

**ExxonMobil  
Refining & Supply Company**

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Gene N. Ortega  
Territory Manager  
Global Remediation-US Retail

RO-448

**ExxonMobil**  
Refining & Supply

November 21, 2001

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

DEC 20 2001

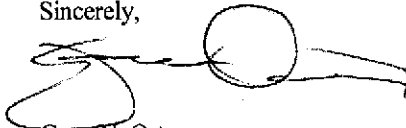
**RE: Former Exxon RAS #7-0104/1725 Park Street, Alameda, California.**

Dear Ms. Chu:

Attached for your review and comment is a letter report entitled *Quarterly Groundwater and Remediation Status Report*, dated November 21, 2001, for the above-referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the results of monitoring, sampling, and remedial activities at the subject site.

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

Sincerely,



Gene N. Ortega  
Territory Manager

Attachment: ERI's Quarterly Groundwater and Remediation Status Report, dated November 21, 2001

cc: w/ attachment  
Mr. Stephen Hill, California Regional Water Quality Control Board, San Francisco Bay Region  
Mr. Winson B. Low, Environmental Safety and Affairs Department

w/o attachment  
Mr. Scott R. Graham, Environmental Resolutions, Inc.



**ENVIRONMENTAL RESOLUTIONS, INC.**

November 21, 2001  
ERI 250611.R05

Mr. Gene N. Ortega  
ExxonMobil Oil Corporation  
P.O. Box 4032  
Concord, California 94524-4032

DEC 20 2001

Subject: Quarterly Groundwater Monitoring and Remediation Status Report, Third Quarter 2001, Former Exxon Service Station 7-0104, 1725 Park Street, Alameda, California.

Mr. Ortega:

At the request of ExxonMobil Oil Corporation (formerly Exxon Company, U.S.A.) (ExxonMobil), Environmental Resolutions, Inc. (ERI) performed the third quarter 2001 groundwater monitoring and sampling activities at the subject site. The location of the site is shown on the Site Vicinity Map (Plate 1). The purpose of quarterly monitoring and sampling is to evaluate concentrations of dissolved hydrocarbons in groundwater and the effectiveness of remedial actions. The locations of select site features are shown on the Generalized Site Plan (Plate 2).

**GROUNDWATER MONITORING AND SAMPLING**

On July 2, 2001, ERI measured the depth to water (DTW) and collected groundwater samples from select wells for laboratory analysis. Groundwater monitoring and sampling were performed in accordance with ERI's groundwater sampling protocol (Attachment A).

Historical and recent monitoring data are summarized in Table 1. Due to ongoing groundwater and soil vapor extraction, the hydraulic gradient and groundwater flow direction may be affected, and therefore, were not calculated.

**Laboratory Analyses and Results**

ERI submitted groundwater samples to Southern Petroleum Laboratories, Inc. (SPL), a 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 B).

## SOIL AND GROUNDWATER REMEDIATION

### Air Sparge/Soil Vapor Extraction

The air sparge/soil vapor extraction (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 C. The AS/SVE system was shutdown on March 24, 2000, pending system evaluation. 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 AS/SVE system consists of six AS wells, two SVE wells, a horizontal SVE trench, a moisture separator, a Sutorbuilt 100 standard-cubic-foot-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 D).

### Groundwater Extraction and Treatment

The groundwater remediation system (GRS) is designed to remove and treat separate-phase hydrocarbons and groundwater with dissolved hydrocarbons. Pneumatic pumps are utilized to extract groundwater from extraction wells EW1 through EW5. 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.

The GRS system was shut down on March 24, 2000, pending system evaluation. Cumulative GRS flow rates, total volume extracted, and influent, intermediate, and effluent sample concentrations are presented in Table 3.

## SUMMARY AND STATUS OF INVESTIGATION

On August 7, 2001, ERI shut down the AS/SVE system due to blower failure. On August 13, 2001, ERI removed the blower for repair. ERI is awaiting replacement of the blower.

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

Period	Pounds of Hydrocarbons Removed	Gallons of Hydrocarbons Removed
06/04/01 - 09/10/01	<43.33	<7.11
To Date:	<497.9	<81.8

The table below presents the estimated amounts of hydrocarbons removed by the GRS since startup.

Period	Pounds of Hydrocarbons Removed	Gallons of Hydrocarbons Removed
To Date:	29.2	4.8

#### 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

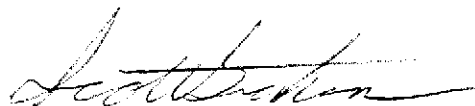
Mr. Winson B. Low  
Environmental and Safety Affairs Department  
One Valero Place, MS-06E  
San Antonio, Texas 78212

#### LIMITATIONS

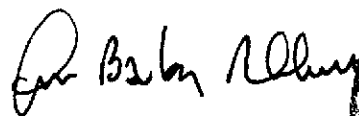
This report was prepared in accordance with generally accepted standards of environmental practice in California at the time this investigation was performed. This report has been prepared for ExxonMobil, and any reliance on this report by third parties shall be at such party's sole risk.

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

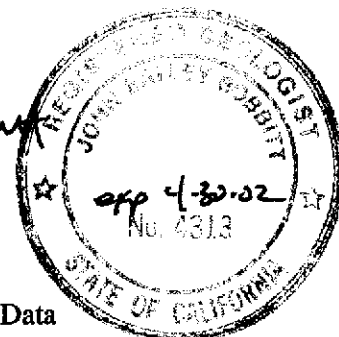
Sincerely,  
Environmental Resolutions, Inc.



Scott R. Graham  
Assistant Project Manager



John B. Bobbitt  
R.G. 4313



- 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
  
  - Attachment A: Groundwater Sampling Protocol
  - Attachment B: Laboratory Analysis Reports and Chain-of-Custody Records
  - Attachment C: AS/SVE System Operation Data From Previous Consultants
  - Attachment D: 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 15)

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....feet.....>			<.....ug/L.....>							
MW1	09/12/94	NLPH	7.11	10.24	---	1,600a	---	200	1.9	210	6.6	---
(17.35)	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	---	---	---	---	---	---	---	---
	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	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 2 of 15)

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....feet.....>	<.....ug/L.....>									
MW2	09/12/94	NLPH	6.71	9.96	---	31,000a	---	4,400	120	1,700	2,100	---
(16.67)	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	---
	10/17/95	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	---	---	---	---	---	---	---	---
	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	---
	07/02/01	NLPH	5.62	11.05	---	1,400	890	13	1.1	<0.5	1.1	---

TABLE 1  
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 3 of 15)

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....feet.....>			<.....ug/L.....>							
MW3	09/12/94	NLPH	6.58	10.53	---	3,100a	---	580	8	340	100	---
(17.11)	10/01/94	NLPH	6.85	10.26	---	3,800a	---	640	11	230	130	---
	01/13/95	NLPH	5.27	11.84	---	3,800a	---	690	24	210	130	---
	04/27/95	NLPH	6.05	11.06	---	7,500	---	940	35	810	530	---
	08/03/95	NLPH	6.71	10.40	---	1,900	24	380	<5.0	140	45	---
	10/17/95	NLPH	7.46	9.65	---	6,100	<5.0	950	29	230	190	---
	01/24/96	NLPH	5.83	11.28	---	3,000	<100	730	15	190	110	---
	04/24/96	NLPH	5.38	11.73	---	11,000	<100	1,200	130	1,000	1,400	---
	07/26/96	NLPH	6.80	10.31	---	2,500	250	800	16	24	56	---
	10/30/96	NLPH	7.20	9.91	---	5,200	2,900	1,300	28	170	180	---
	01/31/97	NLPH	4.31	12.80	---	---	---	---	---	---	---	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	---	---	---	---	---	---	---	---	---	---	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	4.03	13.08	---	---	---	---	---	---	---	---
	04/14/98	NLPH	3.80	13.31	---	---	---	---	---	---	---	---
	07/30/98	NLPH	5.84	11.27	---	---	---	---	---	---	---	---
	10/19/98	NLPH	6.25	10.86	---	---	---	---	---	---	---	---
	01/13/99	NLPH	6.14	10.97	---	---	---	---	---	---	---	---
	04/28/99	---	4.95	12.16	---	---	---	---	---	---	---	---
	07/09/99	---	---	---	---	---	---	---	---	---	---	---
	10/25/99	---	---	---	---	---	---	---	---	---	---	---
	01/21/00	---	---	---	---	---	---	---	---	---	---	---
	04/14/00	---	---	---	---	---	---	---	---	---	---	---
	07/05/00	---	---	---	---	---	---	---	---	---	---	---
	10/03/00	---	---	---	---	---	---	---	---	---	---	---
	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	---



TABLE 1  
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 4 of 15)

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....feet.....>		<.....ug/L.....>								
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	---
	04/14/00	NLPH	4.39	12.95	---	---	---	---	---	---	---	---
	07/05/00	NLPH	5.48	11.86	---	1,600	260	400	3.9	100	84	---
	10/03/00	NLPH	6.22	11.12	---	1,600	190	280	2	64	34.10	---
	01/02/01	NLPH	5.93	11.41	---	840	1,000	210	2.5	45	28.10	---
	04/02/01	NLPH	4.89	12.45	---	1,900	320	340	8.5	110	116	---
	07/02/01	NLPH	5.83	11.51	---	100	<2	3.9	<0.5	0.65	<0.5	---

TABLE 1  
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 5 of 15)

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....feet.....>	<.....ug/L.....>									
MW5	09/12/94	NLPH	7.12	9.59	---	10,000a	---	2,300	17	320	230	---
(16.71)	10/01/94	Sheen	7.06	9.65	---	11,000a	---	2,300	19	220	200	---
	01/13/95	thickness of	4.85	11.86	---	---	---	---	---	---	---	---
	04/27/95	NLPH	6.51	10.20	---	14,000	---	2,200	72	540	350	---
	08/03/95	NLPH	7.24	9.47	---	<10,000	39,000	2,100	<100	210	<100	---
	10/17/95	NLPH	7.80	8.91	---	13,000	38,000	1,800	14	240	170	---
	01/24/96	NLPH	6.66	10.05	---	10,000	20,000	2,400	79	340	190	---
	04/24/96	NLPH	5.80	10.91	---	13,000	33,000	3,700	120	520	170	---
	07/26/96	NLPH	7.67	9.04	---	15,000	140,000	3,400	53	280	76	---
	10/30/96	NLPH	7.77	8.94	---	10,000	110,000a	2,600	76	260	150	---
	01/31/97	NLPH	4.90	11.81	---	10,000	34,000c	2,400	66	430	140	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	NLPH	7.65	9.06	---	9,800	36,000/52,000c	1,400	120	190	120	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	3.95	12.76	---	6,500	15,000c	1,500	34	73	57	---
	04/14/98	---	4.30	12.41	---	---	---	---	---	---	---	---
	07/30/98	NLPH	5.86	10.85	---	8,300	4,300	1,700	26	110	66	---
	10/19/98	NLPH	6.20	10.51	---	---	---	---	---	---	---	---
	01/13/99	NLPH	6.37	10.34	---	4,780	3,650	1,240	11.1	<10	<10	---
	04/28/99	---	5.25	11.46	---	---	---	---	---	---	---	---
	07/09/99	NLPH	6.08	10.63	---	4,360	2,360	1,780	18.6	45	<5.0	---
	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	---	---	---	---	---	---	---	---
	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	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
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Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....feet.....>			<.....ug/L.....>							
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	700c
	01/28/98	NLPH	3.74	13.82	---	15,000	2,400e	650	2,300	900	2,700	---
	04/14/98	NLPH	3.92	13.64	---	25,000	2,100e	850	3,300	1,200	4,300	---
	07/30/98	NLPH	6.09	11.47	---	5,900	910	270	.65	500	630	---
	10/19/98	NLPH	6.56	11.00	---	---	---	---	---	---	---	---
	01/13/99	NLPH	6.35	11.21	---	3,150	422	204	107	297	304	---
	04/28/99	NLPH	4.89	12.67	---	15,300	436c	1,270	980	1,100	3,320	436c
	07/09/99	NLPH	6.07	11.49	---	1,140	439	121	9.95	160	4.69	---
	10/25/99	NLPH	6.11	11.45	---	2,200	3,400	590	<10	22	12.1	---
	01/21/00	NLPH	5.86	11.70	---	1,300	1,000	95	15	94	74	---
	04/14/00	NLPH	4.29	13.27	---	13,000	420	440	630	840	3,000	---
	07/05/00	NLPH	5.39	12.17	---	5,800	830	1,000	13	550	798	---
	10/03/00	NLPH	6.14	11.42	---	490	3,800	61	<0.5	74	12	---
	01/02/01	---	---	---	---	---	---	---	---	---	---	---
	04/02/01	NLPH	4.70	12.86	400	16,000	450	370	690	870	3,200	---
	07/02/01	NLPH	8.73	8.83	520	3,700	2,000	330	<5	160	32	---

TABLE 1  
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
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Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....>	feet	>	<.....ug/L.....>							
MW7	09/12/94	NLPH	6.43	10.69	---	6,000a	---	490	50	280	70	---
(17.12)	10/01/94	NLPH	6.71	10.41	---	8,900a	---	940	670	310	160	---
	01/13/95	NLPH	4.29	12.83	---	20,000a	---	590	780	970	4,200	---
	04/27/95	NLPH	5.00	12.12	---	8,800	---	410	32	410	230	---
	08/03/95	NLPH	6.53	10.59	---	4,900	17,000	390	<50	290	<50	---
	10/17/95	NLPH	7.23	9.89	---	6,700	17,000	530	26	240	25	---
	01/24/96	NLPH	5.26	11.86	---	9,300	60,000	2,000	390	350	230	---
	04/24/96	NLPH	5.06	12.06	---	9,000	360,000	2,400	850	150	130	---
	07/26/96	NLPH	6.62	10.50	---	4,800	86,000	530	25	60	46	---
	10/30/96	NLPH	7.09	10.03	---	3,400	28,000	180	9.8	58	38	---
	01/31/97	NLPH	3.65	13.47	---	3,800	45,000	300	18	48	37	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	NLPH	7.44	9.68	---	3,500	18,000	70	<25	<25	<25	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	3.06	14.06	---	100	250c	1.0	<0.5	<0.5	0.67	---
	04/14/98	---	3.10	14.02	---	---	---	---	---	---	---	---
	07/30/98	NLPH	5.78	11.34	---	100	670	1.4	<0.5	<0.5	<0.5	---
	10/19/98	NLPH	6.25	10.87	---	---	---	---	---	---	---	---
	01/13/99	NLPH	5.98	11.14	---	273	530	<2.5	<2.5	<2.5	<2.5	---
	04/28/99	---	4.32	12.80	---	---	---	---	---	---	---	---
	07/09/99	NLPH	5.67	11.45	---	139	860	3.79	7.10	1.19	8.65	---
	10/25/99	NLPH	6.23	10.89	---	<50	<1.0	<1.0	<1.0	<1.0	<1.0	---
	01/21/00	NLPH	5.41	11.71	---	410	500	10	2.5	<1.0	2.5	---
	04/14/00	NLPH	3.84	13.28	---	---	---	---	---	---	---	---
	07/05/00	NLPH	5.05	12.07	---	140	480	<0.5	<0.5	<0.5	0.56	---
	10/03/00	NLPH	5.88	11.24	---	370	1,900	<0.5	0.62	<0.5	3.20	---
	01/02/01	NLPH	5.52	11.60	---	120	1,500	2.2	<0.5	<0.5	<0.5	---
	04/02/01	NLPH	4.26	12.86	---	120	1,500	0.91	<0.5	<0.5	<0.5	---
	07/02/01	NLPH	5.42	11.70	---	110	740	4.1	<0.5	0.75	0.84	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
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Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....>	feet	>	<.....ug/L.....>							
MW8	09/12/94	NLPH	6.42	9.91	---	<50a	---	<0.5	<0.5	<0.5	<0.5	---
(16.33)	10/01/94	NLPH	6.62	9.71	---	<50a	---	<0.5	<0.5	<0.5	<0.5	---
	01/13/95	NLPH	5.25	11.08	---	<50a	---	<0.5	<0.5	<0.5	<0.5	---
	04/27/95	NLPH	6.00	10.33	---	<50	---	<0.5	<0.5	<0.5	<0.5	---
	08/03/95	NLPH	6.28	10.05	---	<50	<2.5	<0.5	<0.5	<0.5	<0.5	---
	10/17/95	NLPH	6.93	9.40	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	01/24/96	NLPH	5.71	10.62	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	04/24/96	NLPH	5.52	10.81	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	07/26/96	NLPH	6.27	10.06	---	<50	230	<0.5	<0.5	<0.5	<0.5	---
	10/30/96	NLPH	6.69	9.64	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	01/31/97	NLPH	5.18	11.15	---	---	---	---	---	---	---	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	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	---
	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	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
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Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....feet.....>	<.....ug/L.....>									
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	---
	07/26/96	NLPH	6.80	8.82	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	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	ND
	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	<1
	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	---

TABLE 1  
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
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Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....feet.....>	<.....ug/L.....>									
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	1,300c
	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	---	

TABLE 1  
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
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Well ID #	Sampling (TOC)	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
	Date		<.....feet.....>		<.....ug/L.....>							
MW11 (cont)	01/13/99	NLPH	6.42	11.62	--	50,900	1,920	2,210	6,440	2,030	10,600	---
(18.04)	04/28/99	NLPH	5.30	12.74	---	59,400	2,390c	3,790	4,260	1,790	2,970	2,390c
	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	---
	01/21/00	NLPH	6.47	11.57	---	56,000	1,100	2,300	4,600	2,100	11,600	---
	04/14/00	NLPH	5.09	12.95	---	42,000	2,100	3,000	2,600	1,600	8,000	---
	07/05/00	NLPH	5.93	12.11	---	32,000	3,900	3,000	2,700	1,300	6,200	---
	10/03/00	NLPH	6.57	11.47	---	46,000	4,300	2,900	3,600	1,600	7,900	---
	01/02/01	NLPH	6.46	11.58	1,600d	44,000	4,200	3,900	3,600	1,300	6,500	---
	04/02/01	NLPH	5.44	12.60	2,000	39,000	3,100	2,600	3,600	1,500	7,500	---
	07/02/01	NLPH	9.10	8.94	2,300	45,000	3,000	2,000	2,000	1,400	7,200	---
MW12	10/17/95	NLPH	6.38	9.92	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
(16.30)	01/24/96	NLPH	4.86	11.44	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	04/24/96	NLPH	4.46	11.84	---	<50	<5.0	<0.5	0.68	<0.5	0.72	---
	07/26/96	NLPH	5.90	10.40	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	10/30/96	NLPH	6.56	9.74	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	01/31/97	NLPH	4.57	11.73	---	<50	<5.0	<0.5	<0.5	<0.5	<0.5	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	---	---	---	---	---	---	---	---	---	---	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	3.90	12.40	---	---	---	---	---	---	---	---
	04/14/98	NLPH	3.67	12.63	---	---	---	---	---	---	---	---
	07/30/98	NLPH	5.00	11.30	---	---	---	---	---	---	---	---
	10/19/98	NLPH	---	---	---	---	---	---	---	---	---	---
	01/13/99	NLPH	5.19	11.11	---	---	---	---	---	---	---	---
	04/28/99	---	4.53	11.77	---	---	---	---	---	---	---	---
	Not monitored or sampled 07/09/99 through 4/2/01.											



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 #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....feet.....>	<.....ug/L.....>									
EW-1	09/12/94	NLPH	6.13	10.09	---	400a	---	40	<0.5	10	5.4	---
(16.22)	10/01/94	NLPH	7.63	8.59	---	3,400a	---	<0.5	4.4	30	11	---
	01/13/95	NLPH	11.46	4.76	---	680a	---	40	<0.5	12	16	---
	04/27/95	NLPH	15.47	0.75	---	---	---	---	---	---	---	---
	08/03/95	NLPH	13.85	2.37	---	<125	590	2.7	<1.2	<1.2	<1.2	---
	10/17/95	NLPH	8.05	8.17	---	3,600	400	220	<0.5	160	36	---
	01/24/96	NLPH	11.07	5.15	---	64	260	4.3	<0.5	1.3	0.53	---
	04/24/96	NLPH	6.20	10.02	---	740	3,000	130	2.3	35	2.1	---
	07/26/96	NLPH	13.93	2.29	---	<50	960	<0.5	<0.5	<0.5	<0.5	---
	10/30/96	NLPH	13.74	2.48	---	<50	5,300	0.52	<0.5	<0.5	<0.5	---
	01/31/97	NLPH	8.40	7.82	---	---	---	---	---	---	---	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	---	---	---	---	---	---	---	---	---	---	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	3.35	12.87	---	---	---	---	---	---	---	---
	04/14/98	NLPH	3.52	12.70	---	---	---	---	---	---	---	---
	07/30/98	NLPH	5.48	10.74	---	---	---	---	---	---	---	---
	10/19/98	NLPH	5.77	10.45	---	---	---	---	---	---	---	---
	01/13/99	NLPH	5.49	10.73	---	---	---	---	---	---	---	---
	04/28/99	NLPH	4.31	11.91	---	---	---	---	---	---	---	---
	Not monitored or sampled 07/09/99 through present.											
EW-2	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	---



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 #	Sampling (TOC)	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
	Date		<.....feet.....>		<.....ug/L.....>							
EW-3(cont.) (16.02)	10/19/98	NLPH	5.65	10.37	---	---	---	---	---	---	---	---
	01/13/99	NLPH	13.85	2.17	---	---	---	---	---	---	---	---
	04/28/99	NLPH	4.52	11.50	---	---	---	---	---	---	---	---
	Not monitored or sampled 07/09/99 through present.											
EW-4 (16.61)	09/12/94	NLPH	5.69	10.92	---	4,000a	---	1,700	12	210	77	---
	10/01/94	NLPH	7.90	8.71	---	460a	---	100	1.5	15	11	---
	01/13/95	NLPH	11.36	5.25	---	520a	---	89	8.8	1.6	82	---
	04/27/95	NLPH	16.30	0.31	---	---	---	---	---	---	---	---
	08/03/95	NLPH	6.45	10.16	---	42,000	17,000	3,100	1,100	2,000	8,200	---
	10/17/95	NLPH	15.89	0.72	---	92	2,500	6.3	<0.5	<0.5	<0.5	---
	01/24/96	NLPH	6.03	10.58	---	220	9,200	79	2.5	2.9	10	---
	04/24/96	NLPH	4.97	11.64	---	4,600	860	49	36	69	1,100	---
	07/26/96	NLPH	6.54	10.07	---	2,900	15,000	610	6.2	200	300	---
	10/30/96	NLPH	6.53	10.08	---	550	3,400	68	11	<2.5	71	---
	01/31/97	NLPH	3.98	12.63	---	---	---	---	---	---	---	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	---	---	---	---	---	---	---	---	---	---	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	3.22	13.39	---	---	---	---	---	---	---	---
	04/14/98	NLPH	3.20	13.41	---	---	---	---	---	---	---	---
07/30/98	NLPH	4.89	11.72	---	---	---	---	---	---	---	---	
10/19/98	NLPH	5.16	11.45	---	---	---	---	---	---	---	---	
01/13/99	NLPH	5.57	11.04	---	---	---	---	---	---	---	---	
04/28/99	NLPH	4.27	12.34	---	---	---	---	---	---	---	---	
Not monitored or sampled 07/09/99 through present.												
EW-5 (16.51)	09/12/94	NLPH	6.30	10.21	---	180a	---	26	1.7	11	12	---
	10/01/94	NLPH	11.83	4.68	---	130a	---	16	0.92	5.7	8.5	---
	01/13/95	NLPH	12.54	3.97	---	130a	---	0.6	0.8	0.6	2.9	---
	04/27/95	NLPH	13.11	3.40	---	---	---	---	---	---	---	---
	08/03/95	NLPH	11.99	4.52	---	70	210	<0.5	<0.5	<0.5	<0.5	---
	10/17/95	NLPH	13.43	3.08	---	78	50	1.5	<0.5	<0.5	3.0	---

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 7-0104  
1725 Park Street  
Alameda, California  
(Page 15 of 15)

Well ID #	Sampling	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	Oxygenated Compounds
(TOC)	Date	<.....feet.....>		<.....ug/L.....>								
EW-5(cont.)	01/24/96	NLPH	9.72	6.79	---	2,500	350	280	66	22	370	---
(16.51)	04/24/96	NLPH	8.13	8.38	---	6,400	400	690	240	380	1,300	---
	07/26/96	NLPH	10.00	6.51	---	850	84	82	2.5	2.4	100	---
	10/30/96	NLPH	9.82	6.69	---	1,200	68	110	5.1	2.2	120	---
	01/31/97	NLPH	9.00	7.51	---	---	---	---	---	---	---	---
	04/10/97	---	---	---	---	---	---	---	---	---	---	---
	07/10/97	---	---	---	---	---	---	---	---	---	---	---
	10/08/97	---	---	---	---	---	---	---	---	---	---	---
	01/28/98	NLPH	3.54	12.97	---	---	---	---	---	---	---	---
	04/14/98	NLPH	3.65	12.86	---	---	---	---	---	---	---	---
	07/30/98	NLPH	7.63	8.88	---	---	---	---	---	---	---	---
	10/19/98	NLPH	5.75	10.76	---	---	---	---	---	---	---	---
	01/13/99	NLPH	7.03	9.48	---	---	---	---	---	---	---	---
	04/28/99	NLPH	8.80	7.71	---	---	---	---	---	---	---	---
	Not monitored or sampled 07/09/99 through present.											

- 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.
  - Oxygenated Compounds = Oxygenates compounds analyzed using EPA Method 8260.
  - NLPH = No liquid-phase hydrocarbons.
  - = Not sampled.
  - ug/L = Micrograms per liter.
  - < = Less than the stated laboratory method detection 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

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 3)

Date	Sample ID	Hour Meter	FIELD MEASUREMENTS					Analytical Laboratory Results			TPHg Removal		Benzene Removal		Benzene	
			Hours of Operation	Temp F	Vacuum in H <sub>2</sub> O	Flow lfm	cfm	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	
02/16/98	System startup	---	0	---	---	---	---	---	---	---	---	---	---	---	---	---
03/24/00	System shutdown pending evaluation	12,001									<	60.8	< 60.8			
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	85	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	97	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	95	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	17	53.5	43	< 1	<	6.22	< 67.2	< 0.13	< 0.14	
	A-INT							0.0	< 10	< 1						
	A-EFF							0.0	< 10	< 1						< 0.002
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	52	294.0								
	A-INT							23.7								
	A-EFF							2.4								
09/12/00	System down upon arrival for carbon changeout. System running on departure.															
	A-INF	13,070	5	74	20	2,600	56	247.5	190	2.5	< 4.79	< 72.0	< 0.07	< 0.21		
	A-INT							0.0	< 10	< 1.0						
	A-EFF							0.0	< 10	< 1.0						< 0.01
09/26/00	A-INF	13,406	336	80	22	2,450	52	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	53	96.4	55	< 1.0	< 17.64	< 89.6	< 0.25	< 0.46		
	A-INT							72.3	21	< 1.0						

TABLE 2  
 CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR  
 SOIL VAPOR EXTRACTION SYSTEM  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 2 of 3)

Date	Sample ID	FIELD MEASUREMENTS						Analytical Laboratory Results			TPHg Removal		Benzene Removal		Benzene
		Hour Meter	Hours of Operation	Temp F	Vacuum in H <sub>2</sub> O	Flow lfm	Flow cfm	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
10/30/00	A-EFF						9.0	< 10	< 1.0					< 0.005	
	System down upon arrival for carbon changeout. System running on departure.														
	A-INF	13,788	2	56	24	2,450	55	10,024	1,700	15	< 0.35	< 90.0	< 0.003	< 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	51	102.6	29	< 1.0	< 37.69	< 127.6	< 0.35	< 0.81	
	A-INT							41.8	< 10	< 1.0					
	A-EFF							Stet	< 10	< 1.0				< 0.005	
11/21/00	System running upon arrival. System down upon departure for carbon changeout.														
	A-INF	14,314	306	68	25	2,300	50	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	54	957	240	2.1	< 8.04	< 135.7	< 0.09	< 0.90	
	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	58	192.1							
	A-INT							4.8							
	A-EFF							0.0							
01/09/01	A-INF	15,012	315	56	25	2,400	54	82.4	32	< 1.0	< 19.60	< 155.3	< 0.22	< 1.12	
	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	51	485.0							
	A-INT							35.2							
	A-EFF							20.7							
01/31/01	A-INF	15,355	2	45	33	1,500	34	10000							
	A-INT							0							
	A-EFF							0							
02/13/01	A-INF	15,669	314	56	12	4,000	90	37.8	31	< 1.0	< 4.43	< 159.7	< 4.20	< 5.32	
	A-INT							29.5	< 10	< 1.0					
	A-EFF							0	< 10	< 1.0				< 0.008	
02/27/01	System down upon departure for C/O.														
	A-INF	15,999	330	70	8	4,000	87	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	88	5833	1300	6.1	< 73.16	< 232.9	< 0.39	< 5.71	
	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	89	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	87	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	86	18.6	< 10	< 1.0	< 220.60	< 453.5	< 1.19	< 6.90	

TABLE 2  
 CUMULATIVE HYDROCARBON REMOVAL AND EMISSIONS FOR  
 SOIL VAPOR EXTRACTION SYSTEM  
 Former Exxon Service Station 7-0104  
 1725 Park Street  
 Alameda, California  
 (Page 3 of 3)

Date	Sample ID	Hour Meter	FIELD MEASUREMENTS					Analytical Laboratory Results		TPHg Removal		Benzene Removal		Benzene Emission Rate lbs/day
			Hours of Operation	Temp F	Vacuum in H <sub>2</sub> O	Flow lfm	Flow cfm	PID ppmv	TPHg mg/m <sup>3</sup>	Benzene mg/m <sup>3</sup>	Per Period Pounds	Cumulative Pounds	Per Period Pounds	
05/09/01	A-INT						9.5	< 10	< 1.0					
	A-EFF						0	26	< 1.0					< 0.008
	System running on arrival and departure.													
	A-INF	17,371	337	86	10	4,000	85	11.3	< 10	< 1.0	< 1.07	< 454.5	< 1.57	< 8.47
	A-INT							3.6	< 10	< 1.0				
	A-EFF							5.9	< 10	< 1.0				< 0.008
05/24/01	System running on arrival and departure.													
	A-INF	17,734	363	86	20	3,050	65	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	11	496	280	< 1.0	< 16.05	< 470.6	< 0.11	< 8.58
	A-INT							19.7	< 10	< 1.0				
	A-EFF							3.2	< 10	< 1.0				< 0.001
06/19/01	System running on arrival and departure.													
	A-INF	18,353	361	80	38	500	11	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	11	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	86	0.0	< 10	< 1.0	< 27.27	< 497.9	< 0.19	< 8.77
	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.													

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-INT3 = 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".

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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Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results					TPHg Removal		Benzene Removal	
				TPHg <.....ug/L.....>	B	T	E	X	Per Period <.....lbs.....>	Cumulative <.....lbs.....>	Per Period <.....lbs.....>	Cumulative <.....lbs.....>
10/10/94	1,331,420		W-INF	< 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	0.0	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	0.00
			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	0.67
			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				



TABLE 3  
 OPERATION AND PERFORMANCE DATA FOR  
 GROUNDWATER REMEDIATION SYSTEM  
 Former Exxon Service Station 7-0104  
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Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results					TPHg Removal		Benzene Removal	
				TPHg	B	T	E	X	Per Period	Cumulative	Per Period	Cumulative
				<.....ug/L.....>					<.....lbs.....>		<.....lbs.....>	
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				
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				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
11/16/95	2,384,880	3.3	W-INF	120	4.9	<0.5	<0.5	5.9	0.20	10.8	0.0190	2.62
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
12/14/95	2,453,200	1.7	W-INF	450	46	16	4.6	65	0.16	10.9	0.0145	2.63
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
01/05/96	2,516,900	2.0	W-INF	240	26	2.4	1.2	20	0.18	11.1	0.0191	2.65
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
02/14/96	2,680,160	2.8	W-INF	470	43	5.5	<0.5	55	0.48	11.6	0.0469	2.70
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
03/12/96	2,767,820	2.3	W-INF	620	60	9.8	3.9	70	0.40	12.0	0.0376	2.74
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
04/16/96	2,927,390	3.2	W-INF	790	120	27	8.8	120	0.94	12.9	0.1196	2.86
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				

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Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results					TPHg Removal		Benzene Removal	
				TPHg	B	T	E	X	Per Period	Cumulative	Per Period	Cumulative
				<.....ug/L.....>					<.....lbs.....>		<.....lbs.....>	
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				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
06/11/96	3,109,730	2.8	W-INF	2,900	470	120	19	410	1.92	15.1	0.3094	3.20
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
07/09/96	3,232,330	3.0	W-INF	490	55	6.2	<0.5	110	1.73	16.8	0.2680	3.47
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
08/08/96	3,365,060	3.1	W-INF	580	49	4.6	<1.0	75	0.59	17.4	0.0575	3.53
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
09/05/96	---	---	W-INF	740	67	19	10	72	---	---	---	---
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
10/02/96	3,530,230	2.1	W-INF	980	130	39	7.8	130	1.07	18.5	0.1231	3.65
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
11/08/96	3,657,370	2.4	W-INF	480	42	7.1	0.69	79	0.77	19.2	0.0911	3.74
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
12/09/96	3,735,650	1.8	W-INF	< 50	< 0.5	<0.5	<0.5	<0.5	0.17	19.4	0.0139	3.75
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				

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 OPERATION AND PERFORMANCE DATA FOR  
 GROUNDWATER REMEDIATION SYSTEM  
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Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results					TPHg Removal		Benzene Removal	
				TPHg	B	T	E	X	Per Period	Cumulative	Per Period	Cumulative
				<.....ug/L.....>					<.....lbs.....>		<.....lbs.....>	
01/21/97	3,735,730	0.0	W-INF	690	69	20	20	91	0.00	19.4	0.0000	3.75
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
02/10/97	3,735,360	0.0	W-INF	860	100	24	1.4	160	--	--	--	--
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
03/20/97	3,843,430	2.0	W-INF	86	< 0.5	<0.5	<0.5	5.1	0.43	19.8	0.0452	3.80
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
04/03/97	3,918,650	3.7	W-INF	690	31	6.1	<5.0	89	0.24	20.1	0.0099	3.81
			W-INT	< 1,000	< 10	<10	<10	<10				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
05/07/97	4,092,720	3.6	W-INF	1,000	57	29	11	110	1.22	21.3	0.0638	3.87
			W-INT	< 50	1.1	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
06/11/97	4,144,600	1.0	W-INF	570	66	14	4.7	75	0.34	21.7	0.0266	3.90
			W-INT	< 50	0.57	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
06/25/97	4,273,310	--	W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5	--	--	--	--
07/24/97	4,363,090	3.5	W-INF	470	25	8.8	3.7	49	0.95	22.6	0.0828	3.98
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
08/04/97	4,408,100	2.8	W-INF	610	48	18	6.2	69	0.20	22.8	0.0137	4.00
			W-INT	< 50	0.76	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				

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Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results					TPHg Removal		Benzene Removal	
				TPHg	B	T	E	X	Per Period	Cumulative	Per Period	Cumulative
				<-----ug/L----->					<-----lbs----->		<-----lbs----->	
10/21/97	4,496,810	0.8	W-INF	250	16	5.4	2.3	29	0.32	23.1	0.0236	4.02
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
11/04/97	4,553,090	2.8	W-INF	510	22	9.8	13	60	0.18	23.3	0.0089	4.03
			W-INT	< 50	0.82	<0.5	<0.5	0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
12/05/97	4,588,340	0.8	W-INF	79	1.5	<0.5	<0.5	53	0.09	23.4	0.0034	4.03
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
01/08/98	4,625,400	0.8	W-INF	83	2.6	0.74	<0.5	5.4	0.03	23.4	0.0006	4.03
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	0.58	<0.5	0.81	1.5				
03/03/98	4,662,470	0.5	W-INF	< 50	0.54	<0.5	<0.5	0.88	0.02	23.4	0.0005	4.03
			W-INT	< 50	< 0.5	<0.5	<0.5	0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
04/02/98	4,702,760	0.9	W-INF	1,100	170	32	12	160	0.19	23.6	0.0286	4.06
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
05/04/98	4,786,330	1.8	W-INF	1,000	140	23	8.5	150	0.73	24.4	0.1079	4.17
			W-INT	< 50	< 0.5	<0.5	<0.5	0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
06/10/98	4,852,030	1.2	W-INF	670	110	16	7.6	74	0.46	24.8	0.0684	4.24
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
07/07/98	4,951,910	2.6	W-INF	690	91	13	6.3	55	0.57	25.4	0.0836	4.32
			W-INT	< 200	< 2.0	<2.0	<2.0	<2.0				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				

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Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results					TPH <sub>g</sub> Removal		Benzene Removal	
				TPH <sub>g</sub>	B	T	E	X	Per Period	Cumulative	Per Period	Cumulative
				<.....ug/L.....>					<.....lbs.....>		<.....lbs.....>	
08/04/98	5,039,980	2.2	W-INF	230	36	6.4	2.5	17	0.34	25.7	0.0466	4.37
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
09/03/98	5,080,850	0.9	W-INF	280	13	2.0	6.4	21	0.09	25.8	0.0083	4.38
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
10/20/98	NM		W-INF	740	43	54	25	110	---	---	---	---
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
11/09/98	5,232,360	1.6	W-INF	300	37	10	8.4	43	0.37	26.2	0.0315	4.41
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
12/08/98	5,284,180	1.2	W-INF	700	82	25	13	100	0.22	26.4	0.0257	4.43
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
01/13/99	5,377,930	1.8	W-INF	1,030	155	46.5	52.7	73.3	0.68	27.1	0.0925	4.53
			W-INT	< 500	< 5.0	<5.0	<5.0	<5.0				
			W-EFF	< 500	< 5.0	<5.0	<5.0	<5.0				
02/08/99	5,441,820	1.7	W-INF	260	31	9.0	2.4	33	0.34	27.4	0.0495	4.58
			W-INT	< 50	< 0.5	<0.5	<0.5	<0.5				
			W-EFF	< 50	< 0.5	<0.5	<0.5	<0.5				
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				

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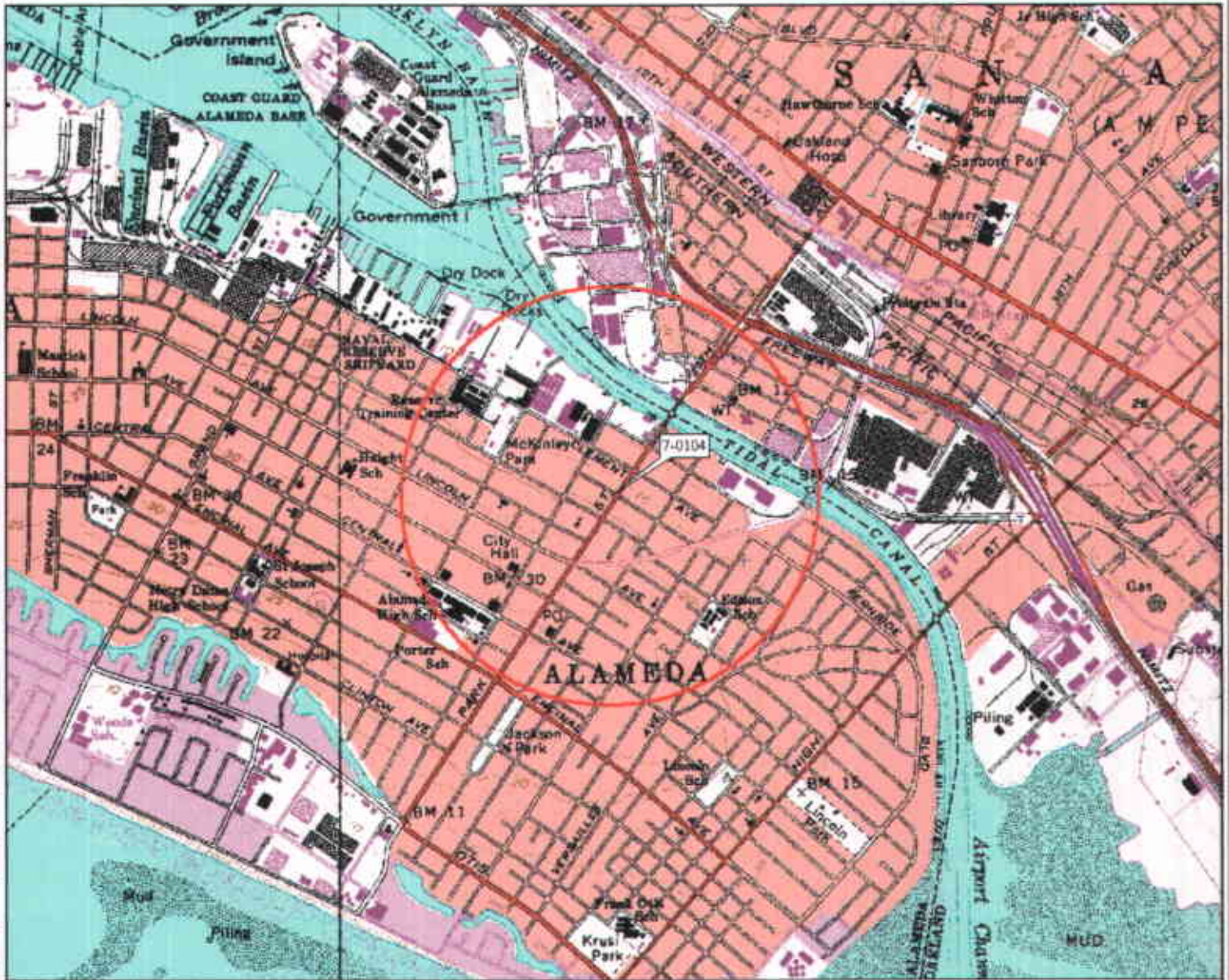
Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results					TPHg Removal		Benzene Removal	
				TPHg	B	T	E	X	Per Period	Cumulative	Per Period	Cumulative
				<.....ug/L.....>					<.....lbs.....>		<.....lbs.....>	
05/06/99	5,621,560	1.1	W-INF	310	45	6.0	0.86	41	0.17	28.2	0.0169	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	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				
12/09/99	5,992,780	0.7	W-INF	200	28	3.2	2.2	22.4	0.08	29.1	0.0083	4.72
			W-INT1	< 50	< 1.0	<1.0	<1.0	<1.0				
			W-INT2	< 50	< 1.0	<1.0	<1.0	<1.0				
			W-EFF	< 50	< 1.0	<1.0	<1.0	<1.0				

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Date	Total Flow gal	Average Flowrate gpm	Sample ID	Laboratory Analytical Results					TPHg Removal		Benzene Removal	
				TPHg	B	T	E	X	Per Period	Cumulative	Per Period	Cumulative
				<.....ug/L.....>					<.....lbs.....>		<.....lbs.....>	
01/10/00	6,035,690	0.9	W-INF	120	11	1.5	1.8	14.5	0.06	29.2	0.0070	4.73
			W-INT	< 50	< 1.0	<1.0	<1.0	<1.0				
			W-EFF	< 50	< 1.0	<1.0	<1.0	<1.0				
02/08/00	6,055,000	0.5	W-INF	130	14	<1.0	<1.0	11.9	0.02	29.2	0.3530	5.08
			MID	< 50	< 1.0	<1.0	<1.0	<1.0				
			W-EFF	< 50	< 1.0	<1.0	<1.0	<1.0				
03/24/00	6,080,125	0.4	System shutdown pending evaluation.									
03/28/00	6,080,360	0.0	W-INF	< 50	< 1.0	<1.0	<1.0	<1.0	0.02	29.2	0.0016	5.08
			MID	< 50	< 1.0	<1.0	<1.0	<1.0				
			W-EFF	< 67	< 1.0	<1.0	<1.0	<1.0				
03/28/00	System shutdown upon departure.											
04/01/00	Environmental Resolutions, Inc. assumed operation of the remediation system.											


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 (EBMUD sample location SS#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/sampled/analyzed.

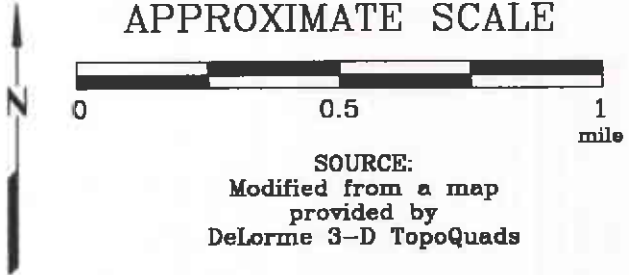


© TopoQuads Copyright © 2009 DeLorme, Vermont, ME 04060 Source Data: USGS  
 500 ft Scale: 1:25,000 Elevation: 154 Datum: WGS84

**EXPLANATION**

 1/2-mile radius circle

**APPROXIMATE SCALE**



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

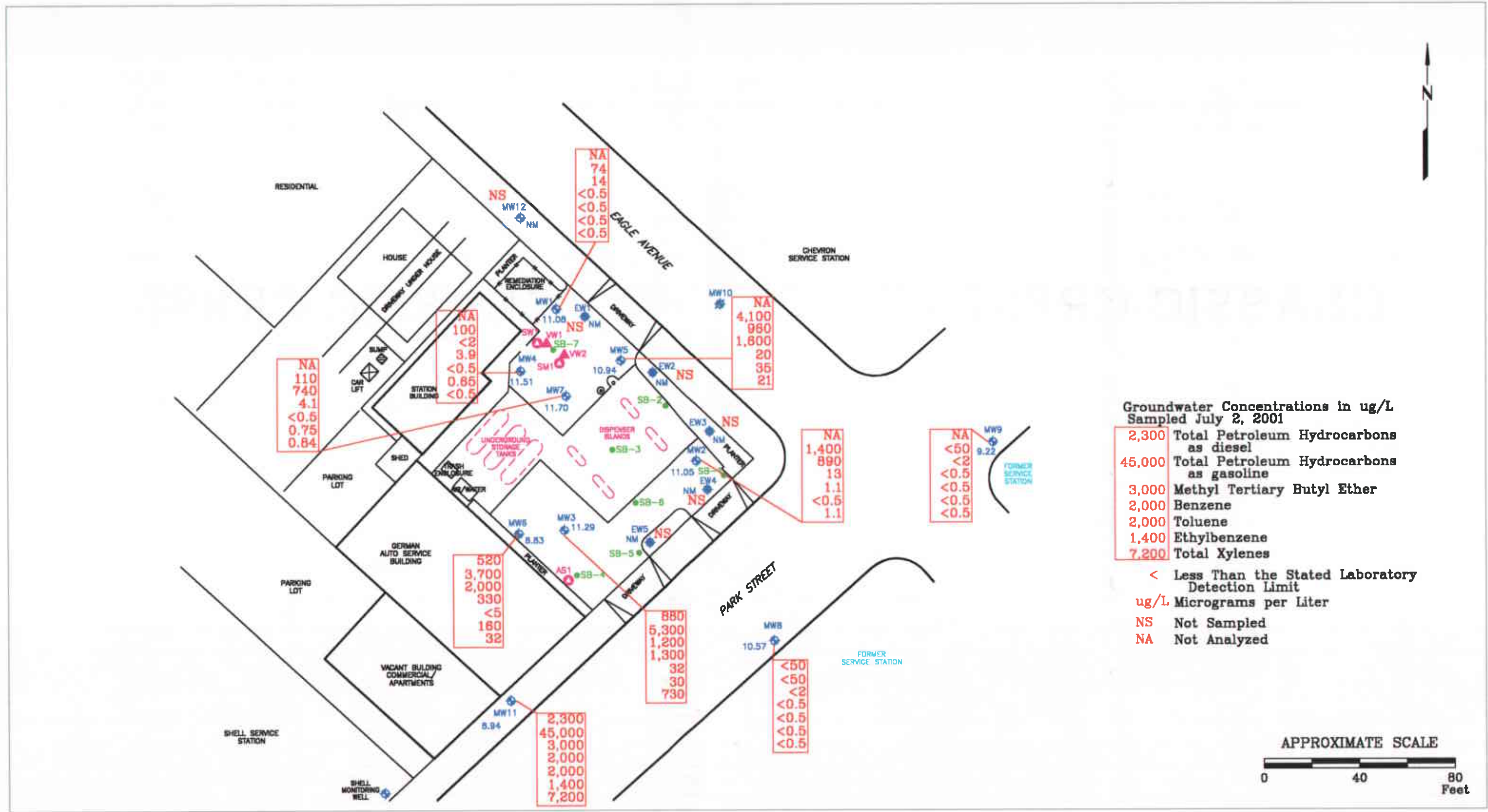
**SITE VICINITY MAP**

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

**PROJECT NO.**  
 2506  
**PLATE**  
 1







**Groundwater Concentrations in ug/L  
Sampled July 2, 2001**

2,300	Total Petroleum Hydrocarbons as diesel
45,000	Total Petroleum Hydrocarbons as gasoline
3,000	Methyl Tertiary Butyl Ether
2,000	Benzene
2,000	Toluene
1,400	Ethylbenzene
7,200	Total Xylenes
<	Less Than the Stated Laboratory Detection Limit
ug/L	Micrograms per Liter
NS	Not Sampled
NA	Not Analyzed

FN 25060002



**GENERALIZED SITE PLAN**  
 FORMER  
 EXXON SERVICE STATION 7-0104  
 1725 Park Street  
 Alameda, California

**EXPLANATION**

	MW9	Groundwater Monitoring Well
9.22		Groundwater elevation in feet above mean sea level
	MW10	Destroyed Groundwater Monitoring Well
	VW2	Vapor Extraction Well
	EW5	Recovery Well

NM	= Not Measured	
AS1	AS1	Air Sparge/Soil Vapor Well
SB-7	SB-7	Soil Boring Location

<b>PROJECT NO.</b>	2506
<b>PLATE</b>	2
	May 7, 2001

**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 well casing volume =  $\pi r^2 h (7.48)$  where:

r	=	radius of the well casing in feet.
h	=	column of water in the well in feet (depth to bottom - depth to water)
7.48	=	conversion constant from cubic feet to gallons
$\pi$	=	ratio of the circumference of a circle to its diameter

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

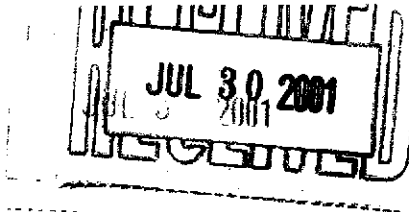
After purging, each well is allowed to recharge to at least 80% of the initial water level. Water samples from wells that do not recover at least 80% (due to slow recharging of the well) between purging and sampling are considered to be "grab samples". Water samples are collected with a new, disposable 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-certified laboratory.

**ATTACHMENT B**

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



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

**01070652**

<b>Report To:</b>  Environmental Resolution, Inc. Jim Chappell 73 Digital Drive Suite 100  Novato California 94949- ph: (415) 382-9105      fax: (415) 382-1856	<b>Project Name:</b> 2506-11X <b>Site:</b> 7-0104 <b>Site Address:</b> 1725 Park Street Alameda CA <b>PO Number:</b> EWR#21040341 <b>State:</b> California <b>State Cert. No.:</b> 1903 <b>Date Reported:</b> 7/24/01
--	--

This Report Contains A Total Of 12 Pages

Excluding This Page

And

Chain Of Custody

7/24/01

Date



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0901

Case Narrative for:  
**EXXON Company U.S.A.**

Certificate of Analysis Number:  
**01070652**

<b>Report To:</b>  Environmental Resolution, Inc. Jim Chappell 73 Digital Drive Suite 100  Novato California 94949- ph: (415) 382-9105      fax: (415) 382-1856	<b>Project Name:</b> 2506-11X <b>Site:</b> 7-0104 <b>Site Address:</b> 1725 Park Street Alameda CA <b>PO Number:</b> EWR#21040341 <b>State:</b> California <b>State Cert. No.:</b> 1903 <b>Date Reported:</b> 7/24/01
--	--

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Sonia West  
Senior Project Manager



HOUSTON LABORATORY  
 8880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:  
**01070652**

**Report To:** Environmental Resolution, Inc.  
 Jim Chappell  
 73 Digital Drive Suite 100

Novato  
 California  
 94949-  
 ph: (415) 382-9105 fax: (415) 382-1856

**Project Name:** 2506-11X  
**Site:** 7-0104  
**Site Address:** 1725 Park Street  
 Alameda CA  
**PO Number:** EWR#21040341  
**State:** California  
**State Cert. No.:** 1903  
**Date Reported:** 7/24/01

**Fax To:** Environmental Resolution, Inc.  
 Jim Chappell fax : (415) 382-1856

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
A-INF	01070652-01	Air	7/17/01 3:00:00 PM	7/19/01 10:00:00 AM		<input type="checkbox"/>
INT	01070652-02	Air	7/17/01 3:00:00 PM	7/19/01 10:00:00 AM		<input type="checkbox"/>
EFF	01070652-03	Air	7/17/01 3:00:00 PM	7/19/01 10:00:00 AM		<input type="checkbox"/>
W-DRUM	01070652-04	Water	7/17/01 2:50:00 PM	7/19/01 10:00:00 AM		<input type="checkbox"/>

*Sonia West*

7/24/01

Sonia West  
 Senior Project Manager

Date

Joel Grice  
 Laboratory Director

Ted Yen  
 Quality Assurance Officer



HOUSTON LABORATORY  
 8880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

01070652

Report To:

Environmental Resolution, Inc.  
 Jim Chappell  
 73 Digital Drive Suite 100

Novato  
 California  
 94949-

ph: (415) 382-9105 fax: (415) 382-1856

Project Name: 2506-11X

Site: 7-0104

Site Address: 1725 Park Street

Alameda CA

PO Number: EWR#21040341

State: California

State Cert. No.: 1903

Date Reported: 7/24/01

Client Sample ID: A-INF

SPL Sample ID: 01070652-01A

Analyte	mg/m <sup>3</sup>		ppm(v)	
	Result	PQL	Result	PQL
Benzene	ND	1.0	ND	0.31
Toluene	ND	1.0	ND	0.26
Ethylbenzene	ND	1.0	ND	0.23
m,p-Xylene	ND	1.0	ND	0.23
o-Xylene	ND	1.0	ND	0.23
Xylenes, Total	ND	1.0	ND	0.23
TPH Air	ND	10	ND	2.8

Client Sample ID: A-INT

SPL Sample ID: 01070652-02A

Analyte	mg/m <sup>3</sup>		ppm(v)	
	Result	PQL	Result	PQL
Benzene	ND	1.0	ND	0.31
Toluene	ND	1.0	ND	0.26
Ethylbenzene	ND	1.0	ND	0.23
m,p-Xylene	ND	1.0	ND	0.23
o-Xylene	ND	1.0	ND	0.23
Xylenes, Total	ND	1.0	ND	0.23
TPH Air	ND	10	ND	2.8





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

**01070652**

Report To:

Environmental Resolution, Inc.  
Jim Chappell  
73 Digital Drive Suite 100

Novato  
California  
94949-  
ph: (415) 382-9105 fax: (415) 382-1856

Project Name: 2506-11X  
Site: 7-0104  
Site Address: 1725 Park Street  
Alameda CA  
PO Number: EWR#21040341  
State: California  
State Cert. No.: 1903  
Date Reported: 7/24/01

Client Sample ID: A-EFF

SPL Sample ID: 01070652-03A

Analyte	mg/m <sup>3</sup>		ppm(v)	
	Result	PQL	Result	PQL
Benzene	ND	1.0	ND	0.31
Toluene	ND	1.0	ND	0.26
Ethylbenzene	ND	1.0	ND	0.23
m,p-Xylene	ND	1.0	ND	0.23
o-Xylene	ND	1.0	ND	0.23
Xylenes, Total	ND	1.0	ND	0.23
TPH Air	ND	10	ND	2.8



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Client Sample ID A-INF

Collected: 7/17/01 3:00:00

SPL Sample ID: 01070652-01

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>PURGEABLE AROMATICS IN AIR</b>			<b>MCL</b>	<b>SW8020A</b>	<b>Units: mg/m<sup>3</sup></b>		
Benzene	ND	1.0	1		07/19/01 16:26	TM	752062
Toluene	ND	1.0	1		07/19/01 16:26	TM	752062
Ethylbenzene	ND	1.0	1		07/19/01 16:26	TM	752062
m,p-Xylene	ND	1.0	1		07/19/01 16:26	TM	752062
o-Xylene	ND	1.0	1		07/19/01 16:26	TM	752062
Xylenes, Total	ND	1.0	1		07/19/01 16:26	TM	752062
Surr: 1,4-Difluorobenzene	94.3	% 20-150	1		07/19/01 16:26	TM	752062
Surr: 4-Bromofluorobenzene	102	% 58-139	1		07/19/01 16:26	TM	752062
<b>TOTAL PETROLEUM PRODUCT IN AIR</b>			<b>MCL</b>	<b>SW8015B</b>	<b>Units: mg/m<sup>3</sup></b>		
TPH Air	ND	10	1		07/19/01 16:26	TM	752069
Surr: 1,4-Difluorobenzene	108	% 62-144	1		07/19/01 16:26	TM	752069
Surr: 4-Bromofluorobenzene	111	% 44-153	1		07/19/01 16:26	TM	752069

*Sonia West*

Sonia West

Project Manager

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated Value between MDL and PQL



HOUSTON LABORATORY  
 8880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Client Sample ID A-INT

Collected: 7/17/01 3:00:00

SPL Sample ID: 01070652-02

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>PURGEABLE AROMATICS IN AIR</b>			<b>MCL</b>	<b>SW8020A</b>	<b>Units: mg/m<sup>3</sup></b>		
Benzene	ND	1.0	1		07/19/01 17:25	TM	752063
Toluene	ND	1.0	1		07/19/01 17:25	TM	752063
Ethylbenzene	ND	1.0	1		07/19/01 17:25	TM	752063
m,p-Xylene	ND	1.0	1		07/19/01 17:25	TM	752063
o-Xylene	ND	1.0	1		07/19/01 17:25	TM	752063
Xylenes, Total	ND	1.0	1		07/19/01 17:25	TM	752063
Surr: 1,4-Difluorobenzene	94.3	% 20-150	1		07/19/01 17:25	TM	752063
Surr: 4-Bromofluorobenzene	99.3	% 58-139	1		07/19/01 17:25	TM	752063
<b>TOTAL PETROLEUM PRODUCT IN AIR</b>			<b>MCL</b>	<b>SW8015B</b>	<b>Units: mg/m<sup>3</sup></b>		
TPH Air	ND	10	1		07/19/01 17:25	TM	752070
Surr: 1,4-Difluorobenzene	107	% 62-144	1		07/19/01 17:25	TM	752070
Surr: 4-Bromofluorobenzene	112	% 44-153	1		07/19/01 17:25	TM	752070

*Sonia West*

Sonia West

Project Manager

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated Value between MDL and PQL



Client Sample ID A-EFF

Collected: 7/17/01 3:00:00

SPL Sample ID: 01070652-03

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>PURGEABLE AROMATICS IN AIR</b>			<b>MCL</b>	<b>SW8020A</b>	<b>Units: mg/m<sup>3</sup></b>		
Benzene	ND	1.0	1		07/19/01 17:55	TM	752064
Toluene	ND	1.0	1		07/19/01 17:55	TM	752064
Ethylbenzene	ND	1.0	1		07/19/01 17:55	TM	752064
m,p-Xylene	ND	1.0	1		07/19/01 17:55	TM	752064
o-Xylene	ND	1.0	1		07/19/01 17:55	TM	752064
Xylenes, Total	ND	1.0	1		07/19/01 17:55	TM	752064
Surr: 1,4-Difluorobenzene	96.0	% 20-150	1		07/19/01 17:55	TM	752064
Surr: 4-Bromofluorobenzene	104	% 58-139	1		07/19/01 17:55	TM	752064
<b>TOTAL PETROLEUM PRODUCT IN AIR</b>			<b>MCL</b>	<b>SW8015B</b>	<b>Units: mg/m<sup>3</sup></b>		
TPH Air	ND	10	1		07/19/01 17:55	TM	752071
Surr: 1,4-Difluorobenzene	108	% 62-144	1		07/19/01 17:55	TM	752071
Surr: 4-Bromofluorobenzene	113	% 44-153	1		07/19/01 17:55	TM	752071

*Sonia West*

Sonia West  
 Project Manager

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated Value between MDL and PQL



HOUSTON LABORATORY  
 8880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Client Sample ID W-DRUM

Collected: 7/17/01 2:50:00

SPL Sample ID: 01070652-04

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
PH				MCL	E150.1	Units: pH Units	
pH	3.2	0.10	1		07/19/01 12:10	DG	749083

*Sonia West*

Sonia West

Project Manager

- Qualifiers:
- ND/U - Not Detected at the Reporting Limit
  - B - Analyte detected in the associated Method Blank
  - \* - Surrogate Recovery Outside Advisable QC Limits
  - J - Estimated Value between MDL and PQL
  - >MCL - Result Over Maximum Contamination Limit(MCL)
  - D - Surrogate Recovery Unreportable due to Dilution
  - MI - Matrix Interference

*Quality Control Documentation*



Quality Control Report  
EXXON Company U.S.A.  
2506-11X

Analysis: Purgeable Aromatics In Air  
Method: SW8020A

WorkOrder: 01070652  
Lab Batch ID: R39525

Method Blank

Samples in Analytical Batch:

RunID: HP\_P\_010719A-752061 Units: mg/m<sup>3</sup>  
Analysis Date: 07/19/2001 15:56 Analyst: TM

Lab Sample ID	Client Sample ID
01070652-01A	A-INF
01070652-02A	A-INT
01070652-03A	A-EFF

Analyte	Result	Rep Limit
Benzene	ND	1.0
Ethylbenzene	ND	1.0
Toluene	ND	1.0
m,p-Xylene	ND	1.0
o-Xylene	ND	1.0
Xylenes, Total	ND	1.0
Sum: 1,4-Difluorobenzene	94.2	20-150
Sum: 4-Bromofluorobenzene	100.1	58-139

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: HP\_P\_010719A-752059 Units: mg/m<sup>3</sup>  
Analysis Date: 07/19/2001 14:57 Analyst: TM

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Benzene	64	59	93	64	63	99	6.8	34	37	117
Ethylbenzene	88	70	79	88	80	91	13.5	35	56	115
Toluene	80	66	83	80	73	92	10.5	30	25	113
m,p-Xylene	88	71	80	88	81	92	13.1	35	12	114
o-Xylene	88	71	81	88	81	92	13.2	35	15	109
Xylenes, Total	176	142	81	176	162	92	13.2	35	12	114

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report  
EXXON Company U.S.A.  
2506-11X

Analysis: Total Petroleum Product in Air  
Method: SW8015B

WorkOrder: 01070652  
Lab Batch ID: R39526

Method Blank

RunID: HP\_P\_010719B-752068 Units: mg/m<sup>3</sup>  
Analysis Date: 07/19/2001 15:56 Analyst: TM

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01070652-01A	A-INF
01070652-02A	A-INT
01070652-03A	A-EFF

Analyte	Result	Rep Limit
TPH Air	ND	10
Surr. 1,4-Difluorobenzene	106.8	62-144
Surr. 4-Bromofluorobenzene	109.1	44-153

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: HP\_P\_010719B-752066 Units: mg/m<sup>3</sup>  
Analysis Date: 07/19/2001 14:57 Analyst: TM

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
TPH Air	770	660	85	770	690	89	4.9	30	40	140

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.





Quality Control Report  
 EXXON Company U.S.A.  
 2506-11X

Analysis: pH  
 Method: E150.1

WorkOrder: 01070652  
 Lab Batch ID: R39375

Samples in Analytical Batch:

Lab Sample ID: 01070652-04A  
 Client Sample ID: W-DRUM

Laboratory Control Sample (LCS)

RunID: WET\_010719A-749082 Units: pH Units  
 Analysis Date: 07/19/2001 12:10 Analyst: DG

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
pH	7	7	100	98	102

Sample Duplicate

Original Sample: 01070652-04  
 RunID: WET\_010719A-749083 Units: pH Units  
 Analysis Date: 07/19/2001 12:10 Analyst: DG

Analyte	Sample Result	DUP Result	RPD	RPD Limit
pH	3.2	3.1	1	10

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
 B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
 J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

*Sample Receipt Checklist  
And  
Chain of Custody*



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0901

Sample Receipt Checklist

Workorder:	01070652	Received By:	NB
Date and Time Received:	7/19/01 10:00:00 AM	Carrier name:	FedEx
Temperature:	3	Chilled by:	Water Ice

1. Shipping container/cooler in good condition? Yes  No  Not Present
2. Custody seals intact on shipping container/cooler? Yes  No  Not Present
3. Custody seals intact on sample bottles? Yes  No  Not Present
4. Chain of custody present? Yes  No
5. Chain of custody signed when relinquished and received? Yes  No
6. Chain of custody agrees with sample labels? Yes  No
7. Samples in proper container/bottle? Yes  No
8. Sample containers intact? Yes  No
9. Sufficient sample volume for indicated test? Yes  No
10. All samples received within holding time? Yes  No
11. Container/Temp Blank temperature in compliance? Yes  No
12. Water - VOA vials have zero headspace? Yes  No  Not Applicable
13. Water - pH acceptable upon receipt? Yes  No  Not Applicable

SPL Representative:

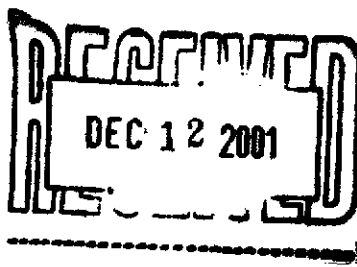
Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:

Client Instructions:





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

**01070097**

Report To:

Environmental Resolution, Inc.  
Scott Graham  
73 Digital Drive Suite 100

Novato  
California  
94949-

ph: (415) 382-9105      fax: (415) 382-1856

Project Name: 250613x

Site: 7-0104

Site Address: 1725 Park Street

Alameda CA

PO Number: EWR#21040341

State: California

State Cert. No.: 1903

Date Reported: 7/20/01

This Report Contains A Total Of 33 Pages

Excluding This Page

And

Chain Of Custody

7/20/01

Date



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0801

Case Narrative for:  
**EXXON Company U.S.A.**

Certificate of Analysis Number:  
**01070097**

<b>Report To:</b> Environmental Resolution, Inc. Scott Graham 73 Digital Drive Suite 100  Novato California 94949- ph: (415) 382-9105      fax: (415) 382-1856	<b>Project Name:</b> 250613x <b>Site:</b> 7-0104 <b>Site Address:</b> 1725 Park Street Alameda CA <b>PO Number:</b> EWR#21040341 <b>State:</b> California <b>State Cert. No.:</b> 1903 <b>Date Reported:</b> 7/20/01
--	---

Please note that your samples "W-5-MW6", "W-5-MW3" and "W-6-MW11" (SPL ID's: 01070097-08, -10 and -11) were detected for the presence of Diesel Range Organics by California method. However, these detects do not resemble a diesel pattern.

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

  
Sonia West  
Senior Project Manager

01070097 Page 1  
7/20/01

Date



HOUSTON LABORATORY  
 8880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:  
01070097

<b>Report To:</b> Environmental Resolution, Inc. Scott Graham 73 Digital Drive Suite 100  Novato California 94949- ph: (415) 382-9105 fax: (415) 382-1856	<b>Project Name:</b> 250613x <b>Site:</b> 7-0104 <b>Site Address:</b> 1725 Park Street Alameda CA <b>PO Number:</b> EWR#21040341 <b>State:</b> California <b>State Cert. No.:</b> 1903 <b>Date Reported:</b> 7/20/01
<b>Fax To:</b> Environmental Resolution, Inc. Scott Graham fax : (415) 382-1856	

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
TB 6/5/01	01070097-01	Water	7/2/01	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-5-MW8	01070097-02	Water	7/2/01 3:42:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-6-MW9	01070097-03	Water	7/2/01 4:03:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-6-MW1	01070097-04	Water	7/2/01 3:35:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-6-MW4	01070097-05	Water	7/2/01 3:50:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-9-MW2	01070097-06	Water	7/2/01 4:03:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-5-MW5	01070097-07	Water	7/2/01 4:20:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-5-MW6	01070097-08	Water	7/2/01 4:30:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-5-MW7	01070097-09	Water	7/2/01 4:35:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-5-MW3	01070097-10	Water	7/2/01 4:42:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-6-MW11	01070097-11	Water	7/2/01 5:00:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>
W-BB-MW8	01070097-12	Water	7/2/01 3:42:00 PM	7/5/01 9:30:00 AM		<input type="checkbox"/>

*Sonia West*

Sonia West  
 Senior Project Manager

7/20/01

Date

Joel Grice  
 Laboratory Director  
 Ted Yen  
 Quality Assurance Officer



HOUSTON LABORATORY  
 8880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Client Sample ID TB 6/5/01 Collected: 7/2/01 SPL Sample ID: 01070097-01

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	ND	50	1		07/18/01 15:30	DL	749329
Surr: 1,4-Difluorobenzene	106	% 62-144	1		07/18/01 15:30	DL	749329
Surr: 4-Bromofluorobenzene	98.7	% 44-153	1		07/18/01 15:30	DL	749329
<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	ND	0.5	1		07/18/01 15:30	DL	751151
Ethylbenzene	ND	0.5	1		07/18/01 15:30	DL	751151
Methyl tert-butyl ether	ND	2	1		07/18/01 15:30	DL	751151
Toluene	ND	0.5	1		07/18/01 15:30	DL	751151
m,p-Xylene	ND	0.5	1		07/18/01 15:30	DL	751151
o-Xylene	ND	0.5	1		07/18/01 15:30	DL	751151
Xylenes,Total	ND	0.5	1		07/18/01 15:30	DL	751151
Surr: 1,4-Difluorobenzene	90.1	% 72-137	1		07/18/01 15:30	DL	751151
Surr: 4-Bromofluorobenzene	83.3	% 48-156	1		07/18/01 15:30	DL	751151

*Sonia West*

Sonia West

Project Manager

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated Value between MDL and PQL





Client Sample ID W-5-MW8

Collected: 7/2/01 3:42:00 P SPL Sample ID: 01070097-02

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>DIESEL RANGE ORGANICS</b>			<b>MCL</b>	<b>CA_DRO</b>	<b>Units: ug/L</b>		
Diesel Range Organics	ND	50	1		07/13/01 17:17	AM	744136
Surr: n-Pentacosane	73.2	% 20-150	1		07/13/01 17:17	AM	744136

Prep Method	Prep Date	Prep Initials
SW3510B	07/08/2001 8:01	KL

<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA_GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	ND	50	1		07/09/01 17:40	D_R	735512
Surr: 1,4-Difluorobenzene	106	% 62-144	1		07/09/01 17:40	D_R	735512
Surr: 4-Bromofluorobenzene	109	% 44-153	1		07/09/01 17:40	D_R	735512

<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	ND	0.5	1		07/09/01 17:40	D_R	735467
Ethylbenzene	ND	0.5	1		07/09/01 17:40	D_R	735467
Methyl tert-butyl ether	ND	2	1		07/09/01 17:40	D_R	735467
Toluene	ND	0.5	1		07/09/01 17:40	D_R	735467
m,p-Xylene	ND	0.5	1		07/09/01 17:40	D_R	735467
o-Xylene	ND	0.5	1		07/09/01 17:40	D_R	735467
Xylenes, Total	ND	0.5	1		07/09/01 17:40	D_R	735467
Surr: 1,4-Difluorobenzene	99.2	% 72-137	1		07/09/01 17:40	D_R	735467
Surr: 4-Bromofluorobenzene	97.5	% 48-156	1		07/09/01 17:40	D_R	735467

*Sonia West*

Sonia West

Project Manager

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated Value between MDL and PQL



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Client Sample ID W-6-MW9

Collected: 7/2/01 4:03:00 P

SPL Sample ID: 01070097-03

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	ND	50	1		07/09/01 18:08	D_R	735513
Surr: 1,4-Difluorobenzene	107	% 62-144	1		07/09/01 18:08	D_R	735513
Surr: 4-Bromofluorobenzene	102	% 44-153	1		07/09/01 18:08	D_R	735513
<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	ND	0.5	1		07/09/01 18:08	D_R	735468
Ethylbenzene	ND	0.5	1		07/09/01 18:08	D_R	735468
Methyl tert-butyl ether	ND	2	1		07/09/01 18:08	D_R	735468
Toluene	ND	0.5	1		07/09/01 18:08	D_R	735468
m,p-Xylene	ND	0.5	1		07/09/01 18:08	D_R	735468
o-Xylene	ND	0.5	1		07/09/01 18:08	D_R	735468
Xylenes, Total	ND	0.5	1		07/09/01 18:08	D_R	735468
Surr: 1,4-Difluorobenzene	97.3	% 72-137	1		07/09/01 18:08	D_R	735468
Surr: 4-Bromofluorobenzene	98.5	% 48-156	1		07/09/01 18:08	D_R	735468

*Sonia West*

Sonia West

Project Manager

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



HOUSTON LABORATORY  
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Client Sample ID W-6-MW1

Collected: 7/2/01 3:35:00 P SPL Sample ID: 01070097-04

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA_GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	74	50	1		07/09/01 18:35	D_R	735514
Surr: 1,4-Difluorobenzene	103	% 62-144	1		07/09/01 18:35	D_R	735514
Surr: 4-Bromofluorobenzene	100	% 44-153	1		07/09/01 18:35	D_R	735514
<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	ND	0.5	1		07/09/01 18:35	D_R	735469
Ethylbenzene	ND	0.5	1		07/09/01 18:35	D_R	735469
Methyl tert-butyl ether	14	2	1		07/09/01 18:35	D_R	735469
Toluene	ND	0.5	1		07/09/01 18:35	D_R	735469
m,p-Xylene	ND	0.5	1		07/09/01 18:35	D_R	735469
o-Xylene	ND	0.5	1		07/09/01 18:35	D_R	735469
Xylenes, Total	ND	0.5	1		07/09/01 18:35	D_R	735469
Surr: 1,4-Difluorobenzene	96.2	% 72-137	1		07/09/01 18:35	D_R	735469
Surr: 4-Bromofluorobenzene	104	% 48-156	1		07/09/01 18:35	D_R	735469

*Sonia West*

Sonia West  
 Project Manager

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated Value between MDL and PQL



HOUSTON LABORATORY  
 6880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Client Sample ID W-6-MW4 Collected: 7/2/01 3:50:00 P SPL Sample ID: 01070097-05

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	100	50	1		07/09/01 19:02	D_R	735515
Surr: 1,4-Difluorobenzene	124	% 62-144	1		07/09/01 19:02	D_R	735515
Surr: 4-Bromofluorobenzene	92.7	% 44-153	1		07/09/01 19:02	D_R	735515
<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	3.9	0.5	1		07/09/01 19:02	D_R	735470
Ethylbenzene	0.65	0.5	1		07/09/01 19:02	D_R	735470
Methyl tert-butyl ether	ND	2	1		07/09/01 19:02	D_R	735470
Toluene	ND	0.5	1		07/09/01 19:02	D_R	735470
m,p-Xylene	ND	0.5	1		07/09/01 19:02	D_R	735470
o-Xylene	ND	0.5	1		07/09/01 19:02	D_R	735470
Xylenes, Total	ND	0.5	1		07/09/01 19:02	D_R	735470
Surr: 1,4-Difluorobenzene	93.7	% 72-137	1		07/09/01 19:02	D_R	735470
Surr: 4-Bromofluorobenzene	92.1	% 48-156	1		07/09/01 19:02	D_R	735470

*Sonia West*

Sonia West

Project Manager

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit  
 B - Analyte detected in the associated Method Blank  
 \* - Surrogate Recovery Outside Advisable QC Limits  
 J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)  
 D - Surrogate Recovery Unreportable due to Dilution  
 MI - Matrix Interference



HOUSTON LABORATORY  
 5880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Client Sample ID W-9-MW2 Collected: 7/2/01 4:03:00 P SPL Sample ID: 01070097-06

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA_GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	1400	50	1		07/09/01 19:29	D_R	735516
Surr: 1,4-Difluorobenzene	106	% 62-144	1		07/09/01 19:29	D_R	735516
Surr: 4-Bromofluorobenzene	110	% 44-153	1		07/09/01 19:29	D_R	735516
<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	13	0.5	1		07/09/01 19:29	D_R	735471
Ethylbenzene	ND	0.5	1		07/09/01 19:29	D_R	735471
Methyl tert-butyl ether	890	20	10		07/10/01 15:20	D_R	736687
Toluene	1.1	0.5	1		07/09/01 19:29	D_R	735471
m,p-Xylene	1.1	0.5	1		07/09/01 19:29	D_R	735471
o-Xylene	ND	0.5	1		07/09/01 19:29	D_R	735471
Xylenes, Total	1.1	0.5	1		07/09/01 19:29	D_R	735471
Surr: 1,4-Difluorobenzene	90.5	% 72-137	10		07/10/01 15:20	D_R	736687
Surr: 1,4-Difluorobenzene	96.2	% 72-137	1		07/09/01 19:29	D_R	735471
Surr: 4-Bromofluorobenzene	102	% 48-156	1		07/09/01 19:29	D_R	735471
Surr: 4-Bromofluorobenzene	89.2	% 48-156	10		07/10/01 15:20	D_R	736687

*Sonia West*

Sonia West  
 Project Manager

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated Value between MDL and PQL



HOUSTON LABORATORY  
 8888 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Client Sample ID W-5-MW5

Collected: 7/2/01 4:20:00 P SPL Sample ID: 01070097-07

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA_GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	4100	500	10		07/10/01 15:43	D_R	737054
Surr: 1,4-Difluorobenzene	122	% 62-144	10		07/10/01 15:43	D_R	737054
Surr: 4-Bromofluorobenzene	116	% 44-153	10		07/10/01 15:43	D_R	737054
<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	1600	5	10		07/10/01 15:43	D_R	736688
Ethylbenzene	35	5	10		07/10/01 15:43	D_R	736688
Methyl tert-butyl ether	960	20	10		07/10/01 15:43	D_R	736688
Toluene	20	5	10		07/10/01 15:43	D_R	736688
m,p-Xylene	21	5	10		07/10/01 15:43	D_R	736688
o-Xylene	ND	5	10		07/10/01 15:43	D_R	736688
Xylenes,Total	21	5	10		07/10/01 15:43	D_R	736688
Surr: 1,4-Difluorobenzene	106	% 72-137	10		07/10/01 15:43	D_R	736688
Surr: 4-Bromofluorobenzene	109	% 48-156	10		07/10/01 15:43	D_R	736688

*Sonia West*

Sonia West

Project Manager

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated Value between MDL and PQL



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0901

Client Sample ID W-5-MW6

Collected: 7/2/01 4:30:00 P SPL Sample ID: 01070097-08

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>DIESEL RANGE ORGANICS</b>			<b>MCL</b>	<b>CA DRO</b>	<b>Units: ug/L</b>		
Diesel Range Organics	520	50	1		07/13/01 17:56 AM		744137
Surr: n-Pentacosane	91.2 %	20-150	1		07/13/01 17:56 AM		744137

Prep Method	Prep Date	Prep Initials
SW3510B	07/08/2001 8:01	KL

<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	3700	500	10		07/11/01 12:33 D_R		738618
Surr: 1,4-Difluorobenzene	100 %	62-144	10		07/11/01 12:33 D_R		738618
Surr: 4-Bromofluorobenzene	102 %	44-153	10		07/11/01 12:33 D_R		738618

<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	330	5	10		07/11/01 12:33 D_R		738532
Ethylbenzene	160	5	10		07/11/01 12:33 D_R		738532
Methyl tert-butyl ether	2000	20	10		07/11/01 12:33 D_R		738532
Toluene	ND	5	10		07/11/01 12:33 D_R		738532
m,p-Xylene	32	5	10		07/11/01 12:33 D_R		738532
o-Xylene	ND	5	10		07/11/01 12:33 D_R		738532
Xylenes, Total	32	5	10		07/11/01 12:33 D_R		738532
Surr: 1,4-Difluorobenzene	99.9 %	72-137	10		07/11/01 12:33 D_R		738532
Surr: 4-Bromofluorobenzene	108 %	48-156	10		07/11/01 12:33 D_R		738532

*Sonia West*

Sonia West

Project Manager

Qualifiers: ND/U - Not Detected at the Reporting Limit  
B - Analyte detected in the associated Method Blank  
\* - Surrogate Recovery Outside Advisable QC Limits  
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)  
D - Surrogate Recovery Unreportable due to Dilution  
MI - Matrix Interference



HOUSTON LABORATORY  
 8880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Client Sample ID W-5-MW7

Collected: 7/2/01 4:35:00 P SPL Sample ID: 01070097-09

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA_GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	110	50	1		07/10/01 3:07	D_R	735705
Surr: 1,4-Difluorobenzene	100	% 62-144	1		07/10/01 3:07	D_R	735705
Surr: 4-Bromofluorobenzene	96.3	% 44-153	1		07/10/01 3:07	D_R	735705
<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	4.1	0.5	1		07/10/01 3:07	D_R	735633
Ethylbenzene	0.75	0.5	1		07/10/01 3:07	D_R	735633
Methyl tert-butyl ether	740	10	5		07/11/01 12:06	D_R	738531
Toluene	ND	0.5	1		07/10/01 3:07	D_R	735633
m,p-Xylene	0.84	0.5	1		07/10/01 3:07	D_R	735633
o-Xylene	ND	0.5	1		07/10/01 3:07	D_R	735633
Xylenes, Total	0.84	0.5	1		07/10/01 3:07	D_R	735633
Surr: 1,4-Difluorobenzene	99.5	% 72-137	5		07/11/01 12:06	D_R	738531
Surr: 1,4-Difluorobenzene	105	% 72-137	1		07/10/01 3:07	D_R	735633
Surr: 4-Bromofluorobenzene	103	% 48-156	1		07/10/01 3:07	D_R	735633
Surr: 4-Bromofluorobenzene	99.8	% 48-156	5		07/11/01 12:06	D_R	738531

*Sonia West*

Sonia West

Project Manager

Qualifiers:

ND/U - Not Detected at the Reporting Limit  
 B - Analyte detected in the associated Method Blank  
 \* - Surrogate Recovery Outside Advisable QC Limits  
 J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)  
 D - Surrogate Recovery Unreportable due to Dilution  
 MI - Matrix Interference





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 HOUSTON, TEXAS 77054  
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Client Sample ID W-5-MW3

Collected: 7/2/01 4:42:00 P SPL Sample ID: 01070097-10

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>DIESEL RANGE ORGANICS</b>			<b>MCL</b>	<b>CA DRO</b>	<b>Units: ug/L</b>		
Diesel Range Organics	880	50	1		07/13/01 18:35 AM		744138
Surr: n-Pentacosane	87.8 %	20-150	1		07/13/01 18:35 AM		744138

Prep Method      Prep Date      Prep Initials:  
 SW3510B          07/08/2001 8:01      KL

<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	5300	500	10		07/10/01 23:47 D_R		737065
Surr: 1,4-Difluorobenzene	124 %	62-144	10		07/10/01 23:47 D_R		737065
Surr: 4-Bromofluorobenzene	126 %	44-153	10		07/10/01 23:47 D_R		737065

<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	1300	5	10		07/10/01 23:47 D_R		737038
Ethylbenzene	30	0.5	1		07/10/01 3:30 D_R		735634
Methyl tert-butyl ether	1200	20	10		07/10/01 23:47 D_R		737038
Toluene	32	0.5	1		07/10/01 3:30 D_R		735634
m,p-Xylene	730	5	10		07/10/01 23:47 D_R		737038
o-Xylene	1.7	0.5	1		07/10/01 3:30 D_R		735634
Xylenes, Total	730	5	10		07/10/01 23:47 D_R		737038
Surr: 1,4-Difluorobenzene	108 %	72-137	10		07/10/01 23:47 D_R		737038
Surr: 1,4-Difluorobenzene	131 %	72-137	1		07/10/01 3:30 D_R		735634
Surr: 4-Bromofluorobenzene	111 %	48-156	10		07/10/01 23:47 D_R		737038
Surr: 4-Bromofluorobenzene	230MI %	48-156	1 *		07/10/01 3:30 D_R		735634

*Sonia West*

Sonia West  
 Project Manager

Qualifiers:      ND/U - Not Detected at the Reporting Limit      >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte detected in the associated Method Blank      D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits      MI - Matrix Interference  
 J - Estimated Value between MDL and PQL



HOUSTON LABORATORY  
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(713) 660-0901

Client Sample ID W-6-MW11 Collected: 7/2/01 5:00:00 P SPL Sample ID: 01070097-11

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>DIESEL RANGE ORGANICS</b>			<b>MCL</b>	<b>CA_DRO</b>	<b>Units: ug/L</b>		
Diesel Range Organics	2300	50	1		07/13/01 19:13	AM	744139
Surr: n-Pentacosane	82.8	% 20-150	1		07/13/01 19:13	AM	744139
Prep Method	Prep Date	Prep Initials					
SW3510B	07/08/2001 8:01	iKL					
<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA_GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	45000	1200	25		07/10/01 3:53	D_R	735706
Surr: 1,4-Difluorobenzene	127	% 62-144	25		07/10/01 3:53	D_R	735706
Surr: 4-Bromofluorobenzene	122	% 44-153	25		07/10/01 3:53	D_R	735706
<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	2000	12	25		07/11/01 0:09	D_R	737039
Ethylbenzene	1400	12	25		07/11/01 0:09	D_R	737039
Methyl tert-butyl ether	3000	50	25		07/11/01 0:09	D_R	737039
Toluene	2000	12	25		07/11/01 0:09	D_R	737039
m,p-Xylene	5100	12	25		07/11/01 0:09	D_R	737039
o-Xylene	2100	12	25		07/11/01 0:09	D_R	737039
Xylenes, Total	7200	12	25		07/11/01 0:09	D_R	737039
Surr: 1,4-Difluorobenzene	104	% 72-137	25		07/11/01 0:09	D_R	737039
Surr: 4-Bromofluorobenzene	107	% 48-156	25		07/11/01 0:09	D_R	737039

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Sonia West  
Project Manager

Qualifiers:  
ND/U - Not Detected at the Reporting Limit  
B - Analyte detected in the associated Method Blank  
\* - Surrogate Recovery Outside Advisable QC Limits  
J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)  
D - Surrogate Recovery Unreportable due to Dilution  
MI - Matrix Interference



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Client Sample ID W-BB-MW8

Collected: 7/2/01 3:42:00 P SPL Sample ID: 01070097-12

Site: 7-0104

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>DIESEL RANGE ORGANICS</b>			<b>MCL</b>	<b>CA_DRO</b>	<b>Units: ug/L</b>		
Diesel Range Organics	ND	56	1		07/13/01 19:52 AM		744140
Surr: n-Pentacosane	70.4	% 20-150	1		07/13/01 19:52 AM		744140
Prep Method	Prep Date	Prep Initials					
SW3510B	07/08/2001 8:01	KL					
<b>GASOLINE RANGE ORGANICS</b>			<b>MCL</b>	<b>CA_GRO</b>	<b>Units: ug/L</b>		
Gasoline Range Organics	ND	50	1		07/10/01 4:15 D_R		735708
Surr: 1,4-Difluorobenzene	95.3	% 62-144	1		07/10/01 4:15 D_R		735708
Surr: 4-Bromofluorobenzene	94.7	% 44-153	1		07/10/01 4:15 D_R		735708
<b>PURGEABLE AROMATICS</b>			<b>MCL</b>	<b>SW8021B</b>	<b>Units: ug/L</b>		
Benzene	ND	0.5	1		07/10/01 4:15 D_R		735635
Ethylbenzene	ND	0.5	1		07/10/01 4:15 D_R		735635
Methyl tert-butyl ether	ND	2	1		07/10/01 4:15 D_R		735635
Toluene	ND	0.5	1		07/10/01 4:15 D_R		735635
m,p-Xylene	1	0.5	1		07/10/01 4:15 D_R		735635
o-Xylene	ND	0.5	1		07/10/01 4:15 D_R		735635
Xylenes, Total	1	0.5	1		07/10/01 4:15 D_R		735635
Surr: 1,4-Difluorobenzene	98.6	% 72-137	1		07/10/01 4:15 D_R		735635
Surr: 4-Bromofluorobenzene	100	% 48-156	1		07/10/01 4:15 D_R		735635

*Sonia West*

Sonia West

Project Manager

Qualifiers:

ND/U - Not Detected at the Reporting Limit  
 B - Analyte detected in the associated Method Blank  
 \* - Surrogate Recovery Outside Advisable QC Limits  
 J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)  
 D - Surrogate Recovery Unreportable due to Dilution  
 MI - Matrix Interference

*Quality Control Documentation*



HOUSTON LABORATORY  
 6880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Quality Control Report

EXXON Company U.S.A.  
 250613x

Analysis: Diesel Range Organics  
 Method: CA\_DRO

WorkOrder: 01070097  
 Lab Batch ID: 13306

Method Blank			Samples in Analytical Batch:	
RunID:	HP_V_010713A-744134	Units:	Lab Sample ID	Client Sample ID
Analysis Date:	07/13/2001 16:00	Analyst: AM	01070097-02B	W-5-MW8
Preparation Date:	07/08/2001 8:01	Prep By: KL Method SW3510B	01070097-08B	W-5-MW6
			01070097-10B	W-5-MW3
			01070097-11B	W-6-MW11
			01070097-12B	W-BB-MW8

Analyte	Result	Rep Limit
Diesel Range Organics	ND	
Surr: n-Pentacosane		

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
 B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
 J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report  
EXXON Company U.S.A.  
250613x

Analysis: Purgeable Aromatics  
Method: SW8021B

WorkOrder: 01070097  
Lab Batch ID: R38649

Method Blank

Samples in Analytical Batch:

RunID: HP\_S\_010708A-735451 Units: ug/L  
Analysis Date: 07/08/2001 16:35 Analyst: D\_R

Lab Sample ID	Client Sample ID
01070097-02A	W-5-MW8
01070097-03A	W-6-MW9
01070097-04A	W-6-MW1
01070097-05A	W-6-MW4
01070097-06A	W-9-MW2

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes, Total	ND	0.50
Surr: 1,4-Difluorobenzene	94.1	72-137
Surr: 4-Bromofluorobenzene	109.1	48-156

Laboratory Control Sample (LCS)

RunID: HP\_S\_010708A-735450 Units: ug/L  
Analysis Date: 07/08/2001 13:18 Analyst: D\_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	50	100	70	130
Ethylbenzene	50	50	100	70	130
Methyl tert-butyl ether	50	50	100	70	130
Toluene	50	50	100	70	130
m,p-Xylene	100	99	99	70	130
o-Xylene	50	50	100	70	130
Xylenes, Total	150	149	99	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070134-03  
RunID: HP\_S\_010708A-735461 Units: ug/L  
Analysis Date: 07/09/2001 13:11 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	27	134	20	34	169 *	3.2 *	21	32	164
Ethylbenzene	ND	20	26	132	20	33	167 *	3.7 *	19	52	142
Methyl tert-butyl ether	ND	20	27	133	20	33	164 *	1.0 *	20	39	150

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



HOUSTON LABORATORY  
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 HOUSTON, TEXAS 77054  
 (713) 660-0901

Quality Control Report  
 EXXON Company U.S.A.  
 250613x

Analysis: Purgeable Aromatics  
 Method: SW8021B

WorkOrder: 01070097  
 Lab Batch ID: R38649

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070134-03  
 RunID: HP\_S\_010708A-735461 Units: ug/L  
 Analysis Date: 07/09/2001 13:11 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	27	134	20	34	172 *	4.8 *	20	38	159
m,p-Xylene	ND	40	52	131	40	67	167 *	4.4 *	17	53	144
o-Xylene	ND	20	26	129	20	33	164 *	3.8 *	18	53	143
Xylenes, Total	ND	60	78	130	60	100	167 *	4.7 *	18	53	144

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
 B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
 J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



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 8880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Quality Control Report  
 EXXON Company U.S.A.  
 250613x

Analysis: Gasoline Range Organics  
 Method: CA\_GRO

WorkOrder: 01070097  
 Lab Batch ID: R38651

Method Blank

RunID: HP\_S\_010708B-735495 Units: mg/L  
 Analysis Date: 07/08/2001 16:35 Analyst: D\_R

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01070097-02A	W-5-MW8
01070097-03A	W-6-MW9
01070097-04A	W-6-MW1
01070097-05A	W-6-MW4
01070097-06A	W-9-MW2

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	105.7	62-144
Surr: 4-Bromofluorobenzene	107.0	44-153

Laboratory Control Sample (LCS)

RunID: HP\_S\_010708B-735498 Units: mg/L  
 Analysis Date: 07/09/2001 12:21 Analyst: D\_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1.1	107	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070134-04  
 RunID: HP\_S\_010708B-735500 Units: mg/L  
 Analysis Date: 07/09/2001 14:05 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	0.056	0.9	1.1	116	0.9	1.4	148	24.2	36	36	160

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
 B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution





Quality Control Report

EXXON Company U.S.A.

250613x

Analysis: Purgeable Aromatics  
Method: SW8021B

WorkOrder: 01070097  
Lab Batch ID: R38659

Method Blank

Samples in Analytical Batch:

RunID: HP\_R\_010709A-735617 Units: ug/L  
Analysis Date: 07/09/2001 18:02 Analyst: D\_R

Lab Sample ID Client Sample ID  
01070097-09A W-5-MW7  
01070097-10A W-5-MW3  
01070097-12A W-BB-MW8

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes, Total	ND	0.50
Surr: 1,4-Difluorobenzene	99.3	72-137
Surr: 4-Bromofluorobenzene	100.8	48-156

Laboratory Control Sample (LCS)

RunID: HP\_R\_010709A-735616 Units: ug/L  
Analysis Date: 07/09/2001 17:17 Analyst: D\_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	50	99	70	130
Ethylbenzene	50	50	99	70	130
Methyl tert-butyl ether	50	56	112	70	130
Toluene	50	50	99	70	130
m,p-Xylene	100	100	100	70	130
o-Xylene	50	50	99	70	130
Xylenes, Total	150	150	100	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070052-15  
RunID: HP\_R\_010709A-735618 Units: ug/L  
Analysis Date: 07/09/2001 19:09 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	23	114	20	23	113	0.440	21	32	164
Ethylbenzene	ND	20	23	113	20	22	109	3.49	19	52	142
Methyl tert-butyl ether	32	20	56	123	20	57	125	1.16	20	39	150

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



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HOUSTON, TEXAS 77054  
(713) 660-0901

Quality Control Report  
EXXON Company U.S.A.  
250613x

Analysis: Purgeable Aromatics  
Method: SW8021B

WorkOrder: 01070097  
Lab Batch ID: R38659

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070052-15  
RunID: HP\_R\_010709A-735618 Units: ug/L  
Analysis Date: 07/09/2001 19:09 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	23	114	20	23	112	1.21	20	38	159
m,p-Xylene	ND	40	46	113	40	44	107	5.62	17	53	144



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 HOUSTON, TEXAS 77054  
 (713) 660-4901

Quality Control Report  
 EXXON Company U.S.A.  
 250613x

Analysis: Gasoline Range Organics  
 Method: CA\_GRO

WorkOrder: 01070097  
 Lab Batch ID: R38664

Method Blank

Samples in Analytical Batch:

RunID: HP\_R\_0107098-735700 Units: mg/L  
 Analysis Date: 07/09/2001 18:02 Analyst: D\_R

Lab Sample ID	Client Sample ID
01070097-09A	W-5-MW7
01070097-11A	W-6-MW11
01070097-12A	W-BB-MW8

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	93.3	62-144
Surr: 4-Bromofluorobenzene	96.7	44-153

Laboratory Control Sample (LCS)

RunID: HP\_R\_0107098-735699 Units: mg/L  
 Analysis Date: 07/09/2001 17:39 Analyst: D\_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.77	77	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070052-16  
 RunID: HP\_R\_0107098-735701 Units: mg/L  
 Analysis Date: 07/09/2001 19:54 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	1.6	0.9	2.2	71.3	0.9	2.2	71.3	.0623	36	36	160

Qualifiers: ND/U - Not Detected at the Reporting Limit  
 B - Analyte detected in the associated Method Blank  
 J - Estimated value between MDL and PQL  
 MI - Matrix Interference  
 D - Recovery Unreportable due to Dilution  
 \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report  
 EXXON Company U.S.A.  
 250613x

Analysis: Gasoline Range Organics  
 Method: CA\_GRO

WorkOrder: 01070097  
 Lab Batch ID: R38697

Method Blank				Samples in Analytical Batch:	
RunID:	HP_R_010710A-736455	Units:	mg/L	Lab Sample ID	Client Sample ID
Analysis Date:	07/10/2001 11:30	Analyst:	D_R	01070097-07A	W-5-MW5
				01070097-10A	W-5-MW3

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	92.7	62-144
Surr: 4-Bromofluorobenzene	96.3	44-153

Laboratory Control Sample (LCS)

RunID: HP\_R\_010710A-736454 Units: mg/L  
 Analysis Date: 07/10/2001 11:08 Analyst: D\_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.75	75	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070225-02  
 RunID: HP\_R\_010710A-737058 Units: mg/L  
 Analysis Date: 07/10/2001 21:10 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	0.9	0.53	58.5	0.9	0.53	59.2	1.15	36	36	160

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
 B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
 J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report  
EXXON Company U.S.A.  
250613x

Analysis: Purgeable Aromatics  
Method: SW8021B

WorkOrder: 01070097  
Lab Batch ID: R38698

Method Blank

Samples in Analytical Batch:

RunID: HP\_R\_010710B-736462 Units: ug/L  
Analysis Date: 07/10/2001 11:30 Analyst: D\_R

Lab Sample ID	Client Sample ID
01070097-06A	W-9-MW2
01070097-07A	W-5-MW5
01070097-10A	W-5-MW3
01070097-11A	W-6-MW11

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes, Total	ND	0.50
Surr: 1,4-Difluorobenzene	99.3	72-137
Surr: 4-Bromofluorobenzene	100.1	48-156

Laboratory Control Sample (LCS)

RunID: HP\_R\_010710B-736460 Units: ug/L  
Analysis Date: 07/10/2001 10:45 Analyst: D\_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	50	99	70	130
Ethylbenzene	50	50	99	70	130
Methyl tert-butyl ether	50	56	112	70	130
Toluene	50	50	100	70	130
m,p-Xylene	100	100	100	70	130
o-Xylene	50	50	99	70	130
Xylenes, Total	150	150	100	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070225-01  
RunID: HP\_R\_010710B-737033 Units: ug/L  
Analysis Date: 07/10/2001 20:26 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	24	119	20	24	119	0.417	21	32	164
Ethylbenzene	ND	20	23	114	20	23	113	1.00	19	52	142
Methyl tert-butyl ether	ND	20	24	121	20	25	126	4.24	20	39	150

Qualifiers: ND/U - Not Detected at the Reporting Limit  
B - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



HOUSTON LABORATORY  
 8880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Quality Control Report

EXXON Company U.S.A.

250613x

Analysis: Purgeable Aromatics  
 Method: SW8021B

WorkOrder: 01070097  
 Lab Batch ID: R38698

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070225-01  
 RunID: HP\_R\_010710B-737033 Units: ug/L  
 Analysis Date: 07/10/2001 20:26 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	24	118	20	23	117	0.369	20	38	159
m,p-Xylene	ND	40	44	110	40	43	107	3.34	17	53	144
o-Xylene	ND	20	22	111	20	22	108	1.99	18	53	143
Xylenes, Total	ND	60	66	110	60	65	108	1.53	18	53	144

Qualifiers: ND/U - Not Detected at the Reporting Limit  
 B - Analyte detected in the associated Method Blank  
 J - Estimated value between MDL and PQL  
 MI - Matrix Interference  
 D - Recovery Unreportable due to Dilution  
 \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report  
EXXON Company U.S.A.  
250613x

Analysis: Purgeable Aromatics  
Method: SW8021B

WorkOrder: 01070097  
Lab Batch ID: R38809

Method Blank

Samples in Analytical Batch:

RunID: HP\_S\_010711A-738529 Units: ug/L  
Analysis Date: 07/11/2001 10:36 Analyst: D\_R

Lab Sample ID Client Sample ID  
01070097-08A W-5-MW6  
01070097-09A W-5-MW7

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes, Total	ND	0.50
Surr: 1,4-Difluorobenzene	98.9	72-137
Surr: 4-Bromofluorobenzene	98.8	48-156

Laboratory Control Sample (LCS)

RunID: HP\_S\_010711A-738528 Units: ug/L  
Analysis Date: 07/11/2001 9:07 Analyst: D\_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	50	100	70	130
Ethylbenzene	50	50	101	70	130
Methyl tert-butyl ether	50	49	98	70	130
Toluene	50	51	102	70	130
m,p-Xylene	100	99	99	70	130
o-Xylene	50	50	100	70	130
Xylenes, Total	150	149	99	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070243-02  
RunID: HP\_S\_010711A-738539 Units: ug/L  
Analysis Date: 07/11/2001 17:49 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	24	119	20	24	120	0.892	21	32	164
Ethylbenzene	ND	20	25	118	20	25	120	1.44	19	52	142
Methyl tert-butyl ether	ND	20	24	117	20	24	119	1.70	20	39	150

Qualifiers: ND/U - Not Detected at the Reporting Limit  
B - Analyte detected in the associated Method Blank  
J - Estimated value between MDL and PQL  
MI - Matrix Interference  
D - Recovery Unreportable due to Dilution  
\* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



HOUSTON LABORATORY  
 6880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

Quality Control Report

EXXON Company U.S.A.  
 250613x

Analysis: Purgeable Aromatics  
 Method: SW8021B

WorkOrder: 01070097  
 Lab Batch ID: R38809

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070243-02  
 RunID: HP\_S\_010711A-738539 Units: ug/L  
 Analysis Date: 07/11/2001 17:49 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	25	123	20	24	121	2.07	20	36	159
m,p-Xylene	ND	40	48	119	40	49	121	2.27	17	53	144
o-Xylene	ND	20	23	117	20	24	118	1.22	18	53	143
Xylenes, Total	ND	60	71	118	60	73	122	2.78	18	53	144

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
 B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
 J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.





Quality Control Report

EXXON Company U.S.A.  
250613x

Analysis: Gasoline Range Organics  
Method: CA\_GRO

WorkOrder: 01070097  
Lab Batch ID: R38817

Method Blank				Samples in Analytical Batch:	
RunID:	HP_S_010711C-738647	Units:	mg/L	<u>Lab Sample ID</u>	<u>Client Sample ID</u>
Analysis Date:	07/11/2001 10:36	Analyst:	D_R	01070097-08A	W-5-MW6

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	107.0	62-144
Surr: 4-Bromofluorobenzene	104.0	44-153

Laboratory Control Sample (LCS)

RunID: HP\_S\_010711C-738616 Units: mg/L  
Analysis Date: 07/11/2001 9:34 Analyst: D\_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.98	98	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070243-03  
RunID: HP\_S\_010711C-738649 Units: mg/L  
Analysis Date: 07/11/2001 18:43 Analyst: D\_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	0.9	0.89	94.2	0.9	0.93	98.5	4.41	36	36	160

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

EXXON Company U.S.A.

250613x

Analysis: Purgeable Aromatics  
 Method: SW8021B

WorkOrder: 01070097  
 Lab Batch ID: R39390

Method Blank

Samples in Analytical Batch:

RunID: VARE\_010718B-749303 Units: ug/L  
 Analysis Date: 07/18/2001 15:06 Analyst: DL

Lab Sample ID: 01070097-01A  
 Client Sample ID: TB 6/5/01

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes, Total	ND	0.50
Surr: 1,4-Difluorobenzene	90.8	72-137
Surr: 4-Bromofluorobenzene	85.3	48-156

Laboratory Control Sample (LCS)

RunID: VARE\_010718B-749302 Units: ug/L  
 Analysis Date: 07/18/2001 14:18 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	52	104	70	130
Ethylbenzene	50	53	107	70	130
Methyl tert-butyl ether	50	49	98	70	130
Toluene	50	52	104	70	130
m,p-Xylene	100	110	106	70	130
o-Xylene	50	53	106	70	130
Xylenes, Total	150	163	109	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070565-03  
 RunID: VARE\_010718B-749306 Units: ug/L  
 Analysis Date: 07/18/2001 16:20 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	20	98.2	20	19	96.7	1.51	21	32	164
Ethylbenzene	ND	20	20	97.7	20	20	97.8	00307	19	52	142
Methyl tert-butyl ether	ND	20	22	108	20	21	105	2.10	20	39	150

Qualifiers: ND/U - Not Detected at the Reporting Limit  
 B - Analyte detected in the associated Method Blank  
 J - Estimated value between MDL and PQL  
 MI - Matrix Interference  
 D - Recovery Unreportable due to Dilution  
 \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



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Quality Control Report

EXXON Company U.S.A.

250613x

Analysis: Purgeable Aromatics  
 Method: SW8021B

WorkOrder: 01070097  
 Lab Batch ID: R39390

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070565-03  
 RunID: VARE\_010718B-749306 Units: ug/L  
 Analysis Date: 07/18/2001 16:20 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	19	95.2	20	19	94.7	0.553	20	38	159
m,p-Xylene	ND	40	40	99.5	40	40	101	1.28	17	53	144
o-Xylene	ND	20	20	98.7	20	20	99.4	0.682	18	53	143
Xylenes, Total	ND	60	60	100	60	60	100	0	18	53	144

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix interference  
 B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
 J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report  
 EXXON Company U.S.A.  
 250613x

Analysis: Gasoline Range Organics  
 Method: CA\_GRO

WorkOrder: 01070097  
 Lab Batch ID: R39391

Method Blank

Samples in Analytical Batch:

RunID: VARE\_010718C-749328 Units: mg/L  
 Analysis Date: 07/18/2001 15:06 Analyst: DL

Lab Sample ID      Client Sample ID  
 01070097-01A      TB 6/5/01

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	105.7	62-144
Surr: 4-Bromofluorobenzene	100.7	44-153

Laboratory Control Sample (LCS)

RunID: VARE\_010718C-749327 Units: mg/L  
 Analysis Date: 07/18/2001 14:42 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.87	87	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01070565-04  
 RunID: VARE\_010718C-749407 Units: mg/L  
 Analysis Date: 07/18/2001 17:07 Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	0.9	0.93	104	0.9	0.94	104	0.310	36	36	160

Qualifiers: ND/U - Not Detected at the Reporting Limit      MI - Matrix Interference  
 B - Analyte detected in the associated Method Blank      D - Recovery Unreportable due to Dilution  
 J - Estimated value between MDL and PQL      \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

*Sample Receipt Checklist  
And  
Chain of Custody*



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0901

Sample Receipt Checklist

Workorder: 01070097  
Date and Time Received: 7/5/01 9:30:00 AM  
Temperature: 5

Received By: DS  
Carrier name: FedEx  
Chilled by: Water Ice

- |  |   |                             |   |
|--|---|-----------------------------|---|
| 1. Shipping container/cooler in good condition?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| 2. Custody seals intact on shipping container/cooler?      | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Present <input type="checkbox"/>            |
| 3. Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>            | No <input type="checkbox"/> | Not Present <input checked="" type="checkbox"/> |
| 4. Chain of custody present?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 5. Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 6. Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 7. Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 8. Sample containers intact?                               | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 9. Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 10. All samples received within holding time?              | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 11. Container/Temp Blank temperature in compliance?        | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |   |
| 12. Water - VOA vials have zero headspace?                 | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/>         |
| 13. Water - pH acceptable upon receipt?                    | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Not Applicable <input type="checkbox"/>         |

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Non Conformance  
Issues:

Client Instructions:

01070097

**EXXON COMPANY, USA.** (West Coast)

CHAIN OF CUSTODY RECORD NO. \_\_\_\_\_ Page 1 of 2

Exxon Engineer: Gene Ortega Phone: (925) 246-8747  
 Consultant Co. Name: ERT Contact: Scott Graham  
 Address: 73 Digital Dr. Suite 100 Novato CA 94949 Fax: (415) 382-4564  
 RAS #: 7-0104 Facility/State ID # (TN Only): \_\_\_\_\_  
 AFE # (Terminal Only): \_\_\_\_\_ Consultant Project #: 250613X  
 Location: 1725 Park St (City) Alameda (State) CA  
 EE  C&M  SDT  
 Consultant Work Release #: 2101110  
 Sampled By: Jared + Jessica

**ANALYSIS REQUEST: (CHECK APPROPRIATE BOX)**

TPHWC 8015 GPO <input type="checkbox"/> 8015 DRO <input type="checkbox"/>	602 <input type="checkbox"/>	OXYGENATES (7) 8260 <input type="checkbox"/>	O&G IR 413.1 <input type="checkbox"/> GRAV. 413.2 <input type="checkbox"/>	VOL 8260 <input type="checkbox"/> 624 <input type="checkbox"/>	SEMI-VOL 8270 <input type="checkbox"/> 825 <input type="checkbox"/>	PNAPAH 8100 <input type="checkbox"/> 8310 <input type="checkbox"/> 8270 <input type="checkbox"/>	PCB/PEST 8081/8082 <input type="checkbox"/> PCB ONLY <input type="checkbox"/>	TCLP FULL <input type="checkbox"/> VOL <input type="checkbox"/> SEMI-VOL <input type="checkbox"/> PEST <input type="checkbox"/> HERB <input type="checkbox"/>	METALS, TOTAL <input type="checkbox"/> METALS, TCLP <input type="checkbox"/>	LEAD, TOTAL 268.1 <input type="checkbox"/> 7421 <input type="checkbox"/> LEAD, TCLP <input type="checkbox"/>	LEAD, DISSOLVED <input type="checkbox"/> LEAD, TOTAL <input type="checkbox"/>	REACTIVITY <input type="checkbox"/> CORROSION <input type="checkbox"/> FLASHPOINT <input type="checkbox"/>	PURGEABLE HYDROCARBON 8010 <input type="checkbox"/> 601 <input type="checkbox"/>	TPH/R 418.1 <input type="checkbox"/>	TOX/TOH <input type="checkbox"/>
---	------------------------------	--	--	--	---	--	---	---	--	--	---	--	--	--------------------------------------	----------------------------------

SAMPLE I.D.	DATE	TIME	COMP	GRAB	MATRIX			OTHER	PRESERVATIVE	NO OF CONTAINERS	CONTAINER SIZE	TPHWC 8015 GPO <input type="checkbox"/> 8015 DRO <input type="checkbox"/>	BTEX 8020 <input checked="" type="checkbox"/>	MTBE 8020 <input checked="" type="checkbox"/>	OXYGENATES (7) 8260 <input type="checkbox"/>	O&G IR 413.1 <input type="checkbox"/> GRAV. 413.2 <input type="checkbox"/>	VOL 8260 <input type="checkbox"/> 624 <input type="checkbox"/>	SEMI-VOL 8270 <input type="checkbox"/> 825 <input type="checkbox"/>	PNAPAH 8100 <input type="checkbox"/> 8310 <input type="checkbox"/> 8270 <input type="checkbox"/>	PCB/PEST 8081/8082 <input type="checkbox"/> PCB ONLY <input type="checkbox"/>	TCLP FULL <input type="checkbox"/> VOL <input type="checkbox"/> SEMI-VOL <input type="checkbox"/> PEST <input type="checkbox"/> HERB <input type="checkbox"/>	METALS, TOTAL <input type="checkbox"/> METALS, TCLP <input type="checkbox"/>	LEAD, TOTAL 268.1 <input type="checkbox"/> 7421 <input type="checkbox"/> LEAD, TCLP <input type="checkbox"/>	LEAD, DISSOLVED <input type="checkbox"/> LEAD, TOTAL <input type="checkbox"/>	REACTIVITY <input type="checkbox"/> CORROSION <input type="checkbox"/> FLASHPOINT <input type="checkbox"/>	PURGEABLE HYDROCARBON 8010 <input type="checkbox"/> 601 <input type="checkbox"/>	TPH/R 418.1 <input type="checkbox"/>	TOX/TOH <input type="checkbox"/>		
					H <sub>2</sub> O	SOIL	AIR																							
TB	6/5	-			X				HCL	2	40 mL	X	X	X																
W-5-MW8	7/2	1542			X				HCL	3/2	40 mL	X	X	X																
W-6-MW9	7/2	1603			X				HCL	3	40 mL	X	X	X																
W-6-MW1	7/2	1535			X				HCL	3	40 mL	X	X	X																
W-6-MW4	7/2	1550			X				HCL	3	40 mL	X	X	X																
W-9-MW2	7/2	1603			X				HCL	3	40 mL	X	X	X																
W-5-MW5	7/2	1620			X				HCL	5	40 mL	X	X	X																
W-5-MW6	7/2	1630			X				HCL	3/2	40 mL	X	X	X																
W-5-MW7	7/2	1635			X				HCL	3	40 mL	X	X	X																
W-5-MW3	7/2	1642			X				HCL	3/2	40 mL	X	X	X																

TAT 24 HR. _____ 72 HR. _____ 48 HR. _____ 96 HR. _____ 8 Business <input checked="" type="checkbox"/> *Contact US Prior to Sending Sample Other _____	<b>EXXON UST CONTRACT NO. C41483</b>	SPECIAL DETECTION LIMITS (Specify)	REMARKS:
QA/QC Level Standard <input checked="" type="checkbox"/> CLP <input type="checkbox"/> Other <input type="checkbox"/>		SPECIAL REPORTING REQUIREMENTS (Specify) PDF <input type="checkbox"/> <input type="checkbox"/> EDD FAX <input type="checkbox"/> <input type="checkbox"/> FAX C-O-C W/REPORT	LAB USE ONLY Lot # _____ Storage Location _____  WORK ORDER #: <u>01070097</u> LAB WORK RELEASE #: <u>21040341</u>

<b>CUSTODY RECORD</b>	Relinquished By Sampler: <u>[Signature]</u>	Date: <u>7/3/01</u> Time: <u>1120</u>	Received By: _____
	Relinquished:	Date: _____ Time: _____	Received By: _____
	Relinquished:	Date: <u>7-5-01</u> Time: <u>0930</u>	Received By: <u>[Signature]</u> Way Bill #: _____ Cooler Temp: <u>5c</u>

01070097

**EXXON COMPANY, USA.**

(West Coast)

CHAIN OF CUSTODY RECORD NO. \_\_\_\_\_

Exxon Engineer: Gene Ortega Phone: (925) 246-8777  
 Consultant Co. Name ERI Contact: Scott Gruber  
 Address: 73 Digital Dr. Fax: (415) 352-1854  
Suite 100 Novato CA 94949  
 RAS #: 7-0104 Facility/State ID # (TN Only): \_\_\_\_\_  
 AFE # (Terminal Only): \_\_\_\_\_ Consultant Project #: 250613X  
 Location: 1725 Park St (City) Alameda (State) CA  
 EE  C&M  SDT  
 Consultant Work Release #: 210110  
 Sampled By: Jacob - Jensen

**ANALYSIS REQUEST:  
(CHECK APPROPRIATE BOX)**

OTHER

NO. OF CONTAINERS	CONTAINER SIZE	TPH/GC 8015 GRO <input type="checkbox"/>	8015 DRO <input type="checkbox"/>	BTEX 8020 <input checked="" type="checkbox"/>	602 <input type="checkbox"/>	MTBE 8020 <input checked="" type="checkbox"/>	8260 <input type="checkbox"/>	OXYGENATES (7) 8260 <input type="checkbox"/>	C&G IR 413.1 <input type="checkbox"/>	GRAV. 413.2 <input type="checkbox"/>	VOL 8260 <input type="checkbox"/>	624 <input type="checkbox"/>	SEMI-VOL 8270 <input type="checkbox"/>	625 <input type="checkbox"/>	PNA/PAH 8100 <input type="checkbox"/>	8310 <input type="checkbox"/>	8270 <input type="checkbox"/>	PCB/PEST 8081/8082 <input type="checkbox"/>	PCB ONLY <input type="checkbox"/>	TCLP FULL <input type="checkbox"/>	VOAC SEMI-VOL PEST <input type="checkbox"/>	HERB <input type="checkbox"/>	METALS, TOTAL <input type="checkbox"/>	METALS, TCLP <input type="checkbox"/>	LEAD, TOTAL 291 <input type="checkbox"/>	7421 <input type="checkbox"/>	LEAD, TCLP <input type="checkbox"/>	LEAD, DISSOLVED <input type="checkbox"/>	LEAD TOTAL <input type="checkbox"/>	REACTIVITY <input type="checkbox"/>	CORROSION <input type="checkbox"/>	FLASH POINT <input type="checkbox"/>	PURGEABLE HYDROCARBON 8010 <input type="checkbox"/>	801 <input type="checkbox"/>	TPH/R 418 <input type="checkbox"/>	TOX/TOT <input type="checkbox"/>		

SAMPLE I.D.	DATE	TIME	COMP.	GRAB	MATRIX			OTHER	PRESERVATIVE	NO. OF CONTAINERS	CONTAINER SIZE	TPH/GC 8015 GRO <input type="checkbox"/>	8015 DRO <input type="checkbox"/>	BTEX 8020 <input checked="" type="checkbox"/>	602 <input type="checkbox"/>	MTBE 8020 <input checked="" type="checkbox"/>	8260 <input type="checkbox"/>	OXYGENATES (7) 8260 <input type="checkbox"/>	C&G IR 413.1 <input type="checkbox"/>	GRAV. 413.2 <input type="checkbox"/>	VOL 8260 <input type="checkbox"/>	624 <input type="checkbox"/>	SEMI-VOL 8270 <input type="checkbox"/>	625 <input type="checkbox"/>	PNA/PAH 8100 <input type="checkbox"/>	8310 <input type="checkbox"/>	8270 <input type="checkbox"/>	PCB/PEST 8081/8082 <input type="checkbox"/>	PCB ONLY <input type="checkbox"/>	TCLP FULL <input type="checkbox"/>	VOAC SEMI-VOL PEST <input type="checkbox"/>	HERB <input type="checkbox"/>	METALS, TOTAL <input type="checkbox"/>	METALS, TCLP <input type="checkbox"/>	LEAD, TOTAL 291 <input type="checkbox"/>	7421 <input type="checkbox"/>	LEAD, TCLP <input type="checkbox"/>	LEAD, DISSOLVED <input type="checkbox"/>	LEAD TOTAL <input type="checkbox"/>	REACTIVITY <input type="checkbox"/>	CORROSION <input type="checkbox"/>	FLASH POINT <input type="checkbox"/>	PURGEABLE HYDROCARBON 8010 <input type="checkbox"/>	801 <input type="checkbox"/>	TPH/R 418 <input type="checkbox"/>	TOX/TOT <input type="checkbox"/>								
					H <sub>2</sub> O	SOIL	AIR																																															
W-6-MW11	7/2	1700			X			HCL	3/2	12			X	X	X																																							
W-BB-MW8	7/2	1542			X			HCL	2/1	12			X	X	X																																							

TAT  
 24 HR. \_\_\_\_\_ \* 72 HR. \_\_\_\_\_ \*  
 48 HR. \_\_\_\_\_ \* 96 HR. \_\_\_\_\_ \*  
 8 Business  \*Contact US Prior to Sending Sample  
 Other \_\_\_\_\_

**EXXON UST  
CONTRACT NO.  
C41483**

SPECIAL DETECTION LIMITS (Specify)

REMARKS:

Standard  CLP  QA/QC Level  
 Other

SPECIAL REPORTING REQUIREMENTS (Specify)  
 PDF   EDD  
 FAX   FAX C-O-C W/REPORT

LAB USE ONLY Lot # \_\_\_\_\_ Storage Location \_\_\_\_\_  
 WORK ORDER #: 01070097 LAB WORK RELEASE #: 21040341

**CUSTODY RECORD**

Relinquished By Sampler: [Signature]  
 Relinquished: \_\_\_\_\_  
 Relinquished: \_\_\_\_\_

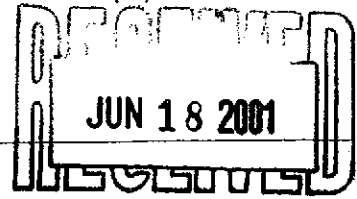
Date \_\_\_\_\_ Time \_\_\_\_\_  
 Date \_\_\_\_\_ Time \_\_\_\_\_  
 Date \_\_\_\_\_ Time \_\_\_\_\_

Received By: \_\_\_\_\_  
 Received By: \_\_\_\_\_  
 Received By: [Signature]  
 Way Bill #: \_\_\_\_\_ Coolery Temp: 50





HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0901



EXXON Company U.S.A.

Certificate of Analysis Number:  
**01060173**

<b>Report To:</b> Environmental Resolution, Inc. Jim Chappell 73 Digital Drive Suite 100  Novato California 94949- ph: (415) 382-9105      fax: (415) 382-1856	<b>Project Name:</b> 2506-11X <b>Site:</b> 7-0104, <b>Site Address:</b>  <b>PO Number:</b> EWR#21040341 <b>State:</b> California <b>State Cert. No.:</b> 1903 <b>Date Reported:</b> 6/8/01
--	---

This Report Contains A Total Of 10 Pages

Excluding This Page

And

Chain Of Custody

6/8/01

Date



Case Narrative for:  
**EXXON Company U.S.A.**

Certificate of Analysis Number:

**01060173**

<p><b>Report To:</b>  Environmental Resolution, Inc. Jim Chappell 73 Digital Drive Suite 100  Novato California 94949- ph: (415) 382-9105      fax: (415) 382-1856</p>	<p><b>Project Name:</b> 2506-11X <b>Site:</b> 7-0104, <b>Site Address:</b>  <b>PO Number:</b> EWR#21040341 <b>State:</b> California <b>State Cert. No.:</b> 1903 <b>Date Reported:</b> 6/8/01</p>
--	---

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

*Sonia West*  
Sonia West  
Senior Project Manager



EXXON Company U.S.A.

Certificate of Analysis Number:  
01060173

**Report To:** Environmental Resolution, Inc.  
 Jim Chappell  
 73 Digital Drive Suite 100

**Project Name:** 2506-11X

**Site:** 7-0104,

**Site Address:**

Novato

California

94949-

ph: (415) 382-9105 fax: (415) 382-1856

**PO Number:** EWR#21040341

**State:** California

**State Cert. No.:** 1903

**Date Reported:** 6/8/01

**Fax To:** Environmental Resolution, Inc.  
 Jim Chappell fax : (415) 382-1856

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
A-INF	01060173-01	Air	6/4/01 11:00:00 AM	6/6/01 10:00:00 AM		<input type="checkbox"/>
A-INT	01060173-02	Air	6/4/01 11:00:00 AM	6/6/01 10:00:00 AM		<input type="checkbox"/>
A-EFF	01060173-03	Air	6/4/01 11:00:00 AM	6/6/01 10:00:00 AM		<input type="checkbox"/>

*Sonia West*

6/8/01

Sonia West  
 Senior Project Manager

Date

Joel Grice  
 Laboratory Director

Ted Yen  
 Quality Assurance Officer



HOUSTON LABORATORY  
 8880 INTERCHANGE DRIVE  
 HOUSTON, TEXAS 77054  
 (713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:  
**01060173**

<b>Report To:</b>  Environmental Resolution, Inc. Jim Chappell 73 Digital Drive Suite 100  Novato California 94949- ph: (415) 382-9105      fax: (415) 382-1856	<b>Project Name:</b> 2506-11X <b>Site:</b> 7-0104, <b>Site Address:</b>
	<b>PO Number:</b> EWR#21040341 <b>State:</b> California <b>State Cert. No.:</b> 1903 <b>Date Reported:</b> 6/8/01

Client Sample ID: A-INF

SPL Sample ID: 01060173-01A

Analyte	mg/m <sup>3</sup>		ppm(v)	
	Result	PQL	Result	PQL
Benzene	ND	1.0	ND	0.31
Toluene	ND	1.0	ND	0.26
Ethylbenzene	ND	1.0	ND	0.23
m,p-Xylene	ND	1.0	ND	0.23
o-Xylene	ND	1.0	ND	0.23
Xylenes, Total	ND	1.0	ND	0.23
TPH Air	280	10	78	2.8

Client Sample ID: A-INT

SPL Sample ID: 01060173-02A

Analyte	mg/m <sup>3</sup>		ppm(v)	
	Result	PQL	Result	PQL
Benzene	ND	1.0	ND	0.31
Toluene	ND	1.0	ND	0.26
Ethylbenzene	ND	1.0	ND	0.23
m,p-Xylene	ND	1.0	ND	0.23
o-Xylene	ND	1.0	ND	0.23
Xylenes, Total	ND	1.0	ND	0.23
TPH Air	ND	10	ND	2.8



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

01060173

<b>Report To:</b>  Environmental Resolution, Inc. Jim Chappell 73 Digital Drive Suite 100  Novato California 94949- ph: (415) 382-9105      fax: (415) 382-1856	<b>Project Name:</b> 2506-11X <b>Site:</b> 7-0104, <b>Site Address:</b>  <b>PO Number:</b> EWR#21040341 <b>State:</b> California <b>State Cert. No.:</b> 1903 <b>Date Reported:</b> 6/8/01
--	---

Client Sample ID: A-EFF

SPL Sample ID: 01060173-03A

Analyte	mg/m <sup>3</sup>		ppm(v)	
	Result	PQL	Result	PQL
Benzene	ND	1.0	ND	0.31
Toluene	ND	1.0	ND	0.26
Ethylbenzene	ND	1.0	ND	0.23
m,p-Xylene	ND	1.0	ND	0.23
o-Xylene	ND	1.0	ND	0.23
Xylenes, Total	ND	1.0	ND	0.23
TPH Air	ND	10	ND	2.8



Client Sample ID A-INF

Collected: 6/4/01 11:00:00

SPL Sample ID: 01060173-01

Site: 7-0104,

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>PURGEABLE AROMATICS IN AIR</b>			<b>MCL</b>	<b>SW8020A</b>	<b>Units: mg/m<sup>3</sup></b>		
Benzene	ND	1.0	1		06/06/01 20:36	TM	696540
Toluene	ND	1.0	1		06/06/01 20:36	TM	696540
Ethylbenzene	ND	1.0	1		06/06/01 20:36	TM	696540
m,p-Xylene	ND	1.0	1		06/06/01 20:36	TM	696540
o-Xylene	ND	1.0	1		06/06/01 20:36	TM	696540
Xylenes, Total	ND	1.0	1		06/06/01 20:36	TM	696540
Surr: 1,4-Difluorobenzene	92.8	% 20-150	1		06/06/01 20:36	TM	696540
Surr: 4-Bromofluorobenzene	97.9	% 58-139	1		06/06/01 20:36	TM	696540
<b>TOTAL PETROLEUM PRODUCT IN AIR</b>			<b>MCL</b>	<b>SW8015B</b>	<b>Units: mg/m<sup>3</sup></b>		
TPH Air	280	10	1		06/06/01 20:36	TM	696600
Surr: 1,4-Difluorobenzene	94.5	% 62-144	1		06/06/01 20:36	TM	696600
Surr: 4-Bromofluorobenzene	93.4	% 44-153	1		06/06/01 20:36	TM	696600

*Sonia West*

Sonia West

Project Manager

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



Client Sample ID A-INT

Collected: 6/4/01 11:00:00

SPL Sample ID: 01060173-02

Site: 7-0104,

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>PURGEABLE AROMATICS IN AIR</b>			<b>MCL</b>	<b>SW8020A</b>	<b>Units: mg/m<sup>3</sup></b>		
Benzene	ND	1.0	1		06/06/01 21:06	TM	696544
Toluene	ND	1.0	1		06/06/01 21:06	TM	696544
Ethylbenzene	ND	1.0	1		06/06/01 21:06	TM	696544
m,p-Xylene	ND	1.0	1		06/06/01 21:06	TM	696544
o-Xylene	ND	1.0	1		06/06/01 21:06	TM	696544
Xylenes, Total	ND	1.0	1		06/06/01 21:06	TM	696544
Surr: 1,4-Difluorobenzene	91.9	% 20-150	1		06/06/01 21:06	TM	696544
Surr: 4-Bromofluorobenzene	97.0	% 58-139	1		06/06/01 21:06	TM	696544
<b>TOTAL PETROLEUM PRODUCT IN AIR</b>			<b>MCL</b>	<b>SW8015B</b>	<b>Units: mg/m<sup>3</sup></b>		
TPH Air	ND	10	1		06/06/01 21:06	TM	696601
Surr: 1,4-Difluorobenzene	104	% 62-144	1		06/06/01 21:06	TM	696601
Surr: 4-Bromofluorobenzene	114	% 44-153	1		06/06/01 21:06	TM	696601

*Sonia West*

Sonia West  
 Project Manager

**Qualifiers:**

ND/U - Not Detected at the Reporting Limit

B - Analyte detected in the associated Method Blank

\* - Surrogate Recovery Outside Advisable QC Limits

J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution

MI - Matrix Interference



Client Sample ID A-EFF

Collected: 6/4/01 11:00:00

SPL Sample ID: 01060173-03

Site: 7-0104,

Analyses/Method	Result	Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
<b>PURGEABLE AROMATICS IN AIR</b>			<b>MCL</b>	<b>SW8020A</b>	<b>Units: mg/m<sup>3</sup></b>		
Benzene	ND	1.0	1		06/06/01 23:49	TM	696551
Toluene	ND	1.0	1		06/06/01 23:49	TM	696551
Ethylbenzene	ND	1.0	1		06/06/01 23:49	TM	696551
m,p-Xylene	ND	1.0	1		06/06/01 23:49	TM	696551
o-Xylene	ND	1.0	1		06/06/01 23:49	TM	696551
Xylenes, Total	ND	1.0	1		06/06/01 23:49	TM	696551
Surr: 1,4-Difluorobenzene	96.3	% 20-150	1		06/06/01 23:49	TM	696551
Surr: 4-Bromofluorobenzene	108	% 58-139	1		06/06/01 23:49	TM	696551
<b>TOTAL PETROLEUM PRODUCT IN AIR</b>			<b>MCL</b>	<b>SW8015B</b>	<b>Units: mg/m<sup>3</sup></b>		
TPH Air	ND	10	1		06/06/01 23:49	TM	696603
Surr: 1,4-Difluorobenzene	109	% 62-144	1		06/06/01 23:49	TM	696603
Surr: 4-Bromofluorobenzene	122	% 44-153	1		06/06/01 23:49	TM	696603

*Sonia West*

Sonia West  
 Project Manager

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)  
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution  
 \* - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference  
 J - Estimated Value between MDL and PQL



*Quality Control Documentation*



Quality Control Report

EXXON Company U.S.A.

2506-11X

Analysis: Purgeable Aromatics in Air  
Method: SW8020A

WorkOrder: 01060173  
Lab Batch ID: R36624

Method Blank

Samples in Analytical Batch:

RunID: HP\_P\_010606A-696513 Units: mg/m<sup>3</sup>  
Analysis Date: 06/06/2001 15:40 Analyst: TM

Lab Sample ID	Client Sample ID
01060173-01A	A-INF
01060173-02A	A-INT
01060173-03A	A-EFF

Analyte	Result	Rep Limit
Benzene	ND	1.0
Ethylbenzene	ND	1.0
Methyl tert-butyl ether	ND	1.0
Toluene	ND	1.0
m,p-Xylene	ND	1.0
o-Xylene	ND	1.0
Xylenes, Total	ND	1.0
Surr: 1,4-Difluorobenzene	91.1	20-150
Surr: 4-Bromofluorobenzene	98.3	58-139

Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)

RunID: HP\_P\_010606A-696511 Units: mg/m<sup>3</sup>  
Analysis Date: 06/06/2001 14:41 Analyst: TM

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
Benzene	64	70	109	64	66	103	5.6	34	37	117
Ethylbenzene	88	88	100	88	83	94	6.0	35	56	115
Methyl tert-butyl ether	364	550	152	364	570	155	1.9	30	30	175
Toluene	80	82	102	80	77	96	6.4	30	25	113
m,p-Xylene	88	87	99	88	81	92	6.7	35	12	114
o-Xylene	88	86	97	88	81	92	5.7	35	15	109
Xylenes, Total	176	173	98	176	162	92	6.6	35	12	114

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report  
 EXXON Company U.S.A.  
 2506-11X

Analysis: Total Petroleum Product in Air  
 Method: SW8015B

WorkOrder: 01060173  
 Lab Batch ID: R36626

**Method Blank**

**Samples in Analytical Batch:**

RunID: HP\_P\_010606B-696591 Units: mg/m<sup>3</sup>  
 Analysis Date: 06/06/2001 15:40 Analyst: TM

Lab Sample ID	Client Sample ID
01060173-01A	A-INF
01060173-02A	A-INT
01060173-03A	A-EFF

Analyte	Result	Rep Limit
TPH Air	ND	10
Surr: 1,4-Difluorobenzene	105.4	62-144
Surr: 4-Bromofluorobenzene	109.3	44-153

**Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD)**

RunID: HP\_P\_010606B-696589 Units: mg/m<sup>3</sup>  
 Analysis Date: 06/06/2001 14:41 Analyst: TM

Analyte	LCS Spike Added	LCS Result	LCS Percent Recovery	LCSD Spike Added	LCSD Result	LCSD Percent Recovery	RPD	RPD Limit	Lower Limit	Upper Limit
TPH Air	770	780	101	770	720	93	7.6	30	40	140

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference  
 B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution  
 J - Estimated value between MDL and PQL \* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

*Sample Receipt Checklist  
And  
Chain of Custody*



HOUSTON LABORATORY  
8880 INTERCHANGE DRIVE  
HOUSTON, TEXAS 77054  
(713) 660-0901

### Sample Receipt Checklist

Workorder:	01060173	Received By:	RE
Date and Time Received:	6/6/01 10:00:00 AM	Carrier name:	FedEx
Temperature:	AMBIENT	Chilled by:	Not Chilled

- 1. Shipping container/cooler in good condition? Yes  No  Not Present
- 2. Custody seals intact on shipping container/cooler? Yes  No  Not Present
- 3. Custody seals intact on sample bottles? Yes  No  Not Present
- 4. Chain of custody present? Yes  No
- 5. Chain of custody signed when relinquished and received? Yes  No
- 6. Chain of custody agrees with sample labels? Yes  No
- 7. Samples in proper container/bottle? Yes  No
- 8. Sample containers intact? Yes  No
- 9. Sufficient sample volume for indicated test? Yes  No
- 10. All samples received within holding time? Yes  No
- 11. Container/Temp Blank temperature in compliance? Yes  No
- 12. Water - VOA vials have zero headspace? Yes  No  Not Applicable
- 13. Water - pH acceptable upon receipt? Yes  No  Not Applicable

SPL Representative:  Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:

Client Instructions:

# EXXON COMPANY, USA.

(West Coast)

CHAIN OF CUSTODY RECORD NO. \_\_\_\_\_

Page 1 of 1

Exxon Engineer: Darin Rouse Phone: (925) 242-8765  
 Consultant Co. Name: ERT Contact: Jim Chapman  
 Address: 73 Digital Dr Fax: (415) 382-1856  
Suite 100 Novato Ca 94949  
 RAS #: 7-0104 Facility/State ID # (TN Only): \_\_\_\_\_  
 AFE # (Terminal Only): \_\_\_\_\_ Consultant Project #: 2504-11X  
 Location: 1725 Park St (City) Alameda (State) CA  
 EE  C&M  SDT  
 Consultant Work Release #: 21011100  
 Sampled By: Corn

### ANALYSIS REQUEST: (CHECK APPROPRIATE BOX)

OTHER

NO. OF CONTAINERS	CONTAINER SIZE	TPHGC 8015 GROSS <input checked="" type="checkbox"/>	8015 DRO <input type="checkbox"/>	BTEX 8020 <input checked="" type="checkbox"/>	602 <input type="checkbox"/>	MTBE 8020 <input type="checkbox"/>	8260 <input type="checkbox"/>	OXYGENATES (7) 8260 <input type="checkbox"/>	ORG IR 413.1 <input type="checkbox"/>	GRAV. 413.2 <input type="checkbox"/>	VOL. 8260 <input type="checkbox"/>	624 <input type="checkbox"/>	SEMI-VOL. 8270 <input type="checkbox"/>	635 <input type="checkbox"/>	PNAPAH 8100 <input type="checkbox"/>	8310 <input type="checkbox"/>	8270 <input type="checkbox"/>	PCB/PEST 9081/8082 <input type="checkbox"/>	PCB ONLY <input type="checkbox"/>	TCLP FULLD VOAD SEVAOAD PESTO HERRO	METALS, TOTAL <input type="checkbox"/>	METALS, TCLP <input type="checkbox"/>	LEAD, TOTAL 2981 <input type="checkbox"/>	7421 <input type="checkbox"/>	LEAD, TCLP <input type="checkbox"/>	LEAD, DISSOLVED <input type="checkbox"/>	LEAD TOTAL <input type="checkbox"/>	REACTIVITY <input type="checkbox"/>	CORROSIIVITY <input type="checkbox"/>	FLASH POINT <input type="checkbox"/>	PURGEABLE HYDROCARBON 8010 <input type="checkbox"/>	801 <input type="checkbox"/>	TPHIR 418.1 <input type="checkbox"/>	TOX/TOH <input type="checkbox"/>
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SAMPLE I.D.	DATE	TIME	COMP.	GRAB	MATRIX			OTHER	PRESERVATIVE
					H <sub>2</sub> O	SOIL	AIR		
A-INF	6/4/01	11:00		X			X		-
A-INT				X			X		-
A-EFF				X			X		-

# RUSH

TAT  
 24 HR. \_\_\_\_\_ 72 HR. \_\_\_\_\_  
 48 HR. \_\_\_\_\_ 96 HR. \_\_\_\_\_  
 8 Business  \*Contact US Prior to Sending Sample  
 Other \_\_\_\_\_

SPECIAL DETECTION LIMITS (Specify)  
 SPECIAL REPORTING REQUIREMENTS (Specify)  
 PDF   EDD  
 FAX   FAX C-O-C W/REPORT

REMARKS:  
Ambient  
 LAB USE ONLY Lot # \_\_\_\_\_ Storage Location \_\_\_\_\_  
 WORK ORDER #: 01060173 LAB WORK RELEASE # 2104034

Standard  CLP  Other   
 QA/QC Level

EXXON UST  
 CONTRACT NO.  
**C41483**

## CUSTODY RECORD

Relinquished By Sampler: <u>Corn Clifford</u>	Date <u>6/5/01</u>	Time <u>9:00</u>	Received By:
Relinquished:	Date	Time	Received By:
Relinquished:	Date	Time	Received By: <u>Val Rill</u>

6/6/01 1000  
Cooler Temp:

**ATTACHMENT C**

**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 ID	FIELD MEASUREMENTS			Laboratory Analytical Results		TPHg Removal	
		Hour Meter	Hours of Operation	Flow cfm	TPHg ppmv	Benzene ppmv	Per Period Pounds	Cumulative Pounds
2/16/98	System startup	1,583	0	--				
2/19/98	A-INF A-INT A-EFF	1,652	69	48	< 2.4 < 2.4 < 2.4	< 0.031 < 0.031 < 0.031	<	< 0.1
3/3/98	A-INF A-INT A-EFF	1,828	176	50	< 2.4 < 2.4 < 2.4	< 0.031 < 0.031 < 0.031	<	< 0.2
4/2/98	A-INF A-INT A-EFF	2,184	356	52	< 2.4 < 2.4 < 2.4	< 0.031 < 0.031 < 0.031	<	< 0.5
5/4/98	A-INF A-INT A-EFF	2,538	354	131	17 < 2.4 < 2.4	0.44 < 0.031 < 0.031		< 5.8
6/10/98	A-INF A-INT A-EFF	2,940	402	131	12 4.2 < 2.4	0.047 < 0.031 < 0.031		< 10.0
7/7/99	A-INF A-INT A-EFF	2,940	0	131	76 -- < 2.4	2.6 -- < 0.031		< 10.0
8/4/98	A-INF A-INT A-EFF	3,248	308	131	34 8.8 10	0.94 0.27 < 0.031		< 19.1
10/20/98	A-INF A-INT A-EFF	3,249	1	131	210 < 2.4 < 2.4	6.0 < 0.031 < 0.031		< 19.3
11/9/98	A-INF A-INT A-EFF	3,464	215	131	13 < 2.4 < 2.4	0.056 < 0.031 < 0.031		< 21.7
12/8/98	A-INF A-INT A-EFF	3,798	334	131	3.1 < 2.4 < 2.4	0.034 < 0.031 < 0.031		< 22.7
1/13/99	A-INF A-INT A-EFF	4,264	466	131	12 5.6 < 2.4	< 0.031 < 0.031 < 0.031		< 27.5
2/8/99	A-INF A-INT A-EFF	4,600	336	131	< 12.1 < 12.1 < 12.1	< 0.16 < 0.16 < 0.16	<	< 31.1
3/8/99	A-INF A-INT	4,919	319	131	2.7 < 2.4	< 0.031 < 0.031		< 31.8



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

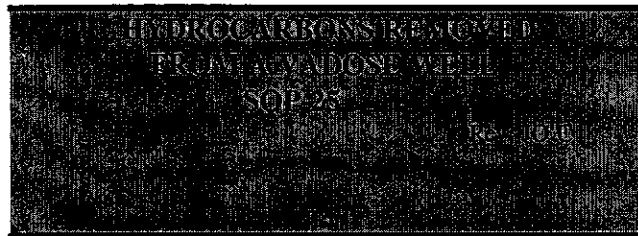
Date	Sample ID	FIELD MEASUREMENTS			Laboratory Analytical Results		TPHg Removal	
		Hour Meter	Hours of Operation	Flow cfm	TPHg ppmv	Benzene ppmv	Per Period Pounds	Cumulative Pounds
	A-EFF				< 2.4	< 0.031		
4/5/99	A-INF	4,957	38	131	42.6	0.474		< 33.3
	A-INT				4.6	< 0.0314		
	A-EFF				< 2.84	< 0.0314		
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 D**

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



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 = 14.7psia, 760 mm Hg, or 407 in H<sub>2</sub>O. T<sub>abs</sub> = 460 + T deg F

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

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

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

21 x 60 x 95 x 0.98 x 0.97 x 0.0283 x 1.050 x 1/454 = 7.4 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)