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EXXON COMPANY, U.S.A.

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MARKETING DEPARTMENT • ENVIRONMENTAL ENGINEERING

MARLA D. GUENSLER
SENIOR ENVIRONMENTAL ENGINEER

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July 23, 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 report entitled ***Quarterly Groundwater Monitoring and Remediation Status Report, Second Quarter 1997***, dated July 21, 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, Second Quarter 1997, dated July 21, 1997

cc: w/attachment
Mr. Kevin Graves - California Regional Water Quality Control Board

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

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RECYC

ENVIRONMENTAL RESOLUTIONS, INC.

July 21, 1997
ERI 201011.R10

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, Second 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 second 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 June 4, 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 AS/SVE system in August 1996 utilizing the thermal/catalytic oxidizer. Cumulative operational and performance data are presented in Table 2. Copies of the Reports of Laboratory Analysis and Chain of Custody Records for soil vapor-extraction system samples collected during second quarter 1997 are attached (Attachment B).

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

Groundwater Extraction And Treatment

The groundwater remediation system (GRS) is designed to treat separate-phase and dissolved hydrocarbons in groundwater extracted from the interceptor trench beneath the site. Pneumatic pumps are installed in extraction wells RW2 and RW5 to recover groundwater from the interceptor trench. Subsurface and above-ground collection piping are used to transfer extracted groundwater to a holding tank. A transfer pump and poly-vinyl chloride (PVC) piping are used to direct the water stream from the holding tank through water filters, an airstripper, and subsequently through liquid-phase granular activated carbon (GAC) canisters connected in series. The treated groundwater is discharged to the sanitary sewer regulated by East Bay Municipal Utilities District (EBMUD).

Between March 26, 1997 and June 11, 1997, the system recovered 31,623 gallons of groundwater from beneath the site. The system was shutdown pending transfer pump replacement. System flow rates, total volume extracted, and influent, intermediate, and effluent sample concentrations are presented in Table 3.

SUMMARY AND STATUS OF INVESTIGATION

How do you distinguish gas removed by GAS vs AS/SVE

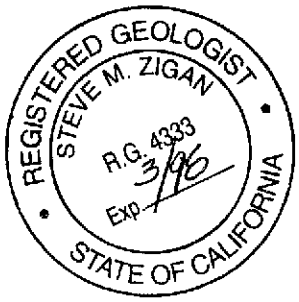
Based on data collected to date, it appears the AS/SVE system and GRS are removing residual hydrocarbons in soil and dissolved hydrocarbons in groundwater. ERI estimates approximately 78 pounds (approximately 12.8 gallons) of residual hydrocarbons were removed by the AS/SVE system during the second quarter 1997, and 2,846 pounds (approximately 465.6 gallons) since start-up. ERI estimates approximately 0.26 pounds of dissolved hydrocarbons were removed by the GRS during the second quarter 1997, and 6.2 pounds (approximately 1.02 gallons) since start-up. ERI will continue to operate the remedial systems and monitor groundwater at the site during the third quarter 1997.

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 # (TOC)	Sampling Date	SUBJ <	DTW feet	Elev. > <	TPHg	B	T	E	X	MTBE	TEPHd	VOCs >
					parts per billion							
MW1	1/20/94	NLPH	9.25	3.62								
(12.87)	02/02-03/94	NLPH	8.60	4.27	< 50	< 0.5	< 0.5	< 0.5	0.7	NA	70	NA
	3/10/94	NLPH	8.31	4.56								
	4/22/94	NLPH	7.95	4.92								
	05/10-11/94	NLPH	7.48	5.39	< 50	< 0.5	< 0.5	< 0.5	1.6	NA	100	NA
	6/27/94	NLPH	7.65	5.22								
	8/31/94	NLPH	9.39	3.48								
	9/29/94	NLPH	9.83	3.04	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	10/25/94	NLPH	10.19	2.68	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 50	NA	NA
	11/30/94	NLPH	8.97	3.90								
	12/27/94	NLPH	7.44	5.43								
	2/6/95	NLPH	5.71	7.16	< 50	0.52	< 0.5	< 0.5	< 0.5	100	NA	NA
	6/7/95	NLPH	7.62	5.25	< 50	< 0.5	< 0.5	< 0.5	< 0.5	3.5	81	NA
	9/18/95	NLPH	10.02	2.85	< 50	< 0.5	< 0.5	< 0.5	< 0.5	6	82	NA
	11/1/95	NLPH	10.74	2.13	< 50	< 0.5	< 0.5	< 0.5	< 0.5	8.9	160	NA
	2/14/96	NLPH	7.81	5.06	< 50	< 0.5	< 0.5	< 0.5	< 0.5	7.8	100	NA
	6/19/96	NLPH	7.47	5.40	< 50	< 0.5	< 0.5	< 0.5	< 0.5	7.1	93	NA
				Additional EHCss	< 50							
	9/24/96	NLPH	10.42	2.45	< 50	< 0.5	< 0.5	< 0.5	< 0.5	9.5	83	NA
	12/11/96	NLPH	8.50	4.37	< 50	< 0.5	< 0.5	< 0.5	< 0.5	7.2	81	NA
	3/19/97	NLPH	9.14	3.73	< 50	< 0.5	< 0.5	< 0.5	< 0.5	6.4	78	NA
	6/4/97	NLPH	9.82	3.05	< 50	< 0.5	< 0.5	< 0.5	< 0.5	6.0	58	NA
MW2	1/20/94	NM [NR]	NM									
(12.98)	02/02-03/94	NM [NR]	NM	---								
	3/10/94	[8 c.]	6.96	6.02								
	4/22/94	[10 c.]	NM	---								
	05/10-11/94	[5 c.]	NM	---								
	6/27/94	Sheen	7.10	5.88								
	8/31/94	Sheen	8.58	4.40								
	9/29/94	Sheen	9.11	3.87								
	10/25/94	Sheen	7.76	5.22								
	11/30/94	NM	7.33	5.65								
	12/27/94	Sheen	6.77	6.21								
	2/6/95	Sheen	5.00	7.98								
	6/7/95	Sheen	7.14	5.84								
	9/18/95	Sheen	10.82	2.16								
	11/1/95	Sheen	11.65	1.33								
	2/14/96	Sheen	8.39	4.59								
	6/19/96	Sheen	6.55	6.43								
	9/24/96	Sheen	11.56	1.42								
	12/11/96	Sheen	8.02	4.96								
	3/19/97	Sheen	8.63	4.35								
	6/4/97	Sheen	10.57	2.41								
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								
MW3 (cont.)	2/14/96	Sheen	8.34	4.58								
(12.92)	6/19/96	Sheen	6.35	6.57								
	9/24/96	Sheen	11.45	1.47								
	12/11/96	NLPH	7.89	5.03	4,800	340	< 5.0	8.2	20	30	17,000*	NA

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					
	3/19/97	NLPH	9.83	3.09	1,900	160	11	5.6	10	80	3,000	NA
	6/4/97	NLPH	10.43	2.49	920	15	2.8	2.4	<2.0	11	8,000	NA
MW4												
(12.77)	1/20/94	NM [NR]	NM	---								
	02/02-03/94	NM [1 c.]	NM	---								
	3/10/94	[8 c.]	7.12	5.65								
	4/22/94	[10 c.]	NM	---								
	05/10-11/94	[5 c.]	NM	---								
	6/27/94	0.01 [NR]	6.50	6.27								
	8/31/94	0.02 [NR]	7.84	4.93								
	9/29/94	0.03 [NR]	8.43	4.34								
	10/25/94	Sheen	9.24	3.53								
	11/30/94	NM	6.77	6.00								
	12/27/94	Sheen	6.14	6.63								
	2/6/95	Sheen	4.87	7.90								
	6/7/95	Sheen	6.91	5.86								
	9/18/95	Sheen	9.59	3.18								
	11/1/95	Sheen	11.52	1.25								
	2/14/96	Sheen	8.56	4.21								
	6/19/96	Sheen	6.09	6.68								
	9/24/96	Sheen	10.20	2.57								
	12/11/96	Sheen	7.78	4.99								
	3/19/97	Sheen	8.56	4.21								
	6/4/97	Sheen	9.31	3.46								
MW5	7/18/89		Well Destroyed									
MW6	1/20/94	NM [NR]	NM	---								
(14.27)	02/02-03/94	NM [NR]	NM	---								
	3/10/94	[¼ c.]	7.82	6.45								
	4/22/94	[10 c.]	NM	---								
	05/10-11/94	[3 c.]	NM	---								
	6/27/94	Sheen	7.77	6.50								
	8/31/94	Sheen	9.02	5.25								
	9/29/94	Sheen	9.51	4.76								
	10/25/94	Sheen	9.93	4.34								
	11/30/94	NM	8.05	6.22								
	12/27/94	NM	7.54	6.73								
	2/6/95	Sheen	5.86	8.41								
	6/7/95	Sheen	8.07	6.20								
	9/18/95	Sheen	10.54	3.73								
	11/1/95	Sheen	11.41	2.86								
	2/14/96	Sheen	9.17	5.10								
	6/19/96	Sheen	7.13	7.14								
	9/24/96	Sheen	11.24	3.03								
	12/11/96	NLPH	9.20	5.07	9,100	2,100	22	160	260	<100	2,900	NA
	3/19/97	NLPH	10.14	4.13	24,000	5,800	91	1,300	1,900	250	3,800	NA
	6/4/97	NLPH	10.58	3.69	20,000	4,400	<50	540	480	270	3,300	NA

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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				>
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							
	6/4/97	NLPH	9.38	5.46	1,900	45	< 2.0	5.3	13	< 2.5	1,000	ND
			Additional Analysis EHCss		780							
MW8	1/20/94	Sheen	8.90	4.55								
(13.45)	02/02-03/94	Sheen	8.58	4.87								
	3/10/94	Sheen	7.16	6.29								
	4/22/94	Sheen	7.34	6.11								
	05/10-11/94	Sheen	7.04	6.41								
	6/27/94	Sheen	6.01	7.44								
	8/31/94	Sheen	9.26	4.19								
	9/29/94	Sheen	9.76	3.69								
	10/25/94	Sheen	10.05	3.40								
	11/30/94	NM	7.68	5.77								
	12/27/94	Sheen	7.11	6.34								
	2/6/95	Sheen	5.39	8.06								
	6/7/95	Sheen	7.53	5.92								
	9/18/95	Sheen	9.84	3.61								
	11/1/95	Sheen	10.47	2.98								
	2/14/96	Sheen	8.27	5.18								
	6/19/96	Sheen	6.88	6.57								
	9/24/96	Sheen	10.13	3.32								
	12/11/96	Sheen	8.53	4.92								
	3/19/97	Sheen	9.09	4.36								
	6/4/97	Sheen	9.52	3.93								

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							>
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
	6/4/97	NLPH	8.87	5.77	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
MW10	1/20/94	NLPH	8.40	5.65								
(14.05)	02/02-03/94	NLPH	8.00	6.05	< 50	< 0.5	1	< 0.5	1.8	NA	< 50	NA
	3/10/94	NLPH	7.56	6.49								
	4/22/94	NLPH	7.35	6.70								
	05/10-11/94	NLPH	7.06	6.99	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	6/27/94	NLPH	7.59	6.46								
	8/31/94	NLPH	8.73	5.32								
	9/29/94	NLPH	9.07	4.98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	10/25/94	NLPH	9.41	4.64	< 50	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	NA
	11/30/94	NM	7.62	6.43								
	12/27/94	NLPH	7.01	7.04								
	2/6/95	NLPH	5.60	8.45	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 50	NA	NA
	6/7/95	NLPH	7.12	6.93	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	9/18/95	NLPH	8.54	5.51	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	11/1/95	NLPH	9.44	4.61	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	2/14/96	NLPH	9.36	4.69	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	64	NA
	6/19/96	NLPH	7.32	6.73	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
			Additional Analysis EHCss		< 50							
	9/24/96	NLPH	9.07	4.98	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA
	12/11/96	NLPH	7.73	6.32	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	67	NA
	3/19/97	NLPH	7.62	6.43	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	51	NA
	6/4/97	NLPH	8.38	5.67	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 50	NA

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							
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
	6/4/97	NLPH	9.91	3.64	< 50	< 0.5	< 0.5	< 0.5	< 0.5	5.6	< 50	NA
MW12	1/20/94	NLPH	7.81	4.80								
(12.61)	02/02-03/94	NLPH	7.22	5.39	48,000	4,000	2,700	2,900	9,900	NA	18,000	NA
	3/10/94	NLPH	6.16	6.45								
	4/22/94	NLPH	6.31	6.30								
	05/10-11/94	NLPH	6.16	6.45	46,000	30,003	1,600	2,900	9,100	NA	8,200	NA
	6/27/94	NLPH	6.55	6.06								
	8/31/94	NLPH	7.97	4.64								
	9/29/94	Sheen	8.52	4.09								
	10/25/94	Sheen	8.74	3.87								
	11/30/94	NM	8.73	3.88								
	12/30/94	NLPH	6.17	6.44								
	2/6/95	Sheen	4.44	8.17								
	6/7/95	Sheen	6.59	6.02								
	9/18/95	Sheen	8.96	3.65								
	11/1/95	Sheen	10.75	1.86								
	2/14/96	Sheen	7.73	4.88								
	6/19/96	Sheen	5.80	6.81								
	9/24/96	Sheen	9.14	3.47								
	12/11/96	Sheen	7.31	5.30								
	3/19/97	Sheen	9.96	2.65								
	6/4/97	Sheen	8.81	3.80								

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								
	6/4/97	Sheen	9.59	4.61								
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								
	6/4/97	NLPH	9.30	5.88	730	<1.2	<1.2	3.5	5.3	<2.5	1,500	ND
		Additional Analysis EHCss		590								

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 (13.73)	1/20/94	NLPH	7.48	6.25								
	02/02-03/94	NLPH	7.30	6.43	4,300	24	6.7	170	26	NA	1,200	NA
	3/10/94	NLPH	7.32	6.41								
	4/22/94	NLPH	6.67	7.06								
	05/10-11/94	NLPH	5.81	7.92	3,900	16	< 0.5	150	13	NA	1,400	NA
	6/27/94	NLPH	6.14	7.59								
	8/31/94	NLPH	7.20	6.53								
	9/29/94	NLPH	7.76	5.97	2,500	51	15	48	3.6	NA	420	NA
	10/25/94	Sheen	8.19	5.54								
	11/30/94	NM	8.57	5.16								
	12/27/94	NLPH	6.49	7.24								
	2/6/95	Sheen	4.97	8.76								
	6/7/95	Sheen	7.14	6.59								
	9/18/95	Sheen	9.00	4.73								
	11/1/95	Sheen	10.67	3.06								
	2/14/96	Sheen	7.27	6.46								
	6/19/96	Sheen	6.65	7.08								
	9/24/96	Sheen	9.45	4.28								
	12/11/96	Sheen	7.77	5.96								
	3/19/97	Sheen	8.15	5.58								
	6/4/97	Sheen	8.62	5.11								

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: 7/15/97

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
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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		70		168	165	0	751	269.69	1,345.2				
11/6/95													
11/20/95	Replaced 2 ea x 500 lb canisters = 1000 lbs of carbon												
11/20/95	A-INF1	70		170			180	176.60	1,521.8	3.6	1.038	< 31.9	
	A-INF2						82			2			
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0015
11/26/95	System down												
12/4/95	Restart system	70		168	18.5	0.5	84	12.03	1,533.8				
12/18/95	A-INF	70		151			4600	469.45	2,003.3	50	10.105	< 42.0	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/2/96		70		147	51.7	8.2	235	485.04	2,488.3				
1/3/96	Shut system down, pending carbon change out												
1/8/96	changed out three carbon beds, #1, #2, #3			two carbon beds in-line									
1/8/96		70		151.2	105.4	0	480	28.72	2,517.0				
1/16/96	A-INF	70		142.8	62.3	0	180	7.50	2,524.5	< 0.1	< 0.000	< 42.0	
	A-EFF									< 0.1			< 0.0013
1/30/96		70		147	50.4	0	230	37.28	2,561.8				
2/14/96	A-INF	72		147	39.7	0	< 10	< 0.49	2,562.3	0.16	0.049	< 42.0	
	A-EFF						< 10			< 0.1			< 0.0013
2/27/96		70		136.5	1	0	5	1.20	2,563.5				
3/12/96	A-INF	70		136.5	2.2	0	< 10	< 1.25	2,564.8	< 0.1	< 0.045	< 42.1	
	A-EFF						< 10			< 0.1			< 0.0012

TABLE 2
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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						
3/19/97				52.5	33	1	140						
3/26/97				50.4	35	1	148						
4/2/97	A-INF			52.5			170	22.56	2,767.7	4.0	< 0.243	< 42.9	
	A-EFF						< 10			< 0.10			< 0.0005
4/9/97				52.5	40	1	169						
4/16/97				52.5	58	3	245						
4/23/97				52.5	30	1	127						
4/30/97				52.5	30	2	127						
5/8/97	A-INF			46.2			340	40.67	2,808.4	4.8	0.702	< 43.6	
	A-EFF						< 10			< 0.10			< 0.0004
5/14/97				46.2	80	1	339						
5/21/97				46.2	20	1	85						
5/28/97				42	42	0	178						
6/4/97	A-INF			42			360	37.41	2,845.8	2.9	0.411	< 44.0	
	A-EFF						< 10			< 0.10			< 0.0004
6/11/97				42	40	0	169						
6/18/97				37.8	38	0	161						

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
6/25/97				39.9	36	0	152						

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 7/8/97

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]
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			System Down										
11/29/95	160361	77	Restart System										
12/4/95	161442	216											
12/18/95	168304	490	W-INF1	8900	1100	240	130	2200	NA	0.3435	2.2543	0.0447	0.5851
			W-INF2	3900	380	85	60	890	NA				
			W-INT	<50	1.3	<0.5	<0.5	5.1	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
1/2/96	171770	231											
1/8/96	173707	323											
1/16/96	178573	608	W-INF	490	53	1.8	3.9	35	NA	0.4023	2.6566	0.0038	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				

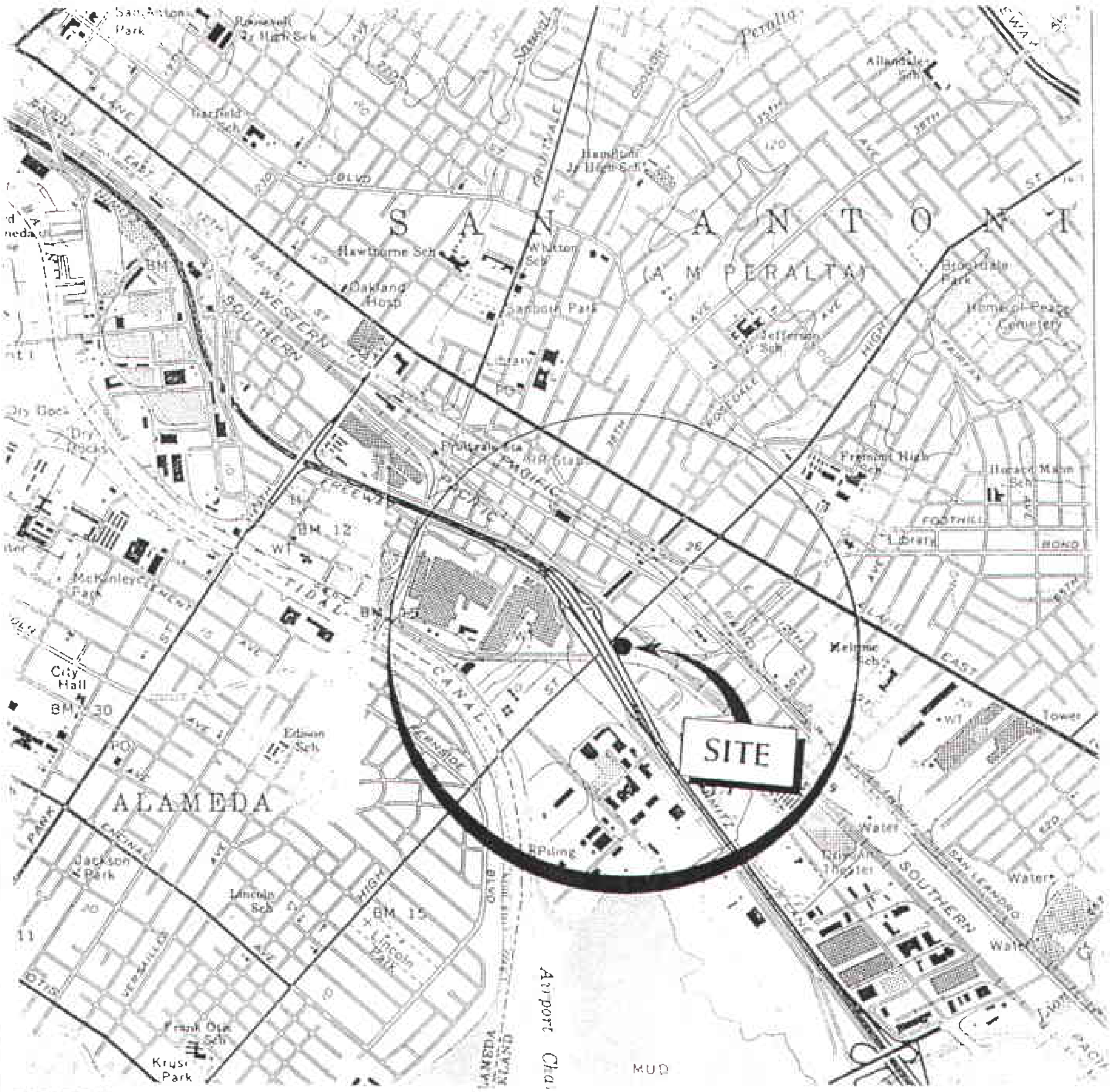
TABLE 3
OPERATION AND PERFORMANCE DATA FOR
GROUNDWATER REMEDIATION SYSTEM
Former Exxon Service Station 7-3006
720 High Street
Oakland, California

				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]
3/25/96	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										
1/2/97	263232		Replaced compressor, restarted unit										
1/31/97	290045	925	W-INF	5,500	1,700	580	120	740	NA	0.6208	4.1753	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											
4/2/97	351729	686	W-INF	430	120	1.8	5.3	19	NA	0.0679	5.9628	0.0106	1.2916
			W-INT1	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
4/9/97	356009	611											
4/16/97	358700	384											
4/23/97			System down on arrival										
4/30/97	361241	182											
5/8/97	365440	525											
5/14/97	368270	472	System down, bad float on air stripper										
5/21/97	370444	311	W-INF	1,300	360	<5.0	16	21	NA	0.1351	6.0978	0.0375	1.3290
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
			System down, bad float on air stripper										
5/28/97	372219	254	System down, bad float on air stripper										
6/4/97			Replaced float, restarted system										
6/4/97	375230	430	W-INF1	1,600	510	5.8	17	16	NA	0.0579	6.1557	0.0174	1.3464
			W-INF2	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
6/11/97	378550	474	System down, faulty transfer pump										
6/18/97			System down, faulty transfer pump										
6/25/97			System down, faulty transfer pump										

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
NA = Not applicable
NS = Not sampled
ND = Not detected
< = less than the laboratory method detection limit
ug/L = micrograms per liter
mg/L = milligrams per Liter
gpd = gallons per day
gal = gallons



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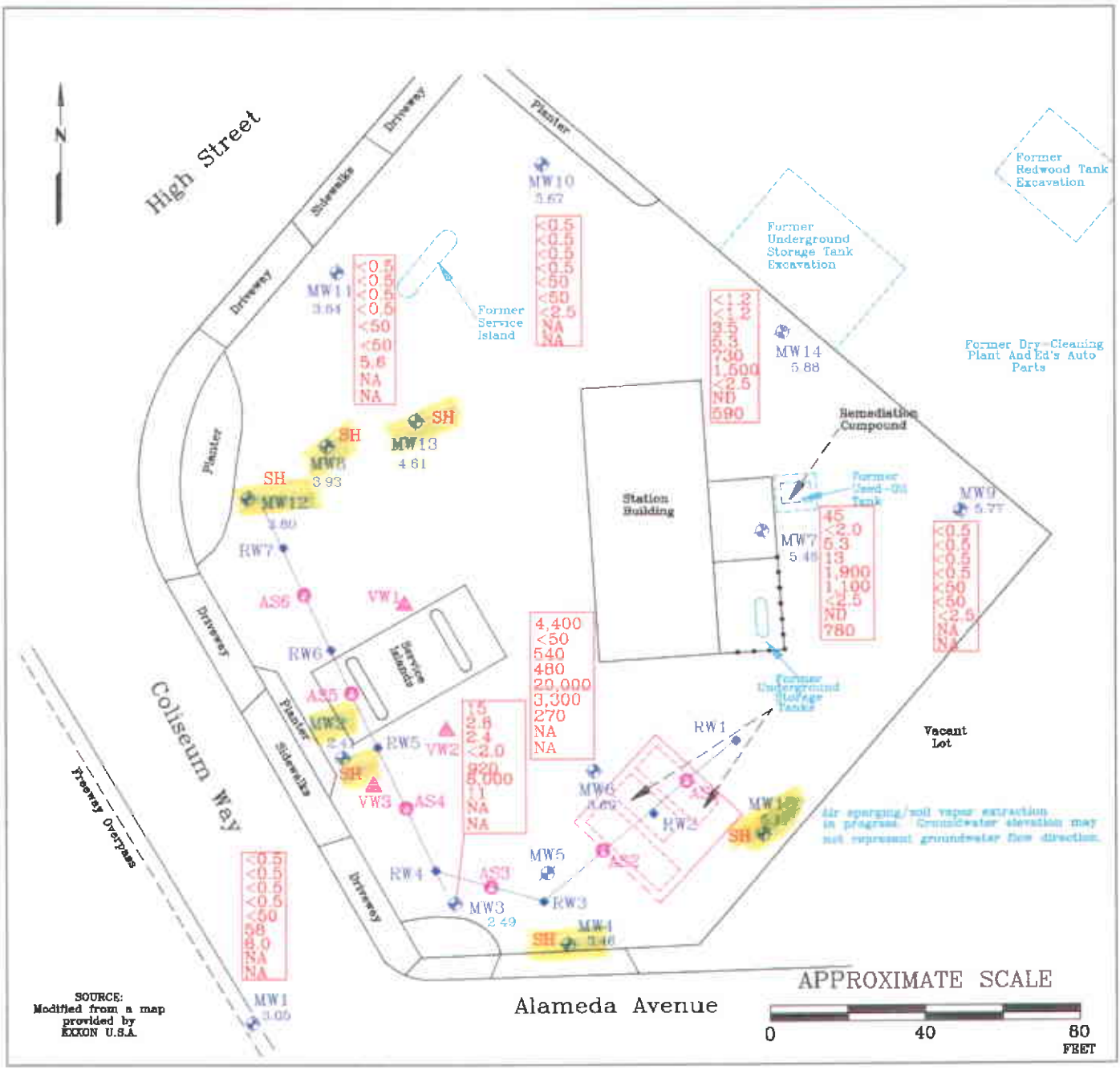
APPROXIMATE SCALE

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.	**SITE VICINITY MAP** FORMER EXXON SERVICE STATION 7-3006 720 High Street Oakland, California	**PLATE** 1
PROJECT ERI 2010		



FN 20100002

EXPLANATION

MW15 5.11 Groundwater Monitoring Well, Groundwater Elevation

MW5 Groundwater Monitoring Well (Destroyed)

VW3 Vapor Well

RW7 Recovery Monitoring Well

Interceptor Trench

AS6 Air-Sparging/Vapor-Extraction Well

Groundwater Concentrations in ug/L
Sampled June 4, 1997

4,400	Benzene
<50	Toluene
540	Ethylbenzene
480	Xylene
20,000	Total Petroleum Hydrocarbons as gasoline
3,300	Total Extractable Petroleum Hydrocarbons as diesel
270	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

June 25, 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: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-08-MW10	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 06/10/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/10/97
Attention: Marc Briggs	Lab Number: 9706353-01	Reported: 06/18/97

QC Batch Number: GC0610970HBPEXC
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

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

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	86

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

RECEIVED
JUN 26 1997

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, 201013X	Sampled: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-08-MW10	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/11/97
Attention: Marc Briggs	Lab Number: 9706353-01	Reported: 06/18/97

QC Batch Number: GC061197BTEX02A
Instrument ID: GCHP02

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	83

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: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW1	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 06/10/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/11/97
Attention: Marc Briggs	Lab Number: 9706353-02	Reported: 06/18/97

QC Batch Number: GC0610970HBPEXC
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	**58**
Chromatogram Pattern: **Unidentified HC**		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	85

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: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW1	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/12/97
Attention: Marc Briggs	Lab Number: 9706353-02	Reported: 06/18/97

QC Batch Number: GC061297BTEX21A
Instrument ID: GCHP21

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**	**6.0**
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: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-14-MW9	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 06/10/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/11/97
Attention: Marc Briggs	Lab Number: 9706353-03	Reported: 06/18/97

QC Batch Number: GC0610970HBPEXC
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

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

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	77

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
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201013X
Sample Descript: W-14-MW9
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706353-03

Sampled: 06/04/97
Received: 06/05/97

Analyzed: 06/11/97
Reported: 06/18/97

QC Batch Number: GC061197BTEX02A
Instrument ID: GCHP02

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	83

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	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-11-MW11	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 06/10/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/11/97
Attention: Marc Briggs	Lab Number: 9706353-04	Reported: 06/18/97

QC Batch Number: GC0610970HBPEXC
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

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

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	68

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201013X
Sample Descript: W-11-MW11
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706353-04

Sampled: 06/04/97
Received: 06/05/97

Analyzed: 06/12/97
Reported: 06/18/97

QC Batch Number: GC061297BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	**2.5**	**5.6**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:	0.50	N.D.

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	95

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

QUOIA ANALYTICAL - ELAP #1210

in Follett
ect Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-13-MW14	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 06/10/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/11/97
Attention: Marc Briggs	Lab Number: 9706353-05	Reported: 06/18/97

QC Batch Number: GC0610970HBPEXC
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	**1500**
Chromatogram Pattern: **Unidentified HC**		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	107

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

SEQUOIA ANALYTICAL - ELAP #1210

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201013X
Sample Descript: W-13-MW14
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706353-05

Sampled: 06/04/97
Received: 06/05/97

Analyzed: 06/12/97
Reported: 06/18/97

QC Batch Number: GC061297BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**125**	**730**
Methyl t-Butyl Ether	2.5	N.D.
Benzene	1.2	N.D.
Toluene	1.2	N.D.
Ethyl Benzene	**1.2**	**3.5**
Xylenes (Total)	**1.2**	**5.3**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	157 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: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-13-MW14	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: EPA 601	Analyzed: 06/13/97
Attention: Marc Briggs	Lab Number: 9706353-05	Reported: 06/18/97

QC Batch Number: GC061397060108A
Instrument ID: GCHP8

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	89

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201013X	Sampled: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-13-MW14	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	Extracted: 06/10/97
	Analysis Method: EPA 8015 Mod	Analyzed: 06/11/97
Attention: Marc Briggs	Lab Number: 9706353-05	Reported: 06/18/97

QC Batch Number: GC0610970HBPEXC
Instrument ID: GCHP4A

Fuel Fingerprint : Stoddard Solvent

Analyte	Detection Limit ug/L	Sample Results ug/L
Extract HC as Stoddard Solvent	50	590
Chromatogram Pattern:		
Unidentified HC		C9-C13

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	107

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
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201013X
Sample Descript: W-10-MW3
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706353-06

Sampled: 06/04/97
Received: 06/05/97
Extracted: 06/10/97
Analyzed: 06/11/97
Reported: 06/18/97

QC Batch Number: GC0610970HBPEXC
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	250	8000
Chromatogram Pattern: **Weathered Diesel**		C9-C24

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

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

SEQUOIA ANALYTICAL - ELAP #1210

evin Follett
oject Manager

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, 201013X
Sample Descript: W-10-MW3
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9706353-06

Sampled: 06/04/97
Received: 06/05/97

Analyzed: 06/12/97
Reported: 06/18/97

QC Batch Number: GC061297BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	200	920
Methyl t-Butyl Ether	10	11
Benzene	2.0	15
Toluene	2.0	2.8
Ethyl Benzene	2.0	2.4
Xylenes (Total)	2.0	N.D.
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	139 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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Environmental Resolutions
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201013X
Sample Descript: W-10-MW7
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706353-07

Sampled: 06/04/97
Received: 06/05/97
Extracted: 06/10/97
Analyzed: 06/11/97
Reported: 06/18/97

QC Batch Number: GC0610970HBPEXC
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

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

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

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

EQUOIA 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, 201013X	Sampled: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-10-MW7	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/12/97
Attention: Marc Briggs	Lab Number: 9706353-07	Reported: 06/18/97

QC Batch Number: GC061297BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**200**	**1900**
Methyl t-Butyl Ether	2.5	N.D.
Benzene	**2.0**	**45**
Toluene	2.0	N.D.
Ethyl Benzene	**2.0**	**5.3**
Xylenes (Total)	**2.0**	**13**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	103

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

SEQUOIA ANALYTICAL - ELAP #1210

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, 201013X
Sample Descript: W-10-MW7
Matrix: LIQUID
Analysis Method: EPA 601
Lab Number: 9706353-07

Sampled: 06/04/97
Received: 06/05/97

Analyzed: 06/13/97
Reported: 06/18/97

QC Batch Number: GC061397060108A
Instrument ID: GCHP8

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	73

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

EQUOIA ANALYTICAL - ELAP #1210

evin Follett
oject Manager

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201013X
Sample Descript: W-10-MW7
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706353-07

Sampled: 06/04/97
Received: 06/05/97
Extracted: 06/10/97
Analyzed: 06/11/97
Reported: 06/18/97

QC Batch Number: GC0610970HBPEXC
Instrument ID: GCHP4A

Fuel Fingerprint : Stoddard Solvent

Analyte	Detection Limit ug/L	Sample Results ug/L
Extract HC as Stoddard Solvent	50	**780**
Chromatogram Pattern: **Unidentified HC**		**C9-C13**

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

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

EQUOIA ANALYTICAL - ELAP #1210

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oject Manager

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201013X
Sample Descript: W-28-MW6
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9706353-08

Sampled: 06/04/97
Received: 06/05/97
Extracted: 06/16/97
Analyzed: 06/18/97
Reported: 06/18/97

QC Batch Number: GC0616970HBPEXB
Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	100	3300
Chromatogram Pattern: **Unidentified HC**		C9-C24

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

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

SEQUOIA ANALYTICAL - ELAP #1210

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 #: 9706353 08

Reported: Jun 19, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC0616970HBPEXB
Analy. Method:	EPA 8015M
Prep. Method:	EPA 3510
Analyst:	B. Sullivan
MS/MSD #:	970638702
Sample Conc.:	250
Prepared Date:	6/16/97
Analyzed Date:	6/17/97
Instrument I.D.#:	GCHP4B
Conc. Spiked:	1000 µg/L
Result:	960
MS % Recovery:	71
Dup. Result:	1100
MSD % Recov.:	85
RPD:	14
RPD Limit:	0-50

LCS #:	BLK061697
Prepared Date:	6/16/97
Analyzed Date:	6/17/97
Instrument I.D.#:	GCHP4B
Conc. Spiked:	1000 µg/L
LCS Result:	910
LCS % Recov.:	91

MS/MSD	50-150
LCS	60-140
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 #: 9706353 01, 03

Reported: Jun 19, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC061197BTEX02A	GC061197BTEX02A	GC061197BTEX02A	GC061197BTEX02A	GC051197BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	970613909	970613909	970613909	970613909	970613909
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/11/97	6/11/97	6/11/97	6/11/97	6/11/97
Analyzed Date:	6/11/97	6/11/97	6/11/97	6/11/97	6/11/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	11	11	11	32	67
MS % Recovery:	110	110	110	107	112
Dup. Result:	11	11	11	32	73
MSD % Recov.:	110	110	110	107	122
RPD:	0.0	0.0	0.0	0.0	8.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK061197	BLK061197	BLK061197	BLK061197	BLK061197
Prepared Date:	6/11/97	6/11/97	6/11/97	6/11/97	6/11/97
Analyzed Date:	6/11/97	6/11/97	6/11/97	6/11/97	6/11/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	10	31	69
LCS % Recov.:	100	100	100	103	115
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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 #: 9706353 02, 04

Reported: Jun 19, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC061297BTEX21A	GC061297BTEX21A	GC061297BTEX21A	GC061297BTEX21A	GC051197BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	970613910	970613910	970613910	970613910	970613910
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Analyzed Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.8	9.7	9.8	30	62
MS % Recovery:	98	97	98	100	103
Dup. Result:	9.6	9.6	9.7	29	62
MSD % Recov.:	96	96	97	97	103
RPD:	2.1	1.0	1.0	3.4	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK061297	BLK061297	BLK061297	BLK061297	BLK061297
Prepared Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Analyzed Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.7	9.6	9.7	29	62
LCS % Recov.:	97	96	97	97	103
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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 #: 9706353 05-07

Reported: Jun 19, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC061297BTEX02A	GC061297BTEX02A	GC061297BTEX02A	GC061297BTEX02A	GC051197BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	970613910	970613910	970613910	970613910	970613910
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Analyzed Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.2	9.2	9.6	27	62
MS % Recovery:	92	92	96	90	103
Dup. Result:	11	11	11	32	71
MSD % Recov.:	11	110	110	107	118
RPD:	18	18	14	17	14
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK061297	BLK061297	BLK061297	BLK061297	BLK061297
Prepared Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Analyzed Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	11	11	11	33	73
LCS % Recov.:	110	110	110	110	122
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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 #: 9706353 08

Reported: Jun 19, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC061397BTEX03A	GC061397BTEX03A	GC061397BTEX03A	GC061397BTEX03A	GC051197BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	970613911	970613911	970613911	970613911	970613911
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/13/97	6/13/97	6/13/97	6/13/97	6/13/97
Analyzed Date:	6/13/97	6/13/97	6/13/97	6/13/97	6/13/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	11	11	11	33	77
MS % Recovery:	110	110	110	110	128
Dup. Result:	11	11	11	33	75
MSD % Recov.:	110	110	110	110	125
RPD:	0.0	0.0	0.0	0.0	2.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK061397	BLK061397	BLK061397	BLK061397	BLK061397
Prepared Date:	6/13/97	6/13/97	6/13/97	6/13/97	6/13/97
Analyzed Date:	6/13/97	6/13/97	6/13/97	6/13/97	6/13/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	11	11	11	33	77
LCS % Recov.:	110	110	110	110	128
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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 #: 9706353 05, 07

Reported: Jun 19, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC061397BTEX02A	GC061397BTEX02A	GC061397BTEX02A	GC061397BTEX02A	GC051197BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	970613911	970613911	970613911	970613911	970613911
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/13/97	6/13/97	6/13/97	6/13/97	6/13/97
Analyzed Date:	6/13/97	6/13/97	6/13/97	6/13/97	6/13/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	10	10	31	70
MS % Recovery:	100	100	100	103	117
Dup. Result:	11	10	11	32	71
MSD % Recov.:	110	100	110	107	118
RPD:	9.5	0.0	9.5	3	1.4
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK061397	BLK061397	BLK061397	BLK061397	BLK061397
Prepared Date:	6/13/97	6/13/97	6/13/97	6/13/97	6/13/97
Analyzed Date:	6/13/97	6/13/97	6/13/97	6/13/97	6/13/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	11	11	11	34	76
LCS % Recov.:	110	110	110	113	127
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

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

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

Client Project ID: Exxon 7-3006, 201013X
Matrix: Liquid
Work Order #: 9706353 07

Reported: Jun 19, 1997

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-Benzene
QC Batch#:	GC061397060108A	GC061397060108A	GC061397060108A
Analy. Method:	EPA 601	EPA 601	EPA 601
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	B. Ali	B. Ali	B. Ali
MS/MSD #:	970638702	970638702	970638702
Sample Conc.:	N.D.	25000	N.D.
Prepared Date:	6/13/97	6/13/97	6/13/97
Analyzed Date:	6/13/97	6/13/97	6/13/97
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Dilution Factor:	2000	2000	2000
Result:	45000	79000	43000
MS % Recovery:	90	108	86
Dup. Result:	43000	71000	40000
MSD % Recov.:	86	92	80
RPD:	4.5	11	7.2
RPD Limit:	0-25	0-25	0-25
LCS #:	BLK061397	BLK061397	BLK061397
Prepared Date:	6/13/97	6/13/97	6/13/97
Analyzed Date:	6/13/97	6/13/97	6/13/97
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	24	23	23
LCS % Recov.:	96	92	92
MS/MSD Control Limits	60-140	60-140	60-140
LCS Control Limits	65-135	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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Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Page 2 of 2

Consultant's Name: Environmental Resolutions Inc		
Address: 74 Digital Dr Suite 6 Novato Ca 94949		Site Location: 720 High Street
Project #: 7-3006	Consultant Project #: 201013X	Consultant Work Release #: 19432503
Project Contact: Marc Briggs	Phone #: 415 382 9105	Laboratory Work Release #:
EXXON Contact: Marla Guensler	Phone #: 510 246 8776	EXXON RAS #: 7-3006
Sampled by (print): Scott Graham	Sampler's Signature: Scott Graham	Oakland, Ca
Shipment Method:	Air Bill #:	

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

ANALYSIS REQUIRED 9706353

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	6/4/97	1510	Water	ICE	2	1		X				
W-10-MW1	"	1525	"	"	"	2		X				
W-14-MW9	"	1540	"	"	"	3		X				
W-11-MW11	"	1555	"	"	"	4		X				
W-13-MW14	"	1610	"	"	3	5		X		X		
W-10-MW3	"	1625	"	"	2	6		X				
W-10-MW7	"	1640	"	"	3	7		X		X		
W-28-MW6	"	1655	"	"	2	8		X		X	KF 6-9	

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Scott Graham	6-5-97	9:25	FedEx 268			
			ENTEC / SEQUOIA	06-05-97	11:15	

Pink - Client
Yellow - Sequoia
White - Sequoia

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

Address: 74 Digital Dr Suite G Novato Ca 94949

Page 1 of 2

Project #: 7-3006

Consultant Project #: 201013X

Site Location: 720 High Street

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): Scott Graham

Sampler's Signature: Scott Graham

EXXON RAS #: 7-3006

Shipment Method:

Air Bill #:

Oakland, Ca

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

ANALYSIS REQUIRED 9706353

	Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	MTBE	Purgable Halocarbons 601	Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
-	W-8-MW10	6/4/97	1505	Water	HCl ICE	3	1	X			X		
-	W-10-MW1	"	1520	"	"	"	2	X			X		
-	W-14-MW9	"	1535	"	"	"	3	X			X		
-	W-11-MW11	"	1550	"	"	"	4	X			X		
+	W-13-MW14	"	1605	"	"	9	5	X			X	X	
-	W-10-MW3	"	1620	"	"	3	6	X			X		
+	W-10-MW7	"	1635	"	"	9	7	X			X	X	
-	W-28-MW6	"	1650	"	"	3	8	X			X		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Scott Graham	6-5-97	9:25	Fed Ex IAN 268			
			Fed Ex / Sequoia	6-05-97	11:15	

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, 201013X	Received: 06/05/97
74 Digital Drive , Suite 6		
Novato, CA 94949	Lab Proj. ID: 9706353	Reported: 06/18/97
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 31 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

TPPH note: MTBE for samples 9706353-05 and -07 are reported from secondary runs performed on GCHP-02. (06/13/97)

SEQUOIA ANALYTICAL

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

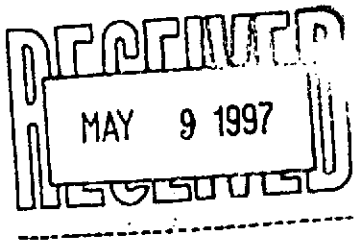
Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 04/02/97
74 Digital Drive , Suite 6	Sample Descript: A-Inf	Received: 04/03/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 04/04/97
Attention: Marc Briggs	Lab Number: 9704133-01	Reported: 04/14/97

QC Batch Number: GC040497BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	170
Benzene	0.10	4.0
Toluene	0.10	0.94
Ethyl Benzene	0.10	0.24
Xylenes (Total)	0.10	0.88
Chromatogram Pattern:		
Gas & Unidentified HC		C6-C8

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	79



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: 04/02/97
74 Digital Drive , Suite 6	Sample Descript: A-Eff	Received: 04/03/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 04/04/97
Attention: Marc Briggs	Lab Number: 9704133-02	Reported: 04/14/97

QC Batch Number: GC040497BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	89

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

Client Project ID: Exxon 7-3006, 201011X
Matrix: Air
Work Order #: 9704133 01

Reported: Apr 18, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC040497BTEX03A	GC040497BTEX03A	GC040497BTEX03A	GC040497BTEX03A	GC040497BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	9703E5403	9703E5403	9703E5403	9703E5403	9703E5403
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/4/97	4/4/97	4/4/97	4/4/97	4/4/97
Analyzed Date:	4/4/97	4/4/97	4/4/97	4/4/97	4/4/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	4.1	4.1	4.3	11	25
MS % Recovery:	41	41	43	37	42
Dup. Result:	9.8	9.9	9.6	27	63
MSD % Recov.:	98	99	96	90	105
RPD:	82	83	76	84	86
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK040497A	BLK040497A	BLK040497A	BLK040497A	BLK040497A
Prepared Date:	4/4/97	4/4/97	4/4/97	4/4/97	4/4/97
Analyzed Date:	4/4/97	4/4/97	4/4/97	4/4/97	4/4/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.7	9.6	9.5	27	61
LCS % Recov.:	97	96	95	90	102
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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.

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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 #: 9704133 02

Reported: Apr 18, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC040497BTEX02A	GC040497BTEX02A	GC040497BTEX02A	GC040497BTEX02A	GC040497BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9703H0503	9703H0503	9703H0503	9703H0503	9703H0503
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/4/97	4/4/97	4/4/97	4/4/97	4/4/97
Analyzed Date:	4/4/97	4/4/97	4/4/97	4/4/97	4/4/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.3	9.2	9.3	29	63
MS % Recovery:	93	92	93	97	105
Dup. Result:	9.1	9.0	9.1	29	60
MSD % Recov.:	91	90	91	97	100
RPD:	2.2	2.2	2.2	0.0	4.9
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK040497	BLK040497	BLK040497	BLK040497	BLK040497
Prepared Date:	4/4/97	4/4/97	4/4/97	4/4/97	4/4/97
Analyzed Date:	4/4/97	4/4/97	4/4/97	4/4/97	4/4/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	7.7	7.6	7.6	24	56
LCS % Recov.:	77	76	76	80	93
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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, 201011X	Received: 04/03/97
74 Digital Drive , Suite 6		
Novato, CA 94949	Lab Proj. ID: 9704133	Reported: 04/14/97
Attention: Marc Briggs		

LABORATORY NARRATIVE

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

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

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

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 G NOVATO, CA 94949			**Site Location:** 720 HIGH ST
Project #: 201011X	**Consultant Project #:** 201011X		**Consultant Work Release #:** 19932503
Project Contact: MARC BRIGGS	**Phone #:** (415) 382-9105		**Laboratory Work Release #:** 19706235
EXXON Contact: KARLA 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 970483

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	4-2-97	12:00PM	AIR	8	1	1	X					
A - EFF	"	"	"	8	1	2	X					
							X					
W - INF		10:30 AM	WATER	HCl/ice	3		X					
W - INT 1					3		X					
W - EFF	"	"	"	"	3		X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	4/3/97	1000	SEQUOIA	4/3/97	1000	
	4/3/97	1215		4/3/97	1215	

Pink - Client
Yellow - Sequoia
White - Sequoia

AP 3 12 15

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
Sample Descript: A-Eff
Matrix: AIR
Analysis Method: 8015Mod/8020
Lab Number: 9705381-01

Sampled: 05/08/97
Received: 05/09/97

Analyzed: 05/09/97
Reported: 05/14/97

QC Batch Number: GC050997BTEX21A
Instrument ID: GCHP21

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90

RECEIVED
MAY 27 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

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
74 Digital Drive , Suite 6
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006, 201011X
Sample Descript: A-Inf
Matrix: AIR
Analysis Method: 8015Mod/8020
Lab Number: 9705381-02

Sampled: 05/08/97
Received: 05/09/97

Analyzed: 05/09/97
Reported: 05/14/97

QC Batch Number: GC050997BTEX03A
Instrument ID: GCHP3

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	20	340
Benzene	0.20	4.8
Toluene	0.20	0.46
Ethyl Benzene	0.20	0.46
Xylenes (Total)	0.20	3.0
Chromatogram Pattern:		
Gas & Unidentified HC		C6-C8

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	135 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
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 201011X
Matrix: Air
Work Order #: 9705381 01

Reported: May 21, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC050997BTEX21A	GC050997BTEX21A	GC050997BTEX21A	GC050997BTEX21A	GC050997BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	97517105	97517105	97517105	97517105	97517105
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/9/97	5/9/97	5/9/97	5/9/97	5/9/97
Analyzed Date:	5/9/97	5/9/97	5/9/97	5/9/97	5/9/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.0	9.1	9.2	28	62
MS % Recovery:	90	91	92	93	103
Dup. Result:	8.5	8.7	8.9	27	66
MSD % Recov.:	85	87	89	90	110
RPD:	5.7	4.5	3.3	3.6	6.3
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK050997	BLK050997	BLK050997	BLK050997	BLK050997
Prepared Date:	5/9/97	5/9/97	5/9/97	5/9/97	5/9/97
Analyzed Date:	5/9/97	5/9/97	5/9/97	5/9/97	5/9/97
Instrument I.D.#:	GCHP21	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	9.7	9.8	29	65
LCS % Recov.:	100	97	98	97	108
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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

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 #: 9705381 02

Reported: May 21, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC050997BTEX03A	GC050997BTEX03A	GC050997BTEX03A	GC050997BTEX03A	GC050997BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	970489402	970489402	970489402	970489402	970489402
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/9/97	5/9/97	5/9/97	5/9/97	5/9/97
Analyzed Date:	5/9/97	5/9/97	5/9/97	5/9/97	5/9/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	10	11	32	45
MS % Recovery:	100	100	110	107	75
Dup. Result:	9.7	9.8	9.9	31	43
MSD % Recov.:	97	98	99	103	72
RPD:	3.0	2.0	11	3.2	4.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK050997A	BLK050997A	BLK050997A	BLK050997A	BLK050997A
Prepared Date:	5/9/97	5/9/97	5/9/97	5/9/97	5/9/97
Analyzed Date:	5/9/97	5/9/97	5/9/97	5/9/97	5/9/97
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	10	32	45
LCS % Recov.:	100	100	100	107	75
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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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Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Consultant's Name: Environmental Resolutions, Inc — Page 1 of 1

Address: 74 Digital Dr #6, Novato CA 94949 — Site Location: 720 High st, Oakland

Project #: — Consultant Project #: 201011X — Consultant Work Release #: 19432503

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

EXXON Contact: Gene Ortega — Phone #: 510-246-8747 — EXXON RAS #: 7-3006

Sampled by (print): John C Skance — Sampler's Signature: John C Skance

Shipment Method: — Air Bill #:

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

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample # 9705381	ANALYSIS REQUIRED: TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
A-EFF	5/8/97	4:30	Air	None	1	01	X					
A-INF	JS	JS	JS	JS	1	02	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	5/9/97	1005		5/9	1005	
SEQUOIA	5/9/97	1240				
			Mara Grisley/Seq.	5/9	1240	

Pink - Client
Yellow - Sequoia
White - Sequoia

MY 9 PM 40

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	Received: 05/09/97
74 Digital Drive , Suite 6		
Novato, CA 94949	Lab Proj. ID: 9705381	Reported: 05/14/97
Attention: Marc Briggs		

LABORATORY NARRATIVE

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

TPPH note: High surrogate recovery was confirmed for the set.

SEQUOIA ANALYTICAL

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: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: A-Eff	Received: 06/05/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 06/06/97
Attention: Marc Briggs	Lab Number: 9706166-01	Reported: 06/10/97

QC Batch Number: GC060697BTEX02A
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	109

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

SEQUOIA ANALYTICAL - ELAP #1210

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JUN 19 1997

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: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: A-Inf	Received: 06/05/97
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 06/05/97
Attention: Marc Briggs	Lab Number: 9706166-02	Reported: 06/10/97

QC Batch Number: GC060597BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**360**
Benzene	**0.50**	**2.9**
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	**0.50**	**2.0**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	109

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

SEQUOIA ANALYTICAL - ELAP #1210

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 #: 9706166 -01

Reported: Jun 14, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC060697BTEX02A	GC060697BTEX02A	GC060697BTEX02A	GC060697BTEX02A	GC060697BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	5030	5030	5030	5030	5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9706F96-04	9706F96-04	9706F96-04	9706F96-04	9706F96-04
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/6/97	6/6/97	6/6/97	6/6/97	6/6/97
Analyzed Date:	6/6/97	6/6/97	6/6/97	6/6/97	6/6/97
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	11	10	10	31	80
MS % Recovery:	110	100	100	103	133
Dup. Result:	10	9.9	10	31	78
MSD % Recov.:	100	99	100	103	130
RPD:	9.5	1.0	0.0	0.0	2.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK060697A	BLK060697A	BLK060697A	BLK060697A	BLK060697A
Prepared Date:	6/6/97	6/6/97	6/6/97	6/6/97	6/6/97
Analyzed Date:	6/6/97	6/6/97	6/6/97	6/6/97	6/6/97
Instrument I.D.#:	GCHP-2	GCHP-2	GCHP-2	GCHP-2	GCHP-2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.8	9.6	9.8	29	77
LCS % Recov.:	98	96	98	97	128
MS/MSD	60-140	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130	70-130
Control Limits					

SEQUOIA ANALYTICAL

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, 201011X
Matrix: Air
Work Order #: 9706166 -02

Reported: Jun 14, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC060597BTEX03A	GC060597BTEX03A	GC060597BTEX03A	GC060597BTEX03A	GC060597BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	5030	5030	5030	5030	5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9705f63	9705f63	9705f63	9705f63	9705f63
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/5/97	6/5/97	6/5/97	6/5/97	6/5/97
Analyzed Date:	6/5/97	6/5/97	6/5/97	6/5/97	6/5/97
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3	GCHP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	11	11	32	72
MS % Recovery:	100	110	110	107	120
Dup. Result:	10	10	10	31	70
MSD % Recov.:	100	100	100	103	117
RPD:	0.0	9.5	9.5	3.2	2.8
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK060597A	BLK060597A	BLK060597A	BLK060597A	BLK060597A
Prepared Date:	6/5/97	6/5/97	6/5/97	6/5/97	6/5/97
Analyzed Date:	6/5/97	6/5/97	6/5/97	6/5/97	6/5/97
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3	GCHP-3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	10	10	31	69
LCS % Recov.:	100	100	100	103	115
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

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

Sequoia Analytical
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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

97061166

Page 1 of 1

Consultant's Name: ENVIRONMENTAL RESOLUTIONS, INC		Site Location: 720 HIGH STREET
Address: 74 DIGITAL DRIVE SUITE 6 NOVATO CA 94949		Consultant Work Release #: 19432503
Project #:	Consultant Project #: 201011	Laboratory Work Release #:
Project Contact: MARC A. ARIGES	Phone #: 415-382-5991	EXXON RAS #: 7-3006
EXXON Contact: MARLA D. GUENSLER	Phone #: 510-246-8776	OAKLAND, CA
Sampled by (print): GREG RANDELL	Sampler's Signature: Marc A Ariges for GR.	
Shipment Method: COURIER	Air Bill #:	

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

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	ANALYSIS REQUIRED: TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
A-EFF	6/4/97		AIR	—	1		X					
A-INF	6/4/97		AIR	—	1		X					
W-EFF	6/4/97		WATER	—	3		X					
W-INF2	6/4/97		WATER	—	3		X					
W-INF1	6/4/97		WATER	—	3		X					
W-INF	6/4/97		WATER		3		X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Marc A Ariges for GR. / EE	6/5/97		Mara Gudis	6/5/97	1100	

Pink - Client
Yellow - Sequoia
White - Sequoia

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	Received: 06/05/97
74 Digital Drive , Suite 6		
Novato, CA 94949	Lab Proj. ID: 9706166	Reported: 06/10/97
Attention: Marc Briggs		

LABORATORY NARRATIVE

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SEQUOIA ANALYTICAL

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
Sample Descript: W-INF
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9704256-01

Sampled: 04/02/97
Received: 04/03/97

Analyzed: 04/09/97
Reported: 04/14/97

QC Batch Number: GC040997BTEX02A
Instrument ID: GCHP2

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	125	430
Benzene	1.2	120
Toluene	1.2	1.8
Ethyl Benzene	1.2	5.3
Xylenes (Total)	1.2	19
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	78

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

RECEIVED
MAY 9 1997

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
Sample Descript: W-INT1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9704256-02

Sampled: 04/02/97
Received: 04/03/97

Analyzed: 04/08/97
Reported: 04/14/97

QC Batch Number: GC040897BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	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

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 ,201011X
Sample Descript: W-EFF
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9704256-03

Sampled: 04/02/97
Received: 04/03/97

Analyzed: 04/08/97
Reported: 04/14/97

QC Batch Number: GC040897BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99

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

EQUOIA ANALYTICAL - ELAP #1210

evin Follett
roject 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
74 Digital Drive, Ste. 6
Novato, CA 94949
Attention: Marc Briggs

Client Project ID: Exxon 7-3006, 201011X
Matrix: Liquid

Work Order #: 9704256 01

Reported: Apr 18, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC040997BTEX02A	GC040997BTEX02A	GC040997BTEX02A	GC040997BTEX02A	GC040997BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9703F1403	9703F1403	9703F1403	9703F1403	9703F1403
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/9/97	4/9/97	4/9/97	4/9/97	4/9/97
Analyzed Date:	4/9/97	4/9/97	4/9/97	4/9/97	4/9/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.0	9.0	9.1	29	66
MS % Recovery:	90	90	91	97	110
Dup. Result:	9.3	9.2	9.2	30	67
MSD % Recov.:	93	92	92	100	112
RPD:	3.3	2.2	1.1	3.4	1.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK040997	BLK040997	BLK040997	BLK040997	BLK040997
Prepared Date:	4/9/97	4/9/97	4/9/97	4/9/97	4/9/97
Analyzed Date:	4/9/97	4/9/97	4/9/97	4/9/97	4/9/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.3	9.2	9.2	29	65
LCS % Recov.:	93	92	92	97	108
MS/MSD LCS Control Limits	60-140 70-130	60-140 70-130	60-140 70-130	60-140 70-130	60-140 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: Liquid
Work Order #: 9704256 02, 03

Reported: Apr 18, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC040897BTEX17A	GC040897BTEX17A	GC040897BTEX17A	GC040897BTEX17A	GC040997BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9703F1404	9703F1404	9703F1404	9703F1404	9703F1404
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97
Analyzed Date:	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	10	10	30	61
MS % Recovery:	100	100	100	100	102
Dup. Result:	10	10	10	31	60
MSD % Recov.:	100	100	100	103	100
RPD:	0.0	0.0	0.0	3.3	1.7
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK040897	BLK040897	BLK040897	BLK040897	BLK040897
Prepared Date:	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97
Analyzed Date:	4/8/97	4/8/97	4/8/97	4/8/97	4/8/97
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.3	9.2	9.3	28	55
LCS % Recov.:	93	92	93	93	92
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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

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

Lab Proj. ID: 9704256

Received: 04/03/97

Reported: 04/14/97

LABORATORY NARRATIVE

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

SEQUOIA ANALYTICAL

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 G NOVATO, CA 94949		
Project #: 201011X	**Consultant Project #:** 201011X	**Site Location:** 720 HIGH ST
Project Contact: MARK BRIGGS	**Phone #:** (415) 382-9105	**Consultant Work Release #:** 19432503
EXXON Contact: MARLA GUENSLER	**Phone #:** (510) 246-8776	**Laboratory Work Release #:** 19706236
Sampled by (print): GREG RANDALL	**Sampler's Signature:**	**EXXON RAS #:** 7300G
Shipment Method:	**Air Bill #:**	OAKLAND, CA

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

ANALYSIS REQUIRED 9704256

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	4-2-97	12:00pm	AIR	8	1		√					
A- EFF		〃	〃	8	1		X					
							√					
W- INF		10:30 AM	WATER	HCl/ice	3	1	X					
W- INT 1					3	2	X					
W- EFF	〃	〃	〃	〃	3	3	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	4/3/97	1000	SEQUOIA	4/3/97	1000	
	4/3/97	1215		4/3/97	1215	

White - Sequoia Yellow - Sequoia Pink - Client

AP 3 12 15

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

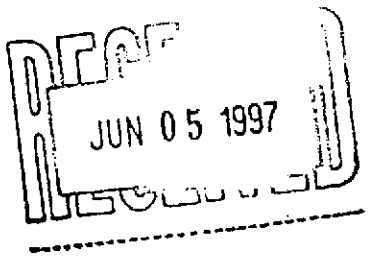
Environmental Resolutions	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 05/21/97
74 Digital Drive , Suite 6	Sample Descript: W-Inf	Received: 05/22/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/28/97
Attention: Marc Briggs	Lab Number: 9705C04-01	Reported: 05/30/97

QC Batch Number: GC052897BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	**1300**
Benzene	5.0	**360**
Toluene	5.0	N.D.
Ethyl Benzene	5.0	**16**
Xylenes (Total)	5.0	**21**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88



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

SEQUOIA ANALYTICAL - ELAP #1210

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: 05/21/97
74 Digital Drive , Suite 6	Sample Descript: W-Eff	Received: 05/22/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/27/97
Attention: Marc Briggs	Lab Number: 9705C04-02	Reported: 05/30/97

QC Batch Number: GC052797BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

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	Client Proj. ID: Exxon 7-3006, 201011X	Sampled: 05/21/97
74 Digital Drive , Suite 6	Sample Descript: W-Int	Received: 05/22/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/27/97
Attention: Marc Briggs	Lab Number: 9705C04-03	Reported: 05/30/97

QC Batch Number: GC052797BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	92

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

Client Project ID: Exxon 7-3006, 201011X
Matrix: Liquid
Work Order #: 9705C04 01

Reported: Jun 4, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC052897BTEX02A	GC052897BTEX02A	GC052897BTEX02A	GC052897BTEX02A	GC052897BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9705B1803	9705B1803	9705B1803	9705B1803	9705B1803
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/28/97	5/28/97	5/28/97	5/28/97	5/28/97
Analyzed Date:	5/28/97	5/28/97	5/28/97	5/28/97	5/28/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	9.2	9.1	9.2	29	67
MS % Recovery:	92	91	92	97	112
Dup. Result:	9.1	9.0	9.1	29	66
MSD % Recov.:	91	90	91	97	110
RPD:	1.1	1.1	1.1	0.0	1.5
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK052897A	BLK052897A	BLK052897A	BLK052897A	BLK052897A
Prepared Date:	5/28/97	5/28/97	5/28/97	5/28/97	5/28/97
Analyzed Date:	5/28/97	5/28/97	5/28/97	5/28/97	5/28/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.3	9.2	9.3	30	66
LCS % Recov.:	93	92	93	100	110
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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.

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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 #:	9705C04 02, 03	Reported: Jun 4, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC052797BTEX17A	GC052797BTEX17A	GC052797BTEX17A	GC052797BTEX17A	GC052897BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	9705B1703	9705B1703	9705B1703	9705B1703	9705B1703
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/27/97	5/27/97	5/27/97	5/27/97	5/27/97
Analyzed Date:	5/27/97	5/27/97	5/27/97	5/27/97	5/27/97
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	10	10	30	64
MS % Recovery:	100	100	100	100	107
Dup. Result:	10	10	10	31	64
MSD % Recov.:	100	100	100	103	107
RPD:	0.0	0.0	0.0	3.3	0.0
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK052797BSA	BLK052797BSA	LK052797BSA	BLK052797BSA	BLK052797BSA
Prepared Date:	5/27/97	5/27/97	5/27/97	5/27/97	5/27/97
Analyzed Date:	5/27/97	5/27/97	5/27/97	5/27/97	5/27/97
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	9.0	9.0	9.1	28	55
LCS % Recov.:	90	90	91	93	92
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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** 1
Address: 74 DIGITAL DR. SUITE 6 NOVATO CA 94949			**Site Location:** 720 THAT ST
Project #: ~~200~~ 201011X	**Consultant Project #:** 201011X		**Consultant Work Release #:** 19432503
Project Contact: MARC BAILES	**Phone #:** (415) 382-9105		**Laboratory Work Release #:**
EXXON Contact: MARLA BRANSLER	**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 9705C04

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
W-INF	5-21-97	1:00 pm	WATER	HCl	2	1	X					
W-EFF	"	"	"	"	2	2	X					
W-INT	"	"	"	"	1	3	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	5/22/97	3:25	S. Dwight / SEQ	5/22/97	3:25	
S. Dwight / SEQ	5/22/97	532				

Pink - Client
Yellow - Sequoia
White - Sequoia

37

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: 9705C04

Received: 05/22/97

Reported: 05/30/97

LABORATORY NARRATIVE

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

SEQUOIA ANALYTICAL

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: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-Eff	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/10/97
Attention: Marc Briggs	Lab Number: 9706349-01	Reported: 06/17/97

QC Batch Number: GC061097BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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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JUN 26 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, 201011X	Sampled: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-Inf2	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/11/97
Attention: Marc Briggs	Lab Number: 9706349-02	Reported: 06/17/97

QC Batch Number: GC061197BTEX01A
Instrument ID: GCHP01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90

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, 201011X	Sampled: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-Inf1	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/12/97
Attention: Marc Briggs	Lab Number: 9706349-03	Reported: 06/17/97

QC Batch Number: GC061297BTEX01A
Instrument ID: GCHP01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	1600
Benzene	5.0	510
Toluene	5.0	5.8
Ethyl Benzene	5.0	17
Xylenes (Total)	5.0	16
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	108

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, 201011X	Sampled: 06/04/97
74 Digital Drive , Suite 6	Sample Descript: W-Int	Received: 06/05/97
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 06/10/97
Attention: Marc Briggs	Lab Number: 9706349-04	Reported: 06/17/97

QC Batch Number: GC061097BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	101

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

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

Client Project ID: Exxon 7-3006, 201011X
Matrix: Liquid
Work Order #: 9706349 01, 04

Reported: Jun 18, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC061097BTEX02A	GC061097BTEX02A	GC061097BTEX02A	GC061097BTEX02A	GC061097BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	970617001	970617001	970617001	970617001	970617001
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/10/97	6/10/97	6/10/97	6/10/97	6/10/97
Analyzed Date:	6/10/97	6/10/97	6/10/97	6/10/97	6/10/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	10	10	32	65
MS % Recovery:	100	100	100	107	108
Dup. Result:	10	10	10	31	71
MSD % Recov.:	100	100	100	103	118
RPD:	0.0	0.0	0.0	3.2	8.8
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK061097	BLK061097	BLK061097	BLK061097	BLK061097
Prepared Date:	6/10/97	6/10/97	6/10/97	6/10/97	6/10/97
Analyzed Date:	6/10/97	6/10/97	6/10/97	6/10/97	6/10/97
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	9.9	10	30	68
LCS % Recov.:	100	99	100	100	113
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

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

Client Project ID: Exxon 7-3006, 201011X
Matrix: Liquid
Work Order #: 9706349 02

Reported: Jun 18, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC061197BTEX01A	GC061197BTEX01A	GC061197BTEX01A	GC061197BTEX01A	GC061097BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	970617402	970617402	970617402	970617402	970617402
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/11/97	6/11/97	6/11/97	6/11/97	6/11/97
Analyzed Date:	6/11/97	6/11/97	6/11/97	6/11/97	6/11/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	11	11	11	31	77
MS % Recovery:	110	110	110	103	128
Dup. Result:	11	10	10	30	75
MSD % Recov.:	110	100	100	100	125
RPD:	0.0	9.5	9.5	3.3	2.6
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK061197	BLK061197	BLK061197	BLK061197	BLK061197
Prepared Date:	6/11/97	6/11/97	6/11/97	6/11/97	6/11/97
Analyzed Date:	6/11/97	6/11/97	6/11/97	6/11/97	6/11/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	11	10	10	30	73
LCS % Recov.:	110	100	100	100	122
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

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

Client Project ID: Exxon 7-3006, 201011X
Matrix: Liquid
Work Order #: 9706349 03

Reported: Jun 18, 1997

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Gas
QC Batch#:	GC061297BTEX01A	GC061297BTEX01A	GC061297BTEX01A	GC061297BTEX01A	GC061297BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	970621003	970621003	970621003	970621003	970621003
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Analyzed Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
Result:	10	9.5	96	28	69
MS % Recovery:	100	95	96	93	115
Dup. Result:	10	9.8	96	29	70
MSD % Recov.:	100	98	96	97	117
RPD:	0.0	3.1	0.0	3.5	1.4
RPD Limit:	0-25	0-25	0-25	0-25	0-25
LCS #:	BLK061297	BLK061297	BLK061297	BLK061297	BLK061297
Prepared Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Analyzed Date:	6/12/97	6/12/97	6/12/97	6/12/97	6/12/97
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	60 µg/L
LCS Result:	10	9.6	9.6	29	69
LCS % Recov.:	100	96	96	97	115
MS/MSD Control Limits	60-140	60-140	60-140	60-140	60-140
LCS Control Limits	70-130	70-130	70-130	70-130	70-130

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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.		Site Location: 720 HIGH STREET
Address: 74 DIGITAL DRIVE SUITE 6 NOVATO CA 94949		Consultant Work Release #: 19432503
Project #:	Consultant Project #: 201011	Laboratory Work Release #:
Project Contact: MARC A. PARKS	Phone #: 415-382-5991	EXXON RAS #: 7-3006
EXXON Contact: MARLA D GUENSLER	Phone #: 510-246-8776	OAKLAND, CA
Sampled by (print): GREG RANDELL	Sampler's Signature: Marc A Parks for GR	
Shipment Method: COURIER	Air Bill #:	

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

ANALYSIS REQUIRED 9706349

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 - EFF	6/4/97		AIR	-	1		X					
A - INF	6/4/97		AIR	-	1		X					
W - EFF	6/4/97		WATER	-	3	1	X					
W - INF 2	6/4/97		WATER	-	3	2	X					
W - INF 1	6/4/97		WATER	-	3	3	X					
W INF	6/4/97		WATER		3	4	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Marc A Parks for GR / ERI	6/5/97					

Pink - Client
Yellow - Sequoia
White - Sequoia

06/05/97 THU 14:37 FAX 1 415 382 1856 ERI Novato Office →→→ SEQUIA ANALYTIC 001

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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: 9706349	Received: 06/05/97 Reported: 06/17/97

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.).

Please note: samples received without a COC. COC was faxed later.

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

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

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

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

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

Note: If results are given in ppm, an assumption about the molecular weight of the hydrocarbon must be made to get mg/M^3. ppmv x molecular wt. /24.1 = mg/M^3. (Use 102 for gasoline)