

**EXON COMPANY, U.S.A.**

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

MARKETING DEPARTMENT • ENVIRONMENTAL ENGINEERING

MARLA D. GUENSLER  
SENIOR ENGINEER

(510) 246-8776  
(510) 246-8798 FAX

ENVIRONMENTAL  
ENGINEERING

95 AUG 20 PM 2:29

August 14, 1995

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

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

Dear Mr. Chan:

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

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

Sincerely,

  
Marla D. Guensler  
Senior Engineer

MDG/jb

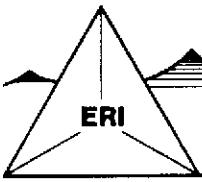
attachment: ERI Report Dated August 1, 1995

cc: w/attachment:

Mr. Richard Hiett - San Francisco Bay Region CRWQCB

w/o attachment:

Mr. Marc Briggs - ERI, Novato



August 1, 1995  
ERI 201013.R02

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

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

Ms. Guensler:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI) performed remedial activities and groundwater monitoring for the second quarter 1995 at the subject site. The location of the site is shown on the Site Vicinity Map (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 June 7, 1995, ERI measured the depth to water (DTW) in monitoring wells MW1 through MW4, and MW6 through MW15 and subjectively analyzed water in these wells for the presence of liquid phase hydrocarbons. Monitoring well MW5 was previously destroyed. Groundwater samples were collected from wells MW1, MW7, MW9, MW10, MW11, and MW14 for laboratory analysis. 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 of 0.010 (Plate 2). Recent monitoring and sampling data for 1994 and 1995 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 Stoddard Solvent. 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 adsorbers. The system is equipped with a catalytic hydrocarbon detector between carbon adsorbers #2 and #3 which automatically shuts the system down when concentrations in the vapor stream exceed the set point (10 parts per million vapor [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 second quarter 1995 are attached (Attachment B). Analyses detected maximum TPHg influent concentrations of 440 micrograms per liter (ug/L). 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 April 20, 1995, two 500-pound vapor phase absorbers were replaced. On May 1, 1995, one 500-pound vapor phase absorber was added in series. The system is currently operating within permit conditions.

### 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 air stripper, and subsequently through liquid-phase granular activated carbon (GAC) canisters connected in series. The treated groundwater is discharged to the sanitary sewer regulated by East Bay Municipal Utilities District (EBMUD).

Between March 30, 1995 and June 27, 1995, the system recovered approximately 11,325 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 second quarter 1995 are attached (Attachment B). Analyses detected maximum TPHg influent concentrations of 4,500 parts per billion (ppb). Hydrocarbon concentrations above laboratory detection limits were not discharged to the sanitary sewer.

On April 4, 1995 and on May 9, 1995, one 55-gallon liquid phase absorber was replaced. On June 6, 1995, two additional 55-gallon liquid phase absorber were placed in series. The system is currently operating within permit conditions.

### SUMMARY AND STATUS OF INVESTIGATION

Based on data collected to date, it appears the system is effectively removing residual hydrocarbons in soil and dissolved hydrocarbons in groundwater. ERI estimates approximately 182 pounds of hydrocarbons have been removed by the vapor extraction system during the second quarter of 1995 (Attachment C and Table 2). ERI estimates the groundwater extraction system removed less than 1 pound of hydrocarbons during the second quarter 1995 (Table 3). The vapor extraction and groundwater extraction systems were each functioning as of the beginning of the third quarter 1995. ERI will continue to operate the remedial systems and monitor groundwater at the site during the third quarter 1995.

### LIMITATIONS

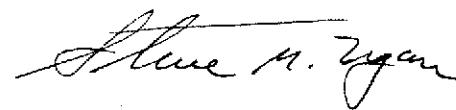
This report was prepared in accordance with generally accepted standards of environmental geological practice in California at the time this investigation was performed. This report has been prepared for Exxon Company, U.S.A. and any reliance on this report by third parties shall be at such party's sole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

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

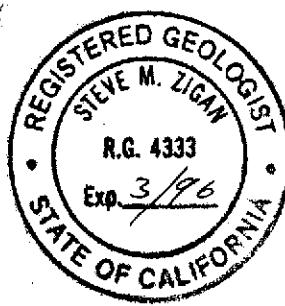
Sincerely,  
Environmental Resolutions, Inc.



Marc A. Briggs  
Project Manager



Steve M. Zigan  
R.G. 4333



---

Enclosures:   Table 1:   Groundwater Monitoring and Sampling Data  
                  Table 2:   Operational and Performance Data for Soil Vapor Extraction System  
                  Table 3:   Operational 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**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 1 of 12)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < ..... >	TPHg < ..... >	B	T	E parts per billion	X	MTBE	TEPHd	VOCs >
MW1 (12.87)	01/20/94	NLPH	9.25	3.62#								
	02/02-03/94	NLPH	8.60	4.27	<50	<0.5	<0.5	<0.5	0.7	NA	70	NA
	03/10/94	NLPH	8.31	4.56#								
	04/22/94	NLPH	7.95	4.92#								
	05/10-11/94	NLPH	7.48	5.39	<50	<0.5	<0.5	<0.5	1.6	NA	100	NA
	06/27/94	NLPH	7.65	5.22#								
	08/31/94	NLPH	9.39	3.48#								
	09/29/94	NLPH	9.83	3.04	<50	<0.5	<0.5	<0.5	<0.5	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#								
	02/06/95	NLPH	5.71	7.16	<50	0.52	<0.5	<0.5	<0.5	100	NA	NA
	06/07/95	NLPH	7.62	5.25	<50	<0.5	<0.5	<0.5	<0.5	3.5	81	NA
MW2 (12.98)	01/20/94	NM [NR]	NM	--								
	02/02-03/94	NM [NR]	NM	--								
	03/10/94	[8 c.]	6.96	6.29#								
	04/22/94	[10 c.]	NM	--								
	05/10-11/94	[5 c.]	NM	--								
	06/27/94	Sheen	7.10	5.88#								
	08/31/94	Sheen	8.58	4.40#								
	09/29/94	Sheen	9.11	3.87#								
	10/25/94	Sheen	7.76	5.22#								
	11/30/94	NM	7.33	5.65#								

4

**TABLE 1**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 2 of 12)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < ..... >	TPHg < ..... >	B	T	E	X	MTBE	TEPHd	VOCs >
<hr/>												
MW2 cont.												
(12.98)	12/27/94	Sheen	6.77	6.21#								
	02/06/95	Sheen	5.00	7.98#								
	06/07/95	Sheen	7.14	5.84#								
MW3												
(12.92)	01/20/94	Sheen	8.24	4.70#								
	02/02-03/94	Sheen	7.68	5.26#								
	03/10/94	Sheen	7.24	5.68#								
	04/22/94	Sheen	6.79	6.13#								
	05/10-11/94	Sheen	6.43	6.49#								
	06/27/94	0.01 [NR]	6.97	5.95#								
	08/31/94	Sheen	8.41	4.51#								
	09/29/94	Sheen	8.97	3.95#								
	10/25/94	Sheen	9.43	3.49#								
	11/28/94	NM	7.19	5.73#								
	12/27/94	Sheen	6.64	6.28#								
	02/06/95	Sheen	4.87	8.05#								
	06/07/95	Sheen	7.05	5.87#								
MW4												
(12.77)	01/20/94	NM [NR]	NM	---								
	02/02-03/94	NM [1 c.]	NM	---								
	03/10/94	[8 c.]	7.12	5.65#								
	04/22/94	[10 c.]	NM	---								
	05/10-11/94	[5 c.]	NM	---								
	06/27/94	0.01 [NR]	6.50	6.27#								
	08/31/94	0.02 [NR]	7.84	4.93#								

---

See Notes on page 12 of 12

---

**TABLE 1**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California  
 (Page 3 of 12)

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

MW4 cont.

(12.77)	09/29/94	0.03 [NR]	8.43	4.37#
	10/25/94	Sheen	9.24	3.53#
	11/30/94	NM	6.77	6.00#
	12/27/94	Sheen	6.14	6.63#
	02/06/95	Sheen	4.87	7.90#
	06/07/95	Sheen	6.91	5.86#

MWS

(8.38)	07/18/89	Well Destroyed
--------	----------	----------------

MW6

(14.27)	01/20/94	NM [NR]	NM	---
	02/02-03/94	NM [NR]	NM	---
	03/10/94	[¼ c.]	7.82	6.45#
	04/22/94	[10 c.]	NM	---
	05/10-11/94	[3 c.]	NM	---
	06/27/94	Sheen	7.77	6.50#
	08/31/94	Sheen	9.02	5.25#
	09/29/94	Sheen	9.51	4.76#
	10/25/94	Sheen	9.93	4.34#
	11/30/94	NM	8.05	6.22#
	12/27/94	NM	7.54	6.73#
	02/06/95	Sheen	5.86	8.41#
	06/07/95	Sheen	8.07	6.20#

**TABLE 1**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 4 of 12)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev. < ..... >	TPHg < .....	B	T	E parts per billion	X	MTBE	TEPHd	VOCs >
MW7 (14.84)	01/20/94	NLPH	8.67	6.17#								
	02/02-03/94	NLPH	8.47	6.37	2,900	79	5.0	8.2	21	NA	1,300	NA
				Additional Analysis TOG:		470 <sup>1</sup>						
	03/10/94	NLPH	8.24	6.60#								
	04/22/94	NLPH	7.95	6.89#								
	05/10-11/94	NLPH	7.53	7.31#	2,400	88	5.6	5.2	15	NA	1,300	NA
				Additional Analysis TOG:		1,400						
	06/27/94	NLPH	8.01	6.83#								
	08/31/94	NLPH	9.19	5.65#								
	09/29/94	NLPH	9.65	5.19	1,900	71	3.1	3.5	7.8	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#								
	02/06/95	NLPH	5.79	9.05	2,500	130	<10	<10	<10	NA	1,300	ND
	06/07/95	NLPH	7.73	7.11	2,400	91	5.0	7.6	14	39	1,200	NA
				Additional Analysis Stoddard Solvent:		1,100						
						1,000						
				Additional Analysis Stoddard Solvent:								

See Notes on page 12 of 12

**TABLE 1**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 5 of 12)

Well ID # (TOC)	Sampling Date	SUBJ < ..... >	DTW feet .....	Elev. < ..... >	TPHg < ..... >	B	T	E parts per billion	X	MTBE	TEPHd	VOCs >
MW8 (13.45)	01/20/94	Sheen	8.90	4.55#								
	02/02-03/94	Sheen	8.58	4.87#								
	03/10/94	NLPH	7.16	6.29#								
	04/22/94	Sheen	7.34	6.11#								
	05/10-11/94	Sheen	7.04	6.41#								
	06/27/94	Sheen	6.01	7.44#								
	08/31/94	Sheen	9.26	4.19#								
	09/29/94	Sheen	9.76	3.72#								
	10/25/94	Sheen	10.05	3.40#								
	11/30/94	NM	7.68	5.77#								
	12/27/94	Sheen	7.11	6.34#								
	02/06/95	Sheen	5.39	8.06#								
	06/07/95	Sheen	7.53	5.92#								
MW9 (14.64)	01/20/94	NM	NM	---								
	02/02-03/94	NM	NM	---								
	03/10/94	NLPH	6.90	7.74#								
	04/22/94	NLPH	7.38	7.26#								
	05/10-11/94	NLPH	6.96	7.68#								
	06/27/94	NLPH	7.65	6.99#								
	08/31/94	NLPH	8.87	5.77#								
	09/29/94	NLPH	9.19	5.45	< 50	< 0.5	< 0.5	< 0.5	< 0.5	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#								

See Notes on page 12 of 12

**TABLE 1**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 6 of 12)

Well ID # (TOC)	Sampling Date	SUBJ <.....>	DTW feet	Elev. .....>	TPHg <.....>	B	T	E parts per billion	X	MTBE	TEPHd	VOCs >
MW9 cont. (14.64)	02/06/95	NLPH	5.74	8.90	<50	<0.5	<0.5	<0.5	<0.5	NA	56	NA
	06/07/95	NLPH	8.33	6.31	<50	<0.5	<0.5	<0.5	<0.5	<2.5	72	NA
MW10 (14.05)	01/20/94	NLPH	8.40	5.65#								
	02/02-03/94	NLPH	8.00	6.05	<50	<0.5	1.0	<0.5	1.8	NA	<50	NA
	03/10/94	NLPH	7.56	6.49#								
	04/22/94	NLPH	7.35	6.70#								
	05/10-11/94	NLPH	7.06	6.99	<50	<0.5	<0.5	<0.5	<0.5	NA	<50	NA
	06/27/94	NLPH	7.59	6.46#								
	08/31/94	NLPH	8.73	5.32#								
	09/29/94	NLPH	9.07	4.98	<50	<0.5	<0.5	<0.5	<0.5	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#								
	02/06/95	NLPH	5.60	8.45	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NA
	06/07/95	NLPH	7.12	6.93	<50	<0.5	<0.5	<0.5	<0.5	<2.5	<50	NA
MW11 (13.55)	01/20/94	NLPH	9.61	3.94#								
	02/02-03/94	NLPH	9.56	3.99	<50	<0.5	1.0	<0.5	0.9	NA	160	NA
	03/10/94	NLPH	8.59	4.96#								
	04/22/94	NLPH	8.47	5.08#								
	05/10-11/94	NLPH	8.12	5.43	<50	<0.5 <sup>3</sup>	<0.5	<0.5	3.2	NA	100 <sup>2</sup>	NA
	06/27/94	NLPH	8.65	4.90#								
	08/31/94	NLPH	9.80	3.75#								
	09/29/94	NLPH	10.16	3.39	<50	<0.5	<0.5	<0.5	<0.5	NA	<50	NA

See Notes on page 12 of 12

**TABLE 1**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 7 of 12)

Well ID # (TOC)	Sampling Date	SUBJ <.....>	DTW feet	Elev. <.....>	TPHg <.....>	B	T	E parts per billion	X	MTBE	TEPHd	VOCs <.....>
<hr/>												
MW11 cont. (13.55)	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#								
	02/06/95	NLPH	6.49	7.06	<50	<0.5	<0.5	<0.5	<0.5	NA	160	NA
	06/07/95	NLPH	7.98	5.57	<50	<0.5	<0.5	<0.5	<0.5	42	50	NA
MW12 (12.61)	01/20/94	NLPH	7.81	4.80#								
	02/02-03/94	NLPH	7.22	5.39	48,000	4,000	2,700	2,900	9,900	NA	18,000	NA
	03/10/94	NLPH	6.16	6.45#								
	04/22/94	NLPH	6.31	6.30#								
	05/10-11/94	NLPH	6.16	6.45	46,000	3,000 <sup>a</sup>	1,600	2,900	9,100	NA	8,200	NA
	06/27/94	NLPH	6.55	6.06#								
	08/31/94	NLPH	7.97	4.64#								
	09/29/94	Sheen	8.52	4.09#								
	10/25/94	Sheen	8.74	3.87#								
	11/30/94	NM	8.73	3.88#								
	12/30/94	NLPH	6.17	6.44#								
	02/06/95	Sheen	4.44	8.17#								
	06/07/95	Sheen	6.59	6.02#								
MW13 (14.20)	01/20/94	NLPH	9.08	5.12#								
	02/02-03/94	NLPH	8.75	5.45	41,000	3,800	1,500	2,700	9,500	NA	8,100	NA
	03/10/94	Sheen	7.46	6.74#								
	04/22/94	Sheen	7.78	6.42#								

See Notes on page 12 of 12

**TABLE 1**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 8 of 12)

Well ID # (TOC)	Sampling Date	SUBJ < . . . . .	DTW feet	Elev. >	TPHg < . . . . .	B	T	E parts per billion	X	MTBE	TEPHd	VOCs >
MW13 cont. (14.20)	05/10-11/94	NLPH	7.61	6.59	39,000	3,400	930	2,400	8,900	NA	15,000	NA
	06/27/94	NLPH	7.97	6.23								
	08/31/94	NLPH	9.21	4.99								
	09/29/94	NLPH	9.61	4.59	57,000	2,100	470	2,600	8,100	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#								
	02/06/95	Sheen	8.05	6.15#								
MW14 (15.18)	01/20/94	NM	NM	---								
	02/02-03/94				Not Accessible							
	03/10/94	NLPH	7.84	7.34#								
	04/22/94	NLPH	8.00	7.18#								
	05/10-11/94	NLPH	7.93	7.25	300	2.7	7.9	2.0	27	NA	1,100 <sup>2</sup>	NA
		Additional Analysis:				210						
	06/27/94	NLPH	8.19	6.99#								
	08/31/94	NLPH	9.44	5.74#								
	09/29/94	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	6.61#								
	12/27/94	Sheen	8.15	7.03#								
	02/06/95	NLPH	7.18	8.00	360	<1.0	<1.0	<1.0	<1.0	NA	1,200	NA
		Additional Analysis TOG: 400										
	06/07/95	NLPH	7.70	7.48	670	<0.5	<0.5	3.6	<0.5	<2.5	1,100	NA
		Additional Analysis Stoddard Solvent: 450										

See Notes on page 12 of 12

**TABLE 1**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 9 of 12)

Well ID # (TOC)	Sampling Date	SUBJ < . . . . .	DTW feet . . . . .	Elev. >	TPHg < . . . . .	B . . . . .	T . . . . .	E parts per billion . . . . .	X . . . . .	MTBE . . . . .	TEPHd . . . . .	VOCs >
<hr/>												
MW15 (13.73)	01/20/94	NLPH	7.48	6.25#								
	02/02-03/94	NLPH	7.30	6.43	4,300	24	6.7	170	26	NA	1,200	NA
	03/10/94	NLPH	7.32	6.41#								
	04/22/94	NLPH	6.67	7.06#								
	05/10-11/94	NLPH	5.81	7.92	3,900	16	<0.5	150	13	NA	1,400	NA
	06/27/94	NLPH	6.14	7.59#								
	08/31/94	NLPH	7.20	6.53#								
	09/29/94	NLPH	7.76	5.97	2,500	51	15	48	3.6	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#								
	02/06/95	Sheen	4.97	8.76#								
	06/07/95	Sheen	7.14	6.59#								
VW1 (14.01)	01/20/94	Dry										
	02/02-03/94	NLPH	5.58	8.43#								
	03/10/94	NLPH	6.19	7.82#								
	04/22/94	NLPH	5.96	8.05#								
	05/10-11/94	NLPH	5.66	8.35#								
	06/27/94	NLPH	5.99	8.02#								
	08/31/94	NLPH	3.92	10.09#								
	09/29/94	NM	NM	---								
	10/25/94	Sheen	5.80	8.21#								
	11/30/94	NM	6.21	7.80#								
	12/27/94	NM	NM	---								

See Notes on page 12 of 12

**TABLE 1**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-3006  
720 High Street, Oakland, California  
(Page 10 of 12)

Well ID # (TOC)	Sampling Date	SUBJ <.....>	DTW feet	Elev. <.....>	TPHg <.....>	B	T	E parts per billion	X	MTBE	TEPHd	VOCs >
<hr/>												
VW1 cont.												
(14.01)	02/06/95	NM	NM	---								
	06/07/95	NM	NM	---								
VW2												
(14.09)	01/20/94	NLPH	7.75	6.34#								
	02/02-03/94	Dry										
	03/10/94	NLPH	6.85	7.24#								
	04/22/94	NLPH	7.30	6.79#								
	05/10-11/94	NLPH	7.20	6.89#								
	06/27/94	NLPH	7.29	6.80#								
	08/31/94	NLPH	7.75	6.34#								
	09/29/94	NM	NM	---								
	10/25/94	NLPH	7.76	6.33#								
	11/30/94	NM	7.77	6.32#								
	12/27/94	NM	NM	---								
	02/06/95	NM	NM	---								
	06/07/95	NM	NM	---								
VW3												
(13.37)	01/20/94	NLPH	7.49	5.88#								
	02/02-03/94	NLPH	7.15	6.22#								
	03/10/94	NLPH	6.21	7.16#								
	04/22/94	NLPH	6.34	7.03#								
	05/10-11/94	NLPH	5.92	7.45#								
	06/27/94	NLPH	6.66	6.71#								
	08/31/94	NLPH	7.55	5.82#								
	09/29/94	NM	NM	---								

---

See Notes on page 12 of 12

---

**TABLE 1**  
**GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California  
 (Page 11 of 12)

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

VW3 cont.

(13.37)	10/25/94	NLPH	7.57	5.80#
	11/30/94	NM	6.97	6.40#
	12/27/94	NM	NM	---
	02/06/95	NM	NM	---
	06/07/95	NM	NM	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-3006  
 720 High Street, Oakland, California  
 (Page 12 of 12)

---

Notes:

SUBJ	= Results of subjective evaluation, liquid-phase hydrocarbon thickness (HT) in feet
LPH	= Liquid-phase hydrocarbons present, thickness not measured
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 modified 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 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 Detectable
NA	= Not Analyzed
--	= Not Applicable
<	= Less than the indicated detection limit shown by the laboratory
#	= Well monitored but not sampled
†	= A peak eluting earlier than benzene and suspected to be methyl tert-butyl ether was present

---

**TABLE 2**  
**OPERATIONAL AND PERFORMANCE DATA FOR**  
**SOIL VAPOR EXTRACTION SYSTEM**  
**Former Exxon Service Station 7-3006**  
**720 High Street**  
**Oakland, California**  
**Page 1 of 2**

Date	Flowrate	Sample ID	HC Conc [ug/l] or [mg/cuM]	Benzene Conc [ug/l] or [mg/cuM]	HC Extracted per period *[lb]	HC Extracted Cumulative *[lb]	Benzene Extracted per period *[lb]	Benzene Extracted Cumulative *[lb]	Benzene Emitted per day *[lb]
			[acf m]						
1/9/95	158	A-INF	210	39	--	--	--	--	--
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					
1/10/95	158	A-INF	110	22	2.27	2.27	0.433	0.433	
		A-INT	<10	<0.1					< 0.001
		A-EFF	<10	<0.1					< 0.001
1/11/95	158	A-INF	70	12	1.28	3.55	0.241	0.674	
		A-INT	<10	<0.1					< 0.001
		A-EFF	<10	<0.1					< 0.001
1/12/95	158	A-INF	<10	<0.1	0.57	4.11	0.086	0.759	
		A-INT	<10	<0.1					< 0.001
		A-EFF	<10	<0.1					< 0.001
1/13/95	160	A-INF	<10	<0.1	0.14	4.26	0.001	0.761	
		A-INT	<10	<0.1					< 0.001
		A-EFF	<10	<0.1					< 0.001
1/14/95	160	A-INF	<10	<0.1	0.14	4.40	0.001	0.762	
		A-INT	<10	<0.1					< 0.001
		A-EFF	<10	<0.1					< 0.001
1/15/95	158	A-INF	<10	<0.1	0.14	4.54	0.001	0.764	
		A-INT	<10	<0.1					< 0.001
		A-EFF	<10	<0.1					< 0.001
1/16/95	158	A-INF	<10	<0.1	0.14	4.68	0.001	0.765	
		A-INT	<10	<0.1					< 0.001
		A-EFF	<10	<0.1					< 0.001
1/17/95	155	A-INF	<10	0.13	0.14	4.82	0.002	0.767	
		A-INT	<10	<0.1					< 0.001
		A-EFF	<10	<0.1					< 0.001
1/18/95	155	A-INF	100	12	0.77	5.59	0.084	0.851	
		A-INT	<10	<0.1					< 0.001
		A-EFF	<10	<0.1					< 0.001
1/20/95	155								
2/1/95	147	A-INF	39	3.5	13.19	18.78	1.471	2.322	
		A-INT	<10	<0.1					< 0.001
		A-EFF	<10	<0.1					< 0.001
2/13/95	147								

See notes page 2 of 2

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

Date	Flowrate	Sample ID	HC Conc [ug/l] or [mg/cuM]	Benzene Conc [ug/l] or [mg/cuM]	HC Extracted per period *[lb]	HC Extracted Cumulative *[lb]	Benzene Extracted per period *[lb]	Benzene Extracted Cumulative *[lb]	Benzene Emitted per day *[lb]
		[acfmin]							
2/27/95	151								
3/13/95	176	A-INF	<10	0.42	14.21	32.98	1.137	3.458	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					< 0.001
3/31/95	116								
4/4/95	84								
4/12/95	176	A-INF	95	6.4	24.88	57.87	1.616	5.074	
		A-INT	<10	0.38					
		A-EFF	<10	<0.1					< 0.002
4/19/95	109	A-INF	210	7.6	13.65	71.52	0.627	5.701	
		A-INT	47	12					
		A-EFF	<10	<0.1					< 0.001
4/20/95		Replaced 2 ea x 500 lb drums = 1000 lbs of Carbon							
4/26/95	84	A-INF	400	9.1	18.49	90.01	0.506	6.208	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					< 0.001
5/1/95		Installed third 500 lb drum in series							
5/1/95	168	A-INF	Insufficient sample for analyses						
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					< 0.001
5/15/95	84								
5/19/95	105	A-INF	140	3.5	52.68	142.69	1.229	7.437	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					< 0.001
6/6/95	178	A-INF	36	0.22	20.12	162.81	0.425	7.862	
		A-INT	<10	0.1					
		A-EFF	<10	<0.1					< 0.001
6/27/95	164	A-INF	440	4.9	76.72	239.53	0.825	8.687	
		A-INT	<10	<0.1					
		A-EFF	<10	<0.1					< 0.002

Notes:

A-INF = Air Influent

HC = Hydrocarbon

A-INT = Air Intermediate

ug/l = micrograms per liter

A-EFF = Air Effluent

mg/cuM = milligrams per cubic meter

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

lb = pounds

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

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

Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data							TPHg Removed Per Period [lb]	Cumulative TPHg Removed [lb]	Benzene Removed Per Period [lb]	Cumulative Benzene Removed [lb]
				TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]					
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	1080	1	W-INF	110	7.4	0.5	0.53	6	NA	0.0158	0.0158	0.0029	0.0029	
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA					
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	<0.005					
3/21/95	1166	11	W-INF	50	4.5	0.5	0.5	5.5	NA	0.0001	0.0159	0.0000	0.0029	
			W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA					
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	0.0059					
3/30/95	1176		Replaced one 55-gallon liquid phase adsorber (leak)											

See Notes page 3 of 3.

**TABLE 3**  
**OPERATIONAL AND PERFORMANCE DATA FOR**  
**GROUND WATER REMEDIATION SYSTEM**  
**Former Exxon Service Station, 7-3006**  
**720 High Street**  
**Oakland, California**  
**Page 2 of 3**

Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data						TPHg Removed Per Period [lb]	Benzene Removed Per Period [lb]	Benzene Removed Cumulative [lb]		
				TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]					
Replaced one 55-gallon liquid phase adsorber (leak)														
4/4/95	1176			W-INF	220	66	11	4.8	16	NA	0.0001	0.0160	0.0000	
4/4/95	1266	18		W-INT	<50	<0.5	<0.5	<0.5	<0.5	NA			0.0029	
				W-EFF	<50	<0.5	<0.5	<0.5	<0.5	0.0096				
4/12/95	5320	507	W-INF	770	110	19	<5.0	160	NA	0.0167	0.0327	0.0030	0.0059	
			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	7371	293	W-INF	400	47	5.4	<0.5	40	NA	0.0100	0.0427	0.0013	0.0072	
			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	8282	130	W-INF	1500	190	44	12	150	NA	0.0072	0.0500	0.0009	0.0081	
			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	8375	7	Replaced two 55-gallon liquid phase adsorbers (leaks)											
5/19/95	9780	141												
5/26/95	9784	1	W-INF	680	210	16	5.8	58	NA	0.0137	0.0636	0.0025	0.0106	
			W-INT	<50	0.94	<0.5	<0.5	<0.5	NA					
			W-EFF	<50	<0.5	<0.5	<0.5	<0.5	NA					

See Notes page 3 of 3.

**TABLE 3**  
**OPERATIONAL AND PERFORMANCE DATA FOR**  
**GROUND WATER REMEDIATION SYSTEM**

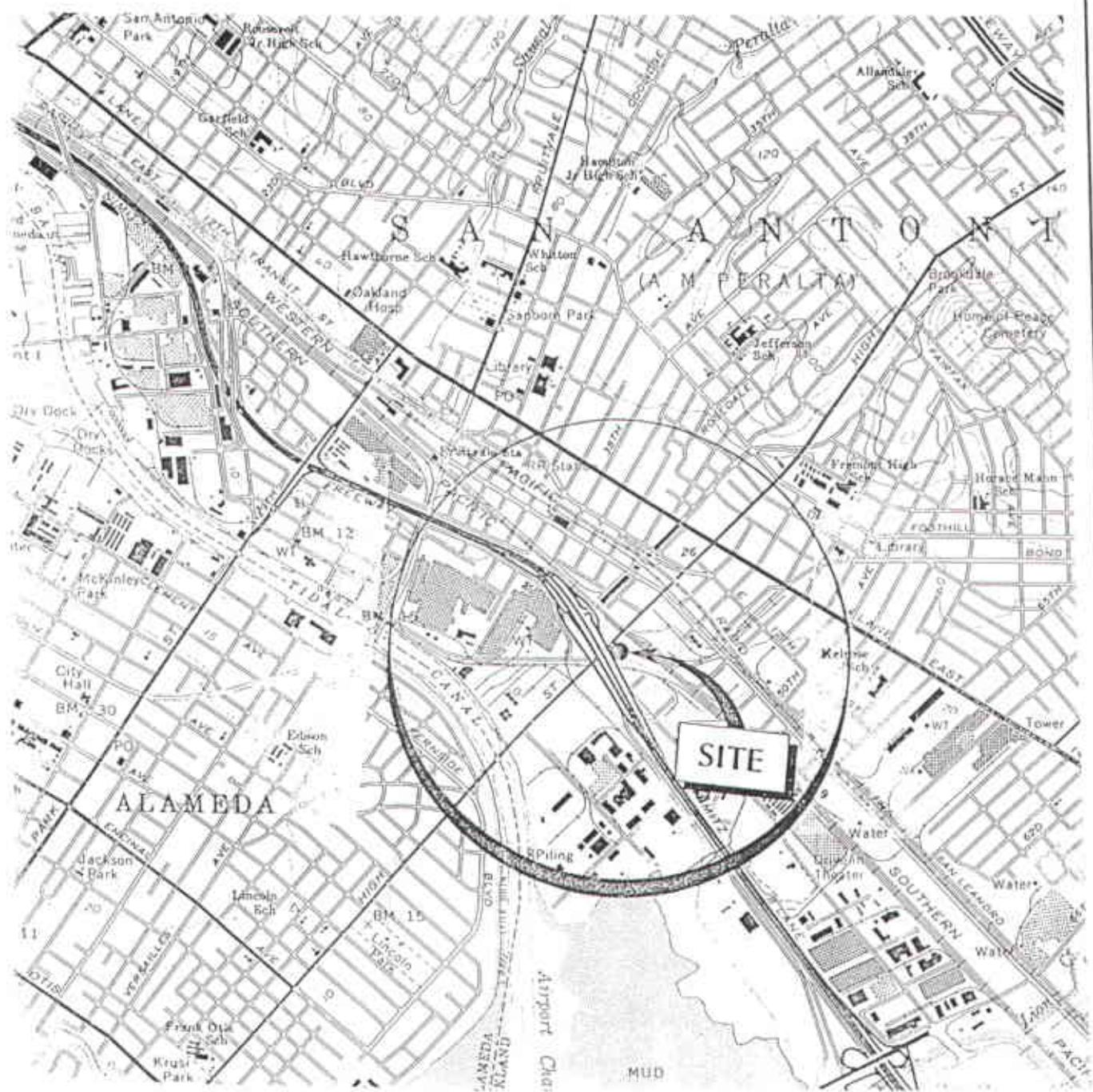
Former Exxon Service Station, 7-3006

720 High Street

Oakland, California

Page 3 of 3

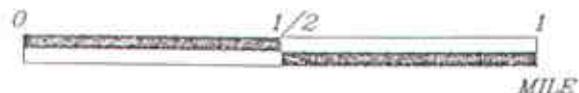
Date	Total Flow [gal]	Average Flowrate [gpd]	Sample ID	Analytical Data						TPHg Removed Per Period [lb]	Benzene Removed Per Period [lb]	Benzene Removed Cumulative [lb]	
				TPHg [ug/l]	B [ug/l]	T [ug/l]	E [ug/l]	X [ug/l]	Arsenic [mg/l]				
6/6/95				Added two 55-gallon liquid phase adsorbers in series									
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	12501	85	W-INF1	4500	1700	99	35	220	NA	0.0587	0.1223	0.0216	0.0323
			W-INF2	810	420	20	7.9	28	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-EFF1	<50	<0.5	<0.5	<0.5	<0.5	NA				
			W-EFF2	<50	<0.5	<0.5	<0.5	<0.5	NA				
<b>NOTES:</b>													
W-INF W-INF2 = water influent				B	= Benzene				NA	= Not applicable			
W-INT = water intermediate				T	= Toluene				NS	= Not sampled			
W-EFF -EFF W-EFF2 = water effluent				E	= Ethylbenzene				ND	= Not detected			
TPHg = Total petroleum hydrocarbons as gas				X	= Total Xylenes								



20100001



APPROXIMATE SCALE



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



PROJECT ERI 2010

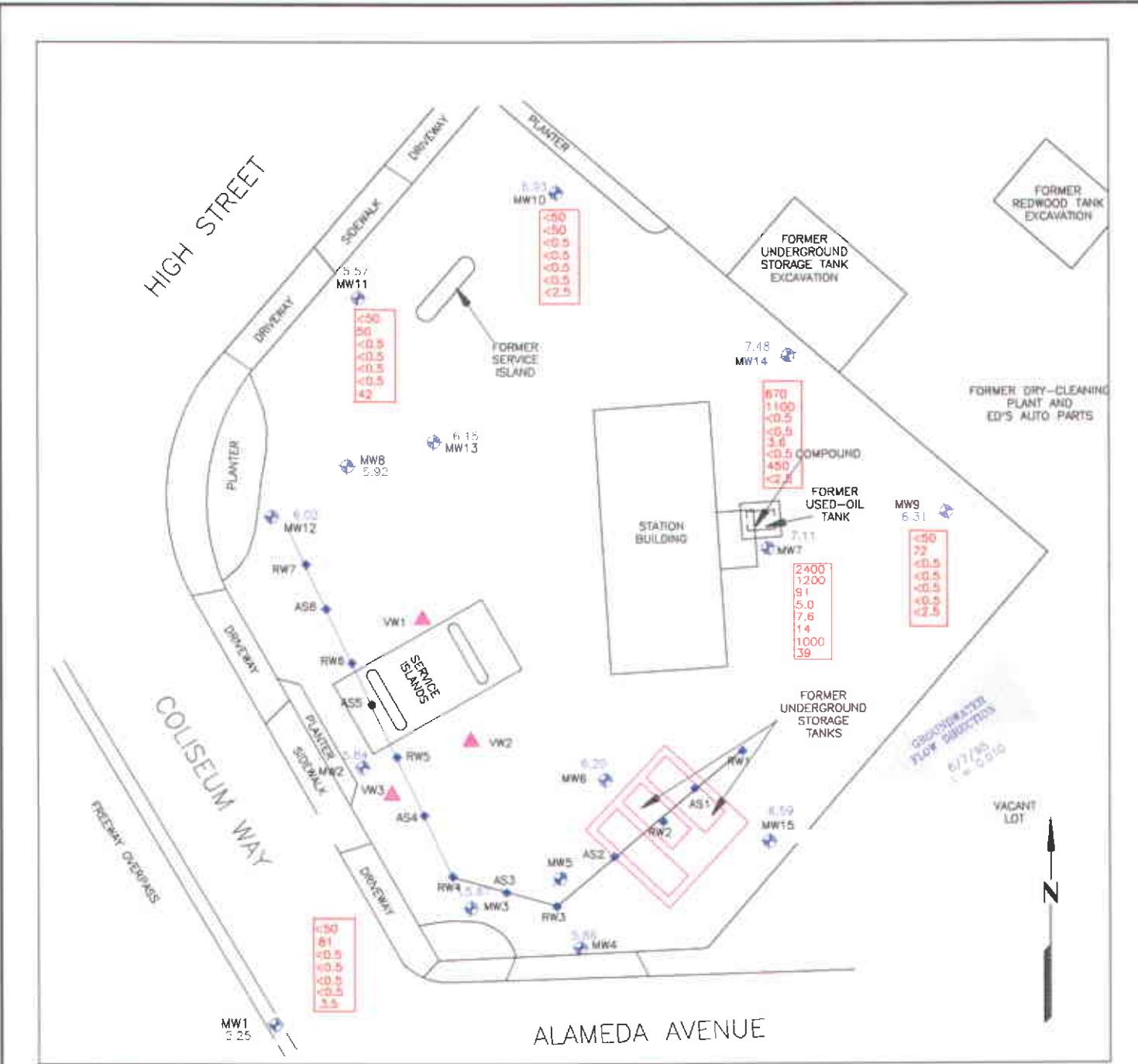
SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7-3006

720 High Street

Oakland, California

PLATE



FN 20100002

### EXPLANATION

- MW15 Monitoring well
- MW5 Monitoring well (destroyed)
- VW3 Vapor well
- RW7 Recovery Monitoring Well
- ASB Intercepter Trench
- AS8 Air Sparging/Vapor Extraction Well

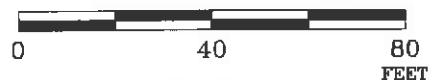
7.48 = Elevation of groundwater in feet above mean sea level, (6/7/95)

i = Interpreted magnitude of hydraulic gradient

Concentrations of Petroleum Hydrocarbons in groundwater in parts per billion ( $\mu\text{g/L}$ ), June 7, 1995

2400	Total Purgeable Petroleum Hydrocarbons = Gas
1200	Toluene Extractable Petroleum Hydrocarbons = Diesel
91	Benzene Concentration
5.0	Toluene Concentration
7.6	Ethylbenzene Concentration
14	Xylyne Concentration
1000	Styrene Solvent
39	Methyl Tert-Butyl Ether

### APPROXIMATE SCALE



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



### GENERALIZED SITE PLAN

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

PROJECT NO.  
2010

PLATE  
2

DATE 8/7/95

**ATTACHMENT A**

**GROUNDWATER SAMPLING PROTOCOL**

## GROUNDWATER SAMPLING PROTOCOL

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

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

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

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

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

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

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

**ATTACHMENT B**

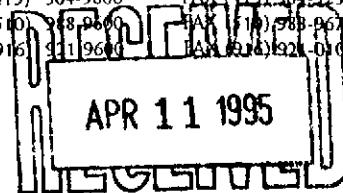
**LABORATORY ANALYSIS REPORTS  
AND CHAIN OF CUSTODY RECORDS**



Sequoia  
Analytical

680 Chesapeake Drive      Redwood City, CA 94063  
404 N. Wiget Lane      Walnut Creek, CA 94598  
819 Striker Avenue, Suite 8      Sacramento, CA 95834

(415) 364-9600      FAX (415) 364-9233  
(510) 368-9600      FAX (510) 593-9673  
(916) 311-9600      FAX (916) 921-0100



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

Client Proj. ID: 2010-11, Exxon 7-3006  
Lab Proj. ID: 9504177

Sampled: 04/04/95  
Received: 04/05/95  
Analyzed: see below

Attention: Marc Briggs

Reported: 04/06/95

### LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9504177-03				
Sample Desc : LIQUID,W-Eff				
Arsenic	mg/L	04/05/95	0.0050	0.0096

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-Inf  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504177-01

Sampled: 04/04/95  
Received: 04/05/95  
  
Analyzed: 04/06/95  
Reported: 04/06/95

QC Batch Number: GC040595BTEX03A  
Instrument ID: GCHP03

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	220
Benzene	0.50	66
Toluene	0.50	11
Ethyl Benzene	0.50	4.8
Xylenes (Total)	0.50	16
Chromatogram Pattern:		Gas
Surrogates		Control Limits %
Trifluorotoluene		70 130
		% Recovery
		96

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Marc Briggs

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-Int  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504177-02

Sampled: 04/04/95  
Received: 04/05/95  
Analyzed: 04/06/95  
Reported: 04/06/95

QC Batch Number: GC040595BTEX21A  
Instrument ID: GCHP21

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

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70                  130	99

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-Eff  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504177-03

Sampled: 04/04/95  
Received: 04/05/95  
Analyzed: 04/06/95  
Reported: 04/06/95

QC Batch Number: GC040595BTEX21A  
Instrument ID: GCHP21

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

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	91

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

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

Work Order #: 9504177 -03

Reported: Apr 7, 1995

## QUALITY CONTROL DATA REPORT

Analyte: Arsenic

QC Batch#: ME0404957000M1A  
Analy. Method: EPA 206.2  
Prep. Method: EPA 3020

Analyst: W. Thant  
MS/MSD #: 9503L6901  
Sample Conc.: N.D.  
Prepared Date: N/A  
Analyzed Date: 4/5/95  
Instrument I.D.#: MTJA3  
Conc. Spiked: 0.050 mg/L

Result: 0.055  
MS % Recovery: 110

Dup. Result: 0.052  
MSD % Recov.: 104

RPD: 5.6  
RPD Limit: 0-30

LCS #: BLKCCV040595

Prepared Date: N/A  
Analyzed Date: 4/5/95  
Instrument I.D.#: MTJA3  
Conc. Spiked: 0.050 mg/L

LCS Result: 0.045  
LCS % Recov.: 90

MS/MSD  
LCS  
Control Limits 75-125

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

Please Note:

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



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

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

Work Order #: 9504177-01

Reported: Apr 7, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC040595BTEX03A	GC040595BTEX03A	GC040595BTEX03A	GC040595BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	9503M3208	9503M3208	9503M3208	9503M3208
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/5/95	4/5/95	4/5/95	4/5/95
Analyzed Date:	4/5/95	4/5/95	4/5/95	4/5/95
Instrument I.D. #:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.7	8.8	8.5	26
MS % Recovery:	87	88	85	87
Dup. Result:	9.1	9.5	9.1	27
MSD % Recov.:	91	95	91	90
RPD:	4.5	7.7	6.8	3.8
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Client Project ID: 2010-11, Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9504177-02, 3

Reported: Apr 7, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC040595BTEX21A	GC040595BTEX21A	GC040595BTEX21A	GC040595BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	9503M3208	9503M3208	9503M3208	9503M3208
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/5/95	4/5/95	4/5/95	4/5/95
Analyzed Date:	4/5/95	4/5/95	4/5/95	4/5/95
Instrument I.D. #:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	11	11	31
MS % Recovery:	100	110	110	103
Dup. Result:	9.4	9.6	9.7	29
MSD % Recov.:	94	96	97	97
RPD:	6.2	14	13	6.7
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

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

Please Note:

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

SEQUOIA ANALYTICAL

  
Vickie Tague Clark  
Project Manager


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

# EXXON COMPANY, U.S.A.

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

## CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: <u>ENVIRONMENTAL RESOLUTIONS</u>			
Address: <u>359 BAY MARIN KAYS, SUITE 107, REDWOOD CITY</u>		Site Location: <u>720 HIGH ST OAKLAND</u>	
Project #: <u>2010-11</u>		Consultant Project #: <u></u>	
Project Contact: <u>Marc Bangs</u>		Phone #: <u>415 382 9105</u>	
EXXON Contact: <u>MARIA GREENBLER</u>		Phone #: <u>510 246-8763</u>	
Sampled by (print): <u>PETER PETRO</u>		Sampler's Signature: <u>Peter Petro</u>	
Shipment Method:		Air Bill #: <u>9504177</u>	

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

### ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/8015/8020	TPH/Diesel S.M. 5520 EPA 8015	TPH S.M. 5520	Metals Arsenic	Temperature: _____	Inbound Seal: Yes No	Outbound Seal: Yes No
W-INF	4/4	14:40	WATER	H2O ICP	3	-01	X						
W-INT	/	14:2	/	/	3	-02	X						
W-EFF	/	:44	/	PP	3	-03	X			X ←	Arsenic		
W-EFF	PP	146	PP	H2O <sub>2</sub>	1								

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<u>Peter Petro</u> <u>Dayne Bell</u>	4/5/95	1:55	<u>Dayne Bell</u>	4/5/95	1:55	
	4/5/95	4:20	<u>John R. ...</u>	4/5/95	1631	

Pink - Client

Yellow - Sequoia

White - Sequoia



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 561-9600  
(510) 993-5600  
(916) 921-9600  
AC 100-304-333  
FAX (415) 561-9678  
FAX (916) 921-0700  
FAX (916) 921-0700

APR 21 1995

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

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: A-INF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9504801-01

Sampled: 04/12/95  
Received: 04/13/95  
Analyzed: 04/14/95  
Reported: 04/17/95

Attention: Steve Wiegel  
QC Batch Number: GC041495BTEX02A  
Instrument ID: GCHP02

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	95
Benzene	25	.....
Toluene	0.25	6.4
Ethyl Benzene	0.25	1.3
Xylenes (Total)	0.25	1.0
Chromatogram Pattern:	0.25	4.9
Unidentified HC	.....	Gas < C8
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 130

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: A-INT  
Matrix: AIR

Sampled: 04/12/95  
Received: 04/13/95

Attention: Steve Wiegel

Analysis Method: 8015Mod/8020  
Lab Number: 9504801-02

Analyzed: 04/14/95  
Reported: 04/17/95

QC Batch Number: GC041495BTEX17A  
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

0.38

Toluene

0.10

N.D.

Ethyl Benzene

0.10

N.D.

Xylenes (Total)

0.10

N.D.

Chromatogram Pattern:

0.10

N.D.

#### Surrogates

Trifluorotoluene

Control Limits %

70

130

% Recovery

97

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager





Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: A-EFF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9504801-03

Sampled: 04/12/95  
Received: 04/13/95  
Analyzed: 04/14/95  
Reported: 04/17/95

Attention: Steve Wiegel  
QC Batch Number: GC041495BTEX03A  
Instrument ID: GCHP03

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

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	107

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager





**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Keith Romstad

Client Project ID: 2010-11, Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9504801 -01

Reported: Apr 18, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC041495BTEX02A	GC041495BTEX02A	GC041495BTEX02A	GC041495BTEX02A
Anal. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950433108	950433108	950433108	950433108
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/14/95	4/14/95	4/14/95	4/14/95
Analyzed Date:	4/14/95	4/14/95	4/14/95	4/14/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	9.4	9.6	28
MS % Recovery:	94	94	96	93
Dup. Result:	8.8	8.8	9.1	26
MSD % Recov.:	88	88	91	87
RPD:	6.6	6.6	5.3	7.4
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:  
LCS % Recov.:

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

Please Note:

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

**SEQUOIA ANALYTICAL**

*Vickie Taque Clark*  
Vickie Taque Clark



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Keith Romstad

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

Work Order #: 9504801-02

Reported: Apr 18, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC041495BTEX17A	GC041495BTEX17A	GC041495BTEX17A	GC041495BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950431108	950431108	950431108	950431108
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/14/95	4/14/95	4/14/95	4/14/95
Analyzed Date:	4/14/95	4/14/95	4/14/95	4/14/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	12	12	12	34
MS % Recovery:	120	120	120	113
Dup. Result:	12	12	12	34
MSD % Recov.:	120	120	120	113
RPD:	0.0	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:

Analyzed Date:

Instrument I.D. #:

Conc. Spiked:

LCS Result:

LCS % Recov.:

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

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

9504801.EEE <2>

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager





**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Attention: Keith Romstad

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

Work Order #: 9504801-03

Reported: Apr 18, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC041495BTEX03A	GC041495BTEX03A	GC041495BTEX03A	GC041495BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950431109	950431109	950431109	950431109
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/14/95	4/14/95	4/14/95	4/14/95
Analyzed Date:	4/14/95	4/14/95	4/14/95	4/14/95
Instrument I.D. #:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.3	9.4	9.4	28
MS % Recovery:	93	94	94	93
Dup. Result:	9.2	9.4	9.4	28
MSD % Recov.:	92	94	94	93
RPD:	1.1	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

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

MS/MSD	71-133	72-128	72-130	71-120
--------	--------	--------	--------	--------

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

9504801.EEE <3>



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 77002-7420

## CHAIN OF CUSTODY

Page 1 of 10

Consultant's Name:	ENVIRONMENTAL RESOURCES INC.		
Address:	359 BELL MARIN KYS BLD, SUITE 20, MARINA DEL REY, CA 90292		
Project #:	7-3006 20/0-11	Consultant Project #:	
Project Contact:	Steve Wiesel	Phone #:	415 382 9105
EXXON Contact:	MARLA GLENSLER	Phone #:	510 246 8768
Sampled by (print):	PETER PETERS	Sampler's Signature:	<i>Peter Peters</i>
Shipment Method:	Air Bill #:		

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

### ANALYSIS REQUIRED

9504807

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TPH S.M. 5520	metals arsenic	Temperature:
✓ W-EFF	4/1/95	12:00	Watery	ice HCl	1					X	
✓ W-EFF		12:02		ice HCl	3					X	
✓ W-INT		12:05			3					X	
✓ W-INF	/18	12:07	pp	pp	3					X	
A-INF	4/12/	12:22	Air	None	2	01 A,B				X	
A-INT		12:24			2	02 A,B				X	
A-EFF	/18	12:26	pp	pp	2	03 A,B				X	

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<i>W. Peters</i>	4/13/95	15:00	<i>J. O'Brien</i>	4/13	3:00	
	4/13	4:25				



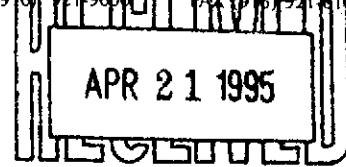
Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 221-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 221-8100



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

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

Sampled: 04/12/95

Lab Proj. ID: 9504854

Received: 04/13/95

Analyzed: see below

Attention: Steve Wiegel

Reported: 04/17/95

### LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9504854-01				
Sample Desc : LIQUID,W-EFF				
Arsenic	mg/L	04/14/95	0.0050	N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Steve Wiegel

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-EFF  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504854-01

Sampled: 04/12/95  
Received: 04/13/95  
Analyzed: 04/15/95  
Reported: 04/17/95

QC Batch Number: GC041595BTEX17B  
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	112

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Attention: Steve Wiegel

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-INT  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504854-02

Sampled: 04/12/95  
Received: 04/13/95  
Analyzed: 04/15/95  
Reported: 04/17/95

QC Batch Number: GC041595BTEX17B  
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

Trifluorotoluene

Control Limits %  
70                  130

% Recovery  
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

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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Steve Wiegel

Client Proj. ID: 2010-11, Exxon 7-3006  
Sample Descript: W-INF  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504854-03

Sampled: 04/12/95  
Received: 04/13/95  
Analyzed: 04/15/95  
Reported: 04/17/95

QC Batch Number: GC041595BTEX17A  
Instrument ID: GFHP17

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	770
Benzene	5.0	110
Toluene	5.0	19
Ethyl Benzene	5.0	N.D.
Xylenes (Total)	5.0	160
Chromatogram Pattern:		Gas
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 101

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

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

Work Order #: 9504854 -01

Reported: Apr 18, 1995

## QUALITY CONTROL DATA REPORT

**Analyte:** Arsenic

**QC Batch#:** ME0414957000MDA  
**Analy. Method:** EPA 206.2  
**Prep. Method:** EPA 3020

**Analyst:** L. Zhu  
**MS/MSD #:** 950475002  
**Sample Conc.:** N.D.  
**Prepared Date:** 4/14/95  
**Analyzed Date:** 4/14/95  
**Instrument I.D. #:** MTJA3  
**Conc. Spiked:** 0.050 mg/L

**Result:** 0.034  
**MS % Recovery:** 36

**Dup. Result:** 0.037  
**MSD % Recov.:** 74

**RPD:** 8.5  
**RPD Limit:** 0-30

**LCS #:** BLK041495

**Prepared Date:** 4/14/95  
**Analyzed Date:** 4/14/95  
**Instrument I.D. #:** MTJA3  
**Conc. Spiked:** 0.050 mg/L

**LCS Result:** 0.051  
**LCS % Recov.:** 102

<b>MS/MSD</b>	
<b>LCS</b>	75-125
<b>Control Limits</b>	

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

Please Note:

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



**Sequoia  
Analytical**

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  
 359 Bel Marin Keys, Suite 20  
 Novato, CA 94949  
 Attention: Steve Wiegel

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

Work Order #: 9504854-01, 2

Reported: Apr 18, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC041595BTEX17B	GC041595BTEX17B	GC041595BTEX17B	GC041595BTEX17B
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950431113	950431113	950431113	950431113
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/15/95	4/15/95	4/15/95	4/15/95
Analyzed Date:	4/15/95	4/15/95	4/15/95	4/15/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	12	11	11	33
MS % Recovery:	120	110	110	110
Dup. Result:	10	10	10	31
MSD % Recov.:	100	100	100	103
RPD:	18	9.5	9.5	6.3
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

*Vickie Tague Clark*

Vickie Tague Clark  
 Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

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

Work Order #: 9504854-03

Reported: Apr 18, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC041595BTEX17A	GC041595BTEX17A	GC041595BTEX17A	GC041595BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950431108	950431108	950431108	950431108
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/15/95	4/15/95	4/15/95	4/15/95
Analyzed Date:	4/15/95	4/15/95	4/15/95	4/15/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	10	10	31
MS % Recovery:	110	100	100	103
Dup. Result:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	9.5	0.0	0.0	3.3
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:  
LCS % Recov.:

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

Please Note:

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

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager



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

EXXON COMPANY, U.S.A.  
P.O. Box 2180, Houston, TX 77002-7426  
CHAIN OF CUSTODY

9504854

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

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC

Address: 359 BEL MARIN KEYS BLVD, SUITE 20, REDWOOD CITY

Project #: 7306-2010-11

Consultant Project #:

Project Contact: Steve Wiesel

Phone #: 415 382 9105

EXXON Contact: MARLA GLENNISTER

Phone #: 510 246 8768

Sampled by (print): PETER PESTO

Sampler's Signature:

Shipment Method:

Air Bill #: 108 CLK

Site Location: 720 HIGH ST

Consultant Work Release #: 9432503

Laboratory Work Release #:

EXXON RAS #: 7-3006

OAKLAND

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

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	metals arsenic	Temperature: _____
W-EFF	4/12	12:00	Watery	ice	1	1 A-D				X	
W-EFF		12:02		ice HCL	3	↓				X	
W-INT		12:05			3	2 A-C				X	
W-INF	/pp	12:07	pp	pp	3	3 ↓				X	
A-INF	4/12	12:22	Air	none	2					X	
A-INT		12:24			2					X	
A-EFF	/pp	12:26	pp	pp	2					X	

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<i>Peter Pesto</i>	4/13/95	15:00	<i>J.D. LL</i>	4/13	3:00	
	4/13	4:25	<i>J.B. Baia</i>	4/13/95	16:24	

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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
  
Attention: Steve Wiegel

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: A-INF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9504C84-01

Sampled: 04/19/95  
Received: 04/20/95  
  
Analyzed: 04/21/95  
Reported: 04/21/95

QC Batch Number: GC042195BTEX02A  
Instrument ID: GCHP02

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

Analyte	Detection Limit ug/L	Sample Results ug/L	
TPPH as Gas	.....	10	210
Benzene	.....	0.10	7.6
Toluene	.....	0.10	4.0
Ethyl Benzene	.....	0.10	1.5
Xylenes (Total)	.....	0.10	8.4
Chromatogram Pattern: Gas & Unidentified HC	.....	.....	< C8
Surrogates		Control Limits %	% Recovery
Trifluorotoluene	70	130	227 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Steve Wiegel

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: A-INT  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9504C84-02

Sampled: 04/19/95  
Received: 04/20/95  
Analyzed: 04/21/95  
Reported: 04/21/95

QC Batch Number: GC042195BTEX20A  
Instrument ID: GCHP20

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	47
Benzene	0.10	12
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	N.D.
Chromatogram Pattern:		
Unidentified HC	.....	< C8
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 130

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Steve Wiegel

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: A-EFF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9504C84-03

Sampled: 04/19/95  
Received: 04/20/95  
Analyzed: 04/21/95  
Reported: 04/21/95

QC Batch Number: GC042195BTEX02A  
Instrument ID: GCHP02

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

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	104

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager

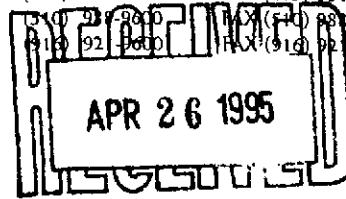


Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600 FAX (415) 364-9233  
(408) 947-9600 FAX (408) 981-9673  
(916) 921-9600 FAX (916) 921-0100



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

Client Proj. ID: 201011, Exxon 7-3006  
Lab Proj. ID: 9504C84

Sampled: 04/19/95  
Received: 04/20/95  
Analyzed: see below

Attention: Steve Wiegel

Reported: 04/21/95

### LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9504C84-07				
Sample Desc : LIQUID,W-EFF				
Arsenic	mg/L	04/20/95	0.0050	0.0055

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-INFL  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504C84-04

Sampled: 04/19/95  
Received: 04/20/95  
  
Analyzed: 04/21/95  
Reported: 04/21/95

QC Batch Number: GC042195BTEX21A  
Instrument ID: GCHP21

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	400
Benzene	0.50	47
Toluene	0.50	5.4
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	40
Chromatogram Pattern: Gas & Unidentified HC	.....	< C8
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 130

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Steve Wiegel

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-INT  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504C84-05

Sampled: 04/19/95  
Received: 04/20/95  
Analyzed: 04/21/95  
Reported: 04/21/95

QC Batch Number: GC042195BTEX03A  
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	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager

Page:

6



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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Steve Wiegel

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-EFF  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504C84-06

Sampled: 04/19/95  
Received: 04/20/95  
Analyzed: 04/21/95  
Reported: 04/21/95

QC Batch Number: GC042195BTEX03A  
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	103

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

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

Work Order #: 9504C84 -07

Reported: Apr 24, 1995

## QUALITY CONTROL DATA REPORT

Analyte: Arsenic

QC Batch#: ME0420957000MDB  
Analy. Method: EPA 206.2  
Prep. Method: EPA 3020

Analyst: W. Thant  
MS/MSD #: 9504A4905  
Sample Conc.: N.D.  
Prepared Date: 4/20/95  
Analyzed Date: 4/20/95  
Instrument I.D.#: MTJA3  
Conc. Spiked: 0.050 mg/L

Result: 0.050  
MS % Recovery: 100

Dup. Result: 0.050  
MSD % Recov.: 100

RPD: 0.0  
RPD Limit: 0-30

LCS #: BLK042095

Prepared Date: 4/20/95  
Analyzed Date: 4/20/95  
Instrument I.D.#: MTJA3  
Conc. Spiked: 0.050 mg/L

LCS Result: 0.048  
LCS % Recov.: 96

MS/MSD  
LCS  
Control Limits  
75-125

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

Please Note:

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



**Sequoia  
Analytical**

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  
 359 Bel Marin Keys, Suite 20  
 Novato, CA 94949  
 Attention: Steve Wiegel

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

Work Order #: 9504C84-01, 03

Reported: Apr 24, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC042195BTEX02A	GC042195BTEX02A	GC042195BTEX02A	GC042195BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950474402	950474402	950474402	950474402
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/21/95	4/21/95	4/21/95	4/21/95
Analyzed Date:	4/21/95	4/21/95	4/21/95	4/21/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	9.7	9.4	30
MS % Recovery:	100	97	94	100
Dup. Result:	9.8	9.7	9.5	29
MSD % Recov.:	98	97	95	97
RPD:	2.0	0.0	1.1	3.4
RPD Limit:	0-50	0-50	0-50	0-50

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

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
 Project Manager

Please Note:

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



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

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

Work Order #: 9504C84-02

Reported: Apr 24, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC042195BTEX20A	GC042195BTEX20A	GC042195BTEX20A	GC042195BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950474409	950474409	950474409	950474409
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/21/95	4/21/95	4/21/95	4/21/95
Analyzed Date:	4/21/95	4/21/95	4/21/95	4/21/95
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	9.6	9.7	30
MS % Recovery:	110	96	97	100
Dup. Result:	10	9.6	9.5	29
MSD % Recov.:	100	96	95	97
RPD:	9.5	0.0	2.1	3.4
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:  
LCS % Recov.:

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

Please Note:

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

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager



**Sequoia  
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  
 359 Bel Marin Keys, Suite 20  
 Novato, CA 94949  
 Attention: Steve Wiegel

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

Work Order #: 9504C84-04

Reported: Apr 24, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC042195BTEX21A	GC042195BTEX21A	GC042195BTEX21A	GC042195BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950474409	950474409	950474409	950474409
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/21/95	4/21/95	4/21/95	4/21/95
Analyzed Date:	4/21/95	4/21/95	4/21/95	4/21/95
Instrument I.D. #:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.3	8.0	7.4	22
MS % Recovery:	83	80	74	73
Dup. Result:	7.7	7.5	7.1	22
MSD % Recov.:	77	75	71	73
RPD:	7.5	6.5	4.1	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK042195	BLK042195	BLK042195	BLK042195
Prepared Date:	4/21/95	4/21/95	4/21/95	4/21/95
Analyzed Date:	4/21/95	4/21/95	4/21/95	4/21/95
Instrument I.D. #:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	8.5	8.2	7.9	24
LCS % Recov.:	85	82	79	80

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.



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

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

Work Order #: 9504C84-05-06

Reported: Apr 24, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC042195BTEX03A	GC042195BTEX03A	GC042195BTEX03A	GC042195BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950474403	950474403	950474403	950474403
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/21/95	4/21/95	4/21/95	4/21/95
Analyzed Date:	4/21/95	4/21/95	4/21/95	4/21/95
Instrument I.D. #:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.8	9.7	9.6	29
MS % Recovery:	98	97	96	97
Dup. Result:	8.5	8.3	8.0	25
MSD % Recov.:	85	83	80	83
RPD:	14	16	18	15
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

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

Please Note:

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

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager



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

# EXXON COMPANY, U.S.A.

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

## CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: ENVIRONMENTAL RESOURCES INC

Address: 359 Beech Marina Keys Blvd, Suite 203, Navato

Project #: 201011

Consultant Project #:

Site Location: 70 High St Oakland

Project Contact: Steve Wiegel

Phone #: 415 382 9105

Consultant Work Release #: 19437,503

EXXON Contact: Marla Guenerson

Phone #: 510 246 8768

Laboratory Work Release #:

Sampled by (print): PETER PETRO

Sampler's Signature: *Peter Petro*

EXXON RAS #: 73008

Shipment Method:

Air Bill #: *PETRO*

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

### ANALYSIS REQUIRED

*9504C84*

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	METALS	Arsenic	Temperature: _____
-A- INF	4/19	15:15	Ave/ Ave	Z	2	01 A,B	X					
-A- INT	/	15:13	/	Ave	Z	02	/	X				
-A- Eff	100	15:09	IP	Ave	Z	03	/	X				
-W- INF	4/19	15:35	WATER/ H2O ICE	3	04	A-C	X					
-W- INT	/	15:30	/	/	3	05	/	X				
-W- Eff	/	/	IP	3	06	/	X					
-W- Eff	100	/	IP	4	07	A)				X		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<i>Peter Petro</i> <i>Environmental Resources Inc.</i>	4-20	10:50	<i>Millie Jenkins Jr.</i>	4-20	10:50	
	4-20		<i>Millie Jenkins Jr.</i>	4-20/03	1303	



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600 FAX (415) 364-9233  
(510) 988-1600 FAX (810) 885-5671  
(916) 921-4400 FAX (415) 364-0100

MAY 15 1995

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

Client Proj. ID: Exxon 7-3006  
Lab Proj. ID: 9504I70

Sampled: 04/26/95  
Received: 04/27/95  
Analyzed: see below

Attention: Steve Wiegel

Reported: 05/05/95

### LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9504I70-01				
Sample Desc : LIQUID, W-Eff				
Arsenic	mg/L	05/01/95	0.0050	0.0080

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Steve Wiegel

Client Proj. ID: Exxon 7-3006  
Sample Descript: W-Eff  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504170-01

Sampled: 04/26/95  
Received: 04/27/95  
Analyzed: 05/02/95  
Reported: 05/05/95

QC Batch Number: GC050295BTEX20A  
Instrument ID: GCHP20

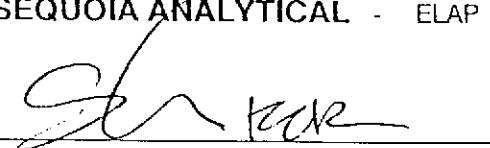
### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	120

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

SEQUOIA ANALYTICAL - ELAP #1210

  
Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Steve Wiegel

Client Proj. ID: Exxon 7-3006  
Sample Descript: W-Int  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504I70-02

Sampled: 04/26/95  
Received: 04/27/95  
Analyzed: 05/03/95  
Reported: 05/05/95

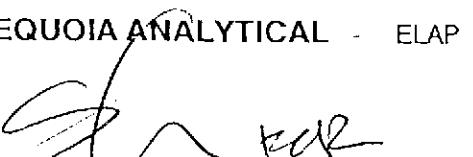
QC Batch Number: GC050395BTEX17A  
Instrument ID: GCHP17

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	200
Benzene	0.50	31
Toluene	0.50	3.2
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	15
Chromatogram Pattern:		Gas
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 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

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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Steve Wiegel

Client Proj. ID: Exxon 7-3006  
Sample Descript: W-Inf  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9504170-03

Sampled: 04/26/95  
Received: 04/27/95  
Analyzed: 05/02/95  
Reported: 05/05/95

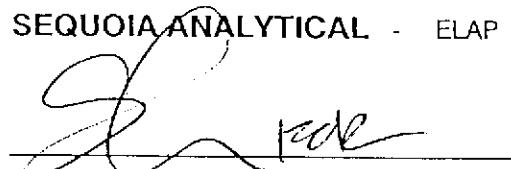
QC Batch Number: GC050295BTEX21  
Instrument ID: GCHP21

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	1500
Benzene	5.0	190
Toluene	5.0	44
Ethyl Benzene	5.0	12
Xylenes (Total)	5.0	150
Chromatogram Pattern:	.....	Gas
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 130

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

SEQUOIA ANALYTICAL - ELAP #1210

  
Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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

Client Project ID: Exxon 7-3006  
 Matrix: Liquid

Work Order #: 9504I70 -01

Reported: May 5, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Arsenic	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	ME0501957000MDA	GC050295BTEX20A	GC050295BTEX20A	GC050295BTEX20A	GC050295BTEX20A
Analy. Method:	EPA 206.2	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 3020	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	W. Thant	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504G2601	9504I6112	9504I6112	9504I6112	9504I6112
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/1/95	5/2/95	5/2/95	5/2/95	5/2/95
Analyzed Date:	5/1/95	5/2/95	5/2/95	5/2/95	5/2/95
Instrument I.D. #:	MTJA3	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	0.050 mg/L	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	0.047	9.6	9.8	9.8	30
MS % Recovery:	94	96	98	98	100
Dup. Result:	0.050	9.4	9.4	9.3	28
MSD % Recov.:	100	94	94	93	93
RPD:	6.2	2.1	4.2	5.2	6.9
RPD Limit:	0-30	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:  
 LCS % Recov.:

MS/MSD LCS Control Limits	75-125	71-133	72-128	72-130	71-120

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
 Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Client Project ID: Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9504170-02

Reported: May 5, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050395BTEX17A	GC050395BTEX17A	GC050395BTEX17A	GC050395BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950416110	950416110	950416110	950416110
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/3/95	5/3/95	5/3/95	5/3/95
Analyzed Date:	5/3/95	5/3/95	5/3/95	5/3/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.7	9.0	9.0	27
MS % Recovery:	87	90	90	90
Dup. Result:	9.2	9.5	9.5	28
MSD % Recov.:	92	95	95	93
RPD:	5.6	5.4	5.4	3.6
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:  
LCS % Recov.:

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Client Project ID: Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9504I70-03

Reported: May 5, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050295BTEX21A	GC050295BTEX21A	GC050295BTEX21A	GC050295BTEX21A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504I6112	9504I6112	9504I6112	9504I6112
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/2/95	5/2/95	5/2/95	5/2/95
Analyzed Date:	5/2/95	5/2/95	5/2/95	5/2/95
Instrument I.D. #:	GCHP21	GCHP21	GCHP21	GCHP21
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.5	9.2	9.3	27
MS % Recovery:	85	92	93	90
Dup. Result:	8.9	9.5	9.5	29
MSD % Recov.:	89	95	95	97
RPD:	4.6	3.2	2.1	7.1
RPD Limit:	0-50	0-50	0-50	0-50

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

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager

Please Note:

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



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

# EXXON COMPANY, U.S.A.

P.O. Box 2180, Houston, TX 77002-7426  
CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC

Address: 357 BEL MAREIN RKSIS BLVD. SUITE 20, HALLIBURTON	Site Location: 720 HIGH ST
Project #: 201011	Consultant Project #:
Project Contact: Steve Wiegert	Phone #: 415 382 5994
EXXON Contact: MARIA GLENSER	Phone #:
Sampled by (print): PETER PETRO	Sampler's Signature: Peter Petro
Shipment Method:	Air Bill #: OAKLAND

TAT: <input checked="" type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> 72 hr <input type="checkbox"/> 96 hr <input checked="" type="checkbox"/> Standard (10 day) (WATER)							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	TPH S.M. 5520	metals Arsenic	Temperature:
		13:03									Inbound Seal: Yes No
A-EFF	4/26/	13:35	AIR/	100%	1		X				Outbound Seal: Yes No
A-INT		13:02						X			
B-A-INT	4/26	13:04	MP	MP	1			X			9504170
		14:35									
W-EFF	4/26/	13:30	WATER/	100%	3	O1	X				
W-INT		13:34			3	O2	X				
W-INT	4/26	13:36	MP	MP	3	O3	X				
W-EFF	4/26	13:32	MP	HNO3	O4				X		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Peter Petro	4/27/95	11:20	MILLER, JAMES P.	4/27	11:20	
MILLER, JAMES P.	4/27/95		P.A.	16-10-1	11:20	

Pink - Client

Yellow - Sequoia

White - Sequoia



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600 FAX (415) 364-9233  
(510) 988-9610 FAX (510) 988-9673  
(916) 921-9500 FAX (916) 921-9500

MAY 10 1995

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

Client Proj. ID: Exxon 7-3006  
Sample Descript: A-EFF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9504126-01

Sampled: 04/26/95  
Received: 04/27/95  
Analyzed: 04/28/95  
Reported: 04/28/95

QC Batch Number: GC042895BTEX17A  
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	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: Exxon 7-3006  
Sample Descript: A-INT  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9504I26-02

Sampled: 04/26/95  
Received: 04/27/95  
Analyzed: 04/28/95  
Reported: 04/28/95

QC Batch Number: GC042895BTEX02A  
Instrument ID: GCHP02

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	0.46
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	0.52
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70                    130	% Recovery 92

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: Exxon 7-3006  
Sample Descript: A-INF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9504126-03

Sampled: 04/26/95  
Received: 04/27/95  
  
Analyzed: 04/28/95  
Reported: 04/28/95

QC Batch Number: GC042895BTEX20A  
Instrument ID: GCHP20

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	400
Benzene	0.50	9.1
Toluene	0.50	5.8
Ethyl Benzene	0.50	1.6
Xylenes (Total)	0.50	7.0
Chromatogram Pattern:	.....	Gas
Unidentified HC	.....	< C8
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 148 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**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Client Project ID: Exxon 7-3006  
Matrix: Air

Work Order #: 9504I26 -01

Reported: May 2, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC042895BTEX17A	GC042895BTEX17A	GC042895BTEX17A	GC042895BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504D4911	9504D4911	9504D4911	9504D4911
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/28/95	4/28/95	4/28/95	4/28/95
Analyzed Date:	4/28/95	4/28/95	4/28/95	4/28/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.6	9.6	9.6	29
MS % Recovery:	96	96	96	97
Dup. Result:	9.3	9.4	9.4	28
MSD % Recov.:	93	94	94	93
RPD:	3.2	2.1	2.1	3.5
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite B	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Client Project ID: Exxon 7-3006  
Matrix: Air  
Work Order #: 9504I26-02

Reported: May 2, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC042895BTEX02A	GC042895BTEX02A	GC042895BTEX02A	GC042895BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504D4911	9504D4911	9504D4911	9504D4911
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/28/95	4/28/95	4/28/95	4/28/95
Analyzed Date:	4/28/95	4/28/95	4/28/95	4/28/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	10	10	28
MS % Recovery:	94	100	100	93
Dup. Result:	9.7	10	10	29
MSD % Recov.:	97	100	100	97
RPD:	3.1	0.0	0.0	3.5
RPD Limit:	0-50	0-50	0-50	0-50

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

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

SEQUOIA ANALYTICAL  
  
Vickie Tague Clark  
Project Manager

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



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Client Project ID: Exxon 7-3006  
Matrix: Air  
Work Order #: 9504I26-03

Reported: May 2, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC042895BTEX20A	GC042895BTEX20A	GC042895BTEX20A	GC042895BTEX20A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504D4910	9504D4910	9504D4910	9504D4910
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	4/28/95	4/28/95	4/28/95	4/28/95
Analyzed Date:	4/28/95	4/28/95	4/28/95	4/28/95
Instrument I.D. #:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.8	8.6	8.5	28
MS % Recovery:	98	86	85	93
Dup. Result:	10	10	9.9	30
MSD % Recov.:	100	100	99	100
RPD:	2.0	15	15	6.9
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



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

# EXXON COMPANY, U.S.A.

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

## CHAIN OF CUSTODY

9504126

Page 1 of 1

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC

Address: 357 BEL MARIN KEYS BLVD, SUITE 20, REDWOOD CITY	Site Location: 720 HIGH ST
Project #: 201011	Consultant Project #:
Project Contact: Steve (Steve)	Phone #: 415 382 5974
EXXON Contact: MALLA GHEMSEY	Phone #:
Sampled by (print): PETER PETRO	Sampler's Signature: <i>Peter Petro</i>
Shipment Method:	Air Bill #: <i>Peter Petro</i>
TAT: <input checked="" type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> 72 hr <input type="checkbox"/> 96 hr	Standard (10 day) (WATER)

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	TPH S.M. 5520	metals Arsenic	Temperature: _____	
A-5FF	4/26/	13:05	AIR	Ice dry	1	1A	X					
A- INT		13:02			1	2A	X					
B A - INF	/P	13:04	MP	HP	1	3A	X					
		14:35										
W-EFF	4/26/	13:30	WATER	ice dry	3		X					
W- INT		13:34			3		X					
W- INF	/P	13:36	MP	MP	3		X					
W-EFF	4/26	13:32	MP		HNO3					X		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<i>Peter Petro</i>	4/27/95	11:20	<i>Mallay Ghemsey</i>	4/27	11:30	
<i>Mallay Ghemsey</i>	4/27/95		<i>P. Petro</i>	4/27/95	14:27	

Pink - Client

Yellow - Sequoia

White - Sequoia



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600 FAX (415) 364-9293  
(510) 988-9600 FAX (510) 988-9673  
(916) 971-1600 FAX (916) 921-0100

MAY 15 1995

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

Attention: Keith Romstad

Client Proj. ID: 2010, Exxon 7-3006  
Sample Descript: A-Eff  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9505159-01

Sampled: 05/01/95  
Received: 05/03/95  
Analyzed: 05/03/95  
Reported: 05/04/95

QC Batch Number: GC050395BTEX17A  
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	83

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: 2010, Exxon 7-3006  
Sample Descript: A-Int  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9505159-02

Sampled: 05/01/95  
Received: 05/03/95  
Analyzed: 05/04/95  
Reported: 05/04/95

Attention: Keith Romstad

QC Batch Number: GC050495BTEX17A  
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	115

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive Redwood City, CA 94063 (415) 364-9600 FAX (415) 364-9233  
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 359 Bel Marin Keys, Suite 20 Novato, CA 94949  Attention: Keith Romstad	Client Proj. ID: 2010, Exxon 7-3006 Sample Descript: A-Inf Matrix: AIR Analysis Method: 8015Mod/8020 Lab Number: 9505159-03	Sampled: 05/01/95 Received: 05/03/95  Analyzed: Reported: 05/04/95
---	---	--

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

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

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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Keith Romstad

Client Proj. ID: 2010, Exxon 7-3006  
Lab Proj. ID: 9505159

Received: 05/03/95  
Reported: 05/04/95

## LABORATORY NARRATIVE

Sample A-INF was received with insufficient sample to conduct analysis.

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Keith Romstad

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

Work Order #: 9505159 -01

Reported: May 5, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050395BTEX17A	GC050395BTEX17A	GC050395BTEX17A	GC050395BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504I6110	9504I6110	9504I6110	9504I6110
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/3/95	5/3/95	5/3/95	5/3/95
Analyzed Date:	5/3/95	5/3/95	5/3/95	5/3/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	8.7	9.0	9.0	27
MS % Recovery:	87	90	90	90
Dup. Result:	9.2	9.5	9.5	28
MSD % Recov.:	92	95	95	93
RPD:	5.6	5.4	5.4	3.6
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:  
LCS % Recov.:

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

Environmental Resolutions  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949  
Attention: Keith Romstad

Client Project ID: 2010, Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9505159-02

Reported: May 5, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC050495BTEX17A	GC050495BTEX17A	GC050495BTEX17A	GC050495BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9504I6114	9504I6114	9504I6114	9504I6114
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/4/95	5/4/95	5/4/95	5/4/95
Analyzed Date:	5/4/95	5/4/95	5/4/95	5/4/95
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	9.8	29
MS % Recovery:	97	98	98	97
Dup. Result:	9.8	9.8	9.8	29
MSD % Recov.:	98	98	98	97
RPD:	1.0	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

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

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

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

Please Note:

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



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

# EXXON CORP., NY, U.S.A.

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

## CHAIN OF CUSTODY

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

Consultant's Name: <i>Exxon Corp., NY, U.S.A.</i>												
Address: <i>720 Hildebrand St., Houston, TX 77002</i>							Site Location: <i>720 Hildebrand St.</i>					
Project #: <i>19432902</i>			Consultant Project #:				Consultant Work Release #: <i>19432902</i>					
Project Contact: <i>John D. Miller</i>			Phone #: <i>713-525-5105</i>				Laboratory Work Release #:					
EXXON Contact: <i>John D. Miller</i>			Phone #: <i>713-525-5105</i>				EXXON RAS #: <i>7-3016</i>					
Sampled by (print): <i>John D. Miller</i>			Sampler's Signature: <i>John D. Miller</i>				Shipment Method: <i>Air Freight</i>					
TAT: <input checked="" type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> 72 hr <input type="checkbox"/> 96 hr <input type="checkbox"/> Standard (10 day) <i>19432902</i>							ANALYSIS REQUIRED					
Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520			Temperature: _____
<i>A-101</i>						<i>1</i>	<i>1</i>					Inbound Seal: Yes No
<i>A-102</i>						<i>2</i>	<i>2</i>					Outbound Seal: Yes No
<i>A-103</i>						<i>3</i>	<i>3</i>					
RELINQUISHED BY / AFFILIATION			Date	Time	ACCEPTED / AFFILIATION				Date	Time	Additional Comments	
<i>John D. Miller</i>					<i>John D. Miller</i>				<i>7/3</i>	<i>12:30</i>		
<i>John D. Miller</i>					<i>John D. Miller</i>				<i>7/3</i>	<i>12:30</i>		
<i>John D. Miller</i>					<i>John D. Miller</i>				<i>7/3</i>	<i>12:30</i>		

Pink - Client

Yellow - Sequoia

White - Sequoia



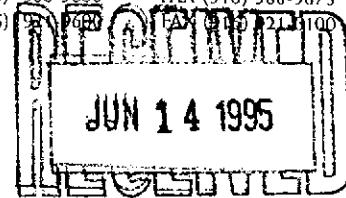
Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
8119 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 927-7600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-3100



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

Attention: Marc Briggs

Client Proj. ID: Exxon Ras #73006/2010  
Sample Descript: A-EFF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9505D79-01

Sampled: 05/19/95  
Received: 05/19/95  
Analyzed: 05/20/95  
Reported: 05/22/95

QC Batch Number: GC051995BTEX02B  
Instrument ID: GCHP01

### 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	102

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive      Redwood City, CA 94063      (415) 364-9600  
404 N. Wiget Lane      Walnut Creek, CA 94598      (510) 988-9600  
819 Striker Avenue, Suite 8      Sacramento, CA 95834      (916) 921-9600  
FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: Exxon Ras #73006/2010  
Sample Descript: A-INT  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9505D79-02

Sampled: 05/19/95  
Received: 05/19/95  
Analyzed: 05/22/95  
Reported: 05/22/95

QC Batch Number: GC052295BTEX17A  
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		
Trifluorotoluene	Control Limits % 70      130	% Recovery 85

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Marc Briggs

Client Proj. ID: Exxon Ras #73006/2010  
Sample Descript: A-INF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9505D79-03

Sampled: 05/19/95  
Received: 05/19/95  
Analyzed: 05/22/95  
Reported: 05/22/95

QC Batch Number: GC052295BTEX17A  
Instrument ID: GCHP17

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	25	140
Benzene	0.25	3.5
Toluene	0.25	3.9
Ethyl Benzene	0.25	1.0
Xylenes (Total)	0.25	4.1
Chromatogram Pattern: Gas & Unidentified HC	.....	+< C8
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	117

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Client Project ID: Exxon Ras #73006, 2010  
Matrix: Liquid

Work Order #: 9505D79 -01

Reported: Jun 8, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC051995BTEX02B	GC051995BTEX02B	GC051995BTEX02B	GC051995BTEX02B
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950598206	950598206	950598206	950598206
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/20/95	5/20/95	5/20/95	5/20/95
Analyzed Date:	5/20/95	5/20/95	5/20/95	5/20/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.0	8.8	8.6	26
MS % Recovery:	90	88	86	87
Dup. Result:	9.7	9.3	9.1	28
MSD % Recov.:	97	93	91	93
RPD:	7.5	5.5	5.6	7.4
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Client Project ID: Exxon Ras #73006, 2010  
Matrix: Liquid  
Work Order #: 9505D79-02, 3

Reported: Jun 8, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC052295BTEX17A	GC052295BTEX17A	GC052295BTEX17A	GC052295BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950581102	950581102	950581102	950581102
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/22/95	5/22/95	5/22/95	5/22/95
Analyzed Date:	5/22/95	5/22/95	5/22/95	5/22/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	7.8	7.5	8.1	24
MS % Recovery:	78	75	81	80
Dup. Result:	8.6	8.3	9.1	27
MSD % Recov.:	86	83	91	90
RPD:	9.8	10	12	12
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



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

# EXXON COMPANY, U.S.A.

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

## CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: ENVIRONMENTAL RESOLUTIONS INC

Address: 359 BEL MARIN KEYES BLDG, SUITE 702, NOVATO

Site Location: 720 HIGH ST

Project #: 201011

Consultant Project #:

Consultant Work Release #: 19432503

Project Contact: MARC BRIGGS

Phone #: 415 382 9005

Laboratory Work Release #:

EXXON Contact: Mark Gundersen

Phone #: 510 246 8762

EXXON RAS #: 73006

Sampled by (print): PETER PERIO

Sampler's Signature: *Peter Perio*

OAKLAND

Shipment Method:

Air Bill #: *1005*

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

### ANALYSIS REQUIRED

9505079

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel S.M. EPA 8015	TRPH 5520			Temperature: _____
A-EFP	13:35	5/19/95	AIR	1/4	2	01 A,B	X			X		
A-WT	13:36				2	02 A,B	X					
A-INF	17:38	10	1/4	1pp	2	03 A,B	X					

Run G.C.-  
Identification  
if EFP is not  
TAtg/BTEX

GAS  
CHROMATOGRAPH

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<i>J. M. Ho</i>	5/19/95	14:40	<i>J. Kam</i>			



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-0600  
(916) 921-9400

FAX (415) 364-9233  
FAX (510) 988-9773  
FAX (916) 921-0100

JUN 14 1995

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

Client Proj. ID: 2010, Exxon 7-3006  
Sample Descript: W-Inf  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9505L05-01

Sampled: 05/26/95  
Received: 05/31/95  
Analyzed: 06/05/95  
Reported: 06/06/95

QC Batch Number: GC060595BTEX02A  
Instrument ID: GCHP02

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	680
Benzene	5.0	210
Toluene	5.0	16
Ethyl Benzene	5.0	5.8
Xylenes (Total)	5.0	28
Chromatogram Pattern:	.....	Gas
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 130

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Marc Briggs

Client Proj. ID: 2010, Exxon 7-3006  
Sample Descript: W-Int  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9505L05-02

Sampled: 05/26/95  
Received: 05/31/95  
Analyzed: 06/05/95  
Reported: 06/06/95

QC Batch Number: GC060595BTEX02A  
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	0.94
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates		Control Limits %
Trifluorotoluene		70 130
		% Recovery
		99

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: 2010, Exxon 7-3006  
Sample Descript: W-Eff  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9505L05-03

Sampled: 05/26/95  
Received: 05/31/95  
Analyzed: 06/05/95  
Reported: 06/06/95

QC Batch Number: GC060595BTEX02A  
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	106

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager

Page:

3



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

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

Work Order #: 9505L05 -01-3

Reported: Jun 7, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060595BTEX02A	GC060595BTEX02A	GC060595BTEX02A	GC060595BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	9505I9002	9505I9002	9505I9002	9505I9002
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/5/95	6/5/95	6/5/95	6/5/95
Analyzed Date:	6/5/95	6/5/95	6/5/95	6/5/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.4	9.3	9.3	28
MS % Recovery:	94	93	93	93
Dup. Result:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	6.2	7.3	7.3	6.9
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



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

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

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

## **CHAIN OF CUSTODY**

Page 1 of 1



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 948-3600  
(916) 921-9400

FAX (415) 364-9233  
FAX (510) 981-9678  
FAX (916) 921-0100

JUN 21 1995

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

Attention: Marc Briggs

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: A-Inf  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9506333-01

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

QC Batch Number: GC060795BTEX17A  
Instrument ID: GCHP17

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	36
Benzene	0.10	0.22
Toluene	0.10	0.78
Ethyl Benzene	0.10	0.17
Xylenes (Total)	0.10	0.71
Chromatogram Pattern:		Gas
Unidentified HC		< C8
Surrogates		
Trifluorotoluene	Control Limits % 70      130	% Recovery 113

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: A-Int  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9506333-02

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

QC Batch Number: GC060795BTEX17A  
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	0.10
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>		
Trifluorotoluene	70                    130	% Recovery 84

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: A-Eff  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9506333-03

Sampled: 06/06/95  
Received: 06/07/95  
Analyzed: 06/08/95  
Reported: 06/12/95

Attention: Marc Briggs  
QC Batch Number: GC060895BTEX02A  
Instrument ID: GCHP02

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Client Project ID: 201011, Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9506333 -01, 2

Reported: Jun 19, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060795BTEX17A	GC060795BTEX17A	GC060795BTEX17A	GC060795BTEX17A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	950603102	950603102	950603102	950603102
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/7/95	6/7/95	6/7/95	6/7/95
Analyzed Date:	6/7/95	6/7/95	6/7/95	6/7/95
Instrument I.D. #:	GCHP17	GCHP17	GCHP17	GCHP17
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	7.7	8.1	8.2	24
MS % Recovery:	77	81	82	80
Dup. Result:	8.1	8.5	8.5	25
MSD % Recov.:	81	85	85	83
RPD:	5.1	4.8	3.6	4.1
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

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

Please Note:

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

SEQUOIA ANALYTICAL

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

Client Project ID: 201011, Exxon 7-3006  
 Matrix: Liquid  
 Work Order #: 9506333-03

Reported: Jun 19, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC060895BTEX02A	GC060895BTEX02A	GC060895BTEX02A	GC060895BTEX02A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Vincent	R. Vincent	R. Vincent	R. Vincent
MS/MSD #:	950603102	950603102	950603102	950603102
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/8/95	6/8/95	6/8/95	6/8/95
Analyzed Date:	6/8/95	6/8/95	6/8/95	6/8/95
Instrument I.D. #:	GCHP2	GCHP2	GCHP2	GCHP2
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	10	12	32
MS % Recovery:	110	100	120	107
Dup. Result:	12	10	12	32
MSD % Recov.:	120	100	120	107
RPD:	8.7	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
 Project Manager



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

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

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

## CHAIN OF CUSTODY

Consultant's Name: Environmental Resolutions Inc

9506333

Page 1 of 1

Address: 359 Bel Marin Keys Blvd Suite 20 Novato Ca 94457		Site Location: 770 High Street
Project #: 201011	Consultant Project #:	Consultant Work Release #:
Project Contact: Marc Briggs	Phone #: 415-382-9105	Laboratory Work Release #: 19432503
EXXON Contact: Maclia Greenster	Phone #: 510-246-8776	EXXON RAS #: 7-3006
Sampled by (print): Scott Graham	Sampler's Signature: Scott Graham	Oakland, Ca
Shipment Method:	Air Bill #:	

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

ANALYSIS REQUIRED

Temperature: \_\_\_\_\_

Inbound Seal: Yes No  
Outbound Seal: Yes No

**RELINQUISHED BY / AFFILIATION**

Date | Time

**ACCEPTED / AFFILIATION**

Date \_\_\_\_\_

Time

*Additional Comments*

Scott Graham  
Z. Dr.

6-7 10:00

6-7 1:30

~~St. John Segovia~~

7-6 10:00

6/7/95 133



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8  
Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600  
FAX (415) 364-9233  
FAX (510) 988-9674  
FAX (916) 921-9170

RECEIVED  
JUN 30 1995  
RESULTS

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

Attention: Marc Briggs

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-INF  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506767-01

Sampled: 06/08/95  
Received: 06/13/95  
Analyzed: 06/15/95  
Reported: 06/21/95

QC Batch Number: GC061595BTEX22A  
Instrument ID: GCHP22

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	2800
Benzene	5.0	660
Toluene	5.0	300
Ethyl Benzene	5.0	54
Xylenes (Total)	5.0	340
Chromatogram Pattern:		Gas
Surrogates		
Trifluorotoluene	Control Limits % 70      130	% Recovery 111

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-INT2  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506767-02

Sampled: 06/08/95  
Received: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/21/95

QC Batch Number: GC061495BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70      130	92

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-INT1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506767-03

Sampled: 06/08/95  
Received: 06/13/95  
Analyzed: 06/15/95  
Reported: 06/21/95

Attention: Marc Briggs

QC Batch Number: GC061595BTEX22A  
Instrument ID: GCHP22

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70                  130	100

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

SEQUOIA ANALYTICAL - ELAP #1210

  
Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-EFF1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506767-04

Sampled: 06/08/95  
Received: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/21/95

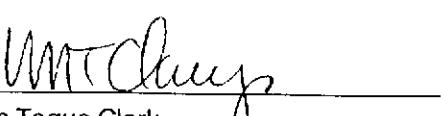
QC Batch Number: GC061495BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>		
Trifluorotoluene	Control Limits % 70                  130	% Recovery 78

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

**SEQUOIA ANALYTICAL - ELAP #1210**

  
Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Marc Briggs

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-EFF2  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506767-05

Sampled: 06/08/95  
Received: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/21/95

QC Batch Number: GC061495BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>		
Trifluorotoluene	Control Limits % 70                  130	% Recovery 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**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

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

Work Order #: 9506767 -01, 3

Reported: Jun 26, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061595BTEX22A	GC061595BTEX22A	GC061595BTEX22A	GC061595BTEX22A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	950645401	950645401	950645401	950645401
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/15/95	6/15/95	6/15/95	6/15/95
Analyzed Date:	6/15/95	6/15/95	6/15/95	6/15/95
Instrument I.D. #:	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	9.7	10	29
MS % Recovery:	100	97	100	97
Dup. Result:	10	9.7	10	30
MSD % Recov.:	100	97	100	100
RPD:	0.0	0.0	0.0	3.4
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:  
LCS % Recov.:

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

Please Note:

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

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Client Project ID: 201011, Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9506767-02, 4-5

Reported: Jun 26, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061495BTEX07A	GC061495BTEX07A	GC061495BTEX07A	GC061495BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	950666803	950666803	950666803	950666803
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/14/95	6/14/95	6/14/95	6/14/95
Analyzed Date:	6/14/95	6/14/95	6/14/95	6/14/95
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	32
MS % Recovery:	110	110	110	107
Dup. Result:	11	11	11	32
MSD % Recov.:	110	110	110	107
RPD:	0.0	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

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

LCS Result:  
LCS % Recov.:

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

Please Note:

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

**SEQUOIA ANALYTICAL**

  
Vickie Tague Clark  
Project Manager



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

# EXXON COMPANY, U.S.A.

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

## CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: <u>ENVIRONMENTAL ANALYSIS INC</u>	Site Location: <u>TEXAS CITY HARBOR</u>
Address: <u>369 BSL NARROW LANE, SUITE 100, BAY CITY, TX 77420</u>	Consultant Work Release #: <u>104735</u>
Project #: <u>204011</u>	Consultant Project #: <u></u>
Project Contact: <u>Marcus Williams</u>	Phone #: <u>409-942-1105</u>
EXXON Contact: <u>Mark Johnson</u>	Phone #: <u>713-246-8776</u>
Sampled by (print): <u>Mark Johnson</u>	Sampler's Signature: <u>Mark Johnson</u>
Shipment Method:	Air Bill #: <u>1361767</u>

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

### ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	Temperature: _____
01-HF	5/9/	14:00	AIR	10	3	1				Inbound Seal: Yes No
01-MTE	5/9/	14:07				2				Outbound Seal: Yes No
01-MTE	5/9/	14:08				3				
01-EFF1	5/9/	14:09				4				
01-EFF2	5/9/	14:09				5				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<u>Mark Johnson</u>	5/9/	14:48	<u>Charles H. H.</u>			



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

JUN 21 1995

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

Attention: Marc Briggs

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-BB-MW1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506628-01

Sampled: 06/07/95  
Received: 06/08/95  
Analyzed: 06/15/95  
Reported: 06/16/95

QC Batch Number: GC061595BTEX03A  
Instrument ID: GCHP03

### 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	91

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-8-MW1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506628-02

Sampled: 06/07/95  
Received: 06/08/95  
Analyzed: 06/13/95  
Reported: 06/16/95

QC Batch Number: GC061395BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	3.5
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-8-MW1  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9506628-02

Sampled: 06/07/95  
Received: 06/08/95  
Extracted: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/16/95

Attention: Marc Briggs  
QC Batch Number: GC0613950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	.....
Chromatogram Pattern:	50	81
Unidentified HC	.....	C9-C24
<b>Surrogates</b>		
n-Pentacosane (C25)	Control Limits % 50 150	% Recovery 108

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-8-MW10  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506628-04

Sampled: 06/07/95  
Received: 06/08/95  
Analyzed: 06/13/95  
Reported: 06/16/95

QC Batch Number: GC061395BTEX07A  
Instrument ID: GCHP7

**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	78

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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

Attention: Marc Briggs

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-8-MW10  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9506628-04

Sampled: 06/07/95  
Received: 06/08/95  
Extracted: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/16/95

QC Batch Number: GC0613950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern:	50	N.D.
Surrogates n-Pentacosane (C25)	Control Limits % 50                  150	% Recovery 103

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Marc Briggs

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-14-MW9  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506628-06

Sampled: 06/07/95  
Received: 06/08/95  
Analyzed: 06/13/95  
Reported: 06/16/95

QC Batch Number: GC061395BTEX07A  
Instrument ID: GCHP7

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70                  130	83

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-14-MW9  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9506628-06

Sampled: 06/07/95  
Received: 06/08/95  
Extracted: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/16/95

QC Batch Number: GC0613950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	50
Chromatogram Pattern: Unidentified HC	.....	72
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50      150	110

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-9-MW11  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506628-08

Sampled: 06/07/95  
Received: 06/08/95  
Analyzed: 06/13/95  
Reported: 06/16/95

Attention: Marc Briggs

QC Batch Number: GC061395BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	2.5	42
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
<b>Surrogates</b>		
Trifluorotoluene	Control Limits % 70	% Recovery 130

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-9-MW11  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9506628-08

Sampled: 06/07/95  
Received: 06/08/95  
Extracted: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/16/95

QC Batch Number: GC0613950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	50
Chromatogram Pattern:		
Unidentified HC	.....	C9-C24
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50                  150	99

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9600

FAX (415) 364-9233  
FAX (510) 988-9673  
FAX (916) 921-0100

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

Attention: Marc Briggs

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-12-MW14  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506628-10

Sampled: 06/07/95  
Received: 06/08/95  
Analyzed: 06/14/95  
Reported: 06/16/95

QC Batch Number: GC061495BTEX22A  
Instrument ID: GCHP22

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	670
Methyl t-Butyl Ether	50	N.D.
Benzene	2.5	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	3.6
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern: Weathered Gas	.....	C7-C12
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	82

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-12-MW14  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9506628-10

Sampled: 06/07/95  
Received: 06/08/95  
Extracted: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/16/95

Attention: Marc Briggs  
QC Batch Number: GC0613950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel Chromatogram Pattern: Unidentified HC	..... 50	..... 1100
Surrogates n-Pentacosane (C25)	.....	C9-C24
	Control Limits % 50            150	% Recovery 100

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-12-MW14  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9506628-10

Sampled: 06/07/95  
Received: 06/08/95  
Extracted: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/16/95

QC Batch Number: GC0613950HBPEXZ  
Instrument ID: GCHP4A

### Fuel Fingerprint : Stoddard Solvent

Analyte	Detection Limit ug/L	Sample Results ug/L
Extract HC as Stoddard Solvent	50	450
Chromatogram Pattern: Unidentified HC		C9-C13
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	100

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-10-MW7  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506628-12

Sampled: 06/07/95  
Received: 06/08/95  
Analyzed: 06/14/95  
Reported: 06/16/95

QC Batch Number: GC061495BTEX22A  
Instrument ID: GCHP22

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	2400
Methyl t-Butyl Ether	12	39
Benzene	2.5	91
Toluene	2.5	5.0
Ethyl Benzene	2.5	7.6
Xylenes (Total)	2.5	14
Chromatogram Pattern: Weathered Gas		C6-C12
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

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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-10-MW7  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9506628-12

Sampled: 06/07/95  
Received: 06/08/95  
Extracted: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/16/95

QC Batch Number: GC0613950HBPEXZ  
Instrument ID: GCHP4A

### Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit ug/L	Sample Results ug/L
TEPH as Diesel	.....	50
Chromatogram Pattern:	.....	1200
Unidentified HC	.....	C9-C24
<b>Surrogates</b>		
n-Pentacosane (C25)	Control Limits % 50	% Recovery 150

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: 201013, Exxon 7-3006  
Sample Descript: W-10-MW7  
Matrix: LIQUID  
Analysis Method: EPA 8015 Mod  
Lab Number: 9506628-12

Sampled: 06/07/95  
Received: 06/08/95  
Extracted: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/16/95

Attention: Marc Briggs  
QC Batch Number: GC0613950HBPEXZ  
Instrument ID: GCHP4A

### Fuel Fingerprint : Stoddard Solvent

Analyte	Detection Limit ug/L	Sample Results ug/L
Extract HC as Stoddard Solvent	.....	1000
Chromatogram Pattern:		
Unidentified HC	.....	C9-C13
Surrogates	Control Limits %	% Recovery
n-Pentacosane (C25)	50 150	124

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Project ID: 201013, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9506628 -02, 4, 6, 8, 10, 12

Reported: Jun 19, 1995

## QUALITY CONTROL DATA REPORT

Analyte: Diesel

QC Batch#: GC0613950HBPEXZ  
Analy. Method: EPA 8015 M  
Prep. Method: EPA 3520

Analyst: T. Olive  
MS/MSD #: 950662802  
Sample Conc.: 81  
Prepared Date: 6/13/95  
Analyzed Date: 6/14/95  
Instrument I.D.#: GCHP4  
Conc. Spiked: 600 µg/L

Result: 510  
MS % Recovery: 72

Dup. Result: 290  
MSD % Recov.: 35

RPD: 55  
RPD Limit: 0-50

LCS #: BLK061395

Prepared Date: 6/13/95  
Analyzed Date: 6/14/95  
Instrument I.D.#: GCHP4  
Conc. Spiked: 600 µg/L

LCS Result: 320  
LCS % Recov.: 53

MS/MSD  
LCS  
Control Limits 38-122

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

Please Note:

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



**Sequoia  
Analytical**

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

Client Project ID: 201013, Exxon 7-3006  
 Matrix: Liquid

Work Order #: 9506628-01

Reported: Jun 19, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061595BTEX03A	GC061595BTEX03A	GC061595BTEX03A	GC061595BTEX03A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel
MS/MSD #:	950646603	950646603	950646603	950646603
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/15/95	6/15/95	6/15/95	6/15/95
Analyzed Date:	6/15/95	6/15/95	6/15/95	6/15/95
Instrument I.D. #:	GCHP3	GCHP3	GCHP3	GCHP3
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	11	11	33
MS % Recovery:	110	110	110	110
Dup. Result:	11	11	11	32
MSD % Recov.:	110	110	110	107
RPD:	0.0	0.0	0.0	3.1
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
 Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Client Project ID: 201013, Exxon 7-3006  
Matrix: Liquid

Work Order #: 9506628-02, 3, 6, 8

Reported: Jun 19, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061395BTEX07A	GC061395BTEX07A	GC061395BTEX07A	GC061395BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	950648705	950648705	950648705	950648705
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/13/95	6/13/95	6/13/95	6/13/95
Analyzed Date:	6/13/95	6/13/95	6/13/95	6/13/95
Instrument I.D. #:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	11	11	12	34
MS % Recovery:	110	110	120	113
Dup. Result:	11	11	11	34
MSD % Recov.:	110	110	110	113
RPD:	0.0	0.0	8.7	0.0
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager



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

Client Project ID: 201013, Exxon 7-3006  
 Matrix: Liquid

Work Order #: 9506628-10, 12

Reported: Jun 19, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061495BTEX22A	GC061495BTEX22A	GC061495BTEX22A	GC061495BTEX22A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	950666803	950666803	950666803	950666803
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/14/95	6/14/95	6/14/95	6/14/95
Analyzed Date:	6/14/95	6/14/95	6/14/95	6/14/95
Instrument I.D. #:	GCHP22	GCHP22	GCHP22	GCHP22
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:	10	10	10	30
MSD % Recov.:	100	100	100	100
RPD:	0.0	9.5	9.5	6.5
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



Sequoia 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

9506628

Page 3 of 3

CHAIN OF CUSTODY										Page <u>3</u> of <u>3</u>			
Consultant's Name: Environmental Resolutions Inc													
Address: 359 Bel Marin Keys Blvd Suite 20 Novato Ca 94949										Site Location: 720 High Street			
Project #: 201013					Consultant Project #:					Consultant Work Release #:			
Project Contact: Marc Briggs					Phone #: 415-382-9105					Laboratory Work Release #: 19432503			
EXXON Contact: Marla Gurnsler					Phone #: 510-246-8776					EXXON RAS #: 7-3006			
Sampled by (print): Scott Graham					Sampler's Signature: Scott Graham					Oakland, Ca			
Shipment Method:										Air Bill #:			
TAT: <input type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> 72 hr <input type="checkbox"/> 96 hr <input checked="" type="checkbox"/> Standard (10 day)										ANALYSIS REQUIRED			
Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	Stockard Solvent	M B E	Temperature: _____	
W-10-MW7	6/7/95	18:09	Water	ICE	2		X					Inbound Seal: Yes No	
W-10-MW7	6/7/95	18:10	water	ICE	1					X		Outbound Seal: Yes No	
												EPA Methods 3510/8015	
RELINQUISHED BY / AFFILIATION					Date	Time	ACCEPTED / AFFILIATION			Date	Time	Additional Comments	
<u>Scott Graham</u>					6/8	12:20	<u>Kurtzler</u>			6/8	12:20		
<u>Fultsler</u>					6/8		<u>JM</u>			6/8/95	1425		

Pink - Client

Yellow - Sequoia

White - Seannia



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

9506028

Page 1 of 3

Consultant's Name:	Environmental Resolutions Inc.		Site Location:	720 High Street
Address:	359 Bel Marin Keys Blvd Suite 20 Novato Ca 94949		Consultant Work Release #:	
Project #:	201013	Consultant Project #:	Laboratory Work Release #:	19432503
Project Contact:	Mark Briggs	Phone #: 415-382-9105	EXXON RAS #:	7-3006
EXXON Contact:	Marla Guenster	Phone #: 510-246-8776	Oakland, Ca	
Sampled by (print):	Scott Graham	Sampler's Signature: <i>Scott Graham</i>		
Shipment Method:			Air Bill #:	

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

### ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	Ground Sample	M B T E	Temperature: _____	Inbound Seal: Yes No	Outbound Seal: Yes No
1 A W-BB-MW1	6/7/95	16:17	water	HCL ICE	1		X				X			
2 A W-BB-MW1		16:19		HCL ICE	3		X				X			
3 D W-BB-MW1		16:21		ICE	2			X						
3 E W-BB-MW10		16:45		HCL ICE	1		hold				Hold			
4 E W-BB-MW10		16:47		HCL ICE	3		X				X			
5 E W-BB-MW10		16:49		ICE	2			X						
5 F W-BB-MW9		17:00		HCL ICE	1		hold				Hold			
6 F W-BB-MW9		17:02		HCL ICE	3		X				X			
6 G W-BB-MW9		17:04	ds	ICE	2			X			Hold			

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<i>Scott Graham</i>	6/8	12:20	<i>Fattiger</i>	6/8	12:20	
<i>Fattiger</i>	6/8		<i>M</i>	6/8	14:25	



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

9506628

Page 2 of 3

Consultant's Name: Environmental Resolutions Inc.

Address: 359 Bel Marin Keys Blvd Suite 20 Novato Ca 94949

Project #: 2D1013

Consultant Project #:

Project Contact: Marc Briggs

Phone #: 415-382-9105

EXXON Contact: Marla Gvensler

Phone #: 510-246-8776

Sampled by (print): Scott Graham

Sampler's Signature: Scott Graham

Shipment Method:

Air Bill #:

Site Location: 720 High Street

Consultant Work Release #:

Laboratory Work Release #: 19432503

EXXON RAS #: 7-3006

Oakland, Ca

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

## ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel S.M. EPA 8015	TRPH 5520	Storage Solvent	IM	Temperature:	Inbound Seal: Yes No	Outbound Seal: Yes No
W-BB-MW11	6/7/95	17:30	water	HCL ICE	1		hold					Hold		
W-9-MW11		17:32		HCL ICE	3			X				X		EPA Methods 3510/8015
W-9-MW11		17:34		ICE	2				X					
W-BB-MW14		17:50		HCL ICE	1		hold					Hold		
W-12-MW14		17:52		HCL ICE	3			X				X		
W-12-MW14		17:54		ICE	2				X					
W-12-MW14		17:55		ICE	1							X		
W-BB-MW7		18:05		HCL ICE	1		hold					Hold		
W-10-MW7		18:07		HCL ICE	3			X				X		

## RELINQUISHED BY / AFFILIATION

Date

Time Accepted / Affiliation

Date Time Additional Comments

Scott Graham  
Fuller

6/8  
6/8

Scott Graham

6/8 12:20

M

6/8 14:25

Pink - Client

Yellow - Sequoia

White - Sequoia



Sequoia  
Analytical

680 Chesapeake Drive      Redwood City, CA 94063  
404 N. Wiget Lane      Walnut Creek, CA 94598  
819 Striker Avenue, Suite 8      Sacramento, CA 95834

(415) 364-9600      FAX (415) 364-9233  
(510) 988-9600      FAX (510) 988-9673  
(916) 921-9600      FAX (916) 921-0100

REPRINTED  
JUL 07 1995

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

Attention: Marc Briggs

Client Proj. ID: 2010, Exxon 7-3006  
Sample Descript: A-INF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9506H96-01

Sampled: 06/27/95  
Received: 06/28/95  
Analyzed: 06/29/95  
Reported: 06/30/95

QC Batch Number: GC062995BTEX03A  
Instrument ID: GCHP03

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	.....	440
Benzene	100	4.9
Toluene	1.0	2.0
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.0	2.3
Chromatogram Pattern:	.....	Gas
Unidentified HC	.....	< C8
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 130

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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

Attention: Marc Briggs

Client Proj. ID: 2010, Exxon 7-3006  
Sample Descript: A-INT  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9506H96-02

Sampled: 06/27/95  
Received: 06/28/95  
Analyzed: 06/29/95  
Reported: 06/30/95

QC Batch Number: GC062995BTEX03A  
Instrument ID: GCHP03

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	
Trifluorotoluene	70	130
	% Recovery	
		105

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager

Page:

2



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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: 2010, Exxon 7-3006  
Sample Descript: A-EFF  
Matrix: AIR  
Analysis Method: 8015Mod/8020  
Lab Number: 9506H96-03

Sampled: 06/27/95  
Received: 06/28/95  
Analyzed: 06/29/95  
Reported: 06/30/95

QC Batch Number: GC062995BTEX03A  
Instrument ID: GCHP03

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	10	N.D.
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	0.10	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	103

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite B	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

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

Work Order #: 9506H96 -01-3

Reported: Jul 5, 1995

## QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC062995BTEX03A	GC062995BTEX03A	GC062995BTEX03A	GC062995BTEX03A
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 #:	9506B5103	9506B5103	9506B5103	9506B5103
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/29/95	6/29/95	6/29/95	6/29/95
Analyzed Date:	6/29/95	6/29/95	6/29/95	6/29/95
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:	8.9	9.4	9.1	27
MSD % Recov.:	89	94	91	90
RPD:	12	6.2	9.4	14
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager

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

9506H96.EEE <1>





Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9600  
(510) 988-9600  
(916) 921-9000

FAX (415) 364-9233  
FAX (510) 988-9677  
FAX (916) 921-9100

JUN 30 1995

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

Attention: Marc Briggs

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-INF  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506767-01

Sampled: 06/08/95  
Received: 06/13/95  
Analyzed: 06/15/95  
Reported: 06/21/95

QC Batch Number: GC061595BTEX22A  
Instrument ID: GCHP22

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	2800
Benzene	5.0	660
Toluene	5.0	300
Ethyl Benzene	5.0	54
Xylenes (Total)	5.0	340
Chromatogram Pattern:		Gas
Surrogates		Control Limits %
Trifluorotoluene		70 130
		% Recovery
		111

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-INT2  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506767-02

Sampled: 06/08/95  
Received: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/21/95

Attention: Marc Briggs  
QC Batch Number: GC061495BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70                  130	92

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Marc Briggs

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-INT1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506767-03

Sampled: 06/08/95  
Received: 06/13/95  
Analyzed: 06/15/95  
Reported: 06/21/95

QC Batch Number: GC061595BTEX22A  
Instrument ID: GCHP22

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

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

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	100

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Vickie Tague Clark  
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  
359 Bel Marin Keys, Suite 20  
Novato, CA 94949

Attention: Marc Briggs

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-EFF1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506767-04

Sampled: 06/08/95  
Received: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/21/95

QC Batch Number: GC061495BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 130 78

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Marc Briggs

Client Proj. ID: 201011, Exxon 7-3006  
Sample Descript: W-EFF2  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506767-05

Sampled: 06/08/95  
Received: 06/13/95  
Analyzed: 06/14/95  
Reported: 06/21/95

QC Batch Number: GC061495BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	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**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

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

Work Order #: 9506767 -01, 3

Reported: Jun 26, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061595BTEX22A	GC061595BTEX22A	GC061595BTEX22A	GC061595BTEX22A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	950645401	950645401	950645401	950645401
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/15/95	6/15/95	6/15/95	6/15/95
Analyzed Date:	6/15/95	6/15/95	6/15/95	6/15/95
Instrument I.D. #:	GCHP22	GCHP22	GCHP22	GCHP22
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	9.7	10	29
MS % Recovery:	100	97	100	97
Dup. Result:	10	9.7	10	30
MSD % Recov.:	100	97	100	100
RPD:	0.0	0.0	0.0	3.4
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100
--	--	--	--

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

Client Project ID: 201011, Exxon 7-3006  
Matrix: Liquid  
Work Order #: 9506767-02, 4-5

Reported: Jun 26, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC061495BTEX07A	GC061495BTEX07A	GC061495BTEX07A	GC061495BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	950666803	950666803	950666803	950666803
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/14/95	6/14/95	6/14/95	6/14/95
Analyzed Date:	6/14/95	6/14/95	6/14/95	6/14/95
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	32
MS % Recovery:	110	110	110	107
Dup. Result:	11	11	11	32
MSD % Recov.:	110	110	110	107
RPD:	0.0	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

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

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

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

Please Note:

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



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

EXXON COMPANY, U.S.A.

P O Box 2180, Houston, TX 77002-7426

## **CHAIN OF CUSTODY**

Page 1 of 1



Sequoia  
Analytical

680 Chesapeake Drive  
404 N. Wiget Lane  
819 Striker Avenue, Suite 8

Redwood City, CA 94063  
Walnut Creek, CA 94598  
Sacramento, CA 95834

(415) 364-9608 FAX (415) 364-9723  
(510) 988-9600 FAX (510) 988-9673  
(916) 921-9600 FAX (916) 921-0100

JUL 07 1995

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

Attention: Marc Briggs

Client Proj. ID: 201011X, Exxon 7-3006  
Sample Descript: W-INF1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506138-01

Sampled: 06/27/95  
Received: 06/28/95  
Analyzed: 06/30/95  
Reported: 07/03/95

QC Batch Number: GC063095BTEX18A  
Instrument ID: GCHP18

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	2000	4500
Benzene	20	1700
Toluene	20	99
Ethyl Benzene	20	35
Xylenes (Total)	20	220
Chromatogram Pattern:		Gas
Surrogates		
Trifluorotoluene	Control Limits % 70	% Recovery 130

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Marc Briggs

Client Proj. ID: 201011X, Exxon 7-3006  
Sample Descript: W-INF2  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506I38-02

Sampled: 06/27/95  
Received: 06/28/95  
Analyzed: 06/30/95  
Reported: 07/03/95

QC Batch Number: GC063095BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	810
Benzene	2.5	420
Toluene	2.5	20
Ethyl Benzene	2.5	7.9
Xylenes (Total)	2.5	58
Chromatogram Pattern:		Gas
Surrogates		
Trifluorotoluene	Control Limits % 70 130	% Recovery 88

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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

Attention: Marc Briggs

Client Proj. ID: 201011X, Exxon 7-3006  
Sample Descript: W-INT1  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506138-03

Sampled: 06/27/95  
Received: 06/28/95  
Analyzed: 06/30/95  
Reported: 07/03/95

QC Batch Number: GC063095BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70                  130	89

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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

Attention: Marc Briggs

Client Proj. ID: 201011X, Exxon 7-3006  
Sample Descript: W-INT2  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506138-04

Sampled: 06/27/95  
Received: 06/28/95

Analyzed: 06/30/95  
Reported: 07/03/95

QC Batch Number: GC063095BTEX07A  
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	0.53
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70                  130	% Recovery 104

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

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

Client Proj. ID: 201011X, Exxon 7-3006  
Sample Descript: W-EFF  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506I38-05

Sampled: 06/27/95  
Received: 06/28/95  
Analyzed: 06/30/95  
Reported: 07/03/95

Attention: Marc Briggs  
QC Batch Number: GC063095BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates		
Trifluorotoluene	Control Limits % 70      130	% Recovery 86

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

**SEQUOIA ANALYTICAL - ELAP #1210**

Vickie Tague Clark  
Project Manager



Sequoia  
Analytical

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

Attention: Marc Briggs

Client Proj. ID: 201011X, Exxon 7-3006  
Sample Descript: W-EFF2  
Matrix: LIQUID  
Analysis Method: 8015Mod/8020  
Lab Number: 9506I38-06

Sampled: 06/27/95  
Received: 06/28/95  
Analyzed: 06/30/95  
Reported: 07/03/95

QC Batch Number: GC063095BTEX07A  
Instrument ID: GCHP07

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

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	84

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 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 #: 9506I38 -01

Reported: Jul 5, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC063095BTEX18A	GC063095BTEX18A	GC063095BTEX18A	GC063095BTEX18A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	S. Mann	S. Mann	S. Mann	S. Mann
MS/MSD #:	9506J3901	9506J3901	9506J3901	9506J3901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/30/95	6/30/95	6/30/95	6/30/95
Analyzed Date:	6/30/95	6/30/95	6/30/95	6/30/95
Instrument I.D. #:	GCHP18	GCHP18	GCHP18	GCHP18
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.5	9.7	9.8	30
MS % Recovery:	95	97	98	100
Dup. Result:	9.7	9.9	9.9	30
MSD % Recov.:	97	99	99	100
RPD:	2.1	2.0	1.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

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

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

Please Note:

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

**SEQUOIA ANALYTICAL**

Vickie Tague Clark  
Project Manager



**Sequoia  
Analytical**

680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8	Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834	(415) 364-9600 (510) 988-9600 (916) 921-9600	FAX (415) 364-9233 FAX (510) 988-9673 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 #: 9506I38 -02-06

Reported: Jul 5, 1995

### QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC063095BTEX07A	GC063095BTEX07A	GC063095BTEX07A	GC063095BTEX07A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	R. Burton	R. Burton	R. Burton	R. Burton
MS/MSD #:	9506H7303	9506H7303	9506H7303	9506H7303
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	6/30/95	6/30/95	6/30/95	6/30/95
Analyzed Date:	6/30/95	6/30/95	6/30/95	6/30/95
Instrument I.D. #:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	10	11	10	30
MS % Recovery:	100	110	100	100
Dup. Result:	11	11	10	30
MSD % Recov.:	110	110	100	100
RPD:	9.5	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

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

MS/MSD	71-133	72-128	72-130	71-120
--------	--------	--------	--------	--------

SEQUOIA ANALYTICAL

Vickie Tague Clark  
Project Manager

Please Note:

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



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

# EXXON COMPANY, U.S.A.

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

## CHAIN OF CUSTODY

Consultant's Name: Environmental Resolutions Inc							Page <u>1</u> of <u>1</u>					
Address: 359 Bel Marin Keys Blvd Suite 20 Novato Ca 94949							Site Location: 720 High Street					
Project #: 201011X			Consultant Project #:				Consultant Work Release #:					
Project Contact: Marc Briggs			Phone #: 415-382-5905				Laboratory Work Release #: 19432503					
EXXON Contact: Maria Gruenster			Phone #: 510-246-8776				EXXON RAS #: 7-3006					
Sampled by (print): Scott Graham			Sampler's Signature: <u>Scott Graham</u>				Oakland, Ca					
Shipment Method:			Air Bill #:									
TAT: <input type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> 72 hr <input type="checkbox"/> 96 hr <input checked="" type="checkbox"/> Standard (10 day)							ANALYSIS REQUIRED [ 9506138 ]					
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: _____
W-INF1	6/27/93	14:53	Water	HCL ICE	3	01 A-C	X					
W-INF2	/	14:49	/	/	3	02	X					
W-INT1	/	14:45	/	/	3	03	X					
W-INT2	/	14:41	/	/	3	04	X					
W-EFF	/	14:34	/	/	2	05 A,B	X					
W-EFF2	14:36	/	/	/	1	06 A	X					
RELINQUISHED BY / AFFILIATION			Date	Time	ACCEPTED / AFFILIATION			Date	Time	Additional Comments		
<u>Scott Graham</u> <u>Fulfiller</u>			6/28	10:15	<u>Fulfiller</u>			6/28	10:15			
			6/28									
					<u>J. Bang</u>			6/28/93	11:40			

Pink - Client

Yellow - Sequoia

White - Sequoia

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

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

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

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

**ASSUMPTIONS:**

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

**SAMPLE DATA AND CALCULATIONS**

Date	Time	Temp deg F	Press in H <sub>2</sub> O	HC conc mg/M <sup>3</sup>	Air flow 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 = 14.7 psia, 760 mm Hg, or 407 in H<sub>2</sub>O. T<sub>abs</sub> = 460 + T deg F

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

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

$$\begin{array}{l} \text{hr} \quad \text{min} \quad \text{cu ft} \quad M^3 \quad g \quad lb \\ \hline \text{basis} \quad \times \quad \text{hr} \quad \times \quad \text{min} \quad \times \quad T_{corr} \quad \times \quad P_{corr} \quad \times \quad \frac{\text{cu ft}}{M^3} \quad \times \quad \frac{g}{M^3} \quad \times \quad \frac{lb}{g} \quad = \quad \frac{lb}{basis} \\ \hline 21 \quad \times \quad 60 \quad \times \quad 95 \quad \times \quad 0.98 \quad \times \quad 0.97 \quad \times \quad 0.0283 \times 1.050 \times 1/454 = 7.4 \text{ lb.} \end{array}$$

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

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