#### **ExxonMobil**

**Environmental Services Company** 

4096 Piedmont Avenue #194
Oakland, CA 94611
510.547.8196
510.547.8706 FAX
jennifer.c.sedlachek@exxonmobil.com

#### **RECEIVED**

2:07 pm, Oct 27, 2008

Alameda County Environmental Health Jennifer C. Sedlachek Project Manager



October 24, 2008

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

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, Third Quarter 2008* for the above-referenced site. The report, prepared by ETIC Engineering, Inc. of Pleasant Hill, California, details the results of the September 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

Project Manager

Attachment: ETIC Groundwater Monitoring Report

c: w/ attachment:

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

Mr. Peter McIntyre - AEI Consultants

& Sideriek

c: w/o attachment:

Mr. Bryan Campbell - ETIC Engineering, Inc.



## Report of Groundwater Monitoring Third 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

No.8092

OF CALL

ERIK

APPEL

Date

October 24, 2008

#### 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. (ETIC) 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 11 June 2008, the date of the previous monitoring event, until 16 September 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: 16 September 2008

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

Wells gauged only: None

**Groundwater flow direction:** North-northwest

Groundwater gradient: 0.0014
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

In response to a letter received in June 2008 from the Alameda County Health Care Services, ETIC submitted a Vapor Sampling Work Plan in August 2008.

#### WORK PROPOSED FOR NEXT QUARTER

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

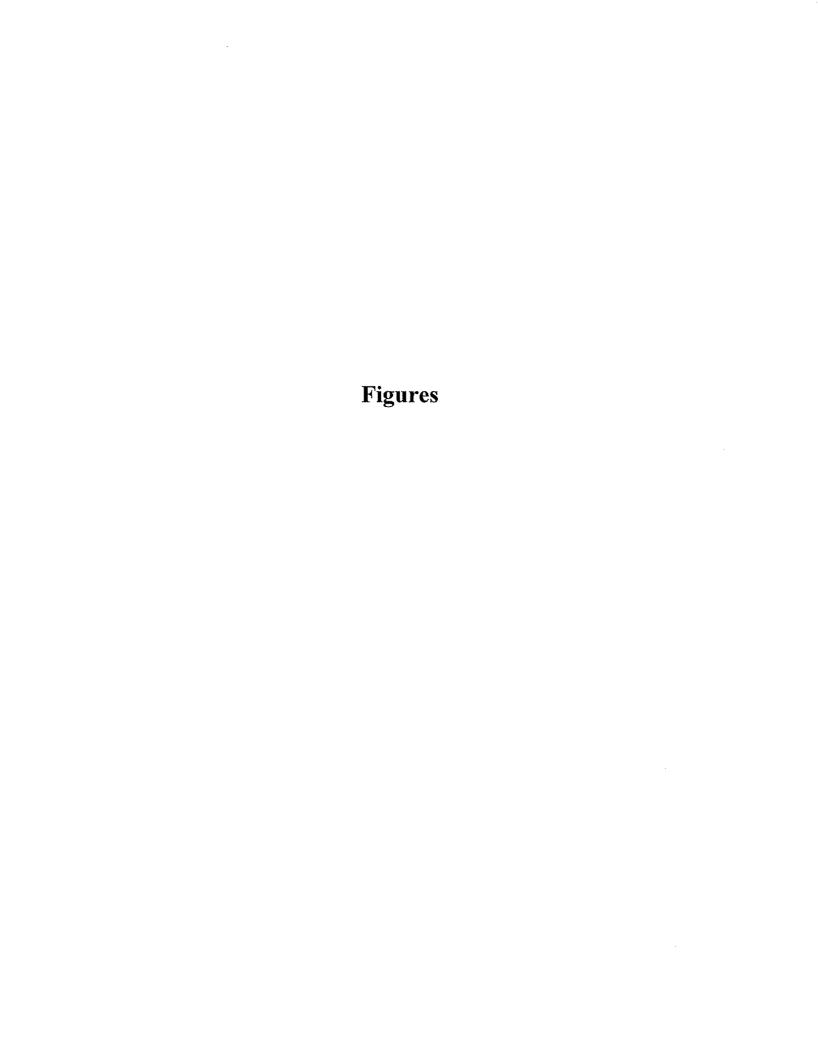
#### Attachments:

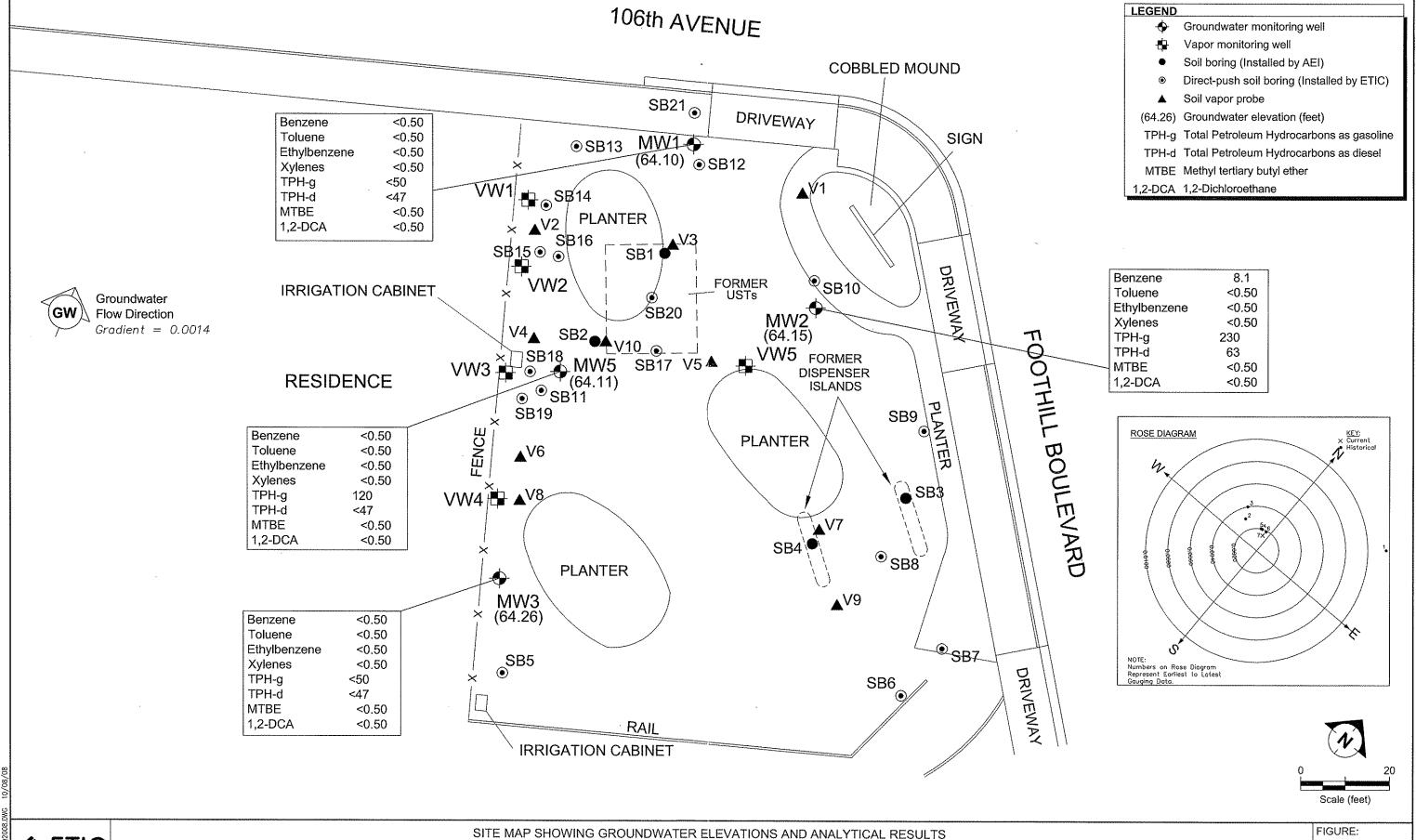
Figure 1: Site Map Showing Groundwater Elevations and Analytical Results

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





SETIC ENGINEERING

FORMER ELEVATIONS AND ANALYTICAL RESULT
FORMER EXXON RS 74121

10605 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA
16 SEPTEMBER 2008

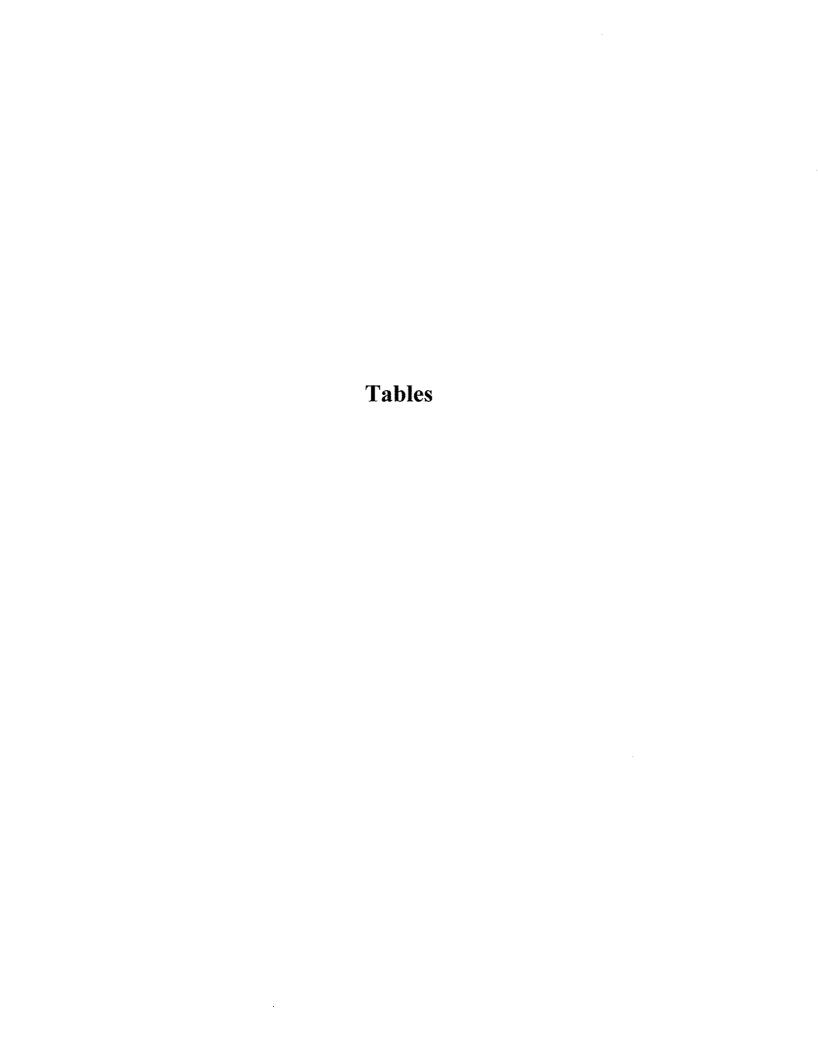


TABLE 1 WELL CONSTRUCTION DETAILS, FORMER EXXON RS 74121, 10605 FOOTHILL BOULEVARD, OAKLAND, CALIFORNIA

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
MW1	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
VWI	a	01/22/07	aur cur	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	a	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						Concen	tration (µg/L)						
W-11 ID	D-1-	Elevation	Water	Elevation	Thickness (feet)	Benzene	Toluene	Ethyl- benzene	Xylenes	ТРН-д	TPH-d	MTBE	ТВА	DIPE	ETBE	1,2-DCA	TAME	EDB
Well ID	Date	(feet)	(feet)	(feet)	(leet)	Delizelle	TORGENE	OCHECHE	Ayrenes	1111-8	1111-u	147 1 1777	1DA		WI DID	1,200011	2713122	
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
MWI	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 <sup>a,b</sup>	< 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 <sup>a,b</sup>	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW1	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°	3.08	<10.0	< 0.500	< 0.500	< 0.500	0.930	< 0.500
MWI	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
MWI	09/16/08	82.47	18.37	64.10	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
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 <sup>a,c</sup>	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
MW2	12/03/07	84.40	19.97	64.43	0.00	22 <sup>d</sup>	< 0.50	< 0.50	< 0.50	560	120°	< 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 <sup>e</sup>	< 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 <sup>e</sup>	< 0.50	<20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
MW2	09/16/08	84.40	20.25	64.15	0.00	8.1 <sup>d</sup>	< 0.50	< 0.50	<0.50	230	63°	< 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 <sup>a,b</sup>	< 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 <sup>a,b</sup>	< 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
MW3	09/16/08	83.25	18.99	64.26	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 <sup>a,b</sup>	< 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 <sup>a,b</sup>	< 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°	< 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
MW5	09/16/08	82.65	18.54	64.11	0.00	< 0.50	< 0.50	< 0.50	< 0.50	120	<47	< 0.50	<20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

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

 1,2-DCA
 1,2-Dichloroethane.

 DIPE
 Diisopropyl ether.

 EDB
 1,2-Dibromoethane.

 ETBE
 Ethyl tertiary butyl ether.

GAProjects/ExxonMobil/Sites/74121/Master/WP/Q0908/74121 gw & cales

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

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

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

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

e 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						Concent	tration (μg/L)						
		Elevation	Water	Elevation	Thickness			Ethyl-										
Well ID	Date	(feet)	(feet)	(feet)	(feet)	Benzene	Toluene	benzene	Xylenes	TPH-g	TPH-d	MTBE	TBA	DIPE	ETBE	1,2-DCA	TAME	EDB

MTBE Methyl tertiary butyl ether.
TAME Tertiary amyl methyl ether.

TBA Tertiary butyl alcohol.

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

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 Analy	sis Frequency
Well	Gauging	TPH-g, TPH-d, and		Other Oxygenates
Number	Frequency	BTEX	MTBE	and Additives
MWI	O	O	O	0
MW2	ò	ò	ò	ò
MW3	Q	ò	Q	Ò
MW5	Q	Q	Q	Q
Notes:	<del></del>	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 Hydrod	carbons as gasoline.		
TPH-d	Total Petroleum Hydro	carbons 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: 69-16-08
Project Number: UP4121.1.6	Station Number: 74121
Site Location:	Samplers: T3;ND=P
10605 Foothill Boulevard, Oakland, CA	

10605 Footniii	Douievaiu, C	Zakialiu, CA					
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	18-37	N.P	6.00	٥		24.13	gil
MW2	20 95	N.r <sup>2</sup>	Ø .60	0		24.77	Ŋ II
MW3	18-99	N.P	0.00	O		23.57	9"
MW5	18-34	N.P	0.00	٥		25 44	<i>\$</i> ''
						_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
,,							
<u></u>							

# **ETIC**ENGINEERING

Project Name:	Exxon 74121			Well No:	MWI	Date:	09-16-8
Project No:	UP4121.1.6			Personnel:		TIBIN DEA	
GAUGING DAT	A		······································				
Water Level Me	asuring Method:	WLM / P		Measuring P	oint De	scription: TOC	
WELL PURGE	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier Casing Diar		Casing Volume (gal)	Total Purge Volume (gal)
CALCULATION	24.13	/8.37	5.46	1 Ø 4 0.04 0.16 0.6	_	0.92	2.76
PURGING DAT					<b>D</b>		CDU
Purge Method(					Purg	e Rate:	GPM
Time	e730	•732	0734				MANAGEMENT AND
Volume Purge (gal)	1.60	2.00	3.00				
Temperature ( C)	17.7	18.0	18.3				
pH	6:42	6.53	6.56				
Spec Cond (umhos)	1453	1459	1456				
Turbidity/Color	SICT BROWN!	SILLERAN	31874 1380WH				
Odor (Y/N)	N	N	N				
Casing Volumes	1	2	3				
Dewatered (Y/N)	N	N	N				
Comments/Obse	rvations:						
SAMPLING DA	TA	***************************************					
Time Sampled:	0740		Approximate Dept	h to Water Dui	ring San	npling: 19,	(feet)
Comments:							
	5. Januari Santuria de Mantoni i establica				Market en reger i		
Sample Number	Number of Containers	Container Type	Preservative	Volume F (mL or	Action and the second second	Turbidity/ Color	Analysis Method
MWI	-69	Voa	HCL	40 m		2 ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) (	TPH-g, BTEX, MTBE
MWI	2	AMBERS	NONE	1L			TPH-D
				<u> </u>			
Total Purge Vo		(gallons)		Disposal:		SYSTEM	
Weather Condi	tions: ok						<b>20</b> / N
	ell Box and Casing					CAP & LOCK C	Y / N
Well Head Con	ditions Requiring	Correction:	NONE			GROUT (	② / N
	untered During Pu	urging and Sampl	ing: NWE			WELL BOX.	2 / N
Comments:						SECURED	Ø / N

# **ETIC**

Project Name:	Exxon 74121			Well No: 🏌	4102	Date:	09-/	6.68
Project No:	UP4121.1.6			Personnel:	-	BINGOER	,,,,	
GAUGING DAT	Α		.,,,					
Water Level Mea	asuring Method:	WLM / (D)		Measuring F	Point De	scription: TOC		
WELL PURGE VOLUME	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier Casing Dia		Casing Volume (gal)		Purge e (gal)
CALCULATION	24.77	20.25	) 4.50 <b>(</b>	1 Ø 4 0.04 0.16 0.4		0.72	<u>)</u> 2	16
PURGING DATA						***************************************	., ., ., .	
Purge Method:	WATÈRRA / BAI	LER / SUB			Purg	e Rate:	GPM	
Time	e757	<i>4</i> 759	080/					
Volume Purge (gal)	1.60	g. v»	3.00					
Temperature ( C)	17.0	175	17.6					
pH	6.37	ල යින	6.83					·····
Spec.Cond (umhos)	[6]	1218	1213					•
Turbidity/Color	SHOT! CUM	SITY CLEAR	CUMP					
Odor (Y/N)	~	N	N					
Casing Volumes	1	2	· 3					
Dewatered (Y/N)	N	^/	W					
Comments/Obse	rvations:							
								•
SAMPLING DA	ТА							
Time Sampled:			Approximate Dept	h to Water Du	ıring San	apling: 31.	(feet)	
Comments:								
67740				lecove cercos				1000
Sample Number	Number of Containers	Container Type	Preservative	Volume I (mL or	2000 9742 77	Turbidity/ Color	The state of the second	ilysis thod
MWZ	-09	Voa	HCL	40 m	ıl		TPH-g, BT	EX, MTBE
MWQ	2	AMBERS	NONE	1L			TP	H-D
								<u>.</u>
Total Purge Vol	ume:	(gallons)		Disposal:		SYSTEM		
Weather Condit	tions: of					BOLTS (	Y//	N
Condition of We	ell Box and Casing	at Time of Samp	<del>-</del>			CAP & LOCK	<u> </u>	N
Well Head Con-	ditions Requiring (	Correction:	NONE			GROUT (	<u> </u>	N
Problems Enco	untered During Pu	irging and Sampli	ing: NoNE			WELL BOX.	B) 1	N
Comments: G:\Projects\ExxonMobiliSite	:s\74121\Public\QM Pre-Pield Fo	lder\(74121 Scope of Work.xis)	Sheet			SECURED	1(8	N

# **ETIC** ENGINEERING

Project Name:	Exxon 74121			Well No:	MW	3 Date	: 09	-16-08		
Project No:	UP4121.1.6			Personnel:		TRINDE	<del>-1</del> 9			
GAUGING DAT	A									
Water Level Me	asuring Method:	WLM / P		Measuring	Point De	escription: TOC				
WELL PURGE VOLUME	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplic Casing Di	Clare of the Control of the Control	Casing Volume (gal)	the section at the parent.	al Purge ume (gal)		
CALCULATION	93·57 C	) 18.99	9 4.58 (	0.04 0.16	4 6 0.64 1.44	o·73 (		219		
PURGING DAT										
Purge Method:	(WATERRA) BAI				Purg	e Rate:	GPM			
Time	0960	0902	e 904							
Volume Purge (gal)	1,00	g . ev	3.જ્							
Temperature ( C)	16.8	16.9	17.0							
pH	6.69	6.75	6.79					<del> </del>		
Spec.Cond.(umhos)	1343	1499	1469							
Turbidity/Color	SINTEROUM	SIETY FROUNT	Signer							
Odor (Y/N)	N	N/	N							
Casing Volumes	1	2	3							
Dewatered (Y/N)	<b>N</b>	<b>^</b>	a)							
Comments/Obse	rvations:									
		:								
SAMPLING DA	TA									
Time Sampled:	0910		Approximate Depti	h to Water D	uring Sar	npling: 19	(feet)	: :		
Comments:										
	a Pariti de Santa de Como de C	to Car han ears was not the			2 - 11 - 12 - 12 - 12 - 12	Elektrika apotektora 1835		eng en len de le		
Sample Number	Number of Containers	Container Type	Preservative	Volume (mL c	<b>高等的基本公司的</b> 中国基本企业	Turbidity/ Cold		nalysis Nethod		
MW3	-69	Voa	HCL	40 ו	ml		TPH-g,	BTEX, MTBE		
MW3	2	AMBERS	NONE	11	-			TPH-D		
,										
Total Purge Vol	ume: 3、	(gallons)	***************************************	Disposal:		SYSTE		***************************************		
Weather Condi	tions: a					BOLTS	Ø ,	N		
	ell Box and Casing		<del> </del>			CAP & LOCK		N		
	ditions Requiring (		NOME			GROUT		<u> </u>		
	untered During Pu	irging and Sampli	ing: <u>Nor</u>	<u> </u>		WELL BOX.		N N		
	Comments: SECURED Ø / N G:\Projects\ExxonMobil\Sites\74121\Public\QM Pre-Field Folder\[74121\Scope of Work.xis\]Sheet1									

# **ETIC**

Project Name:	Exxon 74121			Well No: /	1W5	Date:	09-16-08
Project No:	UP4121.1.6			Personnel:	,	TSINDER	
GAUGING DATA							
	suring Method:	WLM / 🕮		Measuring F	Point Des	scription: TOC	
WELL PURGE VOLUME	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier Casing Dia		Casing Volume (gal)	Total Purge Volume (gal)
CALCULATION	25.44	18:54	6.90	1 2 4 0.04 0.16 0.0		1.40	3.31
PURGING DATA Purge Method:	WATERBA / BAI	LER / SUB		· · · · · · · · · · · · · · · · · · ·	Purge	e Rate:	GРM
Time	0323	0826					
Volume Purge (gal)	150	3.00	4.50				
Temperature ( C)	16.5	17.1					
pH	6-89	હ કર					
Spec.Cond.(umhos)	1084	1161					
Turbidity/Color	- CRAY	SUTY ERAY					
Odor (Y/N)	N	Ŋ					
Casing Volumes	1	2	3				
Dewatered (Y/N)	^'	VL					
Comments/Obser	vations:	Dews term	d at 3	S GAU	. ∞u^-`		
							-
SAMPLING DA		***************************************					
Time Sampled: 4 Comments:	<u> 2845                                     </u>		Approximate Deptl	n to Water Du	ring Sam	pling: )9,	(feet)
Salar Sa		Esperancia de la companya de la comp	mogracia.protection recognisticates	Toward Wart Congress Court	anese en gral .	on the entropy of the stop of the stop of the stop of	
Sample Number	Number of Containers	Container Type	Preservative	Volume I (mL or		Turbidity/ Color	Analysis Method
MW5 MW5	-89	Voa	HCL	40 m	1		TPH-g, BTEX, MTBE
MW5	2	AMBERS	NONE	1L			TPH-D
Total Purge Volu	ume:	(gallons)		Disposal:		SYSTEM	I
Weather Conditi						BOLTS (	Ø / N
Condition of We	ll Box and Casing	at Time of Samp	oling:			CAP & LOCK ,	29 / N
Well Head Cond	litions Requiring (	Correction:	Ninder			GROUT (	<u>Ď / N</u>
	untered During Pu	rging and Sampl	ing: N.J5	Devsa te	~~~~~~~~~~		Ø / N
Comments:					~~~~	SECURED	(S) 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

30 September, 2008

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

RE: Exxon 7-4121 Work Order: MRI0427

Enclosed are the results of analyses for samples received by the laboratory on 09/16/08 13:56. The samples arrived at a temperature of 2° C. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Megan Tran VOA

CA ELAP Certificate #2682





ETIC Engineering Inc - Pleasant Hill (Exxon)
Project: Exxon 7-4121

2285 Morello Avenue
Project Number: 7-4121

Reported:
Pleasant Hill CA, 94523
Project Manager: Erik Appel
09/30/08 16:14

#### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW1	MRI0427-01	Water	09/16/08 07:40	09/16/08 13:56
MW2	MRI0427-02	Water	09/16/08 08:10	09/16/08 13:56
MW3	MRI0427-03	Water	09/16/08 09:10	09/16/08 13:56
MW5	MRI0427-04	Water	09/16/08 08:45	09/16/08 13:56





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

Project Number: 7-4121
Project Manager: Erik Appel

MRI0427 Reported: 09/30/08 16:14

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW1 (MRI0427-01) Water	Sampled: 09/16/08 07:40	Received: (	9/16/08 13	3:56					
Gasoline Range Organics (C4-	C12) ND	50	ug/l	1	8122003	09/22/08	09/22/08	EPA 8015B/8021B	
Benzene	ND	0.50	Ħ	Ħ	u	n		**	
Toluene	ND	0.50	Ħ	R	U	Ħ	U	tt	
Ethylbenzene	ND	0.50	u	17	u	ěř.	11	Ħ	
Xylenes (total)	ND	0.50	Ħ	п	u	57	ų	Ħ	
Surrogate: a,a,a-Trifluorotolue	ene	101 %	85-1	20	"	#	n	ø	
Surrogate: 4-Bromofluorobenz	ene	110 %	75-I	25	ft	u	n	"	
MW2 (MRI0427-02) Water	Sampled: 09/16/08 08:10	Received: (	09/16/08 13	3:56					
Gasoline Range Organics (C4	4-C12) 230	50	ug/l	1	8122003	09/22/08	09/22/08	EPA 8015B/8021B	
Benzene	8.1	0.50	ŧı	11	μ	Ħ	B	U	R1
Toluene	ND	0.50	Ħ	*1	u	Ħ	H	Ħ	
Ethylbenzene	ND	0.50	**	\$1	n	#1	H	n	
Xylenes (total)	ND	0.50	Ħ	н	II .	it.	U	11	
Surrogate: a,a,a-Trifluorotolue	ene	113 %	85-I	20	H	n	и	u	
Surrogate: 4-Bromofluorobenz	ene	120 %	75-I	25	"	u	a	"	
MW3 (MRI0427-03) Water	Sampled: 09/16/08 09:10	Received:	09/16/08 1:	3:56					
Gasoline Range Organics (C4-	C12) ND	50	ug/l	1	8I22003	09/22/08	09/22/08	EPA 8015B/8021B	
Benzene	ND	0.50	11	a	H	n	<b>f</b> t	u	
Toluene	ND	0.50	u	н	D	u	Ħ	u	
Ethylbenzene	ND	0.50	a	21	U	ti	H	ŧ	
Xylenes (total)	ND	0.50	(1	Ħ		#	ıı	¥I	
Surrogate: a,a,a-Trifluorotolue	ene	108 %	85-1	20	η	II	ø	u	
Surrogate: 4-Bromofluorobenz	ene	98 %	75-1	25	u	"	H	а	





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

Project Number: 7-4121 Project Manager: Erik Appel MRI0427 Reported: 09/30/08 16:14

## Purgeable Hydrocarbons and BTEX by EPA 8015B/8021B

#### TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW5 (MRI0427-04) Water Sam	oled: 09/16/08 08:45	Received: 0	9/16/08 1	3:56					
Gasoline Range Organics (C4-C12)	120	50	ug/l	1	8122003	09/22/08	09/22/08	EPA 8015B/8021B	
Benzene	ND	0.50	**	"	п	D	ţ1	n	
Toluene	ND	0.50	11	U	,,,	v	**	11	
Ethylbenzene	ND	0.50	Ħ	u	U	tt	tt .	a	
Xylenes (total)	ND	0.50	Ħ	a	0	ħ	Ħ	н	
Surrogate: a,a,a-Trifluorotoluene		107 %	85-1	120	17	"	H	и	
Surrogate: 4-Bromofluorobenzene		122 %	75-1	125	ĸ	н	"	"	





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

Project Number: 7-4121 Project Manager: Erik Appel MRI0427 Reported: 09/30/08 16:14

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW1 (MRI0427-01) Water	Sampled: 09/16/08 07:40	Received: (	9/16/08	13:56					
Diesel Range Organics (C10-C2	28) ND	47	ug/l	1	8118004	09/18/08	09/18/08	EPA 8015B-SVOA	
Surrogate: n-Octacosane		84 %	35	-120	n	п	"	υ	
MW2 (MRI0427-02) Water	Sampled: 09/16/08 08:10	Received: (	9/16/08	13:56					
Diesel Range Organics (C10-C	(28) 63	47	ug/l	1	8118004	09/18/08	09/18/08	EPA 8015B-SVOA	QI
Surrogate: n-Octacosane		74 %	35	-120	"	н	,,	и	
MW3 (MRI0427-03) Water	Sampled: 09/16/08 09:10	Received: (	09/16/08	13:56					
Diesel Range Organics (C10-C2	28) ND	47	ug/l	1	8118004	09/18/08	09/18/08	EPA 8015B-SVOA	
Surrogate: n-Octacosane		78 %	35	-120	"	n	"	и	
MW5 (MRI0427-04) Water	Sampled: 09/16/08 08:45	Received:	9/16/08	13:56					
Diesel Range Organics (C10-C2	28) ND	47	ug/l	1	8118004	09/18/08	09/18/08	EPA 8015B-SVOA	
Surrogate: n-Octacosane		69 %	35	-120	μ	17	"	r	





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

Project Number: 7-4121
Project Manager: Erik Appel

MRI0427 Reported: 09/30/08 16:14

## Volatile Organic Compounds by EPA Method 8260B

#### TestAmerica Morgan Hill

Analyte	Result	Reporting Limit Units I		Dilution	Batch	Prepared	Analyzed	Method	Notes
MW1 (MRI0427-01) Water	Sampled: 09/16/08 07:40	Received: 0	9/16/08 1	3:56					
tert-Amyl methyl ether	ND	0.50	ug/l	1	8122002	09/22/08	09/22/08	EPA 8260B	
tert-Butyl alcohol	ND	20	a	H	**	**	Ħ	H	
Di-isopropyl ether	ND	0.50	u	Ħ	st.	ข	tt	н	
1,2-Dibromoethane (EDB)	ND	0.50	er.	11	tf	Ħ	Ħ	1#	
1,2-Dichloroethane	ND	0.50	n	Ħ	t <del>t</del>	19	11	19	
Ethyl tert-butyl ether	ND			n	11	11	17	h	
Methyl tert-butyl ether	ND	0.50	57	1)	1)	**	17	11	
Surrogate: Dibromofluorometh	iane	98 %	80-	120	"	tt	,,	"	
Surrogate: 1,2-Dichloroethane	-d4	101 %	<i>75-</i> .	130	"	н	n	p	
Surrogate: Toluene-d8		97 %	80-	120	"	n	"	"	
Surrogate: 4-Bromofluorobenza	ene	87 %	70-	120	u	н	Ħ	и	
MW2 (MRI0427-02) Water	Sampled: 09/16/08 08:10	Received: (	9/16/08 1	3:56					
tert-Amyl methyl ether	ND	0.50	ug/l	1	8122002	09/22/08	09/22/08	EPA 8260B	
tert-Butyl alcohol	ND	20	tt	łt .	n	**	11	ff	
Di-isopropyl ether	ND	0.50	#	**	11	19	*	**	
1,2-Dibromoethane (EDB)	ND	0.50	и	Ħ	U	n	79	l <del>7</del>	
1,2-Dichloroethane	ND	0.50	ti	H	u	17	l†	н	
Ethyl tert-butyl ether	ND	0.50	**	11	n	17	n	11	
Methyl tert-butyl ether	ND	0.50	\$1	a	U	n	IT	u	
Surrogate: Dibromofluorometh	ıane	95 %	80-	120	11	u	n	"	
Surrogate: 1,2-Dichloroethane	÷d4	99 %	75-	130	11	n	n	u	
Surrogate: Toluene-d8		104 %	80-	120	17	r	n	v	
Surrogate: 4-Bromofluorobenz	ene	94 %	70-	120	"	u	н	a	





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

Project Number: 7-4121 Project Manager: Erik Appel MRI0427 Reported: 09/30/08 16:14

## **Volatile Organic Compounds by EPA Method 8260B**

#### TestAmerica Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW3 (MRI0427-03) Water	Sampled: 09/16/08 09:10	Received: 0	9/16/08 13	:56					
tert-Amyl methyl ether	ND	0.50	ug/l	1	8122002	09/22/08	09/22/08	EPA 8260B	
tert-Butyl alcohol	ND	20	u	12	u	п	u	v	
Di-isopropyl ether	ND	0.50	U	"	u	U	U	Ħ	
1,2-Dibromoethane (EDB)	ND	0.50	u	U	u	ų.	u	11	
1,2-Dichloroethane	ND	0.50	u	t!	tt	11	Ð.	11	
Ethyl tert-butyl ether	ND	0.50	0	u	n	9	n	#1	
Methyl tert-butyl ether	ND	0.50	u ·	u	**	u	и	že .	
Surrogate: Dibromofluorometho	me	100 %	80-12	20	r	"	"	tt	
Surrogate: 1,2-Dichloroethane-	d4	106 %	75-13	30	u	"	#	"	
Surrogate: Toluene-d8		98 %	80-12	20	"	"	u	"	
Surrogate: 4-Bromofluorobenze	ne	88 %	70-12	20	"	#	n	H	
MW5 (MRI0427-04) Water	Sampled: 09/16/08 08:45	Received: 0	9/16/08 13	:56					
tert-Amyl methyl ether	ND	0.50	ug/l	1	8122002	09/22/08	09/22/08	EPA 8260B	
tert-Butyl alcohol	ND	20	u	1)	Ħ	u	Ħ	n	
Di-isopropyl ether	ND	0.50	(1		a	"	<b>74</b>	*1	
1,2-Dibromoethane (EDB)	ND	0.50	u	ŧ	n	u	a	н	
1,2-Dichloroethane	ND	0.50	u	U	ti	u	71	н	
Ethyl tert-butyl ether	ND	0.50	st	п	#1	ч	37	P	
Methyl tert-butyl ether	ND	0.50	41	a	++	11	52	l†	
Surrogate: Dibromofluorometho	ine	93 %	80-12	20	n	*	n	a	
Surrogate: 1,2-Dichloroethane-	d4	95 %	75-13	30	u	#	#	u	
Surrogate: Toluene-d8		101 %	80-12	20	"	"	u	"	
Surrogate: 4-Bromofluorobenze	ne	85 %	70-12	20	"	#	"	и	





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

Project Number: 7-4121
Project Manager: Erik Appel

MRI0427 Reported: 09/30/08 16:14

# 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 8I22003 - EPA 5030B [P/T]										
Blank (8122003-BLK1)				Prepared	& Analyz	ed: 09/22/	08			
Gasoline Range Organics (C4-C12)	ND	25	ug/l							
Benzene	ND	0.25	4							
Toluene	ND	0.25	0							
Ethylbenzene	ND	0.25	н							
Xylenes (total)	ND	0.42	0							
Surrogate: a,a,a-Trifluorotoluene	43.3		0	40.0		108	85-120			***************************************
Surrogate: 4-Bromofluorobenzene	38.8		r#	40.0		97	75-125			
LCS (8I22003-BS1)				Prepared	& Analyz	·····				
Benzene	10.3	0.50	ug/l	10.0		103	70-130			
Toluene	10.1	0.50	H	10.0		101	70-130			
Ethylbenzene	10.4	0.50	α	10.0		104	70-130			
Xylenes (total)	30.7	0.50	a	30.0		102	70-130			
Surrogate: a,a,a-Trifluorotoluene	43.0	****	"	40.0		108	85-120	***************************************		***************************************
LCS (8I22003-BS2)				Prepared	& Analyz	ed: 09/22/	08			
Gasoline Range Organics (C4-C12)	211	50	ug/l	250		85	70-130			
Surrogate: 4-Bromofluorobenzene	39.6		U	40.0		99	75-125			
LCS Dup (8122003-BSD2)				Prepared	& Analyz	ed: 09/22/	08			
Gasoline Range Organics (C4-C12)	234	50	ug/I	250		94	70-130	10	25	
Surrogate: 4-Bromofluorobenzene	41.5		II	40.0		104	75-125			
Matrix Spike (8I22003-MS1)	So	urce: MRI04	27-03	Prepared	& Analyz	ed: 09/22/	08			
Gasoline Range Organics (C4-C12)	98.5	50	ug/l	91.0	8.93	98	70-130			
Benzene	11.1	0.50	u	10.0	ND	111	70-130			
Toluene	10.4	0.50	Đ	10.0	ND	104	70-130			
Ethylbenzene	11.0	0.50	a	10.0	ND	110	70-130			
Xylenes (total)	32.7	0.50	n	30.0	ND	109	70-130			
Surrogate: a,a,a-Trifluorotoluene	42.8		H	40.0	adaneera adaman renderaddoddaana	107	85-120	***************************************	***************************************	***************************************
Surrogate: 4-Bromofluorobenzene	39.5		n	40.0		99	75-125			





2285 Morello Avenue

Pleasant Hill CA, 94523

Surrogate: a,a,a-Trifluorotoluene

Surrogate: 4-Bromofluorobenzene

Project: Exxon 7-4121

Project Number: 7-4121 Project Manager: Erik Appel

MRI0427 Reported: 09/30/08 16:14

### 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 8122003 - EPA 5030B [P/T]										
Matrix Spike Dup (8I22003-MSD1)	Sour	ce: MRI04	27-03	Prepared	& Analyze	eđ: 09/22/	08			
Gasoline Range Organics (C4-C12)	93.8	50	ug/l	91.0	8.93	93	70-130	5	25	
Benzene	10.5	0.50	u	10.0	ND	105	70-130	5	25	
Toluene	10.2	0.50	Œ	10.0	ND	102	70-130	2	25	
Ethylbenzene	10.6	0.50	я	10.0	ND	106	70-130	4	25	
Xylenes (total)	31.4	0.50	я	30.0	ND	105	70-130	4	25	

40.0

40.0

109

106

85-120

75-125

43.7

42.3





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

Project Number: 7-4121 Project Manager: Erik Appel MRI0427 Reported: 09/30/08 16:14

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

	<del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>	<del></del>		<del></del>	<del></del>					
Analyte	Result	Evaluation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8I18004 - EPA 3510C										
Blank (8I18004-BLK1)				Prepared	& Analyzo	ed: 09/18/	08			
Diesel Range Organics (C10-C28)	ND	25	ug/l							
Surrogate: n-Octacosane	30.8		н	50.0		62	35-120	4 1 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
LCS (8I18004-BS1)				Prepared	& Analyz	ed: 09/18/	08			
Diesel Range Organics (C10-C28)	366	50	ug/l	500		73	45-120			
Surrogate: n-Octacosane	31.1		"	50.0		62	35-120			
LCS Dup (8I18004-BSD1)				Prepared	& Analyze	ed: 09/18/	08			
Diesel Range Organics (C10-C28)	326	50	ug/l	500		65	45-120	11	25	
Surrogate: n-Octacosane	29.2		"	50.0		58	35-120	······································		





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

Project Number: 7-4121 Project Manager: Erik Appel MRI0427 Reported: 09/30/08 16:14

### 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 8122002 - EPA 5030B P/T										
Blank (8I22002-BLK1)				Prepared	& Analyzo	ed: 09/22/	08			
tert-Amyl methyl ether	ND	0.25	ug/l							
tert-Butyl alcohol	ND	10	ti							
Di-isopropyl ether	ND	0.25	Ħ							
1,2-Dibromoethane (EDB)	ND	0.25	*1							
1,2-Dichloroethane	ND	0.25	**							
Ethyl tert-butyl ether	ND	0.25	**							
Methyl tert-butyl ether	ND	0.25	tr							
Surrogate: Dibromofluoromethane	7.04		b	7.50	***************	94	80-120			***************************************
Surrogate: 1,2-Dichloroethane-d4	7.18		1#	7.50		96	75-130			
Surrogate: Toluene-d8	6.95		**	7.50		93	80-120			
Surrogate: 4-Bromofluorobenzene	5.76		"	7.50		77	70-120			
LCS (8I22002-BS1)				·····	& Analyz	ed: 09/22/				
ert-Amyl methyl ether	10.5	0.50	ug/l	10.0		105	70-130			
ert-Butyl alcohol	209	20	a	200		104	70-130			
Di-isopropyl ether	10.6	0.50	a	10.0		106	70-130			
,2-Dibromoethane (EDB)	10.4	0.50	ņ	10.0		104	70-130			
1,2-Dichloroethane	9.47	0.50	**	10.0		95	70-130			
Ethyl tert-butyl ether	9.45	0.50	Ħ	10.0		94	70-130			
Methyl tert-butyl ether	9.03	0.50	\$1	10.0		90	70-130			
Surrogate: Dibromofluoromethane	7.22		н	7.50		96	80-120	***********	***************************************	
Surrogate: 1,2-Dichloroethane-d4	6.98		P	7.50		93	75-130			
Surrogate: Toluene-d8	7.30			7.50		97	80-120			
Surrogate: 4-Bromofluorobenzene	7.29		"	7.50		97	70-120			
Matrix Spike (8I22002-MS1)	~~···	urce: MRI04			& Analyz	******************************	·			
tert-Amyl methyl ether	10.2	0.50	ug/l	10.0	ND	102	70-130			
ert-Butyl alcohol	193	20	#	200	ND	97	70-130			
Di-isopropyl ether	10.8	0.50	"	10.0	ND	108	70-130			
1,2-Dibromoethane (EDB)	11.6	0.50	11	10.0	ND	116	70-130			
1,2-Dichloroethane	9.71	0.50	u	10.0	ND	97	70-130			
Ethyl tert-butyl ether	9.98	0.50	u	10.0	ND	100	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

MRI0427 Reported: 09/30/08 16:14

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

					<del> </del>	·				
		Evaluation		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch	8122002 -	<b>EPA</b>	5030B P/T

Matrix Spike (8I22002-MS1)	Sour	ce: MRI042	27-04	Prepared	& Analyze	ed: 09/22/	/08			
Methyl tert-butyl ether	9.38	0.50	ug/l	10.0	ND	94	70-130			
Surrogate: Dibromofluoromethane	7.26		t/	7.50		97	80-120	*****	**************************************	
Surrogate: 1,2-Dichloroethane-d4	7.11		"	7.50		95	75-130			
Surrogate: Toluene-d8	7.74		n	7.50		103	80-120			
Surrogate: 4-Bromofluorobenzene	7.60 "		7.50		101	70-120				
Matrix Spike Dup (8I22002-MSD1)	Sour	ce: MRI042	27-04	Prepared	& Analyze	d: 09/22	/08			
tert-Amyl methyl ether	10.5	0.50	ug/l	10.0	ND	105	70-130	3	25	
tert-Butyl alcohol	186	20	n	200	ND	93	70-130	4	25	
Di-isopropyl ether	10.4	0.50	1)	10.0	ND	104	70-130	3	25	
1,2-Dibromoethane (EDB)	11.2	0.50	n	10.0	ND	112	70-130	3	25	
1,2-Dichloroethane	10.0	0.50	U	10.0	ND	100	70-130	3	25	
Ethyl tert-butyl ether	10.1	0.50	ш	10.0	ND	101	70-130	2	25	
Methyl tert-butyl ether	10.1	0.50	0	10.0	ND	101	70-130	7	25	
Surrogate: Dibromofluoromethane	7.56			7.50		101	80-120	ennemen e sein dans en anne en en en		
Surrogate: 1,2-Dichloroethane-d4	7.64		"	7.50		102	75-130			
Surrogate: Toluene-d8	7.67		"	7.50		102	80-120			
Surrogate: 4-Bromofluorobenzene	7.71		"	7.50		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

MRI0427 Reported: 09/30/08 16:14

#### **Notes and Definitions**

R1 The RPD between the primary and confirmatory analysis exceeded 40%. Per method 8000B, the higher value was reported.

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



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

## ExonMobil.

74 CORPORATED	,		Worgan Hill, CA 95037 MRU0427																																	
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		Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	lce	HNO <sub>3</sub> (Red Label)	HCI (Blue Label)	JaOH (Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	12SO4 Glass(Yellow Label)	lone (Black Label)	ither (Specify)	roundwater			Soil		FPH-G BY 8015B	TPH-D BY 8015B/3510 *	8TEX 8Y 80249		ry 82608 **					7			IAT request (in Bus. Days)	UIAI	-ax Results	
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elinguished by:  Toll Markovic	9	-66 -66	9.16.08 1/30 Edward by TestAmerica:											Date			Time	-		Spe				-		pre-s					America					

TEST AMERICA SAMPLE RECEIPT LOG

	CLIENT NAME: REC. BY (PRINT) WORKORDER:	EC. BY (PRINT)		DATE REC'D AT LAB: TIME REC'D AT LAB: DATE LOGGED IN:	9116100 2415 1/17/68	2-115 DRINKING WATER				ATER	
	CIRCLE THE APPR	OPRIATE RESPONSE	LAB SAMPLE#		CONTAINER DESCRIPTION	PRESER VATIVE	рН**	SAMPLE MATRIX	OMINI ELD	Temp. >6°C	REMARKS: CONDITION
1.	Custody Seal(s)	Present / Absent		MW4	1LAMBER (2)	A		<b>W</b>	8/16/0 <sup>1</sup>		
	***************************************	Intact / Broken*			VDAS (a)	401			· · · ·		
	Chain-of-Custody	Present / Atisent*		MWS							
3.	Traffic Reports or	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		\$ € 1 Same as	MWI				······································		
<u> </u>	Packing List:	Present / Absent	***************************************					,	30 8/		
4.	Airbill / Sticker - Pres	sent / Absent		MW3	1 Lamber (1)	·		<i>1</i> <sub>1</sub> / <sub>1</sub> / <sub>1</sub>	9/10/08		
	Tracking #				1 L AMBEK (1)	HC1		W	a 16 68.		
		tact/Leaking*/Broken*		Ą	vòns (a)	HOL		W	- \$		
	Samples labeled	CYes/No*			mayer and amend and other to the			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
7. Sample ID's listed on COC											
8.	8. Does information on COC and sample				·						
<u> </u>	labels agree?	Yes / No*									
9.	Sample received wit	fiin									
	hold time:					······································	,				
10.	. Adequate sample vo	olume ( )									
	received	Yes / No* s used Yes / No*									
	Proper preservatives	s used Yes / No*			\<				······································		8
12.	. Trip Blank / Temp B	lank Received?			- inot						
	(circle which if yes)	Yes /₩o			P	X		,			
		: IR-1 / IR=3 / Backup			r						
14.	. Cooler RT***	CF*** CT***									·
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	4								***************************************		····
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	. Is/Are corrected tem			<b>A</b>							
	xception (if any): Mel										
W	in 24hrs of sampling-	on ice / Problem COC									
ce:1202								and the second second		and the second	

SAMPLERECEIPTLOG Revision 12 (08/07/08) \*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION

\*\*CHECK SAMPLE PREP LOG IF NOT INDICATED

\*\*\* Read Temperature/Correction Factor/Corrected Temperature

Page \_\_\_\_\_ of \_\_\_\_