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

MARLA D. GUENSLER
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#136

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ENVIRONMENTAL PROTECTION

June 13, 1996

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

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

Dear Mr. Chan:

Attached for your review and comment is a letter report entitled ***Quarterly Groundwater Monitoring and Remediation Status Report, First Quarter 1996*** for the above referenced site. This report, prepared by Environmental Resolutions, Inc., of Novato, California, details the results of the groundwater monitoring sampling and remediation sampling events which occurred in the first quarter 1996.

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

Sincerely,

Marla D. Guensler CMS

Marla D. Guensler
Senior Engineer

MDG/jb

attachment: ERI Report Dated April 25, 1996

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

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

ENVIRONMENTAL RESOLUTIONS, INC.

April 25, 1996
ERI 201013.R05

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

Subject: Quarterly Groundwater Monitoring and Remediation Status Report, First Quarter 1996, Former Exxon Service Station 7-3006, 720 High Street, Oakland, California.

Ms. Guensler:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI) performed remedial activities and groundwater monitoring for the first quarter 1996 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, to evaluate the capture zone caused by groundwater pumping, and to evaluate the effectiveness of remedial actions.

GROUNDWATER MONITORING AND SAMPLING

On February 14, 1996, 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. No measurable liquid phase hydrocarbons or sheen were observed on groundwater from wells MW1, MW7, MW9 through MW11, and MW14. Monitoring wells MW2 through MW4, MW6, MW8, MW12, MW13, and MW15 had a sheen and therefore were not purged or sampled. ERI's groundwater sampling protocol is attached (Attachment A).

The groundwater appears to flow southwest beneath the site towards the groundwater interceptor trench with an approximate gradient ranging from 0.020 to 0.032 (Plate 2). Monitoring and sampling data for 1994 through 1996 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), and total extractable petroleum hydrocarbons as diesel (TEPHd). Samples collected from MW7 and MW14 were also analyzed for extratable hydrocarbons as stoddard solvent 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

The air sparging/soil vapor-extraction system (AS/VES) consists of eight air sparging wells for air injection, vadose wells for vapor extraction, a water knock-out tank, the ERI-3000 vacuum blower unit, and three vapor-phase carbon absorbers. The system is equipped with a catalytic hydrocarbon detector between carbon absorbers #2 and #3 which automatically shuts the system down when concentrations in the vapor stream exceed the set point (10 parts per million by volume [ppmv]). Additionally, the system is equipped with a high liquid level shutdown to turn the system off if the water level in the knock-out tank reaches the specified level. The AS/VES is operated in a continuous mode.

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

Cumulative operational and performance data are presented in Table 2. Copies of the Reports of Laboratory Analysis and Chain of Custody Records for AS/VES samples collected during first quarter 1996 are attached (Attachment B). Hydrocarbon concentrations above laboratory detection limits were not emitted to the atmosphere. ERI's standard operating procedures for calculating pounds of hydrocarbons in an air stream is attached (Attachment C).

On January 8, 1996, ERI replaced three 500-pound carbon cannisters at the site. The system is currently non-operational pending replacement of the ERI-3000 and carbon abatement with a Thermtech VAC-25 thermal oxidizer.

Groundwater Extraction And Treatment

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

Between December 18, 1995 and March 25, 1996, the system recovered 49,156 gallons of groundwater from beneath the site. System flow rates, total volume extracted, and influent, intermediate, and effluent sample concentrations are presented in Table 3. Copies of the Reports of Laboratory Analysis and Chain of Custody Records for water treatment system samples collected

during first quarter 1996 are attached (Attachment B). Hydrocarbon concentrations above laboratory detection limits were not discharged to the sanitary sewer.

On March 27, 1996 one 500-pound liquid phase carbon adsorber was replaced. The system is currently non-operational pending replacement of the ERI-3000 and carbon abatement with a Thermtech VAC-25 thermal oxidizer.

SUMMARY AND STATUS OF INVESTIGATION

Based on data collected to date, it appears the system is effectively removing residual hydrocarbons in soil and dissolved hydrocarbons in groundwater. However, ERI has been diluting influent vapor concentrations to minimize carbon consumption. Therefore, ERI is removing the ERI-3000 and carbon canisters and installing a Thermtech VAC-25 thermal oxidizer at the site to allow for an increase in the hydrocarbon removal rate. ERI estimates approximately 640 pounds of hydrocarbons were removed by the AS/SVE system during the first quarter 1996 (Attachment C and Table 2), and 2,599 pounds total since start-up. ERI estimates the groundwater extraction system removed approximately 0.68 pounds of hydrocarbons during the first quarter 1996 (Table 3) and approximately 2.9 pounds to date. The AS/SVE and groundwater extraction systems are currently non-operational pending replacement of the ERI-3000 and carbon abatement with a Thermtech VAC-25 thermal oxidizer. ERI will continue to operate the remedial systems and monitor groundwater at the site during the second quarter 1996.

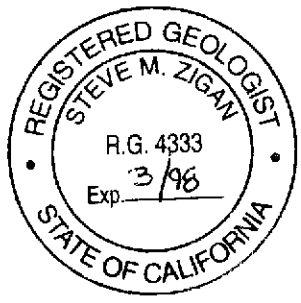
LIMITATIONS

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

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

Sincerely,
Environmental Resolutions, Inc.

Marc A. Briggs
Project Manager



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

Enclosures:

Table 1:	Cumulative Groundwater Monitoring and Sampling Data
Table 2:	Cumulative Hydrocarbon Removal and Emissions for Soil Vapor Extraction System
Table 3:	Operation and Performance Data for Groundwater Remediation System
Plate 1:	Site Vicinity Map
Plate 2:	Generalized Site Plan
Attachment A:	Groundwater Sampling Protocol
Attachment B:	Laboratory Analysis Reports and Chain of Custody Records
Attachment C:	ERI SOP-25 "Hydrocarbons Removed from a Vadose Well"

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

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHg	B	T	E	X	MTBE	TEPHd	VOCs
(TOC)	Date	<	feet	> <	parts per billion							>
MW1	1/20/94	NLPH	9.25	3.62								
(12.87)	02/02-03/94	NLPH	8.60	4.27	<50	<0.5	<0.5	<0.5	0.7	NA	70	NA
	3/10/94	NLPH	8.31	4.56								
	4/22/94	NLPH	7.95	4.92								
	05/10-11/94	NLPH	7.48	5.39	<50	<0.5	<0.5	<0.5	1.6	NA	100	NA
	6/27/94	NLPH	7.65	5.22								
	8/31/94	NLPH	9.39	3.48								
	9/29/94	NLPH	9.83	3.04	<50	<0.5	<0.5	<0.5	<0.5	NA	<50	NA
	10/25/94	NLPH	10.19	2.68	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	11/30/94	NLPH	8.97	3.90								
	12/27/94	NLPH	7.44	5.43								
	2/6/95	NLPH	5.71	7.16	<50	0.52	<0.5	<0.5	<0.5	100	NA	NA
	6/7/95	NLPH	7.62	5.25	<50	<0.5	<0.5	<0.5	<0.5	3.5	81	NA
	9/18/95	NLPH	10.02	2.85	<50	<0.5	<0.5	<0.5	<0.5	6	82	NA
	11/1/95	NLPH	10.74	2.13	<50	<0.5	<0.5	<0.5	<0.5	8.9	160	NA
	2/14/96	NLPH	7.81	5.06	<50	<0.5	<0.5	<0.5	<0.5	7.8	100	NA
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								
MW3	1/20/94	Sheen	8.24	4.68								
(12.92)	02/02-03/94	Sheen	7.68	5.24								
	3/10/94	Sheen	7.24	5.68								
	4/22/94	Sheen	6.79	6.13								
	05/10-11/94	Sheen	6.43	6.49								
	6/27/94	0.01 [NR]	6.97	5.95								
	8/31/94	Sheen	8.41	4.51								
	9/29/94	Sheen	8.97	3.95								
	10/25/94	Sheen	9.43	3.49								
	11/28/94	NM	7.19	5.73								
	12/27/94	Sheen	6.64	6.28								
	2/6/95	Sheen	4.87	8.05								
	6/7/95	Sheen	7.05	5.87								
	9/18/95	Sheen	10.61	2.31								
	11/1/95	Sheen	11.58	1.34								
	2/14/96	Sheen	8.34	4.58								

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							>
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								
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								
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:		4701							
	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 Stoddard Solvent:		1,100							
	6/7/95	NLPH	7.73	7.11	2,400	91	5	7.6	14	39	1,200	NA
			Additional Analysis Stoddard Solvent:		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 Stoddard Solvent:		870							
	11/1/95	NLPH	10.56	4.28	3,000	2.7	11	25	<2.5	<13	1,700	NA
			Additional Analysis Stoddard Solvent:		1,400							

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720 High Street
Oakland, California

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHg	B	T	E	X	MTBE	TEPHd	VOCs
(TOC)	Date	<	feet	> <	parts per billion							>
MW7 cont.	2/14/96	NLPH	8.04	6.80	1,900	59	<5.0	<5.0	<5.0	<25	1,200	NA
(14.84)			Additional Analysis Stoddard Solvent: 940 ppb									
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								
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
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
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								

TABLE 1
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Former Exxon Service Station 7-3006
720 High Street
Oakland, California

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHg	B	T	E	X	MTBE	TEPHd	VOCs
(TOC)	Date	<	feet	> <	parts per billion							>
MW11 cont.	05/10-11/94	NLPH	8.12	5.43	<50	<0.53	<0.5	<0.5	3.2	NA	1002	NA
(13.55)	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
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								
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								
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
		Additional Analysis:		210.00								
	6/27/94	NLPH	8.19	6.99								
	8/31/94	NLPH	9.44	5.74								
	9/29/94	NLPH	9.82	5.36	300	<0.5	<0.5	0.9	1.3	1,600	NA	NA
	10/25/94	NLPH	9.99	5.19	200	<0.5	<0.5	0.8	<0.5	210	NA	NA
	11/30/94	NM	8.16	7.02								
	12/27/94	Sheen	8.15	7.03								

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

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHg	B	T	E	X	MTBE	TEPHd	VOCs
(TOC)	Date	<	feet	> <	parts per billion							>
MW14 cont.	2/6/95	NLPH	7.18	8.00	360	<1.0	<1.0	<1.0	<1.0	NA	1,200	NA
(15.18)		Additional Analysis TOG: 400										
	6/7/95	NLPH	7.70	7.48	670	<0.5	<0.5	3.6	<0.5	<2.5	1,100	NA
		Additional Analysis Stoddard Solvent: 450										
	9/18/95	NLPH	9.88	5.30	1,300	<2.0	<2.0	<2.0	3	<10	1,900	NA
		Additional Analysis Stoddard Solvents: 1200										
	11/1/95	NLPH	10.56	4.62	1,100	<2.5	<2.5	3.2	3.1	<13	2,700	NA
		Additional Analysis Stoddard Solvents: 1600										
	2/14/96	NLPH	9.08	6.10	470	<0.5	<0.5	1.3	<0.5	<2.5	1,500	ND
		Additional Analysis Stoddard Solvents: 680 ppb										
MW15	1/20/94	NLPH	7.48	6.25								
(13.73)	02/02-03/94	NLPH	7.30	6.43	4,300	24	6.7	170	26	NA	1,200	NA
	3/10/94	NLPH	7.32	6.41								
	4/22/94	NLPH	6.67	7.06								
	05/10-11/94	NLPH	5.81	7.92	3,900	16	<0.5	150	13	NA	1,400	NA
	6/27/94	NLPH	6.14	7.59								
	8/31/94	NLPH	7.20	6.53								
	9/29/94	NLPH	7.76	5.97	2,500	51	15	48	3.6	NA	420	NA
	10/25/94	Sheen	8.19	5.54								
	11/30/94	NM	8.57	5.16								
	12/27/94	NLPH	6.49	7.24								
	2/6/95	Sheen	4.97	8.76								
	6/7/95	Sheen	7.14	6.59								
	9/18/95	Sheen	9.00	4.73								
	11/1/95	Sheen	10.67	3.06								
	2/14/96	Sheen	7.27	6.46								

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 modified EPA method 5030/8015.
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.
MTBE	=	Methyl tert-butyl ether analyzed using modified EPA method 5030/8020.
VOCs	=	Volatile organic compounds/purgable halocarbons analyzed using EPA method 601.
TOG	=	Total oil and grease analyzed using Standard Method 5520.
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

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

Revision: 4/17/96

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	0.44	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	0.24	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	0.09	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	0.00	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	0.00	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	0.00	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	0.00	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	0.00	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	0.08	0.9	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/19/95		70		155	15	0	68	1.17	6.8				
1/20/95		70		155	14.4	0	66	0.93	7.7				
2/1/95	A-INF	70		147			39	8.50	16.2	3.5	1.47	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	24.9				
2/27/95		70		151									
3/13/95	A-INF	70		176			< 10	9.09	34.0	0.42	1.14	3.5	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0016
3/31/95		70		116	2.3	0	10	2.41	36.4				
4/4/95		70		84	129	0.8	587	10.73	47.2				

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

DATE	SAMPLE ID	TEMP deg F	PRESS in H2O	AIR FLOW cu ft/min	HC Inf ppmv	HC Eff ppmv	HC Inf Conc* mg/cu M	LB HC for Period	LB HC Cumulative	Benzene Inf Conc* mg/cu M	LB Benzene per Period	LB Benzene Cumulative	LB Benzene Emitted per Day
4/12/95	A-INF	70		176			95	31.85	79.0	6.4	1.62	5.1	
	A-INT						< 10			0.38			
	A-EFF						< 10			< 0.1			< 0.0016
4/19/95	A-INF	70		109			210	13.65	92.7	7.6	0.63	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	111.2	9.1	0.64	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	163.8	3.5	1.23	7.6	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0009
6/6/95	A-INF	70		178			36	20.12	183.9	0.22	0.43	8.0	
	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												
6/27/95	A-INF	70		164			440	76.72	260.7	4.9	0.83	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	325.6	2.8	0.75	9.6	
	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	362.8	< 0.5	0.41	10.0	
	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	28.17	391.0	14	0.72	10.7	
	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 manufacrure 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												

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
9/18/95	A-INF	70		164			980	196.08	587.1	13	3.58	14.3	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0015
9/20/95	System Down - hydrocarbon vapor detector shut down												
9/25/95	Restarted system												
9/25/95	A-INF	70		164			NA			2.4			
	A-INT						NA			< 0.1			
	A-EFF						NA			< 0.1			
10/13/95	Replaced 2 ea x 500 lb canisters = 1000 lbs of carbon												
10/13/95	A-INF	70		168			2000	444.04	1,031.1	100	16.84	31.1	
	A-INT						< 10			< 0.05			
	A-EFF						< 10			< 0.05			< 0.0008
10/26/95	Replaced 2 ea x 500 lb canisters = 1000 lbs of carbon												
10/26/95		70		168	165	0	751	269.69	1,300.8				
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	1,477.4	3.6	29.86	61.0	
	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	1,489.4				
12/18/95	A-INF	70		151			4600	469.45	1,958.9	50	10.81	71.8	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0014
1/2/96		70		147	51.7	8.2	235	485.04	2,443.9				
1/3/96	System down												
1/8/96	Replaced 3 ea x 500 lb canisters = 1500 lbs of carbon												
1/8/96	Restart system	70		151	105.4	0	480	28.70	2,472.6				
1/16/96	A-INF1	70		143			180	34.83	2,507.5	< 0.1	9.59	81.4	
	A-INF2						63			0.73			
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0013
1/30/96		70		147	50.4	0	230	37.31	2,544.8				
2/14/96	A-INF1	70		147	39.7	0	160	38.55	2,583.3	2.2	0.43	81.8	
	A-INF2						< 10			0.16			
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0013
2/27/96		70		136	0	0	0	13.21	2,596.5				
3/12/96	A-INF1	70		136	2.2	0	< 10	0.85	2,597.4	< 0.1	0.39	82.2	
	A-INT						< 10			< 0.1			
	A-EFF						< 10			< 0.1			< 0.0012

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

DATE	SAMPLE ID	TEMP deg F	PRESS in H2O	AIR FLOW cu ft/min	HC Inf ppmv	HC Eff ppmv	HC Inf Conc* mg/cu M	LB HC for Period	LB HC Cumulative	Benzene Inf Conc* mg/cu M	LB Benzene per Period	LB Benzene Cumulative	LB Benzene Emitted per Day
3/25/96		70		147	2.4	0	11	1.87	2,599.3				

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
				acfm	= actual cubic feet per minute

*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 4/17/96

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)										

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]
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				
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										

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

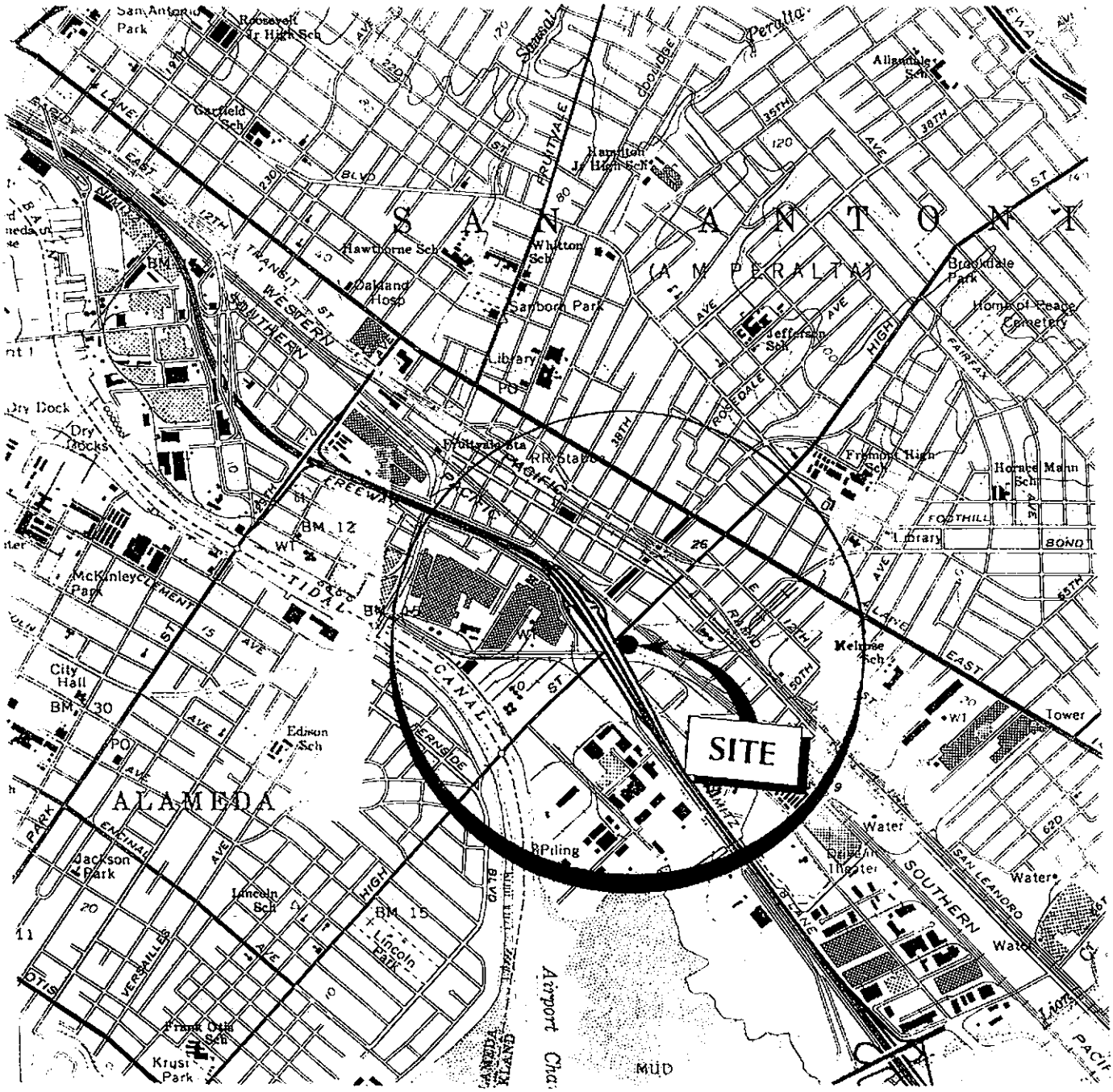
Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]	TPHg Removed Per Period [lb]	TPHg Removed Cumlative [lb]	Benzene Removed Per Period [lb]	Benzene Removed Cumlative [lb]
9/25/95		Restart System											
9/28/95		System Down - hydrocarbon vapor detector shut down											
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	System Restart										
1/16/96	178573	608	W-INF1	490	53	1.8	3.9	35	NA	0.4023	2.6566	0.0395	0.6246
			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	190163	828											
2/14/96	202343	812	W-INF1	840	220	25	<2.5	36	NA	0.1319	2.7885	0.0271	0.6517
			W-INF2	410	96	10	1.1	23	NA				
			W-INT	<50	0.58	1.8	<0.5	2.5	NA				
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA				
2/27/96	215833	1038											
3/12/96			System down upon arrival. Restart system.										

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

Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]	TPHg Removed Per Period [lb]	TPHg Removed Cumlative [lb]	Benzene Removed Per Period [lb]	Benzene Removed Cumlative [lb]
3/12/96	216590	54	W-INF1	1700	410	110	26	130	NA	0.1510	2.9394	0.0374	0.6891
			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				
3/25/96	217460	67											
3/27/95			Replaced one 55-gallon liquid phase carbon canisters										

Notes:

W-INF	W-INF1		= water influent before stripper	B	= Benzene	NA	= Not applicable
W-INF2			= water influent after stripper	T	= Toluene	NS	= Not sampled
W-INT	W-INT1	W-INT2	= water intermediate	E	= Ethylbenzene	ND	= Not detected
W-EFF	W-EFF1	W-EFF2	= water effluent	X	= Total Xylenes		
TPHg	= Total petroleum hydrocarbons as gasoline						



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N

APPROXIMATE SCALE

0 1/2 1

MILE

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

ERI ENVIRONMENTAL RESOLUTIONS, INC.

PROJECT ERI 2010

SITE VICINITY MAP

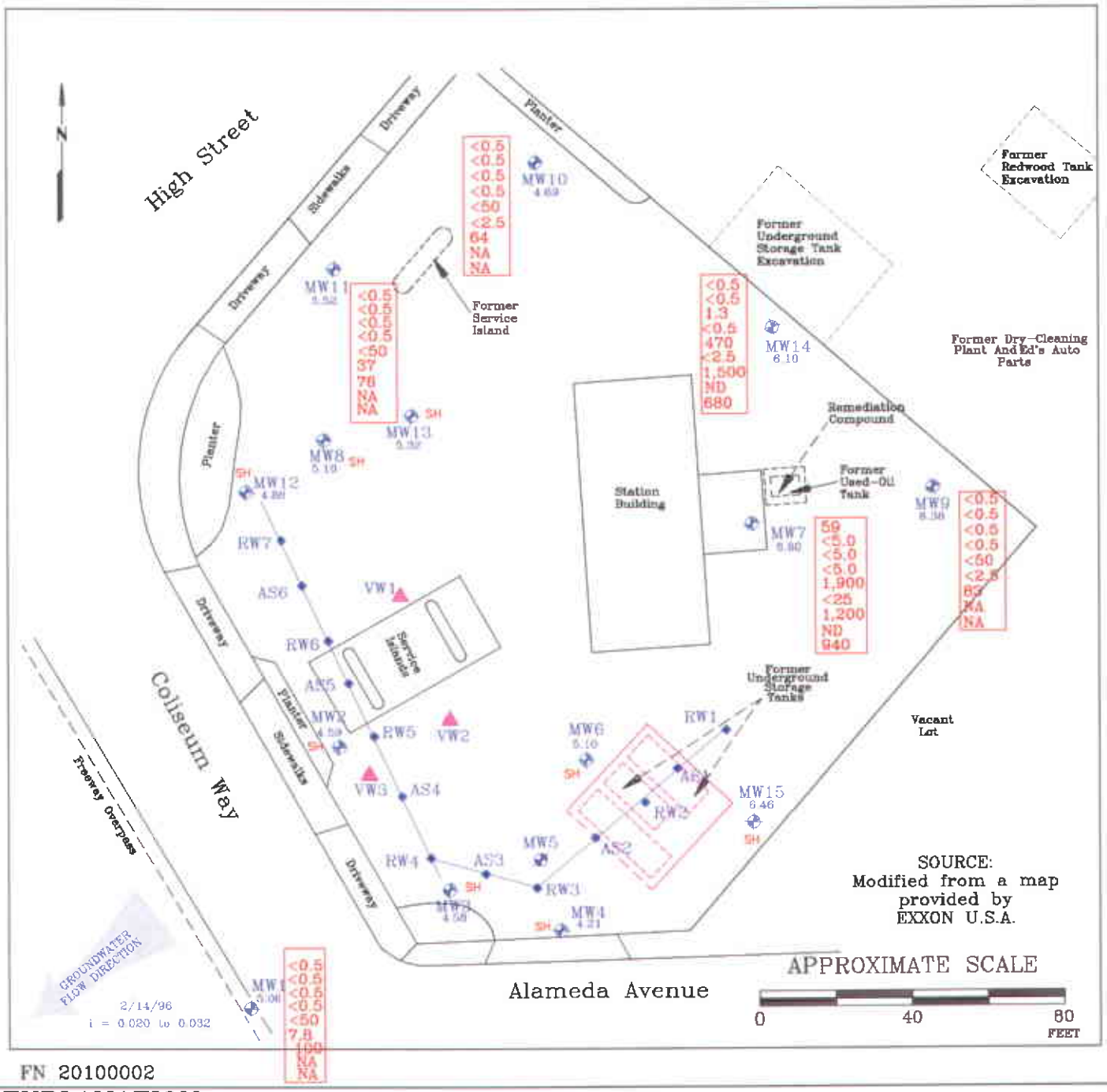
FORMER EXXON SERVICE STATION 7-3006

720 High Street

Oakland, California

PLATE

1



FN 20100002

EXPLANATION

MW15 ⊕ Groundwater Monitoring Well
6.46 = Elevation of groundwater in feet above mean sea level (2/14/96)

MW5 ⊕ Groundwater Monitoring Well (Destroyed)

VW3 ▲ Vapor Well

RW7 ◆ Recovery Monitoring Well

Interceptor Trench

AS6 ◆ Air-Sparging/Vapor-Extraction Well

i = Interpreted magnitude of hydraulic gradient

Groundwater Concentrations in ug/L
Sampled February 14, 1996

<0.5	Benzene
<0.5	Toluene
1.3	Ethylbenzene
<0.5	Xylene
470	Total Petroleum Hydrocarbons as gasoline
<2.5	Methyl tert-butyl ether
1,500	Total Extractable Petroleum Hydrocarbons as diesel
NA	Volatile Organic Compounds
680	Stoddard Solvent

ND = Not Detected
NA = Not Analyzed
SH = Sheen

ERI ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

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

PROJECT NO. 2010

PLATE 2

DATE: 2/29/96

ATTACHMENT A

GROUNDWATER SAMPLING PROTOCOL

GROUNDWATER SAMPLING PROTOCOL

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

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

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

1 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 1 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: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-8-MW10	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	Extracted: 02/21/96
	Analysis Method: EPA 8015 Mod	Analyzed: 02/22/96
Attention: Marc Briggs	Lab Number: 9602B21-01	Reported: 02/26/96

QC Batch Number: GC0221960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	64
Chromatogram Pattern:		
Unidentified HC		C12-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	114

RECEIVED
FEB 28 1996

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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Environmental Resolutions	Client Proj. ID: Exxon 7-3006 / 201013X	Sampled: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-8-MW10	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 02/21/96
Attention: Marc Briggs	Lab Number: 9602B21-01	Reported: 02/26/96

QC Batch Number: GC022196BTEX20A
Instrument ID: GCHP20

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	108

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: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-15-MW9	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	Extracted: 02/21/96
	Analysis Method: EPA 8015 Mod	Analyzed: 02/22/96
Attention: Marc Briggs	Lab Number: 9602B21-02	Reported: 02/26/96

QC Batch Number: GC0221960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	83
Chromatogram Pattern:		
Unidentified HC		C12-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	118

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
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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: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-15-MW9	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 02/21/96
Attention: Marc Briggs	Lab Number: 9602B21-02	Reported: 02/26/96

QC Batch Number: GC022196BTEX20A
Instrument ID: GCHP20

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	101

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: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-13-MW11	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	Extracted: 02/21/96
	Analysis Method: EPA 8015 Mod	Analyzed: 02/22/96
Attention: Marc Briggs	Lab Number: 9602B21-03	Reported: 02/26/96

QC Batch Number: GC0221960HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	50	76
Chromatogram Pattern:		
Unidentified HC		C12-C24

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

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

SEQUOIA ANALYTICAL - ELAP #1210

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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: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-13-MW11	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 02/21/96
Attention: Marc Briggs	Lab Number: 9602B21-03	Reported: 02/26/96

QC Batch Number: GC022196BTEX20A
Instrument ID: GCHP20

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**	**37**
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	96

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: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-8-MW1	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	Extracted: 02/21/96
	Analysis Method: EPA 8015 Mod	Analyzed: 02/22/96
Attention: Marc Briggs	Lab Number: 9602B21-04	Reported: 02/26/96

QC Batch Number: GC0221960HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

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

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	130

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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

Environmental Resolutions	Client Proj. ID: Exxon 7-3006 / 201013X	Sampled: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-8-MW1	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 02/21/96
Attention: Marc Briggs	Lab Number: 9602B21-04	Reported: 02/26/96

QC Batch Number: GC022196BTEX20A
Instrument ID: GCHP20

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**	**7.8**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	102

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201013X
Sample Descript: W-13-MW14
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9602B21-05

Sampled: 02/14/96
Received: 02/15/96
Extracted: 02/21/96
Analyzed: 02/22/96
Reported: 02/26/96

QC Batch Number: GC0221960HBPEXB
Instrument ID: GCHP5B

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	146

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
359 Bel Marin Keys, Suite 20
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201013X
Sample Descript: W-13-MW14
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9602B21-05

Sampled: 02/14/96
Received: 02/15/96
Extracted: 02/21/96
Analyzed: 02/22/96
Reported: 02/26/96

QC Batch Number: GC0221960HBPEXB
Instrument ID: GCHP5B

Fuel Fingerprint : Stoddard Solvent

Analyte	Detection Limit ug/L	Sample Results ug/L
Extract HC as Stoddard Solvent	50	680
Chromatogram Pattern:		
Unidentified HC		C9-C13

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	146

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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

Environmental Resolutions	Client Proj. ID: Exxon 7-3006 / 201013X	Sampled: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-13-MW14	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 02/21/96
Attention: Marc Briggs	Lab Number: 9602B21-05	Reported: 02/26/96

QC Batch Number: GC022196BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**470**
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**1.3**
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	112

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201013X
Sample Descript: W-13-MW14
Matrix: LIQUID
Analysis Method: EPA 601
Lab Number: 9602B21-05

Sampled: 02/14/96
Received: 02/15/96

Analyzed: 02/21/96
Reported: 02/26/96

QC Batch Number: GC022096060116A
Instrument ID: GCHP16

Purgeable Halocarbons (EPA 601)

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

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

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 / 201013X	Sampled: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-13-MW7	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	Extracted: 02/21/96
	Analysis Method: EPA 8015 Mod	Analyzed: 02/22/96
Attention: Marc Briggs	Lab Number: 9602B21-06	Reported: 02/26/96

QC Batch Number: GC0221960HBPEXB
Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

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

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

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201013X
Sample Descript: W-13-MW7
Matrix: LIQUID
Analysis Method: EPA 8015 Mod
Lab Number: 9602B21-06

Sampled: 02/14/96
Received: 02/15/96
Extracted: 02/21/96
Analyzed: 02/22/96
Reported: 02/26/96

QC Batch Number: GC0221960HBPEXB
Instrument ID: GCHP5B

Fuel Fingerprint : Stoddard Solvent

Analyte	Detection Limit ug/L	Sample Results ug/L
Extract HC as Stoddard Solvent	**50**	**940**
Chromatogram Pattern: **Unidentified HC**		**C9-C13**

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	Client Proj. ID: Exxon 7-3006 / 201013X	Sampled: 02/14/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-13-MW7	Received: 02/15/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 02/21/96
Attention: Marc Briggs	Lab Number: 9602B21-06	Reported: 02/26/96

QC Batch Number: GC022196BTEX20A
Instrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**500**	**1900**
Methyl t-Butyl Ether	25	N.D.
Benzene	**5.0**	**59**
Toluene	5.0	N.D.
Ethyl Benzene	5.0	N.D.
Xylenes (Total)	5.0	N.D.
Chromatogram Pattern:		
Weathered Gas		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	102

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201013X
Sample Descript: W-13-MW7
Matrix: LIQUID
Analysis Method: EPA 601
Lab Number: 9602B21-06

Sampled: 02/14/96
Received: 02/15/96

Analyzed: 02/21/96
Reported: 02/26/96

QC Batch Number: GC022196060108A
Instrument ID: GCHP8

Purgeable Halocarbons (EPA 601)

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

Surrogates	Control Limits %		% Recovery
1-Chloro-2-fluorobenzene	70	130	84

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

Client Project ID: Exxon 7-3006/201013X
Matrix: Liquid
Work Order #: 9602B21 -01-06

Reported: Feb 26, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
QC Batch#:	GC022196BTEX20A	GC022196BTEX20A	GC022196BTEX20A	GC022196BTEX20A	GC0221960HBPEXB
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 3510
Analyst:	J. Woo	J. Woo	J. Woo	J. Woo	J. Minkel
MS/MSD #:	960245110	960245110	960245110	960245110	9602B2101
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	64
Prepared Date:	2/21/96	2/21/96	2/21/96	2/21/96	2/21/96
Analyzed Date:	2/21/96	2/21/96	2/21/96	2/21/96	2/22/96
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20	GCHP5
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	1000 µg/L
Result:	9.9	10	10	30	1300
MS % Recovery:	99	100	100	100	124
Dup. Result:	10	10	9.9	30	1300
MSD % Recov.:	100	100	99	100	124
RPD:	1.0	0.0	1.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50	0-50
LCS #:	BLK022196	BLK022196	BLK022196	BLK022196	BLK022196
Prepared Date:	2/21/96	2/21/96	2/21/96	2/21/96	2/21/96
Analyzed Date:	2/21/96	2/21/96	2/21/96	2/21/96	2/22/96
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20	GCHP5
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L	1000 µg/L
LCS Result:	10	9.7	9.9	30	1300
LCS % Recov.:	100	97	99	100	130
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	38-122

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

Client Project ID: Exxon 7-3006/201013X
Matrix: Liquid
Work Order #: 9602B21-05

Reported: Feb 26, 1996

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC022096060116A	GC022096060116A	GC022096060116A
Analy. Method:	EPA 601	EPA 601	EPA 601
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Li	A. Li	A. Li
MS/MSD #:	960293702	960293702	960293702
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	2/20/96	2/20/96	2/20/96
Analyzed Date:	2/20/96	2/20/96	2/20/96
Instrument I.D.#:	GCHP16	GCHP16	GCHP16
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Result:	28	26	29
MS % Recovery:	112	104	116
Dup. Result:	25	23	26
MSD % Recov.:	100	92	104
RPD:	11	12	11
RPD Limit:	0-50	0-50	0-50
LCS #:	BLK022196	BLK022196	BLK022196
Prepared Date:	2/21/96	2/21/96	2/21/96
Analyzed Date:	2/21/96	2/21/96	2/21/96
Instrument I.D.#:	GCHP16	GCHP16	GCHP16
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	27	25	27
LCS % Recov.:	108	100	108
MS/MSD LCS Control Limits	30-140	40-130	40-130

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

Kevin Follett
Project Manager

Sequoia Analytical

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

Client Project ID: Exxon 7-3006/201013X
Matrix: Liquid
Work Order #: 9602B21-06
Reported: Feb 26, 1996

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	GC021996060108A	GC021996060108A	GC021996060108A
Analy. Method:	EPA 601	EPA 601	EPA 601
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	9602A8801	9602A8801	9602A8801
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	2/20/96	2/20/96	2/20/96
Analyzed Date:	2/21/96	2/21/96	2/21/96
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
Result:	24	24	24
MS % Recovery:	96	96	96
Dup. Result:	24	23	24
MSD % Recov.:	96	92	96
RPD:	0.0	4.3	0.0
RPD Limit:	0-50	0-50	0-50
LCS #:	BLK022196	BLK022196	BLK022196
Prepared Date:	2/21/96	2/21/96	2/21/96
Analyzed Date:	2/21/96	2/21/96	2/21/96
Instrument I.D.#:	GCHP8	GCHP8	GCHP8
Conc. Spiked:	25 µg/L	25 µg/L	25 µg/L
LCS Result:	27	24	25
LCS % Recov.:	108	96	100
MS/MSD LCS Control Limits	30-140	40-130	40-130

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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EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Page 1 of 2

Consultant's Name: Environmental Resolutions Inc			
Address: 359 Bel Marin Keys Suite 20 Novato Ca 94949		**Site Location:** 720 High Street	
Project #: 7-3006	**Consultant Project #:** 201013X	**Consultant Work Release #:** 1943503	
Project Contact: Mara Briggs	**Phone #:** 415 382 9105	**Laboratory Work Release #:**	
EXXON Contact: Marla Guenzler	**Phone #:** 510 746 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) | 9602B211 |

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Preserv	# 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	2/14/96	14:05	Water	HCl	3	01	X			X		
W-8-MW9		14:20				02	X			X		
W-13-MW11		14:35				03	X			X		
W-8-MW1		14:50				04	X			X		
W-13-MW14		14:59			6	05	X			X	X	
W-13-MW7		15:10				06	X			X	X	
W-8-MW10		14:10		4°C	2	07 01		X				
W-15-MW9		14:25				08 02		X				
W-13-MW11		14:40				09 03		X				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Scott Graham	2/15/96	1034	Keith R Rudder	2/15	1034	
Keith R Rudder	2/15/96					
			SRonz	2/15/96	1221	

Pink - Client
Yellow - Sequoia
White - Sequoia

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

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

CHAIN OF CUSTODY

Page 2 of 2

Consultant's Name: Environmental Resolutions Inc			
Address: 359 Bel Marin Keys Suite 20 Novato Ca 94949		**Site Location:** 720 High Street	
Project #: 7-3006	**Consultant Project #:** 201013X	**Consultant Work Release #:** 1943250	
Project Contact: Marc Buggs	**Phone #:** 415 382 9105	**Laboratory Work Release #:**	
EXXON Contact: Marla Guenster	**Phone #:** 510 246 8776	**EXXON RAS #:** 7-3006	
Sampled by (print): Scott Graham	**Sampler's Signature:** Scott Graham	Outland Co	
Shipment Method:	**Air Bill #:**		

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☑ Standard (10 day) [960282]

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	Stoddard Solvent 3510/ 8015		Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
W-8-MW1	2/14/96	14:55	Water	Ice	2	04	X					
W-13-MW14		15:00			3	05	X			X		
W-13-MW7		15:15			3	06	X			X		
				06		04						
						05						
						06						
						01						
						02						
						03						

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Scott Graham	2/15/96	1033	Keith R Brubb	2/15/96	1033	
Keith R Brubb	2/15/96					
			S Ross	2/15/96	1211	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

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

Attention: Marc Briggs

Client Proj. ID: 201011X, Exxon 7-3006
Sample Descript: A-INF 1
Matrix: AIR
Analysis Method: 8015Mod/8020
Lab Number: 9601797-01

Sampled: 01/16/96
Received: 01/17/96

Analyzed: 01/18/96
Reported: 01/25/96

QC Batch Number: GC011896BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ppmv	Sample Results ppmv
TPPH as Gas	**2.4**	**43**
Benzene	0.031	N.D.
Toluene	**0.027**	**0.12**
Ethyl Benzene	**0.023**	**0.039**
Xylenes (Total)	**0.023**	**0.32**
Chromatogram Pattern:		**Gas**
Unidentified HC		**< C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	337 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

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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: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: A-INF 2	Received: 01/17/96
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 01/18/96
Attention: Marc Briggs	Lab Number: 9601797-02	Reported: 01/25/96

QC Batch Number: GC011896BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ppmv	Sample Results ppmv
TPPH as Gas	**2.4**	**15**
Benzene	**0.031**	**0.23**
Toluene	**0.027**	**0.056**
Ethyl Benzene	**0.023**	**0.025**
Xylenes (Total)	**0.023**	**0.20**
Chromatogram Pattern:		**Gas**
Unidentified HC		**<C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	257 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: A-INT	Received: 01/17/96
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 01/18/96
Attention: Marc Briggs	Lab Number: 9601797-03	Reported: 01/25/96

QC Batch Number: GC011896BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ppmv	Sample Results ppmv
TPPH as Gas	2.4	N.D.
Benzene	0.031	N.D.
Toluene	0.027	N.D.
Ethyl Benzene	0.023	N.D.
Xylenes (Total)	**0.023**	**0.032**
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

Vickie Tague Clark
Project Manager

Sequoia Analytical

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

Environmental Resolutions	Client Proj. ID: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: A-EFF	Received: 01/17/96
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 01/18/96
Attention: Marc Briggs	Lab Number: 9601797-04	Reported: 01/25/96

QC Batch Number: GC011896BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ppmv	Sample Results ppmv
TPPH as Gas	2.4	N.D.
Benzene	0.031	N.D.
Toluene	0.027	N.D.
Ethyl Benzene	0.023	N.D.
Xylenes (Total)	0.023	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	105

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

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Environmental Resolutions	Client Proj. ID: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: A-INF 1	Received: 01/17/96
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 01/18/96
Attention: Marc Briggs	Lab Number: 9601797-01	Reported: 01/25/96

QC Batch Number: GC011896BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**10**	**180**
Benzene	0.10	N.D.
Toluene	**0.10**	**0.47**
Ethyl Benzene	**0.10**	**0.17**
Xylenes (Total)	**0.10**	**1.4**
Chromatogram Pattern:		**Gas**
Unidentified HC		**<C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	337 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

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Environmental Resolutions	Client Proj. ID: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: A-INF 2	Received: 01/17/96
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 01/18/96
Attention: Marc Briggs	Lab Number: 9601797-02	Reported: 01/25/96

QC Batch Number: GC011896BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**10**	**63**
Benzene	**0.10**	**0.73**
Toluene	**0.10**	**0.21**
Ethyl Benzene	**0.10**	**0.11**
Xylenes (Total)	**0.10**	**0.85**
Chromatogram Pattern:		**Gas**
Unidentified HC		**<C8**

Surrogates	**Control Limits %**		**% Recovery**
Trifluorotoluene	70	130	257 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

VMT Clark

Vickie Tague Clark
Project Manager

Sequoia Analytical

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

Environmental Resolutions	Client Proj. ID: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: A-INT	Received: 01/17/96
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 01/18/96
Attention: Marc Briggs	Lab Number: 9601797-03	Reported: 01/25/96

QC Batch Number: GC011896BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	**0.10**	**0.14**
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

Vickie Tague Clark
Project Manager

Sequoia Analytical

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

Environmental Resolutions	Client Proj. ID: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: A-EFF	Received: 01/17/96
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 01/18/96
Attention: Marc Briggs	Lab Number: 9601797-04	Reported: 01/25/96

QC Batch Number: GC011896BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	105

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

Sequoia Analytical

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

Client Proj. ID: 201011X, Exxon 7-3006
Lab Proj. ID: 9601797

Received: 01/17/96
Reported: 01/25/96

LABORATORY NARRATIVE

(TPHGBA) High surrogate recovery due to matrix coelution for samples 9601797-01,02.

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

Sequoia Analytical

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

Environmental Resolutions	Client Project ID:	201011X, Exxon 7-3006	
359 Bel Marin Keys, Suite 20	Matrix:	Liquid	
Novato, CA 94949			
Attention: Marc Briggs	Work Order #:	9601797 -01-4	Reported: Jan 26, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC011896BTEX17A	GC011896BTEX17A	GC011896BTEX17A	GC011896BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Woo	J. Woo	J. Woo	J. Woo
MS/MSD #:	960145404	960145404	960145404	960145404
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	1/18/96	1/18/96	1/18/96	1/18/96
Analyzed Date:	1/18/96	1/18/96	1/18/96	1/18/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	11	11	31
MS % Recovery:	110	110	110	103
Dup. Result:	11	11	11	31
MSD % Recov.:	110	110	110	103
RPD:	0.0	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	BLK011896	BLK011896	BLK011896	BLK011896
Prepared Date:	1/18/96	1/18/96	1/18/96	1/18/96
Analyzed Date:	1/18/96	1/18/96	1/18/96	1/18/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	11	11	31
LCS % Recov.:	100	110	110	103
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL

MT Clark

Vickie Tague Clark
Project Manager

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

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EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC		
Address: 359 BEL MARIN KEYS BLVD, SUITE 20, NOVATO		Site Location: 720 High St
Project #: 201011X	Consultant Project #: 201011X	Consultant Work Release #:
Project Contact: MARC BRIGGS	Phone #: 415 382 9105	Laboratory Work Release #:
EXXON Contact: MARLA GUENSLER	Phone #: 510 246 8768	EXXON RAS #: 73006
Sampled by (print): PETER PETRO	Sampler's Signature:	OAKLAND
Shipment Method:	Air Bill #:	

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

ANALYSIS REQUIRED 9601797

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-INF1	4/16	16:45	AIR	None	1	1	X					
A-INF2		16:50				2	X					
A-INT		16:55				3	X					
A-Eff	"	17:00	"	"	"	4	X					
W-INF1	4/16	14:45	WATER	HCl ice	3		X					
W-INF2		14:50					X					
W-INT		14:55					X					
W-Eff	"	15:00	"	"	"		X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	4/17/96	2:55	SRoss / SEQ	4/17/96	2:55	
SRoss	4/17/96					
			/ Sequoia	4/17/96	1624	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-INF1	Received: 01/17/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 01/19/96
Attention: Marc Briggs	Lab Number: 9601A12-01	Reported: 01/26/96

QC Batch Number: GC011996BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	490
Benzene	1.0	53
Toluene	1.0	1.8
Ethyl Benzene	1.0	3.9
Xylenes (Total)	1.0	35
Chromatogram Pattern:		Gas

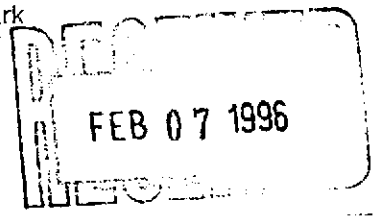
Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	105

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

SEQUOIA ANALYTICAL - ELAP #1210

VMTClark

Vickie Tague Clark
Project Manager



Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-INF2	Received: 01/17/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 01/19/96
Attention: Marc Briggs	Lab Number: 9601A12-02	Reported: 01/26/96

QC Batch Number: GC011996BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**150**
Benzene	**0.50**	**8.1**
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**0.61**
Xylenes (Total)	**0.50**	**6.8**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	85

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

SEQUOIA ANALYTICAL - ELAP #1210

VMTClark

Vickie Tague Clark
Project Manager

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-INT	Received: 01/17/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 01/23/96
Attention: Marc Briggs	Lab Number: 9601A12-03	Reported: 01/26/96

QC Batch Number: GC012296BTEX17A
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	83

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

Sequoia Analytical

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Environmental Resolutions	Client Proj. ID: 201011X, Exxon 7-3006	Sampled: 01/16/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-EFF	Received: 01/17/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 01/19/96
Attention: Marc Briggs	Lab Number: 9601A12-04	Reported: 01/26/96

QC Batch Number: GC011996BTEX02A
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	85

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

Sequoia Analytical

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

Client Project ID: 201011X, Exxon 7-3006
Matrix: Liquid
Work Order #: 9601A12 01

Reported: Feb 2, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC011996BTEX17A	GC011996BTEX17A	GC011996BTEX17A	GC011996BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Woo	J. Woo	J. Woo	J. Woo
MS/MSD #:	960154601	960154601	960154601	960154601
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	1/19/96	1/19/96	1/19/96	1/19/96
Analyzed Date:	1/19/96	1/19/96	1/19/96	1/19/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.7	9.7	9.6	29
MS % Recovery:	97	97	96	97
Dup. Result:	11	11	11	33
MSD % Recov.:	110	110	110	110
RPD:	13	13	14	13
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	BLK012996	BLK012996	BLK012996	BLK012996
Prepared Date:	1/19/96	1/19/96	1/19/96	1/19/96
Analyzed Date:	1/19/96	1/19/96	1/19/96	1/19/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	11	10	32
LCS % Recov.:	100	110	100	107
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

Sequoia Analytical

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

Client Project ID: 201011X, Exxon 7-3006
Matrix: Liquid
Work Order #: 9601A12 02, 04

Reported: Feb 2, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC011996BTEX02A	GC011996BTEX02A	GC011996BTEX02A	GC011996BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Woo	J. Woo	J. Woo	J. Woo
MS/MSD #:	960154601	960154601	960154601	960154601
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	1/19/96	1/19/96	1/19/96	1/19/96
Analyzed Date:	1/19/96	1/19/96	1/19/96	1/19/96
Instrument I.D.#:	GCHP12	GCHP12	GCHP12	GCHP12
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	11	11	32
MS % Recovery:	100	110	110	107
Dup. Result:	11	11	11	32
MSD % Recov.:	110	110	110	107
RPD:	9.5	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	BLK011996	BLK011996	BLK011996	BLK011996
Prepared Date:	1/19/96	1/19/96	1/19/96	1/19/96
Analyzed Date:	1/19/96	1/19/96	1/19/96	1/19/96
Instrument I.D.#:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	10	31
LCS % Recov.:	100	100	100	103
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

Client Project ID: 201011X, Exxon 7-3006
Matrix: Liquid
Work Order #: 9601A12 03
Reported: Feb 2, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC012996BTEX17A	GC012996BTEX17A	GC012996BTEX17A	GC012996BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	B. Sullivan	B. Sullivan	B. Sullivan	B. Sullivan
MS/MSD #:	9601A0701	9601A0701	9601A0701	9601A0701
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	1/22/96	1/22/96	1/22/96	1/22/96
Analyzed Date:	1/22/96	1/22/96	1/22/96	1/22/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.7	9.8	9.6	29
MS % Recovery:	97	98	96	97
Dup. Result:	8.4	8.5	8.5	25
MSD % Recov.:	84	85	85	83
RPD:	14	14	12	15
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	BLK012296	BLK012296	BLK012296	BLK012296
Prepared Date:	1/22/96	1/22/96	1/22/96	1/22/96
Analyzed Date:	1/22/96	1/22/96	1/22/96	1/22/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	9.9	30
LCS % Recov.:	100	100	99	100
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

Vickie Tague Clark
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

Sequoia Analytical
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EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC		Site Location: 720 High St
Address: 359 BEL MARIN KEYS BLVD, SUITE 20, NOVATO	Consultant Project #: 20011X	Consultant Work Release #:
Project #: 20011X	Phone #: 415 382 9105	Laboratory Work Release #:
Project Contact: MARC BRIGGS	Phone #: 510 246 8768	EXXON RAS #: 73006
EXXON Contact: MARLA GROSSLER	Sampler's Signature:	OAKLAND
Sampled by (print): PETER PETRO	Air Bill #:	
Shipment Method:		9601A12

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

ANALYSIS REQUIRED

Temperature: 10°C
Inbound Seal: Yes (No)
Outbound Seal: Yes (No)

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			
A-INF1	4/16	16:45	AIR	None	1		X					
A-INF2		16:50					X					
A-INT		16:55					X					
A-Eff	"	17:00	"	"	"		X					
W-INF1	4/16	14:45	WATER	HCl to pH<2	3	01	X					
W-INF2		14:50				02	X					
W-INT		14:55				03	X					
W-Eff	"	15:00	"	"	"	04	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	4/17/96	2:55	Sloan / SEQ	4/17/96	2:55	
Sloan	4/17/96		/ Sequoia	4/17/96	1624	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Environmental Resolutions
359 Bel Marin Keys, Suite 20
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: 9602999-01

Sampled: 02/14/96
Received: 02/15/96

Analyzed: 02/16/96
Reported: 02/21/96

QC Batch Number: GC021696BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

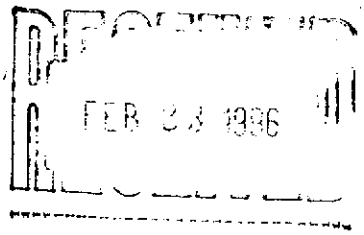
Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	98

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
359 Bel Marin Keys, Suite 20
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201011X
Sample Descript: A-INT2
Matrix: AIR
Analysis Method: 8015Mod/8020
Lab Number: 9602999-02

Sampled: 02/14/96
Received: 02/15/96

Analyzed: 02/16/96
Reported: 02/21/96

QC Batch Number: GC021696BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	98

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
359 Bel Marin Keys, Suite 20
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201011X
Sample Descript: A-INT1
Matrix: AIR
Analysis Method: 8015Mod/8020
Lab Number: 9602999-03

Sampled: 02/14/96
Received: 02/15/96

Analyzed: 02/16/96
Reported: 02/21/96

QC Batch Number: GC021696BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	**0.10**	**0.16**
Toluene	**0.10**	**0.23**
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	**0.10**	**0.13**
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	146 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
359 Bel Marin Keys, Suite 20
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: 9602999-04

Sampled: 02/14/96
Received: 02/15/96

Analyzed: 02/16/96
Reported: 02/21/96

QC Batch Number: GC021696BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	160
Benzene	0.50	2.2
Toluene	0.50	2.7
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	2.0
Chromatogram Pattern:		
Gas & Unidentified HC		<C8

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	128

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

Client Proj. ID: Exxon 7-3006 / 201011X
Lab Proj. ID: 9602999

Received: 02/15/96
Reported: 02/21/96

LABORATORY NARRATIVE

TPPH: High surrogate recovery due to matrix coelution for sample 9602999-03.

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

Sequoia Analytical

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

Client Project ID: Exxon 7-3006 / 201011X
Matrix: Air
Work Order #: 9602999 01-04

Reported: Feb 22, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC021696BTEX17A	GC021696BTEX17A	GC021696BTEX17A	GC021696BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Woo	J. Woo	J. Woo	J. Woo
MS/MSD #:	960245102	960245102	960245102	960245102
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/16/96	2/16/96	2/16/96	2/16/96
Analyzed Date:	2/16/96	2/16/96	2/16/96	2/16/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	9.9	29
MS % Recovery:	100	100	99	97
Dup. Result:	9.8	9.7	9.7	29
MSD % Recov.:	98	97	97	97
RPD:	2.0	3.0	2.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	BLK021696	BLK021696	BLK021696	BLK021696
Prepared Date:	2/16/96	2/16/96	2/16/96	2/16/96
Analyzed Date:	2/16/96	2/16/96	2/16/96	2/16/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.7	9.8	9.7	29
LCS % Recov.:	97	98	97	97
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

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

EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: Environmental Resolutions Inc		Site Location: 720 High Street
Address: 359 Bel Marin Keys Suite 20 Novato Ca 94949	Consultant Project #: 201011X	Consultant Work Release #: 943 2503
Project #: 7-3006	Phone #: 415 382 9105	Laboratory Work Release #:
Project Contact: Marc Briggs	Phone #: 510 746 8776	EXXON RAS #: 7-3006
EXXON Contact: Marla Guensler	Sampler's Signature:	Oakland, Ca
Sampled by (print): Peter Petio	Air Bill #:	
Shipment Method:		

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

ANALYSIS REQUIRED — 9602999

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	MTBE		Temperature: ____ Inbound Seal: Yes No Outbound Seal: Yes No
A-EFF	2/14/96	15:20	Air	none	1	01	X					
A-INT2	"	15:22	"	"	"	02	X					
A-INT1	"	15:24	"	"	"	03	X					
A-INF	"	15:26	"	"	"	04	X					
W-INF1	"	15:40	Water	HCl Ice	3		X			~~MTBE~~		
W-INF2	"	15:45	"	"	"		X			~~MTBE~~		
W-INT	"	15:50	"	"	"		X			~~MTBE~~		
W-EFF	"	15:55	"	"	"		X			~~MTBE~~		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	2/15/96	1032	Keith R Thrubb	2/15/96	1032	
Keith R Thrubb	2/15/96					
				2/15/96	12:11	

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	Sampled: 03/12/96
359 Bel Marin Keys, Suite 20	Sample Descript: A-INF1	Received: 03/13/96
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 03/14/96
Attention: Marc Briggs	Lab Number: 9603787-04	Reported: 03/16/96

QC Batch Number: GC031496BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	**0.10**	**0.43**
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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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201011X
Sample Descript: A-EFF
Matrix: AIR
Analysis Method: 8015Mod/8020
Lab Number: 9603787-01

Sampled: 03/12/96
Received: 03/13/96

Analyzed: 03/14/96
Reported: 03/16/96

QC Batch Number: GC031496BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	**0.10**	**0.14**
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

RECEIVED
MAR 21 1996

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: 03/12/96
359 Bel Marin Keys, Suite 20	Sample Descript: A-INT	Received: 03/13/96
Novato, CA 94949	Matrix: AIR	
	Analysis Method: 8015Mod/8020	Analyzed: 03/14/96
Attention: Marc Briggs	Lab Number: 9603787-02	Reported: 03/16/96

QC Batch Number: GC031496BTEX17A
Instrument ID: GCHP17

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	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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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

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

Client Proj. ID: Exxon 7-3006 / 201011X
Lab Proj. ID: 9603787

Received: 03/13/96
Reported: 03/16/96

LABORATORY NARRATIVE

Insufficient sample for A-Inf2.

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

Client Project ID: Exxon 7-3006 / 201011X
Matrix: Air
Work Order #: 9603787 01, 02, 04

Reported: Mar 18, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC031496BTEX17A	GC031496BTEX17A	GC031496BTEX17A	GC031496BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Woo	J. Woo	J. Woo	J. Woo
MS/MSD #:	960313903	960313903	960313903	960313903
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/14/96	3/14/96	3/14/96	3/14/96
Analyzed Date:	3/14/96	3/14/96	3/14/96	3/14/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	10	30
MS % Recovery:	100	100	100	100
Dup. Result:	9.6	9.4	9.3	27
MSD % Recov.:	96	94	93	90
RPD:	4.1	6.2	7.3	11
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	BLK031496	BLK031496	BLK031496	BLK031496
Prepared Date:	3/14/96	3/14/96	3/14/96	3/14/96
Analyzed Date:	3/14/96	3/14/96	3/14/96	3/14/96
Instrument I.D.#:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	10	30
LCS % Recov.:	100	100	100	100
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

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

EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Page ___ of ___

Consultant's Name: Environmental Resolutions Inc.		
Address: 359 Bel Marin Keys Blvd Suite 20 Novato CA 94949		**Site Location:** 720 High Street
Project #: 20101A	**Consultant Project #:**	**Consultant Work Release #:** 94325R3
Project Contact: Marc Briggs	**Phone #:** 415 382 5991	**Laboratory Work Release #:**
EXXON Contact: Marla Gloester	**Phone #:** 510 241 8776	**EXXON RAS #:** 7-3006
Sampled by (print): Marc Briggs	**Sampler's Signature:** Marc A Briggs	
Shipment Method: Courier	**Air Bill #:**	

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

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample # 9603787	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: ___ Inbound Seal: Yes No Outbound Seal: Yes No
A-Eff	3/12/96	1545	Air	—	1	01 A	X					
A-Int		1555	Air	—	1	02	X					
A-Inf2		1605	Air	—	1	03	X					deleted.
A-Inf1		1615	Air	—	1	04	X					
W-Eff		1630	Water	HCl Ice	3	05 A-C	X					
W-Int		1640	Water	HCl Ice	3	06	X					
W-Inf2	3/12	1650	Water	HCl Ice	3	07	X					
W-Inf1	3/12/96	1700	Water	HCl Ice	3	08	X					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Marc A Briggs	3/13/96	1157		3/13/96	1157	
	3/13/96					
				3/13/96	13.59	

Pink - Client
Yellow - Sequoia
White - Sequoia

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201011X
Sample Descript: W-INF1
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9602B06-01

Sampled: 02/14/96
Received: 02/15/96

Analyzed: 02/21/96
Reported: 02/23/96

QC Batch Number: GC022196BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

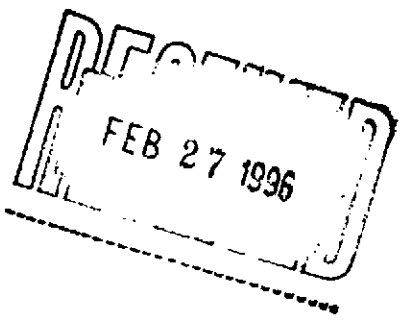
Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	840
Benzene	2.5	220
Toluene	2.5	25
Ethyl Benzene	2.5	N.D.
Xylenes (Total)	2.5	36
Chromatogram Pattern:		Gas+
Discrete Peak		C6

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	70

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
359 Bel Marin Keys, Suite 20
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201011X
Sample Descript: W-INF2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9602B06-02

Sampled: 02/14/96
Received: 02/15/96

Analyzed: 02/21/96
Reported: 02/23/96

QC Batch Number: GC022196BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	410
Benzene	1.0	96
Toluene	1.0	10
Ethyl Benzene	1.0	1.1
Xylenes (Total)	1.0	23
Chromatogram Pattern:		Gas

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

Attention: Marc Briggs

Client Proj. ID: Exxon 7-3006 / 201011X
Sample Descript: W-INT
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9602B06-03

Sampled: 02/14/96
Received: 02/15/96

Analyzed: 02/22/96
Reported: 02/23/96

QC Batch Number: GC022196BTEX07A
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	**0.50**	**0.58**
Toluene	**0.50**	**1.8**
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	**0.50**	**2.5**
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	72

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
359 Bel Marin Keys, Suite 20
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: 9602B06-04

Sampled: 02/14/96
Received: 02/15/96

Analyzed: 02/20/96
Reported: 02/23/96

QC Batch Number: GC022096BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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

Client Project ID: Exxon 7-3006 / 201011X
Matrix: Liquid
Work Order #: 9602B06 01-03

Reported: Feb 23, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC022296BTEX07A	GC022296BTEX07A	GC022296BTEX07A	GC022296BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Jirsa	D. Jirsa	D. Jirsa	D. Jirsa
MS/MSD #:	9602A4109	9602A4109	9602A4109	9602A4109
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/21/96	2/21/96	2/21/96	2/21/96
Analyzed Date:	2/21/96	2/21/96	2/21/96	2/21/96
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	11	11	34
MS % Recovery:	110	110	110	113
Dup. Result:	11	10	10	30
MSD % Recov.:	110	100	100	100
RPD:	0.0	9.5	9.5	13
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	BLK022196	BLK022196	BLK022196	BLK022196
Prepared Date:	2/21/96	2/21/96	2/21/96	2/21/96
Analyzed Date:	2/21/96	2/21/96	2/21/96	2/21/96
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	9.8	9.6	9.7	30
LCS % Recov.:	98	96	97	100
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

Sequoia Analytical

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

Client Project ID: Exxon 7-3006 / 201011X
Matrix: Liquid
Work Order #: 9602B06 04

Reported: Feb 23, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC022096BTEX06A	GC022096BTEX06A	GC022096BTEX06A	GC022096BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	A. Miraftab	A. Miraftab	A. Miraftab	A. Miraftab
MS/MSD #:	9602A0511	9602A0511	9602A0511	9602A0511
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	2/20/96	2/20/96	2/20/96	2/20/96
Analyzed Date:	2/20/96	2/20/96	2/20/96	2/20/96
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.5	8.2	8.3	24
MS % Recovery:	85	82	83	80
Dup. Result:	8.5	8.6	8.6	25
MSD % Recov.:	85	86	86	83
RPD:	0.0	4.8	3.6	4.1
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	BLK022096	BLK022096	BLK022096	BLK022096
Prepared Date:	2/20/96	2/20/96	2/20/96	2/20/96
Analyzed Date:	2/20/96	2/20/96	2/20/96	2/20/96
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.1	8.3	8.0	24
LCS % Recov.:	81	83	80	80
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

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EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: Environmental Resolutions Inc		Site Location: 720 High Street
Address: 359 Bel Marin Keys Suite 20 Novato Ca 94949	Consultant Project #: 201011X	Consultant Work Release #: 1943 25D3
Project #: 7-3006	Phone #: 415 382 9105	Laboratory Work Release #:
Project Contact: Marc Briggs	Phone #: 510 746 8776	EXXON RAS #: 7-3006
EXXON Contact: Maula Gruenstein	Sampler's Signature:	Oakland, Ca
Sampled by (print): Peter Petio	Air Bill #:	
Shipment Method:		

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

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample # 9602B06	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	MTBE		Temperature: _____ Inbound Seal: Yes No Outbound Seal: Yes No
A-EFF	2/14/96	15:20	Air	none	1		X					
A-INT2		15:22					X					
A-INT1		15:24					X					
A-INF		15:26					X					
W-INF1		15:40	Water	HCl Ice	3	01 A-C	X			~~MTBE~~		
W-INF2		15:45				02	X			~~MTBE~~		
W-INT		15:50				03	X			~~MTBE~~		
W-EFF		15:55				04	X			~~MTBE~~		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	2/15/96	1032		2/15/96	1032	
	2/15/96					
				2/15/96	12:11	

White - Sequoia
Yellow - Sequoia
Pink - Client

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 / 19432503	Sampled: 03/12/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-EFF	Received: 03/13/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/14/96
Attention: Marc Briggs	Lab Number: 9603789-01	Reported: 03/16/96

QC Batch Number: GC031496BTEX03A
Instrument ID: GCHP03

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	103

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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MAR 19 1996

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 / 19432503	Sampled: 03/12/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-INT	Received: 03/13/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/14/96
Attention: Marc Briggs	Lab Number: 9603789-02	Reported: 03/16/96

QC Batch Number: GC031496BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	**0.50**	**0.53**
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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

Environmental Resolutions	Client Proj. ID: Exxon 7-3006 / 19432503	Sampled: 03/12/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-INF2	Received: 03/13/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/14/96
Attention: Marc Briggs	Lab Number: 9603789-03	Reported: 03/16/96

QC Batch Number: GC031496BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**100**	**420**
Benzene	**1.0**	**94**
Toluene	**1.0**	**24**
Ethyl Benzene	**1.0**	**5.9**
Xylenes (Total)	**1.0**	**33**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	102

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

SEQUOIA ANALYTICAL - ELAP #1210

Kevin Follett
Project Manager

Sequoia Analytical

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

Environmental Resolutions	Client Proj. ID: Exxon 7-3006 / 19432503	Sampled: 03/12/96
359 Bel Marin Keys, Suite 20	Sample Descript: W-INF1	Received: 03/13/96
Novato, CA 94949	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 03/14/96
Attention: Marc Briggs	Lab Number: 9603789-04	Reported: 03/16/96

QC Batch Number: GC031496BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**500**	**1700**
Benzene	**5.0**	**410**
Toluene	**5.0**	**110**
Ethyl Benzene	**5.0**	**26**
Xylenes (Total)	**5.0**	**130**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90

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

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

Client Project ID: Exxon 7-3006 / 19432503
Matrix: Liquid
Work Order #: 9603789 01-04

Reported: Mar 18, 1996

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC031496BTEX03A	GC031496BTEX03A	GC031496BTEX03A	GC031496BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	J. Woo	J. Woo	J. Woo	J. Woo
MS/MSD #:	960313903	960313903	960313903	960313903
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	3/14/96	3/14/96	3/14/96	3/14/96
Analyzed Date:	3/14/96	3/14/96	3/14/96	3/14/96
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	10	10	31
MS % Recovery:	100	100	100	103
Dup. Result:	10	10	9.8	30
MSD % Recov.:	100	100	98	100
RPD:	0.0	0.0	2.0	3.3
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:	BLK031496	BLK031496	BLK031496	BLK031496
Prepared Date:	3/14/96	3/14/96	3/14/96	3/14/96
Analyzed Date:	3/14/96	3/14/96	3/14/96	3/14/96
Instrument I.D.#:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	10	10	10	31
LCS % Recov.:	100	100	100	103
MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL

Kevin Follett
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

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

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

EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Page ___ of ___

Consultant's Name: Environmental Resolutions Inc		
Address: 359 Bel Marin Keys Blvd Suite 20 Novato CA 94949		**Site Location:** 720 High Street
Project #: 20101x	**Consultant Project #:**	**Consultant Work Release #:** 94325R3
Project Contact: Marc Briggs	**Phone #:** 415 382 5991	**Laboratory Work Release #:**
EXXON Contact: Marla Goodstein	**Phone #:** 510 247 8776	**EXXON RAS #:** 7-3006
Sampled by (print): Marc Briggs	**Sampler's Signature:** Marc A Briggs	
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 # 9603789	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	3/12/96	1545	Air	—	1	01 A	X					
A-Int		1555	Air	—	1	02	X					
A-Inf2		1605	Air	—	1	03	X					Deleted.
A-Inf1		1615	Air	—	1	04	X					9603789
W-Eff		1630	Water	HCl Ice	3	~~05~~ A-C PL	X					01 A-C
W-Int		1640	Water	HCl Ice	3	~~06~~ PL	X					02
W-Inf2		1650	Water	HCl Ice	3	~~07~~ PL	X					03
W-Inf1	3/12/96	1700	Water	HCl Ice	3	~~08~~ PL	X					04

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Marc A Briggs	3/13/96	1157	Keith R Shields	3/13/96	1157	
Keith R Shields	3/13/96		Steven Yates	3/13/96	13:59	

Pink - Client
Yellow - Sequoia
White - Sequoia

ATTACHMENT C

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

Rev. 1/29/95

POUNDS OF HYDROCARBON IN AN AIR STREAM

INPUT DATA:
1) Air flow rate acfm (usually by Pitot tube)
2) Air pressure at the flow measuring device (in inches of H_2O) (use {-} for vacuum)
3) Air temperature at the flow measuring device.
4) Hydrocarbon content of air (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) Air flow for the period equals the average of the initial and final reading for the period.
2) Pressure and temperature for the entire period will be the final reading.
3) Hydrocarbon concentration for the period equals the average of the initial and final reading.
4) The hours of operation can be taken from an hour meter, an electric meter or will be assumed to be equal to the time between measurements.
5) If the unit is found down - try to determine how many hours it did operate and use the data taken for the previous period to make the calculations. Restart the unit and then take data to start the next period.

SAMPLE DATA AND CALCULATIONS

Date	Time	Temp deg F	Press in H_2O	HC conc mg/M3	Air flow acfm	Calc. lb. rem.
1/6/95	11:00	70	-46	2000	120	
1/7/95	13:00	55	-50	1350	90	
1/8/95	10:00	80	-13	750	100	7.4

Calculate the pounds of hydrocarbon removed from the system during the basis period from 13:00 (1:00 pm) on the 7th to 10 am on the 8th. Pressure and temperature of the measurements (at the flow meter) must be corrected to the P and T used to report the HC concentration (which are P = 1 atm and T = 70 deg F). 1 atm = 14.7psia, 760 mm Hg, or 407 in H_2O. T_{abs} = 460 + T deg F

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

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

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

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

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

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