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

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P.O. BOX 4032 • CONCORD, CA 94524-4032
MARKETING DEPARTMENT • ENVIRONMENTAL ENGINEERING

DARIN L. ROUSE SENIOR ENGINEER

(925) 246-8768 (925) 246-8798 FAX

# 1068

March 10, 2000

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 #7-0236/6600 East 14th Street, Oakland, California.

Dear Mr. Chan:

Attached for your review and comment is a letter report entitled *Quarterly Groundwater Monitoring Report, First Quarter 2000*, dated February 23, 2000, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the results of quarterly groundwater monitoring and sampling activities at the subject site.

Base on our recent meeting, Exxon will be submitting an addendum to the submitted closure plan incorporating data obtained by the current property owner to expedite case closure. Exxon also anticipated removing the tank noted on the adjacent parcel and collecting appropriate samples.

If you have any questions or comments, please contact me at (925) 246-8768.

Sincerely,

Darin Rouse Senior Engineer

Attachment: ERI's Quarterly Groundwater Monitoring Report, First Quarter 2000, dated February 23, 2000.

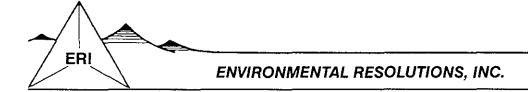
cc: w/attachment

Mr. Stephen Hill - California Regional Water Quality Control Board-San Francisco Bay Region

w/o attachment

Mr. James F. Chappell - Environmental Resolutions, Inc.





February 23, 2000 ERI 200913.R21

Mr. Darin L. Rouse Exxon Company, U.S.A. P.O. Box 4032 Concord, California 94524-4032

Subject:

Quarterly Groundwater Monitoring Report, First Quarter 2000, Former Exxon Service

Station 7-0236, 6600 East 14th Street, Oakland, California.

#### Mr. Rouse:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI) is reporting the results of the first quarter 2000 groundwater monitoring and sampling event 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 direction and gradient of groundwater flow. Blaine Tech Services, Inc. (Blaine Tech) performed the site field activities at the request of Exxon.

#### GROUNDWATER MONITORING AND SAMPLING

On January 26 and 27, 2000, Blaine Tech measured depth to water (DTW) in on-site and off-site wells, and collected groundwater samples from these wells for laboratory analysis. Work was performed in accordance with Blaine Tech's groundwater sampling protocol (Attachment A).

Calculated groundwater gradient and flow direction are presented on Plate 2. Historical and recent monitoring data are summarized in Table 1.

#### LABORATORY ANALYSES AND RESULTS

Groundwater samples were submitted to Southern Petroleum Laboratories, Inc. (SPL), and Sequoia Analytical Laboratories, Inc. (Sequoia), California state-certified laboratories, under Chain of Custody protocol. The samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), total purgeable petroleum hydrocarbons as gasoline (TPPHg), and total extractable petroleum hydrocarbons as diesel (TEPHd), alkalinity, ferrous iron, nitrate, and sulfate using the methods listed in the notes in Table 1. The laboratory analysis reports and Chain of Custody records are attached (Attachment B). Cumulative results of laboratory analyses of groundwater samples are summarized in Table 1. Analytical results of groundwater samples collected during the recent sampling event are shown on Plate 2.

#### 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 Exxon Company, U.S.A., and any reliance on this report by third parties shall be at such party's sole risk.

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

Please call Mr. James F. Chappell, ERI's project manager for this site, at (415) 382-4323 with any questions regarding this project.

Sincerely,

Environmental Resolutions, Inc.

James F. Chappell Senior Staff Scientist

> Mark S. Dockum R.G. 4412

C.E.G. 1675

Attachments: Table 1: 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 Reports and Chain of Custody Records

#### CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Former Exxon Service Station 7-0236 6600 East 14th Street Oakland, California (Page 1 of 8)

Well ID#	Sampling	SUBJ	DTW	Elev	TEPHd	ТРРНg	мтве	В	T	Е	X	DO	Ferrous Iron	Alkalinity	Nitrate	Sulfate
(TOC)	Date	<	feet	>	< ,		**	ug/L .			.>	<		mg/L.		>
MWI	3/15/91	NR	7 44	12 76		< 50		< 0.3	0.5	0.3	1 3					
(20.20)	1/15/92 (H,T)	NR	10.60	9 <i>6</i> 0	< 300	< 50		< 0.5	0.7	< 0.5	0.9		•••	-**		***
	3/23/92 (H,T)	NR	6 38	13 82	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5		***			
	4/6/92	NR	7 55	12 65								***			***	
	7/8/92 (H,T)	NR	9.85	10.35	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5					
	10/13/92 (H,T)	NR	12 95	7 25	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5		***	•-•		
	3/9/93	NLPH	7.38	12.82	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5				•	***
	6/4/93	NLPH	8 55	11 65	< 50	< 50	***	< 0.5	<0.5	< 0.5	< 0.5					
	9/2/93	NLPH	10.85	9.35	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5	••-			•••	***
	11/16/93	NLPH	12 43	7 77	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5				•••	***
	2/4/94	NLPH	9.10	11 10	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5		•			
	4/29/94	NLPH	8 45	11.75	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5		***			•
	9/20/94	NLPH	10.73	9 47	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5	***				
	12/14/94	NLPH	7.35	12,85	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5	•••			***	
	3/27/95	NLPH	7 06	13 14	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5					
	5/18/95	NLPH	7 32	12 88	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5	•••				•••
	8/8/95	NLPH	9.24	10.96	< 50	< 50	< 25	< 0.5	< 0.5	< 0.5	< 0.5					
	11/7/95	NLPH	10 74	9 46	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5		•		•••	•
	2/29/96	NLPH	6 80	13.40	53	< 50	< 25	< 0.5	< 0.5	< 0.5	< 0.5					
	5/10/96	NLPH	8.13	12 07	150	< 50	< 25	< 0.5	< 0.5	< 0.5	< 0.5					
	8/20/96	NLPH	9 58	10 62	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5					
	10/17/96											9.50				
	11/27/96											11 54				
	12/6/96	NLPH	8 10	12.10								10 05				
	1/19/97	Abandoned										***			•••	•••
MW2	3/15/91 (H,T)	NR	9 05	10 10	120	1,700	***	190	2.6	12	64					
(19.15)	1/15/92 (H,T)	NR	11 60	7 55	1,000	6,800		81	< 10	320	170					
	3/23/92 (H,T)	NR	9 42	9 73	3,000	7,100		740	30	810	490					
	4/6/92	NR	9 09	10 06		***	*						***			
	7/8/92	NR	10.08	9 07	2,100	7,000		250	14	300	160					
	10/13/92	NR	12 06	7 09	1,900	3,200		97	2 6	97	53		***			
	3/9/93	sheen	9.71	9 44	***											
	6/4/93	sheen	9.40	9 75			40-		***							
	9/2/93	sheen	10 46	8 69	3,700	11,000	2,500	210	18	260	59		***			
	11/16/93 (M*)	NLPH	11.44	7,71	3,300	8,500		75	27	51	32	•••				***
	2/4/94	NLPH	10 41	8.74	2,700	4,400		120	16	22	7.7					
	4/29/94	NLPH	9.51	9 64	2,000	380		5 9	0.6	16	< 0.5		•			***
	9/20/94	NLPH	10.57	8 58	1,800**	19,000		190	29***	110	27***	•••			•••	
	12/14/94	sheen	8.90	10 25		*						•	•••	•••		
	3/27/95	NLPH	7.72	11 43	1,700	6,300	•	210	15	250	43		•••			•••
	5/18/95	sheen	8 65	10.50	2,000#	6,000		180	9.9	220	55				•••	
	8/8/95	NLPH	9 67	9 48	2,700	5,300	36,000	110	<20	120	<20					
	11/7/95	NLPH	10.49	8 66	1,800	6,400	24,000	120	11	95	38		***		***	
	22/1/20	1,55111	10.42	0.00	2,000			ral minerals and p		,,	,,,			-		
							, Some	120	- 1							

#### CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Former Exxon Service Station 7-0236 6600 East 14th Street Oakland, California (Page 2 of 8)

Well ID#	Sampling	SUBJ	DTW	Elev	TEPHd	TPPHg	МТВЕ	В	T	Е	X	DO	Ferrous Iron	Alkalinity	Nurate	Sulfate
(POC)	Date	<	, feet	>	< .	,		ug/L.			>	<		.mg/L	**	>
MW2 (cont.)	5/10/96	NLPH	9.02	10 13	2,300	11,000	26,000	210	120	210	140		***		***	
(19.15)	8/20/96	NLPH	10.08	9 07									***	***		
	10/17/96				***							7 75				
	11/27/96									***		6 28		***		•••
	12/6/96	NLPH	10 21	8,94	1,700	5,800	< 125	170	< 25	38	< 25	5 21				***
	1/17/97	NLPH							***			3 67	***			
(22 19)	2/25/97	NLPH	8 15	14.04	1,500	5,900	4,400	110	14	310	52	2.71	•••			
	3/13/97			***				•••			***	2.46			•••	
	4/16/97			***			***		***			1.00				
	5/21/97	NLPH	10 50	11 69	1,600	5,700	1,800	71	11	240	59	0 85		***		•••
	6/5/97						***					2 18			***	
	7/11/97			•••				+				1 87	***	•••		
	8/6/97	NLPH	10 80	11 39	1,600	4,100	(1,900)	40	5.2	49	17	1.51			•	
	9/23/97					***					•	2 36				
	10/7/97	NLPH	11 08	11 11	1,200	280	230	1.2	2.4	< 0.5	11	1.56	•••		•••	
	12/24/97	~**										1.23			***	
	1/16/98	NLPH	7 29	14.90	1,200	3,500	3,000	190	14	110	31	1 18	***		•••	
	2/20/98	***		***				•••				1.30		***		
	3/26/98							***			***	1 20		***		***
	4/17/98	NLPH	8.61	13.58	970	3,200	2,600	150	69	37	5.7	1.38		***		***
	5/13/98	110111	•			3,200	2,000					0 45		•••		***
	6/22/98					•••						1 09		•••		
	7/17/98	NLPH	9 38	12.81	1.300	1,700	1,500	63	< 50	<50	< 50	0.86			***	
	10/16/98	NLPH	10.41	11 78	1,500	2,000	1,400	22	< 20		2.4				•••	
	1/15/99	NLPH	10.41	12 18	900		2,200			< 2.0				***		
	4/23/99				967	2,300	937	< 50	6.0	< 5 0 22 3	6.5		*		•••	
		NLPH	7 61	14.58		2,140		42.3	< 10		<100	***			•••	
	7/30/99	NLPH	9 82	12.37	1,620	2,480	1,470/1,360*	100	< 10 0	< 10.0	< 10.0		0.710			
	8/12/99	NLPH	10.00	12 19			***		***	***		1.03	0.710	750	60	7 2
	9/3/99	NLPH			. 700		4 000/4 400+					1 02	0.00	037	14.0	
	10/11/99	NLPH	10 46	11 73	1,700	2,900	1,300/1,400*	< 1.0	2 5	< 10	< 10		0 200	927	148	27.6
	10/14/99	NLPH		***		***						19.71				
	1/26-27/2000	NLPH	8.95	13.24	150/180**	160	420	12	< 0.5	< 0.5	< 0.5	4.10	0.0200	842	6.97	28.2
MW3	3/15/91 (H,T)	NR	7 84	11.75	160	3,100		2.2	19	100	84					•••
(19.59)	1/15/92 (H,T)	NR	10.30	9 29	< 300	250		0.7	6.8	1.5	1.5		•••	•		
(-1.17)	3/23/92 (H,T)	NR.	6 84	12.75	440	640		< 0.5	12	25	6.5	•				
	4/6/92	NR	7 84	11.75							***					
	7/8/92 (H,T)	NR	8.63	10.96	960	2,900		< 0.5	26	12	63 7			•••		
	10/13/92 (H)	NR	12 10	7 49	400	1,100	***	5.5	< 0.5	4 6	1.1	•		•••		
	3/9/93	sheen	9 05	10.54									•••		•••	
	6/4/93	sheen	8.43	11 16												
	9/2/93	NLPH	10.22	9.37	690	840		2.7	3.6	5 4	2.9	***			***	
	11/16/93	NLPH	10.22	8 15	310	650		< 0.5	11	7.7	2.9					
	2/4/94	NLPH NLPH	9.27	10 32	340	870			14	1.7	0.8					
								0.6								
	4/29/94	NLPH	8.10	11 49	290	790		< 0.5	< 0.5	0.8	1		***			•
	9/20/94	NLPH	10 10	9.49	91**	1,900		< 0.5	< 0.5	11	4.4				***	
	12/14/94	NLPH	8.00	11.59	190	1,700		17	22	< 0.5	< 0.5		***		***	•
	3/27/95	NLPH	7 23	12 36	1,100	1,500		50	3 1	63	3.6	***		***		

#### CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Former Exxon Service Station 7-0236 6600 East 14th Street Oakland, California (Page 3 of 8)

(TOC)											х	DO	Ferrous Iron	Alkalimity	Nurate	Sultate
	Date	<	, feet	>	<		****	. ug/L			, >	<		.mg/L		. >
MW3 (cont.)	5/18/95	NLPH	7.73	11.86	470#	1,000		< 0.5	< 0.5	4 1	0 94				•••	
(19 59)	8/8/95	NLPH	8 81	10 78	580	1,600	12	12	< 0.5	2 4	0 63			•••		
	11/7/95	NLPH	9 96	9 63	540	1,500	26	< 2.5	29	< 2.5	< 2.5			***		
	2/29/96	NLPH	8 47	11 12	680	1,000	< 25	< 50	< 5 0	< 50	< 50					•••
	5/10/96	NLPH	7 93	11.66	560	480	68	< 10	< 10	< 10	<10		***			
	8/20/96	NLPH	10 13	9 46			***	***							***	
	10/17/96											7 65	•			
	11/27/96										***	8 76	***		***	
	12/6/96	NLPH	9 21	10 38	450	970	19	<10	<1.0	<10	1.8	10 14		***		***
	1/17/97		4									14 02	4			
(22.62)	2/25/97	NLPH	8 34	14.28	410	990	47	10	0.85	0 86	1.5	10 69				
(,	3/13/97			***						***		8.68		***		-10
	4/16/97								•		•••	18 73				•
	5/21/97	NLPH	9,99	12.63	270	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5	6 76	•••		***	
	6/5/97											6 70		***		
	7/11/97					***						4 10				
	8/6/97	NLPH	10.29	12.33	310	650	< 5.0	4.0	<10	<1.0	<10	10 59	•••			
	9/23/97	MLFR	10.29		510			4.0							•	
	10/7/97	NLPH	10 86		500	1,600	10		•••	-2.0	2.6	8 62	•••		•	
	12/24/97			11.76		-	12	24	10	< 2.0	3.5	11 81			***	
				*		***		•				***			•	
	1/16/98						***								•••	
	2/20/98						•		*			11.22				•••
	3/26/98	***								***		10.55	***			
	4/17/98	NLPH	7 56	15.06	220	710	21	< 0.5	0 76	< 0.5	< 0.5	9.40		•••		•••
	5/13/98			***	/	***=	***		***			0.22		•••		
	6/22/98				***		**-					0 96				
	7/17/98	NLPH	8 23	14.39	180	450	89	9 5	< 1.0	< 10	<1.0	0.94		***		•••
	10/16/98	NLPH	9 75	12.87	320	520	5.1	< 0.5	11	< 0.5	0.93					
	1/15/99	NLPH	8 83	13 79	600	190	12	< 0.5	0 91	< 0.5	07		***			
	4/23/99	NLPH	7.11	15.51	194	406	2 71	< 0.5	< 0.5	< 0.5	< 0.5		***		***	
	7/30/99	NLPH	8 98	13 64	72 5	193	< 2.50	< 0.5	< 0.5	< 0.5	< 0.5	***		***		***
	8/12/99	NLPH	9.40	13 22								***	0.0440	330	48. l	47 4
	9/3/99	NLPH					***		***			2.56		***		
	10/11/99	NLPH	9 91	12 71	100	130	< 1.0	< 10	< 1.0	< 10	< 1.0	***	0 0490	317	50 1	48 2
	10/14/99	NLPH					***		~-+			1.41		•••		
	1/26-27/2000	NLPH	8.56	14.06	150/<50**	210	< 2	1.6	< 0.5	< 0.5	< 0.5	2.00	0.0120	329	38.6	61.9
MW4	4/6/92	NR	7.76	11 70	< 50	< 50		< 0.5	< 0.5	<05	<05			•		
(19 46)	7/8/92	NR	9.56	9 90	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5		•••		•••	
•	10/13/92	NR	12 09	7.37	< 80	< 50		< 0.5	< 0.5	< 0.5	< 0.5		***		•••	
	3/9/93	NLPH	7.53	11 93	< 50	< 50	•••	< 0.5	< 0.5	< 0.5	< 0.5	•••		***		
	6/4/93	NLPH	8 50	10 96	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5					
	9/2/93	NLPH	10 30	9 16	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5				***	
	11/16/93*												•••		•••	
	2/4/94	NLPH	8.82	10.64	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5			***	•••	
	4/29/94 (D)	NLPH	8 55	10.91	100	< 50		< 0.5	< 0.5	< 0.5	< 0.5					
	9/20/94	NLPH	10 21	9.25	< 50	< 50		< 0.5	<05	< 0.5	< 0.5				•••	···
	12/14/94	NLPH	7.04	12 42	<50	< 50		< 0.5	< 0.5	< 0.5	<0.5				***	,

#### CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Former Exxon Service Station 7-0236 6600 East 14th Street Oakland, California (Page 4 of 8)

Well ID#	Sampling	SUBJ	DTW	Elev	ТЕРНа	TPPHg	MTBE	В	T	E	Х	DO	Ferrous Iron	Alkahnity	Nitrate	Sultate
(TOC)	Date	<	, feet	>	<			ug/L		****	>	<		mg/L		< <b>&gt;</b>
MW4 (cont.)	3/27/95	NLPH	6 38	13 08	140	< 50	+	< 0.5	< 0.5	< 0.5	< 0.5					<i></i>
(19 46)	5/18/95	NLPH	7.56	11 90	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5		***			***
	8/8/95	NLPH	8 92	10.54	< 50	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5			***		
	11/7/95	NLPH	10 30	9 16	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0 \$	-4			**-	<i>,</i>
	2/29/96	NLPH	6.44	13 02	< 50	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5					
	5/10/96	NLPH	8.15	11.31	< 50	< 50	<25	< 0.5	0.84	< 0.5	2.3			***		***
	8/20/96	NLPH	9.27	10 19	< 50	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5					<i></i> -
	10/17/96	***					***					1 63				***
	11/27/96							***				1 54	•		•••	
	12/6/96	NLPH	7 76	11 70			•					2 33	•••			
	1/17/97											0 91				•••
(22.58)	2/25/97	NLPH	7.98	14 60	< 50	< 50	< 2 5	< 0.5	0 89	< 0.5	18	1.03	•••		•••	<i></i>
	3/13/97											1.06		•••		
	4/16/97		*			***						4 03				<i>,</i>
	5/21/97	NLPH	9.03	13.55								0.90		•••		
	6/5/97									•••		1 46	***			
	7/11/97					***						1.31		•••		
	8/6/97	NLPH	9 74	12 84	< 50	< 50	< 2 5	< 0.5	< 0.5	< 0.5	< 0.5	1 46				
	9/23/97					***			444			1 50	***		***	
	10/7/97	NLPH	10.06	12 52								1.65			***	
	12/24/97	~~*					**-					1 96		  		
	1/16/98	NLPH	5 01	17.57	< 50	< 50	< 2 5	< 0.5	< 0.5	< 0.5	< 0.5	1.68				•••
	2/20/98							***				3.33				***
	3/26/98						4**					1.65		***		•••
	4/17/98	NLPH	7 21	15 37							•••	3 10		•		
	5/13/98	***										0.40			•	
	6/22/98		***					***		***		1 20	•••			
	7/17/98	NLPH	8 46	14 12	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	1.84		•••		
	10/16/98	NLPH	9 84	12 74			•••		***			***		•••		
	1/15/99	NLPH	11.33	11 25	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5					
	4/23/99	NLPH	7 63	14.95								***		•••	•••	•••
	7/30/99	NLPH	9 17	13 41	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5					
	9/3/99	NLPH							***			2 94		•••		
	10/11/99	NLPH	9 98	12.60		***							•		***	
	10/14/99	NLPH	***		***					***		1.36	•••			***
	1/26-27/2000	NLPH	7.60	14,98	110/<50**	< 50	<2	< 0.5	< 0.5	< 0.5	< 0.5	3.00	•••	***		,
MW5	4/6/92	NR	10.66	6 29	< 50	< 50	**-	< 0.5	< 0.5	< 0.5	< 0.5		***	***		
(16 95)	7/8/92 *		**-		***					***						
(10 35)	10/13/92	NR	15.02	1 93	< 50	69		< 0.5	< 0.5	< 0.5	< 0.5	•		•••		•••
	3/9/93	NLPH	10.02	6,68	< 50	< 50		<05	< 0.5	< 0.5	< 0.5	***		***		
	6/4/93	NLPH	11 35	5 60	<50	< 50	***	< 0.5	< 0.5	< 0.5	< 0.5					
	9/2/93	NLPH	13 15	3.80	<50	< 50		< 0.5	< 0.5	< 0.5	< 0.5				***	
	11/16/93	NLPH	14.35	2,60	<50	< 50		< 0.5	< 0.5	< 0.5	< 0.5					
	2/4/94	NLPH	11 83	5 12	60	< 50		< 0.5	<05	< 0.5	< 0.5					
	4/29/94	NLPH	11 15	5 80	<50	< 50		< 0.5	< 0.5	< 0.5	< 0.5					
	9/20/94	NLPH	12 79	3 80 4,16	< 50	<50		< 0.5	< 0.5	< 0.5	< 0.5				•••	
	12/14/94	NLPH	9 95	7 00	<50	< 50		< 0.5	< 0.5	<0.5	<05				•••	

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

Former Exxon Service Station 7-0236 6600 East 14th Street Oakland, California (Page 5 of 8)

Well ID#	Sampling	SUBJ	DTW	Elev	TEPHd	ТРРНg	мтве	В	T	E	х	DO	Ferrous fron	Alkalınıy	Nurate	Sultate
(TOC)	Date	< .	feet .	, >	<			ug/L		* * * *	>	_<		mg/L.		>
MW5 (cont )	3/27/95	NLPH	9.09	7 86	< 50	< 50		< 0.5	< 0.5	< 0.5	<05					
(16.95)	5/18/95	NLPH	10 29	6.66	< 50	< 50		< 0.5	4 6	0.65	2.8			***		•••
	8/8/95	NLPH	11.13	5 82	51	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5			***		•••
	11/7/95	NLPH	12.12	4 83	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5					
Add	ditional Analyses fo	r general miner	als and properti	es < **										***		
	2/29/96	NLPH	9.24	7 71	60	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	•••				***
	5/10/96	NLPH	10 71	6 24	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	1.6					
	8/20/96	NLPH	11 45	5 50							•					
	10/17/96						***		***					•••		
	11/27/96		***											***		
	12/6/96	NLPH	10 70	6.25	90	62	<25	12	6.5	17	11					
	1/17/97							**-					***			
	2/25/97	NLPH	10.49	6 46	90	< 50	< 2.5	1.4	2 4	0 95	7.4			••-		
(19 98)	3/13/97			***				***					*		•••	
,/	4/16/97			***							•			•		
	5/21/97	NLPH	11 31	8 67	< 50	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5		•••		•••	
	6/5/97						***	- 0.0								
	7/11/97				•				***			***		***		
	8/6/97	NLPH	11.78	8 20	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5		•••		•••	•••
	9/23/97												***		***	
	10/7/97	NLPH	12 26	7 72	< 50	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5		•			
	12/24/97	112111				~ 30		~0.5			~0.5	•		•••		•••
	1/16/98	NLPH	8 87	11 11	< 50	< 50	<25	< 0.5	< 0.5	< 0.5	0.64			***		
	2/20/98					7-7		~03			0.04		***		•••	
	3/26/98												***		•••	
	4/17/98	NLPH	9 97	10 01	< 50	< 50	<2.5	09	2.2	0.81	3 6			***		***
	5/13/98	NLFR.														
							***									
	6/22/98 7/17/98	NI DII	11 00	e ne						-0.6			***			
		NLPH		8.98	< 50	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5 < 0.5			***	•••	•••
	10/16/98	NLPH	11 92 9 01	8 06 10.97	51	< 50	< 2.5	< 0.5	< 0.5	< 0.5			*		***	
	1/15/99	NLPH			< 50	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5		***			
	4/23/99	NLPH	6.31	13 67	< 50	< 50	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5	***				
	7/30/99	NLPH	11.16	8 82	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5			***	•••	
	8/12/99	NLPH	11 48	8.50							***		0 110	510	< 10	17.7
	9/3/99	NLPH										2.11				
	10/11/99	NLPH	12.01	7.97	< 50	< 50	< 10	< 10	< 10	<10	< 10		4.00	457	5.39	27 2
	10/14/99	NLPH										1.58				
	1/26-27/2000	NLPH	10.12	9.86	130 < 50**	< 50	<2	< 0.5	< 0.5	< 0.5	< 0.5	2.20	0.0340	503	< 1.00	1.95
MW6	4/6/92 (H)	NR	8.29	10 50	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5				•-•	
(18.79)	7/8/92 (II.T)	NR	9.22	9.57	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5					•••
	10/13/92	NR	11 51	7 28	< 50	< 50	***	< 0.5	< 0.5	< 0.5	< 0.5		***			
	3/9/93	NLPH	8 26	10 53	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5			•		
	6/4/93	NLPH	8.90	9.89	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5				•••	
	9/2/93	NLPH	9.92	8 87	60	< 50		< 0.5	< 0.5	< 0.5	< 0.5				•••	
	11/16/93	NLPH	10 65	8 14	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5					***
	2/4/94	NLPH	9 26	9 53	80	< 50		< 0.5	< 0.5	<0.5	<05	***				
	4/29/94	NLPH	8 33	10 46	110	< 50		< 0.5	< 0.5	< 0.5	< 0.5	•••		***		•,-

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

Former Exxon Service Station 7-0236 6600 East 14th Street Oakland, California (Page 6 of 8)

Well ID#	Sampling	SUBJ	DTW	Elev	TEPHd	TPPHg	MTBE	В	T	E	Х	DO	Ferrous Iron	•	Nitrate	Sulfare
(TOC)	Date	<u> </u>		>	<., ,			ug/L			>	<		mg/L .		>
MW6 (cont.)	9/20/94	NLPH	9.23	9 56	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5					
(18 79)	12/14/94	sheen	7 87	10.92	***		*		***					•••		•••
	3/27/95	NLPH	7 63	11 16	54	56	***	< 0.5	<05	< 0.5	< 0.5	***	***		***	
	5/18/95	NLPH	8.00	10 79	71	56		< 0.5	< 0.5	< 0.5	< 0.5		•••	mg/L	***	
	8/8/95	NLPH	8.92	9 87	60	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5					
	11/7/95	NLPH	9 77	9 02	< 50	< 50	4 7	< 0.5	< 0.5	< 0.5	< 0.5		**-			
	2/29/96	NLPH	7 67	11.12	64	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	<b>,</b>		***		•••
	5/10/96	NLPH	8.33	10 46	110	< 50	5 4	< 0.5	< 0.5	< 0.5	< 0.5	***				
	8/20/96	NLPH	9 16	9.63			**-					**-		•••		***
	10/17/96											10.58		***		*
	11/27/96		***									14 17			***	
	12/6/96	NLPH	8.55	10.24	68	< 50	3.9	< 0.5	< 0.5	< 0.5	< 0.5	10.33				
	1/17/97											11.71				
(21 84)	2/25/97	NLPH	8 42	13.42	67	< 50	6.8	< 0.5	< 0.5	< 0.5	< 0.5	10 94			•••	
	3/13/97											8.88		***		***
	4/16/97					**-						15 20				
	5/21/97	NLPH	9 16	12.68	82	< 50	3 4	< 0.5	< 0.5	< 0.5	< 0.5	12 38	***		***	
	6/5/97				***							10.99	***		***	
	7/11/97								**-		***	10 13			***	
	8/6/97	NLPH	9.82	12 02	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	9.05	**-		***	
	9/23/97							***				6.22				
	10/7/97	NLPH	9 85	11.99	89	< 50	4 1	< 0.5	< 0.5	< 0.5	< 0.5	9.68				***
	12/24/97				•		***		40.5		***	2,78			***	•••
	1/16/98	NLPH	5 50	16.34	93	< 50	<25	<0.5	<0.5	< 0.5	< 0.5	2 73	•••		***	
	2/20/98											3.55				•••
	3/26/98			***				***		***		3.90	•••		•••	
	4/17/98	NLPH	8 12	13.72	59	< 50	<25	< 0.5	<0.5	< 0.5	< 0.5	5 08				•••
	5/13/98	***	0 12	13.72								6 90				
	6/22/98											8.96				
	7/17/98	NLPH	8 81	13 03		< 50	3.2	 <05	<0.5	<0.5	<0.5	10 69				***
		NLPH	9 84	12 00	63	< 50	3 3 < 2 5	< 0.5		< 0.5						•••
	10/16/98				60				< 0.5		< 0.5		**-		•••	
	1/15/99	NLPH	9.55	12 29	< 50	<50	3.7	< 0.5	< 0.5	< 0.5	< 0.5					*
	4/23/99	NLPH	8.72	13 12	106	< 50	14,4	< 0.5	<0.5	< 0.5	< 0.5	***	***			
	7/30/99	NLPH	9 32	12.52	< 50	< 50	<2.50/2 50*	< 0.5	< 0.5	< 0.5	< 0.5					***
	9/3/99	NLPH				. 40					•••	6.20				•
	10/11/99	NLPH	9 54	12 30	< 50	< 50	3 4/5*	< 10	<1.0	< 1.0	<1.0	***	•••		•	
	10/14/99	NLPH	***		***							9.09				***
	1/26-27/2000	NLPH	9.09	12.75	120/<50**	< 50	2.7	< 0.5	< 0.5	< 0.5	< 0.5	2.30		•••		•••
MW7	4/6/92	NR	8 34	10.89	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5	·		•••		
(19 23)	7/8/92 *	NR	10 30	8 93	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5		***		•••	
	10/13/92	NR	12 91	6.32	94	670		0.8	< 0.5	< 0.5	2.5			***		
	3/9/93	***							***						***	
	6/4/93	NLPH	8 68	10.55	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5					
	9/2/93	NLPH	10 80	8.43	< 50	< 50		< 0.5	<0.5	< 0.5	< 0.5	,			***	•••
	11/16/93	NLPH	12.38	6.85	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5		•••		4	
	2/4/94	NLPH	9.28	9.95	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5				***	
	4/4/34	MPLU	7.20	7.73	< JU	< 30		< U. J	C0.3	< U. J	< U.3			***	•••	

#### CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Former Exxon Service Station 7-0236 6600 East 14th Street Oakland, California

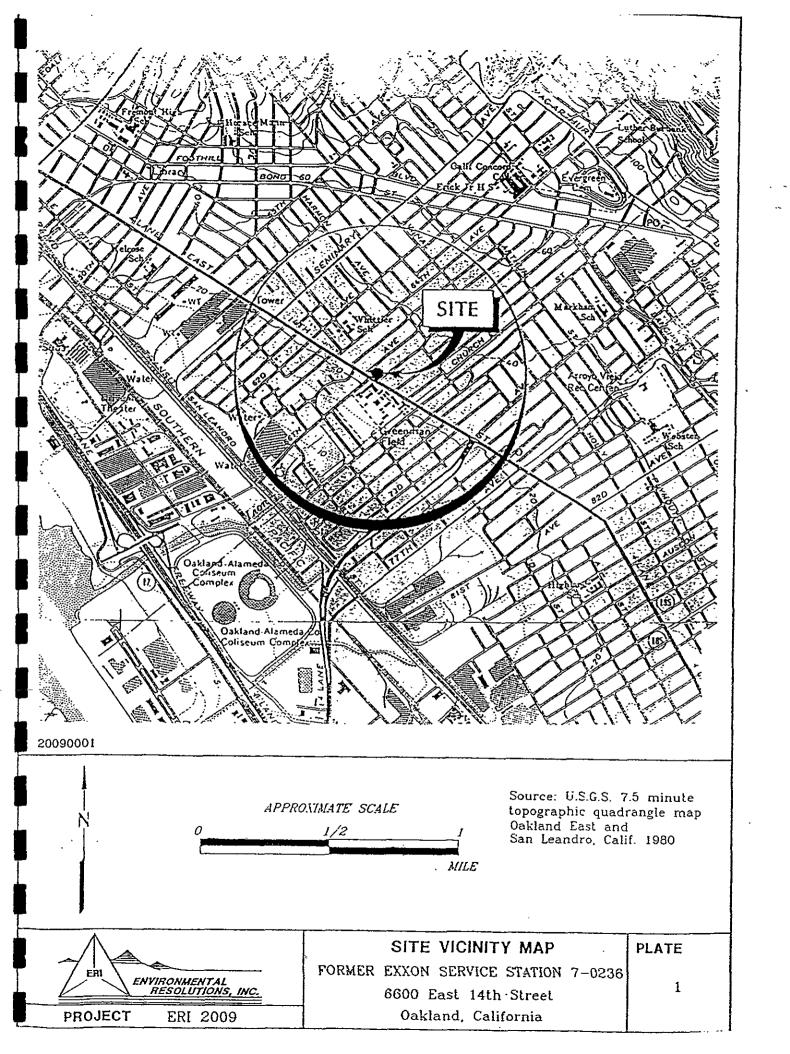
Junior	CHILICIAN
(Page	7 of 8)

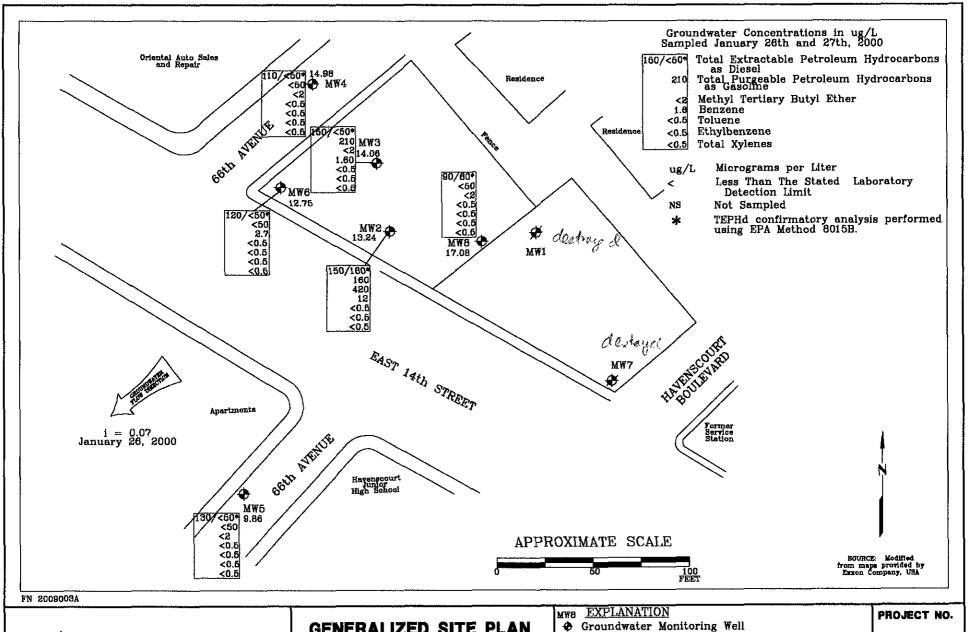
Well ID#	Sampling	SUBJ	DTW	Elev	TEPHd	TPPHg	MTBE	В	Т	E	X	DO.	Ferrous Iron	Alkalinity	Nitrate	Sultate
(TOC)	Date	<	feet.	>	_ <			ug/L	4		>	<	441.	mg/L		<>
MW7 (cont.)	9/20/94	NLPH	10 85	8 38	< 50	< 50	*	< 0.5	< 0.5	< 0.5	< 0.5		***			
(19 23)	12/14/94	NLPH	8.44	10 79	< 50	< 50		< 0.5	< 0.5	< 0.5	< 0.5		***	***		
	3/27/95	NLPH	7 54	11 69	280	< 50		< 0.5	< 0.5	< 0.5	< 0.5	***			***	
	5/18/95	NLPH	8.11	11 12	< 50	< 50	**-	< 0.5	< 0.5	< 0.5	< 0.5			mg/L		
	8/8/95	NLPH	9 48	9.75	52	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5				•••	
	11/7/95	NLPH	10.83	8 40	< 50	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5			mg/L		
	2/29/96	NLPH	7 70	11 53	< 50	< 50	<25	< 0.5	< 0.5	< 0.5	< 0.5				•••	
	5/10/96	NLPH	8 76	10 47	< 50	< 50	<25	< 0.5	< 0.5	< 0.5	2.1	***		***	•••	
	8/20/96	NLPH	9 91	9 32	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5		***			•••
	10/17/96	***		***								1.48		•••		
	11/27/96								***			2 71			•••	
	12/6/96	NLPH	8.90	10.33						***		8 90		•••		
	1/19/97	Abandoned					***						***			
MW8	1/17/97		•••			***				***		1 39	***		•-•	
(22.60)	2/25/97	NLPH	7 93	14 67	< 50	69	30	< 0.5	< 0.5	< 0.5	< 0.5	1 82		**-		
<b>,</b> ,	3/13/97						***					1 58	•••		***	
	4/16/97								***			0.81	***			
	5/21/97	NLPH	9 04	13 56	< 50	< 50	3.5	< 0.5	< 0.5	< 0.5	< 0.5	0.74	***		***	
	6/5/97	***			***		•					0.55	***			
	7/11/97		***			***				***		0.85				
	8/6/97	NLPH	9.90	12 70	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	0.77	***		***	
	9/23/97		7170			***						0 75				
	10/7/97	NLPH	10.23	12.37	< 50	100	4 9	1.1	< 0.5	< 0.5	< 0.5	0 82				
	12/24/97									***	***	0 86				
	1/16/98	NLPH	4 39	18 21	81	180	9 6	2 8	< 0.5	< 0.5	0 92	0 94	***			
	2/20/98	***					***					0 61	***			
	3/26/98	***	•							•		0.53				•**
	4/17/98	NLPH	***		74	370	27	< 0.5	0 94	< 0.5	0.79	2.65		•••		
	5/13/98	***			•••	370	***		***		***	0 25				
	6/22/98		***									1.38				
	7/17/98	NLPH	8.02	14 58	< 50	< 50	3 3	< 0.5	< 0.5	< 0.5	< 0.5	2 09	***			
	10/16/98	NLPH	9.78	12 82	< 50	< 50	<2.5	< 0.5	<05	< 0.5	< 0.5					
	1/15/99	NLPH	8 40	14 20	<50	< 50	<2.5	< 0.5	0.97	< 0.5	< 0.5					
	4/23/99	NLPH	7 35	15.25	70.1	111	3 45	< 0.5	< 0.5	< 0.5	< 0.5		•••			
	7/30/99	NLPH	8 86	13.74	< 50	89 4	<25	< 0.5	2.7	< 0.5	< 0.5		•••			•••
	9/3/99	NLPH NLPH		13.74			<23 	<03	2.1	<0.5	<.U.3	2.45				
			10.04			 ۵۰									***	
	10/11/99	NLPH	10.04	12 56	< 50	< 50	<10	< 10	< 10	< 1.0	<1.0	0.60	***			
	10/14/99	NLPH	···	17.00	00/6044	- FO					 -0.5	0.69			•••	
	1/26-27/2000	NLPH	5.52	17.08	90/60++	< 50	<2	< 0.5	< 0.5	< 0.5	< 0.5	2.10	***			

#### CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Former Exxon Service Station 7-0236 6600 East 14th Street Oakland, California (Page 8 of 8)

Matan		
Notes <sup>,</sup> SUBJ	=	Results of subjective evaluation, liquid-phase hydrocarbon thickness (HT) in feet
NLPH	= ==	No liquid-phase hydrocarbons present in well
TOC		Elevation of top of well casing, relative to mean sea level
DTW	=	· · · · · · · · · · · · · · · · · · ·
	=	Depth to water
Elev.	=	Elevation of groundwater. If liquid-phase hydrocarbons present, elevation adjusted using TOC - [DTW - (PT x 0 8)]
TEPHd	=	Total extractable petroleum hydrocarbons as diesel analyzed using EPA method 8015 (modified)
TPPHg	=	Total purgeable petroleum hydrocarbons as gasoline analyzed using EPA method 5030/8015 (modified).
MTBE	=	Methyl tertiary butyl ether analyzed using EPA method 5030/8020.
	***	Methyl tertiary butyl ether analyzed using EPA method 8260
**	#	Total extractable petroleum hydrocarbons as diesel analyzed using EPA method 8015B
BTEX	222	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA method 5030/8020
Nitrate	=	Nitrate as NO <sub>3</sub> analyzed using EPA Method 300.
Sulfate	223	Sulfate as SO <sub>4</sub> analyzed using EPA Method 300
Ferrous Iron	22	Ferrous Iron analyzed using EPA Method 6000/7000
Alkalinity	=	Total alkalınıty analyzed usıng APHA/EPA methods
•••	100	Not measured/not analyzed
<	=	Less than the indicated detection limit shown by the laboratory
DO	=	Dissolved Oxygen
**	±=	Lighter hydrocarbons contribute to diesel range quantitation.
***	=	Results obtained past technical holding time (10/08/94) due to dilution requirements
C	m	High boiling point hydrocarbons are present in sample.
D	=	Sample pattern does not match diesel standard pattern.
H	=	EPA Method 8010 compounds not detected at or above their respective laboratory detection limits
		Exceptions. MW2, 03/15/91, Methylene Chloride detected at 1 ppb
		MW3, 03/15/91, Methylene Chloride detected at 21 ppb
M*	=	A compound suspected to be methyl tertiary butyl ether was present
T	=	Total Oil and Grease (TOG) using Standard Method 5520 not detected at or above the laboratory detection limit of 5,000 ppb
< *	43	Less than stated laboratory detection limits except 490 ppm bicarbonate, 37 ppm calcium,
		31 ppm chloride, 390 ppm hardness, 790 ppb tron, 60 ppm magnesium, 4,700 ppb manganese,
		1.1 ppm sodium, 61 ppm sulfate, 540 ppm TDS, 730 umhos/cm conductivity, pH=6.9,
<**	=	Less than the stated laboratory detection limits except 200 ppm bicarbonate, 23 ppm calcium,
		21 ppm chloride, 78 ppb copper, 190 ppm hardness, 49,000 ppb iron, 44 ppm magnesium, 4,200 ppb manganese,
		3.9 ppm potassium, 52 ppm sodium, 60 ppm sulfate, 390 ppm TDS.
ug/L	=	micrograms per liter.
ppm	=	parts per million
ing/L	e	Milligrams per liter
mg/ D		







#### **GENERALIZED SITE PLAN**

FORMER EXXON SERVICE STATION 7-0236 6600 East 14th Street Oakland, California

Groundwater elevation in feet above mean sea level 17.08 MW7

# Groundwater Monitoring Well (Destroyed)

i = Interpreted Groundwater Gradient

2009

PLATE 2

February 4, 2000

## ATTACHMENT A GROUNDWATER SAMPLING PROTOCOL

# BLAINE TECH SERVICES, INC. METHODS AND PROCEDURES FOR THE ROUTINE MONITORING OF GROUNDWATER WELLS AT EXXON STATIONS

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. We specialize in groundwater monitoring assignments and intentionally limit the scope of our services to those centered on the generation of objective information.

To avoid conflicts of interest, Blaine Tech Services, Inc. personnel do not evaluate or interpret the information we collect. As a state licensed contractor (C-57 well drilling –water – 746684) performing strictly technical services, we do not make any professional recommendations and perform no consulting of any kind.

#### SAMPLING PROCEDURES OVERVIEW

#### **SAFETY**

All groundwater monitoring assignments performed for Exxon comply with Exxon's safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40 hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any Exxon site.

#### INSPECTION AND GAUGING

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist. Each wellcap is removed prior to gauging to allow the water level to equilibrate for at least 15 minutes.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic sounders which are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of Immiscibles or sheen and when free product is suspected, it is confirmed using an electronic interface probe (e.g. MMC). If sheen or product is found in a well, the Project Coordinator notifies the appropriate party (e.g. Exxon employee or consultant).

No samples are collected from a well containing sheen or product.

#### **EVACUATION**

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.

Well purging devices are selected on the basis of the well diameter and the total volume to be evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well. Small volumes of purgewater are often removed by hand bailing with a disposable bailer.

#### PARAMETER STABILIZATION

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

#### **DEWATERED WELLS**

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewaters and does not recharge.

Wells known to dewater are evacuated as early as possible during each site visit in order to allow for the greatest amount of recovering. Any well that does not recharge to 80% of its original volume will be sampled prior to the departure of our personnel from the site in order to eliminate the need of a return visit.

In jurisdictions where a certain percentage of recovery is included in the local completion standard, our personnel follow the regulatory expectation.

#### PURGEWATER CONTAINMENT

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non hazardous purgewater is transported under standard Bill of Lading documentation to a

Blaine Tech Services, Inc. facility before being transported to an Exxon approved disposal facility (e.g. Romic Environmental Technologies Corporation in East Palo Alto, California).

#### SAMPLE COLLECTION DEVICES

All samples are collected using a disposable bailer.

#### SAMPLE CONTAINERS

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory which will analyze the samples. The transfer of sample material from the bailer to the sample container conforms to specifications contained in the USEPA T.E.G.D. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

#### TRIP BLANKS

A Trip Blank is carried to each site and is kept inside the cooler for the duration of the sampling event. It is turned over to the laboratory for analysis with the samples from that site.

#### SAMPLE STORAGE

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the analytical laboratory that will perform the intended analytical procedures. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

#### **DOCUMENTATION CONVENTIONS**

Each and every sample container has a label affixed to it. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time at which the sample was collected and the initials of the person collecting the sample are handwritten onto the label.

Chain of Custody records are created using client specific preprinted forms following USEPA specifications.

Bill of Lading records are contemporaneous records created in the field at the site where the non-hazardous purgewater is generated. Field Technicians use preprinted Bill of Lading forms.

#### **DECONTAMINATION**

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is detuned to function as a hot pressure washer which is then operated with high quality deionized water which is produced at our facility and stored onboard our sampling vehicle. Cleaning is facilitated by the use of proprietary fixtures and devices included in the patented workstation (U.S. Patent 5,535,775) that is incorporated in each sampling vehicle. The steam cleaner is used to decon reels, pumps and bailers.

Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, sounder etc.) that cannot be washed using the hot high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

EXAMPLE: The sounder is cleaned between wells using the non-phosphate soap and deionized water solution followed by deionized water rinses. The sounder is then washed with the steam cleaner between sites or as necessitated by use in a particularly contaminated well.

#### DISSOLVED OXYGEN READINGS

All Dissolved Oxygen readings are taken using YSI meters (e.g. YSI Model 58 or equivalent YSI meter). These meters are equipped with a YSI stirring device that enables them to collect accurate in-situ readings. The probe/stirring devices are modified to allow downhole measurements to be taken from wells as small as two-inch diameter.

The probe and reel is decontaminated between wells as described above. The meter is calibrated between wells as per the instructions in the operating manual. The probe and stirrer is lowered into the water column allowed to stabilize before use.

#### OXYIDATON REDUCTION POTENTIAL READINGS

All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter GP). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual. In use the probe is placed in a cup of freshly obtained monitoring well water and allowed to stabilize.

#### ATTACHMENT B

## LABORATORY ANALYSIS REPORTS AND CHAIN OF CUSTODY RECORDS

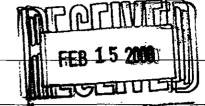


#### HOUSTON LABORATORY

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

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

## Certificate of Analysis Number: 00010699



Project Name: 2009 Report To: Site: 7-0236,19908584 Environmental Resolution, Inc. Site Address: 6600 East 14th St. John Skance 73 Digital Drive Suite 100 Oakland CA PO Number: Novato State: California California 94949-State Cert. No.: 1903 ph: (415) 382-9105 fax: (415) 382-1856 Date Reported: 2/4/00

Any data flags or quality control 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.

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.

Soma West.

Senior Project Manager

2/4/00

Date



#### **EXXON Company U.S.A.**

#### Certificate of Analysis Number:

00010699

port To: Environmental Resolution, Inc.

John Skance

73 Digital Drive Suite 100

Novato

California

94949-

Client Sample ID

ph: (415) 382-9105

fax: (415) 382-1856

**Matrix** 

Environmental Resolution, Inc.

John Skance

fax: (415) 382-1856

Lab Sample ID

Project Name:

2009

7-0236,19908584

Site Address:

6600 East 14th St.

Oakland

CA

COC ID

HOLD

PO Number:

State Cert. No.:

State:

**Date Collected** 

Site:

California

1903

Date Reported: 0:

02/04/2000

**Date Received** 

V-2	00010699-01	Water	01/27/2000 12:23:00 PM	01/29/2000 10:00:00 AM	
<i>l-</i> 3	00010699-02	Water	01/27/2000 11:59:00 AM	01/29/2000 10:00:00 AM	
W-4	00010699-03	Water	01/27/2000 10:13:00 AM	01/29/2000 10:00:00 AM	
V-5	00010699-04	Water	01/27/2000 10:49:00 AM	01/29/2000 10:00:00 AM	
<i>!-</i> 6	00010699-05	Water	01/27/2000 11:39:00 AM	01/29/2000 10:00:00 AM	
W-8	00010699-06	Water	01/27/2000 11:18:00 AM	01/29/2000 10:00:00 AM	
rip Blank	00010699-07	Water	01/27/2000	01/29/2000 10:00:00 AM	

Sonia West

enior Project Manager

02/04/2000

Date

Joel Grice Laboratory Director

Ted Yen
Quality Assurance Officer



Client Sample ID MW	-2		Coll	ected:	01/27/2000 12:2	SPL Sample II	D: 00	010699-01
			Site	7-0	236,19908584			
Analyses/Method	Result		Rep.Limit	***	Dil. Factor QUAL	Date Analyzed	Analys	st Seq.#
DIESEL RANGE ORGA	ANICS			MCL	SW8015B	Units: ug	ı/L	
Diesel Range Organics	150		50		1	02/03/00 02:20	RR	179365
Surr: Pentacosane	77.0	%	18-120		1	02/03/00 02:20	RR	179365
Run ID/Seq #: HP	V_000202A-179365							
Prep Method	Prep Date		Prep Initials					
SW3510B	01/31/2000 08:47		KL					
GASOLINE RANGE O	RGANICS			MCL	CA_GRO	Units: ug	ı/L	
Gasoline Range Organi	cs 160		50		1	02/01/00 02:47	DL	176356
Surr: 1,4-Difluoroben:	zene 99.7	%	62-144		1	02/01/00 02:47	DL	176356
Surr: 4-Bromofluorob	enzene 83.0	%	44-153		1	02/01/00 02:47	DL	176356
PURGEABLE AROMA	TICS			MCL	SW8021B	Units: ug	/L	
Benzene	12	_	0.5		1	02/01/00 02:47	DL	176340
Ethylbenzene	ND		0.5		1	02/01/00 02:47	DL	176340
Methyl tert-butyl ether	420		2		1	02/01/00 02:47	DŁ	176340
Toluene	ND		0.5		1	02/01/00 02:47	DL	176340
m,p-Xylene	ND		0.5		1	02/01/00 02:47	DL	176340
o-Xylene	ND		0.5		1	02/01/00 02:47	DL	176340
Xylenes,Total	ND		0.5		1	02/01/00 02:47	DL	176340
Surr: 1,4-Diffuoroben:	zene 86.9	%	72-137		1	02/01/00 02:47	DL	176340
Surr: 4-Bromofluorob	enzene 89.1	%	48-156		1	02/01/00 02:47	DL	176340

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)





Client Sample ID MW	-3		Coll	ected:	01/27/2000 11:5	SPL Sample ID:	00010699-02
			Site	: 7-0	236,19908584		
Analyses/Method	Result		Rep.Limit		Dil. Factor QUAL	Date Analyzed A	nalyst Seq.#
DIESEL RANGE ORGA	ANICS	· · · · · · ·		MCL	SW8015B	Units: ug/L	
Diesel Range Organics	150		50		1	02/03/00 02:58 RI	R 179366
Surr: Pentacosane	81.8	%	18-120		1	02/03/00 02:58 RI	R 179366
Run ID/Seq #: HP	V_000202A-179366						
Prep Method	Prep Date		Prep Initials				
SW3510B	01/31/2000 08:47		KL				
GASOLINE RANGE O	ASOLINE RANGE ORGANICS				CA_GRO	Units: ug/L	
Gasoline Range Organi	cs 210		50	-	1	02/01/00 03:14 D	L 176357
Surr: 1,4-Difluoroben:	zene 96.4	%	62-144	···	1	02/01/00 03:14 D	L 176357
Surr: 4-Bromofluorob	enzene 87.8	%	44-153		1	02/01/00 03:14 D	L 176357
PURGEABLE AROMA	TICS			MCL	SW8021B	Units: ug/L	
Benzene	1.6		0.5		1	02/01/00 03:14 DI	L 176341
Ethylbenzene	ND		0.5		1	02/01/00 03:14 D	L 176341
Methyl tert-butyl ether	ND		2		1	02/01/00 03:14 DI	L 176341
Toluene	ND		0.5		1	02/01/00 03:14 DI	L 176341
m,p-Xylene	ND		0.5		1	02/01/00 03:14 DI	L 176341
o-Xylene	ND		0.5		1	02/01/00 03:14 DI	L 176341
Xylenes,Total	ND		0.5		1	02/01/00 03:14 Di	L 176341
Surr: 1,4-Difluorobenz	zene <b>82.</b> 6	%	72-137		1	02/01/00 03:14 DI	L 176341
Surr: 4-Bromofluorobe	enzene 93.6	%	48-156		1	02/01/00 03:14 DI	L 176341

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)





Client Sample ID MW-	4		Col	lected:	01/27/2000 10:1	SPL Sample II	): 0001	0699-03
			Site	: 7-0	236,19908584		,	<u>-</u> "
Analyses/Method	Resul	t	Rep.Limit		Dil. Factor QUAL	Date Analyzed	Analyst	Seq.#
DIESEL RANGE ORGA	NICS	-		MCL	SW8015B	Units: ug	/L	
Diesel Range Organics	110	)	50		1	02/03/00 03:36	RR	179367
Surr: Pentacosane	54.2	2 %	18-120		1	02/03/00 03:36	RR	179367
Run ID/Seq #: HP_	V_000202A-179367							
Prep Method	Prep Date		Prep Initials					
SW3510B	01/31/2000 08:47		KL					
ASOLINE RANGE ORGANICS		<u>,                                      </u>		MCL	CA_GRO	Units: ug	/L.	•
Gasoline Range Organic	s NE	)	50		1	02/01/00 03:42	DL	176358
Surr: 1,4-Difluorobenze	ene 95.9	9 %	62-144		1	02/01/00 03:42	DL	176358
Surr: 4-Bromofluorobe	nzene 82.8	3 %	44-153		1	02/01/00 03:42	DL	176358
PURGEABLE AROMAT	ICS			MCL	SW8021B	Units: ug/L		
Benzene	NE	)	0.5		1	02/01/00 03:42	DL	176342
Ethylbenzene	NE	)	0.5	<del></del>	1	02/01/00 03:42	DL	176342
Methyl tert-butyl ether	NE	)	2		1	02/01/00 03:42	DL	176342
Toluene	NE	)	0.5		1	02/01/00 03:42	DL	176342
m,p-Xylene	NE	)	0.5		1	02/01/00 03:42	DL	176342
o-Xylene	NE	)	0.5		1	02/01/00 03:42	DL	176342
Xylenes,Total	NE	)	0.5		1	02/01/00 03:42	DŁ	176342
Surr: 1,4-Difluorobenze	ene 88.4	1 %	72-137		1	02/01/00 03:42	DL	176342
Surr: 4-Bromofluorobe	nzene 93.3	3 %	48-156		1	02/01/00 03:42	DL	176342

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)





Surr: 4-Bromofluorobenzene

Collected: 01/27/2000 10:4 SPL Sample ID: 00010699-04 Client Sample ID MW-5 Site: 7-0236,19908584 Rep.Limit Result Dil. Factor QUAL Analyses/Method Date Analyzed Analyst Seq.# **DIESEL RANGE ORGANICS** MCL SW8015B Units: ug/L Diesel Range Organics 130 50 1 02/03/00 04:14 RR 179368 Surr: Pentacosane 67.0 % 18-120 1 02/03/00 04:14 RR 179368 Run ID/Seg #: HP V 000202A-179368 Prep Method Prep Initials Prep Date SW3510B 01/31/2000 08:47 KL **GASOLINE RANGE ORGANICS** MCL CA\_GRO Units: ug/L ND 50 02/01/00 04:09 176359 Gasoline Range Organics 1 176359 96.3 1 02/01/00 04:09 DL Surr: 1,4-Difluorobenzene % 62-144 176359 Surr: 4-Bromofluorobenzene 82.4 % 44-153 1 02/01/00 04:09 DL **PURGEABLE AROMATICS** MCL SW8021B Units: ug/L Benzene ND 0.5 1 02/01/00 04:09 ÐL. 176343 Ethylbenzene ND 0.5 1 02/01/00 04:09 DL. 176343 176343 Methyl tert-butyl ether ND 2 1 02/01/00 04:09 DL ND 0.5 Di 176343 Toluene 1 02/01/00 04:09 m,p-Xylene ND 0.5 1 02/01/00 04:09 DL 176343 o-Xylene ND 0.5 1 02/01/00 04:09 DL 176343 02/01/00 04:09 DL 176343 Xylenes, Total ND 0.5 1 02/01/00 04:09 DL 176343 Surr: 1,4-Difluorobenzene 86.0 72-137 1

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B - Analyte detected in the associated Method Blank

92.7

%

48-156

1

02/01/00 04:09

DL

176343

\* - 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

02/04/2000 10:46:28 AM



Client Sample ID MW-	6		Colle	ected:	01/27/2000 11:3	SPL Sample II	D: 00010	0699-05
			Site:	7-0	236,19908584			
Analyses/Method	Result		Rep.Limit		Dil. Factor QUAL	Date Analyzed	Analyst	Seq.#
DIESEL RANGE ORGA	NICS		~	MCL	SW8015B	Units: ug	ı/L	
Diesel Range Organics	120		56		1	02/03/00 04:53	RR	179369
Surr: Pentacosane	69.3	%	18-120		1	02/03/00 04:53	RR	179369
Run ID/Seq #: HP_	V_000202A-179369							
Prep Method	Prep Date		Prep Initials					
SW3510B	01/31/2000 08:47		KL					
GASOLINE RANGE ORGANICS				MCL	CA GRO	Units: ug	ı/L	
Gasoline Range Organic	s ND		50		1	02/01/00 04:37	DL	176360
Surr: 1,4-Difluorobenz	ene 97.0	%	62-144		1	02/01/00 04:37	DL	176360
Surr: 4-Bromofluorobe	enzene 82.1	%	44-153		1	02/01/00 04:37	DL	176360
PURGEABLE AROMA	TICS			MCL	SW8021B	Units: ug	ı/L	
Benzene	ND		0.5		1	02/01/00 04:37	DL,	176344
Ethylbenzene	ND		0.5		1	02/01/00 04:37	DL	176344
Methyl tert-butyl ether	2.7		2		1	02/01/00 04:37	DL	176344
Toluene	ND		0.5		1	02/01/00 04:37	DL	176344
m,p-Xylene	ND		0.5		1	02/01/00 04:37	DL	176344
o-Xylene	ND		0.5		1	02/01/00 04:37	DL	176344
Xylenes, Total	ND		0.5	•	1	02/01/00 04:37	DL	176344
Surr: 1,4-Difluorobenz	ene 89.0	%	72-137	-	1	02/01/00 04:37	DL	176344
Surr: 4-Bromofluorobe	enzene 92.4	%	48-156		1	02/01/00 04:37	DL	176344

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

02/04/2000 10:46:28 AM





8		Col	lected:	01/27/2000 11:1	SPL Sample II	D: 0001	0699-06
		Site	: 7-0	236,19908584	·		
Result		Rep.Limit		Dil. Factor QUAL	Date Analyzed	Analyst	Seq.#
NICS			MCL	SW8015B	Units: นดู	ı/L	
90		50		1	02/03/00 05:31	RR	179370
60.6	%	18-120		1	02/03/00 05:31	RR	179370
V_000202A-179370						·	
Prep Date		Prep Initials					
01/31/2000 08:47		KL					
RGANICS			MCL	CA_GRO	Units: ug	/L	
s ND		50		1	02/01/00 05:04	DL	176361
ene 88.6	%	62-144		1	02/01/00 05:04	DL	176361
enzene 82.4	%	44-153		1	02/01/00 05:04	DL	176361
TICS			MCL	SW8021B	Units: ug	/L	
ND		0.5		1	02/01/00 05:04	DL	176345
ND		0.5		1	02/01/00 05:04	DL	176345
ND		2		1	02/01/00 05:04	DL	176345
ND		0.5		1	02/01/00 05:04	DL	176345
ND		0.5		1	02/01/00 05:04	DL.	176345
ND		0.5		1	02/01/00 05:04	DL	176345
ND		0.5		1	02/01/00 05:04	DL	176345
ene 88.6	%	72-137		1	02/01/00 05:04	DL	176345
enzene 90.7	%	48-156		1	02/01/00 05:04	DL	176345
	Result  ANICS  90 60.6  V_000202A-179370  Prep Date 01/31/2000 08:47  RGANICS s ND ene 88.6 enzene 82.4  TICS  ND	Result  NICS  90 60.6 %  V_000202A-179370  Prep Date 01/31/2000 08:47  RGANICS s ND ene 88.6 % enzene 82.4 %  TICS  ND	Result Rep.Limit  NICS  90 50 60.6 % 18-120  V_000202A-179370  Prep Date Prep Initials  01/31/2000 08:47 KL  RGANICS s ND 50 ene 88.6 % 62-144 enzene 82.4 % 44-153  TICS  ND 0.5	Result   Rep.Limit   Rep.Lim	Site: 7-0236,19908584   Result   Rep.Limit   Dil. Factor   QUAL     NICS	Site: 7-0236,19908584   Result   Rep.Limit   Dil. Factor QUAL   Date Analyzed	Site: 7-0236,19908584   Result   Rep.Limit   Dil. Factor   QUAL   Date Analyzed   Analyst   Dil. Factor   QUAL   Dil. F

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)



Client Sample ID Trip Blank			Co	ollected	: 01/27/200	0	SPL Sample il	<b>):</b> 000	010699-07
			Si	te: 7	0236,19908	584			
Analyses/Method	Result		Rep.Limit		Dil. Factor	QUAL	Date Analyzed	Analys	t Seq.#
GASOLINE RANGE ORGANICS				MC	L CA	GRO	Units: ug	ı/L	
Gasoline Range Organics	ND		50		1		02/01/00 02:20	DL	176355
Surr: 1,4-Diffuorobenzene	95.7	%	62-144		1		02/01/00 02:20	DL	176355
Surr: 4-Bromofluorobenzene	82.1	%	44-153		11		02/01/00 02:20	DL	176355
PURGEABLE AROMATICS				MC	L SW	8021B	Units: ug	/L	
Benzene	ND		0.5		1		02/01/00 02:20	DL	176339
Ethylbenzene	ND		0.5		1		02/01/00 02:20	DL	176339
Methyl tert-butyl ether	ND		2		1		02/01/00 02:20	DL	176339
Toluene	ND		0.5		1		02/01/00 02:20	DL	176339
m,p-Xylene	ND		0.5		1		02/01/00 02:20	DL	176339
o-Xylene	ND		0.5		1		02/01/00 02:20	DL	176339
Xylenes, Total	ND		0.5		1		02/01/00 02:20	DL	176339
Surr: 1,4-Difluorobenzene	89.2	%	72-137	-	1		02/01/00 02:20	DL	176339
Surr: 4-Bromofluorobenzene	89.1	%	48-156		1		02/01/00 02:20	DL	176339

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)

### **Quality Control Documentation**



#### **Quality Control Report**

#### **EXXON Company U.S.A.**

2009

Analysis: ethod:

RunID:

alysis Date:

Diesel Range Organics

SW8015B

WorkOrder:

00010699

Lab Batch ID:

2901

Method Blank

HP\_V\_000202A-179353

Units: Analyst

mg/L RR

Preparation Date: 01/31/2000 08:47

Lab Sample ID 00010699-01B

Client Sample ID

02/02/2000 18:04 paration Date: 01/31/2000 08:47

Prep By: KL

Method SW3510B

00010699-02B

MW-2 MW-3

00010699-03B

MW-4 MW-5

Result Rep Limit Analyte Diesel Range Organics ND 0.050 Sur: Pentacosane 91.2 18-120 00010699-04B 00010699-05B MW-6 00010699-06B 8-WM

Samples in Analytical Batch:

#### Laboratory Control Sample (LCS)

RunID:

HP V 000202A-179354

Units:

mg/L

Analysis Date:

02/02/2000 18:42

Analyst: RR

Prep By: KL

Method SW3510B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics	2.5	2.6	105	44	141

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

Sample Spiked:

00010677-01

RunID:

HP\_V\_000202A-179356

Units:

mg/L

Analysis Date:

02/02/2000 19:58

RR Analyst:

Preparation Date: 01/31/2000 08:47

Prep By: KL

Method SW3510B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
esel Range Organics	ND	2.5	1.9	69.6	2.5	2.2	80.8	14.9	39	13	130

Qualifiers:

ND/U - Not Detected at the Reporting Limit

\* - Recovery Outside Advisable QC Limits

B - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL



#### **Quality Control Report**

#### **EXXON Company U.S.A.**

2009

Analysis:

alysis Date:

RuniD:

**Purgeable Aromatics** 

thod: SW8021B

WorkOrder:

00010699

Lab Batch ID:

R8433

Method Blank

HP\_W\_000131A-176321

01/31/2000 17:12

Uı

Units: ug

Analyst:

ug/L DL

Lab Sample ID 00010699-01A

Client Sample ID

00010699-01A 00010699-02A

Samples in Analytical Batch:

MW-2 MW-3

00010699-03A 00010699-04A 00010699-05A

MW-4 MW-5 MW-6

00010699-06A 00010699-07A

MW-8 Trip Blank

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	87.1	72-137
Surr 4-Bromofluorobenzene	91.5	48-156

#### Laboratory Control Sample (LCS)

RunID:

HP\_W\_000131A-176384

Units:

ug/L

Analysis Date:

01/31/2000 16:15

Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	53	106	61	119
Ethylbenzene	50	52	103	70	118
Methyl tert-butyl ether	50	53	106	72	128
Toluene	50	52	104	65	125
m,p-Xylene	100	100	104	72	116
o-Xylene	50	52	103	72	117
Xylenes,Total	150	152	101	72	117

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

Sample Spiked:

00010626-02

RunID:

HP\_W\_000131A-176324

Units:

ug/L

Analysis Date:

01/31/2000 18:07

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
Benzene	ND	20	22	108	20	23	115	6.91	21	32	164
Elegibenzene	ND	20	21	102	20	22	109	7.16	19	52	142
N thyl tert-butyl ether	ND	20	26	132	20	30	149	11.9	20	39	150
Toluene	ND	20	21	106	20	23	113	6.62	20	38	159

ualifiers:

ND/U - Not Detected at the Reporting Limit

\* - Recovery Outside Advisable QC Limits

B - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL

02/04/2000 10:46:34 AM



#### **Quality Control Report**

#### **EXXON Company U.S.A.**

2009

thod:

**Purgeable Aromatics** 

SW8021B

WorkOrder:

00010699

Lab Batch ID:

R8433

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

Sample Spiked:

Analysis Date:

RunID:

00010626-02

01/31/2000 18:07

HP\_W\_000131A-176324

Units:

ug/L Analyst: DL

_										-	
Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit		High Limit
p-Xylene	1.2	40	42	102	40	45	109	7.09	17	53	144
Xylene	0.57	20	20	99.4	20	22	108	7.82	18	53	143
rienes.Total	1.2	60	62	101	60	67	110	7.90	18	53	144

Qualifiers:

ND/U - Not Detected at the Reporting Limit

\* - Recovery Outside Advisable QC Limits

B - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL

02/04/2000 10:46:34 AM



#### **Quality Control Report**

#### **EXXON Company U.S.A.**

2009

nalysis:

alysis Date:

**Gasoline Range Organics** 

thod: CA\_GRO

2003

WorkOrder:

00010699

Lab Batch ID:

R8434

Method Blank

HP\_W\_000131B-176353 02/01/2000 01:25 Units: Analyst:

mg/L DL

Lab Sample ID 00010699-01A

Samples in Analytical Batch:

Client Sample ID

00010699-01A 00010699-02A MW-2

00010699-03A

MW-3 MW-4

00010699-04A 00010699-05A MW-5 MW-6 MW-8

 Analyte
 Result
 Rep Limit

 Gasoline Range Organics
 ND
 0.050

 Surr. 1,4-Diffuorobenzene
 96.6
 62-144

 Surr. 4-Bromofluorobenzene
 83.0
 44-153

00010699-06A 00010699-07A

Trip Blank

#### Laboratory Control Sample (LCS)

RunID:

HP\_W\_000131B-176350

Units:

mg/L

Analysis Date:

01/31/2000 23:35

Analyst: DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.79	79	64	131

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

Sample Spiked:

00010699-01

RunID:

HP\_W\_000131B-176351

Units:

mg/L

Analysis Date:

02/01/2000 00:30

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
soline Range Organics	0.16	0.9	1,2	110	0.9	1.1	104	6.34	36	36	160

ualifiers:

ND/U - Not Detected at the Reporting Limit

\* - Recovery Outside Advisable QC Limits

B - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL

# Chain of Custody And Sample Receipt Checklist

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Exxon Engineer:  Consultant Co. Name:		ERI		- Cor					Skand					,	_			,		<u> </u>	<u> </u>		T	<del> </del>			0			<del></del>
Address: 73 D	igital Di	Suite	e 100	Pho										_	601								E.E.		귕				}	
Address: 73 Digital Dr, Suite 100 Phone:  Novato, CA 94949 Fax:					(415) 382-1856							602	Ö		G	X			a	_		٥	LEAD, TCLP		IGNITABILITY			İ		
					<del>,,,,</del>									9	0		13.2	RO,			8270		PEST	15.	ā		IGN			
RAS#: 7-0	236		Facility	State	ID#(	TN O	nly):							<b>X</b>	8010		GRAV. 413.2	0151			_	Ö	q	LS.	0					
AFE # (Terminal Only): Consulta											ક્ટ		WITH MTBE(S.	PURGEABLE HALOCARBON 8010		8	TPH / GC 8015 GRO X 8015 DROX	- 4	625 🗅	8310 🗅	PCB ONLY []	FV0A	METALS, TCLP	O 7421		CORROSIVITY				
Location: 6600 East 14th St. (City): (				0.	Oakland (State): CA					_											SEM	_								
□ EF □ C&M						□ snt						CONTAINERS		3	ALOC		3.1	GRÓ	8	٥	o	9	Q	0	239.1 🖸		COR			
Consultant Work Release #: 19908584 BTS# 000/27 K-/								Ā	RSI	X	H H	o	R 410	015	<b>-</b>	3270	8	88	8	OTA	AL 2	0								
Sampled By: Blaine Tech Services, Inc.								8	AINE	80207	EAB!	418.1	=	3C 8	240 (	정	₽	PEST	밀	1,8	101	품								
SAMPLE 1.D.		DATE	TIME	COMP.	GRAB	H <sub>2</sub> O \	MATRIX SOIL	AIR	OTHER	PRESE	RVATIVE	NO.O	CONTAINER SIZE	BTEX	PURG	TPH/IR 418.1 🔾	O&G	TPH /	VOL 82	SEMIL	PNAJP	PCB / PEST 8080 🛘	TCLP FULLCI VOACI SEMI-VOACI PESTCI HERBCI	METALS, TOTAL	LEAD, TOTAL 2	тохлон	REACTIVITY	STATE		
MG-2		1/27	12:23	X		Y				He	Lun	5		X				X					-			<del> </del>		CA		
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24 HR. * 72 HR. * EXXON UST					81112-0					^ -																				
48 HR. * 96 HR. * CONTRACT NO. Standard X * Contact US Prior S02317M01					\$143728 SPECIAL REPORTING REQUIREMENT					4 <u>C</u>	<u>), 11</u>	<u>ما</u>		LAB HOT ONLY																
Other to Sending Sample					SPECIAL REPORTING REQUIREMENT					NTS (Specify)				LAB USE ONLY LOT # Storage Location																
QA/QC Level								500 (500																						
Standard C CLP C Other C FAX C FAX C							c w	W/REPORT WORK ORDER #: 000 10699 LAB WORK RELEASE						SE#:																
Relinguished By Sampler:					T		Date				Time Received By:																			
CUSTODY Relinquished By Sampler:						Date			Time																					
	) Young	resimplified by Sampler.										Date	ı		111116		Received By:							ĵ						
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#### Sample Receipt Checklist

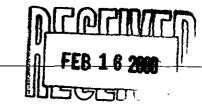
Workorder:	00010699		Received by:		Stelly, D'Anna
Date and Time Received:	01/29/2000 10:00:00 AM	00 AM			<u>FedEx</u>
Temperature:	2				
Shipping container/cooler in	good condition?	Yes 🗹	No 🗌	Not Present	
Custody seals intact on shipp	oping container/cooler?	Yes 🗌	No 🗌	Not Present	<b>✓</b>
Custody seals intact on sam	ple bottles?	Yes 🗌	No 🗌	Not Present	✓
Chain of custody present?		Yes 🔽	No 🗌		
Chain of custody signed whe	n relinquished and received?	Yes 🔽	No 🗌		
Chain of custody agrees with	sample labels?	Yes 🗹	No 🗌		
Samples in proper container	/bottle?	Yes 🗹	No 🗌		
Sample containers intact?		Yes 🗹	No 🗆		
Sufficient sample volume for	indicated test?	Yes 🗹	No 🗌		
All samples received within h	nolding time?	Yes 🗹	No 🗌		
Container/Temp Blank tempe	erature in compliance?	Yes 🗹	No 🗆		
Water - VOA vials have zero	headspace?	Yes 🗹	No 🗌	Not Present	
Water - pH acceptable upon	receipt?	Yes 🗹	No 🗆		
J			····		



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

# Certificate of Analysis Number:

## 00020137



Report To:	Project Name:	2009	# 4 4 · ·
Environmental Resolution, Inc.	<u>Site:</u>	7-0236,19908584	
Jim Chappell	Site Address:	6600 East 14th St.	
73 Digital Drive Suite 100	ļ	Oakland	CA
Novato	PO Number:		
California	State:	California	
94949-	State Cert. No.:	1903	
ph: (415) 382-9105 fax: (415) 382-1856	Date Reported:	2/11/00	

As per your request on February 4, 2000, your samples were re-logged and re-analyzed for Diesel Range Organics with a Silica Gel cleanup. Your samples were originally assigned to Certificate of Analysis No. 00010699.

Any data flags or quality control 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.

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.

West, Sonia
Senior Project Manager

2/13/00

Date



### **EXXON Company U.S.A.**

### Certificate of Analysis Number:

### 00020137

port To: Environmental Resolution, Inc.

Jim Chappell

73 Digital Drive Suite 100

Novato

California

94949-

ph: (415) 382-9105

fax: (415) 382-1856

Environmental Resolution, Inc.

Jim Chappell

fax: (415) 382-1856

Project Name:

2009

Site:

7-0236,19908584

Site Address:

6600 East 14th St.

Oakland

CA

PO Number:

State Cert. No.:

State:

California

1903

Date Reported:

2/11/00

C	lient Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
N /-2		00020137-01	Water	1/27/00 12:23:00 PM	1/29/00 10:00:00 AM		
N /-3		00020137-02	Water	1/27/00 11:59:00 AM	1/29/00 10:00:00 AM		77
MW-4		00020137-03	Water	1/27/00 10:13:00 AM	1/29/00 10:00:00 AM		
MM4'-5		00020137-04	Water	1/27/00 10:49:00 AM	1/29/00 10:00:00 AM		7 7
N /-6		00020137-05	Water	1/27/00 11:39:00 AM	1/29/00 10:00:00 AM		7 7
MW-8		00020137-06	Water	1/27/00 11:18:00 AM	1/29/00 10:00:00 AM		T H

nior Project Manager

2/13/00

Date

Joel Grice Laboratory Director

Ted Yen Quality Assurance Officer



Client Sample ID MW-2

Collected: 1/27/00 12:23:00 SPL Sample ID:

00020137-01

Site: 7-0236,19908584

Analyses/Method	Result	Rep.Limit		Dil. Factor QUAL	Date Analyzed An	alyst Seq. #
DIESEL RANGE ORGANICS	· · · · · · · · · · · · · · · · · · ·		MCL	SW8015B	Units: ug/L	
Diesel Range Organics	180	50		1	02/08/00 20:26 RR	185826
Surr: Pentacosane	94.4	% 18-120		1	02/08/00 20:26 RR	185826

Run ID/Seq #: HP\_V\_000208A-185826

Prep Method	Prep Date	Prep Initials
SW3510B	02/05/2000 16:15	KL

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



Client Sample ID MW-3 Collected: 1/27/00 11:59:00 SPL Sample ID: 00020137-02

Site: 7-0236,19908584

Analyses/Method	Result	Rep.Limit		Dil. Factor QUAL	Date Analyzed Analyst	Seq.#
DIESEL RANGE ORGANICS			MCL	SW8015B	Units: ug/L	
Diesel Range Organics	ND	50		1	02/08/00 21:04 RR	185827
Surr: Pentacosane	82.0	% 18-120		1	02/08/00 21:04 RR	185827

Run ID/Seq #: HP\_V\_000208A-185827

Prep Method	Prep Date	Prep Initials
SW3510B	02/05/2000 16:15	KL

- \* 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



Client Sample ID MW-4

Collected: 1/27/00 10:13:00 SPL Sample ID:

00020137-03

Site:

7-0236,19908584

Analyses/Method	Result	Rep.Limit		Dil. Factor QUAL	Date Analyzed	Analyst Seq. #
DIESEL RANGE ORGANICS			MCL	SW8015B	Units: ug/L	
Diesel Range Organics	ND	50		1	02/08/00 21:42 R	R 185828
Surr: Pentacosane	83.8	% 18-120		1	02/08/00 21:42 R	R 185828

Run ID/Seq #: HP\_V\_000208A-185828

Prep Method	Prep Date	Prep Initials
SW3510B	02/05/2000 16:15	KL

- \* 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



Client Sample ID MW-5

Collected: 1/27/00 10:49:00 SPL Sample ID:

00020137-04

Site: 7-0236,19908584

Analyses/Method	Result	Rep.Limit		Dil. Factor QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			MCL	SW8015B	Units: uç	3/L	
Diesel Range Organics	ND	50		1	02/08/00 22:21	RR	185829
Surr: Pentacosane	63.4	% 18-120		1	02/08/00 22:21	RR	185829

Run ID/Seq #: HP\_V\_000208A-185829

Prep Method	Prep Date	Prep Initials
SW3510B	02/05/2000 16:15	KL

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



Client Sample ID MW-6 Collected: 1/27/00 11:39:00 SPL Sample ID: 00020137-05

Site: 7-0236,19908584

Analyses/Method	Result	Rep.Limit		Dil. Factor QUAL	Date Analyzed Analyst	Seq.#
DIESEL RANGE ORGANICS			MCL	SW8015B	Units: ug/L	
Diesel Range Organics	ND	50		1	02/08/00 22:59 RR	185830
Surr: Pentacosane	73.6	% 18-120		1	02/08/00 22:59 RR	185830

Run ID/Seq #: HP\_V\_000208A-185830

Prep Method	Prep Date	Prep Initials
SW3510B	02/05/2000 16:15	KL

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



Client Sample ID MW-8

Collected: 1/27/00 11:18:00 SPL Sample ID:

00020137-06

Site: 7-0236,19908584

Analyses/Method	Result	Rep.Limit		Dil Factor QUAL	Date Analyzed	Anaiyst	Seq.#
DIESEL RANGE ORGANICS			MCL	SW8015B	Units: ug	/L	
Diesel Range Organics	60	50	······	1	02/08/00 23:37	RR	185831
Surr: Pentacosane	98.2	% 18-120		1	02/08/00 23:37	RR	185831

Run ID/Seq #: HP\_V\_000208A-185831

Prep Meth	<u>iod</u>	Prep Date	Ргер	Initials
SW3510E	}	02/05/2000 16:15	KL	

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

**Quality Control Documentation** 





### **Quality Control Report**

### **EXXON Company U.S.A.**

2009

Analysis: thod:

RuniD:

alysis Date:

paration Date:

**Diesel Range Organics** 

SW8015B

WorkOrder:

00020137

Lab Batch ID:

3021

Method Blank

HP\_V\_000208A-185834 02/08/2000 18:32

02/05/2000 16:15

Units: Analyst:

Prep By: KL

mg/L RR

Method SW3510B

Lab Sample ID 00020137-01A

Client Sample ID

MW-2 00020137-02A

Samples in Analytical Batch:

00020137-03A

K-WM MW-4

00020137-04A

MW-5

Analyte Result Rep Limit ND 0.050 Diesel Range Organics Surr. Pentacosane 48.8 18-120

00020137-05A 00020137-06A MW-6 MW-8

### **Laboratory Control Sample (LCS)**

RunID:

HP\_V\_000208A-185823

Units:

mg/L

Analysis Date: Preparation Date:

02/08/2000 18:32 02/05/2000 16:15

RR Analyst: Prep By: KL

Method SW3510B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics	2.5	2.1	83	44	141

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

Sample Spiked:

00020115-04

RunID:

HP\_V\_000208A-185836

Units:

mg/L

Analysis Date:

02/08/2000 19:48

Preparation Date:

02/05/2000 16:15

Analyst: RR Prep By: KL

Method SW3510B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit		High Limit
sel Range Organics	ND	2.5	1.5	58.8	2.5	1.6	61.2	4.00	39	13	130

dualifiers:

ND/U - Not Detected at the Reporting Limit

\* - Recovery Outside Advisable QC Limits

B - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

J - Estimated value between MDL and PQL

Chain of Custody And Sample Receipt Checklist



### HOUSTON LABORATORY

8880 INTERCHANGE DRIVE HOUSTON TEXAS 7054 PHONE (713) 660-0901

SPL/HE/QA-F132.01

# **RE-LOG WORKORDER REQUEST FORM**

NEW WORKOR	DER NO.:	<u>0005a3</u>	37
CHANGE CLIENT	CODE TO:		RUSH Y or N
Previous WO#:	00010699	New WO Due Date:	2-11-00
Date Requested:	2-4-00	Requested By:	Somallest
Tests/Preps:		·	
SAMPLE(s)	FRACTION(s)	TEST/PREP CODE	F2/F5 COMMENTS
mu-2	-01	8015-W-DSL, PR3130	P3510 W DSL Silrcagel K Clean up
MW-3	-02-		Clean up
MW-4	-03		
mu)-5	-04		
MW-10	-05		
mul-8	-06		<i>Y</i>
77700			
<b>II</b>			1

REMEMBER TO RE-LABEL/RE-SCAN ALL AFFECTED SAMPLE CONTAINERS!!!!!

MUST ATTACH A COPY OF THE ORIGINAL CHAIN OF CUSTODY BEFORE SUBMITTING TO LOGIN
Page 1

**EXXON COMPANY, USA.** SPL CHAIN OF CUSTODY RECORD NO. **ANALYSIS REQUEST:** OTHER Exxon Engineer: Darin Rouse Phone: (925) 246-8768 (CHECK APPROPRIATE BOX) Consultant Co. Name: Contact: John Skance LEAD, TOLP Address: 73 Digital Dr. Suite 100 Phone: (415) 382-5996 IGNITABILITY 90 Novato, CA 94949 (415) 382-1856 Fax: 7-0236 Facility/State ID # (TN Only): RAS#: Consultant Project #: AFE # (Terminal Only): 2009 TPH / GC 8015 GRO X (City): (State): CA 6600 East 14th St. Oakland Location: 0 ICLP FULL O VOACE □ EE □ C&M □ SDT METALS, TOTAL BTS# 000/27 K-1 SEMI-VOL 8270 Consultant Work Release #: 19908584 Sampled By: Blaine Tech Services, Inc. REACTIVITY TIME COMP. GRAB SAMPLE I.D. DATE PRESERVATIVE SOIL MG-2 127 Hel con 12:23 CA M4-3 NPLF 11:59 MW-4 10:13 MW-5 10:49 M4-6 11:39 MW-8 11:18 TB /z: 30 SPECIAL DETECTION LIMITS (Specify) TAT REMARKS: 24 HR. **EXXON UST** 814372890716 96 HR. 48 HR. CONTRACT NO. Standard X S02317M01 SPECIAL REPORTING REQUIREMENTS (Specify) \* Contact US Prior LAB USE ONLY LOT# Storage Location Other to Sending Sample 250 QA/QC Level 00020137 Standard Q CLP Q Other 🗆 FAX 🗆 WORK ORDER #: DOD HYGH ☐ FAX C-O-C W / REPORT LAB WORK RELEASE #: Relinquished By Sampler: Received By: Relinquished By Sampler: CUSTODY Date Time Received By: **RECORD** Relinquished By Sampler: Received By Laboratory: Way Bill #: 1 O: S. T. CORFETT ED, Seed interchange Drive, modston, TX 77054 Pm. (715) 660-0901





### Sample Receipt Checklist

Workorder:		Received by:				
Date and Time Received:		Carrier name	:			
Temperature:					 	
Shipping container/cooler in good condition?	Yes 🔳	No 🖾	Not Present			
Custody seals intact on shippping container/cooler?	Yes 🔳	No 🔳	Not Present			
Custody seals intact on sample bottles?	Yes	No 🔳	Not Present			
Chain of custody present?	Yes 🔳	No 🗃				
Chain of custody signed when relinquished and received?	Yes	No 🔳				
Chain of custody agrees with sample labels?	Yes 🔳	No 🍱				
Samples in proper container/bottle?	Yes 🔳	No 🌆				
Sample containers intact?	Yes 🔳	No 🐻				
Sufficient sample volume for indicated test?	Yes 🔳	No 🇃				
All samples received within holding time?	Yes	No 🗃				
Container/Temp Blank temperature in compliance?	Yes 🗷	No 🐷				
Water - VOA vials have zero headspace?	Yes 🖺	No 🖫	Not Present	<b>3</b>		
Water - pH acceptable upon receipt?	Yes 🍱	No 🗟				



9 February, 2000

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

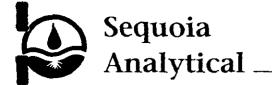
RE: Exxon Sequoia Report: MJA0138

Enclosed are the results of analyses for samples received by the laboratory on 01/27/00 17:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew Project Manager

CA ELAP Certificate #1210



885 Jarvis Drive Morgan Hill, CA 95037 (408) 776-9600 FAX (408) 782-6308

Environmental Resolutions (Exxon)

73 Digital Drive, Suite 100 Novato CA, 94949

Project: Exxon Project Number: 7-0236

Project Number: 7-0236

Project Manager: John Skance

Reported: 02/09/00 18:10

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	MJA0138-01	Water	01/27/00 12:23	01/27/00 17:45
_MW-3	MJA0138-02	Water	01/27/00 11:59	01/27/00 17:45
MW-5	MJA0138-03	Water	01/27/00 10:49	01/27/00 17:45

Sequoia Analytical - Morgan Hill

on Chew, Project Manager

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

Page 1 of 8





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Environmental Resolutions (Exxon)

73 Digital Drive, Suite 100

Novato CA, 94949

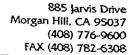
Project: Exxon

Project Number: 7-0236 Project Manager: John Skance Reported: 02/09/00 18:10

Total Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Morgan Hill

	<u></u>		<u></u>						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (MJA0138-01) Water	Sampled: 01/27/00 12:23	Received:	01/27/00	17:45		· · · · ·			
Ferrous Iron	0.0200	0.0100	mg/l	1	0B01026	02/01/00	02/07/00	EPA 6010A	
MW-3 (MJA0138-02) Water	Sampled: 01/27/00 11:59	Received:	01/27/00	17:45		·			
errous Iron	0.0120	0.0100	mg/l	1	0B01026	02/01/00	02/07/00	EPA 6010A	
MW-5 (MJA0138-03) Water	Sampled: 01/27/00 10:49	Received:	01/27/00	17:45					
Ferrous Iron	0.0340	0.0100	mg/l	1	0B01026	02/01/00	02/07/00	EPA 6010A	





73 Digital Drive, Suite 100 Novato CA, 94949 Project: Exxon

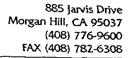
Project Number: 7-0236 Project Manager: John Skance Reported: 02/09/00 18:10

# Conventional Chemistry Parameters by APHA/EPA Methods

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (MJA0138-01) Water	Sampled: 01/27/00 12:23	Received:	01/27/00	17:45					
Total Alkalinity	842	5.00	mg/l	1	0B02005	02/01/00	02/01/00	SM 2320B	
MW-3 (MJA0138-02) Water	Sampled: 01/27/00 11:59	Received:	01/27/00	17:45					
otal Alkalinity	329	5.00	mg/l	1	0B02005	02/01/00	02/01/00	SM 2320B	
MW-5 (MJA0138-03) Water	Sampled: 01/27/00 10:49	Received:	01/27/00	17:45					
Total Alkalinity	503	5.00	mg/l	1	0B02005	02/01/00	02/01/00	SM 2320B	-







73 Digital Drive, Suite 100

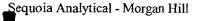
Novato CA, 94949

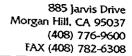
Project: Exxon

Project Number: 7-0236 Project Manager: John Skance Reported: 02/09/00 18:10

# Anions by EPA Method 300.0 Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TW-2 (MJA0138-01) Water	Sampled: 01/27/00 12:23	Received:	01/27/00	17:45					
itrate as NO3	6.97	1.00	mg/I	10	0B01001	01/28/00	01/28/00	EPA 300.0	
Sulfate as SO4	28.2	5.00	*	•	-	7		**	
IW-3 (MJA0138-02) Water	Sampled: 01/27/00 11:59	Received:	01/27/00	17:45					
itrate as NO3	38.6	1.00	mg/l	10	0B01001	01/28/00	01/28/00	EPA 300.0	
Sulfate as SO4	61.9	5.00	н	*	*	H	•	•	
IW-5 (MJA0138-03) Water	Sampled: 01/27/00 10:49	Received:	01/27/00	17:45					
ritrate as NO3	ND	1.00	mg/l	10	0B01001	01/28/00	01/28/00	EPA 300.0	
Sulfate as SO4	1.95	0.500	Ħ	ī	Ħ	н	=	н	







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Novato CA, 94949

Project: Exxon

Project Number: 7-0236

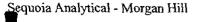
Project Manager: John Skance

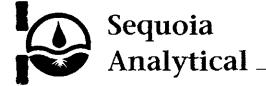
Reported: 02/09/00 18:10

# Total Metals by EPA 6000/7000 Series Methods - Quality Control

# Sequoia Analytical - Morgan Hill

				-						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
atch 0B01026 - EPA 3005A			·							
Blank (0B01026-BLK1)				Prepared:	02/01/00	Analyzed	l: <mark>02/07/0</mark> 0			
Serrous Iron	ND	0.0100	mg/l	<del></del>	-			-		
CS (0B01026-BS1)				Prepared:	02/01/00	Analyzed	l: <mark>02/07/</mark> 00			
Ferrous Iron	1.00	0.0100	mg/l				80-120			··· ••
atrix Spike (0B01026-MS1)	Sou	rce: MJA01	72-01	Prepared:	02/01/00	Analyzed	l: 02/07/00			
rerrous Iron	1.00	0.0100	mg/l	. <del>.</del>	ND		80-120		_	
Matrix Spike Dup (0B01026-MSD1)	Sou	rce: MJA01	72-01	Prepared:	02/01/00	Analyzed	1: 02/07/00			
rrous Iron	1.00	0.0100	mg/l		ND		80-120	0	20	
<del></del>										





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Novato CA, 94949

Project: Exxon

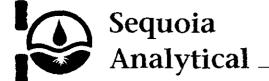
Project Number: 7-0236

Project Manager: John Skance

Reported: 02/09/00 18:10

# Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control Sequoia Analytical - Morgan Hill

	•	•	-	9						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 0B02005 - General Preparation										
Blank (0B02005-BLK1)				Prepared	& Analyze	ed: 02/01/0	00			
Total Alkalinity	ND	5.00	mg/l							
CS (0B02005-BS1)				Prepared	& Analyze	ed: 02/01/0	00			
Total Alkalinity	99.0	5.00	mg/l	100		99.0	80-120			
Aatrix Spike (0B02005-MS1)	Sou	rce: MJA01	39-01	Prepared	& Analyze	ed: 02/01/0	00			
otal Alkalinity	119	5.00	mg/l	100	44.4	74.6	75-125			Q-0
Matrix Spike Dup (0B02005-MSD1)	Sou	rce: MJA01	39-01	Prepared	& Analyze	d: 02/01/0	00			
otal Alkalinity	119	5.00	mg/i	100	44.4	74.6	75-125	0	20	Q-0



73 Digital Drive, Suite 100 Novato CA, 94949 Project: Exxon Project Number: 7-0236

Project Manager: John Skance

Reported: 02/09/00 18-10

# Anions by EPA Method 300.0 - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes							
Batch 0B01001 - General Preparation									<del>-</del>								
Blank (0B01001-BLK1)			***	Prepared	& Analyz	ed: 01/28/	00	<del></del>									
Nitrate as NO3	ND	0.100	mg/l		<u>,,</u>				··								
ulfate as SO4	ND	0.500	"														
Blank (0B01001-BLK2)				Prepared & Analyzed: 01/28/00													
Vitrate as NO3	ND	0.100	mg/l														
ulfate as SO4	ND	0.500	*														
LCS (0B01001-BS1)				Prepared	Prepared & Analyzed: 01/28/00												
litrate as NO3	10 00	0 100	mg/l	100		100	80-120										
ulfate as SO4	9.71	0 500	*	100		97.1	80-120										
LCS (0B01001-BS2)				Prepared	Prepared & Analyzed: 01/28/00												
litrate as NO3	10 00	0 100	mg/l	10.0		100	80-120										
ulfate as SO4	9 71	0 500	**	100		97 1	80-120										
Matrix Spike (0B01001-MS1)	So	urce: MJA01	167-01	Prepared	& Analyz	ed: 01/28/	00										
litrate as NO3	121	1 00	mg/l	100	16.8	104	75-125										
Sulfate as SO4	144	5.00	"	100	4.16	140	75-125			Q-02							
Matrix Spike (0B01001-MS2)	So	urce: MJA01	67-01	Prepared	& Analyze	ed: 01/28/	00										
litrate as NO3	121	1.00	mg/l	100	16.8	104	75-125										
Sulfate as SO4	144	5.00	***	100	4.16	140	75-125										
Aatrix Spike Dup (0B01001-MSD1)	So	urce: MJA01	167-01	Prepared	& Analyza	ed: 01/28/	00										
litrate as NO3	121	1 00	mg/l	100	16.8	104	75-125	0	20								
Sulfate as SO4	144	5 00	n	100	4 16	140	75-125	0	20								
Matrix Spike Dup (0B01001-MSD2)	Se	urce: MJA01	Prepared	& Analyz	ed: 01/28/0	00											
Nitrate as NO3	121	1 00	mg/I	100	168	104	75-125	0	20								
Sulfate as SO4	144	5 00	#	100	4 16	140	75-125	0	20								



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Environmental Resolutions (Exxon)

73 Digital Drive, Suite 100

Novato CA, 94949

Project: Exxon

Project Number: 7-0236

Project Manager: John Skance

Reported:

02/09/00 18:10

#### **Notes and Definitions**

Q-01 The spike recovery for this QC sample is outside of established control limits. Review of associated batch QC indicates the

recovery for this analyte does not represent an out-of-control condition for the batch.

Q-02 The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

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Exxon Engineer:	Darin Ro	use	Ph	one:	(925) 246-8768							ANALYSIS REQUEST: (CHECK APPROPRIATE BOX)												OTHER					
Consultant Co. Name:		:RI			t: John Skance				1											1		o		0		$\Box$		7	
Address: 73 Di	gital Dr. Si	uite 100			(415) 382-5996							E01 🗆								F 188		9		≧				: <u>I</u>	
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SAMPLE I.D.	DAT	E TIME	COMP	GRAB		SOIL		OTHER	PRESERVATIVE	<b>Y</b>	CONTAINER SIZE	BTEX 8020	PURGEABLE HALOCARBON 8010	TPI-VIR 418.1	O&G	TPH / GC 8015 GRO D	VOL 8240 🗆	SEMI-VOL 8270 🗆	PNAVPAH 8100	PCB / PEST 8080 🗅	TOUR FULLE VOAD	METALS, TOTAL D	LEAD, TOTAL 239.1	TOX/TOH	REACTIVITY	STATE	2	بۇ	*
M4-2	1/2:	7- 12:23	X		U			-	NPLT.	2													T			CA	X	Ź,	
MW-3		11:59	X						Hel	2												Г					X	X	7
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CUSTODY	Balinguleh	d By Sample	2000		<del></del>						Date																		
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RECORD	Relinquish	d By Sample	<u>, / (</u> ∋r:							ļ	Date			Time Received By Laboratory:										$\dashv$					
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SHIP SAMPLES BACK TO: SEQUOIA ANALYTICAL-MORGAN HILL