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Gene N. Ortega
Territory Manager
Global Remediation – U.S. Retail

ExxonMobil
Refining & Supply

June 19, 2002

JUN 28 2002

Ms. Eva Chu
Alameda County Health Agency
Division of Environmental Protection
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

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

Dear Ms. Chu:

Attached for your review and comment is a copy of the *Report of Groundwater Monitoring, Second Quarter* 2002 for the above-referenced site. The report, prepared by ETIC Engineering, Inc. of Pleasant Hill, California, details the results of the April 2002 sampling event.

If you have any questions or comments, please contact me at (925) 246-8747.

Sincerely,

Gene N. Ortega
Territory Manager

Attachment: ETIC Groundwater Monitoring Report dated June 2002

c: w/ attachment:
Mr. Joseph A. Aldridge - Valero Energy Corporation

c: w/o attachment:
Ms. Andrea Ricci - ETIC Engineering, Inc.

RO. 2424

ETIC
Engineering, Inc.

JUN 28 2002

Report of Groundwater Monitoring
Second Quarter 2002

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

Prepared for

ExxonMobil Refining and Supply Company
2300 Clayton Road, Suite 1250
Concord, California 94520

Prepared by

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

Ted Moise
Project Manager

6/19/02
Date

Heidi Dieffenbach-Carle, R.G. #6793
Senior Geologist

June 19, 2002
Date

REGISTERED GEOLOGIST
HEIDI L. DIEFFENBACH-CARLE
No. 6793
exp 03/31/04
STATE OF CALIFORNIA

June 2002

SITE CONTACTS

Station Number:	Former Exxon Retail Site 7-0210
Station Address:	7840 Amador Valley Boulevard Dublin, California
ExxonMobil Project Manager:	Gene N. Ortega ExxonMobil Refining and Supply Company 2300 Clayton Road, Suite 1250 Concord, California 94520 (925) 246-8747
Consultant to ExxonMobil:	ETIC Engineering, Inc. 2285 Morello Avenue Pleasant Hill, California 94523 (925) 602-4710
ETIC Project Manager:	Ted Moise
Regulatory Oversight:	Eva Chu Alameda County Health Agency Division of Environmental Protection Department of Environmental Health 1131 Harbor Bay Parkway, 2nd Floor Alameda, California 94502 (510) 567-6700

INTRODUCTION

At the request of ExxonMobil Refining and Supply Company, 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 27 February 2002, the date of the last monitoring event, until 26 April 2002, 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

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

GROUNDWATER MONITORING SUMMARY

Gauging and sampling date:	26 April 2002
Wells gauged and sampled:	MW5-MW7
Wells gauged only:	None
Groundwater flow direction:	Southeast
Groundwater gradient:	0.003
Well screens submerged:	None
Well screens not submerged:	MW5-MW7
Liquid-phase hydrocarbons:	Not observed or detected
Laboratory:	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 by EPA Method 8021B
- Methyl t-butyl ether by EPA Method 8260 (confirmation samples)

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.

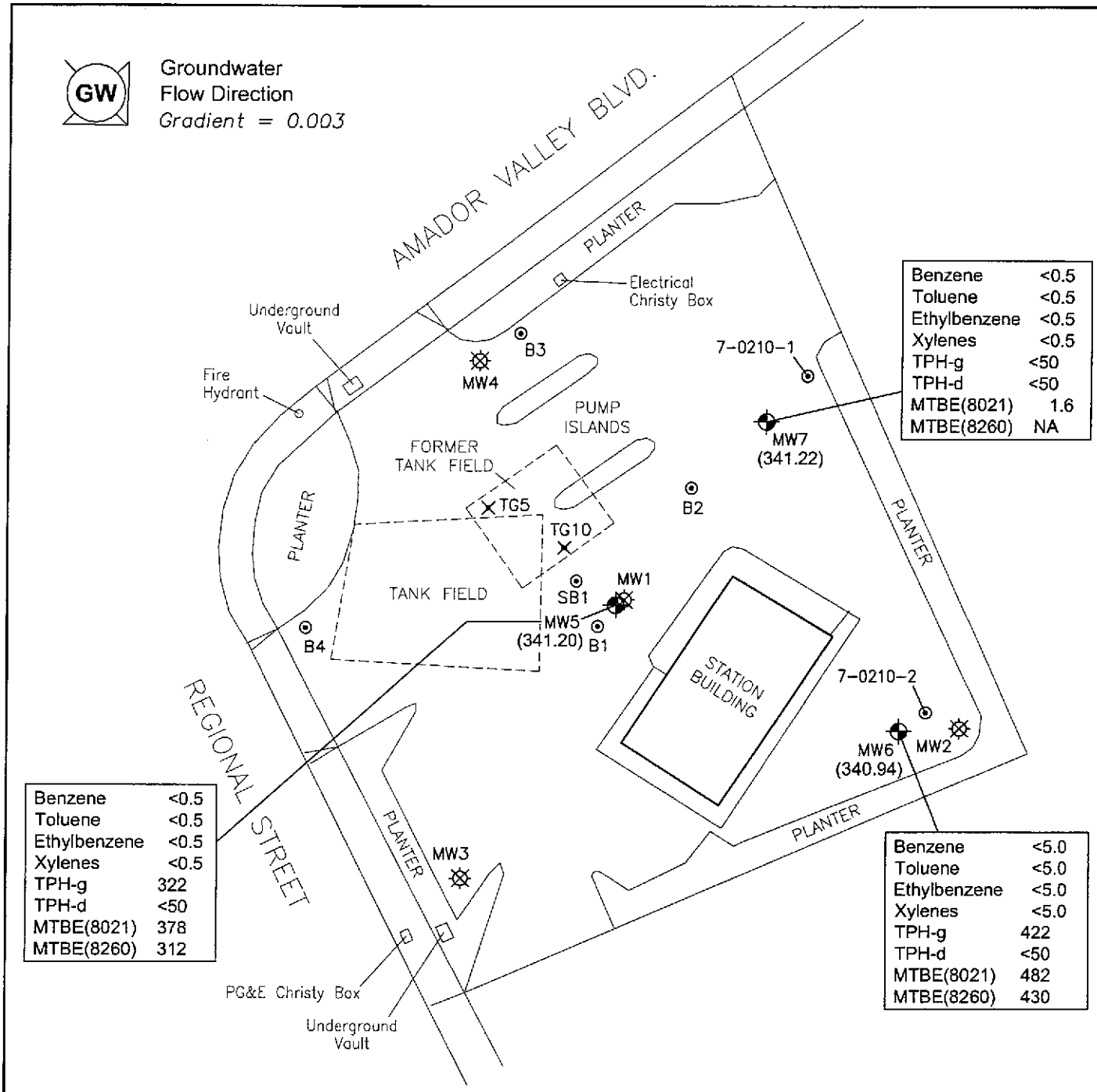
In accordance with the Work Plan for Offsite Subsurface Investigation submitted in April 2002, ETIC initiated an access agreement with the owner of the neighboring property.

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



LEGEND

- GROUNDWATER MONITORING WELL LOCATION
- SOIL BORING / GROUNDWATER SAMPLING LOCATION
- CONFIRMATION SOIL SAMPLE
- DESTROYED GROUNDWATER MONITORING WELL
- (341.10) GROUNDWATER ELEVATION (FEET)
- TPH-g TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- TPH-d TOTAL PETROLEUM HYDROCARBONS AS DIESEL
- MTBE METHYL T-BUTYL ETHER
- NA NOT ANALYZED
- *CONCENTRATIONS IN MICROGRAMS PER LITER (ug/L).*

N

0 40

Scale (feet)

FILENAME: 2Q2002.DWG 06/10/02

ETIC Engineering, Inc.

SITE PLAN SHOWING GROUNDWATER ELEVATIONS
AND ANALYTICAL RESULTS
FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BLVD., DUBLIN, CA.
26 APRIL 2002

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)	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)	Other Oxygenates and Additives (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[b]	<0.5	<0.5	<0.5	190		NA	
MW1	07/26/94	96.32	15.11	81.21	0.00	<0.5[b]	<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	

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)	Other Oxygenates and Additives (µg/L)
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.										
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	

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)	Other Oxygenates and Additives (µg/L)
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	
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[a]	
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[a]	
MW5	05/09/01	352.93	12.20	340.73	0.00	<0.5	<0.5	<0.5	<0.5	<50			770[a]	ND[c]
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[a]	
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[a]	
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[a]	
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[a]**	
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[a]	
MW6	02/02/01	352.66	13.79	338.87	0.00	<0.5	<0.5	<0.5	<0.5	<50			160	

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)	Other Oxygenates and Additives (µg/L)
MW6	02/02/01	352.66											130[a]	
MW6	05/09/01	352.66	12.25	340.41	0.00	<0.5	<0.5	<0.5	<0.5	<50			760[a]	ND[c]
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[a]	
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[a]	
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[c]
MW6	02/27/02	352.69											1,410[a]	
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[a]**	
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[a]	ND[c]
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[a]	
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**

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.

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)	Other Oxygenates and Additives (µg/L)

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
MW5	Q	Q	Q	Q
MW6	Q	Q	Q	Q
MW7	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 and, if the well does not recover, the well is considered "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 parameters are considered stable when two consecutive readings indicate no greater than a 10 percent change from the previous reading for temperature and electrical conductance and no greater than a 0.1 pH units change from the previous reading for pH. 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

ETIC
Engineering, Inc.

MONITORING WELL DATA FORM

Client: *ExxonMobil*

Date: 4/26/02

Project Number: *UP0210.1*

Station Number: *7-0210*

Site Location:
7840 AMADOR VALLY BLVD., DUBLIN, CA

Samplers: CM/WN

MONITORING WELL NUMBER	DEPTH TO WATER (TOC) ft.	DEPTH TO PRODUCT (TOC)	APPARENT PRODUCT THICKNESS	AMOUNT OF PRODUCT REMOVED	MONITORING WELL INTEGRITY	DEPTH TO BOTTOM (TOC) ft.	WELL CASING DIAMETER in.
MM5	11.75					24.32	2"
MM6	11.75					24.45	2"
MM7	10.65					23.84	2"

ETIC Engineering, Inc.

GROUNDWATER PURGE AND SAMPLE

Project Name: *Exxon 7-0210* Well No: MW5 Date: 4/26/02

Project No: *UP0210.1* Personnel:

GAUGING DATA

Water Level Measuring Method: *WLM* 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)
	24.32	−	11.75	=	12.57	X	1	(2)	4	6	2	=	6.03
							0.04	0.16	0.64	1.44			

PURGING DATA

Purge Method: *Waterra Pump*

Time	10:40	10:42	10:45			
Volume Purge (gal)	3	6	9			
Temperature (C)	17.9	18.8	18.9			
pH	7.09	7.02	6.95			
Spec.Cond.(umhos)	1445 µS	1425 µS	1427 µS			
Turbidity/Color	/	/	/			
Odor (Y/N)	N	N	N			
Dewatered (Y/N)	N	N	N			

Comments/Observbations:

SAMPLING DATA

Time Sampled: 10:50 Approximate Depth to Water During Sampling: 12.50 *(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
					/	
					/	
					/	

Total Purge Volume: 9 *(gallons)* Disposal: ROMIC

Weather Conditions:

Condition of Well Box and Casing at Time of Sampling: good

Well Head Conditions Requiring Correction: NO

Problems Encountered During Purging and Sampling: NO

Comments:

ETIC Engineering, Inc.

GROUNDWATER PURGE AND SAMPLE

Project Name: *Exxon 7-0210* Well No: MW6 Date: 4/26/07

Project No: *UP0210.1* Personnel:

GAUGING DATA

Water Level Measuring Method: *WLM* 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)
	24.45	(-)	11.75	(=)	12.70	(X)	1	(2)	4	6	2.03	(=)	6.10
							0.04	0.16	0.64	1.44			

PURGING DATA

Purge Method: *Waterra Pump*

Time	11:10	11:12	11:14			
Volume Purge (gal)	3	6	9			
Temperature (C)	18.1	19.0	18.8			
pH	7.26	7.08	7.05			
Spec.Cond.(umhos)	1432 uS	1424 uS	1428 uS			
Turbidity/Color						
Odor (Y/N)	N	N	N			
Dewatered (Y/N)	N	N	N			

Comments/Observbations:

SAMPLING DATA

Time Sampled: 11:20 Approximate Depth to Water During Sampling: 12.50 *(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*

Total Purge Volume: *(gallons)* Disposal: ROMIC

Weather Conditions: Clear

Condition of Well Box and Casing at Time of Sampling: Good

Well Head Conditions Requiring Correction: No

Problems Encountered During Purging and Sampling: N/A

Comments:

ETIC Engineering, Inc.

GROUNDWATER PURGE AND SAMPLE

Project Name: Exxon 7-0210 Well No: MW7 Date: 4/26/02

Project No: UP0210.1 Personnel: C. Mitchell

GAUGING DATA

Water Level Measuring Method: WLM 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)
	23.84	(-)	10.65	(=)	13.19	(X)	1	(2)	4	6	2.11	(=)	6.33
							0.04	0.16	0.64	1.44			

PURGING DATA

Purge Method: Waterra Pump

Time	10:42	10:45	10:48			
Volume Purge (gal)	3	6	9			
Temperature (C)	18.4°C	18.7°C	18.7°C			
pH	6.99	6.35	6.27			
Spec.Cond.(umhos)	1391 µS	1390 µS	1387 µS			
Turbidity/Color	Silty	Silty	Silty			
Odor (Y/N)	N	N	N			
Dewatered (Y/N)	N	N	N			

Comments/Observbations:

SAMPLING DATA

Time Sampled: 10:55 Approximate Depth to Water During Sampling: 12 (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

Total Purge Volume: 9 (gallons) Disposal: ROMIC

Weather Conditions: OK

Condition of Well Box and Casing at Time of Sampling: OK

Well Head Conditions Requiring Correction: None

Problems Encountered During Purging and Sampling: None

Comments:

Appendix C

Laboratory Analytical Reports

TestAmerica
INCORPORATED

5/20/02

ETIC 3865
Ted Moise
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 EXXONMOBIL 7-0210. The Laboratory Project number is 282909. An executed copy of the chain of custody and the sample receipt form are also included as an addendum to this report.

Sample Identification	Lab Number	Collection Date
MW5	02-A71989	4/26/02
MW6	02-A71990	4/26/02
MW7	02-A71991	4/26/02

Report Approved By: Michael A. Dunn Report Date: 5/13/02

Laboratory Certification Number: 01168CA

TestAmerica
INCORPORATED

ANALYTICAL REPORT

ETIC 3865
Ted Moise
2285 MORELLO AVENUE
PLEASANT HILL, CA 94523

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

Lab Number: 02-A71989
Sample ID: MW5
Sample Type: Water
Site ID:

Date Collected: 4/26/02
Time Collected: 10:50
Date Received: 5/ 1/02
Time Received: 9:00

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS									
Benzene	ND	ug/L	0.5	1.0	5/ 9/02	20:57	D.Ramey	8021B	198
Ethylbenzene	ND	ug/L	0.5	1.0	5/ 9/02	20:57	D.Ramey	8021B	198
Toluene	ND	ug/L	0.5	1.0	5/ 9/02	20:57	D.Ramey	8021B	198
Xylenes (Total)	ND	ug/L	0.5	1.0	5/ 9/02	20:57	D.Ramey	8021B	198
Methyl-t-butylether	378.	ug/L	2.5	5.0	5/10/02	12:55	D.Ramey	8021B	2915
TPH (Gasoline Range)	322.	ug/L	50.0	1.0	5/ 9/02	20:57	D.Ramey	8015B	198
TPH (Diesel Range)	ND	ug/L	50.	1.0	5/ 7/02	11:55	M.Jarrett	8015B/3510	8140

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
EPH	1000 ml	1.00 ml	5/ 3/02		D. Harris	3510

Surrogate	% Recovery	Target Range
surr-o-Terphenyl	128.	50. - 150.
BTEX/GRO Surr., a,a,a-TFT	103.	67. - 135.

Sample report continued . . .

TestAmerica
INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A71989
Sample ID: MW5
Project:

LABORATORY COMMENTS:

ND - Not detected at the report limit.
B - Analyte was detected in the method blank.
J - Estimated Value below Report Limit.
- Recovery outside Laboratory historical or method prescribed limits.
MTBE results confirmed by GC/MS method 8260 @ 312 ug/l

End of Sample Report.

2960 Foster Creighton Drive / Nashville,TN 37204 / 615-726-0177 / Fax: 615-726-0954 / 800-765-0980

TestAmerica
INCORPORATED

ANALYTICAL REPORT

ETIC 3865
Ted Moise
2285 MORELLO AVENUE
PLEASANT HILL, CA 94523

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

Lab Number: 02-A71990
Sample ID: MW6
Sample Type: Water
Site ID:

Date Collected: 4/26/02
Time Collected: 11:20
Date Received: 5/ 1/02
Time Received: 9:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS									
Benzene	ND	ug/L	0.5	1.0	5/ 9/02	21:27	D.Ramey	8021B	198
Ethylbenzene	ND	ug/L	0.5	1.0	5/ 9/02	21:27	D.Ramey	8021B	198
Toluene	ND	ug/L	0.5	1.0	5/ 9/02	21:27	D.Ramey	8021B	198
Xylenes (Total)	ND	ug/L	0.5	1.0	5/ 9/02	21:27	D.Ramey	8021B	198
Methyl-t-butylether	482.	ug/L	2.5	5.0	5/10/02	13:25	D.Ramey	8021B	2915
TPH (Gasoline Range)	422.	ug/L	50.0	1.0	5/ 9/02	21:27	D.Ramey	8015B	198
TPH (Diesel Range)	ND	ug/L	50.	1.0	5/ 7/02	13:16	M.Jarrett	8015B/3510	8140

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
EPH	1000 ml	1.00 ml	5/ 3/02		D. Harris	3510

Surrogate	% Recovery	Target Range
surr-o-Terphenyl	123.	50. - 150.
BTEX/GRO Surr., a,a,a-TFT	102.	67. - 135.

Sample report continued . . .

TestAmerica
INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A71990
Sample ID: MW6
Project:

LABORATORY COMMENTS:

ND - Not detected at the report limit.
B - Analyte was detected in the method blank.
J - Estimated Value below Report Limit.
- Recovery outside Laboratory historical or method prescribed limits.
MTBE results confirmed by GC/MS method 8260 @ 430 ug/l

End of Sample Report.

TestAmerica
INCORPORATED

ANALYTICAL REPORT

ETIC 3865
Ted Moise
2285 MORELLO AVENUE
PLEASANT HILL, CA 94523

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

Lab Number: 02-A71991
Sample ID: MW7
Sample Type: Water
Site ID:

Date Collected: 4/26/02
Time Collected: 10:55
Date Received: 5/ 1/02
Time Received: 9:00
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
ORGANIC PARAMETERS									
Benzene	ND	ug/L	0.5	1.0	5/ 9/02	21:57	D.Ramey	8021B	198
Ethylbenzene	ND	ug/L	0.5	1.0	5/ 9/02	21:57	D.Ramey	8021B	198
Toluene	ND	ug/L	0.5	1.0	5/ 9/02	21:57	D.Ramey	8021B	198
Xylenes (Total)	ND	ug/L	0.5	1.0	5/ 9/02	21:57	D.Ramey	8021B	198
Methyl-t-butylether	1.6	ug/L	0.5	1.0	5/ 9/02	21:57	D.Ramey	8021B	198
TPH (Gasoline Range)	ND	ug/L	50.0	1.0	5/ 9/02	21:57	D.Ramey	8015B	198
TPH (Diesel Range)	ND	ug/L	50.	1.0	5/ 5/02	2:02	M.Jarrett	8015B/3510	8140

Sample Extraction Data

Parameter	Wt/Vol Extracted	Extract Vol	Date	Time	Analyst	Method
EPH	1000 ml	1.00 ml	5/ 3/02		D. Harris	3510

Surrogate	% Recovery	Target Range
surr-o-Terphenyl	94.	50. - 150.
BTEX/GRO Surr., a,a,a-TFT	103.	67. - 135.

Sample report continued . . .

TestAmerica
INCORPORATED

ANALYTICAL REPORT

Laboratory Number: 02-A71991
Sample ID: MW7
Project:

LABORATORY COMMENTS:

ND - Not detected at the report limit.
B - Analyte was detected in the method blank.
J - Estimated Value below Report Limit.
- Recovery outside Laboratory historical or method prescribed limits.
MTBE results did not confirm by GC/MS method 8260.

End of Sample Report.

2960 Foster Creighton Drive / Nashville,TN 37204 / 615-726-0177 / Fax: 615-726-0954 / 800-765-0980

TestAmerica
INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number:
Page: 1

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
UST ANALYSIS								
Benzene	mg/l	< 0.0005	0.0524	0.0500	105	82. - 125.	198	BLANK
Toluene	mg/l	< 0.0005	0.0538	0.0500	108	77. - 121.	198	BLANK
Ethylbenzene	mg/l	< 0.0005	0.0555	0.0500	111	76. - 128.	198	BLANK
Xylenes (Total)	mg/l	< 0.0005	0.113	0.100	113	79. - 125.	198	BLANK
Methyl-t-butylether	mg/l	< 0.0005	0.0496	0.0500	99	71. - 128.	198	BLANK
TPH (Gasoline Range)	mg/l	< 0.0500	1.05	1.00	105	72. - 126.	198	BLANK
TPH (Diesel Range)	mg/l	< 0.050	0.805	1.00	80	41. - 121.	8140	BLANK
BTEX/GRO Surr., a,a,a-TFT	% Recovery				98	67. - 135.	198	

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
UST PARAMETERS						
Benzene	mg/l	0.0524	0.0515	1.73	13.	198
Toluene	mg/l	0.0538	0.0533	0.93	13.	198
Ethylbenzene	mg/l	0.0555	0.0545	1.82	13.	198
Xylenes (Total)	mg/l	0.113	0.111	1.79	13.	198
Methyl-t-butylether	mg/l	0.0496	0.0470	5.38	12.	198
TPH (Gasoline Range)	mg/l	1.05	0.944	10.63	20.	198
TPH (Diesel Range)	mg/l	0.805	0.746	7.61	46.	8140
BTEX/GRO Surr., a,a,a-TFT	% Recovery		98.			198

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
UST PARAMETERS						
Benzene	mg/l	0.100	0.0923	92	82 - 122	198

Project QC continued . . .

PROJECT QUALITY CONTROL DATA
Project Number:

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Toluene	mg/l	0.100	0.0970	97	77 - 119	198
Ethylbenzene	mg/l	0.100	0.100	100	76 - 125	198
Xylenes (Total)	mg/l	0.200	0.202	101	73 - 123	198
Methyl-t-butylether	mg/l	0.100	0.0853	85	71 - 126	198
Methyl-t-butylether	mg/l	0.100	0.108	108	71 - 126	2915
TPH (Gasoline Range)	mg/l	1.00	1.05	105	75 - 126	198
TPH (Diesel Range)	mg/l	1.00	0.579	58	46 - 118	8140
BTEX/GRO Surr., a,a,a-TFT	% Recovery			95	67 - 135	198
BTEX/GRO Surr., a,a,a-TFT	% Recovery			98	67 - 135	2915

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
Benzene	< 0.0005	mg/l	198	5/ 9/02	18:58
Toluene	< 0.0005	mg/l	198	5/ 9/02	18:58
Ethylbenzene	< 0.0005	mg/l	198	5/ 9/02	18:58
Xylenes (Total)	< 0.0005	mg/l	198	5/ 9/02	18:58
Methyl-t-butylether	< 0.0005	mg/l	198	5/ 9/02	18:58
Methyl-t-butylether	< 0.0005	mg/l	2915	5/10/02	5:23
TPH (Gasoline Range)	< 0.0500	mg/l	198	5/ 9/02	18:58
TPH (Diesel Range)	< 0.050	mg/l	8140	5/ 4/02	7:12

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST PARAMETERS					
BTEX/GRO Surr., a,a,a-TFT	105.	% Recovery	198	5/ 9/02	18:58
BTEX/GRO Surr., a,a,a-TFT	102.	% Recovery	2915	5/10/02	5:23

Project QC continued . . .

TestAmerica
INCORPORATED

PROJECT QUALITY CONTROL DATA
Project Number:
Page: 3

- Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 282909

TestAmerica INCORPORATED

Nashville Division
2960 Foster Creighton
Nashville, TN 37204

CHAIN OF CUSTODY RECORD
Phone: 615-726-0177
Toll Free: 800-765-0980
Fax: 615-726-3404

282909

ExxonMobil

Consultant Name:	ETIC ENGINEERING	**Report To:**	JOHN ORTEGA
Address:	2285 MORELLO AVENUE	**Invoice To:**	GENE ORTEGA (EXXONMOBIL TM)
City/State/Zip:	PLEASANT HILL, CA. 94523	**Account #:**	3865
ExxonMobil Project Mgr:	TED MOISE	**PO #:**	4501663691
Telephone Number:	(925) 602-4710 EXT. 23 **Fax No.:** (925) 602-4720	**Facility ID #**	7-0210
Sampler Name: (Print)		**Site Address**	7840 AMADOR VALLEY BLVD.
Sampler Signature:		**City, State Zip**	DUBLIN, CA

Sample ID / Description	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Ice	Preservative: HNO_3 (Red Label)	Preservative: HCl (Blue Label)	Preservative: NaOH (Orange Label)	Preservative: H_2SO_4 Plastic (Yellow Label)	Preservative: H_2SO_4 Glass (Yellow Label)	Preservative: None (Black Label)	Preservative: Other (Specify)	Matrix: Groundwater	Matrix: Wastewater	Matrix: Drinking Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: TPH-G/BTEX BY 8015/8020	Analyze For: MTBE BY 8021B	Analyze For: CONFIRM MTBE HITS BY 8260B	Analyze For: TPH-D BY 8015	RUSH TAT (Pre-Schedule)	TAT request (in Bus. Days)	STD TAT	Fax Results
MW5 71989	4/26	1050	8				X		X						X						X	X	X	X			X	X
MW6 90	4/26	1170	8				X		X						X						X	X	X	X			X	X
MW7 71991	4/26	1055	8				X		X						X						X	X	X	X			X	X

Special Instructions: GLOBAL ID# T0600100553 EDF FILE REQUIRED

CONFIRM ALL MTBE HITS BY 8260B

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

TM

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	4/26/02	16:30			
Relinquished by:	Date	Time	Received by TestAmerica:	Date	Time
			[signature]	5/1/02	9:00

TESTAMERICA,INC.-NASHVILLE

COOLER RECEIPT FORM

Client: ETL BC# 252909

Cooler Received On: 5/1/02 And Opened On: 5/1/02 By: Paul Buckingham

(Signature)

1. Temperature of Cooler when opened 2.0 Degrees Celsius
2. Were custody seals on outside of cooler?.....YES...NO
   a. If yes, how many, what kind and where: now
3. Were custody seals on containers and intact?.....NO...YES
4. Were the seals intact, signed, and dated correctly?.....YES....NO
5. Were custody papers inside cooler?.....YES...NO
6. Were custody papers properly filled out (ink,signed,etc)?.....YES....NO
7. Did you sign the custody papers in the appropriate place?.....YES...NO
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)?.....YES...NO
10. Did all bottles arrive in good condition(unbroken)?.....YES...NO
11. Were all bottle labels complete (#,date,signed,pres,etc)?.....YES...NO
12. Did all bottle labels and tags agree with custody papers?.....YES...NO
13. Were correct bottles used for the analysis requested?.....YES...NO
14. a. Were VOA vials received?.....YES...NO
    b. Was there any observable head space present in any VOA vial?.....NO...YES
15. Was sufficient amount of sample sent in each bottle?.....YES...NO
16. Were correct preservatives used?.....YES...NO
17. Was residual chlorine present?.....NO...YES NA
18. Corrective action taken, if necessary:

    See attached for resolution

SAMPLE NONCONFORMANCE/COC REVISION FORM

TestAmerica
INCORPORATED
Nashville Division

ACCT NO. _____

DATE RECEIVED 5/1/02

COMPANY ETC

Relinquished by:	Date/Time:	Received by:	Date/Time
PKB	5/2/02	UCK	5.2/1520
Relinquished by:	Date/Time:	Received by:	Date/Time:
UCK	5.2/1545	PKD	5/3/02 12:30
Relinquished by:	Date/Time:	Received by:	Date/Time:

PROBLEM(S):

FOC/TOC?	METALS LIST?
TPH METHOD?	TCLP WHAT?
EDB METHOD?	HERB LIST- LONG OR SHORT? 3665 / 3568
NEED LIST OF COMPOUNDS:	8260 INSTEAD OF 8021?
TEMPERATURE UPON RECEIPT	SATURDAY DELIVERY MARKED?
ICE -- OR-- NO ICE??	FIELD TEST-- OUT OF HOLD
NO COC - PLEASE FAX	NO ANALYSIS REQUESTED
DOCUMENTATION LEVEL?	OUT OF HOLDING TIME-- TEST

OTHER: RAs 7-021D

RESOLUTION: Will be fixing COC came in @ 8:00 5/3/02

CONTACTED	DATE/TIME	EMAIL	LEFT MESSAGE
Wendy	5.2		
Ted Moise	/1540		

Revised 8/9/00