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J. Sedl  
**Jennifer C. Sedlachek**  
Project Manager

**ExxonMobil**  
*Refining & Supply*

July 15, 2005

Mr. Bob Schultz  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Alameda, CA 94501-6577

Alameda County  
JUL 20 2005  
Environmental Health

Subject: Former Exxon RAS #7-0210, 7840 Amador Valley Boulevard, Dublin, California

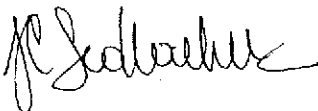
Dear Mr. Schultz:

Attached for your review and comment is a copy of the *Report of Groundwater Monitoring, Second Quarter 2005* for the above-referenced site. The report, prepared by ETIC Engineering, Inc. of Pleasant Hill, California, details the results of the May 2005 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 dated July 2005

- c: w/ attachment:  
Mr. Joseph A. Aldridge - Valero Energy Corporation
  
- c: w/o attachment:  
Ms. Christa Marting - ETIC Engineering, Inc.



Alameda County  
JUL 20 2005  
Environmental Health

# Report of Groundwater Monitoring Second Quarter 2005

**Former Exxon Retail Site 7-0210  
7840 Amador Valley Boulevard  
Dublin, California**

Prepared for

ExxonMobil Oil Corporation  
4096 Piedmont Avenue #194  
Oakland, California 94611

Prepared by

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

*Ted Moise*

*7/12/05*

Ted Moise  
Senior Project Manager

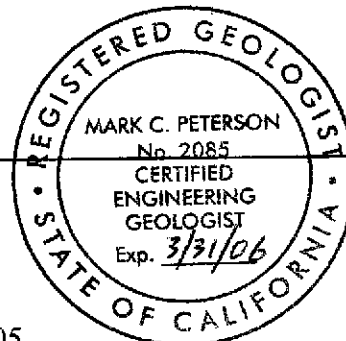
Date

*Mark Peterson*

*7/14/05*

Mark Peterson, C.E.G. # 2085  
Senior Geologist

Date



July 2005

## SITE CONTACTS

Station Number: Former Exxon Retail Site 7-0210

Station Address: 7840 Amador Valley Boulevard  
Dublin, California

ExxonMobil Project Manager: Jennifer C. Sedlachek  
ExxonMobil Refining and Supply Company  
4096 Piedmont Avenue #194  
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(510) 547-8196

Consultant to ExxonMobil: ETIC Engineering, Inc.  
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(925) 602-4710

ETIC Project Manager: Ted Moise

Regulatory Oversight: Donna Drogos  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway  
Alameda, California 94501-6577  
(510) 567-6721

## INTRODUCTION

At the request of ExxonMobil Oil Corporation, ETIC Engineering, Inc. has prepared this quarterly groundwater monitoring report for former Exxon Retail Site 7-0210. 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 16 February 2005, the date of the last monitoring event, until 16 May 2005, the date of the recent 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

<b>Site name:</b>	Former Exxon Retail Site 7-0210
<b>Site address:</b>	7840 Amador Valley Boulevard, Dublin, California
<b>Current property owner:</b>	Dublin Valero, Inc.
<b>Current site use:</b>	Active Valero-branded station operated by Dublin Valero, Inc.
<b>Current phase of project:</b>	Groundwater monitoring
<b>Tanks at site:</b>	Three underground storage tanks (gasoline)
<b>Number of wells:</b>	3 (all onsite)

## GROUNDWATER MONITORING SUMMARY

<b>Gauging and sampling date:</b>	16 May 2005
<b>Wells gauged and sampled:</b>	MW5-MW7
<b>Wells gauged only:</b>	None
<b>Groundwater flow direction:</b>	Southeast
<b>Groundwater gradient:</b>	0.004
<b>Well screens submerged:</b>	MW5-MW7
<b>Well screens not submerged:</b>	None
<b>Liquid-phase hydrocarbons:</b>	Not observed or detected
<b>Laboratory:</b>	TestAmerica, Inc., Nashville, Tennessee

### Analyses performed:

- Total Petroleum Hydrocarbons as gasoline by EPA Method 8015B
- Total Petroleum Hydrocarbons as diesel by EPA Method 8015B
- Benzene, toluene, ethylbenzene, and total xylenes by EPA Method 8021B
- Methyl t-butyl ether, and ethanol by EPA Method 8260B

## **ADDITIONAL ACTIVITIES PERFORMED AT SITE**

No additional activities were performed at the site.

## **WORK PROPOSED FOR NEXT QUARTER**

Groundwater will be monitored in accordance with the attached groundwater monitoring plan. ExxonMobil plans to discuss site details with the Alameda County Health Care Services Agency concerning site closure.

### Attachments:

Figure 1: Site Plan Showing Groundwater Elevations and Analytical Results

Table 1: Well Construction Details

Table 2: Groundwater Monitoring Data

Table 3: Groundwater Monitoring Plan

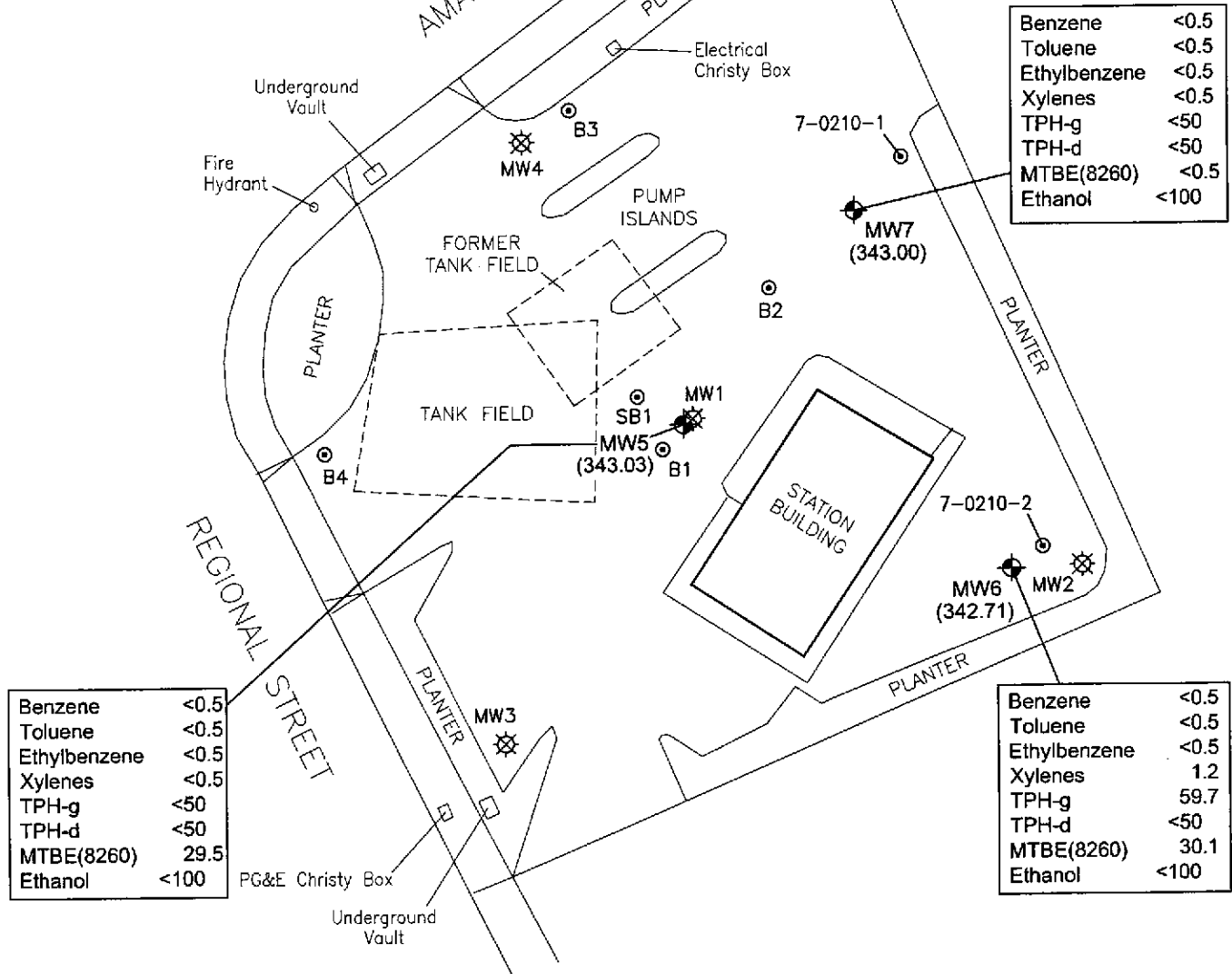
Appendix A: Field Protocols

Appendix B: Field Documents

Appendix C: Laboratory Analytical Reports

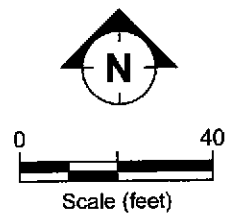


Groundwater  
Flow Direction  
Gradient = 0.004



- LEGEND**
- GROUNDWATER MONITORING WELL LOCATION
  - SOIL BORING / GROUNDWATER SAMPLING LOCATION
  - DESTROYED GROUNDWATER MONITORING WELL
  - (343.03) GROUNDWATER ELEVATION (FEET)
  - TPH-g TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
  - TPH-d TOTAL PETROLEUM HYDROCARBONS AS DIESEL
  - MTBE METHYL T-BUTYL ETHER

CONCENTRATIONS IN MICROGRAMS PER LITER (ug/L).



FILENAME: 202005.DWG 06/24/05



**SITE PLAN SHOWING GROUNDWATER ELEVATIONS  
AND ANALYTICAL RESULTS**  
FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BLVD., DUBLIN, CA.  
16 MAY 2005

FIGURE:  
**1**

TABLE 1 WELL CONSTRUCTION DETAILS, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, 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	04/14/92	96.32	PVC	26.5	24.75	10.25	4	11-24	0.010	10-25	--
MW2	a	05/13/92	95.91	PVC	26	25	10.25	4	10-25	0.010	9.5-26	--
MW3	a	05/14/92	97.95	PVC	28	27.75	10.25	4	12.5-27.5	0.010	11-28	--
MW4	a	05/14/92	96.69	PVC	26.5	25	10.25	4	12-25	0.010	11-26	--
MW5	b	11/15/00	352.95	PVC	25	25	8.25	2	10-25	0.020	7-25	#3 sand
MW6	b	11/14/00	352.69	PVC	27	25	8.25	2	10-25	0.020	8-27	#3 sand
MW7	b	11/14/00	351.87	PVC	26	25	8.25	2	10-25	0.020	7-25	#3 sand

a Well was destroyed April 1996.  
 b Elevation is based on the Alameda Benchmark AM-STW. Elevation = 344.17 feet.  
 PVC Polyvinyl chloride.  
 TOC Top of casing.  
 -- Information not available.

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	LPH Thickness (feet)	Hydrocarbons				TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)	Ethanol (µg/L)	Other Oxygenates and Additives (µg/L)
						Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)					
MW1	05/21/92	96.32	14.45	81.87	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW1	02/10/93	96.32	12.22	84.10	0.00	3.1	<0.5	1.8	0.6	2,600				NA
MW1	05/20/93	96.32	10.74	85.58	0.00	1.9	<0.5	1.8	<1.0	1,000				NA
MW1	06/23/93	96.32	11.74	84.58	0.00	1.0	<0.5	1.2	<0.5	1,300				NA
MW1	08/23/93	96.32	12.72	83.60	0.00	<0.5	<0.5	<0.5	0.8	80				NA
MW1	10/25/93	96.32	13.99	82.33	0.00	<0.5	<0.5	0.8	1.3	140				NA
MW1	02/16/94	96.32	14.90	81.42	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW1	04/16/94	96.32	14.49	81.83	0.00	<0.5 <sup>b</sup>	<0.5	<0.5	<0.5	190				NA
MW1	07/26/94	96.32	15.11	81.21	0.00	<0.5 <sup>b</sup>	<0.5	<0.5	<0.5	130				NA
MW1	10/05/94	96.32	15.69	80.63	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW1	01/04/95	96.32	14.66	81.66	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW1	06/12/95	96.32	10.08	86.24	0.00	<0.5	<0.5	<0.5	<0.5	<50				230
MW1	Well destroyed April 1996.													
MW2	05/21/92	95.91	14.30	81.61	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW2	02/10/93	95.91	12.34	83.57	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW2	05/20/93	95.91	10.73	85.18	0.00	<0.5	<0.5	<0.5	<1.0	320				NA
MW2	06/23/93	95.91	11.74	84.17	0.00	<0.5	<0.5	<0.5	<0.5	130				NA
MW2	08/23/93	95.91	12.60	83.31	0.00	<0.5	<0.5	<0.5	1.1	140				NA
MW2	10/25/93	95.91	13.86	82.05	0.00	<0.5	<0.5	0.5	2.4	75				NA
MW2	02/16/94	95.91	14.73	81.18	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW2	04/16/94	95.91	14.33	81.58	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW2	07/26/94	95.91	14.96	80.95	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW2	10/05/94	95.91	15.49	80.42	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW2	01/04/95	95.91	14.44	81.47	0.00	<0.5	<0.5	<0.5	<0.5	<50				NA
MW2	06/12/95	95.91	10.10	85.81	0.00	<0.5	<0.5	<0.5	<0.5	<50				59
MW2	Well destroyed April 1996.													



TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	LPH Thickness (feet)	Hydrocarbons					Other Oxygenates	
						Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)
MW3	05/21/92	97.95	16.05	81.90	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW3	02/10/93	97.95	13.77	84.18	0.00	<0.5	<0.5	<0.5	0.7	<50		NA
MW3	05/20/93	97.95	12.32	85.63	0.00	<0.5	<0.5	<0.5	<1.0	<50		NA
MW3	06/23/93	97.95	13.34	84.61	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW3	08/23/93	97.95	14.30	83.65	0.00	2.3	1.2	1.4	4.1	<50		NA
MW3	10/25/93	97.95	15.62	82.33	0.00	NS	NS	NS	NS	NS		NS
MW3	02/16/94	97.95	16.48	81.47	0.00	NS	NS	NS	NS	NS		NS
MW3	04/16/94	97.95	16.61	81.34	0.00	NS	NS	NS	NS	NS		NS
MW3	07/26/94	97.95	16.72	81.23	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW3	10/05/94	97.95	17.33	80.62	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW3	01/04/95	97.95	16.29	81.66	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW3	06/12/95	97.95	11.67	86.28	0.00	<0.5	<0.5	<0.5	<0.5	<50		<2.5
MW3			Well destroyed April 1996.									
MW4	05/21/92	96.69	14.59	82.10	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW4	02/10/93	96.69	12.30	84.39	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW4	05/20/93	96.69	10.75	85.94	0.00	1.4	1.0	<0.5	1.8	<50		NA
MW4	06/23/93	96.69	11.78	84.91	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW4	08/23/93	96.69	12.82	83.87	0.00	<0.5	<0.5	<0.5	0.8	<50		NA
MW4	10/25/93	96.69	14.10	82.59	0.00	NS	NS	NS	NS	NS		NS
MW4	02/16/94	96.69	15.02	81.67	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW4	04/16/94	96.69	14.61	82.08	0.00	NS	NS	NS	NS	NS		NS
MW4	07/26/94	96.69	15.23	81.46	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW4	10/05/94	96.69	15.85	80.84	0.00	<0.5	12	<0.5	<0.5	<50		NA
MW4	01/04/95	96.69	14.84	81.85	0.00	<0.5	<0.5	<0.5	<0.5	<50		NA
MW4	06/12/95	96.69	10.07	86.62	0.00	<0.5	<0.5	<0.5	<0.5	<50		<2.5

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	LPH Thickness (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)	Ethanol (µg/L)	Other Oxygenates and Additives (µg/L)
MW4		Well destroyed April 1996.												
MW5	06/15/00	STATION OPERATIONS TRANSFERRED TO VALERO ENERGY CORPORATION												
MW5	11/17/00	352.93	13.51	339.42	0.00	<0.5	<0.5	<0.5	2.46	240			1,500	
MW5	11/17/00	352.93											1,600 <sup>a</sup>	
MW5	02/02/01	352.93	13.81	339.12	0.00	<0.5	<0.5	<0.5	<0.5	110			1,400	
MW5	02/02/01	352.93											1,200 <sup>a</sup>	
MW5	05/09/01	352.93	12.20	340.73	0.00	<0.5	<0.5	<0.5	<0.5	<50			770 <sup>a</sup>	ND <sup>c</sup>
MW5	09/12/01	352.93	13.84	339.09	0.00	<0.5	<0.5	<0.5	<0.5	100			760	NA
MW5	09/12/01	352.93											800 <sup>a</sup>	
MW5	11/05/01	352.95	14.14	338.81	0.00	<0.5	<0.5	<0.5	0.61	70	86		510	NA
MW5	11/05/01	352.95											420 <sup>a</sup>	
MW5	02/04/02	352.95	11.85	341.10	0.00	<0.5	<0.5	<0.5	<0.5	381	d	<50	630	NA
MW5	02/04/02	352.95											525 <sup>a</sup>	
MW5	04/26/02	352.95	11.75	341.20	0.00	<0.5	<0.5	<0.5	<0.5	322	d	<50	378	NA
MW5	04/26/02	352.95											312 <sup>a</sup>	
MW5	07/30/02	352.95	12.87	340.08	0.00	<0.5	<0.5	<0.5	<0.5	97.8	d	<50	126	NA
MW5	07/30/02	352.95											132 <sup>a</sup>	
MW5	11/05/02	352.95	14.13	338.82	0.00	<0.5	<0.5	<0.5	<0.5	74.2	d	<50	80.0	NA
MW5	11/05/02	352.95											96.4 <sup>a</sup>	
MW5	01/24/03	352.95	11.23	341.72	0.00	<0.5	<0.5	<0.5	<0.5	542	d	70	678	NA
MW5	01/24/03	352.95											509 <sup>a</sup>	
MW5	04/24/03	352.95	10.79	342.16	0.00	<0.5	<0.5	<0.5	<0.5	384	d	<50	522	NA
MW5	04/24/03	352.95											498 <sup>a</sup>	
MW5	08/05/03	352.95	12.24	340.71	0.00	<0.5	1.6	<0.5	1.3	282	d	<50	560	NA
MW5	08/05/03	352.95											428 <sup>a</sup>	
MW5	10/17/03	352.95	13.64	339.31	0.00	<0.5	1.6	<0.5	0.9	229	d	<50	284	NA

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	LPH Thickness (feet)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)	Ethanol (µg/L)	Other	
														Oxygenates and Additives (µg/L)	
MW5	10/17/03	352.95												272 <sup>a</sup>	
MW5	01/28/04	352.95	12.41	340.54	0.00	<0.5	0.9	<0.5	1.1	283	d	NA <sup>c</sup>	485	NA	
MW5	01/28/04	352.95												453 <sup>a</sup>	
MW5	04/16/04	352.95	11.67	341.28	0.00	<0.5	<0.5	<0.5	<0.5	163	d	<50	200 <sup>a</sup>	<100 <sup>a</sup>	NA
MW5	08/03/04	352.95	13.39	339.56	0.00	<0.5	<0.5	<0.5	1.0	553	d	<50	92.8 <sup>a</sup>	<100 <sup>a</sup>	NA
MW5	11/04/04	352.95	13.17	339.78	0.00	<0.5	<0.5	<0.5	<0.5	117	d	<50	117 <sup>a</sup>	<100 <sup>a</sup>	ND <sup>c</sup>
MW5	02/16/05	352.95	10.81	342.14	0.00	<0.50	<0.5	<0.5	<0.5	<50.0	d	<50	43.2 <sup>a</sup>	<100 <sup>a</sup>	NA
<b>MW5</b>	<b>05/16/05</b>	<b>352.95</b>	<b>9.92</b>	<b>343.03</b>	<b>0.00</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;50</b>	<b>d</b>	<b>&lt;50</b>	<b>29.5<sup>a</sup></b>	<b>&lt;100<sup>a</sup></b>	<b>NA</b>
MW6	06/15/00	STATION OPERATIONS TRANSFERRED TO VALERO ENERGY CORPORATION													
MW6	11/17/00	352.66	13.47	339.19	0.00	<0.5	<0.5	<0.5	<0.5	<50				270	
MW6	11/17/00	352.66												260 <sup>a</sup>	
MW6	02/02/01	352.66	13.79	338.87	0.00	<0.5	<0.5	<0.5	<0.5	<50				160	
MW6	02/02/01	352.66												130 <sup>a</sup>	
MW6	05/09/01	352.66	12.25	340.41	0.00	<0.5	<0.5	<0.5	<0.5	<50				760 <sup>a</sup>	ND <sup>c</sup>
MW6	09/12/01	352.66	13.83	338.83	0.00	<0.5	<0.5	<0.5	<0.5	<50				680	NA
MW6	09/12/01	352.66												740 <sup>a</sup>	
MW6	11/05/01	352.69	14.11	338.58	0.00	<0.5	<0.5	<0.5	<0.5	<50	<50			390	NA
MW6	11/05/01	352.69												320 <sup>a</sup>	
MW6	02/27/02	352.69	11.77	340.92	0.00	<5.0	<5.0	8.00	<5.0	1,380	d	NA	1,310	ND <sup>c</sup>	
MW6	02/27/02	352.69												1,410 <sup>a</sup>	
MW6	04/26/02	352.69	11.75	340.94	0.00	<0.5	<0.5	<0.5	<0.5	422	d	<50	482	NA	
MW6	04/26/02	352.69												430 <sup>a</sup>	
MW6	07/30/02	352.69	12.88	339.81	0.00	<2.5	<2.5	<2.5	<2.5	144	d	<50	166	NA	
MW6	07/30/02	352.69												185 <sup>a</sup>	
MW6	11/05/02	352.69	14.12	338.57	0.00	<0.5	<0.5	<0.5	<0.5	99.7	d	<50	114	NA	
MW6	11/05/02	352.69												118 <sup>a</sup>	

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	LPH Thickness (feet)	LPH				TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)	Other Oxygenates and Additives (µg/L)		
						Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)				Ethanol (µg/L)	and Additives (µg/L)	
MW6	01/24/03	352.69	11.32	341.37	0.00	<0.5	<0.5	<0.5	<0.5	342	d	84	388		NA
MW6	01/24/03	352.69											293 <sup>a</sup>		
MW6	04/24/03	352.69	10.84	341.85	0.00	<0.5	<0.5	<0.5	<0.5	370	d	<50	509		NA
MW6	04/24/03	352.69											491 <sup>a</sup>		
MW6	08/05/03	352.69	12.25	340.44	0.00	<0.5	<0.5	<0.5	<0.5	967	d	<50	1,240		NA
MW6	08/05/03	352.69											1,010 <sup>a</sup>		
MW6	10/17/03	352.69	13.63	339.06	0.00	<0.5	1.2	<0.5	0.5	476	d	<50	528		NA
MW6	10/17/03	352.69											535 <sup>a</sup>		
MW6	01/28/04	352.69	12.40	340.29	0.00	<0.5	0.8	<0.5	0.9	154	d	<50	283		NA
MW6	01/28/04	352.69											244 <sup>a</sup>		
MW6	04/16/04	352.69	11.68	341.01	0.00	<0.5	<0.5	<0.5	<0.5	219	d	<50	301 <sup>a</sup>	<100 <sup>a</sup>	NA
MW6	08/03/04	352.69	13.37	339.32	0.00	<0.5	<0.5	<0.5	<0.5	243	d	<50	62.3 <sup>a</sup>	<100 <sup>a</sup>	NA
MW6	11/04/04	352.69	13.13	339.56	0.00	<0.5	<0.5	<0.5	<0.5	<50	d	<50	25.0 <sup>a</sup>	<100 <sup>a</sup>	ND <sup>c</sup>
MW6	02/16/05	352.69	10.77	341.92	0.00	<0.50	0.8	<0.5	1.4	53.5	d	<50	52.3 <sup>a</sup>	<100 <sup>a</sup>	NA
<b>MW6</b>	<b>05/16/05</b>	<b>352.69</b>	<b>9.98</b>	<b>342.71</b>	<b>0.00</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>1.2</b>	<b>59.7</b>	<b>d</b>	<b>&lt;50</b>	<b>30.1<sup>a</sup></b>	<b>&lt;100<sup>a</sup></b>	<b>NA</b>
MW7	06/15/00	STATION OPERATIONS TRANSFERRED TO VALERO ENERGY CORPORATION													
MW7	11/17/00	351.86	12.44	339.42	0.00	<0.5	<0.5	<0.5	<0.5	<50			<0.5		
MW7	02/02/01	351.86	12.74	339.12	0.00	<0.5	<0.5	<0.5	<0.5	<50			<0.5		
MW7	05/09/01	351.86	11.15	340.71	0.00	<0.5	<0.5	<0.5	<0.5	<50			<5 <sup>a</sup>		ND <sup>c</sup>
MW7	09/12/01	351.86	12.74	339.12	0.00	<0.5	<0.5	<0.5	<0.5	<50			<0.5		NA
MW7	11/05/01	351.87	13.07	338.80	0.00	<0.5	<0.5	<0.5	<0.5	<50		50	<0.5		NA
MW7	02/04/02	351.87	10.79	341.08	0.00	<0.5	<0.5	<0.5	<0.5	<50	d	<50	5.80		NA
MW7	02/04/02	351.87											1.4 <sup>a</sup>		
MW7	04/26/02	351.87	10.65	341.22	0.00	<0.5	<0.5	<0.5	<0.5	<50	d	<50	1.6		NA
MW7	07/30/02	351.87	11.77	340.10	0.00	<0.5	<0.5	<0.5	<0.5	<50	d	<50	<0.5		NA
MW7	11/05/02	351.87	13.04	338.83	0.00	<0.5	<0.5	<0.5	<0.5	<50	d	<50	<0.5		NA

TABLE 2 GROUNDWATER MONITORING DATA, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA

Well Number	Date	Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	LPH Thickness (feet)	Ethyl-		Total Xylenes (µg/L)	TPH-g (µg/L)	TPH-d (µg/L)	MTBE (µg/L)	Ethanol (µg/L)	Other		
						Benzene (µg/L)	Toluene (µg/L)						Oxygenates and Additives (µg/L)		
MW7	01/24/03	351.87	10.19	341.68	0.00	<0.5	<0.5	<0.5	<50	d	106	<0.5	NA		
MW7	04/24/03	351.87	9.76	342.11	0.00	<0.5	<0.5	<0.5	<50	d	<50	<0.5	NA		
MW7	08/05/03	351.87	11.18	340.69	0.00	<0.5	1.6	<0.5	<50	d	<50	<0.5	NA		
MW7	10/17/03	351.87	12.54	339.33	0.00	<0.5	1.7	<0.5	0.9	<50	d	<50	<0.5	NA	
MW7	01/28/04	351.87	11.33	340.54	0.00	<0.5	1.0	<0.5	0.9	<50	d	<50	<0.5	NA	
MW7	04/16/04	351.87	10.57	341.30	0.00	<0.5	<0.5	<0.5	<50	d	<50	<0.5 <sup>a</sup>	<100 <sup>a</sup>	NA	
MW7	08/03/04	351.87	12.30	339.57	0.00	<0.5	<0.5	<0.5	94.0	d	<50	<0.5 <sup>a</sup>	<100 <sup>a</sup>	NA	
MW7	11/04/04	351.87	12.08	339.79	0.00	<0.5	<0.5	<0.5	<50	d	<50	<0.5 <sup>a</sup>	<100 <sup>a</sup>	ND <sup>c</sup>	
MW7	02/16/05	351.87	9.73	342.14	0.00	<0.50	<0.5	<0.5	<50.0	d	<50	<0.50 <sup>a</sup>	<100 <sup>a</sup>	NA	
<b>MW7</b>	<b>05/16/05</b>	<b>351.87</b>	<b>8.87</b>	<b>343.00</b>	<b>0.00</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;50</b>	<b>d</b>	<b>&lt;50</b>	<b>&lt;0.50<sup>a</sup></b>	<b>&lt;100<sup>a</sup></b>	<b>NA</b>

a Analysis by EPA Method 8260.

b A peak eluting earlier than benzene, suspected to be MTBE.

c Other oxygenates and additives include diisopropyl ether, t-butyl alcohol, tert-amyl methyl ether, tert-butyl ethyl ether, 1,2-dibromoethane, and 1,2-dichloroethane.

d TPH-g results beginning February 2002 include MTBE.

e Sample bottles broken in transit to laboratory.

LPH Liquid-phase hydrocarbons.

TPH-g Total Petroleum Hydrocarbons as gasoline.

TPH-d Total Petroleum Hydrocarbons as diesel.

MTBE Methyl tertiary butyl ether.

NA Not analyzed.

ND Not detected.

NS Not sampled.

µg/L Micrograms per liter.

TABLE 3 GROUNDWATER MONITORING PLAN,  
 FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CALIFORNIA

Well Number	Groundwater Gauging Frequency	Groundwater Sampling and Analysis Frequency			
		BTEX and TPH-g	TPH-d	MTBE	Ethanol
MW5	Q	Q	Q	Q	Q
MW6	Q	Q	Q	Q	Q
MW7	Q	Q	Q	Q	Q

Q = Quarterly.

BTEX = Benzene, toluene, ethylbenzene, total xylenes.

TPH-g = Total Petroleum Hydrocarbons as gasoline.

TPH-d = Total Petroleum Hydrocarbons as diesel.

MTBE = Methyl tertiary butyl ether.

**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**





Engineering, Inc.

### GROUNDWATER PURGE AND SAMPLE

Project Name: Exxon 7-0210

Well No: MW5

Date: 5/16/05

Project No: UP0210.1

Personnel: C. M. Johnson

#### GAUGING DATA

Water Level Measuring Method: WLM / IP

Measuring Point Description: TOC

WELL PURGE VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter				Casing Volume (gal)	Total Purge Volume (gal)				
	24.02	-	9.92	=	14.10	X	1	2	4	6	2.26	=	6.77
					0.04	0.16	0.64	1.44					

#### PURGING DATA

Purge Method: WATERRA / SUB / BAILER

Time	12:30	12:32	12:34			
Volume Purge (gal)	2	4	6			
Temperature (C)	20.2°C	20.1°C	20.0°C			
pH	7.24	6.95	6.98			
Spec Cond (umhos)	1442 uS	1431 uS	1426 uS			
Turbidity/Color	S. Hy/Bron	S. Hy/Bron	S. Hy/Bron			
Odor (Y/N)	N	N	N			
Deodorized (Y/N)	N	N	N			

Comments/Observations:

#### SAMPLING DATA

Time Sampled: 12:40

Approximate Depth to Water During Sampling: 10 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Perservative	Volume Filled (mL or L)	Turbidity/ Color	Analysis Method
MW5	6	Voa	HCL	40 ml		TPH-g, BTEX, MTBE
MW5	2	Amber	None	1 L		TPH-d

Total Purge Volume: 6 (gallons)	Disposal: ROMIC
Weather Conditions: OK	BOLTS (Y) / I / N
Condition of Well Box and Casing at Time of Sampling: 1x Broken Tare	LOCK & CAP (Y) / I / N
Well Head Conditions Requiring Correction:	GROUT (Y) / I / N
Problems Encountered During Purging and Sampling: None	WELL BOX (Y) / I / N
Comments:	WSECURED (X) / I / N



Engineering, Inc.

### GROUNDWATER PURGE AND SAMPLE

Project Name: Exxon 7-0210 Well No: MW6 Date: 5/16/05  
 Project No: UP0210.1 Personnel: C. M. Schell

#### GAUGING DATA

Water Level Measuring Method: WLM IP Measuring Point Description: TOC

WELL PURGE VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter				Casing Volume (gal)	Total Purge Volume (gal)
	24.50	9.98	14.52	1	2	4	6	2.32	6.97
				0.04	0.16	0.64	1.44		

#### PURGING DATA

Purge Method: WATERRA / SUB / BAILER

Time	Volume Purge (gal)	Temperature (°C)	pH	Spec Cond (µmhos)	Turbidity/Color	Odor (Y/N)	Dechlorated (Y/N)
11:34	2	20.0°C	7.67	1393µs	Silt/Brn	N	N
11:35	4	20.1°C	7.13	1396µs	S. Hy/Brn	N	N
11:36	6	20.2°C	6.97	1396µs	S. Hy/Brn	N	N

Comments/Observations:

#### SAMPLING DATA

Time Sampled: 11:40 Approximate Depth to Water During Sampling: 10 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Perservative	Volume Filled (mL or L)	Turbidity/Color	Analysis Method
MW6	6	Voa	HCL	40 ml		TPH-g, BTEX, MTBE
MW6	2	Amber	None	1 L		TPH-d

Total Purge Volume: 6 (gallons) Disposal: ROMIC

Weather Conditions: OK BOLTS (X) N

Condition of Well Box and Casing at Time of Sampling: OK LOCK & CAP (X) N

Well Head Conditions Requiring Correction: None GROUT (X) N

Problems Encountered During Purging and Sampling: None WELL BOX (X) N

Comments: WSECURED (X) N

**GROUNDWATER PURGE AND SAMPLE**

Project Name: Exxon 7-0210

Well No: MW7

Date: 5/16/05

Project No: UP0210.1

Personnel: C. M. Lohell

**GAUGING DATA**

Water Level Measuring Method: WLM / IP

Measuring Point Description: TOC

WELL PURGE VOLUME CALCULATION	Total Depth (feet)	Depth to Water (feet)	Water Column (feet)	Multiplier for Casing Diameter				Casing Volume (gal)	Total Purge Volume (gal)
				0.04	0.16	0.64	1.44		
	23.44	8.87	14.57	1	2	4	6	2.33	6.99

**PURGING DATA**

Purge Method: WATERRA / SUB / BAILER

Time	12:01	12:03	12:05			
Volume Purge (gal)	2	4	6			
Temperature (C)	20.1°C	20.1°C	20.1°C			
pH	7.21	6.95	6.85			
Spec. Cond. (µmhos)	1504 <sub>µs</sub>	1493 <sub>µs</sub>	1497 <sub>µs</sub>			
Turbidity/Color	S. Hy/Bun	S. Hy/Bun	S. Hy/Bun			
Odor (Y/N)	N	N	N			
Dewatered (Y/N)	N	N	N			

Comments/Observations:

**SAMPLING DATA**

Time Sampled: 12:10

Approximate Depth to Water During Sampling: 9 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Perservative	Volume Filled (ml or L)	Turbidity/Color	Analysis Method
MW7	6	Voa	HCL	40 ml		TPH-g, BTEX, MTBE
MW7	2	Amber	None	1 L		TPH-d

Total Purge Volume: 6 (gallons)	Disposal: ROMIC
Weather Conditions: OU	BOLTS <input checked="" type="checkbox"/> / N
Condition of Well Box and Casing at Time of Sampling: OU	LOCK & CAP <input checked="" type="checkbox"/> / N
Well Head Conditions Requiring Correction: None	GROUT <input checked="" type="checkbox"/> / N
Problems Encountered During Purging and Sampling: None	WELL BOX <input checked="" type="checkbox"/> / N
Comments:	WSECURED <input checked="" type="checkbox"/> / N

**Appendix C**

**Laboratory Analytical Reports**

5/27/05

**ETIC ENGINEERING 10236**  
**Doug Fitzgerald**  
**2285 MORELLO AVENUE**  
**PLEASANT HILL, CA 94523**

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EXXONMOBIL 7-0210  
Project Number: .  
Laboratory Project Number: 416532.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. Any QC recoveries outside laboratory control limits are flagged individually with an #. Sample specific comments and quality control statements are included in the Laboratory notes section of the analytical report for each sample report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980. Any opinions, if expressed, are outside the scope of the Laboratory's accreditation.

Sample Identification	Lab Number	Page 1 Collection Date
MW5	05-A70943	5/16/05
MW6	05-A70944	5/16/05
MW7	05-A70945	5/16/05

Sample Identification	Lab Number	Page 2 Collection Date
-----	-----	-----

These results relate only to the items tested.  
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permission of the laboratory.

Report Approved By: Roxanne L. Connor Report Date: 5/27/05

Johnny A. Mitchell, Laboratory Director  
Michael H. Dunn, M.S., Technical Director  
Pamela A. Langford, Senior Project Manager  
Eric S. Smith, QA/QC Director  
Sandra McMillin, Technical Services

Gail A. Lage, Senior Project Manager  
Glenn L. Norton, Technical Services  
Kelly S. Comstock, Technical Services  
Roxanne L. Connor, Senior Project Manag

Laboratory Certification Number: 01168CA

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## ANALYTICAL REPORT

ETIC ENGINEERING 10236  
Doug Fitzgerald  
2285 MORELLO AVENUE  
PLEASANT HILL, CA 94523

Lab Number: 05-A70943  
Sample ID: MW5  
Sample Type: Water  
Site ID: 7-0210

Project:  
Project Name: EXXONMOBIL 7-0210  
Sampler: CHRISTOPHER MITCHELL

Date Collected: 5/16/05  
Time Collected: 12:40  
Date Received: 5/18/05  
Time Received: 8:00  
Page: 1

Purchase Order: 4505802123

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
*ORGANIC PARAMETERS*									
**Benzene	ND	ug/l	0.50	1.0	5/21/05	17:32	A. Cobbs	8021B	4904
**Ethylbenzene	ND	ug/l	0.5	1.0	5/21/05	17:32	A. Cobbs	8021B	4904
**Toluene	ND	ug/l	0.5	1.0	5/21/05	17:32	A. Cobbs	8021B	4904
**Xylenes (Total)	ND	ug/l	0.5	1.0	5/21/05	17:32	A. Cobbs	8021B	4904
**TPH (Gasoline Range)	ND	ug/l	50.0	1.0	5/21/05	17:32	A. Cobbs	8015B	4904
**TPH (Diesel Range)	ND	ug/l	50.	1.0	5/20/05	14:32	B. Yanna	8015B/3510	4986
*VOLATILE ORGANICS*									
**Methyl-t-butyl ether	29.5	ug/l	0.50	1.0	5/26/05	0:09	J. Haley	8260B	8037
Ethanol	ND	ug/L	100.	1.0	5/26/05	0:09	J. Haley	8260B	8037

Silica Gel Cleanup performed for TPH-DRO analysis.

### Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
EPH	1000 ml	1.00 ml	5/19/05		J. Davis	3510

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 05-A70943  
Sample ID: MW5  
Project:  
Page 2

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Surrogate	% Recovery	Target Range
-----	-----	-----
TPH Hi Surr., o-Terphenyl	82.	52. - 132.
BTEX/GRO Surr., a,a,a-TFT	101.	63. - 134.
VOA Surr 1,2-DCA-d4	88.	70. - 130.
VOA Surr Toluene-d8	90.	78. - 121.
VOA Surr, 4-BFB	93.	78. - 126.
VOA Surr, DBFM	96.	79. - 122.

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.  
\*\* = NELAC E87358 Certified Analyte

End of Sample Report.

## ANALYTICAL REPORT

ETIC ENGINEERING 10236  
Doug Fitzgerald  
2285 MORELLO AVENUE  
PLEASANT HILL, CA 94523

Lab Number: 05-A70944  
Sample ID: MW6  
Sample Type: Water  
Site ID: 7-0210

Project:  
Project Name: EXXONMOBIL 7-0210  
Sampler: CHRISTOPHER MITCHELL

Date Collected: 5/16/05  
Time Collected: 11:40  
Date Received: 5/18/05  
Time Received: 8:00  
Page: 1

Purchase Order: 4505802123

Analyte	Result	Units	Report Limit	Dil Factor	Analysis		Analyst	Method	Batch
					Date	Time			
*ORGANIC PARAMETERS*									
**Benzene	ND	ug/l	0.50	1.0	5/20/05	23:52	A. Cobbs	8021B	691
**Ethylbenzene	ND	ug/l	0.5	1.0	5/20/05	23:52	A. Cobbs	8021B	691
**Toluene	ND	ug/l	0.5	1.0	5/20/05	23:52	A. Cobbs	8021B	691
**Xylenes (Total)	1.2	ug/l	0.5	1.0	5/20/05	23:52	A. Cobbs	8021B	691
**TPH (Gasoline Range)	59.7	ug/l	50.0	1.0	5/20/05	23:52	A. Cobbs	8015B	691
**TPH (Diesel Range)	ND	ug/l	50.	1.0	5/20/05	14:53	B. Yanna	8015B/3510	4986
*VOLATILE ORGANICS*									
**Methyl-t-butyl ether	30.1	ug/l	0.50	1.0	5/26/05	0:42	J. Haley	8260B	8037
Ethanol	ND	ug/L	100.	1.0	5/26/05	0:42	J. Haley	8260B	8037

Silica Gel Cleanup performed for TPH-DRO analysis.

### Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
EPH	1000 ml	1.00 ml	5/19/05		J. Davis	3510

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 05-A70944  
Sample ID: MW6  
Project:  
Page 2

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Surrogate	% Recovery	Target Range
-----	-----	-----
TPH Hi Surr., o-Terphenyl	84.	52. - 132.
BTEX/GRO Surr., a,a,a-TFT	98.	63. - 134.
VOA Surr 1,2-DCA-d4	87.	70. - 130.
VOA Surr Toluene-d8	89.	78. - 121.
VOA Surr, 4-BFB	95.	78. - 126.
VOA Surr, DBFM	96.	79. - 122.

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.  
\*\* = NELAC E87358 Certified Analyte

End of Sample Report.

## ANALYTICAL REPORT

ETIC ENGINEERING 10236  
Doug Fitzgerald  
2285 MORELLO AVENUE  
PLEASANT HILL, CA 94523

Lab Number: 05-A70945  
Sample ID: MW7  
Sample Type: Water  
Site ID: 7-0210

Date Collected: 5/16/05  
Time Collected: 12:10  
Date Received: 5/18/05  
Time Received: 8:00  
Page: 1

Project:  
Project Name: EXXONMOBIL 7-0210  
Sampler: CHRISTOPHER MITCHELL

Purchase Order: 4505802123

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
*ORGANIC PARAMETERS*									
**Benzene	ND	ug/l	0.50	1.0	5/21/05	0:23	A. Cobbs	8021B	691
**Ethylbenzene	ND	ug/l	0.5	1.0	5/21/05	0:23	A. Cobbs	8021B	691
**Toluene	ND	ug/l	0.5	1.0	5/21/05	0:23	A. Cobbs	8021B	691
**Xylenes (Total)	ND	ug/l	0.5	1.0	5/21/05	0:23	A. Cobbs	8021B	691
**TPH (Gasoline Range)	ND	ug/l	50.0	1.0	5/21/05	0:23	A. Cobbs	8015B	691
**TPH (Diesel Range)	ND	ug/l	50.	1.0	5/20/05	7:23	B. Yanna	8015B/3510	4986
*VOLATILE ORGANICS*									
**Methyl-t-butyl ether	ND	ug/l	0.50	1.0	5/25/05	14:50	J.Haley	8260B	8021
Ethanol	ND	ug/L	100.	1.0	5/25/05	14:50	J.Haley	8260B	8021

Silica Gel Cleanup performed for TPH-DRO analysis.

### Sample Extraction Data

Parameter	Wt/Vol		Date	Time	Analyst	Method
	Extracted	Extract Vol				
EPH	1000 ml	1.00 ml	5/19/05		J. Davis	3510

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 05-A70945  
Sample ID: MW7  
Project:  
Page 2

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Surrogate	% Recovery	Target Range
-----	-----	-----
TPH Hi Surr., o-Terphenyl	94.	52. - 132.
BTEX/GRO Surr., a,a,a-TFT	96.	63. - 134.
VOA Surr 1,2-DCA-d4	91.	70. - 130.
VOA Surr Toluene-d8	90.	78. - 121.
VOA Surr, 4-BFB	96.	78. - 126.
VOA Surr, DBFM	96.	79. - 122.

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.  
\*\* = NELAC E87358 Certified Analyte

End of Sample Report.

**PROJECT QUALITY CONTROL DATA**

Project Number:  
Project Name: **EXXONMOBIL 7-0210**  
Page: 1  
Laboratory Receipt Date: **5/18/05**

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for the defined analytical batch for MS/MSD analysis on an true sample matrix. Laboratory reagent water was used for QC purposes.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
<b>**UST ANALYSIS**</b>								
Benzene	mg/l	< 0.00100	0.0547	0.0500	109	50. - 160.	691	05-A70900
Toluene	mg/l	< 0.0010	0.0537	0.0500	107	51. - 157.	691	05-A70900
Ethylbenzene	mg/l	< 0.0010	0.0574	0.0500	115	47. - 159.	691	05-A70900
Xylenes (Total)	mg/l	< 0.0010	0.105	0.100	105	51. - 152.	691	05-A70900
TPH (Gasoline Range)	mg/l	< 0.0500	0.980	1.00	98	43. - 150.	691	05-A70900
TPH (Diesel Range)	mg/l	0.060	0.849	1.00	79	35. - 124.	4986	blank
BTEX/GRO Surr., a,a,a-TFT	% Recovery				107	63 - 134	691	
VOA Surr 1,2-DCA-d4	% Rec				79	70 - 130	8021	
VOA Surr 1,2-DCA-d4	% Rec				80	70 - 130	8037	
VOA Surr Toluene-d8	% Rec				90	78 - 121	8021	
VOA Surr Toluene-d8	% Rec.				90	78 - 121	8037	
VOA Surr, 4-BFB	% Rec				96	78 - 126	8021	
VOA Surr, 4-BFB	% Rec				94	78 - 126	8037	
VOA Surr, DBFM	% Rec				91	79 - 122	8021	
VOA Surr, DBFM	% Rec				93	79 - 122	8037	

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
<b>**UST PARAMETERS**</b>						
Benzene	mg/l	0.0547	0.0555	1.45	30.	691
Toluene	mg/l	0.0537	0.0546	1.66	37.	691

Project QC continued . . .

**PROJECT QUALITY CONTROL DATA**

Project Number:  
Project Name: **EXXONMOBIL 7-0210**  
Page: 2  
Laboratory Receipt Date: **5/18/05**

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Ethylbenzene	mg/l	0.0574	0.0580	1.04	38.	691
Xylenes (Total)	mg/l	0.105	0.107	1.89	33.	691
TPH (Gasoline Range)	mg/l	0.980	0.953	2.79	27.	691
TPH (Diesel Range)	mg/l	0.849	0.910	6.94	36.	4986
BTEX/GRO Surr., a,a,a-TFT	% Recovery		106.			691
VOA Surr 1,2-DCA-d4	% Rec		81.			8021
VOA Surr 1,2-DCA-d4	% Rec		80.			8037
VOA Surr Toluene-d8	% Rec		90.			8021
VOA Surr Toluene-d8	% Rec		90.			8037
VOA Surr, 4-BFB	% Rec		94.			8021
VOA Surr, 4-BFB	% Rec		95.			8037
VOA Surr, DBFM	% Rec		93.			8021
VOA Surr, DBFM	% Rec		93.			8037

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**UST PARAMETERS**</b>						
Benzene	mg/l	0.100	0.106	106	72 - 118	691
Benzene	mg/l	0.100	0.110	110	72 - 118	4904
Toluene	mg/l	0.100	0.105	105	72 - 119	691
Toluene	mg/l	0.100	0.109	109	72 - 119	4904
Ethylbenzene	mg/l	0.100	0.112	112	71 - 119	691
Ethylbenzene	mg/l	0.100	0.116	116	71 - 119	4904
Xylenes (Total)	mg/l	0.200	0.205	102	70 - 117	691
Xylenes (Total)	mg/l	0.200	0.212	106	70 - 117	4904
TPH (Gasoline Range)	mg/l	1.00	0.980	98	64 - 130	691

Project QC continued . . .



**PROJECT QUALITY CONTROL DATA**

Project Number:  
Project Name: **EXXONMOBIL 7-0210**  
Page: 3  
Laboratory Receipt Date: **5/18/05**

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
TPH (Gasoline Range)	mg/l	1.00	0.989	99	64 - 130	4904
BTEX/GRO Surr., a,a,a-TFT	% Recovery			109	63 - 134	691
BTEX/GRO Surr., a,a,a-TFT	% Recovery			113	63 - 134	4904
**UST PARAMETERS**						
TPH (Diesel Range)	mg/l	1.00	0.839	84	41 - 120	4986
**VOA PARAMETERS**						
Methyl-t-butyl ether	mg/l	0.0500	0.0454	91	69 - 136	8021
Methyl-t-butyl ether	mg/l	0.0500	0.0458	92	69 - 136	8037
Ethanol	mg/L	5.00	4.71	94	48 - 164	8021
Ethanol	mg/L	5.00	4.46	89	48 - 164	8037
VOA Surr 1,2-DCA-d4	% Rec			80	70 - 130	8021
VOA Surr 1,2-DCA-d4	% Rec			79	70 - 130	8037
VOA Surr Toluene-d8	% Rec			91	78 - 121	8021
VOA Surr Toluene-d8	% Rec			91	78 - 121	8037
VOA Surr, 4-BFB	% Rec			95	78 - 126	8021
VOA Surr, 4-BFB	% Rec			95	78 - 126	8037
VOA Surr, DBFM	% Rec			92	79 - 122	8021
VOA Surr, DBFM	% Rec			92	79 - 122	8037

Duplicates

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch	Sample Dup'd
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Project QC continued . . .

**PROJECT QUALITY CONTROL DATA**

Project Number:  
 Project Name: **EXXONMOBIL 7-0210**  
 Page: 4  
 Laboratory Receipt Date: **5/18/05**

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
<b>**UST PARAMETERS**</b>					
Benzene	< 0.00050	mg/l	691	5/20/05	18:40
Benzene	< 0.00050	mg/l	4904	5/21/05	14:25
Toluene	< 0.0005	mg/l	691	5/20/05	18:40
Toluene	< 0.0005	mg/l	4904	5/21/05	14:25
Ethylbenzene	< 0.0005	mg/l	691	5/20/05	18:40
Ethylbenzene	< 0.0005	mg/l	4904	5/21/05	14:25
Xylenes (Total)	< 0.0005	mg/l	691	5/20/05	18:40
Xylenes (Total)	0.0006	mg/l	4904	5/21/05	14:25
TPH (Gasoline Range)	< 0.0500	mg/l	691	5/20/05	18:40
TPH (Gasoline Range)	< 0.0500	mg/l	4904	5/21/05	14:25
TPH (Diesel Range)	0.060	mg/l	4986	5/20/05	10:06
BTEX/GRO Surr., a,a,a-TFT	102.	% Recovery	691	5/20/05	18:40
BTEX/GRO Surr., a,a,a-TFT	99.	% Recovery	4904	5/21/05	14:25
<b>**VOA PARAMETERS**</b>					
Methyl-t-butyl ether	< 0.00023	mg/l	8021	5/25/05	8:48
Methyl-t-butyl ether	< 0.00023	mg/l	8037	5/25/05	23:36
Ethanol	< 0.0307	mg/L	8021	5/25/05	8:48
Ethanol	< 0.0307	mg/L	8037	5/25/05	23:36
VOA Surr 1,2-DCA-d4	88.	% Rec	8021	5/25/05	8:48
VOA Surr 1,2-DCA-d4	86.	% Rec	8037	5/25/05	23:36
VOA Surr Toluene-d8	89.	% Rec	8021	5/25/05	8:48
VOA Surr Toluene-d8	88.	% Rec	8037	5/25/05	23:36
VOA Surr, 4-BFB	96.	% Rec	8021	5/25/05	8:48
VOA Surr, 4-BFB	95.	% Rec	8037	5/25/05	23:36
VOA Surr, DBFM	80.	% Rec	8021	5/25/05	8:48
VOA Surr, DBFM	95.	% Rec	8037	5/25/05	23:36

Project QC continued . . .

**PROJECT QUALITY CONTROL DATA**

Project Number:

Project Name: EXXONMOBIL 7-0210

Page: 5

Laboratory Receipt Date: 5/18/05

# = Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 416532

416532

Consultant Name: ETIC ENGINEERING

Address: 2285 MORELLO AVENUE

City/State/Zip: PLEASANT HILL, CA. 94523

ExxonMobil Project Mgr: TED MOISE

Telephone Number: (925) 602-4710 EXT. 23

Fax No.: (925) 602-4720

Sampler Name: (Print) Christopher G. Mitchell

Sampler Signature: Christopher G. Mitchell

Report To: DOUG FITZGERALD

Invoice To: Jennifer Sedlachek (XOM TM)

Account #: 10236

PO #: 4505802123

Facility ID # 70210

Site Address 7840 AMADOR VALLEY BLVD.

City, State Zip DUBLIN, CA

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative										Matrix						Analyze For:						RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	STD TAT	Fax Results								
							Ice	HNO <sub>3</sub> (Red Label)	HCl (Blue Label)	NaOH (Orange Label)	H <sub>2</sub> SO <sub>4</sub> Plastic (Yellow Label)	H <sub>2</sub> SO <sub>4</sub> Glass (Yellow Label)	None (Black Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other (Specify)	TPH-D BY 8015	7 OXYS BY 8260B	TPH-D BY 8015	MTBE-ETHANOL BY 8260B																
MW5	5/16	1240	8				X	X										X																			X	X		
MW6	5/16	1140	8				X	X										X																			X	X		
MW7	5/16	1210	8				X	X										X																			X	X		

Special Instructions: **GLOBAL ID# T0600100553** **EDF FILE REQUIRED**

Laboratory Comments:  
Temperature Upon Receipt: 1.8°C  
Sample Containers Intact?  Y  N  
VOCs Free of Headspace?  Y  N

CONFIRM ALL MTBE HITS BY 8260B

Relinquished by:	Date	Time	Received by:	Date	Time
<u>Christopher G. Mitchell</u>	5/16/05	1330			
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time
			<u>[Signature]</u>	5/18/05	800

**Nashville Division**

**COOLER RECEIPT FORM**

**BC#**



**Client Name :** ETIC Engineering

**Cooler Received/Opened On:** 5/18/05 **Accessioned By:** James D. Jacobs

*James D. Jacobs*  
Log-in Personnel Signature

- 1. Temperature of Cooler when triaged: 1.3 Degrees Celsius
- 2. Were custody seals on outside of cooler?..... YES...NO...NA  
a. If yes, how many and where: 1 Front
- 3. Were custody seals on containers?..... NO...YES...NA
- 4. Were the seals intact, signed, and dated correctly?..... YES...NO...NA
- 5. Were custody papers inside cooler?..... YES...NO...NA
- 6. Were custody papers properly filled out (ink, signed, etc)?..... YES...NO...NA
- 7. Did you sign the custody papers in the appropriate place?..... YES...NO...NA
- 8. What kind of packing material used? Bubblewrap    Peanuts    Vermiculite    Foam Insert  
   Ziplock baggies    Paper    Other    None
- 9. Cooling process: Ice    Ice-pack    Ice (direct contact)    Dry ice    Other    None
- 10. Did all containers arrive in good condition ( unbroken)?..... YES...NO...NA
- 11. Were all container labels complete (#, date, signed, pres., etc)?..... YES...NO...NA
- 12. Did all container labels and tags agree with custody papers?..... YES...NO...NA
- 13. Were correct containers used for the analysis requested?..... YES...NO...NA
- 14. a. Were VOA vials received?..... YES...NO...NA  
b. Was there any observable head space present in any VOA vial?..... NO...YES...NA
- 15. Was sufficient amount of sample sent in each container?..... YES...NO...NA
- 16. Were correct preservatives used?..... YES...NO...NA  
If not, record standard ID of preservative used here \_\_\_\_\_
- 17. Was residual chlorine present?..... NO...YES...NA
- 18. Indicate the Airbill Tracking Number (last 4 digits for Fedex only) and Name of Courier below:

6873

Fed-Ex    UPS    Velocity    DHL    Route    Off-street    Misc.

19. If a Non-Conformance exists, see attached or comments below: