EXON COMPANY, U.S.A.

PROTECTION

99 OCT 12 PH 4: 28

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

DARIN L. ROUSE SENIOR ENGINEER

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

October 8, 1999

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

RE: Exxon RAS #7-0235/2225 Telegraph Avenue, Oakland, California.

Dear Mr. Seery:

Attached for your review and comment is a letter report entitled Quarterly Groundwater Monitoring Report, Third Quarter 1999, dated October 5, 1999, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the results of the quarterly groundwater monitoring and sampling activities at the subject site.

At your request, ERI has included copies of the field data sheets from the sampling event in this report. Copies of field data sheets will be included in all future groundwater monitoring and sampling reports for this site.

In addition, as requested, ERI has evaluated the apparent change in top of casing (TOC) elevations of the groundwater monitoring wells from the most recent survey (performed July 21, 1998) when compared to the original TOCs provided by Texaco (the previous site owner). Exxon routinely requests its consultants to have groundwater monitoring wells re-surveyed when sites are acquired from another company. The survey performed on behalf of ERI at this site on July 21, 1998 shows an apparent increase in the TOC elevation. Please note that this increase is uniform in all wells and does not impact gradient and is interpreted to be a result of the surveyor using a different reference datum. City of Oakland

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

Darin L. Rouse Senior Engineer

Attachment

Sincerely

ERI's Quarterly Groundwater Monitoring Report, Third Quarter 1999, dated

October 5, 1999.

cc: w/ attachment

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

w/o attachment

Mr. John C. Skance - Environmental Resolutions, Inc.

Ms. Kathy Simonelli - Geologic Services Corporation

A DIVISION OF EXXON CORPORATION





ENVIRONMENTAL RESOLUTIONS, INC.

TRANSMITTAL

TO: Mr. Scott Seery

Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway, Room 250

Alameda, California 94502-6577

DATE: July 6, 1999

PROJECT NUMBER: 222913X

SUBJECT: Quarterly Groundwater Monitoring

Second Quarter, 1999

Exxon Service Station 7-0235 2225 Telegraph Avenue Oakland, California

FROM: Jennifer Schulte TITLE: Staff Geologist

WE ARE SENDING YOU:

THESE ARE TRA	NSMITTED as checked below:
[] For review a	nd comment [] Approved as submitted [] Resubmit copies for approval
[X] As requeste	d [] Approved as noted [] Submit copies for distribution
[] For approval	[] Return for corrections [] Return corrected prints
[X] For your fi	les [] For distribution to regulatory agencies
a revised second of Exxon Service Stanot sampled during	Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI) is submitting quarter 1999, Table 1 - Cumulative Groundwater Monitoring and Sampling Data for tion 7-0235, 2225 Telegraph Avenue, Oakland, California. Recovery well RW-2 was second quarter 1999, due to the presence of non-measurable liquid-phase hydrocarbor. In the second quarter 1999, due to the presence of non-measurable liquid-phase hydrocarbor. In the second quarter 1999, due to the presence of non-measurable liquid-phase hydrocarbor.

Jennifer Schulte, Staff Geologist

Mr. Darin Rouse - Exxon Company, U.S.A. cc:

Mr. John C. Skance at (415) 382-5996.

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

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Exxon Service Station 7-0235 2225 Telegraph Avenue Oakland, California (Page 1 of 3)

Well ID#	Sampling	SUBJ	DTW	Elev.	TPPHg	MTBE	В	T	Е	Х
(TOC)	Date	<	feet	>	<					
MW-6B	11/26/96	NLPH	12.26	5.22	< 50	< 30	< 0.5	< 0.5	< 0.5	< 0.5
(17.48)	2/27/97	NLPH	11.73	5.75	< 50	< 30	< 0.5	< 0.5	< 0.5	0.80
` '	5/21/97	NLPH	12.70	4.78	< 50	< 30	< 0.5	< 0.5	< 0.5	< 0.5
	8/18/97	NLPH	12.89	4.59	380	< 30	4.3	< 0.5	1.2	1.5
	3/13/98	NLPH	11.15	6.33	360	< 6.2	93	4.9	4.1	12
	4/20/98	NLPH	11.49	5.99	110	5.5	19	1.3	1.5	3.9
(21.37)	7/21/98	NLPH	12.18	9.19	< 50	8.7	0.84	0.59	< 0.5	< 0.5
(22.0.)	10/6/98	NLPH	12.70	8.67	190	6.0	2.4	0.56	0.51	1.2
	1/11/99	NLPH	12.48	8.89	50	3.9	1.2	< 0.5	< 0.5	0.95
	4/8/99	NLPH	11.52	9.85	85	14.0	4.4	< 0.5	< 0.5	< 0.5
MW-6E	11/26/96	NLPH	12.94	4.69	< 50	< 30	1.1	< 0.5	< 0.5	< 0.5
(17.63)	2/27/97	NLPH	12.28	5.35	< 50	< 30	< 0.5	< 0.5	< 0.5	< 0.5
(17.03)	5/21/97	NLPH	13.60	4.03	160	<5	10	1.4	5.5	4.8
	8/18/97	NLPH	13.75	3.88	66	< 30	< 0.5	< 0.5	< 0.5	< 0.5
	3/13/98	NLPH	11.36	6.27	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/20/98	NLPH	11.88	5.75	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
(21.58)	7/21/98	NLPH	13.10	8.48	1,200	< 10	81	3.1	28	77
(21,50)	10/6/98	NLPH	13.55	8.03	< 50	6.6	1.4	0.51	< 0.5	0.97
	1/11/99	NLPH	13.40	8.18	< 50	5.1	< 0.5	< 0.5	< 0.5	< 0.5
	4/8/99	NLPH	12.04	9.54	< 50	4.7	< 0.5	< 0.5	< 0.5	< 0.5
MW-6F	11/26/96	NLPH	13.29	5.29	·<50	<30	< 0.5	< 0.5	< 0.5	< 0.5
(18.58)	2/27/97									
(/	5/21/97	NLPH	14.18	4.40						
	8/18/97	NLPH	14.69	3.89						
	3/13/98	NLPH	10.93	7.65	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/20/98	NLPH	11.77	6.81						
(22.51)	7/21/98	NLPH	13.62	8.89	•••					
(==/	10/6/98	NLPH	13.52	8.99						
	1/11/99	NLPH	14.06	8.45						
	4/8/99	NLPH	11.86	10.65						

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Exxon Service Station 7-0235 2225 Telegraph Avenue Oakland, California (Page 2 of 3)

Well ID#	Sampling	SUBJ	DTW	Elev.	TPPHg	MTBE	В	T	Е	X
(TOC)	Date	<	feet	>	<		ug/L		*************	
MW-6G	11/26/96	NLPH	11.12	5.70	< 50	< 30	< 0.5	< 0.5	< 0.5	< 0.5
(16.82)	2/27/97									
	5/21/97	NLPH	11.76	5.06						
	8/18/97	NLPH	12.23	4.59	•••		•••			
	3/13/98	NLPH	9.13	7.69	< 50	4.4	< 0.5	< 0.5	< 0.5	< 0.5
	4/20/98	NLPH	9.73	7.09	•••					
(20.72)	7/21/98	NLPH	11.15	9.57			***			
	10/6/98	NLPH	11.91	8.81						
	1/11/99	NLPH	12.00	8.72			**-			
	4/8/99	NLPII	10.04	10.68			***			
MW-6H	11/26/96	NLPH	11.87	4.71	1,200	< 30	320	110	22	85
(16.58)	2/27/97	NLPH	11.58	5.00	1,800	< 200	760	31	8.4	44
(20.02)	5/21/97	NLPH	12.23	4.35	1,100	81	640	18	5.4	45
	8/18/97	NLPH	12.29	4.29	870	26	200	3.6	2.4	7.4
	3/13/98	NLPH	11.44	5.14	5,300	< 125	1,900	720	100	470
	4/20/98	NLPH	11.58	5.00	6,000	2,700	1,500	600	91	440
(20.47)	7/21/98	NLPH	11.97	8.5	2,200	1,600	740	44	15	63
(25111)	10/6/98	NLPH	12.23	8.24	5,400	3,000	1,900	< 25	<25	76
	1/11/99	NLPH	12.17	8.30	2,600	4,300	1,200	< 12	< 12	20
	4/8/99	NLPH	11.56	8.91	13,000	13,000	3,400	1,300	260	1,200
MW-6I	11/26/96	NĹPH	12.45	3.81	< 50	< 30	< 0.5	< 0.5	< 0.5	< 0.5
(16.26)	2/27/97	NI.PH	12.24	4.02	< 50	< 30	< 0.5	< 0.5	< 0.5	< 0.5
(10.20)	5/21/97	NLPH	12.82	3.44	< 50	< 30	< 0.5	< 0.5	< 0.5	< 0.5
	8/18/97	NLPH	12.81	3.45	< 50	< 30	< 0.5	< 0.5	< 0.5	< 0.5
	3/13/98									
	4/20/98	NLPH	12.14	4.12	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
(20.24)	7/21/98	NLPII	12.59	7.65	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
(=0/=1)	10/6/98	NLPH	12.81	7.43						
	1/11/99	NLPH	12.74	7.50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/8/99	NLPH	11.93	8.31						

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Exxon Service Station 7-0235 2225 Telegraph Avenue Oakland, California (Page 3 of 3)

Well ID#	Sampling	SUBJ	DTW	Elev.	TPPHg	MTBE	В	T	E	X			
(TOC)	Date	<	feet	>	<		ug/L						
RW-I	Not Monitore	d 6/16/92 thro	ugh 10/6/98.										
(20.24)	1/11/99	NLPH	12.37	7.87									
	4/8/99	NLPH	10.41	9.83	***			***					
RW-2	Not Monitore	d 6/16/92 throu	igh 4/20/98.										
(20.44)	7/21/98	NLPH	12.65	7.79	3,500	170	240	100	41	96			
, ,	10/6/98	NLPH	13.06	7.38	3,200	200	120	48	56	120			
	1/11/99	NLPH	12.88	7.56	3,300	350	150	17	35	40			
	4/8/99	sheen	11.76	8.68	,		***		***				
RW-3A	Not Monitore	d 6/16/92 throu	igh 4/20/98.										
(21.75)	7/21/98	NLPH	13.08	8.67	280	16	97	<1.2	< 1.2	<1.2			
,	10/6/98	NLPH	13.72	8.03	78	26	26	0.89	< 0.5	< 0.5			
	1/11/99	NLPH	12.00	9.75	1,000	230	490	5.0	< 5.0	7.4			
	4/8/99	NLPII	11.90	9.85	130	11	70	<1.0	<1.0	<1.0			
Notes:													
SUBJ	=		bjective evaluat										
NLPH	=	No liquid-pha	ase hydrocarboi	ns present in	well.								
sheen	=	Liquid-phase	hydrocarbon p	resent as she	en.								
TOC	=	Elevation of	top of well casi	ng; relative t	to mean sea level.								
DTW	=	Depth to wat											
Elev.	=				e to mean sea leve								
TPPHg	==					ed using EPA met	thod 5030/8015	(modified).					
MTBE	=				g EPA method 50:								
BTEX	=	Benzene, tolt	iene, ethylbenz	ene, and tota	il xylenes aπalyzed	using EPA metho	d 5030/8020.						
<	=	Less than the	indicated detec	ction limit sh	own by the labora	tory.							
+	===	Not measure	d or sampled.										
*	=	DTW taken a	DTW taken after purging of other nearby wells; measurement suspect.										

ENVIRONMENTAL RESOLUTIONS, INC.

October 5, 1999 ERI 222913.R07

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

Subject:

Quarterly Groundwater Monitoring Report, Third Quarter 1999, Exxon Service Station

7-0235, 2225 Telegraph Avenue, Oakland, California.

Mr. Rouse:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI), is reporting the results of the third quarter 1999 groundwater monitoring and sampling event. The location of the site is shown on the Site Vicinity Map (Plate 1). The purpose of quarterly monitoring is to evaluate concentrations of dissolved hydrocarbons in groundwater and groundwater flow direction and gradient. Blaine Tech Services, Inc. (Blaine Tech) performed the site field activities at the request of Exxon.

GROUNDWATER MONITORING AND SAMPLING

On July 19, 1999, Blaine Tech measured depth to water (DTW) and collected groundwater samples from select wells for laboratory analyses. On July 27, 1999, Blaine Tech measured DTW in all groundwater monitoring wells. Work was performed in accordance with Blaine Tech's groundwater sampling protocol provided in Attachment A. Field data sheets are presented in Attachment B.

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 Sequoia Analytical Laboratories, Inc., 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 purgeable petroleum hydrocarbons as gasoline (TPPHg) using the methods listed in the notes in Table 1. The laboratory analysis report and Chain of Custody record are provided in Attachment C. Historical and recent results of laboratory analyses of groundwater samples are summarized in Table 1. The results of analyses of groundwater samples collected during the recent sampling event are shown on Plate 2.

LIMITATIONS

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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. Scott Seery 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

If you have any questions or comments regarding this report, please call Mr. John C. Skance at (415) 382-5996.

Sincerely,

Environmental Resolutions, Inc.

John C Skange

Assistant Project Manager

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: Field Data Sheets

Attachment C: Laboratory Analysis Report and Chain of Custody Record

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Exxon Service Station 7-0235 2225 Telegraph Avenue Oakland, California (Page 1 of 3)

Well ID#	Sampling	SUBJ	DTW	Elev.	TPPHg	MTBE	В	T	E	X
(TOC)	Date	<	feet	>	<		ug/L			>
MW-6B	11/26/96	NLPH	12.26	5.22	< 50	< 30	< 0.5	< 0.5	< 0.5	< 0.5
(17.48)	2/27/97	NLPH	11.73	5.75	< 50	< 30	< 0.5	< 0.5	< 0.5	0.80
	5/21/97	NLPH	12.70	4.78	< 50	< 30	< 0.5	< 0.5	< 0.5	< 0.5
	8/18/97	NLPH	12.89	4.59	380	< 30	4.3	< 0.5	1.2	1.5
	3/13/98	NLPH	11.15	6.33	360	< 6.2	93	4.9	4.1	12
	4/20/98	NLPH	11.49	5.99	110	5.5	19	1.3	1.5	3.9
(21.37)	7/21/98	NLPH	12.18	9.19	< 50	8.7	0.84	0.59	< 0.5	< 0.5
	10/6/98	NLPH	12.70	8.67	190	6.0	2.4	0.56	0.51	1.2
	1/11/99	NLPH	12.48	8.89	50	3.9	1.2	< 0.5	< 0.5	0.95
	4/8/99	NLPH	11.52	9.85	85	14.0	4.4	< 0.5	< 0.5	< 0.5
	7/19/99	NLPH	11.39	9.98	< 50	< 2.50	< 0.5	< 0.5	< 0.5	< 0.5
	7/27/99	NLPH	12.71	8.66						
MW-6E	11/26/96	NLPH	12.94	4.69	< 50	<30	1.1	< 0.5	< 0.5	< 0.5
(17.63)	2/27/97	NLPH	12.28	5.35	< 50	<30	< 0.5	< 0.5	< 0.5	< 0.5
•	5/21/97	NLPH	13.60	4.03	160	<5	10	1.4	5.5	4.8
	8/18/97	NLPH	13.75	3.88	66	<30	< 0.5	< 0.5	< 0.5	< 0.5
	3/13/98	NLPH	11.36	6.27	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/20/98	NLPH	11.88	5.75	< 5 0	<2.5	< 0.5	< 0.5	< 0.5	< 0.5
(21.58)	7/21/98	NLPH	13.10	8.48	1,200	< 10	81	3.1	28	7 7
•	10/6/98	NLPH	13.55	8.03	< 50	6.6	1.4	0.51	< 0.5	0.97
	1/11/99	NLPH	13.40	8.18	< 50	5.1	< 0.5	< 0.5	< 0.5	< 0.5
	4/8/99	NLPH	12.04	9.54	< 50	4.7	< 0.5	< 0.5	< 0.5	< 0.5
	7/19/99	NLPH	11.59	9.99	•••					
	7/27/99	NLPH	13.65	7.93						
MW-6F	11/26/96	NLPH	13.29	5.29	<50	<30	< 0.5	< 0.5	< 0.5	< 0.5
(18.58)	2/27/97									
	5/21/97	NLPH	14.18	4.40						
	8/18/97	NLPH	14.69	3.89						
	3/13/98	NLPH	10.93	7.65	< 5 0	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/20/98	NLPH	11.77	6.81						
(22.51)	7/21/98	NLPH	13.62	8.89						
•	10/6/98	NLPH	13.52	8.99				***		
	1/11/99	NLPH	14.06	8.45						
	4/8/99	NLPH	11.86	10.65						
	7/19/99									
	7/27/99	Well Inacces	ssible							

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

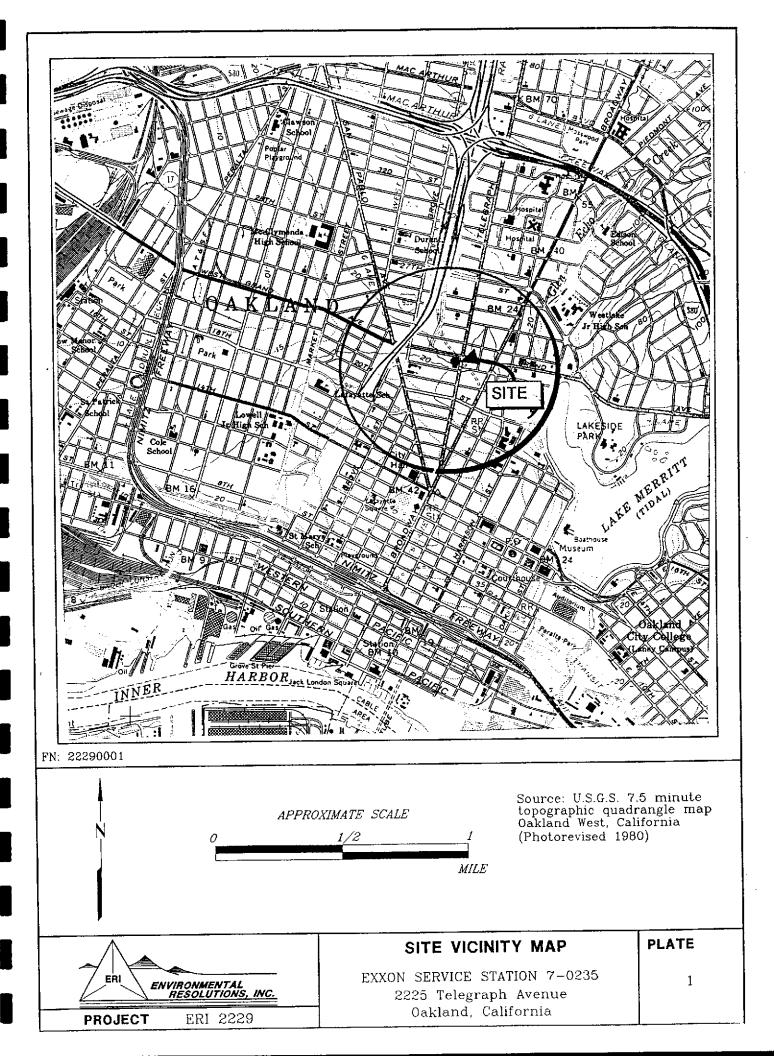
Exxon Service Station 7-0235 2225 Telegraph Avenue Oakland, California (Page 2 of 3)

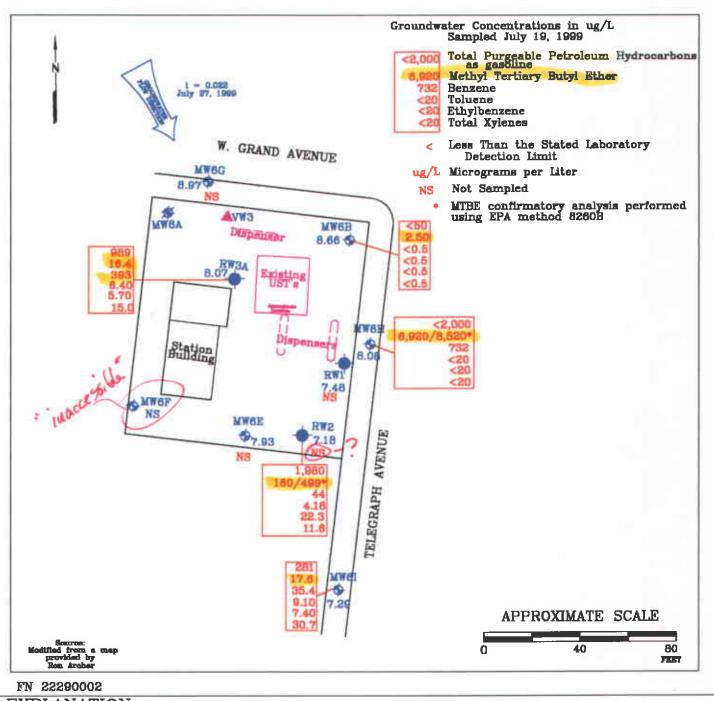
Weli ID #	Sampling	SUBJ	DTW	Elev.	TPPHg	MTEE	В	Ť	E	Х
(TOC)	Date	<	feet	>	<		ug/L			>
MW-6G	11/26/96	NLPH	11.12	5.70	< 50	<30	< 0.5	< 0.5	< 0.5	< 0.5
(16.82)	2/27/97		11.12	J.10						
(10.62)	5/21/97	NLPH	11.76	5.06						
	8/18/97	NLPH	12.23	4.59				***		
	3/13/98	NLPH	9.13	7.69	< 50	4.4	< 0.5	< 0.5	< 0.5	< 0.5
	4/20/98	NLPH	9.73	7.09		T, T	~0,5			
(20.72)	7/21/98	NLPH	11.15	9.57						
(20.72)	10/6/98	NLPH	11.13	8.81						
	1/11/99	NLPH	12.00	8.72						
	4/8/99	NLPH	10.04	10.68						
	7/19/99		10.04	10.00	•••				PPR	
	7/27/99	NLPH	11.75	8.97						
	71277	***************************************	11175	0.77						
MW-6H	11/26/96	NLPH	11.87	4.71	1,200	< 30	320	110	22	85
(16.58)	2/27/97	NLPH	11.58	5.00	1,800	< 200	760	31	8.4	44
, -	5/21/97	NLPH	12.23	4.35	1,100	81	640	18	5.4	45
	8/18/97	NLPH	12.29	4.29	870	26	200	3.6	2.4	7.4
	3/13/98	NLPH	11.44	5.14	5,300	<125	1,900	720	100	470
	4/20/98	NLPH	11.58	5.00	6,000	2,700	1,500	600	91	440
(20.47)	7/21/98	NLPH	11.97	8.5	2,200	1,600	740	44	15	63
	10/6/98	NLPH	12.23	8.24	5,400	3,000	1,900	<25	<25	76
	1/11/99	NLPH	12.17	8.30	2,600	4,300	1,200	< 12	< 12	20
	4/8/99	NLPH	11.56	8.91	13,000	13,000	3,400	1,300	26 0	1,200
	7/19/99	NLPH	11.71	8.76	< 2,000	6,920/8,520*	732	<20	< 20	< 20
	7/27/99	NLPH	12.39	8.08						
MW-6I	11/26/96	NLPH	12.45	3.81	< 50	<30	< 0.5	< 0.5	< 0.5	< 0.5
(16.26)	2/27/97	NLPH	12.24	4.02	< 50	<30	< 0.5	< 0.5	< 0.5	< 0.5
(20.20)	5/21/97	NLPH	12.82	3.44	< 50	<30	< 0.5	< 0.5	< 0.5	< 0.5
	8/18/97	NLPH	12.81	3.45	< 50	<30	< 0.5	< 0.5	< 0.5	< 0.5
	3/13/98									
	4/20/98	NLPH	12.14	4.12	< 50	<2.5	< 0.5	< 0.5	< 0.5	< 0.5
(20.24)	7/21/98	NLPH	12.59	7.65	< 50	<2.5	< 0.5	< 0.5	< 0.5	< 0.5
(23.2.)	10/6/98	NLPH	12.81	7.43			Brair ba			***
	1/11/99	NLPH	12.74	7.50	< 50	<2.5	< 0.5	< 0.5	< 0.5	< 0.5
	4/8/99	NLPH	11.93	8.31						
	7/19/99	NLPH	11.75	8.49	281	17.6	35.4	9.1	7.4	30.7
	7/27/99	NLPH	12.95	7.29	_					•••

TABLE 1 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Exxon Service Station 7-0235 2225 Telegraph Avenue Oakland, California (Page 3 of 3)

Well ID#	Sampling	SUBJ	DTW	Elev.	TPPHg	MTBE	В	T	E	X			
(TOC)	Date	<	feet	>	<		ug/L						
RW-1	Not Monitore	d 6/16/92 throu	igh 10/6/98.										
(20.24)	1/11/99	NLPH	12.37	7.87									
	4/8/99	NLPH	10.41	9.83									
	7/19/99												
	7/27/99	NLPH	12.76	7.48									
RW-2	Not Monitore	d 6/16/92 throu	gh 4/20/98.										
(20.44)	7/21/98	NLPH	12.65	7.79	3,500	170	240	100	41	96			
, ,	10/6/98	NLPH	13.06	7.38	3,200	200	120	48	56	120			
	1/11/99	NLPH	12.88	7.56	3,300	350	150	17	35	40			
	4/8/99	sheen	11.76	8.68									
	7/19/99	NLPH	11.61	8.83	1,980	160/499*	44	4.16	22.3	11.6			
	7/27/99	NLPH	13.26	7.18									
RW-3A	Not Monitore	d 6/16/92 throu	gh 4/20/98.										
(21.75)	7/21/98	NLPH	13.08	8.67	280	16	97	<1.2	<1.2	< 1.2			
	10/6/98	NLPH	13.72	8.03	78	26	26	0.89	< 0.5	< 0.5			
	1/11/99	NLPH	12.00	9.75	1,000	230	490	5.0	< 5.0	7.4			
	4/8/99	NLPH	11.90	9.85	130	11	70	<1.0	<1.0	<1.0			
	7/19/99	NLPH	11.75	10.00	989	16.4	393	6.40	5.70	15.0			
	7/27/99	NLPH	13.68	8.07		•=•							
Notes:													
SUBJ	=		jective evaluat										
NLPH	=		se hydrocarbor	-									
sheen	=		hydrocarbon p										
TOC	=		-	ng; relative to	mean sea level	•							
DTW	=	Depth to water		A 4.5		1							
Elev.	=	•	•		e to mean sea le			r c - 1141 . 15					
TPPHg	=		-			zed using EPA met	tnog 5030/801:	(modineu).					
MTBE	=	•	• •	-	EPA method 5		1 5000 10000						
BTEX	=					ed using EPA metho	04 2030/8020.						
<	=		Less than the indicated detection limit shown by the laboratory.										
	=	Not measured or sampled. Methyl tertiary butyl ether analyzed using EPA method 8260B.											
*	=	•	• -	nalyzed using	EPA method 8	260B.							
ug/L	=	Micrograms (er liter.										





EXPLANATION

MW6H

Groundwater Monitoring Well

Groundwater elevation in feet above mean sea level

1 = Interpreted Groundwater Gradient

RWSA

Recovery Well

VYS

Vapor/Vadose Well



GENERALIZED SITE PLAN

EXXON SERVICE STATION 7-0235 2225 Telegraph Avenue Oakland, California PROJECT NO.

2229

PLATE 2

August 13, 1999

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.

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 station 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 FIELD DATA SHEETS

WELL GAUGING DATA

Project # 990727-X3	_ Date	Client EXXON	
Site 2225 Telegi	aph OAkland	CA	

Well ID	Well Size (in.)	Sheen / Odor		Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-GB	2					12.71	18.30	Toc	
mw:6€	4		·			13.65	19.60	\	
MW-6F			Inacc	essible					
MW-64	4	_				11.75	19.52		
mw-6H	4					12.39	19-65		
mw-6I	4	_				12.95	19.30		
RW-1	4	Ē	×tracti	on Pw	no#	12.76	23.61		
RW-Z	4		x+ract		ump	13.26	23.46	·	
QW-3A	4	E	xtracti		unp	i3.66	21.09	\downarrow	
				·					
* MW-	Fis	'n lock	ed ext	action C	Oni pain	d . Key #	3600 des 1	not work.	
		•	Compound			,			
-	•								

WELL GAUGING DATA

Project #	990719 FZ Date_	7-19-99	Client	Exxon	· · · · · · · · · · · · · · · · · · ·
Site	2225 Telegrad	- Ave.	Galdon	Cav	•

			f	Thickness	Volume of	<u> </u>	***************************************	·	
	Well		Depth to	of	Immiscibles			Survey	
ł I	Size	Sheen /		Immiscible		Depth to water	Depth to well		
Well ID	(in.)	Odor		Liquid (ft.)		(ft.)	bottom (ft.)	or TOC	
MW-6B	2		·			11.39	18.30	TOU	
MM-GE	Ц			-		11.59	19.63		
MW-6H	Ч		,			11:21	19.64		
MW-61	Ц					11.75	1930		
Dus-Z	Ч					11.61	23.49		
RW-3A	4					11.75	21.14	V	
					• *				
									,

Project #:	990	719 F	2		0235		
Sampler:	mike	. <u>5</u> .		Date: 7-/	9-99		<u> </u>
Well I.D.:	mw-	68		Well Diameter	: 🙋 3 4	6 8	
Total Wel	l Depth:	18.30	>	Depth to Wate	r: 11.59		
Depth to I	Free Produ	ct:		Thickness of F	ree Product (fe	et):	
Reference	ed to:	PVC	Grade	D.O. Meter (if	req'd):	YSI HACH	
	Well Diamet 2* 3* 4*	er I	<u>Multiplier</u> <u>y</u> 0.16 0.37 0.65	5" 6"	<u>Multiplier</u> 1.02 1.47 ius ² * 0.163		
Purge Metho	y Di Ele	Bailer sposable Bail Middleburg ctric Submers xtraction Pum	ible	Sampling Method: Other:	Bailer Poisposable Bailer Extraction Port		
	1 Case Volu	ıme (Gals.)	x 3 Specified Vo		Gals.		
Time	Temp (°F)	pН	Cond.	Turbidity	Gals. Removed	Observation	ıs
1319	65.9	7.2	1006	67	2		
1321	65.4	7.1	1000	59	3		
1323	65.1	7.1	1003	61	4		
			·		,		
			· · · · · · · · · · · · · · · · · · ·				
Did well o	dewater?	Yes	No	Gallons actual	ly evacuated:	<u>4</u>	
Sampling	Time:	1327	·	Sampling Date	7-19-	-99	
Sample I.	D.:	MM-6B) 	Laboratory:	Sequoia	Other	
Analyzed	for: TPH-	G BTEX	мтве трн-d	Other:			
D.O. (if re	eq'd):		Pre-purge:	mg/L	Post-purge:		mg/L
O.R.P. (if	req'd):		Pre-purge:	mV	Post-purge:		mV

Project #:	990	19 F	2	Job# 7-	0235_		
Sampler:	mike	<u> </u>		Date: 7-/	9-99		
Well I.D.:	-am	6E		Well Diameter	: 2 3 (4)	6 8 _	
Total Wel	l Depth:	19.63	>	Depth to Wate	r: U.59		
Depth to I	Free Produ	ct:		Thickness of F	ree Product (fe	et):	
Reference	ed to:	(PVC)	Grade	D.O. Meter (if	req'd):	YSI H	ACH
	Well Diamete				Multiplier		
	2" 3"		0.16 0.37	-	1.02 1.47		
,	4"		0.65	-	us ² * 0.163		
Purge Metho	od:	Bailer		Sampling Method:	Bailer		
Tuise mean		sposable Bail	ег		Disposable Bailer		
		Middleburg			Extraction Port		
	k Elec	ctric Submers	ible	Other:			
	E	xtraction Pum	p				
	Other:	····					_
ĺ	£ .	7	у 3		15.6 Gals.		
	5.			= '			
	l Case Volu		Specified Vo	lumes Cai	culated Volume		<u> </u>
Time	Temp (°F)	pН	Cond.	Turbidity	Gals. Removed	Observ	ations
	*In	access	itble Cou	porkel	6		
		ولا (بهو	Λ.	I garre	1 12		
\$ 150 m			svice Mai	weer dock	16		
	ИС	+ have	• •	o more i			
	100	1 1 1	13	<u> </u>			
Did well o	dayyatar?	 Yes 1	No	Gallons actuall	v evacuated:	16	
Did well d	lewater:	165 (110/	Carrons actuars	y cruodated.		
Sampling	Time:			Sampling Date	: 7-19-	-99	
Sample I.	D.: M	13-6E		Laboratory:	Sequoia	Other	
Analyzed	for: TPH-	G BTEX	мтве трн-d	Other:			
D.O. (if re	eq'd):		Pre-purge:	mg/L	Post-purge:		mg/L
O.R.P. (if	req'd):		Pre-purge:	mV	Post-purge:		mV

Project #:	990	719 F	2	Job# 7-	0235		
Sampler:	Mike	<u> 5.</u>		Date: 7-/	9-99		
Well I.D.	MW-	GH		Well Diameter	: 2 3 4	68_	
Total We	ll Depth:	19.6	بر	Depth to Wate	ווּ ווּיבו		
Depth to	Free Produ	ict:		Thickness of F	ree Product (fe	et):	
Reference	ed to:	(PVC)	Grade	D.O. Meter (if	req'd):	YSI HA	СН
Purge Metho	D	Bailer isposable Bail Middleburg ctric Submers	0.16 0.37 0.65	5" 6" Other radi Sampling Method:	Multiplier 1.02 1.47 us² * 0.163 Bailer Misposable Bailer Extraction Port		
		xtraction Pum	ıp				
,	Other:						1
		ume (Gals.)	X Specified Vo		Gals.		
Time	Temp (°F)	pН	Cond.	Turbidity	Gals. Removed	Observat	tions
1339	66.3	6.7	1080	37	6		
1340	66.1	6.7	1075	39	17		
134	66.7	6.6	10 84	35	16		
			,	·			
				·			
Did well o	dewater?	Yes	No	Gallons actuall	y evacuated:	16	
Sampling	Time:	1345		Sampling Date	7-19-	-99	
Sample I.	D.: γ ⁄	1W-6H		Laboratory:	Sequoia	Other	
Analyzed	for: TPH-	G BTEX	мтве трн-d	Other:			
D.O. (if re	eq'd):		Pre-purge:	mg/L	Post-purge:		mg/ _L
O.R.P. (if	req'd):		Pre-purge:	mV	Post-purge:		mV

Project #:	990	719 F	2	Job# 7-0	0235	
Sampler:	mike	. 5_		Date: 7-/-	9-99	
Well I.D.:	MW.	-61	,	Well Diameter	: 2 3	6 8
Total Wel	l Depth:	19.5	5 0	Depth to Water	: 11.75	
Depth to I	Free Produ	ıct:		Thickness of F	ree Product (fe	et):
Reference	d to:	(PVC)	Grade	D.O. Meter (if	req'd):	YSI HACH
	Well Diamet 2" 3" 4"		Multiplier \(\) 0.16 0.37 0.65	Well Diameter 1 5" 6"	Multiplier 1.02 1.47 us ² * 0.163	
Purge Metho	od:	Bailer		Sampling Method:	Bailer	
_	Di	isposable Bail	er	. •	Dis posable Bailer	
		Middleburg		0.1	Extraction Port	•
	, ~	ctric Submers xtraction Pum		Other:		
	Other:	Xuacion i an	ιþ			
	Ч.	9	x 3	=	14:7 Gals.	
	1 Case Volu		Specified Vo	olumes Cale	culated Volume	<u> </u>
Time	Temp (°F)	pН	Cond.	Turbidity	Gals. Removed	Observations
1357	66.7	7.4	658	39	5	
1358	66.3	7.4	655	27	10	
1359	66.1	7.3	655	29	15	
Did well	dewater?	Yes	(No)	Gallons actuall	y evacuated:	IS
Sampling	Time:	1404		Sampling Date	: 7-19-	-99
Sample I.	D.: γ ⁄\	w-61		Laboratory:	Sequoia	Other
Analyzed	for: TPH-	G BTEX	мтве трн-D	Other:		
D.O. (if re	eq'd):		Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if	req'd):		Pre-purge:	mV	Post-purge:	mV

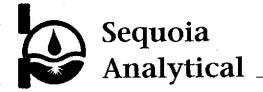
Project #:	990	719 F	2	Job # 7-	0235	
Sampler:	Mike	. 5		Date: 7-/	9-99	
Well I.D.:	RU)-2		Well Diameter	: 2 3 4) 6 8
Total Wel	l Depth:	23.4	9	Depth to Wate	r: \\.C\	
Depth to l	Free Produ	ict:		Thickness of F	ree Product (fe	et):
Reference	d to:	(PVC)	Grade	D.O. Meter (if	req'd):	YSI HACH
	Well Diamet	er	Multiplier 1		Multiplier 1.02	
	3*		0.37	6"	1.47	
n . Make	4*	D-:1	0.65		us ² + 0.163	
Purge Metho		Bailer sposable Bail	ler	Sampling Method:	Bailer Poisposable Bailer	
•	D.	Middleburg			Extraction Port	
	≯ Elec	ctric Submers	ible	Other:		
	E	xtraction Pun	ıp			
1	Other:					
	7.	7	x 3	= -	23.1 Gals.	
	1 Case Volu	ıme (Gals.)	Specified Vo	lumes Cal	culated Volume	
Time	Temp (°F)	pН	Cond.	Turbidity	Gals. Removed	Observations
はに	69.7	6.0	744	22	8	ODOR
1413	69.2	6.0	747	. 27	16	
1415	69.0	6.0	741	19	24	
Did well o	lewater?	Yes (No	Gallons actuall	y evacuated:	之4
Sampling	Time:	14:19		Sampling Date	: 7-19-	-99
Sample I.I	D.: [2]	ひ-2		Laboratory:	Sequoia	Other
Analyzed	for: TPH-	G BTEX	мтве трн-D	Other:		
D.O. (if re	eq'd):		Pre-purge:	mâ\r.	Post-purge:	mg _/
O.R.P. (if	req'd):		Pre-purge:	mV	Post-purge:	m\

Project #:	990	719 F	2	Job# 7-	0235		<u>. </u>
Sampler:	Mike	<u> 5</u>		Date: 7-/	9-99		· · · · · · · · · · · · · · · · · · ·
Well I.D.	: RW	-3A		Well Diameter	: 2 3 4	68_	
Total We	ll Depth:	21.14	ł ·	Depth to Wate	r: 11.75		
Depth to	Free Produ	ıct:		Thickness of F	ree Product (fe	et):	
Reference	ed to:	(PVC)	Grade	D.O. Meter (if	req'd):	YSI ḤAC	CH
	Well Diamet	ter .			Multiplier		
	2"		0.16	5*	1.02		
	3" 4"		0.37 0.65	6" Other radi	1.47 ius ² * 0.163		
	L		0,05				
Purge Metho		Bailer		Sampling Method:	4		
	D	isposable Bai	ler		Oisposable Bailer		
	• -	Middleburg			Extraction Port		
	-	ctric Submers		Other:			
	E	xtraction Pun	ıp				
	Other:						
•	6	1	_v 3	1	18.3 Gals	f	
	·		^		culated Volume		
	I Case voi	ume (Gals.)	Specified Vo	olumes Car	cutated volume		
Time	Temp (°F)	pН	Cond.	Turbidity	Gals. Removed	Observat	ions
1429	66.9	6.4	933	41	7	OCOL.	
1431	67.3	6.5	928	7 9	14		
1432	67.1	6.5	971	40	19		
		7,00					
Did well	dewater?	Yes 7	No) #	Gallons actuall	ly evacuated:	19	
					<u> </u>		
Sampling	Time:	1437		Sampling Date	: 7-19-	- 99	
Sample I.	D.: 714	1-3A	<u> </u>	Laboratory:	Sequoia	Other	
Analyzed	for: TPH-	G BTEX	мтве трн-D	Other:			
D.O. (if re	eq'd):		Pre-purge:	mg/ _L	Post-purge:		mg/L
O.R.P. (if	req'd):		Pre-purge:	mV	Post-purge:		mV

ATTACHMENT B FIELD DATA SHEETS

ATTACHMENT C

LABORATORY ANALYSIS REPORT AND CHAIN OF CUSTODY RECORD



SEP 03 1999

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

שו עובופיר וו

September 2, 1999

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

RE: Exxon 7-0235/M907740

Dear Mark Dockum

Enclosed are the results of analyses for sample(s) received by the laboratory on July 20, 1999. If you have any questions concerning this report, please feel free to contact me.

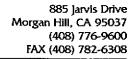
Please note this report was revised on 9/2/99 to revise the sampling date.

Sincerely,

Ron Chew Project Manager

CA ELAP Certificate Number 1210

REISSUED





vironmental Resolutions (Exxon)
73 Digital Drive, Suite 100

vato, CA 94949

Project: Exxon
Project Number: 7-0235

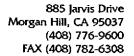
Sampled: 7/19/99 Received: 7/20/99

Project Manager: Mark Dockum

Reported: 9/2/99

ANALYTICAL REPORT FOR M907740

mple Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW-6B	M907740-01	Water	7/19/99
ж w-6H	M907740-02	Water	7/19/99
W -6I	M907740-03	Water	7/19/99
RW-2	M907740-04	Water	7/19/99
V-3A	M907740-05	Water	7/19/99





nvironmental Resolutions (Exxon) 73 Digital Drive, Suite 100 Novato, CA 94949 Project Number: 7-0235
Project Manager: Mark Dockum

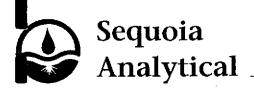
Sampled: 7/19/99 Received: 7/20/99 Reported: 9/2/99

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Morgan Hill

	Batch	Date	Date	Surrogate	Reporting	·		
nalyte	Number	Prepared	Analyzed	Limits	Limit	Result	Units	Notes
L.,	•		3.600 <i>57</i>	40.01			<u>Water</u>	
<u>W-6B</u>	000000	T (0.2 /0.0	M90774	<u> 10-01</u>	50.0	ND	ug/l	
argeable Hydrocarbons	9070796	7/23/99	7/23/99		0.500	ND	я пВл	
enzene	11	**	 H		0.500	ND	11	
pluene	"	11	" #		0.500	ND	11	
hylbenzene	"	**	17		0.500	ND	19	
ylenes (total)		**	., H		2.50	ND ND	**	
ethyl tert-butyl ether	***************************************		<u>"</u>	70 0 120	2.30	106	%	
rrogate: a,a,a-Trifluorotoluene	n	"	"	70.0-130		100		
<u>1W-6H</u>			M9077	<u>40-02</u> .			<u>Water</u>	
nrgeable Hydrocarbons	9070796	7/23/99	7/23/99		2000	ND	ug/l	1
enzene	n	n	TI .		20.0	732	*	
oluene	н	n	н		20.0	ND	Ħ	
thylbenzene	**	.	*		20.0	ND	14	
ylenes (total)	91	**	**		20.0	ND	H	
ethyl tert-butyl ether	#1	H	H		100	6920	Н	
urrogate: a,a,a-Trifluorotoluene	ft.	И	н	70.0-130		85.0	%	
W-61			M9077	<u>40-03</u>			<u>Water</u>	
urgeable Hydrocarbons	9070796	7/23/99	7/23/99		50.0	281	ug/l	2
senzene	n		**		0.500	35.4	**	
bluene	**	м	Ħ		0.500	9.10	er .	
hylbenzene	ır	Ħ	**		0.500	7.40	*	
ylenes (total)	н	17	11		0.500	30.7		
Lethyl tert-butyl ether	н	Ħ	er		2.50	17.6	H	
rrogate: a,a,a-Trifluorotoluene	н	н	п	70.0-130		105	%	
RW-2			M9077	40-04			<u>Water</u>	
urgeable Hydrocarbons	9070796	7/23/99	7/23/99		200	1980	ug/l	3
enzene	#	n	н		2.00	44.0	n	
oluene	н		н		2.00	4.16	**	
<u>Cthylbenzene</u>	**	н	н		2.00	22.3	*	
vienes (total)	H	H			2.00	11.6	н	
fethyl tert-butyl ether	17	**	#		10.0	160	n	
jurrogate: a,a,a-Trifluorotoluene	rt	п	,,	70.0-130		74.0	%	
W-3A			M9077	40-05			<u>Water</u>	i
urgeable Hydrocarbons	9070796	7/23/99	7/23/99		500	989	ug/l	1
Benzene	H 7010170	1123177	11 22 1 7 3		5.00	393	# -	
oluene	Ħ		H		5.00	6.40	н	
chylbenzene	11	**	H		5.00	5.70	71	
BLH T I DCHACHC					5.00	15.0	11	

quoia Analytical - Morgan Hill

*Refer to end of report for text of notes and definitions.



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

Environmental Resolutions (Exxon)

Project: Exxon
Project Number: 7-0235

Sampled: 7/19/99 Received: 7/20/99

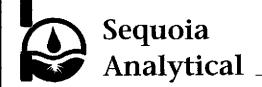
73 Digital Drive, Suite 100 vato, CA 94949

Project Number: 7-0235
Project Manager: Mark Dockum

Reported: 9/2/99

Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
V-3A (continued)			<u>M9077</u>	40 <u>-05</u>	2.52	16.4	Water	
Methyl tert-butyl ether	9070796	7/23/99	7/23/99		2.50	16.4	ug/l	
Surrogate: a,a,a-Trifluorotoluene	N	"	"	70.0-130		77.0	%	•



Avironmental Resolutions (Exxon)
73 Digital Drive, Suite 100

vato, CA 94949

Project Number: 7-0235
Project Manager: Mark Dockum

Sampled: 7/19/99 Received: 7/20/99 Reported: 9/2/99

in the constant of the constan	ide iekatkome P	rong of the		eand whi.	is weigh The	Kariory Paragrams	(Chiere			("
	Date	Spike	Sample	QC		Reporting Limit	Recov	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit		Notes*
				-						
tch: 9070796	Date Prepa	red: 7/23/9	<u> </u>		Extra	ction Method: EP	A 5030B	[P/T]		
Blank	9070796-B	LK1				•				
Purgeable Hydrocarbons	7/23/99			ND	ug/l	50.0				
nzene	н			ND	#	0,500				
luene	н			ND	Ħ	0.500				
Ethylbenzene	Ħ			ND	17	0.500				
Welenes (total)	н			ND	#	0.500				
thyl tert-butyl ether	н			ND	#	2.50				
surrogate: a,a,a-Trifluorotoluene	н	10.0	· · · · · · · · · · · · · · · · · · ·	10.2	п	70.0-130	102			
<u> </u>	9070796-B	S1				•				
rgeable Hydrocarbons	7/23/99	250		264	ug/l	70.0-130	106			
Surrogate: a,a,a-Trifluorotoluene	н	10.0		9.90	n	70.0-130	99.0			
atrix Spike	9070796-M	S1 M	907740-01							
rgeable Hydrocarbons	7/23/99	250	ND	288	ug/l	60.0-140	115			
Surrogate: a,a,a-Trifluorotoluene	п	10.0		9.19	n	70.0-130	91.9			
atrix Spike <u>Dup</u>	9070796-M	SD1 M	907740-01							
Purgeable Hydrocarbons	7/23/99	250	ND	249	ug/l	60.0-140	99.6	25.0	14.4	
Surrogate: a,a,a-Trifluorotoluene	n	10.0		8.24	"	70.0-130	82.4			



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

vironmental Resolutions (Exxon)

73 Digital Drive, Suite 100

ovato, CA 94949

Project: Exxon

Project Number: 7-0235

Project Manager: Mark Dockum

Sampled: 7/19/99

Received: 7/20/99

Reported: 9/2/99

Notes and Definitions

Note

Chromatogram Pattern: Unidentified Hydrocarbons C6-C12

Chromatogram Pattern: Gasoline C6-C12

Chromatogram Pattern: Weathered Gasoline C6-C12

Analyte DETECTED

Analyte NOT DETECTED at or above the reporting limit

Not Reported

Sample results reported on a dry weight basis

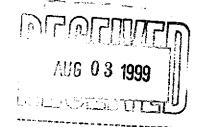
Recovery

Relative Percent Difference

quoia Analytical - Morgan Hill



August 3, 1999



Mark Dockum ERI 74 Digital Dr. Suite 100 Novato, CA 94949

RE: Exxon/P907550

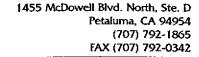
Dear Mark Dockum:

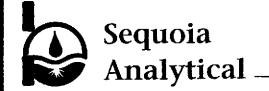
Enclosed are the results of analyses for sample(s) received by the laboratory on July 29, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matt Sakai Project Manager

CA ELAP Certificate Number I-2374





74 Digital Dr. Suite 100 Novato, CA 94949

Project: Exxon

Project Manager: Mark Dockum

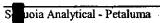
Project Number: 990719F2/7-0235

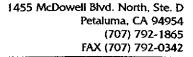
Sampled: 7/19/99 Received: 7/29/99

Reported: 8/3/99

ANALYTICAL REPORT FOR P907550

S pple Description	Laboratory Sample Number	Sample Matrix	Date Sampled
МЖ-6Н	P907550-01	Water	7/19/99
R2	P907550-02	Water	7/19/99







RI Project: Exxon Sampled: 7/19/99
74 Digital Dr. Suite 100 Project Number: 990719F2/7-0235 Received: 7/29/99
Novato, CA 94949 Project Manager: Mark Dockum Reported: 8/3/99

ample Description:

Laboratory Sample Number:

MW-6H P907550-01

	Batch	Date	Date	Specific Method/	Reporting			
Analyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*

Sequoia Analytical - Petaluma

olatile Organic Compounds by EPA Method 8260B

 Methyl tert-butyl ether
 9070507
 8/2/99
 8/2/99
 100
 8520
 ug/l

 Surrogate: Dibromofluoromethane
 "
 "
 86.0-118
 100
 %



1455 McDowell Blvd. North, Ste. D Petaluma, CA 94954 (707) 792-1865 FAX (707) 792-0342

 RI
 Project:
 Exxon
 Sampled:
 7/19/99

 74 Digital Dr. Suite 100
 Project Number:
 990719F2/7-0235
 Received:
 7/29/99

 Novato, CA 94949
 Project Manager:
 Mark Dockum
 Reported:
 8/3/99

ample Description:

Laboratory Sample Number:

RW-2

P907550-02

Number Prepared Analyzed Surrogate Limits Limit Result Uni		Batch	Date	Date	Specific Method/	Reporting			
	nalyte	Number	Prepared	Analyzed	Surrogate Limits	Limit	Result	Units	Notes*

Sequoia Analytical - Petaluma

olatile Organic Compounds by EPA Method 8260B

 Methyl tert-butyl ether
 9070507
 8/2/99
 8/2/99
 12.5
 499
 ug/l

 Surrogate: Dibromofluoromethane
 "
 "
 86.0-118
 104
 %

quoia Analytical - Petaluma

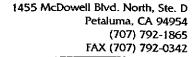
*Refer to end of report for text of notes and definitions.

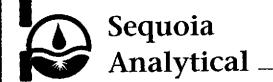


				
RI	Project:	Exxon	Sampled: 7/19/99	
74 Digital Dr. Suite 100	Project Number:	990719F2/7-0235	Received: 7/29/99	
Novato, CA 94949	Project Manager:	Mark Dockum	Reported: 8/3/99	
• • • • • • • • • • • • • • • • • • • •				

Volatile Organic Compounds by EPA Method 8260B/Quality Control Sequena Analytical a Petationa

	Date	Spike	Sample	QC		Reporting Limit	Recov.	RPD	RPD	
Analyte	Analyzed	Level	Result	Result	Units	Recov. Limits	%	Limit	<u>%</u>	Notes*
atch: 9070507	Date Prepa	red: 7/26/9	<u>99</u>		Extrac	aters				
lank	9070507-BI	L K1	•					•		
Methyl tert-butyl ether	7/26/99			ND	ug/l	0.500				
Surrogate: Dibromofluoromethane	"	5.00		5.02		86.0-118	100			· ·
<u>Plank</u>	9070507-BI	L K2								
Methyl tert-butyl ether	8/2/99			ND	ug/l	0.500				
urrogate: Dibromofluoromethane	"	5.00		5.08	"	86.0-118	102			
<u>LCS</u>	9070507-BS	<u> </u>								
Methyl tert-butyl ether	7/26/99	5.00		4.73	ug/l	72.7-119	94.6			
rrogate: Dibromofluoromethane	#	5.00		5.03	"	86.0-118	101			
LCS	9070507-BS	<u>S2</u>								
ethyl tert-butyl ether	8/2/99	5.00		4.84	ug/l	72.7-119	96.8			
irrogate: Dibromofluoromethane	н	5.00		5.02	"	86.0-118	100			
Matrix Spike	9070507-M	<u>S1</u> P	907370-05							
ethyl tert-butyl ether	7/26/99	5.00	ND	4.99	ug/l	72.7-119	99.8			
errogate: Dibromofluoromethane	"	5.00		5.15	#	86.0-118	103			
Matrix Spike Dup	9070507-M	SD1 P	907370-05							
ethyl tert-butyl ether	7/26/99	5.00	ND	4.97	ug/l	72.7-119	99.4	20.0	0.402	
surrogate: Dibromofluoromethane	н	5.00		5.24	"	86.0-118	105			





Notes and Definitions

Note

STOTE A JULIUS T

Analyte DETECTED

Analyte NOT DETECTED at or above the reporting limit

Not Reported

Sample results reported on a dry weight basis

cov. Recovery

RPD Relative Percent Difference

quoia Analytical - Petaluma



Sequoia Analytical 690 Chesapeake Dr. Redwood City, CA 94063 (650) 364-9600 • FAX (650) 364-9233

EXXON COMPANY, U.S.A.

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

Consultant's Name:	ERI	EXX	on			_					Page _	_ of	- Outeland		
Address: 74 Digital Dr. Suite G. Novato, CA 94949										Site Location: 2225 Telegraph Are					
Project #: 990719 FZ					Consultant Project #: 2229						Consultant Work Release #: 19900939				
Project Contact: Mark Dockum.					Phone #: (4/5) 382-599/						Laboratory Work Release #:				
EXXON Contact: Marla Guensler-					Phone #: (925) 246 - 879 61						EXXON RAS #: 7-0235				
Sampled by (print): Wike Stuart					Sampler's Signature: M								•		
Shipment Method:					Air Bill #:										
TAT: 0 24 hr 0 48 hr 0 72 hr 0 96 hr 0 Standard (10 day)								ANALYS	IS REQUIRED						
Sample Description	Collection Date	Collection Time	Matrix Soll/Water	r/Air	Prsv	# of Cont.	Sequola's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	MTBE (BOLD)		Temperature: inbound Seal: Yes No Outhound Seal: Yes No		
MW-6B	7-19-99	1327	w		ST ST	3		X			メ	,			
MM - 6H		1345						X			×	*	CONFIRM MITTER		
MM-91 V		1404			_			X			X		By 8260 A		
2m-2		1419						X			X_	L	jeil mubh		
RW-3A		1437]				1 1			×		NO WELL		
	V	•	4		₩	\checkmark						R	w-2:		
		-													
						_						-			
RELINQUISHED BY AFFICIATION DE			Date	9	7	ïme	ACCEPTED / AFFILIAT			ION	Date	Time	Additional Comments		
m / 20			2-80-6	92_	Ip.	.40	quet	•	7/20/9	1040					
							al s	7	27		1/29	1500	: : 174		