ExxonMobil
Refining & Supply Company
Global Remediation

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Gene N. Ortega
Territory Manager
Global Remediation – US Retail

ExxonMobil
Refining & Supply

March 8, 2002

MAR 22 2002

Mr. Barney Chan
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502-6577

RE: Former Exxon RAS #7-0238/2200 East 12th Street, Oakland, California.

Dear Mr. Chan:

Attached for your review and comment is a letter report entitled ***Quarterly Groundwater Monitoring Report, Fourth Quarter 2001,*** dated March 8, 2002, for the above-referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and discusses the results of quarterly monitoring and sampling 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 Monitoring and Remediation Status Report, Fourth Quarter 2001, dated March 8, 2002.

cc: w/ attachment
Mr. Stephen Hill, California Regional Water Quality Control Board, San Francisco Bay Region
Mr. Winson B. Low, Valero Refining Company

w/o attachment
Ms. Paula A. Sime, Environmental Resolutions, Inc.

ENVIRONMENTAL RESOLUTIONS, INC.

March 8, 2002
ERI 229313.R14

MAR 22 2002

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

Subject: Quarterly Groundwater Monitoring Report, Fourth Quarter 2001, Former Exxon Service Station 7-0238, 2200 East 12th Street, Oakland, California.

Mr. Ortega:

At the request of ExxonMobil Oil Corporation (formerly Exxon Company, U.S.A.) (ExxonMobil), Environmental Resolutions, Inc. (ERI) performed the fourth quarter 2001 groundwater monitoring and sampling event at the subject site. The purpose of quarterly monitoring and sampling is to evaluate concentrations of dissolved hydrocarbons in groundwater and groundwater flow direction and hydraulic gradient. A brief site environmental history is presented in Table 1. The location of the site is shown on the Site Vicinity Map (Plate 1). The configuration of the site and select site features are shown on the Generalized Site Plan (Plate 2).

GROUNDWATER MONITORING AND SAMPLING

On October 22, 2001, ERI measured depth to water (DTW) and collected groundwater samples from select monitoring wells for laboratory analysis. Groundwater monitoring and sampling were performed in accordance with ERI's groundwater sampling protocol (Attachment A). The calculated hydraulic gradient and groundwater flow direction are presented on Plate 2. Historical and recent monitoring data are summarized in Table 2.

Laboratory Analyses and Results

ERI submitted groundwater samples to Southern Petroleum Laboratories, Inc. (SPL), a California state-certified laboratory, under Chain-of-Custody protocol. The samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX); methyl tertiary butyl ether (MTBE); and total petroleum hydrocarbons as gasoline (TPHg) using the methods listed in the notes in Table 2. The laboratory analysis report and Chain-of-Custody record are attached (Attachment B). Cumulative results of laboratory analyses of groundwater samples are summarized in Table 2. The results of analyses of groundwater samples collected during the recent sampling event are shown on Plate 2.

FUTURE ACTIVITIES

Corrective and Remedial Actions

ERI conducted a dual-phase extraction (DPE) feasibility test at the subject site on March 12 through March 16, 2001. The purpose of the test was to evaluate the effectiveness of DPE as a remedial alternative for this site. Test methods and investigation results are described in ERI's report *Dual-Phase Extraction Feasibility Test Report and Conceptual Corrective Action Plan*, dated September 19, 2001.

ERI has designed a DPE system to remediate hydrocarbon-impacted groundwater and soil vapors. ERI is in the process of obtaining the required permits and plans to install the remediation system in 2003. The DPE system will consist of a liquid-ring pump (LRP) to simultaneously extract groundwater and soil vapor from four proposed DPE wells (DPE1 through DPE4). Extracted liquid and vapor streams will be separated by an air-water separator and directed to the liquid and vapor abatement systems. The vapor stream will be abated using a catalytic oxidizer and discharged into the atmosphere under permit from the Bay Area Air Quality Management District (BAAQMD). The liquid stream will be abated with granular activated carbon (GAC) and discharged to the sanitary sewer under permit from the East Bay Municipal Utility District (EBMUD).

Quarterly Monitoring and Sampling

Monitoring and sampling of site groundwater wells is scheduled for the first quarter 2002.

DOCUMENT DISTRIBUTION

ERI recommends forwarding copies of this report to:

Mr. Barney Chan
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
Valero Refining Company
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 Ms. Paula Sime, ERI's senior staff geologist for this site, at (415) 382-4324, with any questions regarding this project.

Sincerely,
Environmental Resolutions, Inc.

Lyz A. Cullmann
Staff Geologist

John B. Bobbitt
R.G. 4313

REGISTERED GEOLOGIST JOHN BAILEY BOBBITT exp 4-30-02 No. 4313 STATE OF CALIFORNIA

Attachments:
Table 1: Site Chronology-Environmental Activities
Table 2: Cumulative Groundwater Monitoring and Sampling Data

Plate 1: Site Vicinity Map
Plate 2: Generalized Site Plan

Attachment A: Groundwater Sampling Protocol
Attachment B: Laboratory Analysis Report and Chain-of-Custody Record

Table 1
Summary of Environmental Activities
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Date	Activity
May 1988	Texaco began environmental activities at the site, including a sensitive receptor study, and a preliminary investigation.
June 1988	Texaco installed three groundwater monitoring wells (MW1A through MW9C) and began quarterly monitoring and sampling of the wells.
September 1988	Texaco conducted a soil gas survey.
October 1988	Texaco installed two groundwater monitoring wells (MW9D and MW9E).
November 1988	Texaco installed three groundwater monitoring wells (MW9F through MW9H).
February 1989	Texaco performed slug tests on two on-site wells.
August 1989	Texaco submitted a Site Assessment Report.
November 1990	Texaco excavated hydrocarbon-impacted soil between the product dispensers and the sidewalk. Groundwater monitoring well MW9E was destroyed during the excavation. Groundwater monitoring well MW9E was destroyed during the excavation. Groundwater monitoring well MW9I was installed to replace MW9E.
1991	Exxon removed two 10,000-gallon single-wall steel USTs, one 7,500-gallon single-wall steel UST, and associated product piping. The USTs were replaced with three 12,000-gallon double-wall fiberglass USTs. The product lines were replaced with double-wall fiberglass lines.
August 1995	Texaco submitted a Management Plan and Work Plan for Non-Attainment Area Closure.
April 1996	Texaco submitted a Utility Trench Investigation Report.
June 1996	Texaco requested that the site be closed as a Low Risk Groundwater Closure.
July 1996	Texaco submitted an Off-site Source Report.
September 1996	Texaco began annual sampling of groundwater monitoring wells and pursuing case closure based on decreasing benzene concentrations in groundwater samples.
September 1997	Exxon removed one 550-gallon used-oil UST.
June 1999	Exxon submitted a Report of Findings detailing hydraulic gradient, groundwater flow direction, and utility line locations and depth at the site.
September 1999	Exxon submitted a Report of Tank and Line Testing.
February 2000	Exxon performed a Sensitive Receptor Survey.
June 2000	ExxonMobil sold the property, including the UST system, to Valero.
January 2001	ExxonMobil installed two vapor point wells.
March 2001	ExxonMobil performed a dual-phase extraction and feasibility test. Results of the test will be used for preliminary design of remediation system.
Present	ExxonMobil is currently in the process of obtaining necessary permits to install a remediation system at the site.

TABLE 2
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	MTBE	B	T	E	X
		<	feet	>	<		ug/L			>
MW9A	11/02/95	NLPH	7.16	4.30	<50	<10	<0.5	<0.5	<0.5	<0.5
(11.46)	04/26/96	NLPH	6.33	5.13	---	---	---	---	---	---
	08/22/96	NLPH	7.02	4.44	---	---	---	---	---	---
	02/24/97	---	---	---	---	---	---	---	---	---
	03/16/98	NLPH	6.14	5.32	<200	40,000	7.9	<2.0	<2.0	<2.0
	04/21/98	NLPH	6.29	5.17	<50	53,000	3.8	<0.5	<0.5	<0.5
(14.53)	07/22/98	NLPH	6.58	7.95	<250	18,000	<2.5	<2.5	<2.5	<2.5
	12/22/98	NLPH	6.47	8.06	<50	5,200	<0.5	<0.5	<0.5	<0.5
	02/26/99	NLPH	6.38	8.15	<100	10,000	<1.0	<1.0	<1.0	<1.0
	5/27/99 b	NLPH	6.56	7.97	<5,000	15,300	<50	<50	<50	<50
	08/03/99	NLPH	9.39	5.14	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	12/03/99	NLPH	6.52	8.01	<50	1,400	<0.5	<0.5	<0.5	0.67 c
	02/29/00	NLPH	5.31	9.22	<50	20,000	1.2	<0.5	<0.5	<0.5
	05/18/00	NLPH	6.31	8.22	<50	14,000/11,000a	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	6.54	7.99	<50	7,400	<0.5	<0.5	<0.5	<0.5
	10/09/00	NLPH	6.00	8.53	<50	2,300	<0.5	<0.5	<0.5	<0.5
	01/10/01	NLPH	6.34	8.19	<50	3,700	<0.5	<0.5	<0.5	<0.5
	04/10/01	NLPH	9.31	5.22	<50	11,000	<0.5	<0.5	<0.5	<0.5
	07/12/01	NLPH	---	---	<50	3,600	<0.5	<0.5	<0.5	<0.5
	8/17/01 d	---	6.61	7.92	---	---	---	---	---	---
	10/11/01	**NLPH**	**7.03**	**7.50**	**<50**	**1,700**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW9B	11/02/95	NLPH	6.14	3.66	130	<10	3.3	<0.5	<0.5	<0.5
(9.80)	04/26/96	NLPH	5.66	4.14	270	70	130	2.8	6.7	<3
	08/22/96	NLPH	6.16	3.64	210	31	5.7	6.8	1.1	9.2
	02/24/97	NLPH	5.58	4.22	1,400	1,300	76	1.4	4.1	1.2
	03/16/98	NLPH	5.32	4.48	860	1,500	140	2.0	11	<2.0
	04/21/98	NLPH	5.49	4.31	1,800	18,000	300	<5.0	7.9	<5.0
(12.83)	07/22/98	NLPH	5.79	7.04	<500	26,000	13	<5.0	<5.0	<5.0
	12/22/98	NLPH	5.69	7.14	700	21,000	110	3.1	9.1	14
	02/26/99	NLPH	5.10	7.73	8,800	8,000	2,000	<25	52	38
	05/18/99	NLPH	5.65	7.18	<10,000	42,100	158	<100	<100	<100
	08/03/99	NLPH	6.24	6.59	960	24,900	<5.0	<5.0	<5.0	<5.0
	12/03/99	NLPH	5.66	7.17	<50	1,000	<0.5	<0.5	<0.5	<0.5
	02/29/00	NLPH	4.61	8.22	3,100	25,000	900	7	23	7.1
	05/18/00	NLPH	5.54	7.29	780	34,000/26,000a	150	<2.5	4.5	<2.5
	07/24/00	NLPH	8.75	4.08	<250	39,000	8	<2.5	<2.5	<2.5
	10/09/00	NLPH	4.84	7.99	<1,200	30,000	1.7	<0.5	<0.5	<0.5
	01/10/01	NLPH	5.56	7.27	<250	32,000	5.3	<0.5	<0.5	<0.5
	04/10/01	NLPH	5.40	7.43	360	27,000	69.0	<2.5	22.0	29.8

TABLE 2
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	MTBE	B	T	E	X
		<.....feet.....>			<.....ug/L.....>					
MW9B (cont.)	07/12/01	NLPH	---	---	<250	41,000	<2.5	<2.5	<2.5	<2.5
(12.83)	8/17/01 d	---	5.83	7.00	---	---	---	---	---	---
	10/11/01	**NLPH**	**8.70**	**4.13**	**<250**	**24,000**	**<2.5**	**<2.5**	**<2.5**	**<2.5**
MW9C	11/02/95	---	---	---	---	---	---	---	---	---
(11.14)	04/26/96	---	---	---	---	---	---	---	---	---
	08/22/96	---	---	---	---	---	---	---	---	---
	02/24/97	---	---	---	---	---	---	---	---	---
	03/16/98	NLPH	5.51	5.63	<500	150,000	24	<5.0	<5.0	<5.0
	04/21/98	NLPH	5.83	5.31	150	130,000/150,000a	<0.5	<0.5	<0.5	<0.5
(14.19)	07/22/98	NLPH	6.43	7.76	<500	95,000	<5.0	<5.0	<5.0	<5.0
	12/22/98	NLPH	6.16	8.03	<500	84,000	<5.0	<5.0	<5.0	<5.0
	02/26/99	NLPH	5.46	8.73	<250	55,000	<2.5	<2.5	<2.5	<2.5
	05/18/99	NLPH	6.27	7.92	<25,000	68,900	<250	<250	<250	<250
	08/03/99	NLPH	7.13	7.06	210	69,200	<1.0	1.3	<1.0	<1.0
	12/03/99	NLPH	6.17	8.02	290	50,000	<2.5	<2.5	<2.5	<2.5
	02/29/00	NLPH	4.49	9.70	<250	40,000	<2.5	<2.5	<2.5	<2.5
	05/18/00	NLPH	5.96	8.23	<250	46,000/33,000	<2.5	<2.5	<2.5	<2.5
	07/24/00	NLPH	6.47	7.72	<250	44,000	<2.5	<2.5	<2.5	<2.5
	10/09/00	NLPH	6.57	7.62	<250	39,000	<2.5	<2.5	<2.5	<2.5
	01/10/01	NLPH	6.09	8.10	<250	42,000	<2.5	<2.5	<2.5	<2.5
	04/10/01	NLPH	7.88	6.31	<250	35,000	<2.5	<2.5	<2.5	<2.5
	07/12/01	NLPH	---	---	<250	32,000	<2.5	<2.5	<2.5	<2.5
	8/17/01 d	---	6.60	7.59	---	---	---	---	---	---
	10/11/01	**NLPH**	**6.67**	**7.52**	**<250**	**53,000**	**<2.5**	**<2.5**	**<2.5**	**<2.5**
MW9D	11/02/95	---	---	---	---	---	---	---	---	---
(12.90)	04/26/96	---	--	--	---	---	---	---	---	---
	08/22/96	---	---	---	---	---	---	---	---	---
	02/24/97	---	---	---	---	---	---	---	---	---
	03/16/98	NLPH	6.94	5.96	<50	10	<0.5	<0.5	<0.5	<0.5
	04/21/98	NLPH	7.22	5.68	<50	12	<0.5	<0.5	<0.5	<0.5
(15.98)	07/22/98	NLPH	7.85	8.13	<50	13	<0.5	<0.5	<0.5	<0.5
	12/22/98	NLPH	7.58	8.40	<50	12	<0.5	<0.5	<0.5	<0.5
	02/26/99	NLPH	6.42	9.56	<50	310	<0.5	<0.5	<0.5	<0.5
	05/18/99	NLPH	6.55	9.43	<2,500	13,500	<25	<25	<25	<25
	08/03/99	NLPH	8.34	7.64	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	12/03/99	NLPH	7.56	8.42	<50	<2	<0.5	<0.5	<0.5	<0.5
	02/29/00	NLPH	4.82	11.16	<50	2.5	<0.5	<0.5	<0.5	<0.5
	05/18/00	NLPH	7.40	8.58	<50	6.2	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	7.91	8.07	<50	14	<0.5	<0.5	0.85	0.74

TABLE 2
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	MTBE	B	T	E	X
		<	feet	>	<		ug/L			>
MW9D (cont.)	10/09/00	NLPH	8.02	7.96	<50	14	<0.5	<0.5	<0.5	<0.5
(15.98)	01/10/01	NLPH	7.26	8.72	<50	18	<0.5	<0.5	<0.5	<0.5
	04/10/01	NLPH	7.32	8.66	<50	14	<0.5	<0.5	<0.5	<0.5
	07/12/01	NLPH	--	--	<50	22	<0.5	<0.5	<0.5	<0.5
	08/17/01 e	---	---	---	---	---	---	---	---	---
	10/11/01	**NLPH**	**8.16**	**7.82**	**<50**	**24**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW9F	11/02/95	---	---	---	---	---	---	---	---	---
(8.37)	04/26/96	NLPH	---	---	<50	57	<0.5	<0.5	<0.5	<0.5
	08/22/96	NLPH	---	---	<50	5.8	<0.5	<0.5	<0.5	<0.5
	02/24/97	NLPH	---	---	<50	<30	<0.5	<0.5	<0.5	<0.5
	03/16/98	NLPH	---	---	---	---	---	---	---	---
	04/21/98	---	---	---	---	---	---	---	---	---
(11.38)	07/22/98	---	---	---	---	---	---	---	---	---
	12/22/98	NLPH	5.47	5.91	<50	81	<0.5	<0.5	<0.5	<0.5
	02/26/99	NLPH	5.35	6.03	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	05/18/99	NLPH	5.62	5.76	<50	61.6	<0.5	<0.5	<0.5	<0.5
	08/03/99	NLPH	6.32	5.06	<50	3.10	<0.5	<0.5	<0.5	<0.5
	12/03/99	NLPH	5.59	5.79	<50	<2	<0.5	<0.5	0.71	<0.5
	02/29/00	NLPH	4.70	6.68	<50	52	<0.5	<0.5	<0.5	<0.5
	05/18/00	NLPH	5.37	6.01	<50	65	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	5.65	5.73	<50	170	<0.5	<0.5	<0.5	<0.5
	10/09/00	NLPH	5.71	5.67	<50	170	<0.5	<0.5	<0.5	<0.5
	01/10/01	NLPH	4.30	7.08	<50	140	<0.5	<0.5	<0.5	<0.5
	04/10/01	NLPH	5.20	6.18	<50	50	<0.5	<0.5	<0.5	<0.5
	07/12/01	NLPH	--	--	<50	190	<0.5	<0.5	<0.5	<0.5
	08/17/01 e	--	--	--	--	--	--	--	--	--
	10/11/01	**NLPH**	**5.82**	**5.56**	**<50**	**260**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW9G	11/02/95	NLPH	5.92	4.03	<50	<10	<0.5	<0.5	<0.5	<0.5
(9.95)	04/26/96	NLPH	5.28	4.67	<50	18	<0.5	<0.5	<0.5	<0.5
	08/22/96	NLPH	5.57	4.38	<50	18	<0.5	<0.5	<0.5	<0.5
	02/24/97	NLPH	5.30	4.65	<50	240	<0.5	0.57	<0.5	0.62
	03/16/98	---	---	---	---	---	---	---	---	---
	04/21/98	---	---	---	---	---	---	---	---	---
(12.99)	07/22/98	---	---	---	---	---	---	---	---	---
	12/22/98	NLPH	5.28	7.71	<50	1,100	<0.5	<0.5	<0.5	<0.5
	02/26/99	NLPH	5.31	7.68	<50	50	<0.5	<0.5	<0.5	<0.5
	05/18/99	NLPH	5.18	7.81	<1,000	3,990	<10	<10	<10	<10
	08/03/99	NLPH	6.00	6.99	<50	1,340	<0.5	<0.5	<0.5	<0.5
	12/03/99	NLPH	5.27	7.72	<50	<2	<0.5	<0.5	<0.5	0.55 c

TABLE 2
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

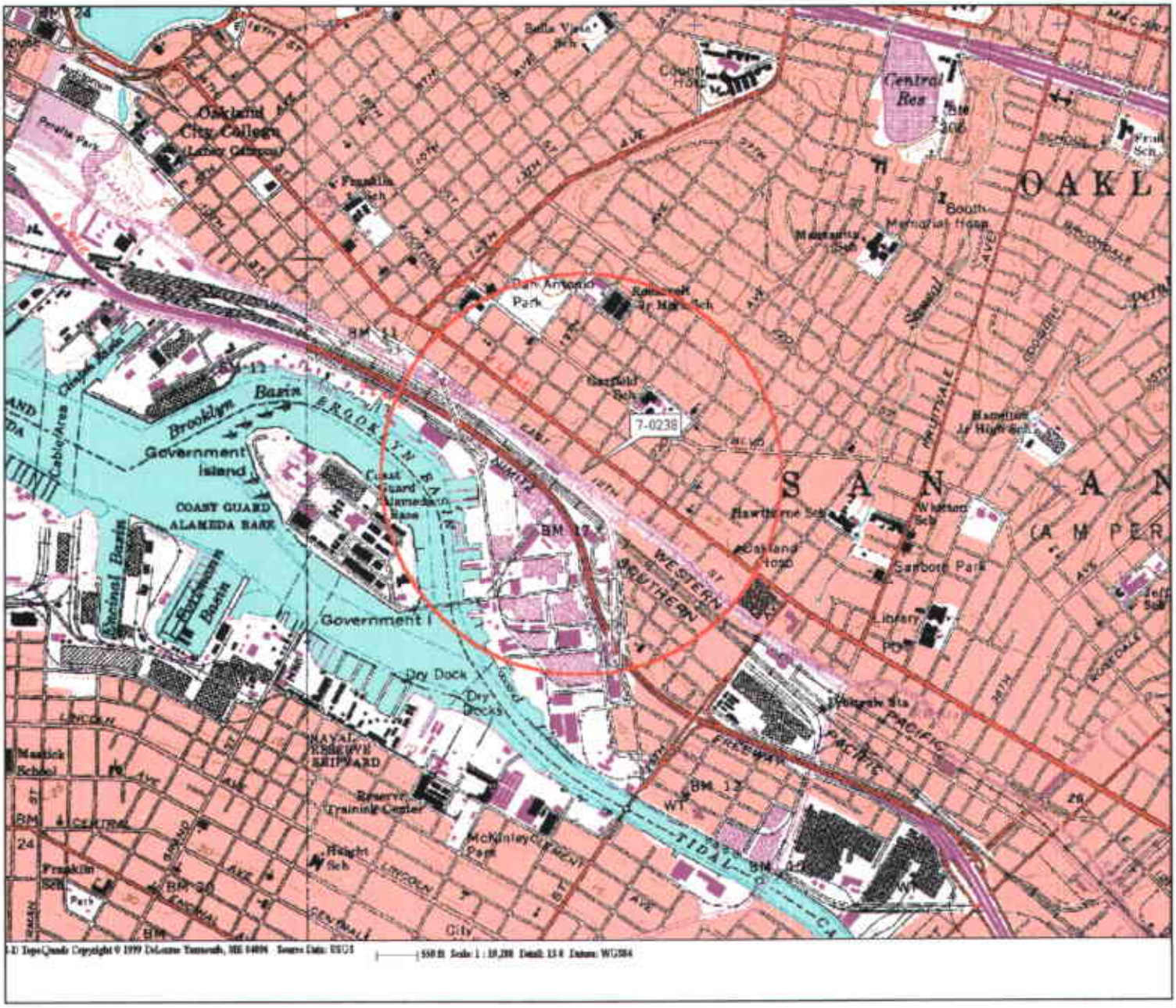
Well ID # (TOC)	Sampling Date	SUBJ	DTW feet	Elev.	TPHg ug/L	MTBE ug/L	B ug/L	T ug/L	E ug/L	X ug/L
MW9G (cont.)	02/29/00	NLPH	4.60	8.39	<50	7,900	<0.5	<0.5	<0.5	<0.5
(12.99)	05/18/00	NLPH	5.16	7.83	<50	2,400	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	5.20	7.79	<50	1,000	<0.5	<0.5	<0.5	<0.5
	10/09/00	NLPH	5.26	7.73	<50	180	<0.5	<0.5	<0.5	<0.5
	01/10/01	NLPH	5.18	7.81	<50	1,200	<0.5	<0.5	<0.5	<0.5
	04/10/01	NLPH	5.08	7.91	<50	9,100	<0.5	<0.5	<0.5	<0.5
	07/12/01	NLPH	--	--	<50	3,000	<0.5	<0.5	<0.5	<0.5
	8/17/01 e	---	---	---	---	---	---	---	---	---
	10/11/01	**NLPH**	**5.48**	**7.51**	**<50**	**1,600**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW9H	11/02/95	NLPH	8.40	0.18	<50	<10	<0.5	<0.5	<0.5	<0.5
(8.58)	04/26/96	NLPH	8.05	0.53	---	---	---	---	---	---
	08/22/96	NLPH	8.17	0.41	---	---	---	---	---	---
	02/24/97	---	---	---	---	---	---	---	---	---
	03/16/98	---	---	---	---	---	---	---	---	---
	04/21/98	---	---	---	---	---	---	--	---	---
(11.61)	07/22/98	---	---	---	---	---	---	---	---	---
	12/22/98	NLPH	7.81	3.80	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	02/26/99	NLPH	7.61	4.00	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	05/18/99	NLPH	8.00	3.61	<50	3.98	<0.5	<0.5	<0.5	<0.5
	08/03/99	NLPH	6.05	5.56	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	12/03/99	NLPH	5.32	6.29	<50	<2	<0.5	<0.5	<0.5	0.57 c
	02/29/00	NLPH	7.10	4.51	<50	<2	<0.5	<0.5	<0.5	<0.5
	05/18/00	NLPH	7.84	3.77	<50	9.7	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	7.94	3.67	<50	17	<0.5	<0.5	<0.5	<0.5
	10/09/00	NLPH	8.09	3.52	<50	13	<0.5	<0.5	<0.5	1.1
	01/10/01	NLPH	7.89	3.72	<50	11	<0.5	<0.5	<0.5	0.5
	04/10/01	NLPH	8.71	2.90	<50	44	<0.5	0.78	0.52	2.36
	07/12/01	NLPH	--	--	<50	28	<0.5	<0.5	<0.5	<0.5
	8/17/01 e	---	---	---	---	---	---	---	---	---
	10/11/01	**NLPH**	**8.15**	**3.46**	**<50**	**30**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW9I	11/02/95	NLPH	6.04	4.07	<50	<10	<0.5	<0.5	<0.5	<0.5
(10.11)	04/26/96	NLPH	5.27	4.84	<50	99	<0.5	<0.5	<0.5	<0.5
	08/22/96	NLPH	5.66	4.45	<50	170	<0.5	<0.5	<0.5	<0.5
	02/24/97	NLPH	5.24	4.87	120	9,100	<0.5	<0.5	<0.5	<0.5
	03/16/98	NLPH	4.91	5.20	<200	59,000	13	<2.0	<2.0	<2.0
	04/21/98	NLPH	5.08	5.03	<500	59,000	<5.0	<5.0	<5.0	<5.0
(13.14)	07/22/98	NLPH	5.44	7.70	<500	62,000	<5.0	<5.0	<5.0	<5.0
	12/22/98	NLPH	5.32	7.82	200	51,000	1.7	<0.5	<0.5	<0.5
	02/26/99	NLPH	4.71	8.43	<500	9,700	<5.0	<5.0	<5.0	<5.0

TABLE 2
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHg	MTBE	B	T	E	X
		<	feet	>	<		ug/L			>
MW9I (cont.) (13.14)	05/18/99	NLPH	5.30	7.84	<1,000	3,730	<10	<10	<10	<10
	08/03/99	NLPH	5.98	7.16	<50	21,900	<0.5	0.650	<0.5	<0.5
	12/03/99	NLPH	5.31	7.83	<250	2,000	3.9	2.9	<2.5	14
	02/29/00	NLPH	4.20	8.94	50	16,000	0.74	<0.5	<0.5	<0.5
	05/18/00	NLPH	5.12	8.02	<50	2,900	<0.5	<0.5	<0.5	<0.5
	07/24/00	NLPH	5.41	7.73	<250	43,000	<2.5	<2.5	<2.5	<2.5
	10/09/00	NLPH	5.41	7.73	<2,500	54,000	1.6	<0.5	<0.5	<0.5
	01/10/01	NLPH	5.24	7.90	<250	36,000	<2.5	<2.5	<2.5	<2.5
	04/10/01	NLPH	4.84	8.30	<50	4,800	<0.5	<0.5	<0.5	<0.5
	07/12/01	NLPH	---	---	<50	8,400	<0.5	<0.5	<0.5	<0.5
	08/17/01	---	6.49	6.65	---	---	---	---	---	---
	10/11/01	**NLPH**	**5.64**	**7.50**	**<250**	**38,000**	**<2.5**	**<2.5**	**<2.5**	**<2.5**

Notes:

SUBJ	=	Results of subjective evaluation.
NLPH	=	No liquid-phase hydrocarbons present in well.
TOC	=	Elevation of top of well casing; relative to mean sea level.
DTW	=	Depth to water.
Elev.	=	Elevation of groundwater surface; relative to mean sea level.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed 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.
<	=	Less than the indicated detection limit shown by the laboratory.
---	=	Not measured or sampled.
ug/L	=	Micrograms per Liter.
a	=	MTBE confirmed using EPA Method 8260.
b	=	Miscalculation in field. Field technician may have inadvertently monitored and sampled the wrong well. Resampled 5/27/99.
c	=	Analyte detected in the associated Trip Blank at 0.52 ug/L.
d	=	Due to measurement error during initial sampling event, DTW was re-measured on August 17, 2001. No samples were taken.
e	=	Well inaccessible due to uncontrollable traffic conditions.



FN 2293TOPO

EXPLANATION

1/2-mile radius circle

N

APPROXIMATE SCALE

0 0.5 1 mile

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

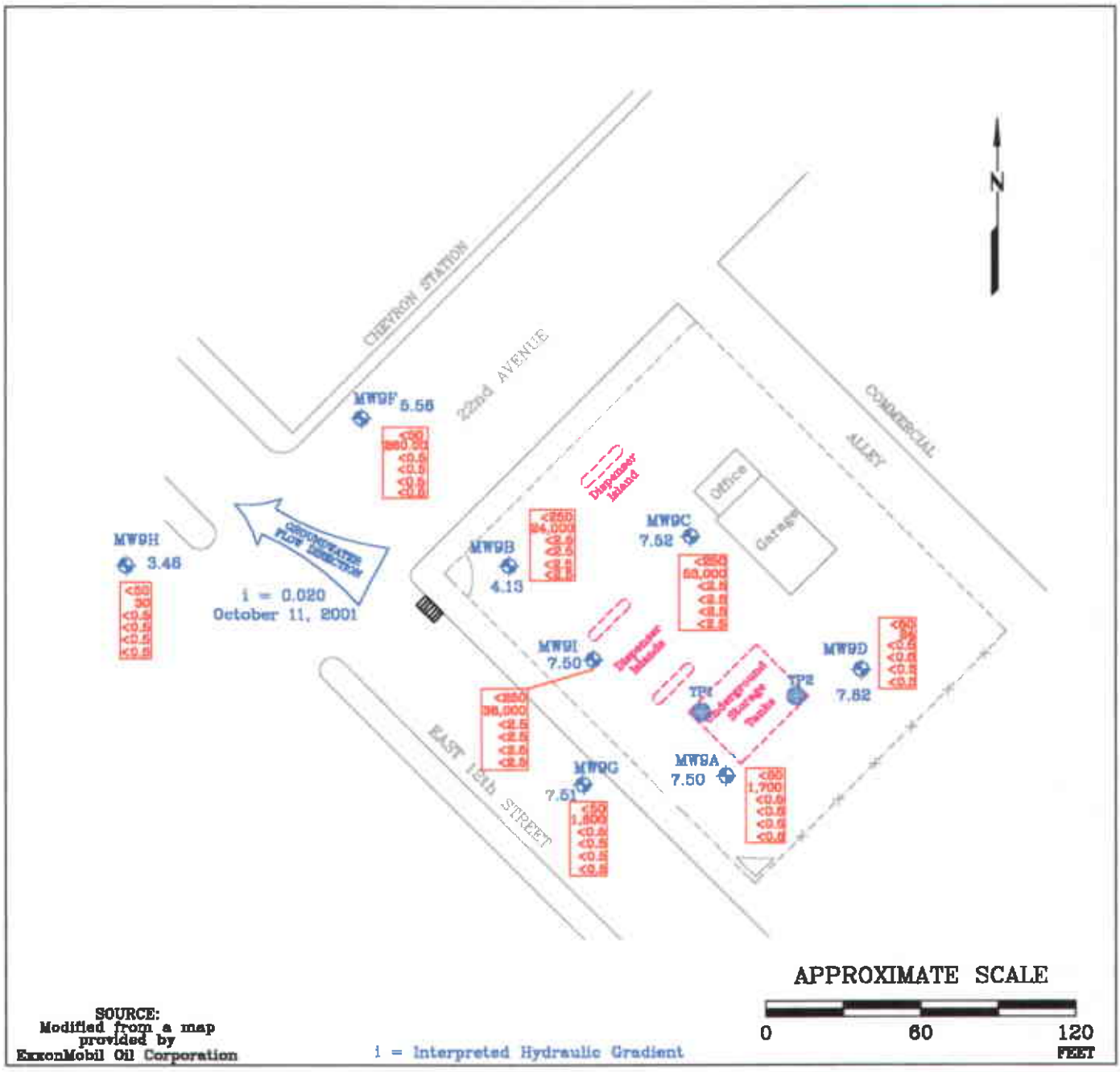
ENVIRONMENTAL RESOLUTIONS, INC.

SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PROJECT NO. 2293

PLATE 1



SOURCE:
Modified from a map provided by ExxonMobil Oil Corporation

i = Interpreted Hydraulic Gradient

FN 22930002

EXPLANATION

MW9D
Groundwater Monitoring Well

7.50 Groundwater elevation in feet, datum is mean sea level

TP2
UST Observation Well

Sampled October 11, 2001
Analyte Concentrations in ug/L
Sampled January 11, 2002

<250	2,470 Total Petroleum Hydrocarbons as gasoline
53,000	90,000 Methyl Tertiary Butyl Ether
<2.5	0.90 Benzene
<2.5	<0.50 Toluene
<2.5	<0.50 Ethylbenzene
<2.5	<0.50 Total Xylenes

< Less Than the Stated Laboratory Detection Limit
ug/L Micrograms per Liter

ERI ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

FORMER EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PROJECT NO. 2293

PLATE 2

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
π	=	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 REPORT AND CHAIN-OF-CUSTODY RECORD

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

EXXON Company U.S.A.

Certificate of Analysis Number:

01100556

Report To:		Project Name:	229313x	
Environmental Resolution, Inc.		Site:	7-0238	
Scott Thompson		Site Address:	2200 East 12th	
73 Digital Drive Suite 100			Oakland	CA
Novato		PO Number:	EWR#21040347	
California		State:	California	
94949-		State Cert. No.:	1903	
ph: (415) 382-9105	fax: (415) 382-1856	Date Reported:	10/23/01	

This Report Contains A Total Of 18 Pages

Excluding This Page

And

Chain Of Custody

10/23/01

Date

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

Case Narrative for:

EXXON Company U.S.A.

Certificate of Analysis Number:

01100556

Report To:		Project Name:	229313x	
Environmental Resolution, Inc.		Site:	7-0238	
Scott Thompson		Site Address:	2200 East 12th	
73 Digital Drive Suite 100			Oakland	CA
Novato		PO Number:	EWR#21040347	
California		State:	California	
94949-		State Cert. No.:	1903	
ph: (415) 382-9105	fax: (415) 382-1856	Date Reported:	10/23/01	

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.

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

10/23/01
Date

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

EXXON Company U.S.A.

Certificate of Analysis Number:

01100556

Report To: Environmental Resolution, Inc.
Scott Thompson
73 Digital Drive Suite 100

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

Fax To: Environmental Resolution, Inc.
Scott Thompson fax : (415) 382-1856

Project Name: 229313x
Site: 7-0238
Site Address: 2200 East 12th
Oakland CA
PO Number: EWR#21040347
State: California
State Cert. No.: 1903
Date Reported: 10/23/01

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
TB	01100556-01	Water	10/11/01	10/12/01 10:00:00 AM		☐
BB	01100556-02	Water	10/11/01 12:15:00 PM	10/12/01 10:00:00 AM		☐
MW9D	01100556-03	Water	10/11/01 12:25:00 PM	10/12/01 10:00:00 AM		☐
MW9H	01100556-04	Water	10/11/01 10:25:00 AM	10/12/01 10:00:00 AM		☐
MW9F	01100556-05	Water	10/11/01 11:00:00 AM	10/12/01 10:00:00 AM		☐
MW9G	01100556-06	Water	10/11/01 9:50:00 AM	10/12/01 10:00:00 AM		☐
MW9A	01100556-07	Water	10/11/01 12:30:00 PM	10/12/01 10:00:00 AM		☐
MW9I	01100556-08	Water	10/11/01 12:35:00 PM	10/12/01 10:00:00 AM		☐
MW9C	01100556-09	Water	10/11/01 12:45:00 PM	10/12/01 10:00:00 AM		☐
MW9B	01100556-10	Water	10/11/01 12:50:00 PM	10/12/01 10:00:00 AM		☐

Sonia West
Senior Project Manager

10/23/01
Date

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer

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

Client Sample ID TB **Collected:** 10/11/01 **SPL Sample ID:** 01100556-01

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		10/19/01 22:17	DL	870298
Surr: 1,4-Difluorobenzene	100	%	62-144	1		10/19/01 22:17	DL	870298
Surr: 4-Bromofluorobenzene	98.7	%	44-153	1		10/19/01 22:17	DL	870298
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		10/19/01 22:17	DL	870251
Ethylbenzene	ND		0.5	1		10/19/01 22:17	DL	870251
Methyl tert-butyl ether	ND		2	1		10/19/01 22:17	DL	870251
Toluene	ND		0.5	1		10/19/01 22:17	DL	870251
m,p-Xylene	ND		0.5	1		10/19/01 22:17	DL	870251
o-Xylene	ND		0.5	1		10/19/01 22:17	DL	870251
Xylenes,Total	ND		0.5	1		10/19/01 22:17	DL	870251
Surr: 1,4-Difluorobenzene	109	%	72-137	1		10/19/01 22:17	DL	870251
Surr: 4-Bromofluorobenzene	107	%	48-156	1		10/19/01 22:17	DL	870251

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, TX 77054
(713) 660-0901

Client Sample ID BB **Collected:** 10/11/01 12:15:0 **SPL Sample ID:** 01100556-02

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		10/19/01 22:41	DL	870299
Surr: 1,4-Difluorobenzene	98.0	%	62-144	1		10/19/01 22:41	DL	870299
Surr: 4-Bromofluorobenzene	97.3	%	44-153	1		10/19/01 22:41	DL	870299
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		10/19/01 22:41	DL	870252
Ethylbenzene	ND		0.5	1		10/19/01 22:41	DL	870252
Methyl tert-butyl ether	ND		2	1		10/19/01 22:41	DL	870252
Toluene	ND		0.5	1		10/19/01 22:41	DL	870252
m,p-Xylene	ND		0.5	1		10/19/01 22:41	DL	870252
o-Xylene	ND		0.5	1		10/19/01 22:41	DL	870252
Xylenes,Total	ND		0.5	1		10/19/01 22:41	DL	870252
Surr: 1,4-Difluorobenzene	108	%	72-137	1		10/19/01 22:41	DL	870252
Surr: 4-Bromofluorobenzene	107	%	48-156	1		10/19/01 22:41	DL	870252

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, TX 77054
(713) 660-0901

Client Sample ID MW9D **Collected:** 10/11/01 12:25:0 **SPL Sample ID:** 01100556-03

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		10/19/01 23:06	DL	870300
Surr: 1,4-Difluorobenzene	101	%	62-144	1		10/19/01 23:06	DL	870300
Surr: 4-Bromofluorobenzene	97.7	%	44-153	1		10/19/01 23:06	DL	870300
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		10/19/01 23:06	DL	870253
Ethylbenzene	ND		0.5	1		10/19/01 23:06	DL	870253
Methyl tert-butyl ether	24		2	1		10/19/01 23:06	DL	870253
Toluene	ND		0.5	1		10/19/01 23:06	DL	870253
m,p-Xylene	ND		0.5	1		10/19/01 23:06	DL	870253
o-Xylene	ND		0.5	1		10/19/01 23:06	DL	870253
Xylenes,Total	ND		0.5	1		10/19/01 23:06	DL	870253
Surr: 1,4-Difluorobenzene	106	%	72-137	1		10/19/01 23:06	DL	870253
Surr: 4-Bromofluorobenzene	108	%	48-156	1		10/19/01 23:06	DL	870253

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, TX 77054
(713) 660-0901

Client Sample ID MW9H **Collected:** 10/11/01 10:25:0 **SPL Sample ID:** 01100556-04

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		10/19/01 23:30	DL	870301
Surr: 1,4-Difluorobenzene	97.3	%	62-144	1		10/19/01 23:30	DL	870301
Surr: 4-Bromofluorobenzene	98.7	%	44-153	1		10/19/01 23:30	DL	870301
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		10/19/01 23:30	DL	870254
Ethylbenzene	ND		0.5	1		10/19/01 23:30	DL	870254
Methyl tert-butyl ether	30		2	1		10/19/01 23:30	DL	870254
Toluene	ND		0.5	1		10/19/01 23:30	DL	870254
m,p-Xylene	ND		0.5	1		10/19/01 23:30	DL	870254
o-Xylene	ND		0.5	1		10/19/01 23:30	DL	870254
Xylenes,Total	ND		0.5	1		10/19/01 23:30	DL	870254
Surr: 1,4-Difluorobenzene	110	%	72-137	1		10/19/01 23:30	DL	870254
Surr: 4-Bromofluorobenzene	108	%	48-156	1		10/19/01 23:30	DL	870254

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, TX 77054
(713) 660-0901

Client Sample ID MW9F **Collected:** 10/11/01 11:00:0 **SPL Sample ID:** 01100556-05

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		10/19/01 23:55	DL	870302
Surr: 1,4-Difluorobenzene	99.0	%	62-144	1		10/19/01 23:55	DL	870302
Surr: 4-Bromofluorobenzene	95.7	%	44-153	1		10/19/01 23:55	DL	870302
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		10/19/01 23:55	DL	870255
Ethylbenzene	ND		0.5	1		10/19/01 23:55	DL	870255
Methyl tert-butyl ether	260		2	1		10/19/01 23:55	DL	870255
Toluene	ND		0.5	1		10/19/01 23:55	DL	870255
m,p-Xylene	ND		0.5	1		10/19/01 23:55	DL	870255
o-Xylene	ND		0.5	1		10/19/01 23:55	DL	870255
Xylenes,Total	ND		0.5	1		10/19/01 23:55	DL	870255
Surr: 1,4-Difluorobenzene	108	%	72-137	1		10/19/01 23:55	DL	870255
Surr: 4-Bromofluorobenzene	106	%	48-156	1		10/19/01 23:55	DL	870255

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, TX 77054
(713) 660-0901

Client Sample ID MW9G **Collected:** 10/11/01 9:50:00 **SPL Sample ID:** 01100556-06

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		10/20/01 0:19	DL	870303
Surr: 1,4-Difluorobenzene	101	%	62-144	1		10/20/01 0:19	DL	870303
Surr: 4-Bromofluorobenzene	98.3	%	44-153	1		10/20/01 0:19	DL	870303
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		10/20/01 0:19	DL	870256
Ethylbenzene	ND		0.5	1		10/20/01 0:19	DL	870256
Methyl tert-butyl ether	1600		20	10		10/20/01 10:39	DL	870273
Toluene	ND		0.5	1		10/20/01 0:19	DL	870256
m,p-Xylene	ND		0.5	1		10/20/01 0:19	DL	870256
o-Xylene	ND		0.5	1		10/20/01 0:19	DL	870256
Xylenes,Total	ND		0.5	1		10/20/01 0:19	DL	870256
Surr: 1,4-Difluorobenzene	106	%	72-137	1		10/20/01 0:19	DL	870256
Surr: 1,4-Difluorobenzene	108	%	72-137	10		10/20/01 10:39	DL	870273
Surr: 4-Bromofluorobenzene	106	%	48-156	1		10/20/01 0:19	DL	870256
Surr: 4-Bromofluorobenzene	106	%	48-156	10		10/20/01 10:39	DL	870273

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, TX 77054
(713) 660-0901

Client Sample ID MW9A **Collected:** 10/11/01 12:30:0 **SPL Sample ID:** 01100556-07

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		10/20/01 0:44	DL	870304
Surr: 1,4-Difluorobenzene	97.0	%	62-144	1		10/20/01 0:44	DL	870304
Surr: 4-Bromofluorobenzene	101	%	44-153	1		10/20/01 0:44	DL	870304
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		10/20/01 0:44	DL	870257
Ethylbenzene	ND		0.5	1		10/20/01 0:44	DL	870257
Methyl tert-butyl ether	1700		20	10		10/20/01 11:04	DL	870274
Toluene	ND		0.5	1		10/20/01 0:44	DL	870257
m,p-Xylene	ND		0.5	1		10/20/01 0:44	DL	870257
o-Xylene	ND		0.5	1		10/20/01 0:44	DL	870257
Xylenes,Total	ND		0.5	1		10/20/01 0:44	DL	870257
Surr: 1,4-Difluorobenzene	104	%	72-137	10		10/20/01 11:04	DL	870274
Surr: 1,4-Difluorobenzene	106	%	72-137	1		10/20/01 0:44	DL	870257
Surr: 4-Bromofluorobenzene	107	%	48-156	1		10/20/01 0:44	DL	870257
Surr: 4-Bromofluorobenzene	109	%	48-156	10		10/20/01 11:04	DL	870274

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
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J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
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MI - Matrix Interference

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

Client Sample ID MW9I **Collected:** 10/11/01 12:35:0 **SPL Sample ID:** 01100556-08

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		250	5		10/20/01 1:08	DL	870305
Surr: 1,4-Difluorobenzene	100	%	62-144	5		10/20/01 1:08	DL	870305
Surr: 4-Bromofluorobenzene	99.3	%	44-153	5		10/20/01 1:08	DL	870305
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		2.5	5		10/20/01 1:08	DL	870258
Ethylbenzene	ND		2.5	5		10/20/01 1:08	DL	870258
Methyl tert-butyl ether	38000		400	200		10/20/01 11:28	DL	870275
Toluene	ND		2.5	5		10/20/01 1:08	DL	870258
m,p-Xylene	ND		2.5	5		10/20/01 1:08	DL	870258
o-Xylene	ND		2.5	5		10/20/01 1:08	DL	870258
Xylenes,Total	ND		2.5	5		10/20/01 1:08	DL	870258
Surr: 1,4-Difluorobenzene	105	%	72-137	200		10/20/01 11:28	DL	870275
Surr: 1,4-Difluorobenzene	106	%	72-137	5		10/20/01 1:08	DL	870258
Surr: 4-Bromofluorobenzene	105	%	48-156	200		10/20/01 11:28	DL	870275
Surr: 4-Bromofluorobenzene	108	%	48-156	5		10/20/01 1:08	DL	870258

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, TX 77054
(713) 660-0901

Client Sample ID MW9C **Collected:** 10/11/01 12:45:0 **SPL Sample ID:** 01100556-09

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		250	5		10/20/01 12:41	DL	870319
Surr: 1,4-Difluorobenzene	99.9	%	62-144	5		10/20/01 12:41	DL	870319
Surr: 4-Bromofluorobenzene	97.2	%	44-153	5		10/20/01 12:41	DL	870319
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		2.5	5		10/20/01 12:41	DL	870278
Ethylbenzene	ND		2.5	5		10/20/01 12:41	DL	870278
Methyl tert-butyl ether	53000		500	250		10/20/01 12:17	DL	870277
Toluene	ND		2.5	5		10/20/01 12:41	DL	870278
m,p-Xylene	ND		2.5	5		10/20/01 12:41	DL	870278
o-Xylene	ND		2.5	5		10/20/01 12:41	DL	870278
Xylenes,Total	ND		2.5	5		10/20/01 12:41	DL	870278
Surr: 1,4-Difluorobenzene	106	%	72-137	5		10/20/01 12:41	DL	870278
Surr: 1,4-Difluorobenzene	106	%	72-137	250		10/20/01 12:17	DL	870277
Surr: 4-Bromofluorobenzene	110	%	48-156	5		10/20/01 12:41	DL	870278
Surr: 4-Bromofluorobenzene	108	%	48-156	250		10/20/01 12:17	DL	870277

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, TX 77054
(713) 660-0901

Client Sample ID MW9B **Collected:** 10/11/01 12:50:0 **SPL Sample ID:** 01100556-10

Site: 7-0238

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		250	5		10/20/01 1:57	DL	870306
Surr: 1,4-Difluorobenzene	100	%	62-144	5		10/20/01 1:57	DL	870306
Surr: 4-Bromofluorobenzene	93.0	%	44-153	5		10/20/01 1:57	DL	870306
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		2.5	5		10/20/01 1:57	DL	870259
Ethylbenzene	ND		2.5	5		10/20/01 1:57	DL	870259
Methyl tert-butyl ether	24000		200	100		10/20/01 11:53	DL	870276
Toluene	ND		2.5	5		10/20/01 1:57	DL	870259
m,p-Xylene	ND		2.5	5		10/20/01 1:57	DL	870259
o-Xylene	ND		2.5	5		10/20/01 1:57	DL	870259
Xylenes,Total	ND		2.5	5		10/20/01 1:57	DL	870259
Surr: 1,4-Difluorobenzene	108	%	72-137	5		10/20/01 1:57	DL	870259
Surr: 1,4-Difluorobenzene	107	%	72-137	100		10/20/01 11:53	DL	870276
Surr: 4-Bromofluorobenzene	103	%	48-156	5		10/20/01 1:57	DL	870259
Surr: 4-Bromofluorobenzene	105	%	48-156	100		10/20/01 11:53	DL	870276

Sonia West
Project Manager

Qualifiers:

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

Quality Control Documentation

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

Quality Control Report

EXXON Company U.S.A.

229313x

Analysis: Purgeable Aromatics
Method: SW8021B
WorkOrder: 01100556
Lab Batch ID: R45812

Method Blank

RunID: VARE_011019B-870248 Units: ug/L
Analysis Date: 10/19/2001 19:50 Analyst: DL

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	108.7	72-137
Surr: 4-Bromofluorobenzene	103.2	48-156

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01100556-01A	TB
01100556-02A	BB
01100556-03A	MW9D
01100556-04A	MW9H
01100556-05A	MW9F
01100556-06A	MW9G
01100556-07A	MW9A
01100556-08A	MW9I
01100556-09A	MW9C
01100556-10A	MW9B

Laboratory Control Sample (LCS)

RunID: VARE_011019B-870247 Units: ug/L
Analysis Date: 10/19/2001 19:01 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	52	103	70	130
Ethylbenzene	50	55	110	70	130
Methyl tert-butyl ether	50	48	97	70	130
Toluene	50	52	104	70	130
m,p-Xylene	100	110	108	70	130
o-Xylene	50	53	107	70	130
Xylenes,Total	150	163	109	70	130

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

Sample Spiked: 01100556-03
RunID: VARE_011019B-870249 Units: ug/L
Analysis Date: 10/19/2001 20:14 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	21	106	20	22	108	1.21	21	32	164

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, TX 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

229313x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01100556
Lab Batch ID: R45812

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

Sample Spiked: 01100556-03
RunID: VARE_011019B-870249 Units: ug/L
Analysis Date: 10/19/2001 20:14 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
thylbenzene	ND	20	21	105	20	21	106	0.981	19	52	142
ethyl tert-butyl ether	24	20	43	95.0	20	43	95.5	0.592	20	39	150
Toluene	ND	20	21	102	20	21	103	0.543	20	38	159
m,p-Xylene	ND	40	43	107	40	43	108	0.665	17	53	144
-Xylene	ND	20	21	105	20	21	106	0.588	18	53	143
Xylenes,Total	ND	60	64	107	60	64	107	0	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.

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

Quality Control Report

EXXON Company U.S.A.

229313x

Analysis: Gasoline Range Organics **WorkOrder:** 01100556
Method: CA_GRO **Lab Batch ID:** R45816

Method Blank

RunID: VARE_011019C-870295 Units: mg/L
Analysis Date: 10/19/2001 19:50 Analyst: DL

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	97.0	62-144
Surr: 4-Bromofluorobenzene	99.3	44-153

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01100556-01A	TB
01100556-02A	BB
01100556-03A	MW9D
01100556-04A	MW9H
01100556-05A	MW9F
01100556-06A	MW9G
01100556-07A	MW9A
01100556-08A	MW9I
01100556-09A	MW9C
01100556-10A	MW9B

Laboratory Control Sample (LCS)

RunID: VARE_011019C-870294 Units: mg/L
Analysis Date: 10/19/2001 19:25 Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.81	81	70	130

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

Sample Spiked: 01100556-04
RunID: VARE_011019C-870296 Units: mg/L
Analysis Date: 10/19/2001 21:03 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	0.88	98.3	0.9	0.85	93.9	4.57	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.

Sample Receipt Checklist

And

Chain of Custody

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

Sample Receipt Checklist

Workorder:	01100556	Received By:	DS
Date and Time Received:	10/12/01 10:00:00 AM	Carrier name:	FedEx
Temperature:	4	Chilled by:	Water Ice

1.	**Shipping container/cooler in good condition?**	Yes	☑	No ☐	Not Present	☐
2.	**Custody seals intact on shippping 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: Gene Ortega Phone: 925-246-8747
Consultant Co. Name: FRI Contact: Scott Thompson / LAC
Address: 73 Digital Dr Fax: 415-382-1856
Suite 100, Novato CA 94949
RAS #: 70238 Facility/State ID # (TN Only): _____
AFE # (Terminal Only): _____ Consultant Project #: 229313X
Location: 2200 E. 12th St (City) Oakland (State) CA
☐ EE ☐ C&M ☐ SDT
Consultant Work Release #: 2104034?
Sampled By: _____

SAMPLE I.D.	DATE	TIME	COMP.	GRAB	MATRIX H_2O	MATRIX SOIL	MATRIX AIR	OTHER	PRESERVATIVE	NO. OF CONTAINERS	CONTAINER SIZE	TPH/GC 8015 GRO (Modified)	BTEX 8020 ☐ 602 ☐	MTBE 8020 ☐ 8260 ☐	OXYGENATES (7) 8260 ☐	O&G IR 413.1 ☐ GRAV. 413.2 ☐	VOL. 8260 ☐ 624 ☐	SEMI-VOL 8270 ☐ 625 ☐	PNA/PAH 8100 ☐ 8310 ☐ 8270 ☐	PCB/PEST 8081/8082 ☐ PCB ONLY ☐	TCLP FULL ☐ VOA ☐ SEMI-VOA ☐ PEST ☐ HERB ☐	METALS, TOTAL ☐ METALS, TCLP ☐	LEAD, TOTAL 239.1 ☐ 7421 ☐ LEAD, TCLP ☐	LEAD, DISSOLVED ☐ LEAD TOTAL ☐	REACTIVITY ☐ CORROSIVITY ☐ FLASH POINT ☐	PURGEABLE HYDROCARBON 8010 ☐ 601 ☐	TPH/IR 418.1 ☐	TOX/TOH ☐
TB									HCl	2	40ml																	
BB	10-11-01	1215								2																		
MW9D		1225								3																		
MW9H		1085																										
MW9F		1100																										
MW9G		950																										
MW9A		1230																										
MW9I		1235																										
MW9C		1245																										
MW9B		1250																										

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

EXXON UST CONTRACT NO. C41483

SPECIAL DETECTION LIMITS (Specify)

REMARKS: 4°

QA/QC Level
Standard X CLP Other ☐ _____

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

LAB USE ONLY Lot # (N) Storage Location
WORK ORDER # 0110E66 LAB WORK RELEASE #: 2104034?

CUSTODY RECORD

	Date	Time	
Relinquished By Sampler:	11-11-01	1400	Received By:
Relinquished:			Received By:
Relinquished:			Received By:
			Way Bill #: Cooler Temp: 10/12/01 1000

Triplicate: Original • White Lab's Copy • Green Client Copy • Yellow