ExxonMobil

Environmental Services Company

4096 Piedmont Avenue #194
Oakland, CA 94611
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Jennifer C. Sedlachek

Project Manager

ExonMobil

August 1, 2008

Mr. Jerry T. Wickham Alameda County Health Care Services Agency 1131 Harbor Bay Parkway Alameda, California 94502-6577 **RECEIVED**

2:16 pm, Aug 01, 2008

Alameda County Environmental Health

Subject:

Fuel Leak Investigation Site No. RO0002635

Former Exxon RAS #74121, 10605 Foothill Boulevard, Oakland, California

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Report of Groundwater Monitoring, Second Quarter 2008* for the above-referenced site. The report, prepared by ETIC Engineering, Inc. of Pleasant Hill, California, details the results of the June 2008 sampling event.

Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached report is true and correct.

If you have any questions or comments, please contact me at 510.547.8196.

Sincerely,

Jennifer C. Sedlachek

Sedlollell

Project Manager

Attachment: ETIC Groundwater Monitoring Report dated August 2008

c: w/ attachment:

Mr. Ken Phares - MacArthur Boulevard Associates, Oakland, California

Mr. Peter McIntyre - AEI Consultants

c: w/o attachment:

Mr. Bryan Campbell - ETIC Engineering, Inc.



Report of Groundwater Monitoring Second Quarter 2008

Former Exxon Retail Site 74121 10605 Foothill Boulevard Oakland, California

Prepared for

ExxonMobil Oil Corporation

Prepared by

ETIC Engineering, Inc. 2285 Morello Avenue Pleasant Hill, California 94523 (925) 602-4710

K. Erik Appel P.G. #8092 Senior Project Geologist

SITE CONTACTS

Site Name: Former Exxon Retail Site 74121

Site Address: . 10605 Foothill Boulevard

Oakland, California

ExxonMobil Project Manager: Jennifer C. Sedlachek

ExxonMobil Environmental Services Company

4096 Piedmont Avenue #194 Oakland, California 94611

(510) 547-8196

Consultant to ExxonMobil: ETIC Engineering, Inc.

2285 Morello Avenue

Pleasant Hill, California 94523

(925) 602-4710

ETIC Project Manager: K. Erik Appel

Regulatory Oversight: Jerry T. Wickham

Alameda County Health Care Services Agency

Environmental Health Services 1131 Harbor Bay Parkway

Alameda, California 94502-6577

(510) 567-6765

INTRODUCTION

ETIC Engineering, Inc. has prepared this quarterly groundwater monitoring report for ExxonMobil Environmental Services Company on behalf of ExxonMobil Oil Corporation for former Exxon Retail Site 74121. This report presents the results for the most recent groundwater monitoring conducted at the site and summarizes recent site activities. This report covers site activities from 19 March 2008, the date of the previous monitoring event, until 11 June 2008, the date of the most recent quarterly monitoring event. Groundwater monitoring results, well construction details, and a groundwater monitoring plan are provided in the attached figures and tables. Groundwater monitoring protocols, field data, and analytical results are provided in the attached appendixes.

GENERAL SITE INFORMATION

Site name: Former Exxon Retail Site 74121

Site address: 10605 Foothill Boulevard, Oakland, California

Current property owner: MacArthur Boulevard Associates

Current site use: Landscaped area

Current phase of project: Groundwater monitoring

Tanks at site: Underground storage tanks removed in 1981 or 1982

Number of wells: 4 (4 onsite, 0 offsite)

GROUNDWATER MONITORING SUMMARY

Gauging and sampling date: 11 June 2008

Wells gauged and sampled: MW1, MW2, MW3, MW5

Wells gauged only:

Groundwater flow direction:

North
Groundwater gradient:

Well screens submerged:

None

Well screens not submerged: MW1, MW2, MW3, MW5
Liquid-phase hydrocarbons: Not observed or detected

Laboratory: TestAmerica, Inc., Morgan Hill, California

Analyses performed:

Total Petroleum Hydrocarbons as gasoline by EPA Method 8015B

Total Petroleum Hydrocarbons as diesel by EPA Method 8015B

• Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8021B

• Methyl tertiary butyl ether, ethyl tertiary butyl ether, tertiary amyl methyl ether, tertiary butyl alcohol, diisopropyl ether, 1,2-dibromoethane, and 1,2-dichloroethane by EPA Method 8260B

ADDITIONAL ACTIVITIES PERFORMED

None.

WORK PROPOSED FOR NEXT QUARTER

Groundwater will be monitored in accordance with the attached groundwater monitoring plan.

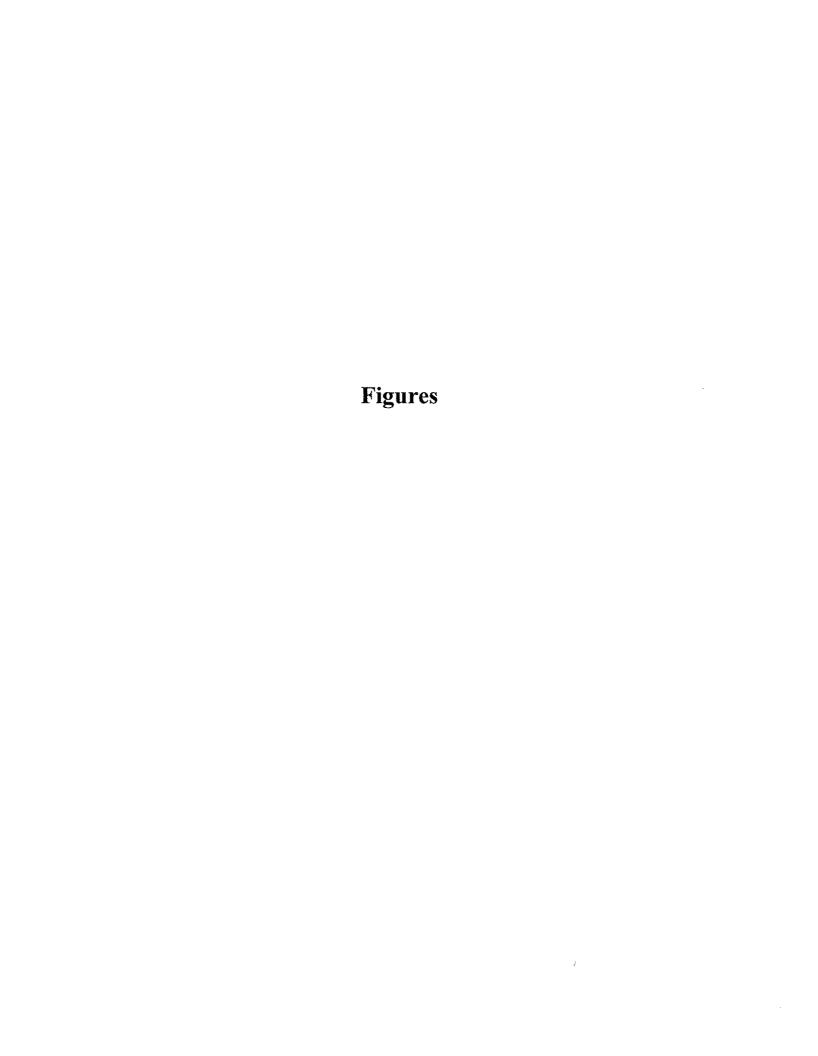
Attachments:

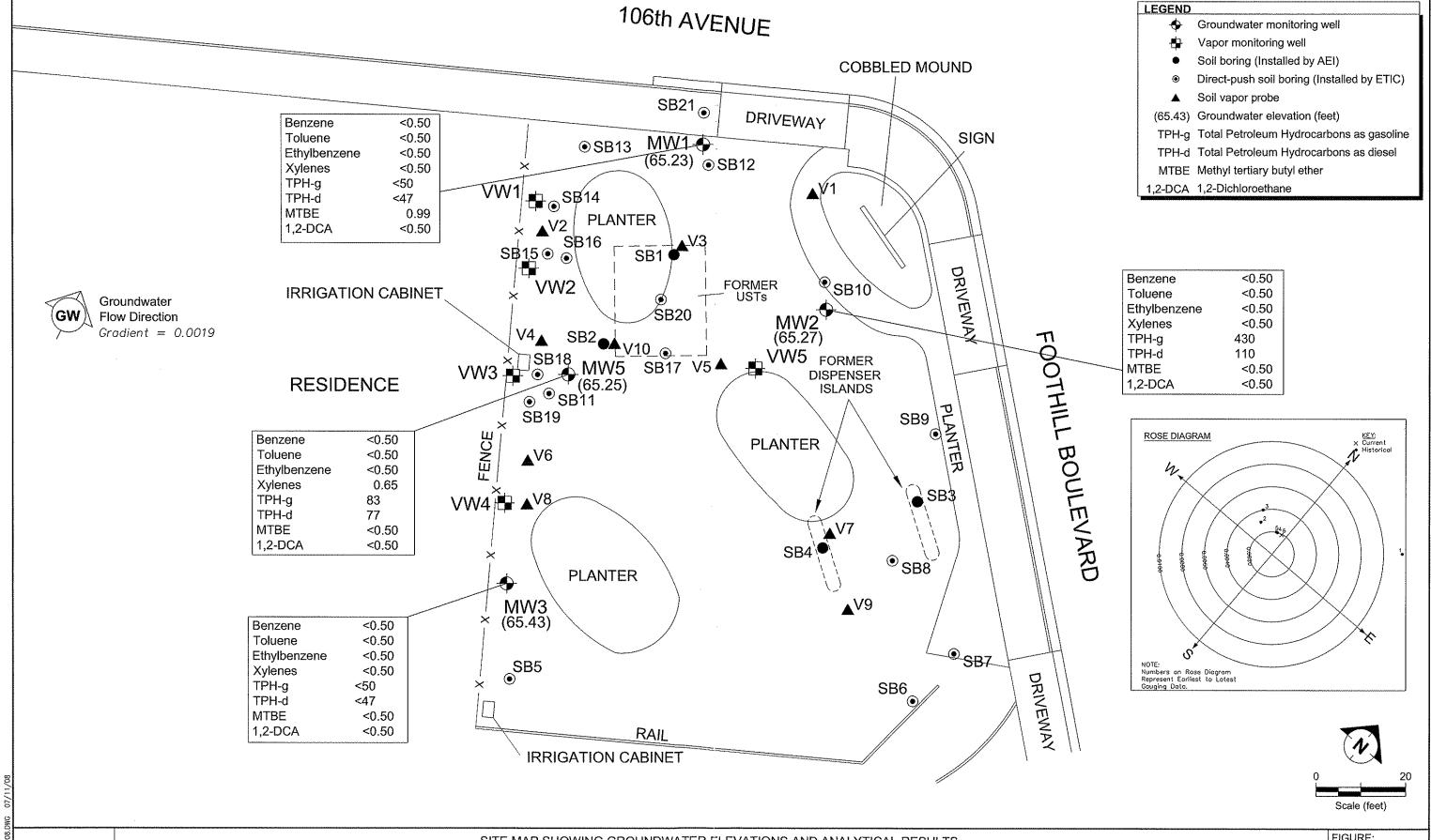
Figure 1: Site Map Showing Groundwater Elevations and Analytical Results

Table 1: Well Construction DetailsTable 2: Groundwater Monitoring DataTable 3: Groundwater Monitoring Plan

Appendix A: Field Protocols Appendix B: Field Documents

Appendix C: Laboratory Analytical Reports and Chain-of-Custody Documentation





SITE MAP SHOWING GROUNDWATER ELEVATIONS AND ANALYTICAL RESULTS FORMER EXXON RS 74121 10605 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA 11 JUNE 2008

FIGURE:



TABLE 1 WELL CONSTRUCTION DETAILS, FORMER EXXON RS 74121, 10605 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

Well Number		Well Installation Date	Elevation TOC (feet)	Casing Material	Total Depth (feet)	Well Depth (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (feet)	Filter Pack Material
MWI	a	01/23/07	82.47	PVC	26.5	25	8	2	10 - 25	0.010	8 - 25	#2/12 Sand
MW2	a	01/23/07	84.40	PVC	26.5	25	8	2	10 - 25	0.010	8 - 25	#2/12 Sand
MW3	a	01/24/07	83.25	PVC	26.5	25	8	2	10 - 25	0.010	8 - 25	#2/12 Sand
MW5	a	01/23/07	82.65	PVC	26.5	25	8	2	10 - 25	0.010	8 - 25	#2/12 Sand
VW1	a	01/22/07	****	SS	6	6	6	0.125	5.25 - 5.75	0.010	5 - 6	#2/12 Sand
VW2	a	01/22/07		SS	6	6	6	0.125	5.25 - 5.75	0.010	5 - 6	#2/12 Sand
VW3	a	01/22/07		SS	6	6	6	0.125	5.25 - 5.75	0.010	5 - 6	#2/12 Sand
VW4	а	01/22/07		SS	6	6	6	0.125	5.25 - 5.75	0.010	5 - 6	#2/12 Sand
VW5	a	01/22/07		SS	6	6	6	0.125	5.25 - 5.75	0.010	5 - 6	#2/12 Sand

Notes:

a Well surveyed on 12 March 2007 by Morrow Surveying.

PVC Polyvinyl chloride. SS Stainless steel. TOC Top of casing.

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON RETAIL SITE 74121, 10605 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

		Top of Casing	Depth to	Groundwater	LPH						Conce	entration (μg/	L)					
Well ID	Date	Elevation (feet)	Water (feet)	Elevation (feet)	Thickness (feet)	Benzene	Toluene	Ethyl- benzene	Xylenes	ТРН-д	TPH-d	MTBE	TBA	DIPE	ETBE	1,2-DCA	TAME	EDB
MWI	03/08/07	82.47	15.10	67.37	0.00	<1.00	1.21	<1.00	<3.00	440	119	1.91	<10.0	<0.500	<0.500	< 0.500	0.560	<0.500
MW1	06/08/07	82.47	16.47	66.00	0.00	< 0.50	< 0.50	< 0.50	< 0.50	127	<47.6	0.880	$<10.0^{a,b}$	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MWI	09/06/07	82.47	17.47	65.00	0.00	< 0.50	< 0.50	< 0.50	< 0.50	78.0	<47.2	0.590	$<10.0^{a,b}$	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MWI	12/03/07	82.47	18.10	64.37	0.00	< 0.50	< 0.50	< 0.50	< 0.50	<50	<47	< 0.50	<20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
MWI	03/19/08	82.47	16.20	66.27	0.00	< 0.50	< 0.50	< 0.50	< 0.50	51.3	61 ^e	3.08	<10.0	< 0.500	< 0.500	< 0.500	0.930	<0.500
MW1	06/11/08	82.47	17.24	65.23	0.00	< 0.50	<0.50	< 0.50	< 0.50	<50	<47	0.99	<20	< 0.50	<0.50	< 0.50	<0.50	<0.50
MW2	03/08/07	84.40	16.97	67.43	0.00	1.33	3.52	2.41	<3.00	1,620	550	< 0.500	<10.0	<0.500	< 0.500	< 0.500	< 0.500	<0.500
MW2	06/08/07	84.40	18.34	66.06	0.00	21.8	2.45	0.66	< 0.50	2,120	395	< 0.500	10.0°	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW2	09/06/07	84.40	19.33	65.07	0.00	4.66	0.70	< 0.50	1.25	470	208	< 0.500	<10.0 ^{a,c}	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW2	12/03/07	84.40	19.97	64.43	0.00	22 ^d	< 0.50	< 0.50	< 0.50	560	120 ^e	< 0.50	<20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
MW2	03/19/08	84.40	18.07	66.33	0.00	5.33	< 0.50	< 0.50	0.82	630	200°	< 0.500	<10.0	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW2	06/11/08	84.40	19.13	65.27	0.00	< 0.50	<0.50	<0.50	<0.50	430	110°	<0.50	<20	< 0.50	<0.50	< 0.50	<0.50	<0.50
MW3	03/08/07	83.25	15.49	67.76	0.00	<1.00	<1.00	<1.00	<3.00	<100	52.9	<0.500	<10.0	< 0.500	<0.500	< 0.500	< 0.500	<0.500
MW3	06/08/07	83.25	17.02	66.23	0.00	< 0.50	< 0.50	<0.50	< 0.50	<50.0	<47.6	< 0.500	<10.0 ^{a,b}	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW3	09/06/07	83.25	18.07	65.18	0.00	<0.50	<0.50	<0.50	<0.50	<50.0	<47.2	< 0.500	<10.0 ^{a,b}	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW3	12/03/07	83.25	18.69	64.56	0.00	< 0.50	< 0.50	< 0.50	<0.50	<50	<47	< 0.50	<20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
MW3	03/19/08	83.25	16.79	66.46	0.00	< 0.50	< 0.50	<0.50	< 0.50	<50.0	<47	< 0.500	<10.0	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW3	06/11/08	83.25	17.82	65.43	0.00	<0.50	< 0.50	< 0.50	<0.50	<50	<47	<0.50	<20	<0.50	< 0.50	< 0.50	<0.50	<0.50
MW5	03/08/07	82.65	14.31	68.34	0.00	<1.00	<1.00	<1.00	<3.00	187	59.2	<0.500	<10.0	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW5	06/08/07	82.65	16.64	66.01	0.00	4.38	0.72	< 0.50	< 0.50	780	90.3	< 0.500	$<10.0^{a.b}$	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW5	09/06/07	82.65	17.62	65.03	0.00	< 0.50	< 0.50	< 0.50	< 0.50	<50.0	121	< 0.500	$<10.0^{a,b}$	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW5	12/03/07	82.65	18.27	64.38	0.00	< 0.50	< 0.50	< 0.50	< 0.50	100	65°	< 0.50	<20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
MW5	03/19/08	82.65	16.37	66.28	0.00	0.69	< 0.50	<0.50	0.87	237	110 ^e	<0.500	<10.0	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW5	06/11/08	82.65	17.40	65.25	0.00	<0.50	<0.50	< 0.50	0.65	83	77°	<0.50	<20	<0.50	< 0.50	<0.50	<0.50	<0.50

MTBE analyzed by EPA Method 8260B unless otherwise indicated. Notes:

1,2-DCA 1,2-Dichloroethane. DIPE Diisopropyl ether. EDB 1,2-Dibromoethane. Ethyl tertiary butyl ether. ETBE Methyl tertiary butyl ether. MTBE TAME Tertiary amyl methyl ether.

TBA Tertiary butyl alcohol.

TPH-d Total Petroleum Hydrocarbons as diesel analyzed by EPA Method 8015B.

Calibration verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.

Laboratory control sample and/or laboratory control sample duplicate recovery was above the acceptance limits. Analyte not detected, data not impacted.

Initial analysis within holding time. Reanalysis for the required dilution or confirmation was past holding time.

The relative percent difference between the primary and confirmatory analysis exceeded 40%. Per EPA Method 8000B, the higher value was reported.

Does not match typical pattern.

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON RETAIL SITE 74121, 10605 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

		Top of Casing	Depth to	Groundwater	LPH						Conce	entration (µg/I	(ـــــــــــــــــــــــــــــــــــــ					
		Elevation	Water	Elevation	Thickness			Ethyi-									T .) (F	rnn
Well ID	Date	(feet)	(feet)	(feet)	(feet)	Benzene	Toluene	benzene	Xylenes	TPH-g	TPH-d	MTBE	TBA	DIPE	ETBE	1,2-DCA	TAME	EDB_

TPH-g Total Petroleum Hydrocarbons as gasoline analyzed by EPA Method 8015B.

μg/L Micrograms per liter.

GROUNDWATER MONITORING PLAN, FORMER EXXON RS 74121, 10605 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

	Groundwater	Groundwater Sampling and Analysis Frequency							
Well	Gauging	TPH-g, TPH-d, and		Other Oxygenates					
Number	Frequency	BTEX	MTBE	and Additives					
MW1	Q	O	O	O					
MW2	Ò	ò	ò	ò					
MW3	Q	Q	Q	Q					
MW5	Q	Q	Q	Q					
Notes:	* *	es include diisopropyl ether, ter, 1,2-dibromoethane, and 1,2-di	- ·	tertiary amyl methyl ether,					
BTEX	Benzene, toluene, ethyl	benzene, and xylenes.							
MTBE	Methyl tertiary butyl etl	, ·							
Q	Quarterly.								
TPH-g	Total Petroleum Hydro	carbons as gasoline.							
TPH-d	Total Petroleum Hydro	earbons as diesel.							

Appendix A

Field Protocols

PROTOCOLS FOR QUARTERLY GROUNDWATER MONITORING

GROUNDWATER GAUGING

Wells are opened prior to gauging to allow the groundwater level in the wells to equilibrate with atmospheric pressure. The depth to groundwater and depth to liquid-phase hydrocarbons, if present, are then measured to the nearest 0.01 feet using an electronic water level meter or optical interface probe. The measurements are made from a permanent reference point at the top of the well casing. If less than 1 foot of water is measured in a well, the water is bailed from the well and, if the well does not recover, the well is considered "functionally dry." Wells with a sheen or measurable liquid-phase hydrocarbons are generally not purged or sampled.

WELL PURGING

After the wells are gauged, each well is purged of approximately 3 well casing volumes of water to provide representative groundwater samples for analysis. Field parameters of pH, temperature, and electrical conductance are measured during purging to ensure that these parameters have stabilized before groundwater in a well is sampled. Groundwater in each well is purged using an inertial pump (WaTerra), an electric submersible pump, or a bailer. After the well is purged, the water level is checked to ensure that the well has recharged to at least 80 percent of its original water level.

GROUNDWATER SAMPLING

After purging, groundwater in each well is sampled using dedicated tubing and an inertial pump (WaTerra) or a factory-cleaned disposable bailer. Samples from extraction wells are typically collected from sample ports associated with the groundwater remediation system. Samples collected for volatile organic analysis are placed in Teflon septum-sealed 40-milliliter glass vials. Samples collected for diesel analysis are placed in 1-liter amber glass bottles. Each sample bottle is labeled with the site name, well number, date, sampler's initials, and preservative. The samples are placed in a cooler with ice for delivery to a state-certified laboratory. The information for each sample is entered on a chain-of-custody form prior to transport to the laboratory.

Appendix B

Field Documents



MONITORING WELL DATA FORM

Client: Former	Exxon 74121				Date:	16-11-08	
Project Number:	UP4121.1.6				Station Number	: 74121	
Site Location: 10605 Foothil	l Boulevard, C	akland, CA			Samplers: 7	SINDER	
MONITORING WELL NUMBER	DEPTH TO WATER (TOC)FT.	DEPTH TO PRODUCT (TOC)FT.	APPARENT PRODUCT THICKNESS (FT.)	AMOUNT OF PRODUCT REMOVED(L)	MONITORING WELL INTEGRITY	DEPTH TO BOTTOM (TOC)	WELL CASING DIAMETER
MW1	17.24	N.P	0.00	0	,	24.15	2"
MW2	19.13	N.P	0.00	Ø		24.15	2"
MW3	17.82	N.P	B (0 E	O		93.60	g"
MW5	17.40	N.P	د م, و	Ø.		25.46	9''
						25-45	



GROUNDWATER PURGE AND SAMPLE FORM

Project Name:	Еххоп 74121			Well No:	MW-1		Date:	06.1	1 208
Project No:	UP4121.1.6			Personnel:	173	HOER			
GAUGING DAT	-A		······································			·· ·····			
Water Level Me	asuring Method:	WLM / P		Measuring F	Point De	scription: T	ОС		
WELL PURGE	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier Casing Dia	All the Control of the Control	Casing Vol (gal)	ume		Purge ne (gal)
CALCULATION	24.15	17.24) 6.91 Q	0.04 0.16 0.4	1 6 64 1.44	1.10	(= 	3.0	3 I
PURGING DAT	Ά	<u></u>							
Purge Method:	WATERRA / BAI	LER / SUB			Purg	e Rate:	(GPM	
Time	0706	e 708	071c						
Volume Purge (gal)	1,5	3.00	4.50						
Temperature (C)	18.6	18.3	18.2						
pH	6.62	6.78	6.79						
Spec.Cond.(umhos	1156	1146	1143						***************************************
Turbidity/Color	JI TEDEON	HIT FROM	SINT BROWN						
Odor (Y/N)	N	~	N					~~~~	
Casing Volumes	1	2	3						
Dewatered (Y/N)	N	N	N						
Comments/Obse	rvations:								
	· · · · · · · · · · · · · · · · · · ·								
	· — -								
SAMPLING DA Time Sampled:			Approximate Dept	h to Water Du	rina San	onlina: £	£.	(feet)	
Comments:			Approximate Dept	it to viator ba	ining oan	11piiiig. /2	<u> </u>	(1001)	
Sample Number	Number of Containers	Container Type	Preservative	Volume I (mL or	255 Section 2012 (c)	Turbidity/ (Color		alysis thod
Mer-1	-69	Voa	HCL	40 m	(detablication)			entre de la propie	EX, MTBE
MNI	2	AMBERS	NONE	1L					·H-D
Total Purge Vo	lume: 4.5	(gallons)		Disposal:		SYS	STEM		
Weather Condi		· · · · · · · · · · · · · · · · · · ·				BOLTS	\overline{C}	Q 1	N
	ell Box and Casing	g at Time of Samp	oling: 0/4			CAP & LO	ck //	2 /	N
	nditions Requiring		NONE	<u>, </u>		GROUT	- C	Ø /	N
Problems Enco	ountered During Po	urging and Sampl	*************************************			WELL BOX	(. <i>C</i>	2 /	N
Comments:	M Pre-Field Folder\[7412] Purge	Form.xis]Sheet1			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	SECURED	(<u>v) / </u>	N



G:\Projects\74121\Public\QM Pre-Field Folder\[74121 Purge Form.xls]Sheet1

GROUNDWATER PURGE AND SAMPLE FORM

Engineering, Inc MW-2 Date: 06-14-08 Exxon 74121 Well No: Project Name: Project No: UP4121.1.6 Personnel: TSWOR **GAUGING DATA** Water Level Measuring Method: WLM / 🗭 Measuring Point Description: TOC Total Depth Multiplier for Casing Volume Total Purge Depth to Water Water Column WELL PURGE (feet) (feet) (feet) Casing Diameter (gal) Volume (gal) VOLUME CALCULATION 5.62 2.69 0.29 24.75 1913 0.04 0.16 0.64 **PURGING DATA** Purge Method: (WATERRA)/BAILER / SUB Purge Rate: **GPM** a734 0730 4132 Time 2.00 1,00 Volume Purge (gal) 18.0 18.1 18.2 Temperature (C) 6.50 6,50 6.79 pΗ 1011 Spec.Cond.(umhos) Turbidity/Color Odor (Y/N) Casing Volumes 1 2 3 NI Dewatered (Y/N) Comments/Observations: **SAMPLING DATA** Time Sampled: 0740 Approximate Depth to Water During Sampling: $\mathcal{Q}o$ (feet) Comments: Volume Filled Analysis Number of Turbidity/ Color Sample Number Preservative Container Type (mL or L) Method Containers MW.2 HCL. Voa TPH-g, BTEX, MTBE 40 ml **AMBERS** NONE TPH-D 1L MW 2 Disposal: SYSTEM Total Purge Volume: 3. (gallons) **BOLTS** Weather Conditions: OK CAP & LOCK Ν Condition of Well Box and Casing at Time of Sampling: 0X **GROUT** Ν Well Head Conditions Requiring Correction: WELL BOX. Ν Problems Encountered During Purging and Sampling: SECURED Ν Comments:

ETIC ENGINEERING

GROUNDWATER PURGE AND SAMPLE FORM

Engineering, Inc.							
Project Name:	Exxon 74121			Well No: 1	yw.	3 Date:	06-11-0
Project No:	UP4121.1.6			Personnel:	•	TBINDER	
GAUGING DAT	A asuring Method: (WCM / IP		Measuring Po	oint Des	scription: TOC	
WELL PURGE VOLUME	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier f Casing Diam		Casing Volume (gal)	Total Purge Volume (ga
CALCULATION	23.60) 17.82		1 3 4 0.04 0.16 0.64	6	0.92	9-77
PURGING DAT		LER / SUB				Rate:	GPM
Time	0829	0831	# 83 8		Γ		
Volume Purge (gal)		g).07	3.00				
Temperature (C)	18.5	17.8	17.5				
pH	6.83	6.77	6.74				
Spec,Cond.(umhos	1131	1314	1343				
Turbidity/Color	SINTERN	2 H BROWN	NET TOWN				
Odor (Y/N)	N	7	7				:
Casing Volumes	1	2	3			,	
Dewatered (Y/N)	' A	N	Ŋ				
Comments/Obse	rvations:						
	·			***************************************			
SAMPLING DA	TA						
Time Sampled:	0840		Approximate Dept	h to Water Durir	ng Sam	pling: 16.	(feet)
Comments:		, , , , , , , , , , , , , , , , , , ,		<u> </u>		, , , , , , , , , , , , , , , , , , ,	
Sample Number	Number of Containers	Container Type	Preservative	Volume Fil (mL or L		Turbidity/ Color	Analysis Method
MV -3	-6-9	Voa	HCL	40 ml			TPH-g, BTEX, MT
MW.3	2	AMBERS	NONE	1L_			TPH-D
	1		<u> </u>				
Total Purge Vo		(gallons)		Disposal:		SYSTEM	
Weather Condi		a of Time of Com-	slina:			BOLTS (Ø / N
B	ell Box and Casing ditions Requiring					GROUT (7 / N
	ountered During Po		Nonc ing: None			WELL BOX.	Ø / N
Comments:			a. VISME			SECURED	N/G
G:\Projects\74121\Public\Q	M Pre-Field Folder\[74121 Purge	Form.xis]Sheet1)

ETIC ENGINEERING

GROUNDWATER PURGE AND SAMPLE FORM

Project Name:	Exxon 74121		1	Well No:	MW-5	Date:	06-	11-08
Project No:	UP4121.1.6			Personnel:		TE1 NDEF		
GAUGING DAT	A							
	asuring Method:	WLM / 😰		Measuring	Point De	scription: TOC		
WELL PURGE VOLUME	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplie Casing Di		Casing Volume (gal)		Purge ne (gal)
CALCULATION	25.46	17.40) 8.56 (X	1 Ø 0.04 0.16 0	4 6 0.64 1.44	1.28) 3	સ્ક 6
PURGING DAT			, , , , , , , , , , , , , , , , , , , ,		_			
Purge Method:	WATERRA YBAI				Purg	e Rate:	GPM	
Time	0క్రింర	્લ ક	0క్షిల కో					
Volume Purge (gal)	1.50	3.00	4.50					
Temperature (C)	17.5	17.4	17.6					
pH	6.90	6.87	6.85					
Spec:Cond.(umhos	929	925	909					······································
Turbidity/Color	STOTERY	MUTTERY	Y GRAY					
Odor (Y/N)	N	N	N					
Casing Volumes	1	2	3					
Dewatered (Y/N)	٨	N	N					
Comments/Obse	rvations:							
								<u></u>
SAMPLING DA Time Sampled:			Approximate Dept	h to Water D	uring San	nolina: 18 ^	(feet)	
Comments:	03)1-		7 sparozania o ope	110 11401 5	umig our			
				Traces (Section Constitution 1975)	and a constant of the constant of	AND DESCRIPTION OF THE PROPERTY.	Distriction and the second	Language appropriate to the state of the first
Sample Number	Number of Containers	Container Type	Preservative	Volume (mL c		Turbidity/ Color		alysis ethod
MW-5	-6-9	Voa	HCL	40 :	Colorest of recorded and re-		TPH-g, B	ГЕХ, МТВЕ
MW5	2	AMBERS	NONE	1L			TF	PH-D
Total Purge Vo	lume: 45	(gallons)		Disposal:		SYSTEM	1	
Weather Condi	itions: ơK					BOLTS	<u> </u>	N
Condition of W	ell Box and Casin	g at Time of Samp	oling: <u>øk</u>			CAP & LOCK	P /	N
Well Head Cor	nditions Requiring	Correction:	Nales	***********************		GROUT	<u>/ W</u>	N
Problems Enco	ountered During P	urging and Sampl	ing: Non	16		WELL BOX.	<u> </u>	N
Comments:	M Pre-Field Folder\[74121 Purg	e Form.xisjSheet1			······································	SECURED	න /	N

Appendix C

Laboratory Analytical Reports and Chain-of-Custody Documentation



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

26 June, 2008

Erik Appel ETIC Engineering Inc - Pleasant Hill (Exxon) 2285 Morello Avenue Pleasant Hill, CA 94523

RE: Exxon 7-4121 Work Order: MRF0339

Enclosed are the results of analyses for samples received by the laboratory on 06/11/08 19:45. The samples arrived at a temperature of 4° C. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Megan Tran For Tim Rhiney Project Manager

CA ELAP Certificate #1210





ETIC Engineering Inc - Pleasant Hill (Exxon) 2285 Morello Avenue

Project: Exxon 7-4121

Project Number: 7-4121

MRF0339 Reported:

Pleasant Hill CA, 94523

Project Manager: Erik Appel

06/26/08 13:38

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW1	MRF0339-01	Water	06/11/08 07:15	06/11/08 19:45
MW2	MRF0339-02	Water	06/11/08 07:40	06/11/08 19:45
MW3	MRF0339-03	Water	06/11/08 08:40	06/11/08 19:45
MW5	MRF0339-04	Water	06/11/08 08:10	06/11/08 19:45





2285 Morello Avenue Pleasant Hill CA, 94523 Project: Exxon 7-4121

Project Number: 7-4121
Project Manager: Erik Appel

MRF0339 Reported: 06/26/08 13:38

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW1 (MRF0339-01) Water	Sampled: 06/11/08 07:15	Received:	06/11/08	19:45					
Gasoline Range Organics (C4-C	C12) ND	50	ug/l	1	8F16003	06/16/08	06/16/08	EPA 8015B/8021B	
Benzene	ND	0.50	Ħ	+1	H	17	#1	n	
Toluene	ND	0.50		14	н	1)	н	tt	
Ethylbenzene	ND	0.50	**	11	н	49	н	Ħ	
Xylenes (total)	ND	0.50	Ħ	h	н	1)	Ħ	#I	
Surrogate: a,a,a-Trifluorotolue	ne	95 %	85	-120	II .	"	п	"	
Surrogate: 4-Bromofluorobenze	ene	91 %	75	-125	"	n	"	"	
MW2 (MRF0339-02) Water	Sampled: 06/11/08 07:40	Received:	06/11/08	19:45					
Gasoline Range Organics (C4	-C12) 430	50	ug/l	1	8F16003	06/16/08	06/16/08	EPA 8015B/8021B	
Benzene	ND	0.50	12	Ð	Ð	н	17	R	
Toluene	ND	0.50	0	ı	n	н	ti	ц	
Ethylbenzene	ND	0.50	U	**	**	н	0	tł	
Xylenes (total)	ND	0.50	11	(1	t1		1)	· ·	·····
Surrogate: a,a,a-Trifluorotolue	ne	94 %	85	-120	"	o	n	u	
Surrogate: 4-Bromofluorobenze	ene	104 %	75	-125	"	"	"	а	
MW3 (MRF0339-03) Water	Sampled: 06/11/08 08:40	Received:	06/11/08	19:45					
Gasoline Range Organics (C4-0	C12) ND	50	ug/l	1	8F16003	06/16/08	06/16/08	EPA 8015B/8021B	
Benzene	ND	0.50	н	ŧł	tt	Ð	Ħ	Ð	
Toluene	ND	0.50	н	ų	ц	**	н	n	
Ethylbenzene	ND	0.50	tt	tt	tŧ	ţ1	н	Ħ	
Xylenes (total)	ND	0.50	17	tt	tł	+1	н	H	hamilian no d'albanin de la Christia d'anticata d'altre de la
Surrogate: a,a,a-Trifluorotolue	ne	96 %	85	-120	tt	ti	н	п	
Surrogate: 4-Bromofluorobenza	ene	93 %	75	-125	u	tt	11	n	





Project: Exxon 7-4121

2285 Morello Avenue Pleasant Hill CA, 94523 Project Number: 7-4121
Project Manager: Erik Appel

MRF0339 Reported: 06/26/08 13:38

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW5 (MRF0339-04) Water Sample	d: 06/11/08 08:10	Received:	06/11/08 1	19:45					
Gasoline Range Organics (C4-C12)	83	50	ug/l	1	8F16003	06/16/08	06/16/08	EPA 8015B/8021B	
Benzene	ND	0.50	н	н	#1	u	н	h	
Toluene	ND	0.50	н	п	и	19	н	п	
Ethylbenzene	ND	0.50	Ħ	Ħ	Ħ	¥ .	п	н	
Xylenes (total)	0.65	0.50	11	Ð	H	a		Я	
Surrogate: a,a,a-Trifluorotoluene		92 %	85~1	120	"	11	ıı	11	
Surrogate: 4-Bromofluorobenzene		97 %	75-1	125	u	"	"	u	





2285 Morello Avenue Pleasant Hill CA, 94523 Project: Exxon 7-4121

Project Number: 7-4121
Project Manager: Erik Appel

MRF0339 Reported: 06/26/08 13:38

Extractable Hydrocarbons with Silica Gel cleanup by EPA 8015B TestAmerica Morgan Hill

						•		 	
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW1 (MRF0339-01) Water	Sampled: 06/11/08 07:15	Received:	06/11/08	19:45					
Diesel Range Organics (C10-C	28) ND	47	ug/l	1	8F17025	06/17/08	06/20/08	EPA 8015B-SVOA	
Surrogate: n-Octacosane		61 %	40-	-120	"	n	"	и	
MW2 (MRF0339-02) Water	Sampled: 06/11/08 07:40	Received:	06/11/08	19:45					
Diesel Range Organics (C10-C	C28) 110	47	ug/l	1	8F17025	06/17/08	06/20/08	EPA 8015B-SVOA	Q1
Surrogate: n-Octacosane		63 %	40	-120	f#	rr .	"	Ħ	
MW3 (MRF0339-03) Water	Sampled: 06/11/08 08:40	Received:	06/11/08	19:45					
Diesel Range Organics (C10-C	28) ND	47	ug/l	1	8F17025	06/17/08	06/20/08	EPA 8015B-SVOA	
Surrogate: n-Octacosane		50 %	40	-120	11	u .	н	"	
MW5 (MRF0339-04) Water	Sampled: 06/11/08 08:10	Received:	06/11/08	19:45					
Diesel Range Organics (C10-	C28) 77	47	ug/l	1	8F17025	06/17/08	06/20/08	EPA 8015B-SVOA	Q1
Surrogate: n-Octacosane		61 %	40	·120	n	"	11	"	





2285 Morello Avenue Pleasant Hill CA, 94523 Project: Exxon 7-4121

Project Number: 7-4121
Project Manager: Erik Appel

MRF0339 Reported: 06/26/08 13:38

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW1 (MRF0339-01) Water	Sampled: 06/11/08 07:15	Received:	06/11/08	19:45					
tert-Amyl methyl ether	ND	0.50	ug/l	1	8F18002	06/18/08	06/18/08	EPA 8260B	
tert-Butyl alcohol	ND	20	и	0	**	**	11	п	
Di-isopropyl ether	ND	0.50	u	ŧ1	11	0	0	u	
1,2-Dibromoethane (EDB)	ND	0.50	tt .	ti	11	**	tt	Ħ	
1,2-Dichloroethane	ND	0.50	11	ŧI	Ħ	ņ	ţ1	Ħ	
Ethyl tert-butyl ether	ND	0.50	n	ŧ1	H	n	n	17	
Methyl tert-butyl ether	0.99	0.50		e	IP .	Ħ	H	et.	
Surrogate: Dibromofluoromethe	ane	101 %	80-	120	11	"	"	а	
Surrogate: 1,2-Dichloroethane-	·d4	109 %	75-	130	n	n	ır	#	
Surrogate: Toluene-d8		100 %	80-	120	"	u	u	"	
Surrogate: 4-Bromofluorobenze	ene	98 %	70-	120	"	u	u	er	
MW2 (MRF0339-02) Water	Sampled: 06/11/08 07:40	Received:	06/11/08	19:45					
tert-Amyl methyl ether	ND	0.50	ug/l	1	8F18002	06/18/08	06/18/08	EPA 8260B	······
tert-Butyl alcohol	ND	20	н	D.	n	61	ti	11	
Di-isopropyl ether	ND	0.50	п	tr	n	41	et	п	
1,2-Dibromoethane (EDB)	ND	0.50	п	11	n	t†	H	н	
1,2-Dichloroethane	ND	0.50	н	Ð	ŧi	47	Ħ	н	
Ethyl tert-butyl ether	ND	0.50	U	n	#1	Ħ	ų)	Ħ	
Methyl tert-butyl ether	ND	0.50	н	₹1	#	sł.	tt .	н	
Surrogate: Dibromofluoromethe	ane	99 %	80-	120	"	n.	"	"	
Surrogate: 1,2-Dichloroethane-	-d4	106 %	75-	130	n	"	"	n .	
Surrogate: Toluene-d8		103 %	80-	120	"	"	"	"	
Surrogate: 4-Bromofluorobenze	ene	101 %	70-	120	"	"	н	n	





2285 Morello Avenue Pleasant Hill CA, 94523 Project: Exxon 7-4121

Project Number: 7-4121
Project Manager: Erik Appel

MRF0339 Reported: 06/26/08 13:38

Volatile Organic Compounds by EPA Method 8260B TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW3 (MRF0339-03) Water	Sampled: 06/11/08 08:40	Received:	06/11/08 1	9:45					
tert-Amyl methyl ether	ND	0.50	ug/l	1	8F18002	06/18/08	06/18/08	EPA 8260B	
tert-Butyl alcohol	ND	20	W	11	**	**	Ħ	и	
Di-isopropyl ether	ND	0.50	Ħ	11	**	14	И	п	
1,2-Dibromoethane (EDB)	ND	0.50	#	n	Ð	н	ŧŧ	et	
1,2-Dichloroethane	ND	0.50	0	ŧ	Ħ	Ħ	17	tr	
Ethyl tert-butyl ether	ND	0.50	11	#	#1	Ħ	17	tr	
Methyl tert-butyl ether	ND	0.50	0	ħ	11	н		н	
Surrogate: Dibromofluorometh	ane	101 %	80-1	20	"	п	n	n	
Surrogate: 1,2-Dichloroethane	-d4	108 %	75-1	130	n	"	"	n	
Surrogate: Toluene-d8		100 %	80-1	20	"	"	"	#	
Surrogate: 4-Bromofluorobenz	ene	95 %	70-1	120	n	п	"	n	
MW5 (MRF0339-04) Water	Sampled: 06/11/08 08:10	Received:	06/11/08 1	9:45					
tert-Amyl methyl ether	ND	0.50	ug/l	1	8F18002	06/18/08	06/18/08	EPA 8260B	
tert-Butyl alcohol	ND	20	н	ы	u	17	**	49	
Di-isopropyl ether	ND	0.50	n	Ħ	W	0	71	0	
1,2-Dibromoethane (EDB)	ND	0.50	н	R	17	19	**	1)	
1,2-Dichloroethane	ND	0.50	a	ч	R	4F	+1	n	
Ethyl tert-butyl ether	ND	0.50	U	ti	11	46	11	n	
Methyl tert-butyl ether	ND	0.50	II)	R	17	Đ	11	81	
Surrogate: Dibromofluorometh	ane	101 %	80-1	120	и	"	ų	п	
Surrogate: 1,2-Dichloroethane	-d4	109 %	75-1	130	H	"	u	"	
Surrogate: Toluene-d8		101 %	80-1	120	"	n	u	"	
Surrogate: 4-Bromofluorobenz		96 %	70-7		"	"	u	"	





2285 Morello Avenue Pleasant Hill CA, 94523 Project: Exxon 7-4121

Spike

Source

Project Number: 7-4121
Project Manager: Erik Appel

MRF0339 Reported: 06/26/08 13:38

RPD

%REC

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control TestAmerica Morgan Hill

Evaluation

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
······································				20.0.		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				710100
Batch 8F16003 - EPA 5030B [P/T] Blank (8F16003-BLK1)				Prepared -	& Analyz	ed: 06/16/	ng		***************************************	
Gasoline Range Organics (C4-C12)	ND	25	ug/l	Troparcu	oc Anaryz	ca. 00/10/				
Benzene	ND	0.28	0							
Foluene	ND	0.25	17							
Sthylbenzene	ND	0.25	0							
Kylenes (total)	ND	0.37	Ħ							
Surrogate: a,a,a-Trifluorotoluene	59.9		"	60.0		100	85-120			
Surrogate: 4-Bromofluorobenzene	55.0		n	60.0		92	75-125			
CS (8F16003-BS1)				Prepared	& Analyz	ed: 06/16/	08			
3enzene	9,32	0.50	ug/l	10.0	and the same is a second to the same of th	93	70-130	, ,		
oluene	9.33	0.50	ч	10.0		93	70-130			
thylbenzene	8.95	0.50	0	10.0		89	70-130			
(ylenes (total)	27.3	0.50	0	30.0		91	70-130			
Surrogate: a,a,a-Trifluorotoluene	59.9		"	60.0	om helica (moderness) kod nemena a kod neme	100	85-120)
CS (8F16003-BS2)				Prepared	& Analyz	ed: 06/16/	08			
Gasoline Range Organics (C4-C12)	194	50	ug/l	250		78	70-130		inalia da mandi aramma a mana a abi	
urrogate: 4-Bromofluorobenzene	57.4	······································	"	60.0	vandina a sammalar, menansusususus	96	75-125	*****************	······································	
.CS Dup (8F16003-BSD2)				Prepared	& Analyz	ed: 06/16/	08			
Gasoline Range Organics (C4-C12)	208	50	ug/l	250		83	70-130	7	25	
urrogate: 4-Bromofluorobenzene	57.8	omendinen (omendinen och dendelse de brandense andres andres andres	H.	60.0	ar technical delicenter consistent of the consis	96	75-125			
Matrix Spike (8F16003-MS1)	So	urce: MRF03	38-01	Prepared	& Analyz	ed: 06/16/	08			
Gasoline Range Organics (C4-C12)	97.1	50	ug/l	91.0	ND	107	70-130	androdenikalismodernom seu romanikum nes	arma er dominin en selvarrer er doministrar	
Benzene	9.92	0.50	0	10.0	ND	99	70-130			
Foluene	9.92	0.50	I?	10.0	ND	99	70-130			
Sthylbenzene	9.90	0.50	0	10.0	ND	99	70-130			
Xylenes (total)	29.8	0.50	ħ	30.0	ND	99	70-130			
Surrogate: a,a,a-Trifluorotoluene	60.3	e kon mai vol voli se lan sluddolfelendiad fooddalandau	***************************************	60.0	di stara se Aradia e dan an danamana	101	85-120			
Surrogate: 4-Bromofluorobenzene	54.6		"	60.0		91	75-125			





2285 Morello Avenue Pleasant Hill CA, 94523 Project: Exxon 7-4121

Project Number: 7-4121
Project Manager: Erik Appel

MRF0339 Reported: 06/26/08 13:38

Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B - Quality Control TestAmerica Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8F16003 - EPA 5030B [P/T]										
Matrix Spike Dup (8F16003-MSD1)	Sou	rce: MRF03	38-01	Prepared	& Analyze	ed: 06/16/	08			
Gasoline Range Organics (C4-C12)	93.5	50	ug/l	91.0	ND	103	70-130	4	25	
Benzene	9.56	0.50	0	10.0	ND	96	70-130	4	25	
Toluene	9.59	0.50	\$1	10.0	ND	96	70-130	3	25	
Ethylbenzene	9.48	0.50	Ħ	10.0	ND	95	70-130	4	25	
Xylenes (total)	28.9	0,50	tt	30.0	ND	96	70-130	3	25	
Surrogate: a,a,a-Trifluorotoluene	60.2		n	60.0		100	85-120	erretenaliseter errenata estarrare erre		
Surrogate: 4-Bromofluorobenzene	55.0		и	60.0		92	75-125			





2285 Morello Avenue Pleasant Hill CA, 94523 Project: Exxon 7-4121

Project Number: 7-4121
Project Manager: Erik Appel

MRF0339 Reported: 06/26/08 13:38

Extractable Hydrocarbons with Silica Gel cleanup by EPA 8015B - Quality Control TestAmerica Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8F17025 - EPA 3510C										
Blank (8F17025-BLK1)				Prepared:	06/17/08	Analyzeo	1: 06/23/08			
Diesel Range Organics (C10-C28)	ND	25	ug/l				***************************************		and the second s	and the property and the second s
Surrogate: n-Octacosane	26.3	all () h () com le la t-h-t-hala en h-mail () en com h-aa eth.	"	50.0	the desired and the desired and the desired in the second		40-120	ri elektron i elektrono - esi ilmondes e	Shazon Sakin kanasannasin Lisa	ALL ALL AVE STEP SANDLAND
LCS (8F17025-BS1)				Prepared:	06/17/08	Analyzed	1: 06/23/08			
Diesel Range Organics (C10-C28)	323	50	ug/l	500		65	45-120			
Surrogate: n-Octacosane	22.5		"	50.0		45	40-120			
LCS Dup (8F17025-BSD1)				Prepared:	06/17/08	Analyzed	1: 06/23/08			
Diesel Range Organics (C10-C28)	251	50	ug/l	500		50	45-120	25	25	
Surrogate: n-Octacosane	21.4	entidad namod hallen alokokodomien en eksekken	a	50.0	anihanona homalinea a aformanihea hinolarihan (a	43	40-120	e established del del selection de la construction de la construction de la construction de la construction de	00m2 / 1 / APP 1874 APP 1855 18 - SHOP 18 APP 18	ter kin ki firit di fini kun ki ili danad An umusii Ad Ad andan saidal





2285 Morello Avenue Pleasant Hill CA, 94523 Project: Exxon 7-4121

Project Number: 7-4121 Project Manager: Erik Appel MRF0339 Reported: 06/26/08 13:38

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica Morgan Hill

Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8F18002 - EPA 5030B P/T										
Blank (8F18002-BLK1)				Prepared	& Analyzo	ed: 06/18/	08			
tert-Amyl methyl ether	ND	0,25	ug/l			- belook allow his anima was	, , , , , , , , , , , , , , , , , , ,			
tert-Butyl alcohol	ND	10	н							
Di-isopropyl ether	ND	0.25	н							
1,2-Dibromoethane (EDB)	ND	0.25	tt							
,2-Dichloroethane	ND	0.25	ø							
Ethyl tert-butyl ether	ND	0.40	4							
Methyl tert-butyl ether	ND	0.25	R							
Surrogate: Dibromofluoromethane	7.37		<i>"</i>	7.50	An disconnect and the efficiency American Set As and country of	98	80-120	4. 	***************************************	
Surrogate: 1,2-Dichloroethane-d4	7.74		n	7.50		103	75-130			
Surrogate: Toluene-d8	7.47		"	7.50		100	80-120			
urrogate: 4-Bromofluorobenzene	7.08		"	7.50		94	70-120			
LCS (8F18002-BS1)					& Analyzo	ed: 06/18/	08			
ert-Amyl methyl ether	9.83	0.50	ug/l	10.0		98	70-130			
ert-Butyl alcohol	195	20	н	200		98	70-130			
Di-isopropyl ether	10.9	0.50	н	10.0		109	70-130			
,2-Dibromoethane (EDB)	9.88	0.50	ц	10.0		99	70-130			
,2-Dichloroethane	10.3	0.50	n	10.0		103	70-130			
Ethyl tert-butyl ether	10.1	0,50	и	10.0		101	70-130			
Methyl tert-butyl ether	9.83	0.50	ц	10.0		98	70-130			
Surrogate: Dibromofluoromethane	7.66	redefinensettiteliserrent sillenen et delt der den et silles den	II	7.50		102	80-120	od estelestativiti annatica nata		
Surrogate: 1,2-Dichloroethane-d4	7.80		n	7.50		104	75-130			
Surrogate: Toluene-d8	7.53		п	7.50		100	80-120			
Surrogate: 4-Bromofluorobenzene	7.56		n	7.50		101	70-120			
Matrix Spike (8F18002-MS1)	·····	urce: MRF03	362-08	Prepared	& Analyzo	ed: 06/18/	08	erreteierre minirer ennem Luc		
tert-Amyl methyl ether	10.1	0.50	ug/I	10.0	ND	101	70-130			
ert-Butyl alcohol	200	20	**	200	3.27	98	70-130			
Di-isopropyl ether	11.3	0.50	D	10.0	ND	113	70-130			
,2-Dibromoethane (EDB)	9,80	0.50	#	10.0	ND	98	70-130			
1,2-Dichloroethane	10.5	0.50	e	10.0	ND	105	70-130			
Ethyl tert-butyl ether	10.4	0.50	tt	10.0	ND	104	70-130			

TestAmerica Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.





2285 Morello Avenue Pleasant Hill CA, 94523 Project: Exxon 7-4121

Project Number: 7-4121
Project Manager: Erik Appel

MRF0339 Reported: 06/26/08 13:38

Volatile Organic Compounds by EPA Method 8260B - Quality Control TestAmerica Morgan Hill

		Spike	Source		%REC		RPD			
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 8F18002 - EPA 5030B P/T										
Matrix Spike (8F18002-MS1)	Sou	rce: MRF03	62-08	Prepared						
Methyl tert-butyl ether	14.2	0.50	ug/l	10.0	4.35	98	70-130	· · · · · · · · · · · · · · · · · · ·		
Surrogate: Dibromofluoromethane	7.70		n	7.50		103	80-120			the administration and the Common Code of Self and
Surrogate: 1,2-Dichloroethane-d4	7.88		"	7.50		105	75-130			
Surrogate: Toluene-d8	7.56		n	7.50		101	80-120			
Surrogate: 4-Bromofluorobenzene	7.71		"	7.50		103	70-120			
Matrix Spike Dup (8F18002-MSD1)	Sou	rce: MRF03	62-08	Prepared	& Analyze	ed: 06/18/	08			
tert-Amyl methyl ether	10.3	0.50	ug/l	10.0	ND	103	70-130	1	25	
tert-Butyl alcohol	199	20	tt	200	3.27	98	70-130	0.6	25	
Di-isopropyl ether	11,2	0.50	0	10.0	ND	112	70-130	0.4	25	
1,2-Dibromoethane (EDB)	10.1	0.50	0	10.0	ND	101	70-130	3	25	
1,2-Dichloroethane	10.6	0.50	υ	10.0	ND	106	70-130	0.8	25	
Ethyl tert-butyl ether	10.5	0.50	0	10.0	ND	105	70-130	1	25	
Methyl tert-butyl ether	14.6	0.50	n	10.0	4.35	102	70-130	3	25	
Surrogate: Dibromofluoromethane	7.70	<u>, </u>	"	7.50		103	80-120		inerior (il marito o e dall'incompatibility)	
Surrogate: 1,2-Dichloroethane-d4	7.89		"	7.50		105	75-130			
Surrogate: Toluene-d8	7.60		"	7.50		101	80-120			

7.50

7.72

Surrogate: 4-Bromofluorobenzene

103

70-120



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

ETIC Engineering Inc - Pleasant Hill (Exxon)

2285 Morello Avenue

Pleasant Hill CA, 94523

Project: Exxon 7-4121

Project Number: 7-4121
Project Manager: Erik Appel

MRF0339 Reported: 06/26/08 13:38

Notes and Definitions

Q1 Does not match typical pattern

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

0Z

14



Morgan Hill Division 885 Jarvis Drive Morgan Hill, CA 95037 Phone: 408-776-9600 Fax: 408-782-6308

EXonMobil.

Consultant Name:	ETIC E	NGINEE	RING	i												Ţ	ΑA	Acc:	oun	t #:	102	236											
Address:	2285 N	ORELLO	AVE														ŀ	100	ice '	To:	JEN	NIF	ER	SEL)LA(CHE	EK (X	OM	TM)				
Cîty/State/Zip:	PLEAS	ANT HIL	L, CA	. 9452	23												F	₹ер	ort '	To:	eticl	abre	port	s@e	etice	ng.c	<u>om</u>						
ExxonMobil Territory Mgr:	JENNIF	ER SED	LACH	IEK															PC	#:	450	932	059	6									
Consultant Project Mgr:	ERK A	PPEL				Pro	ect	#:_U	P41	21.	1.6						Facility ID # 74121																
Consultant Telephone Number:	925-60	2-4710 E	XT,2	l		Fa	x No	.: <u>9</u> :	25-6	502-	472	:0					Site	e A	ddre	:SS	106	05 (ool	hill	Bou	lleva	ard						
Sampler Name: (Print)		TZI	المساخ	مارە≈	= K	Sin	a _{i/}									C	ity,	Sta	rte, :	Zip	Oak	dan	d, C	alifo	ornia	3							
Sampler Signature:	~~~	<u> 13a</u>	Pro		८,क	16	, , , , , , , , , , , , , , , , , , ,							Reç	julat	ory	Dis	stri	ct (C	A)													
			}		, ,	J		Pi	rese	rvai	tive		T		Ma	ıtrix							Ana	lyze	Fo	r:				1			
MRF0339	Date Sampled	Time Sampled	No. of Containers Shipped	qı	Composite	Field Filtered	, , , , , , , , , , , , , , , , , , , ,	HNO ₃ (Red Label)	NaOH (Orange Label)	H ₂ SO ₄ Plastic (Yellow Label)	H ₂ SO ₄ Glass(Yellow Labei)	None (Black Label)	Other (Specify)	Godmawater	king Water	Studge		Other (specify):	TPH-G BY 8015B	PH-D BY 8015B/3510 *	3TEX 8Y 8021B	ATBE BY 8260B	OXYGENATES BY 8280B **	A VARIATA MANAGAMENTA CONTRACTOR					***************************************	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	TAT	ax Results
Sample ID / Description	ä	#	S	Grab	S	Fie	e l		Rad	S ₂ H	R	Son	Š			Sinc	Soll	ĕ	TPH-C	TPT.	37EX	MTBE	ОХУG							RUS	TAT	STD	a X
MW1	06-11-08	0715	11				х	×					;	ΧĪ				1	х	х	Х	х	X									x	
MW2	{	0740	11				х	X				\exists)	Χ				1		x	Х	Х	Х			Γ		T				x	
MW3	1	0840	11	<u> </u>	-		х	X				7	7;	KT	-			1			-		X		Γ			1				x	· · · · · · · · · · · · · · · · · · ·
MW5	4	0810	11				Х	X)						х	х	Х	Х	Х									x	
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Special Instructions: * USE SILICAGEL CLEANUP F ** OXYGENATES ARE: TBA, D	OR TP		IALY	SIS.		ID 1,	2-D			ILE	RE	QU	RE	D				_		- Victor and the Control of the Cont	:	Tem San	iper iple	atur Co	re U ntali	pon ners	is: n Red s Inta dspa	act?		Y Y		Λ Λ	
inquished by:	06~11 06~11	ate	/3	ne 3 <i>00</i>		yed by		N N	fro	le	<u> </u>			1		r Oli	3	/4	ime	2	QC I Leve Leve	<u>Deliv</u> 12 13					circ			-	•	•	Tarif de la desta de La manue, en escape que persona de la companyo de la company
Stad by: Martiner	01/ 01/	ate	19	TIPE TO	Recei		y Tes V		eric	a: Uh	1			6	`Da `([te -0	8	194	ime 45	- 1		Spe				•		•	-sche inst				tAmerica

TEST AMERICA SAMPLE RECEIPT LOG

CLIENT NAME: REC. BY (PRINT) WORKORDER:	ETIC ENGINEERIN LJM MRF0839	16.	DATE REC'D AT LAB: TIME REC'D AT LAB: DATE LOGGED IN:	6-11-08 1945 0/12/08	1945 DRINKING WATER									
CIRCLE THE APPR	OPRIATE RESPONSE	LAB SAMPLE#	CLIENT ID	CONTAINER DESCRIPTION	PRESER VATIVE	рН**	SAMPLE MATRIX	DATE SAMPLED	REMARKS:					
Custody Seal(s)	Present / Aldsent								CONDITION (ETC.)					
·	Intact / Broken*							7						
2. Chain-of-Custody	Present / Absent*		`											
Traffic Reports or			§					/						
Packing List:	· Present / Absent						1	<u> </u>						
4. Airbill:	Airbill / Sticker				·····	~								
	Present / Absent		(\mathcal{I}								
5. Airbill #:														
6. Sample Labels:	Present / Absent													
7. Sample IDs:	bisted / Not Listed													
	on Chain-of-Custody													
8. Sample Condition:	mae? / Broken* /			0										
	Leaking*			100	<u> </u>			*						
9. Does information o														
traffic reports and s														
agree?	€8/No*			\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\										
10. Sample received with			<u> </u>											
hold time:	(€5) No*		·											
11. Adequate sample vo														
received	-€87/No*													
12. Proper preservatives														
13. Trip Blank / Temp Bl	*		$-(\mathcal{Y}_{})$											
(circle which if yes)	Yes / Sto			<u> </u>										
14 Read Temp:	4.6		· / · · · · · · · · · · · · · · · · · ·											
Correction Factor :	-1.0	— // X	/											
Corrected Temp:	3.6.2	-11												
Is corrected temp 0-6			*		<u> </u>									
exception (if any): Meta														
PICON ICE OF PIODIE														
		*IF CIRCL	ED, CONTACT PROJECT I	MANAGER AND A	TTACH REC	ORD	OF RESOL	LITION						

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION
**CHECK SAMPLE PREP LOG IF NOT INDICATED

MPLERECEIPTLOG Sign 10 (05/06/08)

Page ____(of ___