

**ExxonMobil**  
**Refining & Supply Company**  
Global Remediation

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Gene N. Ortega  
Project Manager  
Global Remediation – US Retail



**ExxonMobil**  
**Refining & Supply**

July 30, 2003

Ms. Eva Chu  
Alameda County Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, Room 250  
Alameda, California 94502-6577

*Re: Q4 2003*  
**Alameda County**

AUG 01 2003

**Environmental Health**

**RE: Former Exxon RAS #7-0104/1725 Park Street, Alameda, California.**

Dear Ms. Chu:

Attached for your review and comment is a letter report entitled *Quarterly Groundwater Monitoring Report, Second Quarter 2003*, dated July 30, 2003, for the above-referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details groundwater monitoring, sampling, and remedial activities at the subject site.

If you have any questions or comments, please contact me at (925) 246-8747.

Sincerely,

A handwritten signature in black ink, appearing to read "Gene N. Ortega". It is followed by a short horizontal line.

Gene N. Ortega  
Project Manager

Attachment: ERI's Quarterly Groundwater Monitoring Report, Second Quarter 2003, dated July 30, 2003.

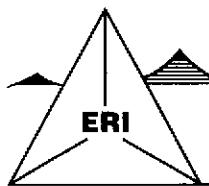
cc

w/ attachment

Mr. Stephen Hill, California Regional Water Quality Control Board, San Francisco Bay Region  
Mr. Joseph A. Aldridge, Valero Energy Corporation

w/o attachment

Ms. Paula Sime, Environmental Resolutions, Inc.



**ENVIRONMENTAL RESOLUTIONS, INC.**

July 30, 2003  
ERI 250613.Q032

Mr. Gene N. Ortega  
ExxonMobil Oil Corporation  
2300 Clayton Road, Suite 1250  
Concord, California 94520

*PCX 4/6*  
**Alameda County**  
**AUG 01 2003**  
**Environmental Health**

Subject: Quarterly Groundwater Monitoring and Remediation Status Report, Second Quarter 2003, Former Exxon Service Station 7-0104, 1725 Park Street, Alameda, California.

Mr. Ortega:

At the request of ExxonMobil Oil Corporation (ExxonMobil), Environmental Resolutions, Inc. (ERI) performed the second quarter 2003 groundwater monitoring and sampling activities at the subject site. The purpose of quarterly monitoring and sampling is to evaluate concentrations of dissolved hydrocarbons in groundwater and the effectiveness of remedial actions. The location of the site is shown on the Site Vicinity Map (Plate 1). The locations of select site features are shown on the Generalized Site Plan (Plate 2).

#### **GROUNDWATER MONITORING AND SAMPLING**

On May 2, 2003, ERI measured the depth to water (DTW) and collected groundwater samples from select wells for laboratory analysis. The quarterly groundwater monitoring event for this site was scheduled concurrently with Alisto Engineering Group (Alisto) of Lafayette, California, the environmental consultant for the Shell-branded Station (former Xtra Oil Company) site at 1701 Park Street, Alameda, California. Groundwater monitoring and sampling were performed in accordance with ERI's groundwater sampling protocol (Attachment A). Cumulative groundwater monitoring data for the Shell-branded site are summarized in Attachment B.

Historical and recent monitoring data are summarized in Table 1. A Groundwater Elevation Map is included as Plate 3. Due to ongoing groundwater and soil vapor extraction (SVE), the hydraulic gradient and groundwater flow direction may be affected and were not calculated.

#### **Laboratory Analyses and Results**

ERI submitted groundwater samples to Test America Incorporated (Test America), a California state-certified laboratory, under Chain-of-Custody protocol. The samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg); total petroleum hydrocarbons as diesel (TPHd); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and methyl tertiary butyl ether (MTBE). The specific methods of analysis are listed in the notes in Table 1. The results of analyses are also presented in Table 1 and are shown on Plate 2. The laboratory analysis report and Chain-of-Custody record are attached (Attachment C).

## SOIL AND GROUNDWATER REMEDIATION

### Air Sparge/Soil Vapor Extraction

The air sparge (AS)/SVE system began operation on February 16, 1998. ERI assumed operation of the system on April 1, 2000. The operation and performance data provided by the previous consultant are presented in Attachment D. The AS/SVE system was shutdown on March 24, 2000, pending system evaluation and retrofit. At the completion of retrofit activities, ERI restarted the system on June 28, 2000. Operational and performance data collected by ERI are presented in Table 2. The laboratory analysis report and Chain-of-Custody record for the second quarter 2003 are attached (Attachment C).

The AS/SVE system currently consists of six AS wells, two SVE wells, a horizontal SVE trench, a moisture separator, a Siemens 100 standard-cubic-feet-per-minute (scfm) vacuum blower, a Gast AS compressor, and two 500-pound vapor-phase granular activated carbon (GAC) vessels. ERI's standard operating procedure for calculating pounds of hydrocarbons in air stream is attached (Attachment E).

### Groundwater Extraction and Treatment

The GRS is designed to remove and treat separate-phase hydrocarbons and groundwater with dissolved hydrocarbons. Pneumatic pumps are used to extract groundwater from extraction wells. Subsurface and above ground piping are used to transfer extracted groundwater to the treatment system. A transfer pump and polyvinyl chloride (PVC) piping are used to direct the water stream through sediment filters and liquid-phase GAC vessels connected in series. The treated groundwater is discharged to the sanitary sewer under East Bay Municipal Utilities District (EBMUD) Discharge Permit No. 50266631.

The GRS was operational from Oct 10, 1994, through March 28, 2000. Cumulative GRS flow rates, total volume extracted, and influent, intermediate, and effluent sample concentrations are presented in Table 3.

ERI retrofitted the GRS system in April 2002. ERI replaced the system's particulate filter, transfer pump, and totalizer. In addition, repairs and/or service was performed on the system compressor, holding tank, control panel, and secondary containment and compound. All other components of the GRS system were checked and found to be in good condition. At the completion of retrofit activities, ERI restarted the system on June 5, 2002. Cumulative GRS flow rates, total volume extracted, and influent, intermediate, and effluent sample concentrations are presented in Table 4. The laboratory analysis report and Chain-of-Custody record are attached (Attachment C). ERI is currently extracting water from extraction wells EW1 and EW3.

**SUMMARY AND STATUS OF INVESTIGATION**

The GRS system was shut down, locked out, and tagged out on November 20, 2002, due to a holding tank transfer pump failure. The pump was replaced on January 3, 2003. The system was re-started and adjusted on January 15, 2003.

The following table presents the estimated amounts of gasoline hydrocarbons removed by the AS/SVE system since the last reporting period and since startup.

Period	Mass of TPHg Removed (pounds)	Mass of Benzene Removed (pounds)
2/12/03-5/7/03	17.89	0.20
To Date:	<894.46	<9.67

The following tables present the estimated amounts of hydrocarbons removed by the GRS since startup.

**Old System:**

Period	Mass of TPHg Removed (pounds)	Mass of Benzene Removed (pounds)
10/10/94 - 3/28/00	<29.2	<4.73

**New System:**

Period	Mass of TPHg Removed (pounds)	Mass of Benzene Removed (pounds)	Mass of MTBE Removed (pounds)
2/12/03-5/7/03	<0.84	<0.03	2.14
To Date:	<31.12	<4.77	5.58

**DOCUMENT DISTRIBUTION**

ERI recommends forwarding copies of this report to:

Ms. Eva Chu  
Alameda County Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, Room 250  
Alameda, California 94502-6577

Mr. Stephen Hill  
California Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, California 94612

Mr. Joseph A. Aldridge  
Valero Energy Corporation  
685 West Third Street  
Hanford, California 93230

**LIMITATIONS**

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

Please call Mr. Scott R. Graham, ERI's assistant project manager for this site, at (415) 382-5989 with any questions regarding this project.

Sincerely,  
Environmental Resolutions, Inc.



Scott R. Graham  
Project Manager



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



- Attachments:
- Table 1: Cumulative Groundwater Monitoring and Sampling Data
  - Table 2: Cumulative Hydrocarbon Removal and Emissions for Soil Vapor Extraction System
  - Table 3: Operation and Performance Data for Groundwater Remediation System
  
  - Plate 1: Site Vicinity Map
  - Plate 2: Generalized Site Plan
  - Plate 3: Groundwater Elevation Map
- Attachment A: Groundwater Sampling Protocol  
Attachment B: Summary of Groundwater Sampling Xtra Oil Company Service Station  
Attachment C: Laboratory Analysis Reports and Chain-of-Custody Records  
Attachment D: AS/SVE System Operation Data from Previous Consultants  
Attachment E: ERI SOP-25: "Hydrocarbons Removed from a Vadose Well"

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
Alameda, California  
(Page 1 of 17)

Well ID # (TOC)	Sampling Date	SUBJ	DTW <.....feet.....>	Elev. <.....>	TPHd <.....>	TPHg <.....>	MTBE <.....>	B .....ug/L.....	T	E	X	Select VOCs <.....>
MW1 (17.35)	09/12/94	NLPH	7.11	10.24	---	1,600a	---	200	1.9	210	6.6	---
	10/01/94	NLPH	7.44	9.91	---	1,400a	---	200	<0.5	160	6.6	---
	01/13/95	NLPH	5.13	12.22	---	2,100a	---	410b	17	280b	89	---
	04/27/95	NLPH	6.57	10.78	---	4,700	---	460	41	340	270	---
	08/03/95	NLPH	7.46	9.89	---	1,900	30	140	<5.0	160	9.9	---
	10/17/95	NLPH	7.67	9.68	---	280	5.5	6.2	<0.5	13	0.75	---
	01/24/96	NLPH	6.52	10.83	---	740	440	21	1.4	38	3.1	---
	04/24/96	NLPH	5.95	11.40	---	7,800	250	200	110	1,000	740	---
	07/26/96	NLPH	7.60	9.75	---	620	23	8.0	0.99	26	1.0	---
	10/30/96	NLPH	8.06	9.29	---	700	33	14	2.9	85	3.5	---
	01/31/97	NLPH	5.12	12.23	---	7,600	<200	420	33	1,400	480	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	NLPH	7.54	9.81	---	580	12	10	<0.5	<0.5	<0.5	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	4.48	12.87	---	820	<2.5c	110	2.8	170	14	---
	04/14/98	---	4.69	12.66	---	---	---	---	---	---	---	---
	07/30/98	NLPH	6.19	11.16	---	2,700	41	210	<5.0	550	<5.0	---
	10/19/98	NLPH	6.72	10.63	---	---	---	---	---	---	---	---
	01/13/99	NLPH	6.52	10.83	---	491	9.78	8.0	<0.5	<0.5	<0.5	---
	04/28/99	---	5.37	11.98	---	---	---	---	---	---	---	---
	07/09/99	NLPH	6.39	10.96	---	1,030	10.6	114	8.07	184	0.644	---
	10/25/99	NLPH	6.68	10.67	---	---	---	---	---	---	---	---
	01/21/00	NLPH	6.20	11.15	---	<50	5.1	<1.0	<1.0	<1.0	<1.0	---
	04/14/00	NLPH	5.18	12.17	---	---	---	---	---	---	---	---
(17.29)	06/16/00	Property transferred to Valero Refining Company.										
	07/05/00	NLPH	5.93	11.42	---	88	200	4.3	<0.5	0.61	<0.5	---
	10/03/00	NLPH	6.51	10.84	---	<50	240	0.72	<0.5	<0.5	<0.5	---
	01/02/01	NLPH	6.17	11.18	---	<50	68	0.75	<0.5	<0.5	<0.5	---
	04/02/01	NLPH	7.42	9.93	---	140	4.3	<0.5	<0.5	4.1	1.1	---
	07/02/01	NLPH	6.27	11.08	---	74	14	<0.5	<0.5	<0.5	<0.5	---
	10/15/01	NLPH	6.64	10.71	---	110	83	2.6	<0.5	<0.5	<0.5	---
	Nov-2001	Well surveyed in compliance with AB 2886 requirements.										
	02/04/02	NLPH	5.08	12.21	52.0	75.0	67.1	0.70	<0.50	0.50	<0.50	---

**TABLE I**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
Alameda, California  
(Page 2 of 17)

Well ID # (TOC)	Sampling Date	SUBJ	DTW feet.....>	Elev. feet.....>	TPHd <.....>	TPHg <.....>	MTBE ug/L.....>	B ug/L.....>	T ug/L.....>	E ug/L.....>	X ug/L.....>	Select VOCs
MW1 (cont.) (17.29)	05/06/02	NLPH	5.48	11.81	129	793	702/1,004g	8.6	<0.5	0.5	1.1	297h
	08/22/02	NLPH	7.14	10.15	602	1,150	181	120	0.8	9.0	3.6	---
	11/08/02	NLPH	6.19	11.10	504	947	182	95.6	4.0	3.7	2.7	---
	02/07/03	NLPH	6.00	11.29	610	1,190	284	89.7	3.8	45.3	13.2	---
	05/02/03	NLPH	5.76	11.53	797	1,020	296	75.8	9.0	5.7	11.9	---
MW2 (16.67)	09/12/94	NLPH	6.71	9.96	---	31,000a	---	4,400	120	1,700	2,100	---
	10/01/94	NLPH	7.22	9.45	---	45,000a	---	4,500	250	1,800	2,400	---
	01/13/95	NLPH	4.46	12.21	---	---	---	---	---	---	---	---
	04/27/95	NLPH	6.92	9.75	---	44,000	---	7,000	840	2,400	3,400	---
	08/03/95	NLPH	6.96	9.71	---	30,000	37,000	4,600	170	1,600	1,100	---
	10/17/1995	NLPH	7.83	8.84	---	45,000	14,000	5,400	190	2,000	1,500	---
	01/24/96	NLPH	6.45	10.22	---	30,000	4,100	5,000	810	2,200	2,200	---
	04/24/96	NLPH	6.00	10.67	---	34,000	22,000	8,700	410	2,200	2,000	---
	07/26/96	NLPH	7.14	9.53	---	40,000	18,000	10,000	<200	1,800	760	---
	10/30/96	NLPH	6.95	9.72	---	43,000	18,000	9,100	<250	2,400	730	---
	01/31/97	NLPH	5.07	11.60	---	28,000	8,000c	2,400	630	1,500	3,300	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	NLPH	7.34	9.33	---	18,000	2,600	2,900	82	1,500	530	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	4.46	12.21	---	29,000	28,000c	5,600	410	1,500	720	---
	04/14/98	---	4.48	12.19	---	---	---	---	---	---	---	---
	07/30/98	NLPH	6.01	10.66	---	24,000	6,300	7,500	<200	1,300	280	---
	10/19/98	NLPH	6.35	10.32	---	---	---	---	---	---	---	---
	01/13/99	NLPH	6.54	10.13	---	18,400	2,200	4,750	211	1,760	45.3	---
	04/28/99	---	5.54	11.13	---	---	---	---	---	---	---	---
	07/09/99	NLPH	6.45	10.22	---	14,100	3,410	4,270	80.1	1,300	339	---
	10/25/99	---	---	---	---	---	---	---	---	---	---	---
	01/21/00	---	---	---	---	---	---	---	---	---	---	---
	02/11/00	NLPH	---	---	---	<50	15	<1.0	<1.0	<1.0	<1.0	---
	04/14/00	NLPH	4.69	11.98	---	---	---	---	---	---	---	---
	06/16/00	Property transferred to Valero Refining Company.										
	07/05/00	NLPH	5.44	11.23	---	150	86	15	<0.5	6.2	2.8	---
	10/03/00	NLPH	6.31	10.36	---	200	2,500	35	0.51	5.1	12	---
	01/02/01	---	---	---	---	---	---	---	---	---	---	---
	04/02/01	NLPH	5.00	11.67	---	<50	680	3.6	<0.5	<0.5	<0.5	---

**TABLE I**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
Alameda, California  
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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
Alameda, California  
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Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev.	TPHd	TPHg	MTBE	B ug/L	T	E	X	Select VOCs
MW3 (cont.)	10/03/00	---	---	---	---	---	---	---	---	---	---	---
(17.11)	01/02/01	NLPH	5.78	11.33	560d	2,700	3,100	1300	8.8	11	21.3	---
	04/02/01	NLPH	4.71	12.40	620	3,700	1,400	1,400	11	36	21	---
	07/02/01	NLPH	5.82	11.29	880	5,300	1,200	1,300	32	30	730	---
	10/15/01	NLPH	6.12	10.99	210e	2,300	1,800	630	2.5	8.2	3.34	---
(17.02)	Nov-2001	Well surveyed in compliance with AB 2886 requirements.										
	02/04/02	NLPH	4.59	12.43	402	8,830	1,420	2,300	166	150	158	---
	05/06/02	NLPH	4.84	12.18	1,300	7,950	544/967.0g	1,930	18.0	80.0	648	194h
	08/22/02	NLPH	6.42	10.60	416	2,270	298	506	3.5	8.0	6.5	---
	11/08/02	NLPH	5.66	11.36	193	1,640	470	330	1.8	4.9	2.7	---
	02/07/03	NLPH	4.99	12.03	800	1,360	662	328	6.5	9.0	35.0	---
	05/02/03	NLPH	4.73	12.29	562	2,500	300	306	4.8	17.5	29.1	---
MW4	09/12/94	NLPH	6.80	10.54	---	5,200a	---	900	57	310	490	---
(17.34)	10/01/94	NLPH	7.09	10.25	---	9,100a	---	1,200	66	360	380	---
	01/13/95	NLPH	4.66	12.68	---	25,000a	---	1,300	200	550	1,000	---
	04/27/95	NLPH	5.54	11.80	---	5,900	---	650	130	350	590	---
	08/03/95	NLPH	6.92	10.42	---	4,200	5,700	1,000	<12	170	140	---
	10/17/95	NLPH	7.50	9.84	---	6,900	1,700	1,300	30	360	380	---
	01/24/96	NLPH	5.81	11.53	---	6,300	830	1,900	46	290	330	---
	04/24/96	NLPH	5.44	11.90	---	5,000	1,600	1,800	<20	190	130	---
	07/26/96	NLPH	7.03	10.31	---	9,100	1,200	1,700	<25	340	280	---
	10/30/96	NLPH	7.57	9.77	---	5,300	1,500	1,100	35	420	300	---
	01/31/97	NLPH	4.22	13.12	---	6,500	40,000	1,200	28	490	130	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	NLPH	7.56	9.78	---	10,000	11,000	1,100	120	470	720	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	3.70	13.64	---	1,700	4,900c	450	6.8	220	73	---
	04/14/98	---	3.81	13.53	---	---	---	---	---	---	---	---
	07/30/98	NLPH	5.96	11.38	---	2,900	2,800	680	<10	220	56	---
	10/19/98	NLPH	6.51	10.83	---	---	---	---	---	---	---	---
	01/13/99	NLPH	6.24	11.10	---	2,140	1,800	146	<10	60.9	16.2	---
	04/28/99	---	4.80	12.54	---	---	---	---	---	---	---	---
	07/09/99	NLPH	6.04	11.30	---	1,300	1,310	322	<2.5	76.1	<2.5	---
	10/25/99	NLPH	6.51	10.83	---	---	---	---	---	---	---	---
	01/21/00	NLPH	5.75	11.59	---	2,200	1,000	410	3.70	40	14.4	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 5 of 17)

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
Alameda, California  
(Page 6 of 17)

Well ID # (TOC)	Sampling Date	SUBJ	DTW <.....feet.....>	Elev.	TPHd	TPHg	MTBE	B .....ug/L.....	T	E	X	Select VOCs
MW5 (cont.)	07/09/99	NLPH	6.08	10.63	---	4,360	2,360	1,780	18.6	45	<5.0	---
(16.71)	10/25/99	NLPH	6.46	10.25	---	---	---	---	---	---	---	---
	01/21/00	NLPH	5.79	10.92	---	2,600	3,100	720	4.7	25	11.3	---
	04/14/00	NLPH	4.57	12.14	---	---	---	---	---	---	---	---
	06/16/00	Property transferred to Valero Refining Company.										
	07/05/00	NLPH	5.37	11.34	---	5,100	380	1,800	14	52	34	---
	10/03/00	NLPH	5.93	10.78	---	5,800	630	2,000	8.9	59	21	---
	01/02/01	NLPH	5.68	11.03	---	4,800	1,100	1,600	9.6	38	15	---
	04/02/01	NLPH	4.87	11.84	---	6,800	1,500	2,000	40	150	49	---
	07/02/01	NLPH	5.77	10.94	---	4,100	960	1,600	20	35	21	---
	10/15/01	NLPH	6.15	10.56	---	3,900	1,000	1,400	8.7	17	15.7	---
(16.64)	Nov-2001	Well surveyed in compliance with AB 2886 requirements.										
	02/04/02	NLPH	4.69	11.95	976	4,380	620	1,440	38.0	84.0	50.0	---
	05/06/02	NLPH	5.00	11.64	1,360	3,810	764/1,220g	1,110	20.0	26.0	26.0	306h/3.20i
	08/22/02	NLPH	6.98	9.66	695	3,190	545	823	9.0	11.0	31.0	---
	11/08/02	NLPH	5.31	11.33	645	3,360	746	1,050	9.4	11.1	17.8	---
	02/07/03	NLPH	5.75	10.89	689	3,550	400	1,100	25.0	65.0	29.0	---
	05/02/03	NLPH	5.34	11.30	934	4,070	439	818	16.9	31.9	28.6	---
MW6	09/12/94	NLPH	6.88	10.68	---	1,500a	---	150	4.4	170	85	---
(17.56)	10/01/94	NLPH	7.15	10.41	---	87a	---	120	<0.5	99	38	---
	01/13/95	NLPH	4.80	12.76	---	9,900a	---	710	220	780	1,100	---
	04/27/95	NLPH	6.14	11.42	---	3,900	---	340	40	460	320	---
	08/03/95	NLPH	6.83	10.73	---	1,100	65	89	<2.5	110	63	---
	10/17/95	NLPH	7.66	9.90	---	8,500	<5.0	410	74	850	110	---
	01/24/96	NLPH	5.86	11.70	---	31,000	<5.0	560	1,500	2,200	7,500	---
	04/24/96	NLPH	5.39	12.17	---	15,000	280	460	570	1,400	3,300	---
	07/26/96	NLPH	6.97	10.59	---	27,000	1,300	270	660	1,600	5,500	---
	10/30/96	NLPH	7.45	10.11	---	28,000	900	490	440	1,800	6,200	---
	01/31/97	NLPH	4.30	13.26	---	7,000	770	190	1,000	380	1,400	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	NLPH	7.57	9.99	---	6,800	1,100	200	<50	300	860	---
	10/08/97	NLPH	7.48	10.08	---	51,000	580	870	7,300	2,600	12,000	---
	01/28/98	NLPH	3.74	13.82	---	15,000	2,400c	650	2,300	900	2,700	---
	04/14/98	NLPH	3.92	13.64	---	25,000	2,100c	850	3,300	1,200	4,300	---
	07/30/98	NLPH	6.09	11.47	---	5,900	910	270	65	500	630	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-0104  
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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
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Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Select VOCs
			<.....feet.....>		<.....>			ug/L.....				
MW8 (cont.)	04/10/97	---	---	---	---	---	---	---	---	---	---	---
(16.33)	07/10/97	---	---	---	---	---	---	---	---	---	---	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	5.11	11.22	---	---	---	---	---	---	---	---
	04/14/98	NLPH	5.02	11.31	---	<50	<2.5	<0.5	<0.5	<0.5	<0.5	---
	07/30/98	NLPH	5.84	10.49	---	<50	6.6	<0.5	<0.5	<0.5	<0.5	---
	10/19/98	NLPH	6.07	10.26	---	<50	<2.5	<0.5	<0.5	<0.5	<0.5	---
	01/13/99	NLPH	5.59	10.74	---	<50	<2.0	<0.5	<0.5	<0.5	<0.5	---
	04/28/99	NLPH	5.38	10.95	---	<50	<0.5c	<0.5	<0.5	<0.5	<0.5	ND
	07/09/99	NLPH	5.71	10.62	---	<50	3.01	<0.5	<0.5	<0.5	<0.5	---
	10/25/99	NLPH	6.15	10.18	---	<50	<1.0	<1.0	<1.0	<1.0	<1.0	---
	01/21/00	NLPH	6.51	9.82	---	<50	<1.0	<1.0	<1.0	<1.0	<1.0	---
	04/14/00	Brown	5.54	10.79	---	<50	<1	<1	<1	<1	<1	---
	06/16/00	Property transferred to Valero Refining Company.										---
	07/05/00	NLPH	5.67	10.66	---	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	10/03/00	NLPH	6.02	10.31	---	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	01/02/01	NLPH	5.95	10.38	140d	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	04/02/01	---	---	---	---	---	---	---	---	---	---	---
	07/02/01	NLPH	5.76	10.57	<50	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	10/15/01	NLPH	6.19	10.14	<50	<50	<2	<0.5	<0.5	<0.5	<0.5	---
(16.24)	Nov-2001	Well surveyed in compliance with AB 2886 requirements.										---
	02/04/02	f	---	---	---	---	---	---	---	---	---	---
	05/06/02	NLPH	5.31	10.93	<50	<50.0	0.5/<0.50g	<0.5	<0.5	<0.5	<0.5	ND
	08/22/02	NLPH	6.07	10.17	<50	<50.0	<0.5	<0.5	<0.5	<0.5	<0.5	---
	11/08/02	NLPH	5.91	10.33	<50	<50.0	<0.5	<0.5	<0.5	<0.5	<0.5	---
	02/07/03	NLPH	5.34	10.90	<50	<50.0	<0.5	<0.5	<0.5	<0.5	<0.5	---
	05/02/03	NLPH	5.27	10.97	<50	<50.0	<0.5	<0.50	<0.5	<0.5	<0.5	---
MW9	09/12/94	NLPH	6.84	8.78	---	<50a	---	<0.5	<0.5	<0.5	<0.5	---
(15.62)	10/01/94	NLPH	6.97	8.65	---	<50a	---	<0.5	<0.5	<0.5	<0.5	---
	01/13/95	NLPH	6.18	9.44	---	<50a	---	<0.5	<0.5	<0.5	<0.5	---
	04/27/95	NLPH	6.58	9.04	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	08/03/95	NLPH	6.72	8.90	---	<50	<2.5	<0.5	<0.5	<0.5	<0.5	---
	10/17/95	NLPH	7.09	8.53	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	01/24/96	NLPH	6.46	9.16	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	04/24/96	NLPH	6.43	9.19	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
Alameda, California  
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Well ID # (FOC)	Sampling Date	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B ug/L.....	T	E	X	Select VOCs
			<.....feet.....>		<.....>							>
MW9 (cont.)	07/26/96	NLPH	6.80	8.82	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
(15.62)	10/30/96	NLPH	6.94	8.68	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	01/31/97	NLPH	6.10	9.52	---	---	---	---	---	---	---	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	---	---	---	---	---	---	---	---	---	---	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	5.66	9.96	---	---	---	---	---	---	---	---
	04/14/98	---	---	---	---	---	---	---	---	---	---	---
	07/30/98	NLPH	6.17	9.45	---	---	---	---	---	---	---	---
	10/19/98	NLPH	6.40	9.22	---	---	---	---	---	---	---	---
	01/13/99	NLPH	6.28	9.34	---	---	---	---	---	---	---	---
	04/28/99	NLPH	5.87	9.75	---	<50	<0.5c	<0.5	<0.5	<0.5	<0.5	---
	07/09/99	NLPH	6.24	9.38	---	<50	<2.0	<0.5	<0.5	<0.5	<0.5	---
	10/25/99	NLPH	6.67	8.95	---	<50	<1.0	<1.0	<1.0	<1.0	<1.0	---
	01/21/00	NLPH	6.93	8.69	---	<50	<1.0	<1.0	<1.0	<1.0	<1.0	---
	04/14/00	Turbid	6.05	9.57	---	<50	<1	<1	<1	<1	<1	---
	06/16/00	Property transferred to Valero Refining Company.										
	07/05/00	NLPH	6.34	9.28	---	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	10/03/00	NLPH	6.52	9.10	---	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	01/02/01	NLPH	6.53	9.09	---	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	04/02/01	NLPH	6.21	9.41	---	<50	<2	<0.5	<0.5	0.57	0.73	---
	07/02/01	NLPH	6.40	9.22	---	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	10/15/01	NLPH	6.65	8.97	---	<50	<2	<0.5	<0.5	<0.5	<0.5	---
(15.56)	Nov-2001	Well surveyed in compliance with AB 2886 requirements.										
	02/04/02	NLPH	4.77	10.79	<50.0	<50.0	0.50	<0.50	<0.50	<0.50	<0.50	---
	05/06/02	NLPH	6.29	9.27	<50	<50.0	<0.5/<0.50g	<0.5	<0.5	<0.5	<0.5	ND
	08/22/02	NLPH	6.70	8.86	<50	<50.0	<0.5	<0.5	<0.5	<0.5	<0.5	---
	11/08/02	NLPH	6.55	9.01	<50	<50.0	<0.5	<0.5	<0.5	<0.5	<0.5	---
	02/07/03	NLPH	6.35	9.21	<50	<50.0	<0.5	<0.5	<0.5	<0.5	<0.5	---
	05/02/03	NLPH	6.16	9.40	91	<50.0	<0.5	<0.50	<0.5	<0.5	<0.5	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
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Well ID # (TOC)	Sampling Date	SUBJ	DTW <.....feet.....>	Elev.	TPHd	TPHg	MTBE	B .....ug/L.....	T	E	X	Select VOCs >
MW10 (16.79)	09/12/94	NLPH	7.04	9.75	---	71a	---	<0.5	<0.5	1.6	<0.5	---
	10/01/94	NLPH	7.30	9.49	---	330a	---	1.1	<0.5	2.8	0.73	---
	01/13/95	NLPH	6.04	10.75	---	90a	---	<0.5	<0.5	<0.5	<0.5	---
	04/27/95	NLPH	6.66	10.13	---	140	---	<0.5	<0.5	5.4	1.3	---
	08/03/95	NLPH	7.23	9.56	---	150	<2.5	<0.5	<0.5	<0.5	<0.5	---
	10/17/95	NLPH	7.93	8.86	---	<50	95	<0.5	<0.5	<0.5	<0.5	---
	01/24/96	NLPH	6.43	10.36	---	760	24	1.6	0.52	62	28	---
	04/24/96	NLPH	6.42	10.37	---	110	6.8	<0.5	<0.5	7.1	<0.5	---
	07/26/96	NLPH	7.47	9.32	---	140	<5.0	<0.5	<0.5	12	0.86	---
	10/30/96	NLPH	7.88	8.91	---	<50	5.6	<0.5	<0.5	<0.5	<0.5	---
	01/31/97	NLPH	5.88	10.91	---	<50	10	<0.5	<0.5	<0.5	<0.5	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	NLPH	7.32	9.47	---	<50	<2.5	<0.5	<0.5	<0.5	<0.5	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	12/12/97	Well destroyed.		---	---	---	---	---	---	---	---	---
MW11 (18.04)	10/17/95	NLPH	7.72	10.32	---	34,000	890	3,800	150	950	4,500	---
	01/24/96	NLPH	5.97	12.07	---	44,000	<500	3,800	1,200	2,100	9,800	---
	04/24/96	NLPH	5.84	12.20	---	34,000	720	2,900	1,400	1,700	8,300	---
	07/26/96	NLPH	6.98	11.06	---	39,000	800	4,600	4,200	950	9,500	---
	10/30/96	NLPH	7.54	10.50	---	53,000	990	4,200	3,600	2,100	9,600	---
	01/31/97	NLPH	5.00	13.04	---	23,000	310c	170	2,500	940	4,300	---
	04/10/97	NLPH	---	---	---	29,000	200	1,200	440	970	6,400	---
	07/10/97	NLPH	7.30	10.74	---	42,000	690	1,700	870	1,900	12,000	---
	10/08/97	NLPH	7.62	10.42	---	42,000	1,100	1,700	2,500	1,400	9,900	---
	01/28/98	NLPH	4.77	13.27	---	35,000	6,800c	2,400	3,500	1,700	7,900	---
	04/14/98	NLPH	4.68	13.36	---	15,000	1,200c	1,700	250	500	2,000	---
	07/30/98	NLPH	6.33	11.71	---	24,000	1,700	1,600	560	1,000	4,300	---
	10/19/98	NLPH	6.65	11.39	---	29,000	1,700	1,200	2,500	920	4,900	---
	01/13/99	NLPH	6.42	11.62	---	50,900	1,920	2,210	6,440	2,030	10,600	---
	04/28/99	NLPH	5.30	12.74	---	59,400	2,390c	3,790	4,260	1,790	2,970	---
	07/09/99	NLPH	6.22	11.82	---	51,500	4,630	5,890	5,340	2,370	12,700	---
	10/25/99	NLPH	6.77	11.27	---	51,000	1,700	3,900	5,800	2,300	12,300	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**

Former Exxon Service Station 7-0104  
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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
Alameda, California  
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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
Alameda, California  
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Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B ug/L.....	T	E	X	Select VOCs
			<.....feet.....>		<.....>			.....ug/L.....				
EW2	09/12/94	NLPH	6.09	9.96	---	8,800a	---	2,000	79	180	290	---
(16.05)	10/01/94	NLPH	7.32	8.73	---	9,500a	---	1,400	6.7	700	310	---
	01/13/95	NLPH	14.38	1.67	---	5,700a	---	930	270	21	280	---
	04/27/95	NLPH	15.23	0.82	---	---	---	---	---	---	---	---
	08/03/95	NLPH	7.19	8.86	---	830	1,600	170	27	36	64	---
	10/17/95	NLPH	18.97	-2.92	---	180	3,600	<0.5	<0.5	<0.5	5.1	---
	01/24/96	NLPH	20.32	-4.27	---	1,700	6,400	290	82	14	170	---
	04/24/96	NLPH	9.46	6.59	---	3,500	7,300	670	200	110	490	---
	07/26/96	NLPH	16.50	-0.45	---	1,400	14,000	250	56	10	220	---
	10/30/96	NLPH	20.30	-4.25	---	1,500	13,000	200	44	8.8	190	---
	01/31/97	NLPH	19.21	-3.16	---	---	---	---	---	---	---	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	---	---	---	---	---	---	---	---	---	---	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	3.35	12.70	---	---	---	---	---	---	---	---
	04/14/98	NLPH	3.45	12.60	---	---	---	---	---	---	---	---
	07/30/98	NLPH	11.50	4.55	---	---	---	---	---	---	---	---
	10/19/98	NLPH	5.67	10.38	---	---	---	---	---	---	---	---
	01/13/99	NLPH	9.57	6.48	---	---	---	---	---	---	---	---
	04/28/99	NLPH	10.15	5.90	---	---	---	---	---	---	---	---
	06/16/00	Property transferred to Valero Refining Company.										
(16.07)	Nov-2001	Well surveyed in compliance with AB 2886 requirements.										
	Not monitored or sampled 07/09/99 through present.											
BW3	09/12/94	NLPH	6.12	9.90	---	300a	---	44	5.9	12	31	---
(16.02)	10/01/94	NLPH	10.52	5.50	---	140a	---	12	0.42	1.7	3.7	---
	01/13/95	NLPH	18.13	-2.11	---	230a	---	4.6	7.6	1.2	6.6	---
	04/27/95	NLPH	23.07	-7.05	---	---	---	---	---	---	---	---
	08/03/95	NLPH	22.90	-6.88	---	<200	1,400	<2.0	<2.0	<2.0	<2.0	---
	10/17/95	NLPH	22.87	-6.85	---	74	2,400	4.4	<0.5	<0.5	<0.5	---
	01/24/96	NLPH	20.97	-4.95	---	120	2,300	16	<0.5	<0.5	<0.5	---
	04/24/96	NLPH	18.10	-2.08	---	180	3,800	34	3.7	8.9	11	---
	07/26/96	NLPH	13.14	2.88	---	180	2,000	45	0.7	<0.5	2.1	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
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**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
Alameda, California  
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Notes:	
SUBJ	= Results of subjective evaluation, liquid-phase hydrocarbon thickness in feet.
TOC	= Elevation of top of well casing; in feet above mean sea level.
DTW	= Depth to water.
Elev.	= Elevation of groundwater in feet above mean sea level.
TPHg	= Total petroleum hydrocarbons as gasoline analyzed using EPA Method 5030/8015 (modified).
TPHd	= Total petroleum hydrocarbons as diesel using EPA Method 5030/8015 (modified).
MTBE	= Methyl tertiary butyl ether analyzed using EPA Method 8021B.
BTEX	= Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
Select VOCs	= Select volatile organic compounds analyzed using EPA Method 8260.
NLPH	= No liquid-phase hydrocarbons.
SPL	= Separate-phase liquids present.
ND	= Not detected at or above laboratory reporting limits.
---	= Not sampled.
ug/L	= Micrograms per liter.
<	= Less than the stated laboratory method reporting limit.
a	= Total volatile hydrocarbons by DHS /LUFT Manual Method.
b	= Results obtained from a 1:10 dilution analyzed on January 17, 1995.
c	= Methyl tertiary butyl ether by EPA Method 8260 (GC/MS).
d	= Diesel-range hydrocarbons reportedly detected in bailer blank; result is suspect.
e	= TPHd was detected in the sample; however, the detections do not resemble the typical diesel pattern.
f	= Well inaccessible.
g	= MTBE analyzed using EPA Method 8260B.
h	= Tertiary butyl alcohol (TBA) detected using EPA Method 8260B.
i	= Di-isopropyl ether (DIPE) detected using EPA Method 8260B.
j	= Ethyl tertiary butyl ether (ETBE) detected using EPA Method 8260B.

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Data prior to second Quarter 2000 provided by Delta Environmental Consultants, Inc.

**TABLE 2**  
**CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR**  
**SOIL VAPOR EXTRACTION SYSTEM**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 1 of 9)

Date	Sample ID	Hour Meter	FIELD MEASUREMENTS					Analytical Laboratory Results		TPHg Removal		Benzene Removal		Benzene Emission Rate	
			Meter Operation	Temp F	Pressure in H <sub>2</sub> O	Vacuum in H <sub>2</sub> O	Flow lfm	scfm	PID ppmv	TPHg mg/m <sup>3</sup>	Benzene mg/m <sup>3</sup>	Per Period Pounds	Cumulative Pounds	Per Period Pounds	Cumulative Pounds
02/16/98	System startup	---	0	---	---	---	---	---	---	770.0	< 1.0	60.8	< 60.8	---	---
03/24/00	System shutdown pending evaluation	12,001												---	---
04/01/00	Environmental Resolutions Inc., assumed operation of the system.														
06/28/00	System upgrades completed, system restarted.														
	A-INF	12,008	7	---	26	---	---	---	770.0						
	A-INT									18.1					
	A-EFF									13.3					
	System shutdown for carbon changeout, 2 x 500-pounds.														
07/11/00	System down upon arrival, restart.														
	A-INF	12,011	3	86	8	4,000	83	207.0	51	< 1.0	0.16	< 61.0	0.00	0.0	
	A-INT									9.1	< 10	< 1.0			
	A-EFF									0.0	< 10	< 1.0			< 0.01
07/20/00	System running upon arrival (VES only). System running on departure.														
	A-INF	12,226	215	78	9	4,500	95	42.3							
	A-INT									2.4					
	A-EFF									0.0					
07/31/00	System down on departure for carbon changeout (2x500 lb).														
	A-INF	12,493	267	87	9	4,500	93	266.0							
	A-INT									73.0					
	A-EFF									41.2					
08/10/00	System down upon arrival for carbon changeout. System running on departure.														
	A-INF	12,733	0	80	30	800	16	53.5	43	< 1	6.27	< 67.2	< 0.13	< 0.14	
	A-INT									0.0	< 10	< 1			
	A-EFF									0.0	< 10	< 1			< 0.001
08/16/00	A-INF	12,874	141	84	31.5	250	5	164.1							
	A-INT									0.0					
	A-EFF									0.0					
08/24/00	System down on departure for carbon changeout.														
	A-INF	13,065	191	76	20	2,400	49	294.0							
	A-INT									23.7					
	A-EFF									2.4					

**TABLE 2**  
**CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR**  
**SOIL VAPOR EXTRACTION SYSTEM**  
Former Exxon Service Station 7-0104  
1725 Park Street  
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Date	Sample ID	FIELD MEASUREMENTS					Flow Ifm	PID ppmv	Analytical Laboratory Results	TPHg Removal		Benzene Removal		Benzene Emission Rate
		Hour Meter Operation	Temp F	Pressure in H <sub>2</sub> O	Vacuum in H <sub>2</sub> O	sclfm				Per Period Pounds	Cumulative Pounds	Per Period Pounds	Cumulative Pounds	lbs/day
09/12/00	System down upon arrival for carbon changeout. System running on departure.													
	A-INF	13,070	5	74	20	2,600	53	247.5	190	2.5	5.09	< 72.3	0.08	< 0.21
	A-INT								0.0	< 10	< 1.0			
	A-EFF								0.0	< 10	< 1.0			< 0.00
09/26/00	A-INF	13,406	336	80	22	2,450	50	448.7						
	A-INT								10.7					
	A-EFF								0.0					
10/12/00	System running on arrival and down upon departure for carbon c/o. Samples taken													
	A-INF	13,786	380	67	24	2,400	50	96.4	55	< 1.0	16.90	< 89.2	< 0.24	< 0.45
	A-INT								72.3	21	< 1.0			
	A-EFF								9.0	< 10	< 1.0			< 0.004
10/30/00	System down upon arrival for carbon changeout. System running on departure.													
	A-INF	13,788	2	56	24	2,450	52	10,024	1,700	15	0.33	< 89.5	0.00	< 0.46
	A-INT								59.1	< 10	< 1.0			
	A-EFF								0.0	< 10	< 1.0			< 0.005
11/08/00	A-INF	14,008	220	60	25	2,300	48	102.6	29	< 1.0	35.42	< 125.0	< 0.33	< 0.79
	A-INT								41.8	< 10	< 1.0			
	A-EFF								Stet	< 10	< 1.0			< 0.004
11/21/00	System running upon arrival. System down upon departure for carbon changeout.													
	A-INF	14,314	306	68	25	2,300	47	322.0						
	A-INT								32.3					
	A-EFF								42.9					
12/06/00	System down upon arrival for carbon changeout. System down upon departure for carbon changeout													
12/11/00	System down on arrival due to carbon changeout. Running on departure.													
	A-INF	14,316	2	52	24	2,400	51	957	240	2.1	7.66	< 132.6	0.09	< 0.87
	A-INT								1.2	< 10	< 1.0			
	A-EFF								3.1	< 10	< 1.0			< 0.005
12/27/00	A-INF	14,697	381	56	26	2,600	54	192.1						
	A-INT								4.8					
	A-EFF								0.0					
01/09/01	A-INF	15,012	315	56	25	2,400	50	82.4	32	< 1.0	17.95	< 150.6	< 0.20	< 1.08
	A-INT								23.2	< 10	< 1.0			
	A-EFF								0.0	< 10	< 1.0			< 0.005
01/23/01	System down on departure for carbon changeout.													
	A-INF	15,353	341	60	26	2,300	48	485.0						
	A-INT								35.2					
	A-EFF								20.7					

**TABLE 2**  
**CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR**  
**SOIL VAPOR EXTRACTION SYSTEM**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
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Date	Sample ID	Hour Meter	FIELD MEASUREMENTS					Analytical Laboratory Results		TPHg Removal		Benzene Removal		Benzene	
			Meter Operation	Temp F	Pressure in H <sub>2</sub> O	Vacuum in H <sub>2</sub> O	Flow lfm	scfm	PID ppmv	TPHg mg/m <sup>3</sup>	Benzene mg/m <sup>3</sup>	Per Period Pounds	Cumulative Pounds	Per Period Pounds	Cumulative Pounds
01/31/01	A-INF	15,355	2	45		33	1,500	32	10000						
	A-INT									0					
	A-EFF									0					
02/13/01	A-INF	15,669	314	56		12	4,000	87	37.8	31	< 1.0	5.32	< 155.9	< 0.17	< 1.25
	A-INT									29.5	< 10				
	A-EFF									0	< 10				< 0.008
02/27/01	System down upon departure for C/O.														
	A-INF	15,999	330	70		8	4,000	85	316						
	A-INT									37.5					
	A-EFF									73.6					
03/13/01	System down upon arrival for C/O and running upon departure. Monthly samples taken.														
	A-INF	16,002	3	65		9	4,000	86	5833	1300	6.1	71.70	< 227.6	0.38	< 1.63
	A-INT									190.4	16	< 1.0			
	A-EFF									0	11	< 1.0			< 0.008
03/27/01	System running on arrival and departure.														
	A-INF	16,336	334	62		10	4,000	86	182.6						
	A-INT									16.8					
	A-EFF									0					
04/12/01	System running on arrival and departure.														
	A-INF	16,725	389	72		8	4,000	85	4.8						
	A-INT									2.6					
	A-EFF									0					
04/25/01	System running on arrival and departure.														
	A-INF	17,034	309	80		9	4,000	84	18.6	< 10	< 1.0	< 214.61	< 442.2	< 1.16	< 2.79
	A-INT									9.5	< 10	< 1.0			
	A-EFF									0	26	< 1.0			< 0.008
05/09/01	System running on arrival and departure.														
	A-INF	17,371	337	86		10	4,000	83	11.3	< 10	< 1.0	< 1.05	< 443.3	< 0.10	< 2.90
	A-INT									3.6	< 10	< 1.0			
	A-EFF									5.9	< 10	< 1.0			< 0.007
05/24/01	System running on arrival and departure.														
	A-INF	17,734	363	86		20	3,050	61	6.2						
	A-INT									1.6					
	A-EFF									3.1					
06/04/01	System running on arrival and departure.														
	A-INF	17,992	258	80		40	500	10	496	280	< 1.0	< 15.53	< 458.8	< 0.11	< 3.00
	A-INT									19.7	< 10	< 1.0			
	A-EFF									3.2	< 10	< 1.0			< 0.001

**TABLE 2**  
**CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR**  
**SOIL VAPOR EXTRACTION SYSTEM**  
Former Exxon Service Station 7-0104  
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Date	Sample ID	FIELD MEASUREMENTS						Analytical Laboratory Results	TPHg Removal		Benzene Removal		Benzene Emission Rate	
		Hour Meter Operation	Temp F	Pressure in H <sub>2</sub> O	Vacuum in H <sub>2</sub> O	Flow lfm	PID scfm		TPHg mg/m <sup>3</sup>	Benzene mg/m <sup>3</sup>	Per Period Pounds	Cumulative Pounds	Per Period Pounds	Cumulative Pounds
06/19/01	System running on arrival and departure.													
	A-INF	18,353	361	80		38	500	10	140					
	A-INT								6.4					
	A-EFF								3.0					
07/02/01	System running on arrival and departure.													
	A-INF	18,660	307	80		38	500	10	7.2					
	A-INT								0.0					
	A-EFF								0.0					
07/17/01	System running on arrival and departure.													
	A-INF	19,028	368	75		10	4,000	84	0.0	< 10	< 1.0	< 26.38	< 485.2	< 0.18
	A-INT								0.0	< 10	< 1.0			
	A-EFF								0.0	< 10	< 1.0			< 0.008
08/07/01	System running on arrival and shut down on departure for blower failure													
	A-INF	---	---	---		---	---	---						
	A-INT	---	---	---		---	---	---						
	A-EFF	---	---	---		---	---	---						
08/13/01	System down on arrival, blower removed awaiting replacement.													
08/27/01	System down, awaiting blower replacement.													
09/10/01	System down, awaiting blower replacement.													
10/18/01	System down on arrival, installed blower, and running on departure.													
	A-INF	19,534	506	120		31	4,000	74	568.0					
	A-INT								3.0					
	A-EFF								2.0					
10/24/01	System running on arrival and running upon departure.													
	A-INF	19,673	139	80		41	3,300	63	93.1	72	< 1.0	7.31	< 492.5	< 0.18
	A-INT								7.3	< 10	< 1.0			
	A-EFF								5	< 10	< 1.0			< 0.006
11/07/01	System running on arrival and down upon departure for carbon c/o. Samples taken													
	A-INF	20,012	339	74		45	3,000	58	230.0	55	< 1.0	4.88	< 497.4	< 0.08
	A-INT								27.0	< 10	< 1.0			
	A-EFF								5.1	< 10	< 1.0			< 0.005
11/21/01	System running on arrival and down upon departure for carbon c/o. Samples taken													
	A-INF	20,012	0	150		45	3,000	51	373.0					
	A-INT								0.0					
	A-EFF								0					
12/12/01	System down upon arrival, K.O. tank H/H, and running upon departure.													
12/12/01	A-INF	20,361	349	142		46	3,000	51	98.1	45	1.3	3.55	< 500.9	0.08
	A-INT								1.0	< 10	< 1.0			
	A-EFF								2.7	< 10	< 1.0			< 0.005



**TABLE 2**  
**CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR**  
**SOIL VAPOR EXTRACTION SYSTEM**  
 Former Exxon Service Station 7-0104  
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Date	Sample ID	FIELD MEASUREMENTS						Flow lfm	PID ppmv	Analytical Laboratory Results	TPHg Removal		Benzene Removal		Benzene
		Hour Meter Operation	Temp F	Pressure in H <sub>2</sub> O	Vacuum in H <sub>2</sub> O	scfm	mg/m <sup>3</sup>				Per Period Pounds	Cumulative Pounds	Per Period Pounds	Cumulative Pounds	Emission Rate lbs/day
05/16/02	A-INF	22,592	198	118	7	41	2,800	50	98.1						
	A-INT									3.9					
	A-EFF									3.9					
05/22/02	System running upon arrival and upon departure.														
05/22/02	A-INF	22,731	139	118	7	38	2,800	51	98.1						
	A-INT									3.9					
	A-EFF									3.9					
06/05/02	System running upon arrival and down upon departure for carbon changeout.														
06/05/02	A-INF	23,068	337	118	---	38	3,000	54	101.1						
	A-INT									10.1					
	A-EFF									18.2					
06/19/02	System down upon arrival and running upon departure.														
06/19/02	A-INF	23,068	0	76	---	9	3,000	63	178.8	120.0	0.83	41.86	< 636.2	0.30	< 7.15
	A-INT								0.0	< 10	< 0.10				
	A-EFF								0.0	< 10	< 0.10				< 0.001
07/03/02	System running upon arrival and upon departure.														
07/03/02	A-INF	23,409	341	112	---	25	3,000	57	62.2	33	0.25	5.86	< 642.1	0.04	< 7.19
	A-INT								0.0	< 10	< 0.10				
	A-EFF								0.0	< 10	< 0.10				< 0.001
07/17/02	System down upon arrival and running upon departure.														
07/17/02	A-INF	23,434	25	109	---	70	3,000	50	82.2						
	A-INT									0.0					
	A-EFF									0.0					
07/31/02	System running upon arrival and upon departure.														
07/31/02	A-INF	23,764	330	110	---	21	3,000	58	16.4						
	A-INT									0.0					
	A-EFF									0.0					
08/14/02	System running upon arrival and upon departure.														
08/14/02	A-INF	24,103	339	112	---	16	3,000	58	9.8	19	0.21	3.88	< 645.9	0.03	< 7.23
	A-INT								0.0	< 10	< 0.10				
	A-EFF								0.0	< 10	< 0.10				< 0.001
08/28/02	System running upon arrival and down upon departure.														
08/28/02	A-INF	24,414	311	110	---	16	3,000	58	16.0						
	A-INT									0.0					
	A-EFF									0.0					

**TABLE 2**  
**CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR**  
**SOIL VAPOR EXTRACTION SYSTEM**  
Former Exxon Service Station 7-0104  
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Date	Sample ID	FIELD MEASUREMENTS						Analytical Laboratory Results		TPHg Removal		Benzene Removal		Benzene	
		Hour Meter Operation	Temp F	Pressure in H <sub>2</sub> O	Vacuum in H <sub>2</sub> O	Flow lfm	Flow scfm	PID ppmv	TPHg mg/m <sup>3</sup>	Benzene mg/m <sup>3</sup>	Per Period Pounds	Cumulative Pounds	Per Period Pounds	Cumulative Pounds	Emission Rate lbs/day
<b>11/06/02 System down upon arrival and running upon departure.</b>															
11/06/02	A-INF	24,415	1	106	---	26	3,000	57	1282	1,300	12	44.46	< 690.4	0.41	< 7.64
	A-INT								0.0	< 10	< 0.10				
	A-EFF								0.0	< 10	< 0.10				< 0.001
<b>11/20/02 System running upon arrival and upon departure.</b>															
11/20/02	A-INF	24,754	339	122	---	36	3,300	60	67.6						
	A-INT								1.1						
	A-EFF								0.0						
<b>12/04/02 System running upon arrival and upon departure.</b>															
12/04/02	A-INF	25,084	330	112	---	46	3,200	57	47.5	< 500	< 5.0	< 129.10	< 819.5	< 1.22	< 8.86
	A-INT								0.2	< 100	< 1.0				
	A-EFF								0.0	< 100	< 1.0				< 0.005
<b>12/18/02 System running upon arrival and upon departure. Carbon C/O performed.</b>															
	A-INF	25,422	668	112	7	46	3,000	54	76.1						
	A-INT								2.1						
	A-EFF								0.0						
<b>01/06/03 System running upon arrival and down upon departure for carbon C/O.</b>															
	A-INF	25,875	453	---	---	35	3200	---	372.0						
	A-INT								602.0						
	A-EFF								604.0						
<b>01/15/03 System down on arrival and running on departure.</b>															
01/15/03	A-INF	25,875	0	112	---	45	2,800	50	134.0	110	1.4	< 48.56	< 868.1	< 0.51	< 9.37
	A-INT								1.3	22	< 0.20				
	A-EFF								0.0	< 20	< 0.20				< 0.001
<b>01/29/03 System running upon arrival and departure.</b>															
01/29/03	A-INF	26,210	335	114	---	45	2,700	48	56.9						
	A-INT								0.0						
	A-EFF								0.0						
<b>02/12/03 System running upon arrival and departure.</b>															
02/12/03	A-INF	26,548	338	110	---	44	2,800	51	50.6	24	0.27	8.51	< 876.6	0.11	< 9.47
	A-INT								3.4	90	1.1				
	A-EFF								0.0	< 10	< 0.10				< 0.000
<b>02/26/03 System running upon arrival and departure. Carbon C/O performed</b>															
02/26/03	A-INF	26,884	336	112	---	44	2,300	46	122.9						
	A-INT								1.9						
	A-EFF								0.0						
<b>03/12/03 System running upon arrival and departure. Carbon C/O performed</b>															
	A-INF	27,218	334	120	---	43	2,600	52	30.4	59	0.81	5.33	< 881.9	0.07	< 9.54
	A-INT								0.6	< 10	< 0.10				
	A-EFF								0.1	< 10	< 0.10				< 0.000

**TABLE 2**  
**CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR**  
**SOIL VAPOR EXTRACTION SYSTEM**  
 Former Exxon Service Station 7-0104  
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Date	Sample ID	FIELD MEASUREMENTS				Analytical Laboratory Results			TPHg Removal		Benzene Removal		Benzene		
		Hour Meter Operation	Temp F	Pressure in H <sub>2</sub> O	Vacuum in H <sub>2</sub> O	Flow lfm	scfm	PID ppmv	TPHg mg/m <sup>3</sup>	Benzene mg/m <sup>3</sup>	Per Period Pounds	Cumulative Pounds	Per Period Pounds	Cumulative Pounds	Emission Rate lbs/day
03/26/03	System running upon arrival and departure.														
03/26/03	A-INF	27,555	337	116	---	40	2,700	54	12.4						
	A-INT								2.5						
	A-EFF								0.1						
04/09/03	System running upon arrival and departure.														
04/09/03	A-INF	27,889	334	120	---	40	2,800	56	36.0	57	0.36	7.83	< 889.7	0.08	< 9.62
	A-INT								2.4	< 10	< 0.10				
	A-EFF								1.0	< 10	< 0.10				< 0.001
04/23/03	System running upon arrival and departure.														
04/23/03	A-INF	28,227	338	113	---	39	2,400	48	54.7						
	A-INT								4.0						
	A-EFF								3.7						
05/07/03	System running upon arrival and departure.														
05/07/03	A-INF	28,563	336	118	---	40	2,500	50	8.5	14	0.34	4.73	< 894.5	0.05	< 9.67
	A-INT								1.8	< 10	< 0.10				
	A-EFF								2.2	< 10	< 0.10				< 0.000
05/21/03	System running upon arrival and departure.														
05/21/03	A-INF	28,900	337	127	---	38	2,750	54	15.8						
	A-INT								2.4						
	A-EFF								1.3						
06/04/03	System running on arrival, down on departure for carbon c/o														
	A-INF	29,234	334	121	---	39	2,900	58	81.2						
	A-INT								90.7						
	A-EFF								70.2						
06/18/03	System down on arrival for c/o, running on departure. Samples taken.														
	A-INF	29,237	3	120	---	39	2,800	56	120.0	790	12	53.58	< 948.0	0.82	< 10.49
	A-INT								0.1	< 10	< 0.10				
	A-EFF								0.1	< 10	< 0.10				< 0.001

TABLE 2  
CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR  
SOIL VAPOR EXTRACTION SYSTEM  
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Notes: Data prior to April 1, 2000 provided by Delta Environmental Consultants, Inc.

A-INF = Influent vapor sample collected prior to biofilters.  
A-INT1 = Vapor sample collected after biofilters.  
A-JNT2 = Vapor sample collected after 1st carbon vessel.  
A-JNT3 = Vapor sample collected after 2nd carbon vessel.  
A-EFF = Vapor sample collected from effluent sample port.  
cfm = Cubic feet per minute.  
ppmv = Parts per million by volume.  
mg/M<sup>3</sup> = Milligrams per cubic meter.  
-- = Not sampled/Not measured.

Removal rates are calculated using ERI SOP-25, "Hydrocarbons Removed from A Vadose Well".

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**TABLE 3**  
**OPERATION AND PERFORMANCE DATA FOR**  
**GROUNDWATER REMEDIATION SYSTEM**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
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Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results							TPHg Removal				Benzene Removal				MTBE Removal	
				TPHg <.....>		B ug/L	T ug/L	E ug/L	X ug/L	MTBE ug/L	Per Period lbs.		Cumulative lbs.		Per Period lbs.		Cumulative lbs.		Per Period lbs.	Cumulative lbs.
10/10/94	1,331,420		W-JNF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
12/02/94	1,392,010	0.8	W-INF	<	65	<	1.9	0.9	<0.5	2.4	---		<	0.03	<	0.03	<	0.0006	<	0.00
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
01/13/95	1,415,980	0.4	W-INF	<	1,000	<	0.5	<0.5	<0.5	<0.5	---		0.11		<	0.1	<	0.0002	<	0.00
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
02/23/95	1,494,030	1.3	W-INF	<	57	<	0.5	<0.5	<0.5	2.7	---		0.34		<	0.5	<	0.0003	<	0.00
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
03/14/95	---		W-INF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
04/14/95	1,513,240	0.3	W-INF	<	50	<	0.5	<0.5	<0.5	<0.5	---		<		0.01		<	0.5	<	0.0001
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
05/18/95	1,714,850	4.1	W-INF	NS	---	---	---	---	---	---	---		---		---		---		---	
06/30/95	1,847,330	2.1	W-INF	<	1,700	<	480	23	66	180	---		<		2.44		<	2.9	0.6685	
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
07/12/95	1,908,730	3.6	W-INF	<	290	<	68	<2.0	2.4	5.6	---		0.51		<	3.4	0.1128		<	0.78
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
08/09/95	2,027,830	3.0	W-INF	<	6,600	<	1,700	260	370	550	---		3.42		<	6.9	0.8768		<	1.66
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
09/06/95	2,158,260	3.2	W-INF	<	120	<	17	0.84	1.0	3.0	---		3.65		<	10.5	0.9325		<	2.59
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5	---		---		---		---		---	

**TABLE 3**  
**OPERATION AND PERFORMANCE DATA FOR**  
**GROUNDWATER REMEDIATION SYSTEM**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 2 of 9)

Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results						TPHg Removal			Benzene Removal			MTBE Removal		
				TPHg <.....>	B ug/L <.....>	T ug/L <.....>	E ug/L <.....>	X ug/L <.....>	MTBE ug/L <.....>	Per Period <.....>	Cumulative lbs <.....>							
10/11/95	2,215,310	1.1	W-INF	160	22	0.97	1.2	4.0	---	0.07	< 10.6	0.0093	< 2.60	---	---	---	---	
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5	---	0.20	< 10.8	0.0190	< 2.62	---	---	---	---	
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	---	0.16	< 10.9	0.0145	< 2.63	---	---	---	---	
11/16/95	2,384,880	3.3	W-INF	120	4.9	<0.5	<0.5	5.9	---	0.18	< 11.1	0.0191	< 2.65	---	---	---	---	
			W-JNT	< 50	< 0.5	<0.5	<0.5	<0.5	---	0.48	< 11.6	0.0469	< 2.70	---	---	---	---	
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	---	0.22	< 13.2	0.0339	< 2.89	---	---	---	---	
12/14/95	2,453,200	1.7	W-INF	450	46	16	4.6	65	---	1.92	< 15.1	0.3094	< 3.20	---	---	---	---	
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.73	< 16.8	0.2680	< 3.47	---	---	---	---	
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	---	0.20	< 16.8	0.2680	< 3.47	---	---	---	---	
01/05/96	2,516,900	2.0	W-INF	240	26	2.4	1.2	20	---	0.40	< 12.0	0.0376	< 2.74	---	---	---	---	
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5	---	0.94	< 12.9	0.1196	< 2.86	---	---	---	---	
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	---	0.22	< 13.2	0.0339	< 2.89	---	---	---	---	
02/14/96	2,680,160	2.8	W-INF	470	43	5.5	<0.5	55	---	0.20	< 11.6	0.0469	< 2.70	---	---	---	---	
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.92	< 15.1	0.3094	< 3.20	---	---	---	---	
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.73	< 16.8	0.2680	< 3.47	---	---	---	---	
03/12/96	2,767,820	2.3	W-INF	620	60	9.8	3.9	70	---	0.22	< 13.2	0.0339	< 2.89	---	---	---	---	
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.92	< 15.1	0.3094	< 3.20	---	---	---	---	
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.73	< 16.8	0.2680	< 3.47	---	---	---	---	
04/16/96	2,927,390	3.2	W-INF	790	120	27	8.8	120	---	0.20	< 13.2	0.0339	< 2.89	---	---	---	---	
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.92	< 15.1	0.3094	< 3.20	---	---	---	---	
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.73	< 16.8	0.2680	< 3.47	---	---	---	---	
05/07/96	2,971,100	1.4	W-INF	430	66	2.7	5	32	---	0.22	< 13.2	0.0339	< 2.89	---	---	---	---	
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.92	< 15.1	0.3094	< 3.20	---	---	---	---	
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.73	< 16.8	0.2680	< 3.47	---	---	---	---	
06/11/96	3,109,730	2.8	W-INF	2,900	470	120	19	410	---	0.20	< 13.2	0.0339	< 2.89	---	---	---	---	
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.92	< 15.1	0.3094	< 3.20	---	---	---	---	
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.73	< 16.8	0.2680	< 3.47	---	---	---	---	
07/09/96	3,232,330	3.0	W-INF	490	55	6.2	<0.5	110	---	0.20	< 13.2	0.0339	< 2.89	---	---	---	---	
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.92	< 15.1	0.3094	< 3.20	---	---	---	---	
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	---	1.73	< 16.8	0.2680	< 3.47	---	---	---	---	

**TABLE 3**  
**OPERATION AND PERFORMANCE DATA FOR**  
**GROUNDWATER REMEDIATION SYSTEM**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
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**TABLE 3**  
**OPERATION AND PERFORMANCE DATA FOR**  
**GROUNDWATER REMEDIATION SYSTEM**

**TABLE 3**  
**OPERATION AND PERFORMANCE DATA FOR**  
**GROUNDWATER REMEDIATION SYSTEM**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
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**TABLE 3**  
**OPERATION AND PERFORMANCE DATA FOR**  
**GROUNDWATER REMEDIATION SYSTEM**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 6 of 9)

Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results						TPHg Removal			Benzene Removal			MTBE Removal			
				TPHg <.....	B .....ug/L.....	T	E	X	MTBE >	Per Period <.....lbs.....>	Cumulative <.....lbs.....>								
03/08/99	5,509,090	1.7	W-INF	800	87	16	8.5	140	---	0.30	<	27.7	0.0331	<	4.61	---	---		
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5									
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5									
04/05/99	5,571,890	1.6	W-INF	<	500	36.6	12.2	5.84	20.9	---	<	0.34	<	28.0	0.0323	<	4.64	---	
			W-INT	<	500	<	5.0	<5.0	<5.0	<5.0									
			W-EFF	<	500	<	5.0	<5.0	<5.0	<5.0									
05/06/99	5,621,560	1.1	W-INF		310	45	6.0	0.86	41	---		0.17	<	28.2	0.0169	<	4.66	---	
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5									
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5									
06/07/99	5,706,250	1.8	W-INF	<	250	24.8	<2.5	<2.5	8.74	---	<	0.20	<	28.4	0.0246	<	4.68	---	
			W-INT	<	100	<	1.0	<1.0	<1.0	<1.0									
			W-EFF	<	250	<	2.5	<2.5	<2.5	<2.5									
07/28/99	5,805,010	1.3	W-INF	<	100	7.00	<1.0	2.40	6.40	---	<	0.14	<	28.5	0.0131	<	4.70	---	
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5									
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5									
08/09/99	5,849,280	2.6	W-INF	<	500	17.1	5.88	<5.0	26.8	---	<	0.11	<	28.7	0.0044	<	4.70	---	
			W-INT	<	250	<	2.5	<2.5	<2.5	<2.5									
			W-EFF	<	250	<	2.5	<2.5	<2.5	<2.5									
09/07/99	5,880,860	0.8	W-INF	<	500	20.4	<5.0	<5.0	31.1	---	<	0.13	<	28.8	0.0049	<	4.71	---	
			W-INT	<	50	<	0.5	<0.5	<0.5	<0.5									
			W-EFF	<	50	<	0.5	<0.5	<0.5	<0.5									
10/12/99	5,966,690	1.7	W-INF		100	2	<1.0	<1.0	<1.0	<1.0	---		0.21	<	29.0	0.0080	<	4.71	---
			W-INT	<	50	<	1.0	<1.0	<1.0	<1.0									
			W-EFF	<	50	<	1.0	<1.0	<1.0	<1.0									
11/18/99	5,971,540	0.1	W-INF		660	66	7.8	5.6	57	---		0.02	<	29.0	0.0014	<	4.72	---	
			W-INT	<	50	<	1.0	<1.0	<1.0	<1.0									
			W-EFF	<	50	<	1.0	<1.0	<1.0	<1.0									

**TABLE 3**  
**OPERATION AND PERFORMANCE DATA FOR**  
**GROUNDWATER REMEDIATION SYSTEM**  
**Former Exxon Service Station 7-0104**  
**1725 Park Street**  
**Alameda, California**  
**(Page 7 of 9)**

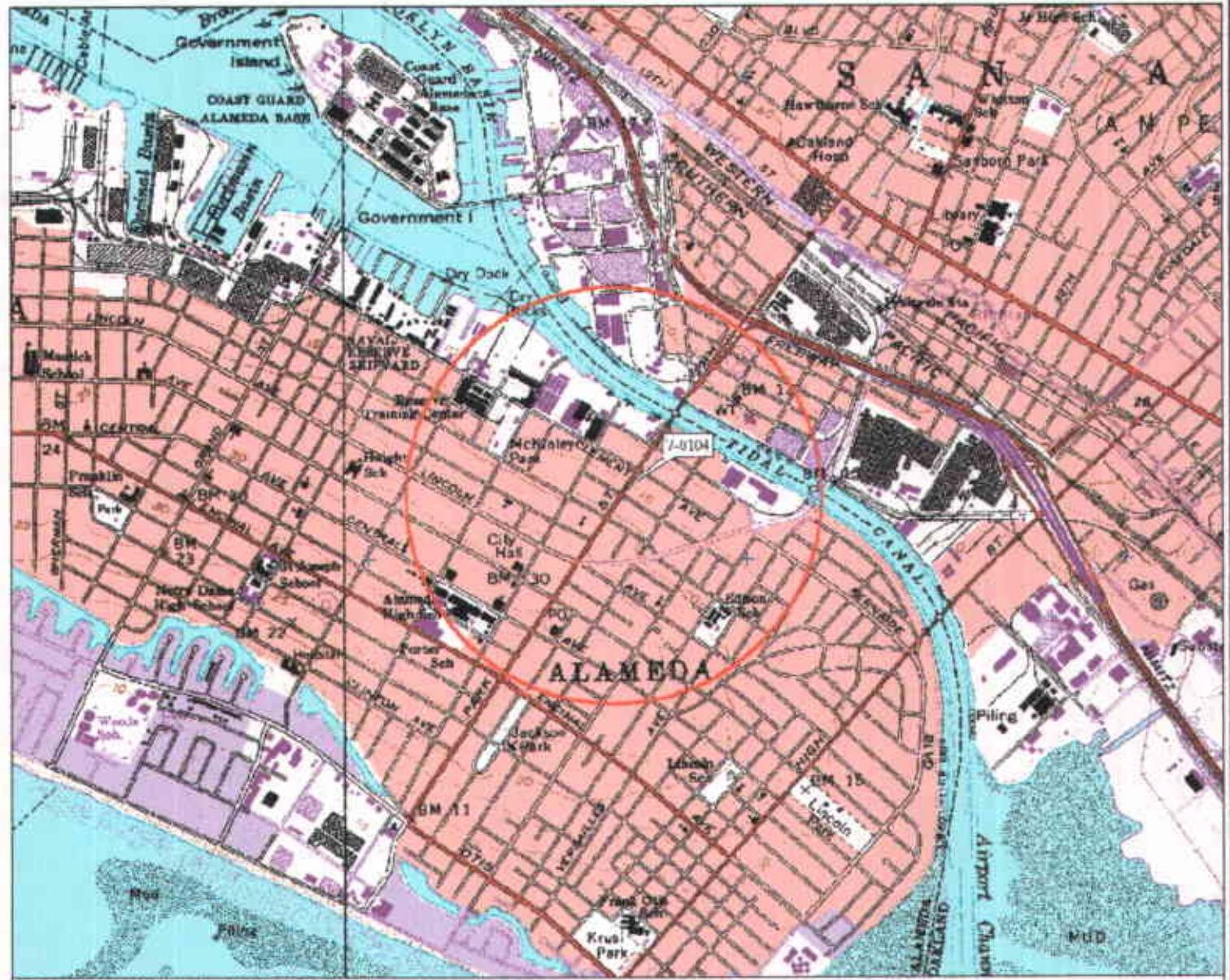
**TABLE 3**  
**OPERATION AND PERFORMANCE DATA FOR**  
**GROUNDWATER REMEDIATION SYSTEM**  
**Former Exxon Service Station 7-0104**  
**1725 Park Street**  
**Alameda, California**  
**(Page 8 of 9)**

**TABLE 3**  
**OPERATION AND PERFORMANCE DATA FOR**  
**GROUNDWATER REMEDIATION SYSTEM**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 9 of 9)  
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Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results						TPHg Removal			Benzene Removal			MTBE Removal		
				TPHg <.....	B ug/L.....	T	E	X	MTBE	Per Period <.....lbs.....>	Cumulative <.....lbs.....>							
<b>03/12/03 GRS running on arrival and departure.</b>																		
03/12/03	439,050	2.7664	W-INF	190	< 10	<10	<10	<10	1,200	0.338	< 30.7	< 0.007	< 4.75	0.833	4.274			
			W-JNT 1	86	< 2.5	<2.5	<2.5	<2.5	150									
			W-INT 2	< 50	< 0.50	<0.50	<0.50	<0.50	1.5									
			W-PSP#1	< 50	< 0.50	<0.50	<0.50	<0.50	<0.5									
<b>03/26/03 GRS running on arrival and departure.</b>																		
03/26/03	489,680	2.5114																
<b>04/09/03 GRS running on arrival and departure.</b>																		
04/09/03	537,030	2.3487	W-INF	< 500	< 25	<25	<25	<25	930	< 0.282	< 30.9	< 0.014	< 4.76	0.871	5.145			
			W-JNT 1	50	< 2.5	<2.5	<2.5	<2.5	91									
			W-INT 2	< 50	< 0.50	<0.50	<0.50	<0.50	8.7									
			W-PSP#1	< 50	< 0.50	<0.50	<0.50	<0.50	<0.5									
<b>04/23/03 GRS running on arrival and departure.</b>																		
04/23/03	584,410	2.3502																
<b>05/07/03 GRS running on arrival and departure.</b>																		
05/07/03	613,620	1.4489	W-INF	180	< 5.0	<5.0	<5.0	<5.0	430	0.217	< 31.2	< 0.010	< 4.77	0.435	5.579			
			W-JNT 1	110	< 0.50	<0.50	<0.50	<0.50	99									
			W-INT 2	< 50	< 0.50	<0.50	<0.50	<0.50	18									
			W-PSP#1	< 50	< 0.50	<0.50	<0.50	<0.50	<0.5									

Notes: Data prior to April 1, 2000 provided by Delta Environmental Consultants, Inc.

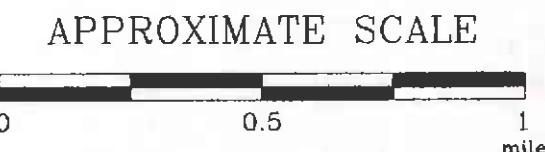
- W-INF = Water sample collected at the influent sample location.
- W-INT = Water sample collected at the intermediate sample location.
- W-EFF = Water sample collected at the effluent sample location.
- W-PSP#1 = Water sample collected at the effluent sample location (EBMUD process sampling point #1).
- gal = Gallons.
- gpm = Gallons per minute.
- ug/L = Micrograms per liter.
- lbs = Pounds.
- TPHg = Total petroleum hydrocarbons as gasoline.
- B = Benzene.
- T = Toluene.
- E = Ethylbenzene.
- X = Total xylenes.
- < = Less than the laboratory method detection limit as indicated.
- = Not measured/Not sampled/Not analyzed/Not calculated



### EXPLANATION



1/2-mile radius circle



SOURCE:  
Modified from a map  
provided by  
DeLorme 3-D TopoQuads



### **SITE VICINITY MAP**

FORMER EXXON SERVICE STATION 7-0104  
1725 Park Street  
Alameda, California

**PROJECT NO.**

2506

**PLATE**

1

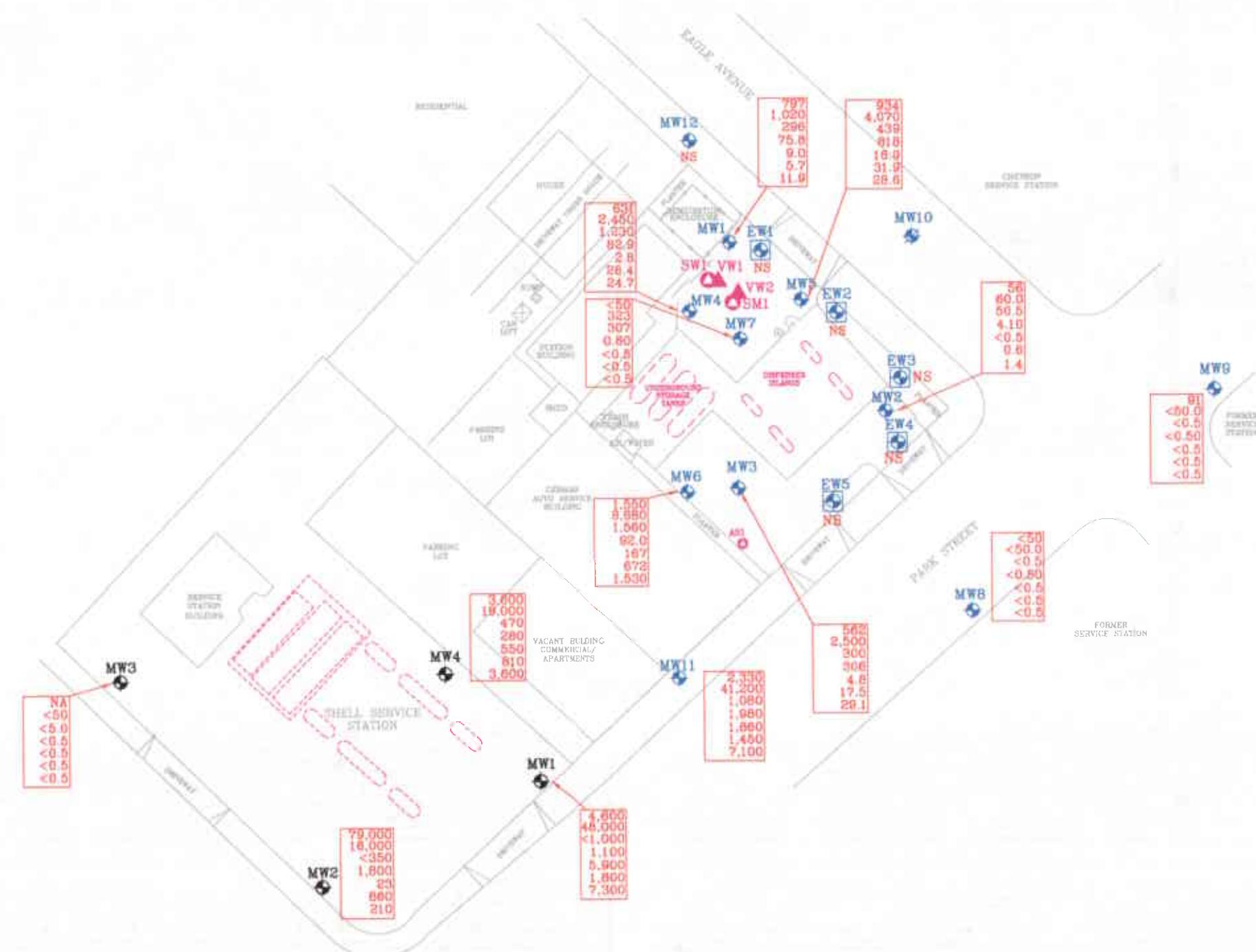
Analyte Concentrations in ug/L  
Sampled May 2, 2003

2,330 Total Petroleum Hydrocarbons  
as diesel  
41,800 Total Petroleum Hydrocarbons  
as gasoline  
1,080 Methyl Tertiary Butyl Ether  
1,080 Benzene  
1,880 Toluene  
1,400 Ethylbenzene  
7,100 Total Xylenes

< Less Than the Stated Laboratory  
Reporting Limit

ug/L Micrograms per Liter

NA Not Analyzed



APPROXIMATE SCALE



FN 25060002



## GENERALIZED SITE PLAN

FORMER  
EXXON SERVICE STATION 7-0104  
1725 Park Street  
Alameda, California

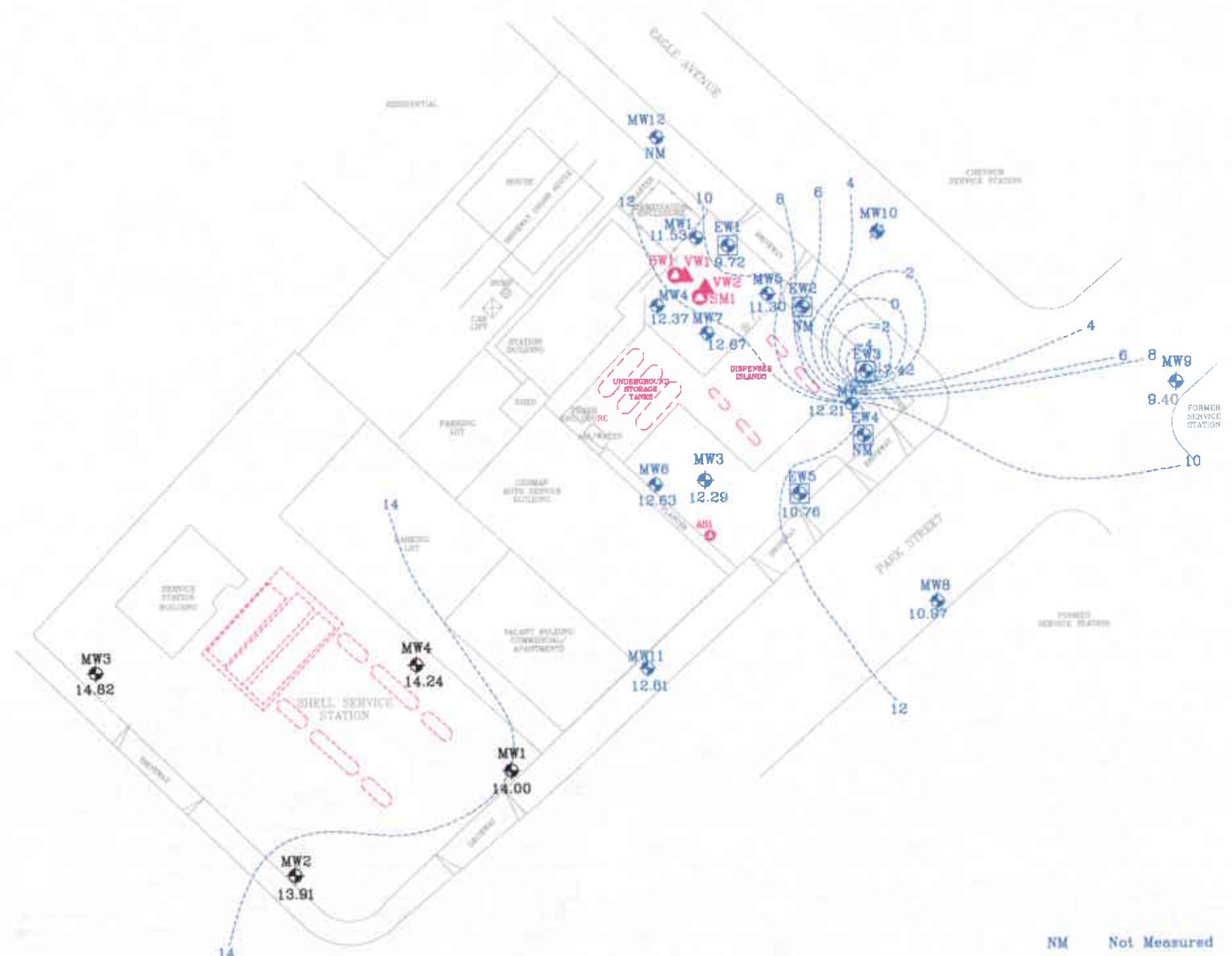
### EXPLANATION

- MW11 Groundwater Monitoring Well By Others  
EW4 Recovery Well  
MW10 Destroyed Groundwater Monitoring Well

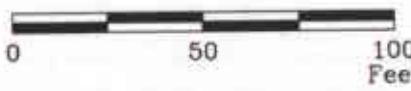
- MW4 Groundwater Monitoring Well By Others  
VW2 Vapor Extraction Well  
AS1 Air Sparge/Soil Vapor Well

PROJECT NO.  
2506  
PLATE  
2

N



APPROXIMATE SCALE



FN 25060002



**GROUNDWATER ELEVATION MAP**  
May 2, 2003  
FORMER  
EXXON SERVICE STATION 7-0104  
1725 Park Street  
Alameda, California

**EXPLANATION**

- MW11 Groundwater Monitoring Well  
12.58 Groundwater elevation in feet; datum is mean sea level  
EW4 Recovery Well  
MW10 Destroyed Groundwater Monitoring Well

- MW4 Groundwater Monitoring Well By Others  
VW2 Vapor Extraction Well  
AS1 Air Sparge/Soil Vapor Well

<b>PROJECT NO.</b>	2506
<b>PLATE</b>	3

**ATTACHMENT A**

**GROUNDWATER SAMPLING PROTOCOL**

## GROUNDWATER SAMPLING PROTOCOL

The static water level and separate-phase product level, if present, in each well that contains water and/or separate-phase product are measured with an 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 top of casing elevations.

Groundwater samples collected for subjective evaluation are collected by gently lowering approximately half the length of a clean Teflon® or polypropylene bailer past the air-water interface (if possible) and collecting a sample from near the surface of the water in the well. The samples are checked for measurable free-phase hydrocarbons or sheen. If appropriate, free-phase hydrocarbons are removed from the well.

Before water samples are collected from the groundwater monitoring wells, the wells are purged until a minimum of three well casing volumes is purged and stabilization of the temperature, pH, and conductivity is 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
$\pi$	=	ratio of the circumference of a circle to its diameter

Gallons of water purged/gallons in 1 well casing volume = well casing volumes removed.

After purging, each well is allowed to recharge to at least 80% of the initial water level. Water samples from wells that do not recover at least 80% (due to slow recharging of the well) between purging and sampling are considered to be "grab samples". Water samples are collected with a new, disposable Teflon® or polypropylene bailer. The groundwater is carefully poured into selected sample containers (40-milliliter (ml) glass vials, 1,000 ml glass amber bottles, etc.), which are filled so as to produce a positive meniscus.

Depending on the required analysis, each sample container is preserved with hydrochloric acid, nitric acid, etc., or it is preservative free. The type of preservative used for each sample is specified on the chain of custody form.

Each vial and glass amber bottle is sealed with a cap containing a Teflon® septum, and subsequently examined for air bubbles to avoid headspace, which would allow volatilization to occur. The samples are promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain-of-Custody Record, to a California state-certified laboratory.

**ATTACHMENT B**

**SUMMARY OF GROUNDWATER SAMPLING  
XTRA OIL COMPANY SERVICE STATION**

TABLE 1 - SUMMARY OF GROUNDWATER SAMPLING  
XTRA OIL COMPANY SERVICE STATION  
1701 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-210

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (Feet)	(a)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (Feet)	(b)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	OTHER SVOCs (ug/l)	NAPHTHALENE (ug/l)	BENZO-PYRENE (ug/l)	DO (ppm)	LAB
MW-1	05/02/03	19.60		5.60	---	14.00		48000	4800	1100	5900	1800	7300	ND<1000	—	—	—	—	MCC
QC-1 (c)	05/02/03	—	—	—	—	—	—	—	—	1200	5800	1800	7100	ND<500	—	—	—	—	MCC
MW-2	05/02/03	20.31		6.40	---	13.91		16000	79000	1800	23	850	210	ND<350	—	—	—	—	MCC
MW-3	05/02/03	20.57		6.75	---	14.82		ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	—	MCC
MW-4	05/02/03	19.69		5.45	---	14.24		19000	3800	280	550	810	3800	470	—	—	—	—	MCC

ABBREVIATIONS:

TPH-G Total petroleum hydrocarbons as gasoline using EPA Methods 5030/8015  
 TPH-D Total petroleum hydrocarbons as diesel using EPA Methods 3510/8015  
 B Benzene using EPA Methods 5030/8020  
 T Toluene using EPA Methods 5030/8020  
 E Ethylbenzene using EPA Methods 5030/8020  
 X Total xylenes using EPA Methods 5030/8020  
 MTBE Methyl tert butyl ether using EPA Methods 5030/8020  
 SVOCs Semivolatile organic compounds using EPA Method 8270  
 DO Dissolved oxygen  
 ug/l Micrograms per liter  
 ppm Parts per million  
 — Not analyzed/applicable/measurable  
 ND Not detected above reported detection limit  
 MCC McCampbell Analytical, Inc.  
 C-HR Chromalab, Inc.

NOTES:

- (a) Top of casing surveyed relative to mean sea level.
- (b) Groundwater elevations expressed in feet above mean sea level, and adjusted assuming a specific gravity of 0.75 for free product.
- (c) Blind duplicate.
- (d) Other SVOCs detected at concentrations of 200 ug/l 2-methylnaphthalene and 14 ug/l phenanthrene.

**ATTACHMENT C**

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

# TestAmerica

ANALYTICAL TESTING CORPORATION

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5/15/03

RECEIVED  
MAY 16 2003

ERI - NORTHERN CA 3876

SCOTT GRAHAM

73 DIGITAL DRIVE, SUITE 100

NOVATO, CA 94949

BY: -----

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EXXONMOBIL 7-0104

Project Number: 250613X.

Laboratory Project Number: 330722.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980.

Page 1

Sample Identification	Lab Number	Collection Date
MW1	03-A70316	5/ 2/03
MW2	03-A70317	5/ 2/03
MW3	03-A70318	5/ 2/03
MW4	03-A70319	5/ 2/03
MW5	03-A70320	5/ 2/03
MW6	03-A70321	5/ 2/03
MW7	03-A70322	5/ 2/03
MW8	03-A70323	5/ 2/03
MW9	03-A70324	5/ 2/03
MW11	03-A70325	5/ 2/03

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Page 2

Sample Identification

Lab Number

Collection Date

These results relate only to the items tested.  
This report shall not be reproduced except in full and with  
permission of the laboratory.

Report Approved By:



Report Date: 5/15/03

Paul E. Lane, Jr., Lab Director  
Michael H. Dunn, M.S., Technical Director  
Johnny A. Mitchell, Dir. Technical Serv.  
Eric S. Smith, Assistant Technical Director  
Roxanne L. Connor, Technical Services

Gail A. Lage, Technical Serv.  
Glenn L. Norton, Technical Serv.  
Kelly S. Comstock, Technical Serv.  
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 01168CA

## ANALYTICAL REPORT

ERI - NORTHERN CA 3876  
SCOTT GRAHAM  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A70316  
Sample ID: MW1  
Sample Type: Water  
Site ID: 7-0104

Project: 250613X  
Project Name: EXXONMOBIL 7-0104  
Sampler: VICKI GRAHAM

Date Collected: 5/ 2/03  
Time Collected: 15:57  
Date Received: 5/ 6/03  
Time Received: 8:15  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*ORGANIC PARAMETERS*</b>									
Benzene	75.8	ug/L	0.50	1.0	5/13/03	18:41	H. Wagner	8021B	3693
Ethylbenzene	5.7	ug/L	0.5	1.0	5/13/03	18:41	H. Wagner	8021B	3693
Toluene	9.0	ug/L	0.5	1.0	5/13/03	18:41	H. Wagner	8021B	3693
Xylenes (Total)	11.9	ug/L	0.5	1.0	5/13/03	18:41	H. Wagner	8021B	3693
Methyl-t-butylether	296.	ug/L	2.5	5.0	5/13/03	13:31	H. Wagner	8021B	3699
TPH (Gasoline Range)	1020	ug/L	50.0	1.0	5/13/03	18:41	H. Wagner	8015B	3693
TPH (Diesel Range)	797.	ug/L	50.	1.0	5/10/03	6:57	M. Jarrett	8015B/3510	9859

Silica Gel Cleanup performed for TPH-DRO analysis.

### Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
TPH	1000 ml	1.00 ml	5/ 7/03		M. Cauthen	3510

Surrogate	% Recovery	Target Range
TPH Hi Surr., o-Terphenyl	94.	41. - 155.
BTEX/GRO Surr., a,a,a-TFT	98.	69. - 132.

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 03-A70316  
Sample ID: MW1  
Project: 250613X  
Page 2

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

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## ANALYTICAL REPORT

ERI - NORTHERN CA 3876  
SCOTT GRAHAM  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A70317  
Sample ID: MW2  
Sample Type: Water  
Site ID: 7-0104

Project: 250613X  
Project Name: EXXONMOBIL 7-0104  
Sampler: VICKI GRAHAM

Date Collected: 5/ 2/03  
Time Collected: 15:33  
Date Received: 5/ 6/03  
Time Received: 8:15  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*ORGANIC PARAMETERS*									
Benzene	4.10	ug/L	0.50	1.0	5/13/03	13:00	H. Wagner	8021B	3693
Ethylbenzene	0.6	ug/L	0.5	1.0	5/13/03	13:00	H. Wagner	8021B	3693
Toluene	ND	ug/L	0.5	1.0	5/13/03	13:00	H. Wagner	8021B	3693
Xylenes (Total)	1.4	ug/L	0.5	1.0	5/13/03	13:00	H. Wagner	8021B	3693
Methyl-t-butylether	50.5	ug/L	0.5	1.0	5/13/03	13:00	H. Wagner	8021B	3693
TPH (Gasoline Range)	60.0	ug/L	50.0	1.0	5/13/03	13:00	H. Wagner	8015B	3693
TPH (Diesel Range)	56.	ug/L	50.	1.0	5/10/03	7:17	M.Jarrett	8015B/3510	9859

Silica Gel Cleanup performed for TPH-DRO analysis.

---

### Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH	1000 ml	1.00 ml	5/ 7/03		M. Cauthen	3510

---

Surrogate	% Recovery	Target Range
TPH Hi Surr., o-Terphenyl	109.	41. - 155.
BTEx/GRO Surr., a,a,a-TFT	99.	69. - 132.

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 03-A70317  
Sample ID: MW2  
Project: 250613X  
Page 2

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

## ANALYTICAL REPORT

ERI - NORTHERN CA 3876  
SCOTT GRAHAM  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A70318  
Sample ID: MW3  
Sample Type: Water  
Site ID: 7-0104

Project: 250613X  
Project Name: EXXONMOBIL 7-0104  
Sampler: VICKI GRAHAM

Date Collected: 5/ 2/03  
Time Collected: 17:18  
Date Received: 5/ 6/03  
Time Received: 8:15  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Analysis Time	Analyst	Method	Batch
<b>*ORGANIC PARAMETERS*</b>									
Benzene	306.	ug/L	1.00	2.0	5/13/03	14:02	H. Wagner	8021B	3699
Ethylbenzene	17.5	ug/L	0.5	1.0	5/13/03	19:43	H. Wagner	8021B	3693
Toluene	4.8	ug/L	0.5	1.0	5/13/03	19:43	H. Wagner	8021B	3693
Xylenes (Total)	29.1	ug/L	0.5	1.0	5/13/03	19:43	H. Wagner	8021B	3693
Methyl-t-butylether	300.	ug/L	1.0	2.0	5/13/03	14:02	H. Wagner	8021B	3699
TPH (Gasoline Range)	2500	ug/L	50.0	1.0	5/13/03	19:43	H. Wagner	8015B	3693
TPH (Diesel Range)	562.	ug/L	50.	1.0	5/10/03	7:36	M.Jarrett	8015B/3510	9859

Silica Gel Cleanup performed for TPH-DRO analysis.

### Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH	1000 ml	1.00 ml	5/ 7/03		M. Cauthen	3510

Surrogate	% Recovery	Target Range
TPH Hi Surr., o-Terphenyl	95.	41. - 155.
BTEX/GRC Surr., a,a,a-TFT	92.	69. - 132.

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 03-A70318  
Sample ID: MW3  
Project: 250613X  
Page 2

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

## ANALYTICAL REPORT

ERI - NORTHERN CA 3876  
SCOTT GRAHAM  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A70319  
Sample ID: MW4  
Sample Type: Water  
Site ID: 7-0104

Project: 250613X  
Project Name: EXXONMOBIL 7-0104  
Sampler: VICKI GRAHAM

Date Collected: 5/ 2/03  
Time Collected: 18:00  
Date Received: 5/ 6/03  
Time Received: 8:15  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*ORGANIC PARAMETERS*									
Benzene	82.9	ug/L	0.50	1.0	5/13/03	19:12	H. Wagner	8021B	3693
Ethylbenzene	26.4	ug/L	0.5	1.0	5/13/03	19:12	H. Wagner	8021B	3693
Toluene	2.8	ug/L	0.5	1.0	5/13/03	19:12	H. Wagner	8021B	3693
Xylenes (Total)	24.7	ug/L	0.5	1.0	5/13/03	19:12	H. Wagner	8021B	3693
Methyl-t-butylether	1230	ug/L	5.0	10.0	5/14/03	11:58	H. Wagner	8021B	3706
TPH (Gasoline Range)	2450	ug/L	50.0	1.0	5/13/03	19:12	H. Wagner	8015B	3693
TPH (Diesel Range)	631.	ug/L	50.	1.0	5/10/03	7:56	M.Jarrett	8015B/3510	9859

Silica Gel Cleanup performed for TPH-DRO analysis.

---

### Sample Extraction Data

Parameter	Wt/Vol	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH		1000 ml	1.00 ml	5/ 7/03		M. Cauthen	3510

---

Surrogate	% Recovery	Target Range
TPH Hi Surr., o-Terphenyl	87.	41. - 155.
BTEX/GRO Surr., a,a,a-TFT	97.	69. - 132.

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 03-A70319  
Sample ID: MW4  
Project: 250613X  
Page 2

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

## ANALYTICAL REPORT

ERI - NORTHERN CA 3876  
SCOTT GRAHAM  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A70320  
Sample ID: MW5  
Sample Type: Water  
Site ID: 7-0104

Project: 250613X  
Project Name: EXXONMOBIL 7-0104  
Sampler: VICKI GRAHAM

Date Collected: 5/ 2/03  
Time Collected: 16:18  
Date Received: 5/ 6/03  
Time Received: 8:15  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*ORGANIC PARAMETERS*</b>									
Benzene	818.	ug/L	2.50	5.0	5/13/03	15:04	H. Wagner	8021B	3699
Ethylbenzene	31.9	ug/L	0.5	1.0	5/13/03	20:14	H. Wagner	8021B	3693
Toluene	16.9	ug/L	0.5	1.0	5/13/03	20:14	H. Wagner	8021B	3693
Xylenes (Total)	28.6	ug/L	0.5	1.0	5/13/03	20:14	H. Wagner	8021B	3693
Methyl-t-butylether	439.	ug/L	2.5	5.0	5/13/03	15:04	H. Wagner	8021B	3699
TPH (Gasoline Range)	4070	ug/L	250.	5.0	5/13/03	15:04	H. Wagner	8015B	3699
TPH (Diesel Range)	934.	ug/L	50.	1.0	5/10/03	8:16	M.Jarrett	8015B/3510	9859

Silica Gel Cleanup performed for TPH-DRO analysis.

### Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH	1000 ml	1.00 ml	5/ 7/03		M. Cauthen	3510

Surrogate	% Recovery	Target Range
TPH Hi Surr., o-Terphenyl	86.	41. - 155.
BTEX/GRO Surr., a,a,a-TFT	95.	69. - 132.

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 03-A70320  
Sample ID: MW5  
Project: 250613X  
Page 2

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

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## ANALYTICAL REPORT

ERI - NORTHERN CA 3876  
SCOTT GRAHAM  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A70321  
Sample ID: MW6  
Sample Type: Water  
Site ID: 7-0104

Project: 250613X  
Project Name: EXXONMOBIL 7-0104  
Sampler: VICKI GRAHAM

Date Collected: 5/ 2/03  
Time Collected: 17:00  
Date Received: 5/ 6/03  
Time Received: 8:15  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*ORGANIC PARAMETERS*</b>									
Benzene	92.0	ug/L	5.00	10.0	5/13/03	15:35	H. Wagner	8021B	3693
Ethylbenzene	672.	ug/L	5.0	10.0	5/13/03	15:35	H. Wagner	8021B	3693
Toluene	167.	ug/L	5.0	10.0	5/13/03	15:35	H. Wagner	8021B	3693
Xylenes (Total)	1530	ug/L	5.0	10.0	5/13/03	15:35	H. Wagner	8021B	3693
Methyl-t-butylether	1560	ug/L	5.0	10.0	5/13/03	15:35	H. Wagner	8021B	3693
TPH (Gasoline Range)	8880	ug/L	500.	10.0	5/13/03	15:35	H. Wagner	8015B	3693
TPH (Diesel Range)	1550	ug/L	50.	1.0	5/10/03	8:36	M. Jarrett	8015B/3510	9859

Silica Gel Cleanup performed for TPH-DRO analysis.

### Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH	1000 ml	1.00 ml	5/ 7/03		M. Cauthen	3510

Surrogate	% Recovery	Target Range
TPH Hi Surr., o-Terphenyl	115.	41. - 155.
BTEX/GRO Surr., a,a,a-TPT	101.	69. - 132.

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 03-A70321  
Sample ID: MW6  
Project: 250613X  
Page 2

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

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## ANALYTICAL REPORT

ERI ~ NORTHERN CA 3876  
SCOTT GRAHAM  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A70322  
Sample ID: MW7  
Sample Type: Water  
Site ID: 7-0104

Project: 250613X  
Project Name: EXXONMOBIL 7-0104  
Sampler: VICKI GRAHAM

Date Collected: 5/ 2/03  
Time Collected: 16:43  
Date Received: 5/ 6/03  
Time Received: 8:15  
Page: 1

Analyte	Result	Units	Report	Dil	Analysis	Analysis	Analyst	Method	Batch
			Limit	Factor	Date	Time			
<b>*ORGANIC PARAMETERS*</b>									
Benzene	0.80	ug/L	0.50	1.0	5/13/03	0:40	H. Wagner	8021B	3691
Ethylbenzene	ND	ug/L	0.5	1.0	5/15/03	11:16	H. Wagner	8021B	3691
Toluene	ND	ug/L	0.5	1.0	5/13/03	0:40	H. Wagner	8021B	3691
Xylenes (Total)	ND	ug/L	0.5	1.0	5/13/03	0:40	H. Wagner	8021B	3691
Methyl-t-butylether	307.	ug/L	2.5	5.0	5/13/03	16:06	H. Wagner	8021B	3693
TPH (Gasoline Range)	323.	ug/L	50.0	1.0	5/13/03	0:40	H. Wagner	8015B	3691
TPH (Diesel Range)	ND	ug/L	50.	1.0	5/10/03	8:56	M. Jarrett	8015B/3510	9859

Silica Gel Cleanup performed for TPH-DRO analysis.

### Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
EPH	1000 ml	1.00 ml	5/ 7/03		M. Cauthen	3510

Surrogate	% Recovery	Target Range
TPH Hi Surr., o-Terphenyl	81.	41. - 155.
BTEX/GRO Surr., a,a,a-TFT	100.	69. - 132.

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 03-A70322  
Sample ID: MW7  
Project: 250613X  
Page 2

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

# TestAmerica

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## ANALYTICAL REPORT

ERI - NORTHERN CA 3876  
SCOTT GRAHAM  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A70323  
Sample ID: MW8  
Sample Type: Water  
Site ID: 7-0104

Project: 250613X  
Project Name: EXXONMOBIL 7-0104  
Sampler: VICKI GRAHAM

Date Collected: 5/ 2/03  
Time Collected: 14:57  
Date Received: 5/ 6/03  
Time Received: 8:15  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*ORGANIC PARAMETERS*									
Benzene	ND	ug/L	0.50	1.0	5/13/03	1:15	H. Wagner	8021B	3691
Ethylbenzene	ND	ug/L	0.5	1.0	5/13/03	1:15	H. Wagner	8021B	3691
Toluene	ND	ug/L	0.5	1.0	5/13/03	1:15	H. Wagner	8021B	3691
Xylenes (Total)	ND	ug/L	0.5	1.0	5/13/03	1:15	H. Wagner	8021B	3691
Methyl-t-butylether	ND	ug/L	0.5	1.0	5/13/03	1:15	H. Wagner	8021B	3691
TPH (Gasoline Range)	ND	ug/L	50.0	1.0	5/13/03	1:15	H. Wagner	8015B	3691
TPH (Diesel Range)	ND	ug/L	50.	1.0	5/10/03	9:15	M. Jarrett	8015B/3510	9859

Silica Gel Cleanup performed for TPH-DRO analysis.

---

### Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH	1000 ml	1.00 ml	5/ 7/03		M. Cauthen	3510

---

Surrogate	* Recovery	Target Range
TPH Hi Surr., o-Terphenyl	96.	41. - 155.
BTEX/GRO Surr., a,a,a-TFT	100.	69. - 132.

Sample report continued . . .

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204  
800-765-0980 • 615-726-3404 FAX

## ANALYTICAL REPORT

Laboratory Number: 03-A70323  
Sample ID: MW8  
Project: 250613X  
Page 2

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

[www.testamericainc.com](http://www.testamericainc.com)

TestAmerica Analytical Testing Corporation | TestAmerica Drilling Corporation | TestAmerica Air Emission Corporation

## ANALYTICAL REPORT

ERI - NORTHERN CA 3876  
SCOTT GRAHAM  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A70324  
Sample ID: MW9  
Sample Type: Water  
Site ID: 7-0104

Project: 250613X  
Project Name: EXXONMOBIL 7-0104  
Sampler: VICKI GRAHAM

Date Collected: 5/ 2/03  
Time Collected: 15:15  
Date Received: 5/ 6/03  
Time Received: 8:15  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*ORGANIC PARAMETERS*									
Benzene	ND	ug/L	0.50	1.0	5/13/03	1:50	H. Wagner	8021B	3691
Ethylbenzene	ND	ug/L	0.5	1.0	5/13/03	1:50	H. Wagner	8021B	3691
Toluene	ND	ug/L	0.5	1.0	5/13/03	1:50	H. Wagner	8021B	3691
Xylenes (Total)	ND	ug/L	0.5	1.0	5/13/03	1:50	H. Wagner	8021B	3691
Methyl-t-butylether	ND	ug/L	0.5	1.0	5/13/03	1:50	H. Wagner	8021B	3691
TPH (Gasoline Range)	ND	ug/L	50.0	1.0	5/13/03	1:50	H. Wagner	8015B	3691
TPH (Diesel Range)	91.	ug/L	50.	1.0	5/10/03	9:35	M.Jarrett	8015B/3510	9859

Silica Gel Cleanup performed for TPH-DRO analysis.

---

### Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH	1000 ml	1.00 ml	5/ 7/03		M. Cauthen	3510

---

Surrogate	% Recovery	Target Range
TPH Hi Surr., o-Terphenyl	90.	41. - 155.
BTEX/GRO Surr., a,a,a-TFT	98.	69. - 132.

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 03-A70324  
Sample ID: MW9  
Project: 250613X  
Page 2

### LABORATORY COMMENTS:

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End of Sample Report.

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## ANALYTICAL REPORT

ERI - NORTHERN CA 3876  
SCOTT GRAHAM  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A70325  
Sample ID: MW11  
Sample Type: Water  
Site ID: 7-0104

Project: 250613X  
Project Name: EXXONMOBIL 7-0104  
Sampler: VICKI GRAHAM

Date Collected: 5/ 2/03  
Time Collected: 17:36  
Date Received: 5/ 6/03  
Time Received: 8:15  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*ORGANIC PARAMETERS*									
Benzene	1980	ug/L	25.0	50.0	5/13/03	17:08	H. Wagner	8021B	3693
Ethylbenzene	1450	ug/L	25.0	50.0	5/13/03	17:08	H. Wagner	8021B	3693
Toluene	1860	ug/L	25.0	50.0	5/13/03	17:08	H. Wagner	8021B	3693
Xylenes (Total)	7100	ug/L	25.0	50.0	5/13/03	17:08	H. Wagner	8021B	3693
Methyl-t-butylether	1080	ug/L	25.0	50.0	5/13/03	17:08	H. Wagner	8021B	3693
TPH (Gasoline Range)	41200	ug/L	2500	50.0	5/13/03	17:08	H. Wagner	8015B	3693
TPH (Diesel Range)	2330	ug/L	50.	1.0	5/10/03	9:54	M.Jarrett	8015B/3510	9859

Silica Gel Cleanup performed for TPH-DRO analysis.

---

### Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
EPH	1000 ml	1.00 ml	5/ 7/03		M. Cauthen	3510

---

Surrogate	% Recovery	Target Range
TPH Hi Surr., o-Terphenyl	109.	41. - 155.
BTEX/GRO Surr., a,a,a-TFT	89.	69. - 132.

Sample report continued . . .

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## ANALYTICAL REPORT

Laboratory Number: 03-A70325  
Sample ID: MW11  
Project: 250613X  
Page 2

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
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End of Sample Report.

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**PROJECT QUALITY CONTROL DATA**

Project Number: 250613X

Project Name: EXXONMOBIL 7-0104

Page: 1

Laboratory Receipt Date: 5/ 6/03

**Matrix Spike Recovery**

Note: If Blank is referenced as the sample spiked, insufficient volume was received for the defined analytical batch for MS/MSD analysis on an true sample matrix. Laboratory reagent water was used for QC purposes.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
---------	-------	------------	--------	------------	----------	--------------	------------	--------------

**\*\*UST ANALYSIS\*\***

TPH (Diesel Range)	mg/l	< 0.050	0.702	0.839	84	23. - 120.	9859	blank
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**Matrix Spike Duplicate**

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
---------	-------	------------	-----------	-----	-------	------------

**\*\*UST PARAMETERS\*\***

Benzene	mg/l	0.115	0.123	6.72	15.	3691
Toluene	mg/l	0.0553	0.0606	9.15	15.	3691
Ethylbenzene	mg/l	0.0524	0.0569	8.23	15.	3691
Xylenes (Total)	mg/l	0.105	0.113	7.34	19.	3691
TPH (Gasoline Range)	mg/l	1.08	1.08	0.00	22.	3691
TPH (Diesel Range)	mg/l	0.702	0.548	24.64#	20.	9859
BTEX/GRO Surr., a,a,a-TFT	% Recovery		96.			3691

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
---------	-------	------------	--------------	------------	--------------	------------

**\*\*UST PARAMETERS\*\***

Benzene	mg/l	0.100	0.0927	93	74 - 124	3691
Benzene	mg/l	0.100	0.0888	89	74 - 124	3693
Benzene	mg/l	0.100	0.0888	89	74 - 124	3699
Toluene	mg/l	0.100	0.0943	94	74 - 121	3691
Toluene	mg/l	0.100	0.0918	92	74 - 121	3693
Ethylbenzene	mg/l	0.100	0.0943	94	75 - 123	3691

Project QC continued . . .

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800-765-0980 • 615-726-3404 FAX

**PROJECT QUALITY CONTROL DATA**  
**Project Number:** 250613X  
**Project Name:** EXXONMOBIL 7-0104  
**Page:** 2  
**Laboratory Receipt Date:** 5/ 6/03

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Ethylbenzene	mg/l	0.100	0.0919	92	75 - 123	3693
Xylenes (Total)	mg/l	0.200	0.188	94	72 - 120	3691
Xylenes (Total)	mg/l	0.200	0.184	92	72 - 120	3693
Methyl-t-butylether	mg/l	0.100	0.0988	99	64 - 128	3691
Methyl-t-butylether	mg/l	0.100	0.0868	87	64 - 128	3693
Methyl-t-butylether	mg/l	0.100	0.0868	87	64 - 128	3699
Methyl-t-butylether	mg/l	0.100	0.0827	83	64 - 128	3706
TPH (Gasoline Range)	mg/l	1.00	1.08	108	61 - 139	3691
TPH (Gasoline Range)	mg/l	1.00	1.08	108	61 - 139	3693
TPH (Gasoline Range)	mg/l	1.00	1.08	108	61 - 139	3699
TPH (Diesel Range)	mg/l	0.839	0.729	87	42 - 115	9859
BTEX/GRO Surr., a,a,a-TFT	% Recovery			96	69 - 132	3691
BTEX/GRO Surr., a,a,a-TFT	% Recovery			99	69 - 132	3693
BTEX/GRO Surr., a,a,a-TFT	% Recovery			96	69 - 132	3706

**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
<b>**UST PARAMETERS**</b>					
Benzene	< 0.00050	mg/l	3691	5/12/03	20:35
Benzene	< 0.00050	mg/l	3693	5/13/03	11:43
Benzene	< 0.00050	mg/l	3699	5/13/03	11:43
Toluene	< 0.0005	mg/l	3691	5/12/03	20:35
Toluene	< 0.0005	mg/l	3693	5/13/03	11:43
Ethylbenzene	< 0.0005	mg/l	3691	5/12/03	20:35
Ethylbenzene	< 0.0005	mg/l	3693	5/13/03	11:43
Xylenes (Total)	< 0.0005	mg/l	3691	5/12/03	20:35
Xylenes (Total)	< 0.0005	mg/l	3693	5/13/03	11:43
Methyl-t-butylether	< 0.0005	mg/l	3691	5/12/03	20:35

Project QC continued . . .

PROJECT QUALITY CONTROL DATA  
Project Number: 250613X  
Project Name: EXXONMOBIL 7-0104  
Page: 3  
Laboratory Receipt Date: 5/ 6/03

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Methyl-t-butylether	< 0.0005	mg/l	3693	5/13/03	11:43
Methyl-t-butylether	< 0.0005	mg/l	3699	5/13/03	11:43
Methyl-t-butylether	< 0.0005	mg/l	3706	5/14/03	11:27
TPH (Gasoline Range)	< 0.0500	mg/l	3691	5/12/03	20:35
TPH (Gasoline Range)	< 0.0500	mg/l	3693	5/13/03	11:43
TPH (Gasoline Range)	< 0.0500	mg/l	3699	5/13/03	11:43
TPH (Diesel Range)	< 0.050	mg/l	9859	5/ 9/03	7:27

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
---------	-------------	-------	------------	---------------	---------------

\*\*UST PARAMETERS\*\*

BTEX/GRO Surr., a,a,a-TFT	101.	% Recovery	3691	5/12/03	20:35
BTEX/GRO Surr., a,a,a-TFT	101.	% Recovery	3693	5/13/03	11:43
BTEX/GRO Surr., a,a,a-TFT	103.	% Recovery	3706	5/14/03	11:27

# = Value outside Laboratory historical or method prescribed QC limits.

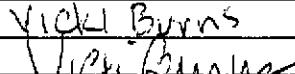
End of Report for Project 330722

**TestAmerica**  
**330722**

(615) 726-0177

Nashville Division

2960 Foster Creighton  
Nashville, TN 37204**ExxonMobil**Shipping Method:  Lab Courier  Hand Deliver  Commercial Express  Other:

Consultant Name: Environmental Resolutions, Inc.  
Address: 73 Digital Drive, Suite 100  
City/State/Zip: Novato, California 94949  
Project Manager Scott Graham  
Telephone Number: (415) 382-5989  
ERI Job Number: 250613X  
Sampler Name: (Print) Vicki Burns  
Sampler Signature: 

ExxonMobil Engineer Gene N. Ortega  
Telephone Number (925) 246-8747  
Account #: 3876  
PO #: 4501667094  
Facility ID # 7-0104  
Global ID# T0600100555  
Site Address 1725 Park Street  
City, State Zip Alameda, California

TAT	PROVIDE:	Special Instructions:	Matrix			Analyze For:					
			Water	Soil	Vapor	TPHd	TPHg	BTEX	MTBE	confirm MTBE	Oxygenates
<input type="checkbox"/> 24 hour	<input type="checkbox"/> 72 hour	EDF Report									
<input type="checkbox"/> 48 hour	<input type="checkbox"/> 96 hour	FAX Results									
<input checked="" type="checkbox"/> 8 day											
Sample ID / Description		DATE	TIME	COMP	GRAB	PRESERV	NUMBER				
QCBB		5-2-03	1609		X	HCL	21	X		H	O
MW1 7031b			1557		X	HCL/O	4/2	X		X	X
MW2	317		1533		X	HCL/O	4/2	X		X	X
MW3	318		1718		X	HCL/O	4/2			X	X
MW4	319		1800		X	HCL/O	4/2	X		X	X
MW5	320		1618		X	HCL/O	4/2	X		X	X
MW6	321		1700		X	HCL/O	4/2	X		X	X
MW7	322		1643		X	HCL/O	4/2	X		X	X
MW8	323		1457		X	HCL/O	4/2	X		X	X
MW9	324		1515		X	HCL/O	4/2	X		X	X
MW11	325		1736		X	HCL/O	4/2	X		X	X

Relinquished by: <i>Jean W. McNamee</i>	Date 5/5	Time 1300	Received by: <i>(Signature)</i>	Time 5/6/03	Laboratory Comments: Temperature Upon Receipt: Sample Containers Intact? VOAs Free of Headspace?
Relinquished by: <i>(Signature)</i>	Date 5/5	Time 8:15	Received by TestAmerica: <i>(Signature)</i>	Time 8:15	

TEST AMERICA ANALYTICAL  
TESTING CORP.-NASHVILLE



COOLER RECEIPT FORM

BC#

330722

Client: ERJ

Cooler Received On:5/6/03 And Opened On:5/6/03 By:SHANE GAMBILL

Shane Gambill  
(Signature)

1. Temperature of Cooler when opened 14 Degrees Celsius
2. Were custody seals on outside of cooler?.....YES...NO...NA
- a. If yes, how many, what kind and where:1/2/3/4 FRONT/BACK/SIDE
3. Were custody seals on containers and intact?.....NO...YES...NA
4. Were the seals intact, signed, and dated correctly?.....YES...NO...NA
5. Were custody papers inside cooler?.....YES...NO...NA
6. Were custody papers properly filled out (ink,signed,etc)?.....YES...NO...NA
7. Did you sign the custody papers in the appropriate place?.....YES...NO...NA
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)?.....YES...NO...NA
10. Did all bottles arrive in good condition( unbroken)?.....YES...NO...NA
11. Were all bottle labels complete (#,date,signed,pres,etc)?.....YES...NO...NA
12. Did all bottle labels and tags agree with custody papers?.....YES...NO...NA
13. Were correct bottles used for the analysis requested?.....YES...NO...NA
14. a. Were VOA vials received?.....YES...NO...NA
- b. Was there any observable head space present in any VOA vial?.....NO...YES...NA
15. Was sufficient amount of sample sent in each bottle?.....YES...NO...NA
16. Were correct preservatives used?.....YES...NO...NA  
If not, record standard ID of preservative used here \_\_\_\_\_
17. Was residual chlorine present?.....NO...YES...NA
18. See attached for resolution of non-conformance:

n w z   VOA   B I S.

Fed-Ex

UPS

Velocity

Airborne

Route

Off-street

Misc.



# Sequoia Analytical

885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
[www.sequolalabs.com](http://www.sequolalabs.com)

RECEIVED  
APR 04 2003

BY: \_\_\_\_\_

28 March, 2003

Scott Graham  
Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato, CA 94949

RE: Exxon 7-0104  
Sequoia Report: MMC0444

Enclosed are the results of analyses for samples received by the laboratory on 03/13/03 11:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pett  
Project Manager

CA ELAP Certificate #1210





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Analytical**

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Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
03/28/03 13:20

**ANALYTICAL REPORT FOR SAMPLES**

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-PSP #1	MMC0444-01	Water	03/12/03 11:10	03/13/03 11:45
W-INT2	MMC0444-02	Water	03/12/03 11:15	03/13/03 11:45
W-INT1	MMC0444-03	Water	03/12/03 11:20	03/13/03 11:45
W-INF	MMC0444-04	Water	03/12/03 11:25	03/13/03 11:45
A-EFF	MMC0444-05	Air	03/12/03 12:15	03/13/03 11:45
A-INT	MMC0444-06	Air	03/12/03 12:20	03/13/03 11:45
A-INF	MMC0444-07	Air	03/12/03 12:25	03/13/03 11:45

Sequoia Analytical - Morgan Hill

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

  
Anthony K. Pelt, Project Manager





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Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
03/28/03 13:20

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>W-PSP #1 (MMC0444-01) Water Sampled: 03/12/03 11:10 Received: 03/13/03 11:45</b>									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	3C17012	03/17/03	03/17/03	8015Bm	
Surrogate: <i>a,a,a-Trifluorotoluene</i>		132 %	55-142		"	"	"	"	
<b>W-INT2 (MMC0444-02) Water Sampled: 03/12/03 11:15 Received: 03/13/03 11:45</b>									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	3C17012	03/17/03	03/17/03	8015Bm	
Surrogate: <i>a,a,a-Trifluorotoluene</i>		105 %	55-142		"	"	"	"	
<b>W-INT1 (MMC0444-03) Water Sampled: 03/12/03 11:20 Received: 03/13/03 11:45</b>									
Gasoline Range Organics (C6-C10)	86	50	ug/l	1	3C17012	03/17/03	03/17/03	8015Bm	HC-19
Surrogate: <i>a,a,a-Trifluorotoluene</i>		94.2 %	55-142		"	"	"	"	
<b>W-INF (MMC0444-04) Water Sampled: 03/12/03 11:25 Received: 03/13/03 11:45</b>									
Gasoline Range Organics (C6-C10)	190	50	ug/l	1	3C17011	03/17/03	03/17/03	8015Bm	HC-19
Surrogate: <i>a,a,a-Trifluorotoluene</i>		116 %	55-142		"	"	"	"	



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Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
03/28/03 13:20

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B in Air Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>A-EFF (MMC0444-05) Air Sampled: 03/12/03 12:15 Received: 03/13/03 11:45</b>									
Gasoline Range Organics (C6-C10)	ND	10	mg/m <sup>3</sup> Air	1	3C15001	03/15/03	03/15/03	8015Bm/8021B	
Benzene	ND	0.10	"	"	"	"	"	"	"
Toluene	ND	0.10	"	"	"	"	"	"	"
Ethylbenzene	0.17	0.10	"	"	"	"	"	"	"
Xylenes (total)	ND	0.10	"	"	"	"	"	"	"
Surrogate: a,a,a-Trifluorotoluene		115 %	56-134		"	"	"	"	"
<b>A-INT (MMC0444-06) Air Sampled: 03/12/03 12:20 Received: 03/13/03 11:45</b>									
Gasoline Range Organics (C6-C10)	ND	10	mg/m <sup>3</sup> Air	1	3C15001	03/15/03	03/15/03	8015Bm/8021B	
Benzene	ND	0.10	"	"	"	"	"	"	"
Toluene	ND	0.10	"	"	"	"	"	"	"
Ethylbenzene	ND	0.10	"	"	"	"	"	"	"
Xylenes (total)	ND	0.10	"	"	"	"	"	"	"
Surrogate: a,a,a-Trifluorotoluene		92.5 %	56-134		"	"	"	"	"
<b>A-INF (MMC0444-07) Air Sampled: 03/12/03 12:25 Received: 03/13/03 11:45</b>									
Gasoline Range Organics (C6-C10)	59	10	mg/m <sup>3</sup> Air	1	3C15001	03/15/03	03/15/03	8015Bm/8021B	
Benzene	0.81	0.10	"	"	"	"	"	"	"
Toluene	0.50	0.10	"	"	"	"	"	"	"
Ethylbenzene	0.19	0.10	"	"	"	"	"	"	"
Xylenes (total)	0.68	0.10	"	"	"	"	"	"	"
Surrogate: a,a,a-Trifluorotoluene		97.5 %	56-134		"	"	"	"	"



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Environmental Resolutions (Exxon)  
 73 Digital Drive, Suite 100  
 Novato CA, 94949

Project: Exxon 7-0104  
 Project Number: 7-0104  
 Project Manager: Scott Graham

Reported:  
 03/28/03 13:20

## MTBE by EPA Method 8260B

### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>V-PSP #1 (MMC0444-01) Water Sampled: 03/12/03 11:10 Received: 03/13/03 11:45</b>									
Methyl tert-butyl ether	ND	0.50	ug/l	1	3C22001	03/22/03	03/22/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		105 %		78-129	"	"	"	"	"
<b>V-INT2 (MMC0444-02) Water Sampled: 03/12/03 11:15 Received: 03/13/03 11:45</b>									
Methyl tert-butyl ether	1.5	0.50	ug/l	1	3C22001	03/22/03	03/22/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		109 %		78-129	"	"	"	"	"
<b>V-INT1 (MMC0444-03) Water Sampled: 03/12/03 11:20 Received: 03/13/03 11:45</b>									
Methyl tert-butyl ether	150	2.5	ug/l	5	3C24020	03/24/03	03/24/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		82.8 %		78-129	"	"	"	"	"
<b>V-INF (MMC0444-04) Water Sampled: 03/12/03 11:25 Received: 03/13/03 11:45</b>									
Methyl tert-butyl ether	1200	10	ug/l	20	3C24020	03/24/03	03/24/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		84.2 %		78-129	"	"	"	"	"



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73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
03/28/03 13:20

## BTEX by EPA Method 8260B

### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>W-PSP #1 (MMC0444-01) Water Sampled: 03/12/03 11:10 Received: 03/13/03 11:45</b>									
Benzene	ND	0.50	ug/l	1	3C22001	03/22/03	03/22/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %		78-129		"	"	"	"
<b>W-INT2 (MMC0444-02) Water Sampled: 03/12/03 11:15 Received: 03/13/03 11:45</b>									
Benzene	ND	0.50	ug/l	1	3C22001	03/22/03	03/22/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		109 %		78-129		"	"	"	"
<b>W-INT1 (MMC0444-03) Water Sampled: 03/12/03 11:20 Received: 03/13/03 11:45</b>									
Benzene	ND	2.5	ug/l	5	3C24020	03/24/03	03/24/03	EPA 8260B	
Toluene	ND	2.5	"	"	"	"	"	"	"
Ethylbenzene	ND	2.5	"	"	"	"	"	"	"
Xylenes (total)	ND	2.5	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		82.8 %		78-129		"	"	"	"
<b>W-INF (MMC0444-04) Water Sampled: 03/12/03 11:25 Received: 03/13/03 11:45</b>									
Benzene	ND	10	ug/l	20	3C24020	03/24/03	03/24/03	EPA 8260B	
Toluene	ND	10	"	"	"	"	"	"	"
Ethylbenzene	ND	10	"	"	"	"	"	"	"
Xylenes (total)	ND	10	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		84.2 %		78-129		"	"	"	"

Sequoia Analytical - Morgan Hill

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Environmental Resolutions (Exxon)  
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Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
03/28/03 13:20

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch 3C17011 - EPA 5030B [P/T]

Blank (3C17011-BLK1)										Prepared & Analyzed: 03/17/03
Gasoline Range Organics (C6-C10)	ND	25	ug/l							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.9	"		10.0		109	55-142			
<b>LCS (3C17011-BS1)</b>										
Gasoline Range Organics (C6-C10)	220	50	ug/l	250		88.0	62-134			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.9	"		10.0		109	55-142			
<b>Matrix Spike (3C17011-MS1)</b>										
Gasoline Range Organics (C6-C10)	222	50	ug/l	275	ND	80.7	62-134			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.0	"		10.0		100	55-142			
<b>Matrix Spike Dup (3C17011-MSD1)</b>										
Gasoline Range Organics (C6-C10)	235	50	ug/l	275	ND	85.5	62-134	5.69	41	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.2	"		10.0		102	55-142			

### Batch 3C17012 - EPA 5030B [P/T]

Blank (3C17012-BLK1)										Prepared & Analyzed: 03/17/03
Gasoline Range Organics (C6-C10)	ND	25	ug/l							
Surrogate: <i>a,a,a</i> -Trifluorotoluene	9.01	"		10.0		90.1	55-142			
<b>LCS (3C17012-BS1)</b>										
Gasoline Range Organics (C6-C10)	227	50	ug/l	250		90.8	62-134			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	10.9	"		10.0		109	55-142			
<b>Matrix Spike (3C17012-MS1)</b>										
Gasoline Range Organics (C6-C10)	246	50	ug/l	275	ND	89.5	62-134			
Surrogate: <i>a,a,a</i> -Trifluorotoluene	14.1	"		10.0		141	55-142			



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Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
03/28/03 13:20

**Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3C17012 - EPA 5030B [P/T]**

Matrix Spike Dup (3C17012-MSD1)	Source: MMC0295-03		Prepared & Analyzed: 03/18/03						
Gasoline Range Organics (C6-C10)	265	50	ug/l	275	ND	96.4	62-134	7.44	41
Surrogate: <i>a,a,a</i> -Trifluorotoluene	13.8	"		10.0		138	55-142		



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Project Manager: Scott Graham

Reported:  
03/28/03 13:20

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B in Air - Quality Contr Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch 3C15001 - EPA 5030B [P/T]

Blank (3C15001-BLK1)		Prepared & Analyzed: 03/15/03						
Gasoline Range Organics (C6-C10)	ND	5	mg/m³ Air					
Benzene	ND	0.05	"					
Toluene	ND	0.05	"					
Ethylbenzene	ND	0.05	"					
Xylenes (total)	ND	0.05	"					

Surrogate: *a,a,a-Trifluorotoluene* 1.94 " 2.00 97.0 56-134

LCS (3C15001-BS1)		Prepared & Analyzed: 03/15/03					
Benzene	1.84	0.10	mg/m³ Air	2.00	92.0	62-125	
Toluene	1.75	0.10	"	2.00	87.5	68-121	
Ethylbenzene	1.80	0.10	"	2.00	90.0	75-125	
Xylenes (total)	5.30	0.10	"	6.00	88.3	76-121	

Surrogate: *a,a,a-Trifluorotoluene* 1.93 " 2.00 96.5 56-134

LCS (3C15001-BS2)		Prepared & Analyzed: 03/15/03					
Gasoline Range Organics (C6-C10)	36.8	10	mg/m³ Air	50.0	73.6	65-142	

Surrogate: *a,a,a-Trifluorotoluene* 2.22 " 2.00 111 56-134

LCS Dup (3C15001-BSD1)		Prepared & Analyzed: 03/15/03					
Benzene	1.99	0.10	mg/m³ Air	2.00	99.5	62-125	7.83
Toluene	1.89	0.10	"	2.00	94.5	68-121	7.69
Ethylbenzene	1.86	0.10	"	2.00	93.0	75-125	3.28
Xylenes (total)	5.71	0.10	"	6.00	95.2	76-121	7.45

Surrogate: *a,a,a-Trifluorotoluene* 1.99 " 2.00 99.5 56-134

LCS Dup (3C15001-BSD2)		Prepared & Analyzed: 03/15/03					
Gasoline Range Organics (C6-C10)	48.2	10	mg/m³ Air	50.0	96.4	65-142	26.8

Surrogate: *a,a,a-Trifluorotoluene* 2.33 " 2.00 116 56-134



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Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
03/28/03 13:20

## MTBE by EPA Method 8260B - Quality Control

### Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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#### Batch 3C22001 - EPA 5030B P/T

Blank (3C22001-BLK1)									Prepared & Analyzed: 03/22/03
Methyl tert-butyl ether	ND	0.25	ug/l						
Surrogate: 1,2-Dichloroethane-d4	5.02	"		5.00		100	78-129		
LCS (3C22001-BS1)									Prepared & Analyzed: 03/22/03
Methyl tert-butyl ether	9.06	0.50	ug/l	10.0		90.6	63-137		
Surrogate: 1,2-Dichloroethane-d4	4.81	"		5.00		96.2	78-129		
ICS (3C22001-BS2)									Prepared & Analyzed: 03/22/03
Methyl tert-butyl ether	8.37	0.50	ug/l	9.04		92.6	63-137		
Surrogate: 1,2-Dichloroethane-d4	5.23	"		5.00		105	78-129		
Matrix Spike (3C22001-MS1)					Source: MMC0473-03				Prepared & Analyzed: 03/22/03
Methyl tert-butyl ether	911	25	ug/l	452	470	97.6	0-200		
Surrogate: 1,2-Dichloroethane-d4	5.59	"		5.00		112	78-129		
Matrix Spike Dup (3C22001-MSD1)					Source: MMC0473-03				Prepared & Analyzed: 03/22/03
Methyl tert-butyl ether	930	25	ug/l	452	470	102	0-200	2.06	200
Surrogate: 1,2-Dichloroethane-d4	5.39	"		5.00		108	78-129		

#### Batch 3C24020 - EPA 5030B P/T

Blank (3C24020-BLK1)									Prepared & Analyzed: 03/24/03
Methyl tert-butyl ether	ND	0.25	ug/l						
Surrogate: 1,2-Dichloroethane-d4	4.28	"		5.00		85.6	78-129		
ICS (3C24020-BS1)									Prepared & Analyzed: 03/24/03
Methyl tert-butyl ether	10.7	0.50	ug/l	10.0		107	63-137		
Surrogate: 1,2-Dichloroethane-d4	4.15	"		5.00		83.0	78-129		

Sequoia Analytical - Morgan Hill

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Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
03/28/03 13:20

**MTBE by EPA Method 8260B - Quality Control**  
**Sequoia Analytical - Morgan Hill**

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3C24020 - EPA 5030B P/T**

LCS (3C24020-BS2)					Prepared & Analyzed: 03/24/03					
Methyl tert-butyl ether	8.57	0.50	ug/l	9.04		94.8	63-137			
Surrogate: 1,2-Dichloroethane-d4	4.24	"		5.00		84.8	78-129			
Matrix Spike (3C24020-MS1)		Source: MMC0444-04			Prepared & Analyzed: 03/24/03					
Methyl tert-butyl ether	1270	10	ug/l	181	1200	38.7	63-137			QM-4X
Surrogate: 1,2-Dichloroethane-d4	4.21	"		5.00		84.2	78-129			
Matrix Spike Dup (3C24020-MSD1)		Source: MMC0444-04			Prepared & Analyzed: 03/24/03					A-01
Methyl tert-butyl ether	1230	10	ug/l	181	1200	16.6	63-137	3.20	13	QM-4X
Surrogate: 1,2-Dichloroethane-d4	4.07	"		5.00		81.4	78-129			





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## BTEX by EPA Method 8260B - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

### Batch 3C22001 - EPA 5030B P/T

Blank (3C22001-BLK1)							Prepared & Analyzed: 03/22/03			
Benzene	ND	0.25	ug/l							
Toluene	ND	0.25	"							
Ethylbenzene	ND	0.25	"							
Xylenes (total)	ND	0.25	"							
Surrogate: 1,2-Dichloroethane-d4	5.02		"	5.00		100	78-129			

### LCS (3C22001-BS1)

Benzene	9.41	0.50	ug/l	10.0		94.1	78-124			
Toluene	9.25	0.50	"	10.0		92.5	78-129			
Surrogate: 1,2-Dichloroethane-d4	4.81		"	5.00		96.2	78-129			

### LCS (3C22001-BS2)

Benzene	5.18	0.50	ug/l	5.44		95.2	78-124			
Toluene	33.1	0.50	"	32.8		101	78-129			
Surrogate: 1,2-Dichloroethane-d4	5.23		"	5.00		105	78-129			

### Matrix Spike (3C22001-MS1)

Benzene	269	25	ug/l	272	12	94.5	78-124			
Toluene	1580	25	"	1640	ND	96.3	78-129			
Surrogate: 1,2-Dichloroethane-d4	5.59		"	5.00		112	78-129			

### Matrix Spike Dup (3C22001-MSD1)

Benzene	272	25	ug/l	272	12	95.6	78-124	1.11	12	
Toluene	1620	25	"	1640	ND	98.8	78-129	2.50	10	
Surrogate: 1,2-Dichloroethane-d4	5.39		"	5.00		108	78-129			

### Batch 3C24020 - EPA 5030B P/T

Blank (3C24020-BLK1)							Prepared & Analyzed: 03/24/03			
Benzene	ND	0.25	ug/l							
Toluene	ND	0.25	"							
Ethylbenzene	ND	0.25	"							
Xylenes (total)	ND	0.25	"							

Sequoia Analytical - Morgan Hill

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Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
03/28/03 13:20

## BTEX by EPA Method 8260B - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 3C24020 - EPA 5030B P/T</b>										
<b>Blank (3C24020-BLK1)</b>										
Surrogate: 1,2-Dichloroethane-d4										
4.28										
Prepared & Analyzed: 03/24/03										
<b>LCS (3C24020-BS1)</b>										
Benzene	10.0	0.50	ug/l	10.0		100	78-124			
Toluene	8.41	0.50	"	10.0		84.1	78-129			
Surrogate: 1,2-Dichloroethane-d4										
4.15										
Prepared & Analyzed: 03/24/03										
<b>LCS (3C24020-BS2)</b>										
Benzene	5.62	0.50	ug/l	5.44		103	78-124			
Toluene	26.2	0.50	"	32.8		79.9	78-129			
Surrogate: 1,2-Dichloroethane-d4										
4.24										
<b>Matrix Spike (3C24020-MS1)</b>										
Source: MMC0444-04										
Benzene	118	10	ug/l	109	2.4	106	78-124			
Toluene	550	10	"	656	ND	83.8	78-129			
Surrogate: 1,2-Dichloroethane-d4										
4.21										
Prepared & Analyzed: 03/24/03										
<b>Matrix Spike Dup (3C24020-MSD1)</b>										
Source: MMC0444-04										
Benzene	109	10	ug/l	109	2.4	97.8	78-124	7.93	12	
Toluene	512	10	"	656	ND	78.0	78-129	7.16	10	
Surrogate: 1,2-Dichloroethane-d4										
4.07										
Prepared & Analyzed: 03/24/03										
A-01										



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Reported:  
03/28/03 13:20

## Notes and Definitions

- A-01 This sample was analyzed outside of the 12 hour CCV window. The results may still be useful for their intended purpose.
- HC-19 Discrete peak @ C6-C7.
- QM-4X The spike recovery was outside of control limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference





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# EXXON COMPANY, U.S.A.

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## CHAIN OF CUSTODY

Consultant's Name: ERI

Page 1 of 1

Address: 73 DIGITAL DR ST #100, NOVATO CA 94949

Site Location: 1725 PARK ST. ALA

Project #: Consultant Project #: 250611X

Consultant Work Release #: 45030033/5

Project Contact: SCOTT GRAHAM

Phone #: 1415 382 9105

Laboratory Work Release #:

EXXON Contact: GENE ORTEGA

Phone #: 1925 246 8747

EXXON RAS #: 7-0104

Sampled by (print): ANTHONY OGATA

Sampler's Signature: *Anthony Ogata*

ALAMEDA, CA

Shipment Method:

Air Bill #:

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

### ANALYSIS REQUIRED

MHC 0444

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	MTBE 8020	Temperature:
W-PSPT	/	1110	H <sub>2</sub> O	HCL	4	01	X			X	ALL
W-INT2	3/13/03	1115	H <sub>2</sub> O	HCL	4	02	X			X	SAMPLES
W-INT1	3/13/03	1120	H <sub>2</sub> O	HCL	4	03	X			X	COLLECTED
W-INF	3/13/03	1125	H <sub>2</sub> O	HCL	4	04	X			X	ARE SICK SAMPLES
A-EFF	3/13/03	1215	AIR	/	1	05	X				
A-INT	3/13/03	1220	AIR	/	1	06	X				
A-INF	3/13/03	1225	AIR	/	1	07	X				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
ANTHONY OGATA ERI <i>Anthony Ogata</i>	3/13/03	0800	ERI RELINQUISHED TOC	3/13/03	0801	
J.C. Ortega	3/13/03	4:50		3-13-03	1145	
	3-13-03	1300	GONDWANALAND SOURCE 1	3-13-03	1255pm	

## SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Exxon Company USA  
 REC. BY (PRINT): JL  
 WORKORDER: HMC 0444

DATE Received at Lab: 3/13/03  
 TIME Received at Lab: 19:00  
 LOG IN DATE: 3-13-03

Drinking water for  
regulatory purposes: YES  NO   
 Wastewater for  
regulatory purposes: YES  NO

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	#	CLIENT ID	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s)	Present / Absent Intact / Broken*	61		W-PSP 1	(4) vials HCl	L	3/12/03	
2. Chain-of-Custody	Present / Absent*	62		W-INT 2				
3. Traffic Reports or Packing List:	Present / Absent	63		W-INT 1				
4. Airbill:	Airbill / Sticker Present / Absent	64		A-EFF	(1) Air bag	A		
5. Airbill #:		65		A-INT				
6. Sample Labels:	Present / Absent	66		A-INF				
7. Sample IDs:	Listed / Not Listed on Chain-of-Custody	67						
8. Sample Condition:	Intact / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample labels agree?	Yes / No*							
10. Sample received within hold time:	Yes / No*							
11. Proper Preservatives used:	Yes / No*							
12. Temp Rec. at Lab: Is temp 4 +/-2°C?	2°C Yes / No**							
(Acceptance range for samples requiring thermal pres.)								
**Exception (if any): Metals / DFF on ice? / DFF no ice? or Problem COC								

\*If Circled, contact Project Manager and attach record of resolution.



# Sequoia Analytical

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RECEIVED  
MAY 03 2003

BY: \_\_\_\_\_

29 April, 2003

Scott Graham  
Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato, CA 94949

RE: Exxon 7-0104  
Sequoia Report: MMD0307

Enclosed are the results of analyses for samples received by the laboratory on 04/10/03 12:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt  
Project Manager

CA ELAP Certificate #1210





Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

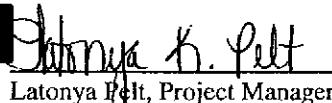
Reported:  
04/29/03 16:04

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-PSP #1	MMD0307-01	Water	04/09/03 11:00	04/10/03 12:45
W-INT 2	MMD0307-02	Water	04/09/03 11:05	04/10/03 12:45
W-INT 1	MMD0307-03	Water	04/09/03 11:10	04/10/03 12:45
W-INF	MMD0307-04	Water	04/09/03 11:15	04/10/03 12:45
A-EFF	MMD0307-05	Air	04/09/03 12:00	04/10/03 12:45
A-INT	MMD0307-06	Air	04/09/03 12:05	04/10/03 12:45
A-INF	MMD0307-07	Air	04/09/03 12:10	04/10/03 12:45

Sequoia Analytical - Morgan Hill

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Latonya K. Pelt, Project Manager



Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
04/29/03 16:04

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>W-PSP #1 (MMD0307-01) Water</b> Sampled: 04/09/03 11:00 Received: 04/10/03 12:45									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	3D23005	04/23/03	04/23/03	8015Bm	
Surrogate: a,a,a-Trifluorotoluene		106 %	55-142		"	"	"	"	"
<b>W-INT 2 (MMD0307-02) Water</b> Sampled: 04/09/03 11:05 Received: 04/10/03 12:45									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	3D23005	04/23/03	04/23/03	8015Bm	
Surrogate: a,a,a-Trifluorotoluene		107 %	55-142		"	"	"	"	"
<b>W-INT 1 (MMD0307-03) Water</b> Sampled: 04/09/03 11:10 Received: 04/10/03 12:45									
Gasoline Range Organics (C6-C10)	50	50	ug/l	1	3D23005	04/23/03	04/23/03	8015Bm	HC-19
Surrogate: a,a,a-Trifluorotoluene		106 %	55-142		"	"	"	"	"
<b>W-INF (MMD0307-04) Water</b> Sampled: 04/09/03 11:15 Received: 04/10/03 12:45									
Gasoline Range Organics (C6-C10)	ND	500	ug/l	10	3D23005	04/23/03	04/23/03	8015Bm	HC-19
Surrogate: a,a,a-Trifluorotoluene		105 %	55-142		"	"	"	"	"





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Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
04/29/03 16:04

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B in Air

### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>A-EFF (MMD0307-05) Air Sampled: 04/09/03 12:00 Received: 04/10/03 12:45</b>									
Gasoline Range Organics (C6-C10)	ND	10	mg/m <sup>3</sup> Air	1	3D11003	04/11/03	04/11/03	8015Bm/8021B	
Benzene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.10	"	"	"	"	"	"	
Xylenes (total)	ND	0.10	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	93.0 %		56-134		"	"	"	"	Q-23
<b>A-INT (MMD0307-06) Air Sampled: 04/09/03 12:05 Received: 04/10/03 12:45</b>									
Gasoline Range Organics (C6-C10)	ND	10	mg/m <sup>3</sup> Air	1	3D11003	04/11/03	04/11/03	8015Bm/8021B	
Benzene	ND	0.10	"	"	"	"	"	"	
Toluene	ND	0.10	"	"	"	"	"	"	
Ethylbenzene	ND	0.10	"	"	"	"	"	"	
Xylenes (total)	ND	0.10	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	74.5 %		56-134		"	"	"	"	Q-23
<b>A-INF (MMD0307-07) Air Sampled: 04/09/03 12:10 Received: 04/10/03 12:45</b>									
Gasoline Range Organics (C6-C10)	57	10	mg/m <sup>3</sup> Air	1	3D11003	04/11/03	04/11/03	8015Bm/8021B	
Benzene	0.36	0.10	"	"	"	"	"	"	
Toluene	0.69	0.10	"	"	"	"	"	"	
Ethylbenzene	0.25	0.10	"	"	"	"	"	"	
Xylenes (total)	1.1	0.10	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	88.5 %		56-134		"	"	"	"	Q-23

Sequoia Analytical - Morgan Hill

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Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
04/29/03 16:04

## MTBE by EPA Method 8260B Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>W-PSP #1 (MMD0307-01) Water Sampled: 04/09/03 11:00 Received: 04/10/03 12:45</b>									
Methyl tert-butyl ether	ND	0.50	ug/l	1	3D16025	04/16/03	04/16/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		107 %		78-129	"	"	"	"	"
<b>W-INT 2 (MMD0307-02) Water Sampled: 04/09/03 11:05 Received: 04/10/03 12:45</b>									
Methyl tert-butyl ether	8.7	0.50	ug/l	1	3D16025	04/16/03	04/16/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		114 %		78-129	"	"	"	"	"
<b>W-INT 1 (MMD0307-03) Water Sampled: 04/09/03 11:10 Received: 04/10/03 12:45</b>									
Methyl tert-butyl ether	91	2.5	ug/l	5	3D16025	04/16/03	04/16/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		104 %		78-129	"	"	"	"	"
<b>W-INF (MMD0307-04) Water Sampled: 04/09/03 11:15 Received: 04/10/03 12:45</b>									
Methyl tert-butyl ether	930	25	ug/l	50	3D16025	04/16/03	04/16/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		111 %		78-129	"	"	"	"	"

Sequoia Analytical - Morgan Hill

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Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
04/29/03 16:04

## BTEX by EPA Method 8260B

### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>W-PSP #1 (MMD0307-01) Water Sampled: 04/09/03 11:00 Received: 04/10/03 12:45</b>									
Benzene	ND	0.50	ug/l	1	3D16025	04/16/03	04/16/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %		78-129		"	"	"	"
<b>W-INT 2 (MMD0307-02) Water Sampled: 04/09/03 11:05 Received: 04/10/03 12:45</b>									
Benzene	ND	0.50	ug/l	1	3D16025	04/16/03	04/16/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	"
Ethylbenzene	ND	0.50	"	"	"	"	"	"	"
Xylenes (total)	ND	0.50	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		114 %		78-129		"	"	"	"
<b>W-INT 1 (MMD0307-03) Water Sampled: 04/09/03 11:10 Received: 04/10/03 12:45</b>									
Benzene	ND	2.5	ug/l	5	3D16025	04/16/03	04/16/03	EPA 8260B	
Toluene	ND	2.5	"	"	"	"	"	"	"
Ethylbenzene	ND	2.5	"	"	"	"	"	"	"
Xylenes (total)	ND	2.5	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		104 %		78-129		"	"	"	"
<b>W-INF (MMD0307-04) Water Sampled: 04/09/03 11:15 Received: 04/10/03 12:45</b>									
Benzene	ND	25	ug/l	50	3D16025	04/16/03	04/16/03	EPA 8260B	
Toluene	ND	25	"	"	"	"	"	"	"
Ethylbenzene	ND	25	"	"	"	"	"	"	"
Xylenes (total)	ND	25	"	"	"	"	"	"	"
<i>Surrogate: 1,2-Dichloroethane-d4</i>		111 %		78-129		"	"	"	"

Sequoia Analytical - Morgan Hill

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Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
04/29/03 16:04

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
<b>Batch 3D23005 - EPA 5030B [P/T]</b>										
<b>Blank (3D23005-BLK1)</b>										
Gasoline Range Organics (C6-C10)	ND	25	ug/l							
Surrogate: a,a,a-Trifluorotoluene	10.6	"		10.0		106	55-142			
<b>LCS (3D23005-BS2)</b>										
Gasoline Range Organics (C6-C10)	211	50	ug/l	250		84.4	62-134			
Surrogate: a,a,a-Trifluorotoluene	10.0	"		10.0		100	55-142			
<b>Matrix Spike (3D23005-MS1)</b>										
Gasoline Range Organics (C6-C10)	447	50	ug/l	550	ND	81.3	62-134			
Surrogate: a,a,a-Trifluorotoluene	9.07	"		10.0		90.7	55-142			
<b>Matrix Spike Dup (3D23005-MSD1)</b>										
Gasoline Range Organics (C6-C10)	487	50	ug/l	550	ND	88.5	62-134	8.57	41	
Surrogate: a,a,a-Trifluorotoluene	11.9	"		10.0		119	55-142			





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Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
04/29/03 16:04

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B in Air - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch 3D11003 - EPA 5030B [P/T]

Blank (3D11003-BLK1)	Prepared & Analyzed: 04/11/03								
Gasoline Range Organics (C6-C10)	ND	5	mg/m <sup>3</sup> Air						
Benzene	ND	0.05	"						
Toluene	ND	0.05	"						
Ethylbenzene	ND	0.05	"						
Xylenes (total)	ND	0.05	"						
Surrogate: a,a,a-Trifluorotoluene	1.88		"	2.00	94.0	56-134			Q-23

### LCS (3D11003-BS1)

LCS (3D11003-BS1)	Prepared & Analyzed: 04/11/03							
Benzene	1.95	0.10	mg/m <sup>3</sup> Air	2.00	97.5	62-125		
Toluene	1.86	0.10	"	2.00	93.0	68-121		
Ethylbenzene	1.93	0.10	"	2.00	96.5	75-125		
Xylenes (total)	5.77	0.10	"	6.00	96.2	76-121		
Surrogate: a,a,a-Trifluorotoluene	1.84		"	2.00	92.0	56-134		Q-23

### LCS (3D11003-BS2)

LCS (3D11003-BS2)	Prepared & Analyzed: 04/11/03							
Gasoline Range Organics (C6-C10)	57.3	10	mg/m <sup>3</sup> Air	50.0	115	65-142		
Surrogate: a,a,a-Trifluorotoluene	2.23		"	2.00	112	56-134		Q-23

### LCS Dup (3D11003-BSD1)

LCS Dup (3D11003-BSD1)	Prepared & Analyzed: 04/11/03							
Benzene	1.95	0.10	mg/m <sup>3</sup> Air	2.00	97.5	62-125	0.00	
Toluene	1.88	0.10	"	2.00	94.0	68-121	1.07	
Ethylbenzene	1.91	0.10	"	2.00	95.5	75-125	1.04	
Xylenes (total)	5.73	0.10	"	6.00	95.5	76-121	0.696	
Surrogate: a,a,a-Trifluorotoluene	1.94		"	2.00	97.0	56-134		Q-23

### LCS Dup (3D11003-BSD2)

LCS Dup (3D11003-BSD2)	Prepared & Analyzed: 04/11/03							
Gasoline Range Organics (C6-C10)	49.2	10	mg/m <sup>3</sup> Air	50.0	98.4	65-142	15.2	
Surrogate: a,a,a-Trifluorotoluene	2.04		"	2.00	102	56-134	50	Q-23

Sequoia Analytical - Morgan Hill

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Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
04/29/03 16:04

## MTBE by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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### Batch 3D16025 - EPA 5030B P/T

Blank (3D16025-BLK1)					Prepared & Analyzed: 04/16/03					
Methyl tert-butyl ether	ND	0.25	ug/l							
Surrogate: 1,2-Dichloroethane-d4	5.34	"		5.00		107	78-129			
LCS (3D16025-BS1)					Prepared & Analyzed: 04/16/03					
Methyl tert-butyl ether	10.5	0.50	ug/l	10.0		105	63-137			
Surrogate: 1,2-Dichloroethane-d4	5.28	"		5.00		106	78-129			
LCS Dup (3D16025-BSD1)					Prepared & Analyzed: 04/16/03					
Methyl tert-butyl ether	9.09	0.50	ug/l	10.0		90.9	63-137	14.4	13	QR-02
Surrogate: 1,2-Dichloroethane-d4	5.45	"		5.00		109	78-129			
Matrix Spike (3D16025-MS1)		Source: MMD0371-01			Prepared & Analyzed: 04/16/03					
Methyl tert-butyl ether	4720	100	ug/l	2000	3100	81.0	63-137			
Surrogate: 1,2-Dichloroethane-d4	5.41	"		5.00		108	78-129			
Matrix Spike Dup (3D16025-MSD1)		Source: MMD0371-01			Prepared & Analyzed: 04/16/03					
Methyl tert-butyl ether	4980	100	ug/l	2000	3100	94.0	63-137	5.36	13	
Surrogate: 1,2-Dichloroethane-d4	5.12	"		5.00		102	78-129			



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Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
04/29/03 16:04

## BTEX by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	------------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

### Batch 3D16025 - EPA 5030B P/T

Blank (3D16025-BLK1)										Prepared & Analyzed: 04/16/03
Benzene	ND	0.25	ug/l							
Toluene	ND	0.25	"							
Ethylbenzene	ND	0.25	"							
Xylenes (total)	ND	0.25	"							

Surrogate: 1,2-Dichloroethane-d4	5.34		"	5.00		107	78-129			
----------------------------------	------	--	---	------	--	-----	--------	--	--	--

LCS (3D16025-BS1)										Prepared & Analyzed: 04/16/03
Benzene	11.8	0.50	ug/l	10.0		118	78-124			
Toluene	11.4	0.50	"	10.0		114	78-129			

Surrogate: 1,2-Dichloroethane-d4	5.28		"	5.00		106	78-129			
----------------------------------	------	--	---	------	--	-----	--------	--	--	--

LCS Dup (3D16025-BSD1)										Prepared & Analyzed: 04/16/03
Benzene	10.2	0.50	ug/l	10.0		102	78-124	14.5	12	QR-02
Toluene	9.79	0.50	"	10.0		97.9	78-129	15.2	10	QR-02

Surrogate: 1,2-Dichloroethane-d4	5.45		"	5.00		109	78-129			
----------------------------------	------	--	---	------	--	-----	--------	--	--	--

Matrix Spike (3D16025-MS1)			Source: MMD0371-01							Prepared & Analyzed: 04/16/03
Benzene	2030	100	ug/l	2000	ND	102	78-124			
Toluene	2020	100	"	2000	20	100	78-129			

Surrogate: 1,2-Dichloroethane-d4	5.41		"	5.00		108	78-129			
----------------------------------	------	--	---	------	--	-----	--------	--	--	--

Matrix Spike Dup (3D16025-MSD1)			Source: MMD0371-01							Prepared & Analyzed: 04/16/03
Benzene	2030	100	ug/l	2000	ND	102	78-124	0.00	12	
Toluene	1950	100	"	2000	20	96.5	78-129	3.53	10	

Surrogate: 1,2-Dichloroethane-d4	5.12		"	5.00		102	78-129			
----------------------------------	------	--	---	------	--	-----	--------	--	--	--

Sequoia Analytical - Morgan Hill

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# Sequoia Analytical

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[www.sequoiyalabs.com](http://www.sequoiyalabs.com)

Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
04/29/03 16:04

## Notes and Definitions

HC-19 Discrete peak @ C6-C7.

Q-23 The closing calibration was outside acceptance limits by 3.3% low. This should be considered in evaluating the result. The average % difference for all analytes met the 15% requirement and the QC suggests that calibration linearity is not a factor.

QR-02 The RPD result exceeded the control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference





Sequoia Analytical  
680 Chesapeake Dr.  
Redwood City, CA 94063  
(650) 364-9600 • FAX (650) 364-9233

# EXXON COMPANY, U.S.A.

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

## CHAIN OF CUSTODY

Consultant's Name: ERI

Page 1 of 1

Address: <u>73 DIGITAL DR. #109, NOVATO, CA 94949</u>	Site Location: <u>1725 PARK, ALAMEDA</u>	
Project #: <u>250611X</u>	Consultant Project #: <u>250611X</u>	Consultant Work Release #: <u>4503003315</u>
Project Contact: <u>SCOTT GRAHAM</u>	Phone #: <u>415 382 9105</u>	Laboratory Work Release #:
EXXON Contact: <u>GENE ORTEGA</u>	Phone #: <u>925 246 8747</u>	EXXON RAS #: <u>HDT04</u>
Sampled by (print): <u>ANTHONY OGATA</u>	Sampler's Signature: <u>A. Ogata</u>	<u>ACAMEDA, CA</u>
Shipment Method:	Air Bill #:	

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

### ANALYSIS REQUIRED

MMD0307

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/Diesel EPA 8015	TRPH S.M. 5520	MTBE <u>8020</u>	Temperature	Inbound Seal: Yes No	Outbound Seal: Yes No
N-PSP#1	9/10	1100	H <sub>2</sub> O	HCL	4	01	X			X		ALL	
N-INT2	9/105	1105	H <sub>2</sub> O	HCL	4	02	X			X		SAMPLES COLLECTION	
N-INT1	9/110	1110	H <sub>2</sub> O	HCL	4	03	X			X		ARE GRAB	
N-INF	9/115	1115	H <sub>2</sub> O	HCL	4	04	X			X			
A-EPR	9/1200	1200	AIR		1	05	X						
A-WT	9/1205	1205	AIR		1	06	X						
A-INF	9/1210	1210	AIR		1	07	X						

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<u>ANTHONY OGATA - ERI</u> <u>ANTHONY OGATA</u>	9APR03	1900	<u>ERI REPRODATOR</u>	9APR03	201	
<u>Chavez</u>	4/10/03	1400	<u>Alvarez / sequoia</u>	4/10/03	1245	

Pink - Client

Yellow - Sequoia

White - Sequoia

## SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: EXXON  
 REC. BY (PRINT) JS/KT  
 WORKORDER: MMDD307

DATE REC'D AT LAB: 04/10/03  
 TIME REC'D AT LAB: 1920  
 DATE LOGGED IN: 4-11-03

Drinking water for  
regulatory purposes: YES/NO  
 Wastewater for  
regulatory purposes: YES/NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / Absent	✓1		W - PSP#1	(4) VIAL	HCl	L	04/09/03	
Intact / Broken*	✓2		- INT2					
2. Chain-of-Custody Present / Absent*	✓3		- INT1					
3. Traffic Reports or Packing List: Present / Absent	✓4		✓ - INF					
4. Airbill: Airbill / Sticker	✓5		A - FFF	(1) BAG		AIR		
Present / Absent	✓6		- INT					
5. Airbill #:	✓7		✓ - INF					
6. Sample Labels: Present / Absent								
7. Sample IDs: Listed / Not Listed on Chain-of-Custody								
8. Sample Condition: Intact / Broken*/ Leaking*								
9. Does information on custody reports, traffic reports and sample labels agree? Yes / No*								
10. Sample received within hold time: Yes / No*								
11. Proper Preservatives used: Yes / No*								
12. Temp Rec. at Lab: Is temp 4 +/-2°C? Yes / No**	3.8							
(Acceptance range for samples requiring thermal pres.)								
**Exception (if any): Metals / DFF (Direct From Field) or Problem COC								

\*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.



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RECEIVED  
MAY 30 2003

27 May, 2003

BY: -----

Scott Graham  
Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato, CA 94949

RE: Exxon 7-0104  
Sequoia Report: MME0221

Enclosed are the results of analyses for samples received by the laboratory on 05/09/03 09:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Latonya Pelt  
Project Manager

CA ELAP Certificate #1210





# Sequoia

# Analytical

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Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

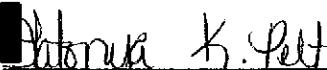
Reported:  
05/27/03 13:54

## ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-PSP1	MME0221-01	Water	05/07/03 13:00	05/09/03 09:30
W-INT2	MME0221-02	Water	05/07/03 13:05	05/09/03 09:30
W-INT1	MME0221-03	Water	05/07/03 13:10	05/09/03 09:30
W-INF	MME0221-04	Water	05/07/03 13:15	05/09/03 09:30
A-EFF	MME0221-05	Air	05/07/03 13:40	05/09/03 09:30
A-INT	MME0221-06	Air	05/07/03 13:45	05/09/03 09:30
A-INF	MME0221-07	Air	05/07/03 13:50	05/09/03 09:30

Sequoia Analytical - Morgan Hill

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Latonya Pelet, Project Manager



Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
05/27/03 13:54

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>W-PSP1 (MME0221-01) Water Sampled: 05/07/03 13:00 Received: 05/09/03 09:30</b>									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	3E15003	05/15/03	05/15/03	8015Bm	
Surrogate: <i>a,a,a-Trifluorotoluene</i>		103 %	55-142	"	"	"	"	"	
<b>W-INT2 (MME0221-02) Water Sampled: 05/07/03 13:05 Received: 05/09/03 09:30</b>									
Gasoline Range Organics (C6-C10)	ND	50	ug/l	1	3E15003	05/15/03	05/15/03	8015Bm	
Surrogate: <i>a,a,a-Trifluorotoluene</i>		106 %	55-142	"	"	"	"	"	
<b>W-INT1 (MME0221-03) Water Sampled: 05/07/03 13:10 Received: 05/09/03 09:30</b>									
Gasoline Range Organics (C6-C10)	110	50	ug/l	1	3E15003	05/15/03	05/15/03	8015Bm	HC-19
Surrogate: <i>a,a,a-Trifluorotoluene</i>		106 %	55-142	"	"	"	"	"	
<b>W-INF (MME0221-04) Water Sampled: 05/07/03 13:15 Received: 05/09/03 09:30</b>									
Gasoline Range Organics (C6-C10)	180	50	ug/l	1	3E15003	05/15/03	05/15/03	8015Bm	
Surrogate: <i>a,a,a-Trifluorotoluene</i>		113 %	55-142	"	"	"	"	"	



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Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
05/27/03 13:54

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B in Air

### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>A-EFF (MME0221-05) Air Sampled: 05/07/03 13:40 Received: 05/09/03 09:30</b>									
Gasoline Range Organics (C6-C10)	ND	10	mg/m <sup>3</sup> Air	1	3E10002	05/10/03	05/10/03	8015Bm/8021B	
Benzene	ND	0.10	"	"	"	"	"	"	"
Toluene	ND	0.10	"	"	"	"	"	"	"
Ethylbenzene	ND	0.10	"	"	"	"	"	"	"
Xylenes (total)	ND	0.10	"	"	"	"	"	"	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>		100 %	56-134		"	"	"	"	"
<b>A-INT (MME0221-06) Air Sampled: 05/07/03 13:45 Received: 05/09/03 09:30</b>									
Gasoline Range Organics (C6-C10)	ND	10	mg/m <sup>3</sup> Air	1	3E10002	05/10/03	05/10/03	8015Bm/8021B	
Benzene	ND	0.10	"	"	"	"	"	"	"
Toluene	ND	0.10	"	"	"	"	"	"	"
Ethylbenzene	ND	0.10	"	"	"	"	"	"	"
Xylenes (total)	ND	0.10	"	"	"	"	"	"	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>		104 %	56-134		"	"	"	"	"
<b>A-INF (MME0221-07) Air Sampled: 05/07/03 13:50 Received: 05/09/03 09:30</b>									
Gasoline Range Organics (C6-C10)	14	10	mg/m <sup>3</sup> Air	1	3E10002	05/10/03	05/10/03	8015Bm/8021B	
Benzene	0.34	0.10	"	"	"	"	"	"	"
Toluene	0.43	0.10	"	"	"	"	"	"	"
Ethylbenzene	0.19	0.10	"	"	"	"	"	"	"
Xylenes (total)	0.57	0.10	"	"	"	"	"	"	"
<i>Surrogate: a,a,a-Trifluorotoluene</i>		102 %	56-134		"	"	"	"	"

Sequoia Analytical - Morgan Hill

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73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
05/27/03 13:54

## MTBE by EPA Method 8260B

### Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>W-PSP1 (MME0221-01) Water   Sampled: 05/07/03 13:00   Received: 05/09/03 09:30</b>									
Methyl tert-butyl ether	ND	0.50	ug/l	1	3E12005	05/12/03	05/12/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		102 %	78-129	"	"	"	"	"	
<b>W-INT2 (MME0221-02) Water   Sampled: 05/07/03 13:05   Received: 05/09/03 09:30</b>									
Methyl tert-butyl ether	18	0.50	ug/l	1	3E12005	05/12/03	05/12/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		101 %	78-129	"	"	"	"	"	
<b>W-INT1 (MME0221-03) Water   Sampled: 05/07/03 13:10   Received: 05/09/03 09:30</b>									
Methyl tert-butyl ether	99	0.50	ug/l	1	3E12005	05/12/03	05/12/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		103 %	78-129	"	"	"	"	"	
<b>W-INF (MME0221-04) Water   Sampled: 05/07/03 13:15   Received: 05/09/03 09:30</b>									
Methyl tert-butyl ether	430	5.0	ug/l	10	3E12005	05/12/03	05/12/03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		103 %	78-129	"	"	"	"	"	



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Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
05/27/03 13:54

## BTEX by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>W-PSP1 (MME0221-01) Water Sampled: 05/07/03 13:00 Received: 05/09/03 09:30</b>									
Benzene	ND	0.50	ug/l	1	3E12005	05/12/03	05/12/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		102 %		78-129		"	"	"	"
<b>W-INT2 (MME0221-02) Water Sampled: 05/07/03 13:05 Received: 05/09/03 09:30</b>									
Benzene	ND	0.50	ug/l	1	3E12005	05/12/03	05/12/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		101 %		78-129		"	"	"	"
<b>W-INT1 (MME0221-03) Water Sampled: 05/07/03 13:10 Received: 05/09/03 09:30</b>									
Benzene	ND	0.50	ug/l	1	3E12005	05/12/03	05/12/03	EPA 8260B	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		103 %		78-129		"	"	"	"
<b>W-INF (MME0221-04) Water Sampled: 05/07/03 13:15 Received: 05/09/03 09:30</b>									
Benzene	ND	5.0	ug/l	10	3E12005	05/12/03	05/12/03	EPA 8260B	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		103 %		78-129		"	"	"	"





Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
05/27/03 13:54

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified - Quality Control

### Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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#### Batch 3E15003 - EPA 5030B [P/T]

##### Blank (3E15003-BLK1)

Prepared & Analyzed: 05/15/03

Gasoline Range Organics (C6-C10)	ND	25	ug/l							
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##### Surrogate: *a,a,a-Trifluorotoluene*

38.1 " 40.0 95.2 55-142

##### LCS (3E15003-BS2)

Prepared & Analyzed: 05/15/03

Gasoline Range Organics (C6-C10)	213	50	ug/l	250		85.2	62-134			
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##### Surrogate: *a,a,a-Trifluorotoluene*

39.6 " 40.0 99.0 55-142

##### Matrix Spike (3E15003-MS1)

Source: MME0356-02 Prepared & Analyzed: 05/15/03

Gasoline Range Organics (C6-C10)	524	50	ug/l	550	ND	95.3	62-134			
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##### Surrogate: *a,a,a-Trifluorotoluene*

42.5 " 40.0 106 55-142

##### Matrix Spike Dup (3E15003-MSD1)

Source: MME0356-02 Prepared & Analyzed: 05/15/03

Gasoline Range Organics (C6-C10)	553	50	ug/l	550	ND	101	62-134	5.39	41	
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##### Surrogate: *a,a,a-Trifluorotoluene*

45.2 " 40.0 113 55-142





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Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
05/27/03 13:54

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B in Air - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch 3E10002 - EPA 5030B [P/T]

Blank (3E10002-BLK1)		Prepared & Analyzed: 05/10/03						
Gasoline Range Organics (C6-C10)	ND	5	mg/m³ Air					
Benzene	ND	0.05	"					
Toluene	ND	0.05	"					
Ethylbenzene	ND	0.05	"					
Xylenes (total)	ND	0.05	"					
Surrogate: <i>a,a,a</i> -Trifluorotoluene	2.01	"	2.00		100	56-134		

Blank (3E10002-BLK2)		Prepared & Analyzed: 05/10/03						
Gasoline Range Organics (C6-C10)	ND	5	mg/m³ Air					
Benzene	ND	0.05	"					
Toluene	ND	0.05	"					
Ethylbenzene	ND	0.05	"					
Xylenes (total)	ND	0.05	"					
Surrogate: <i>a,a,a</i> -Trifluorotoluene	1.95	"	2.00		97.5	56-134		

LCS (3E10002-BS1)		Prepared & Analyzed: 05/10/03						
Benzene	2.14	0.10	mg/m³ Air	2.00		107	62-125	
Toluene	2.14	0.10	"	2.00		107	68-121	
Ethylbenzene	2.00	0.10	"	2.00		100	75-125	
Xylenes (total)	6.62	0.10	"	6.00		110	76-121	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	2.13	"	2.00		106	56-134		

LCS (3E10002-BS2)		Prepared & Analyzed: 05/10/03						
Gasoline Range Organics (C6-C10)	46.3	10	mg/m³ Air	50.0		92.6	65-142	
Surrogate: <i>a,a,a</i> -Trifluorotoluene	2.08	"	2.00		104	56-134		

LCS Dup (3E10002-BSD1)		Prepared & Analyzed: 05/10/03						
Benzene	2.17	0.10	mg/m³ Air	2.00		108	62-125	1.39
Toluene	2.17	0.10	"	2.00		108	68-121	1.39
Ethylbenzene	2.03	0.10	"	2.00		102	75-125	1.49
Xylenes (total)	6.71	0.10	"	6.00		112	76-121	1.35
Surrogate: <i>a,a,a</i> -Trifluorotoluene	2.11	"	2.00		106	56-134		

Sequoia Analytical - Morgan Hill

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73 Digital Drive, Suite 100  
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Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

Reported:  
05/27/03 13:54

## Total Purgeable Hydrocarbons (C6-C10) by EPA 8015B modified, BTEX by EPA 8021B in Air - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch 3E10002 - EPA 5030B [P/T]

LCS Dup (3E10002-BSD2)		Prepared & Analyzed: 05/10/03						
Gasoline Range Organics (C6-C10)	45.5	10	mg/m <sup>3</sup> Air	50.0	91.0	65-142	1.74	50
Surrogate: <i>a,a,a-Trifluorotoluene</i>	2.08	"		2.00	104	56-134		





# Sequoia Analytical

885 Jarvis Drive  
Morgan Hill, CA 95037  
(408) 776-9600  
FAX (408) 782-6308  
[www.sequoiolabs.com](http://www.sequoiolabs.com)

Environmental Resolutions (Exxon)  
73 Digital Drive, Suite 100  
Novato CA, 94949

Project: Exxon 7-0104  
Project Number: 7-0104  
Project Manager: Scott Graham

**Reported:**  
05/27/03 13:54

## MTBE by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 3E12005 - EPA 5030B P/T</b>										
<b>Blank (3E12005-BLK1)</b>										
Methyl tert-butyl ether	ND	0.25	ug/l							
Surrogate: 1,2-Dichloroethane-d4	4.65	"		5.00		93.0	78-129			
<b>LCS (3E12005-BS1)</b>										
Methyl tert-butyl ether	8.78	0.50	ug/l	10.0		87.8	63-137			
Surrogate: 1,2-Dichloroethane-d4	4.42	"		5.00		88.4	78-129			
<b>LCS (3E12005-BS2)</b>										
Methyl tert-butyl ether	7.17	0.50	ug/l	9.04		79.3	63-137			
Surrogate: 1,2-Dichloroethane-d4	4.61	"		5.00		92.2	78-129			
<b>Matrix Spike (3E12005-MS1)</b>										
Methyl tert-butyl ether	472	5.0	ug/l	90.4	430	46.5	63-137			QM-4X
Surrogate: 1,2-Dichloroethane-d4	4.63	"		5.00		92.6	78-129			
<b>Matrix Spike Dup (3E12005-MSD1)</b>										
Methyl tert-butyl ether	474	5.0	ug/l	90.4	430	48.7	63-137	0.423	13	QM-4X
Surrogate: 1,2-Dichloroethane-d4	4.76	"		5.00		95.2	78-129			

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Reported:  
05/27/03 13:54

**BTEX by EPA Method 8260B - Quality Control**

**Sequoia Analytical - Morgan Hill**

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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**Batch 3E12005 - EPA 5030B P/T**

<b>Blank (3E12005-BLK1)</b>							Prepared & Analyzed: 05/12/03			
Benzene	ND	0.25	ug/l							
Toluene	ND	0.25	"							
Methylbenzene	ND	0.25	"							
Xylenes (total)	ND	0.25	"							
Surrogate: 1,2-Dichloroethane-d4	4.65		"	5.00		93.0	78-129			
<b>LCS (3E12005-BS1)</b>							Prepared & Analyzed: 05/12/03			
Benzene	10.1	0.50	ug/l	10.0		101	78-124			
Toluene	10.6	0.50	"	10.0		106	78-129			
Surrogate: 1,2-Dichloroethane-d4	4.42		"	5.00		88.4	78-129			
<b>LCS (3E12005-BS2)</b>							Prepared & Analyzed: 05/12/03			
Benzene	5.23	0.50	ug/l	5.44		96.1	78-124			
Toluene	33.0	0.50	"	32.8		101	78-129			
Surrogate: 1,2-Dichloroethane-d4	4.61		"	5.00		92.2	78-129			
<b>Matrix Spike (3E12005-MS1)</b>							Source: MME0221-04 Prepared & Analyzed: 05/12/03			
Benzene	50.9	5.0	ug/l	54.4	1.4	91.0	78-124			
Toluene	316	5.0	"	328	1.4	95.9	78-129			
Surrogate: 1,2-Dichloroethane-d4	4.63		"	5.00		92.6	78-129			
<b>Matrix Spike Dup (3E12005-MSD1)</b>							Source: MME0221-04 Prepared & Analyzed: 05/12/03			
Benzene	54.1	5.0	ug/l	54.4	1.4	96.9	78-124	6.10	12	
Toluene	337	5.0	"	328	1.4	102	78-129	6.43	10	
Surrogate: 1,2-Dichloroethane-d4	4.76		"	5.00		95.2	78-129			



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Project Manager: Scott Graham

**Reported:**  
05/27/03 13:54

## Notes and Definitions

HC-19 Discrete peak @ C6-C7.

QM-4X The spike recovery was outside of control limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference





S...a Analy

680 Chesapeake Dr.

Redwood City, CA 94063

(650) 364-9600 • FAX (650) 364-9233

## EXXON COMPANY, U.S.A.

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

## CHAIN OF CUSTODY

Consultant's Name: ETIPage 1 of 1Address: 73 DIGITAL DR. #100, NARVATO, CA 94949Site Location: 1725 PARK ST.

Project #:

Consultant Project #: 250611XConsultant Work Release #: 4503003315Project Contact: SCOTT GRAHAMPhone #: 14153829105

Laboratory Work Release #:

EXXON Contact: GENE ORTEGAPhone #: 17252468747EXXON RAS #: 7-0104Sampled by (print): ANTHONY S. OSATASampler's Signature: Anthony S. Osata

ACM150304, CA

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 S.M. EPA 8015	TRPH 5520	MTBE <u>8020</u>	Temperature: _____
W-PSP1	5/7/03	1300	WATER	HCL	4	01	X			X	ALL ARE GRAB SAMPLES
W-INT2		1305	WATER	HCL	4	02	X			X	
W-INT1		1310	WATER	HCL	4	03	X			X	
W-INF		1315	WATER	HCL	4	04	X			X	
A-EFF		1340	AIR	-	1	05	X				
A-INT		1345	AIR	-	1	06	X				
A-INF		1350	AIR	-	1	07	X				

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<u>Anthony S. OSATA ETI</u>	5/7/03	2200	<u>ETI REFRIGERATOR</u>	5/7/03	2201	
<u>CH</u>	5-8-03		<u>CH</u>	5-8-03	1230	

## SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: ERJ  
 REC. BY (PRINT): JR  
 WORKORDER: MME0221

DATE REC'D AT LAB: 5/9/03  
 TIME REC'D AT LAB: 9:30  
 DATE LOGGED IN: 5/9/03

Drinking water for  
regulatory purposes: YES / NO  
 Wastewater for  
regulatory purposes: YES / NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / Absent	01		W - PSP 1	(4) vials	HCl	L	5/9/03	
Intact / Broken*	02		INT 2					
2. Chain-of-Custody Present / Absent*	03		INT 1					
3. Traffic Reports or Packing List: Present / Absent	04		INF					
4. Airbill: Airbill / Sticker	05		A EFF	(1) Airbag	-	A		
Present / Absent	06		INT					
	07		INF					
5. Airbill #:								
6. Sample Labels: Present / Absent								
7. Sample IDs: Listed / Not Listed on Chain-of-Custody								
8. Sample Condition: Intact / Broken* / Leaking*								
9. Does information on custody reports, traffic reports and sample labels agree? Yes / No*								
10. Sample received within hold time: Yes / No*								
11. Proper Preservatives used: Yes / No*								
12. Temp Rec. at Lab: Is temp 4 +/- 2°C? (Acceptance range for samples requiring thermal pres.)	6 °C							
Yes / No**								
**Exception (if any): Metals / DFF (Direct From Field) or Problem COC								

\*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

**ATTACHMENT D**

**AS/SVE SYSTEM OPERATION DATA  
PROVIDED BY PREVIOUS CONSULTANTS**

**OPERATIONAL DATA FOR  
SOIL VAPOR EXTRACTION SYSTEM**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 1 of 2)

Date	Sample	FIELD MEASUREMENTS			Laboratory Analytical Results		TPHg Removal	
		ID	Hour Meter	Hours of Operation	Flow cfm	TPHg ppmv	Benzene ppmv	Per Period Pounds
2/16/98	System startup	1,583		0	---			
2/19/98	A-INF	1,652		69	48	< 2.4	< 0.031	<
	A-INT					< 2.4	< 0.031	
	A-EFF					< 2.4	< 0.031	
3/3/98	A-INF	1,828		176	50	< 2.4	< 0.031	<
	A-INT					< 2.4	< 0.031	
	A-EFF					< 2.4	< 0.031	
4/2/98	A-INF	2,184		356	52	< 2.4	< 0.031	<
	A-INT					< 2.4	< 0.031	
	A-EFF					< 2.4	< 0.031	
5/4/98	A-INF	2,538		354	131	17	0.44	< 5.8
	A-INT					< 2.4	< 0.031	
	A-EFF					< 2.4	< 0.031	
6/10/98	A-INF	2,940		402	131	12	0.047	< 10.0
	A-INT					4.2	< 0.031	
	A-EFF					< 2.4	< 0.031	
7/7/99	A-INF	2,940		0	131	76	2.6	< 10.0
	A-INT					---	---	
	A-EFF					< 2.4	< 0.031	
8/4/98	A-INF	3,248		308	131	34	0.94	< 19.1
	A-INT					8.8	0.27	
	A-EFF					10	< 0.031	
10/20/98	A-INF	3,249		1	131	210	6.0	< 19.3
	A-INT					< 2.4	< 0.031	
	A-EFF					< 2.4	< 0.031	
11/9/98	A-INF	3,464		215	131	13	0.056	< 21.7
	A-INT					< 2.4	< 0.031	
	A-EFF					< 2.4	< 0.031	
12/8/98	A-INF	3,798		334	131	3.1	0.034	< 22.7
	A-INT					< 2.4	< 0.031	
	A-EFF					< 2.4	< 0.031	
1/13/99	A-INF	4,264		466	131	12	< 0.031	< 27.5
	A-INT					5.6	< 0.031	
	A-EFF					< 2.4	< 0.031	
2/8/99	A-INF	4,600		336	131	< 12.1	< 0.16	<
	A-INT					< 12.1	< 0.16	
	A-EFF					< 12.1	< 0.16	
3/8/99	A-INF	4,919		319	131	2.7	< 0.031	< 31.8
	A-INT					< 2.4	< 0.031	

**OPERATIONAL DATA FOR  
SOIL VAPOR EXTRACTION SYSTEM**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 2 of 2)

Date	Sample	FIELD MEASUREMENTS			Laboratory Analytical Results		TPHg Removal	
		ID	Hour Meter	Hours of Operation	Flow cfm	TPHg ppmv	Benzene ppmv	Per Period Pounds
	A-EFF				< 2.4	< 0.031		
4/5/99	A-INF	4,957	38	131	42.6	0.474	< 33.3	
	A-INT				4.6	< 0.0314		
	A-EFF				< 2.84	< 0.0314		
5/6/99	A-INF	5,470	513	131	11.84	0.0872	< 38.6	
	A-INT				4.20	< 0.0314		
	A-EFF				4.71	< 0.0314		
5/26/99	A-INF	5,799	329	131	---	---	< 42.0	
	A-INT				18.03	< 0.031		
	A-EFF				11.98	< 0.031		
8/9/99	A-INF	5,799	0	118	240	1.60	< 42.0	
	A-INT				< 2.84	< 0.0314		
	A-EFF				< 2.84	< 0.0314		
9/7/99	A-INF	6,275	476	109	10.6	0.0403	< 45.7	
	A-INT				6.23	< 0.0314		
	A-EFF				3.74	< 0.0314		
10/12/99	A-INF	6,638	363	122	15	< 0.31	< 50.1	
	A-INT				< 2.8	< 0.31		
	A-EFF				< 2.8	< 0.31		
12/9/99	A-INF	6,686	48	109	82	1.0	< 53.0	
	A-INT				< 2.8	< 0.31		
	A-EFF				< 2.8	< 0.31		
2/8/00	A-INF	7,030	344	109	31	0.59	< 60.8	
	A-INT				< 2.8	< 0.31		
	A-EFF				< 2.8	< 0.31		

3/24/00 System shutdown pending evaluation

4/1/00 Environmental Resolutions Inc., assumed operation of the system.

---

Notes: Data prior to April 1, 2000 provided by Delta Environmental Consultants, Inc.

A-INF	=	Influent vapor sample collected prior to biofilters.
A-INT1	=	Vapor sample collected after biofilters.
A-INT2	=	Vapor sample collected after 1st carbon vessel.
A-EFF	=	Vapor sample collected from effluent sample port.
cfm	=	Cubic feet per minute.
ppmv	=	Parts per million by volume
---	=	Not sampled/not measured.

---

**ATTACHMENT E**

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

**HYDROCARBONS REMOVED**  
**HYDROCARBONS REMOVED**  
**SOP-25**

Rev. JO'C

Rev. 4/29/97

**POUNDS OF HYDROCARBON IN AN VAPOR STREAM**

**INPUT DATA:**

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

**SAMPLE DATA AND CALCULATIONS**

Date	Time	Temp deg F	Press in H <sub>2</sub> O	HC conc mg/M <sup>3</sup> acfm	Vapor flow lb. rem.	Calc.
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.  $T_{abs} = 460 + T$  deg F

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

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

hr	min	cu ft	x	T <sub>corr</sub>	x	P <sub>corr</sub>	x	M <sup>3</sup>	x	g	x	lb	=	lb
-----	-----	-----	x	-----	x	-----	x	cu ft	x	M <sup>3</sup>	x	-----	basis	
basis	hr	min												

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

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

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