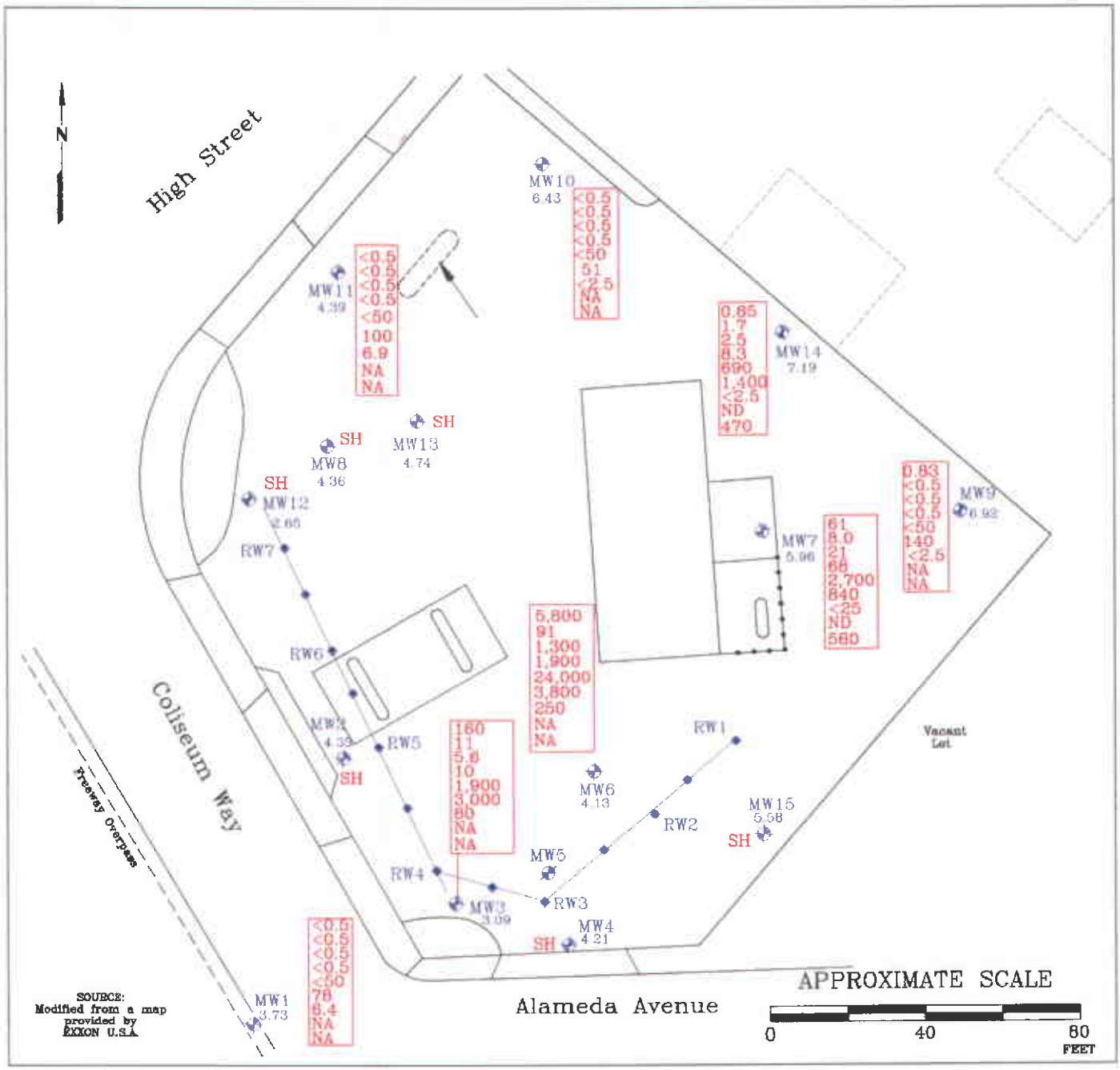
FORMER EXXON SERVICE STATION 7-3006

720 High Street

Oakland, California

PLATE

1



FN 20100002

EXPLANATION

MW15 5.58 — Groundwater Monitoring Well / Groundwater Elevation

MW5 — Groundwater Monitoring Well (Destroyed)

RW7 — Recovery Monitoring Well

Interpreted Groundwater Gradient

Interceptor Trench

Groundwater Concentrations in ug/L
Sampled March 19, 1997

5,800	Benzene
91	Toluene
1,300	Ethylbenzene
1,900	Xylene
24,000	Total Petroleum Hydrocarbons as gasoline
3,800	Total Extractable Petroleum Hydrocarbons as diesel
250	Methyl tert-butyl ether
NA	Volatile Organic Compounds
NA	Extractable Hydrocarbons as Stoddard Solvent

ND = Not Detected
NA = Not Analyzed
SH = Sheen

ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

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

PROJECT NO. 2010

PLATE 2

April 24, 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, (415) 364-9600, FAX (415) 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: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-8-MW10	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 03/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-01	Reported: 03/31/97

QC Batch Number: GC0325970HBPEXZ
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	51
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	105

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

RECEIVED
APR - 7 1997

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-8-MW10	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/26/97
Attention: Marc Briggs	Lab Number: 9703C02-01	Reported: 03/31/97

QC Batch Number: GC032697BTEX18A
Instrument ID: GCHP18

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	117

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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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: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-9-MW1	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 03/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-02	Reported: 03/31/97

QC Batch Number: GC0325970HBPEXZ
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	78
Chromatogram Pattern:		
Unidentified HC		C9-C24

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

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

SEQUOIA ANALYTICAL - ELAP #1210

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-9-MW1	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/27/97
Attention: Marc Briggs	Lab Number: 9703C02-02	Reported: 03/31/97

QC Batch Number: GC032797BTEX07A
Instrument ID: GCHP07

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**	**6.4**
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	91

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-13-MW9	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 03/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-03	Reported: 03/31/97

QC Batch Number: GC0325970HBPEXZ
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	140
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	119

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-13-MW9	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/27/97
Attention: Marc Briggs	Lab Number: 9703C02-03	Reported: 03/31/97

QC Batch Number: GC032797BTEX07A
Instrument ID: GCHP07

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**	**0.83**
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	91

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW11	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 03/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-04	Reported: 03/31/97

QC Batch Number: GC0325970HBPEXZ
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	100
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	103

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

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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: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW11	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/27/97
Attention: Marc Briggs	Lab Number: 9703C02-04	Reported: 03/31/97

QC Batch Number: GC032797BTEX07A
Instrument ID: GCHP07

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**	**6.9**
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.

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-12-MW14	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: EPA 601	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-05	Reported: 03/31/97

QC Batch Number: GC032797060109A
Instrument ID: GCHP09

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.0	N.D.
Bromoform	1.0	N.D.
Bromomethane	2.0	N.D.
Carbon Tetrachloride	1.0	N.D.
Chlorobenzene	1.0	N.D.
Chloroethane	2.0	N.D.
2-Chloroethylvinyl ether	2.0	N.D.
Chloroform	1.0	N.D.
Chloromethane	2.0	N.D.
Dibromochloromethane	1.0	N.D.
1,2-Dichlorobenzene	1.0	N.D.
1,3-Dichlorobenzene	1.0	N.D.
1,4-Dichlorobenzene	1.0	N.D.
1,1-Dichloroethane	1.0	N.D.
1,2-Dichloroethane	1.0	N.D.
1,1-Dichloroethene	1.0	N.D.
cis-1,2-Dichloroethene	1.0	N.D.
trans-1,2-Dichloroethene	1.0	N.D.
1,2-Dichloropropane	1.0	N.D.
cis-1,3-Dichloropropene	1.0	N.D.
trans-1,3-Dichloropropene	1.0	N.D.
Methylene chloride	10	N.D.
1,1,2,2-Tetrachloroethane	1.0	N.D.
Tetrachloroethene	1.0	N.D.
1,1,1-Trichloroethane	1.0	N.D.
1,1,2-Trichloroethane	1.0	N.D.
Trichloroethene	1.0	N.D.
Trichlorofluoromethane	1.0	N.D.
Vinyl chloride	2.0	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	75

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-12-MW14	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 03/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-05	Reported: 03/31/97

QC Batch Number: GC0325970HBPEXZ
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	1400
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	148

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-12-MW14	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 03/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-05	Reported: 03/31/97

QC Batch Number: GC0325970HBPEXZ
Instrument ID: GCHP19A

Fuel Fingerprint : Stoddard Solvent

Analyte	Detection Limit ug/L	Sample Results ug/L
Extract HC as Stoddard Solvent	50	470
Chromatogram Pattern: **Unidentified HC**		C9-C13

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	148

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-12-MW14	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/26/97
Attention: Marc Briggs	Lab Number: 9703C02-05	Reported: 03/31/97

QC Batch Number: GC032697BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**690**
Methyl t-Butyl Ether	2.5	N.D.
Benzene	**0.50**	**0.65**
Toluene	**0.50**	**1.7**
Ethyl Benzene	**0.50**	**2.5**
Xylenes (Total)	**0.50**	**8.3**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	166 Q

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW7	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: EPA 601	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-06	Reported: 03/31/97

QC Batch Number: GC032797060109A
Instrument ID: GCHP09

Purgeable Halocarbons (EPA 601)

Analyte	Detection Limit ug/L	Sample Results ug/L
Bromodichloromethane	1.2	N.D.
Bromoform	1.2	N.D.
Bromomethane	2.5	N.D.
Carbon Tetrachloride	1.2	N.D.
Chlorobenzene	1.2	N.D.
Chloroethane	2.5	N.D.
2-Chloroethylvinyl ether	2.5	N.D.
Chloroform	1.2	N.D.
Chloromethane	2.5	N.D.
Dibromochloromethane	1.2	N.D.
1,2-Dichlorobenzene	1.2	N.D.
1,3-Dichlorobenzene	1.2	N.D.
1,4-Dichlorobenzene	1.2	N.D.
1,1-Dichloroethane	1.2	N.D.
1,2-Dichloroethane	1.2	N.D.
1,1-Dichloroethene	1.2	N.D.
cis-1,2-Dichloroethene	1.2	N.D.
trans-1,2-Dichloroethene	1.2	N.D.
1,2-Dichloropropane	1.2	N.D.
cis-1,3-Dichloropropene	1.2	N.D.
trans-1,3-Dichloropropene	1.2	N.D.
Methylene chloride	12	N.D.
1,1,2,2-Tetrachloroethane	1.2	N.D.
Tetrachloroethene	1.2	N.D.
1,1,1-Trichloroethane	1.2	N.D.
1,1,2-Trichloroethane	1.2	N.D.
Trichloroethene	1.2	N.D.
Trichlorofluoromethane	1.2	N.D.
Vinyl chloride	2.5	N.D.

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	81

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW7	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 03/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-06	Reported: 03/31/97

QC Batch Number: GC0325970HBPEXZ
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	840
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	104

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW7	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 03/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-06	Reported: 03/31/97

QC Batch Number: GC0325970HBPEXZ
Instrument ID: GCHP19A

Fuel Fingerprint : Stoddard Solvent

Analyte	Detection Limit ug/L	Sample Results ug/L
Extract HC as Stoddard Solvent	50	580
Chromatogram Pattern:		
Weathered Stoddard Solvent		C9-C13

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	104

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW7	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/26/97
Attention: Marc Briggs	Lab Number: 9703C02-06	Reported: 03/31/97

QC Batch Number: GC032697BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**500**	**2700**
Methyl t-Butyl Ether	25	N.D.
Benzene	**5.0**	**61**
Toluene	**5.0**	**8.0**
Ethyl Benzene	**5.0**	**21**
Xylenes (Total)	**5.0**	**68**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	135 Q

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

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW3	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 03/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 03/28/97
Attention: Marc Briggs	Lab Number: 9703C02-07	Reported: 03/31/97

QC Batch Number: GC0325970HBPEXZ
Instrument ID: GCHP19A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	3000
Chromatogram Pattern:		
Unidentified HC		C9-C17
Weathered Diesel		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	109

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

SEQUOIA ANALYTICAL - ELAP #1210

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW3	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/26/97
Attention: Marc Briggs	Lab Number: 9703C02-07	Reported: 03/31/97

QC Batch Number: GC032697BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	1900
Methyl t-Butyl Ether	25	80
Benzene	5.0	160
Toluene	5.0	11
Ethyl Benzene	5.0	5.6
Xylenes (Total)	5.0	10
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	154 Q

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

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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, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-28-MW6	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 03/25/97
	Analysis Method: EPA 8015 Mod	Analyzed: 03/29/97
Attention: Marc Briggs	Lab Number: 9703C02-08	Reported: 03/31/97

QC Batch Number: GC0325970HBPEXZ
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	100	3800
Chromatogram Pattern:		
Unidentified HC		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	75

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 03/19/97
74 Digital Drive , Suite 6	Sample Descript: W-28-MW6	Received: 03/21/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/27/97
Attention: Marc Briggs	Lab Number: 9703C02-08	Reported: 03/31/97

QC Batch Number: GC032797BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	24000
Methyl t-Butyl Ether	50	250
Benzene	50	5800
Toluene	50	91
Ethyl Benzene	50	1300
Xylenes (Total)	50	1900
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	110

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
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 #: 9703C02 01-08

Reported: Apr 3, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC032597OHBPEXZ
Analy. Method:	EPA 8010
Prep. Method:	EPA 3520

Analyst:	N. Herrera
MS/MSD #:	9703C02-01
Sample Conc.:	51
Prepared Date:	3/25/97
Analyzed Date:	3/28/97
Instrument I.D.#:	GCHP19A
Conc. Spiked:	1000 µg/L
Result:	990
MS % Recovery:	94
Dup. Result:	930
MSD % Recov.:	88
RPD:	6.3
RPD Limit:	0-50

LCS #:	BLK032597X
Prepared Date:	3/25/97
Analyzed Date:	3/28/97
Instrument I.D.#:	GCHP19A
Conc. Spiked:	1000 µg/L
LCS Result:	870
LCS % Recov.:	87

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

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

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

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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 #:	9703C02 -01, 05-08	Reported: Apr 3, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC032697BTEX18A	GC032697BTEX18A	GC032697BTEX18A	GC032697BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	5030	5030	5030	5030
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	9703B84-03	9703B84-03	9703B84-03	9703B84-03
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/26/97	3/26/97	3/26/97	3/26/97
Analyzed Date:	3/26/97	3/26/97	3/26/97	3/26/97
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/l
Result:	7.8	8.4	8.6	26
MS % Recovery:	78	84	86	87
Dup. Result:	7.8	8.3	8.6	26
MSD % Recov.:	78	83	86	87
RPD:	0.0	1.2	0.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK032697	BLK032697	BLK032697	BLK032697
Prepared Date:	3/26/97	3/26/97	3/26/97	3/26/97
Analyzed Date:	3/26/97	3/26/97	3/26/97	3/26/97
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/l
LCS Result:	8.7	9.2	9.6	29
LCS % Recov.:	87	92	96	97

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

SEQUOIA ANALYTICAL

Kevin Follett
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 #: 9703C02 02-04

Reported: Apr 3, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC032797BTEX07A	GC032797BTEX07A	GC032797BTEX07A	GC032797BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	5030	5030	5030	5030
Analyst:	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9703B84-06	9703B84-06	9703B84-06	9703B84-06
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/27/97	3/27/97	3/27/97	3/27/97
Analyzed Date:	3/27/97	3/27/97	3/27/97	3/27/97
Instrument I.D.#:	GCHP-07	GCHP-07	GCHP-07	GCHP-07
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/l
Result:	10	9.7	9.3	28
MS % Recovery:	100	97	93	93
Dup. Result:	9.3	8.7	8.4	25
MSD % Recov.:	93	87	84	83
RPD:	7.3	11	10	11
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK032797	BLK032797	BLK032797	BLK032797
Prepared Date:	3/27/97	3/27/97	3/27/97	3/27/97
Analyzed Date:	3/27/97	3/27/97	3/27/97	3/27/97
Instrument I.D.#:	GCHP-07	GCHP-07	GCHP-07	GCHP-07
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/l
LCS Result:	10	9.4	9.1	27
LCS % Recov.:	100	94	91	90

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

SEQUOIA ANALYTICAL

Kevin Follett
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 #: 9703C02 -08

Reported: Apr 3, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC032797BTEX06A	GC032797BTEX06A	GC032797BTEX06A	GC032797BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	5030	5030	5030	5030
Analyst:	A. Porter	A. Porter	A. Porter	A. Porter
MS/MSD #:	9703B84-06	9703B84-06	9703B84-06	9703B84-06
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/27/97	3/27/97	3/27/97	3/27/97
Analyzed Date:	3/27/97	3/27/97	3/27/97	3/27/97
Instrument I.D.#:	GCHP-06	GCHP-06	GCHP-06	GCHP-06
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/l
Result:	8.7	8.8	8.9	26
MS % Recovery:	87	88	89	87
Dup. Result:	9.4	9.4	9.7	28
MSD % Recov.:	94	94	97	93
RPD:	7.7	11	8.6	7.4
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK032797	BLK032797	BLK032797	BLK032797
Prepared Date:	3/27/97	3/27/97	3/27/97	3/27/97
Analyzed Date:	3/27/97	3/27/97	3/27/97	3/27/97
Instrument I.D.#:	GCHP-06	GCHP-06	GCHP-06	GCHP-06
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/l
LCS Result:	9.5	9.5	9.6	29
LCS % Recov.:	95	95	96	97

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

SEQUOIA ANALYTICAL

Kevin Follett
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 #:	9703C02 -05, -06	Reported: Apr 3, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-Benzene
QC Batch#:	GC032797060109A	GC032797060109A	GC032797060109A
Analy. Method:	EPA 601	EPA 601	EPA 601
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	E. Cunanan	E. Cunanan	E. Cunanan
MS/MSD #:	9703B81-01	9703B81-01	9703B81-01
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	3/27/97	3/27/97	3/27/97
Analyzed Date:	3/28/97	3/28/97	3/28/97
Instrument I.D.#:	GCHP09	GCHP09	GCHP09
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Result:	24	24	23
MS % Recovery:	96	96	92
Dup. Result:	26	25	23
MSD % Recov.:	104	100	92
RPD:	8.0	4.1	0.0
RPD Limit:	0-25	0-25	0-25

LCS #:	VBLK032897BS	VBLK032897BS	BLK032897BS
Prepared Date:	3/28/97	3/28/97	3/28/97
Analyzed Date:	3/28/97	3/28/97	3/28/97
Instrument I.D.#:	GCHP09	GCHP09	GCHP09
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	22	23	22
LCS % Recov.:	88	92	88

MS/MSD	60-140	60-140	60-140
LCS	65-135	70-130	70-130
Control Limits			

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

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Redwood City, CA 94063
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EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Consultant's Name: Environmental Resolutions Inc. — **Page** 1 **of** 2

Address: 74 Digital Dr Suite G Novato Ca 94949		**Site Location:** 720 Higuera Street
Project #: 7-3006	**Consultant Project #:** 20103X	**Consultant Work Release #:** 19432503
Project Contact: Marc Briggs	**Phone #:** 415 382 9105	**Laboratory Work Release #:**
EXXON Contact: Marla Buensler	**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)

ANALYSIS REQUIRED 9703C02

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	~~TPH SW 5020~~ MTBE	Stoddard Solvent 3510/ 8015	Purgable Halocarbons 601	Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
W-8-MW10	3/19/97	1450	Water	HCl	3	1	X		X			
W-9-MW1	"	1505	"	"	"	2	X		X			
W-13-MW9	"	1520	"	"	"	3	X		X			
W-10-MW11	"	1535	"	"	"	4	X		X			
W-12-MW14	"	1550	"	"	6	5	X		X		X	
W-10-MW7	"	1605	"	"	"	6	X		X		X	
W-10-MW3	"	1620	"	"	3	7	X		X			
W-23-MW6	"	1635	"	"	"	8	X		X			

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Scott Graham	3/21/97	1050	SW Wright / SEQ	3/21/97	1050	
SW Wright / SEQ	3/21/97	1251	[signature]	3/21/97	1251	

Pink - Client
Yellow - Sequoia
White - Sequoia

MR 21

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 2

Address: 74 Digital Dr. Suite G Novato Ca 94949		Site Location: 720 High Street
Project #: 7-3006	Consultant Project #: 201013X	Consultant Work Release #: 1943283
Project Contact: Marc Briggs	Phone #: 415 382 9105	Laboratory Work Release #:
EXXON Contact: Marla Guenzler	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)

ANALYSIS REQUIRED 9703C02

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	Stoddard solvent 3510/ 8015		Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
W-8-MW10	3/19/97	1455	Water	HCl	2	1		X				
W-9-MW1		1510				2		X				
W-13-MW9		1525				3		X				
W-10-MW11		1540				4		X				
W-12-MW14		1555			3	5		X		X		
W-10-MW7		1610				6		X		X		
W-10-MW3		1625			2	7		X				
W-28-MW6		1640				8		X				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Scott Graham	3/21/97	1050	A Wright / SEQ	3/21/97	1050	
A Wright SEQ	3/21/97	1251		3/21/97	1254	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Received: 03/21/97
74 Digital Drive , Suite 6		
Novato, CA 94949	Lab Proj. ID: 9703C02	Reported: 03/31/97
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 28 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPPH note: MTBE result for 9703C02-08 is reported from a secondary run performed on GCHP-18 03/26/96.

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 02/06/97
74 Digital Drive , Suite 6	Sample Descript: W-Inf 1	Received: 02/06/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 02/13/97
Attention: Marc Briggs	Lab Number: 9702346-01	Reported: 02/14/97

QC Batch Number: GC021397BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	5100
Benzene	10	910
Toluene	10	160
Ethyl Benzene	10	45
Xylenes (Total)	10	910
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	104

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

SEQUOIA ANALYTICAL - ELAP #1210

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for

Kevin Follett
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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: 02/06/97
74 Digital Drive , Suite 6	Sample Descript: W-Inf 2	Received: 02/06/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 02/11/97
Attention: Marc Briggs	Lab Number: 9702346-02	Reported: 02/14/97

QC Batch Number: GC021197BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	570
Benzene	0.50	62
Toluene	0.50	12
Ethyl Benzene	0.50	2.9
Xylenes (Total)	0.50	86
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	118

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 02/06/97
74 Digital Drive , Suite 6	Sample Descript: W-Int	Received: 02/06/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 02/11/97
Attention: Marc Briggs	Lab Number: 9702346-03	Reported: 02/14/97

QC Batch Number: GC021197BTEX07A
Instrument ID: GCHP07

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	108

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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: 02/06/97
74 Digital Drive , Suite 6	Sample Descript: W-Eff	Received: 02/06/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 02/11/97
Attention: Marc Briggs	Lab Number: 9702346-04	Reported: 02/14/97

QC Batch Number: GC021197BTEX07A
Instrument ID: GCHP07

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	105

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

SEQUOIA ANALYTICAL - ELAP #1210

for

Kevin Follett
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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

Lab Proj. ID: 9702346

Received: 02/06/97

Reported: 02/14/97

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

Kevin Follett
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** ____ **of** ____
Address: 74 Digital Dr #6 Novato CA 94949		**Site Location:** High St
Project #: 7-3006	**Consultant Project #:** 201011X	**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): John C Sklancz	**Sampler's Signature:**	
Shipment Method:	**Air Bill #:** fax to 415-382-1856	

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

ANALYSIS REQUIRED 9702346

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	2/6/97	12:00	Air	None	1		X					
A-Eff			Air	None	1		X					
W-INF 1			Water	HCl/ICE	3	1	X					
W-INF 2			Water	HCl/ICE	3	2	X					
W-INT			Water	HCl/ICE	3	3	X					
W-Eff	JS	JS	Water	HCl/ICE	3	4	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	2/6/97	18:05				
			Sequoia	2/6/97	1805	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

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

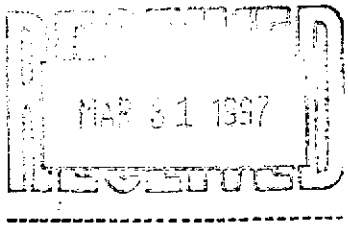
Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 03/05/97
74 Digital Drive , Suite 6	Sample Descript: W-INF1	Received: 03/07/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/12/97
Attention: Marc Briggs	Lab Number: 9703368-01	Reported: 03/13/97

QC Batch Number: GC031297BTEX18A
Instrument ID: GCHP18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**200**	**980**
Benzene	**2.0**	**100**
Toluene	**2.0**	**5.0**
Ethyl Benzene	**2.0**	**2.1**
Xylenes (Total)	**2.0**	**54**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	148 Q



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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
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, 201011X	Sampled: 03/05/97
74 Digital Drive , Suite 6	Sample Descript: W-INF2	Received: 03/07/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/12/97
Attention: Marc Briggs	Lab Number: 9703368-02	Reported: 03/13/97

QC Batch Number: GC031297BTEX01A
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**	**0.81**
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	112

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
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, 201011X	Sampled: 03/05/97
74 Digital Drive , Suite 6	Sample Descript: W-INT1	Received: 03/07/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/11/97
Attention: Marc Briggs	Lab Number: 9703368-03	Reported: 03/13/97

QC Batch Number: GC031197BTEX18A
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	102

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
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, 201011X	Sampled: 03/05/97
74 Digital Drive , Suite 6	Sample Descript: W-EFF	Received: 03/07/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/11/97
Attention: Marc Briggs	Lab Number: 9703368-04	Reported: 03/13/97

QC Batch Number: GC031197BTEX18A
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	105

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
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, 201011X	
74 Digital Drive, Ste. 6	Matrix:	Liquid	
Novato, CA 94949			
Attention: Marc Briggs	Work Order #:	9703368 01	Reported: Mar 26, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC031297BTEX18A	GC031297BTEX18A	GC031297BTEX18A	GC031297BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	970336401	970336401	970336401	970336401
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/11/97	3/11/97	3/11/97	3/11/97
Analyzed Date:	3/11/97	3/11/97	3/11/97	3/11/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.6	8.7	8.7	26
MS % Recovery:	86	87	87	87
Dup. Result:	8.8	8.9	8.9	26
MSD % Recov.:	88	89	89	87
RPD:	2.3	2.3	2.3	0.0
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK031297A	BLK031297A	BLK031297A	BLK031297A
Prepared Date:	3/11/97	3/11/97	3/11/97	3/11/97
Analyzed Date:	3/11/97	3/11/97	3/11/97	3/11/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.2	9.3	9.3	27
LCS % Recov.:	92	93	93	90
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Kevin Follett
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

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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, 201011X	
74 Digital Drive, Ste. 6	Matrix:	Liquid	
Novato, CA 94949			
Attention: Marc Briggs	Work Order #:	9703368 02	Reported: Mar 26, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC031297BTEX01A	GC031297BTEX01A	GC031297BTEX01A	GC031297BTEX01A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	970336401	970336401	970336401	970336401
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/12/97	3/12/97	3/12/97	3/12/97
Analyzed Date:	3/12/97	3/12/97	3/12/97	3/12/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	7.4	7.6	8.0	23
MS % Recovery:	74	76	80	77
Dup. Result:	8.7	8.9	9.5	28
MSD % Recov.:	87	89	95	93
RPD:	16	16	17	20
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK031297A	BLK031297A	BLK031297A	BLK031297A
Prepared Date:	3/12/97	3/12/97	3/12/97	3/12/97
Analyzed Date:	3/12/97	3/12/97	3/12/97	3/12/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.2	9.4	9.8	29
LCS % Recov.:	92	94	98	97

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

SEQUOIA ANALYTICAL

Kevin Follett
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

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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, 201011X	
74 Digital Drive, Ste. 6	Matrix:	Liquid	
Novato, CA 94949			
Attention: Marc Briggs	Work Order #:	9703368 03, 04	Reported: Mar 26, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC031197BTEX18A	GC031197BTEX18A	GC031197BTEX18A	GC031197BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	970309403	970309403	970309403	970309403
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/11/97	3/11/97	3/11/97	3/11/97
Analyzed Date:	3/11/97	3/11/97	3/11/97	3/11/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.6	9.6	9.6	29
MS % Recovery:	96	96	96	97
Dup. Result:	9.3	9.4	9.3	27
MSD % Recov.:	93	94	93	90
RPD:	3.2	2.1	3.2	7.1
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	BLK031197A	BLK031197A	BLK031197A	BLK031197A
Prepared Date:	3/11/97	3/11/97	3/11/97	3/11/97
Analyzed Date:	3/11/97	3/11/97	3/11/97	3/11/97
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.7	9.8	9.7	29
LCS % Recov.:	97	98	97	97

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

SEQUOIA ANALYTICAL

Kevin Follett
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

Consultant's Name: ENVIRONMENTAL RESOLUTIONS, INC.

Page 1 of 1

Address: 74 DIGITAL DR. SUITE 6 NOVATO 94949		
Project #: 201011X	Consultant Project #: 201011X	Site Location: 720 HIGH ST
Project Contact: MARC BRIGGS	Phone #: (415) 382-9105	Consultant Work Release #: 19432503
EXXON Contact: MARLA GUENSLER	Phone #: (510) 246-8776	Laboratory Work Release #:
Sampled by (print): GREG RANDALL	Sampler's Signature:	EXXON RAS #: 73006
Shipment Method:	Air Bill #:	OAKLAND, CA

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

ANALYSIS REQUIRED 9703368

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	3-5-97	1:00 pm	AIR	⊗	1		X					
A- EFF	〃	〃	〃	⊗	1		X					
W-INF1	3-5-97	12:00 pm	WATER	HCl/ICE	3	1	X					
W-INF2					3	2	X					
W-INT1					3	3	X					
W-EFF	〃	〃	〃	〃	3	4	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	3/6/97	1050	Stan Knight / SEQ	3/7/97	1050	
Stan Knight / SEQ	3/7/97	1:00				
			Mara Gruis	3/7/97	13:02	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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

Lab Proj. ID: 9703368

Received: 03/07/97

Reported: 03/13/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 9 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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 #73006	Sampled: Jan 31, 1997
74 Digital Dr, Ste 6	Sample Matrix:	Air	Received: Jan 31, 1997
Novato, CA 94949	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Feb 6, 1997
Attention: Marc Briggs	First Sample #:	701-1655	

QC Batch Number:	GC012997 802009A	GC012997 802009A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 701-1655 A-INF	Sample I.D. 701-1656 A-EFF
Purgeable Hydrocarbons	10	N.D.	N.D.
Benzene	0.050	0.14	N.D.
Toluene	0.050	0.093	0.052
Ethyl Benzene	0.050	0.055	N.D.
Total Xylenes	0.050	0.33	0.18
Chromatogram Pattern:		--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	1/31/97	1/31/97
Instrument Identification:	HP-9	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	90	88

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

RECEIVED
FEB 14 1997

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Client Services Representative

7011655.ENR <1>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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 #73006	Sampled: Jan 31, 1997
74 Digital Dr, Ste 6	Sample Matrix:	Air	Received: Jan 31, 1997
Novato, CA 94949	Analysis Method:	EPA 5030/8015 Mod./8020	Reported: Feb 6, 1997
Attention: Marc Briggs	First Sample #:	701-1655	

QC Batch Number:	GC012997 802009A	GC012997 802009A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit ppmv	Sample I.D. 701-1655 A-INF	Sample I.D. 701-1656 A-EFF
Purgeable Hydrocarbons	2.4	N.D.	N.D.
Benzene	0.016	0.044	N.D.
Toluene	0.013	0.025	0.014
Ethyl Benzene	0.012	0.013	N.D.
Total Xylenes	0.012	0.076	0.042
Chromatogram Pattern:		--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	1/31/97	1/31/97
Instrument Identification:	HP-9	HP-9
Surrogate Recovery, %: (QC Limits = 70-130%)	90	88

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Client Services Representative

7011655.ENR <2>

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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 Dr, Ste 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon #73006
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 701-1657

Sampled: Jan 31, 1997
Received: Jan 31, 1997
Reported: Feb 6, 1997

QC Batch Number:	GC020397 802004A	GC020397 802004A	GC020397 802004A	GC020397 802004A

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit µg/L	Sample I.D. 701-1657 W-INF	Sample I.D. 701-1658 W-INT 1	Sample I.D. 701-1659 W-INT 2	Sample I.D. 701-1660 W-EFF
Purgeable Hydrocarbons	50	5,500	190	N.D.	N.D.
Benzene	0.50	1,700	39	N.D.	N.D.
Toluene	0.50	580	12	N.D.	N.D.
Ethyl Benzene	0.50	120	2.1	N.D.	N.D.
Total Xylenes	0.50	740	13	N.D.	N.D.
Chromatogram Pattern:		Gasoline	Gasoline	--	--

Quality Control Data

Report Limit Multiplication Factor:	20	1.0	1.0	1.0
Date Analyzed:	2/3/97	2/3/97	2/3/97	2/3/97
Instrument Identification:	HP-4	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	103	103	96	96

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Client Services Representative

7011655.ENR <3>

Sequoia Analytical

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

Client Project ID: Exxon #73006
Matrix: Vapor
QC Sample Group: 7011655-656

Reported: Feb 6, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC012997 802009A	GC012997 802009A	GC012997 802009A	GC012997 802009A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	BLK012997	BLK012997	BLK012997	BLK012997
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	1/29/97	1/29/97	1/29/97	1/29/97
Analyzed Date:	1/29/97	1/29/97	1/29/97	1/29/97
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.1	9.5	7.9	30
MS % Recovery:	91	95	79	100
Dup. Result:	8.6	9.0	7.5	29
MSD % Recov.:	86	90	75	97
RPD:	5.7	5.4	5.2	3.4
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	9LCS013197	9LCS013197	9LCS013197	9LCS013197
Prepared Date:	1/31/97	1/31/97	1/31/97	1/31/97
Analyzed Date:	1/31/97	1/31/97	1/31/97	1/31/97
Instrument I.D.#:	HP-9	HP-9	HP-9	HP-9
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	11	7.8	35
LCS % Recov.:	100	110	78	117

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

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Client Services Representative

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

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

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

Client Project ID: Exxon #73006
Matrix: Liquid

QC Sample Group: 7011657-660

Reported: Feb 6, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC020397	GC020397	GC020397	GC020397
	802004A	802004A	802004A	802004A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	7011660	7011660	7011660	7011660
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/3/97	2/3/97	2/3/97	2/3/97
Analyzed Date:	2/3/97	2/3/97	2/3/97	2/3/97
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	18	19	19	58
MS % Recovery:	90	95	95	97
Dup. Result:	16	16	16	48
MSD % Recov.:	80	80	80	80
RPD:	12	17	17	19
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	4LCS020397	4LCS020397	4LCS020397	4LCS020397
Prepared Date:	2/3/97	2/3/97	2/3/97	2/3/97
Analyzed Date:	2/3/97	2/3/97	2/3/97	2/3/97
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	20	21	21	63
LCS % Recov.:	100	105	105	105

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

SEQUOIA ANALYTICAL, #1271

Melissa A. Brewer

Melissa A. Brewer
Client Services Representative

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

7011655.ENR <5>

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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

Project #: 2010 11X

Project Contact: MARC BRIGGS

EXXON Contact: MARIA GUERRERO

Sampled by (print): ~~PETER PORTER~~

Shipment Method: John Skance

Site Location: 720 High St OAKLAND

Consultant Work Release #: 19432503

Consultant Project #: 2010 11X

Phone #: 415 382 9105

Laboratory Work Release #:

Phone #: 510 746 9768

EXXON RAS #: 73006

Sampler's Signature:

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	1/31/97	1230	AIR	None	1		X	7011655				
A-Eff					1		X	7011656				
W-INF		300	WATER	HCl			X	7011657	A-C			
W-INT 1							X	7011658				
W-INT 2							X	7011659				
W-Eff							X	7011660	✓			

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	1/31/97	16:20		1/31/97	16:20	

Pink - Client
Yellow - Sequoia
White - Sequoia

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, 201011X	Sampled: 02/06/97
74 Digital Drive , Suite 6	Sample Descript: A-Eff	Received: 02/06/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Marc Briggs	Lab Number: 9702257-01	Reported: 02/13/97

QC Batch Number: GC020697BTEX02A
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	96

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

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FEB 18 1997

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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: 02/06/97
74 Digital Drive , Suite 6	Sample Descript: A-Inf	Received: 02/06/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 02/07/97
Attention: Marc Briggs	Lab Number: 9702257-02	Reported: 02/13/97

QC Batch Number: GC020697BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**10**	**86**
Benzene	**0.10**	**2.2**
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	**0.10**	**0.25**
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.

SEQUOIA ANALYTICAL - ELAP #1210

for

Kevin Follett
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
74 Digital Drive , Suite 6
Novato, CA 94949
Attention: Marc Briggs

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

Lab Proj. ID: 9702257

Received: 02/06/97

Reported: 02/13/97

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 3 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

for

Kevin Follett
Project Manager

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, 201011X
Matrix: Air
Work Order #: 9702257 01, 02

Reported: Feb 13, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC020697BTEX02A	GC020697BTEX02A	GC020697BTEX02A	GC020697BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	G. Fish	G. Fish	G. Fish	G. Fish
MS/MSD #:	9701D1204	9701D1204	9701D1204	9701D1204
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/6/97	2/6/97	2/6/97	2/6/97
Analyzed Date:	2/6/97	2/6/97	2/6/97	2/6/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.6	9.7	9.9	31
MS % Recovery:	96	97	99	103
Dup. Result:	9.5	9.6	9.8	31
MSD % Recov.:	95	96	98	103
RPD:	1.0	1.0	1.0	0.0
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK020697A	BLK020697A	BLK020697A	BLK020697A
Prepared Date:	2/6/97	2/6/97	2/6/97	2/6/97
Analyzed Date:	2/6/97	2/6/97	2/6/97	2/6/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.3	9.4	9.6	30
LCS % Recov.:	93	94	96	100
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Kevin Follett
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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EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Page ___ of ___

Consultant's Name: Environmental Resolutions Inc		
Address: 74 Digital Dr #6 Novato CA 94949		Site Location: High St
Project #: 7-3006	Consultant Project #: 201011X	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): John C Skancke	Sampler's Signature:	
Shipment Method:	Air Bill #: fax to 415-382-1856	

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

ANALYSIS REQUIRED 9702257

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	2/6/97	12:00	Air	None	1	1	X					
A-Eff			Air	None	1	2	X					
W-INF 1			Water	HCl/ICE	3		X					
W-INF 2			Water	HCl/ICE	3		X					
W-INT			Water	HCl/ICE	3		X					
W-Eff	JS	JS	Water	HCl/ICE	3		X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	2/6/97	18:05				
			Sequoia	2/6/97	1805	

Pink - Client
Yellow - Sequoia
White - Sequoia

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, 201011X	Sampled: 03/05/97
74 Digital Drive , Suite 6	Sample Descript: A-Inf	Received: 03/07/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 03/07/97
Attention: Marc Briggs	Lab Number: 9703292-01	Reported: 03/13/97

QC Batch Number: GC030797BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	210
Benzene	0.10	N.D.
Toluene	0.10	0.35
Ethyl Benzene	0.10	0.35
Xylenes (Total)	0.10	1.1
Chromatogram Pattern:		
Gas & Unidentified HC		C6-C8

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	213 Q

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MAR 31 1997

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
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: 03/05/97
74 Digital Drive , Suite 6	Sample Descript: A-Eff	Received: 03/07/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 03/07/97
Attention: Marc Briggs	Lab Number: 9703292-02	Reported: 03/13/97

QC Batch Number: GC030797BTEX03A
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	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 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, 201011X
Matrix: Air
Work Order #: 9703292 01

Reported: Mar 22, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC030797BTEX03A	GC030797BTEX03A	GC030797BTEX03A	GC030797BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9702D4002	9702D4002	9702D4002	9702D4002
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/7/97	3/7/97	3/7/97	3/7/97
Analyzed Date:	3/7/97	3/7/97	3/7/97	3/7/97
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.9	9.0	9.4	28
MS % Recovery:	89	90	94	93
Dup. Result:	9.3	9.2	9.3	26
MSD % Recov.:	93	92	93	87
RPD:	4.4	2.2	1.1	7.4
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK030797A	BLK030797A	BLK030797A	BLK030797A
Prepared Date:	3/7/97	3/7/97	3/7/97	3/7/97
Analyzed Date:	3/7/97	3/7/97	3/7/97	3/7/97
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.2	8.5	8.6	26
LCS % Recov.:	82	85	86	87
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Kevin Follett
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

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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, 201011X
Matrix: Air
Work Order #: 9703292 02

Reported: Mar 22, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC030797BTEX03A	GC030797BTEX03A	GC030797BTEX03A	GC030797BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	9702D4001	9702D4001	9702D4001	9702D4001
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/7/97	3/7/97	3/7/97	3/7/97
Analyzed Date:	3/7/97	3/7/97	3/7/97	3/7/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	12	12	12	32
MS % Recovery:	120	120	120	107
Dup. Result:	12	12	12	33
MSD % Recov.:	120	120	120	110
RPD:	0.0	0.0	0.0	3.1
RPD Limit:	0-25	0-25	0-25	0-25
LCS #:	BLK030797A	BLK030797A	BLK030797A	BLK030797A
Prepared Date:	3/7/97	3/7/97	3/7/97	3/7/97
Analyzed Date:	3/7/97	3/7/97	3/7/97	3/7/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	12	12	12	33
LCS % Recov.:	120	120	120	110
MS/MSD Control Limits	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

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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

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC.			Page 1 of 1
Address: 74 DIGITAL DR. SUITE 6 NOVATO 94949			**Site Location:** 720 HIGH ST
Project #: 201011.X	**Consultant Project #:** 201011.X		**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 #:** 73006
Sampled by (print): GREG RANDALL	**Sampler's Signature:**		OAKLAND, CA
Shipment Method:	**Air Bill #:**		

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

ANALYSIS REQUIRED 9703292

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	3-5-97	1:00 pm	AIR		1	1	X					
A- EFF	〃	〃	〃		1	2	X					
W-INF1	3-5-97	12:00 pm	WATER	HCl	3		X					
W-INF2	〃	〃	〃	〃	3		X					
W-INT1	〃	〃	〃	〃	3		X					
W-EFF	〃	〃	〃	〃	3		X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	3/6/97	1050	STK Knight / SEQ	3/7/97	1050	
STK Knight / SEQ	3/7/97	1:00				
				3/7/97	1302	

Pink - Client
Yellow - Sequoia
White - Sequoia

ER 7102

Sequoia Analytical

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

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

Lab Proj. ID: 9703292

Received: 03/07/97

Reported: 03/13/97

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.).

TPPH Note: High surrogate recovery was confirmed.

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

ATTACHMENT C

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

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

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

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

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

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)