

ExxonMobil
Environmental Services Company
4096 Piedmont Avenue #194
Oakland, California 94611
510 547 8196 Telephone
510 547 8706 Facsimile

Jennifer C. Sedlachek
Project Manager

RECEIVED

By Alameda County Environmental Health at 2:01 pm, Jun 27, 2014

ExxonMobil

June 26, 2014

Mr. Keith Nowell
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Subject: Report of Groundwater Monitoring, Second Quarter 2014
Former Exxon RAS #70234
3450 35th Avenue, Oakland, California
ACHCSA File No. RO0002515

Dear Mr. Nowell:

Attached for your review and comment is a copy of the *Report of Groundwater Monitoring, Second Quarter 2014* for the above-referenced site. The document, prepared by ETIC Engineering, Inc. of Pasadena, California, details the results of the May 2014 sampling event.

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

If you have any questions or comments, please contact me at (510) 547-8196.

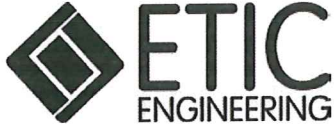
Sincerely,



Jennifer C. Sedlachek
Project Manager

Attachment: ETIC's Second Quarter 2014 Groundwater Monitoring Report

- c: w/ attachment:
Mr. Zack Spencer, FWS Highland LLC, 99 South Hill Drive, Brisbane, CA 94005
Mr. Shay Wideman, The Valero Companies, Environ. Liability Mgt., P.O. Box 696000, San Antonio, TX 78269
- c: w/o attachment:
Mr. Robert Owoc, ETIC Engineering, Inc.



**Report of Groundwater Monitoring
Second Quarter 2014**

**Former Exxon Service Station 70234
3450 35th Avenue
Oakland, California**

Prepared for

ExxonMobil Oil Corporation

Prepared by

ETIC Engineering, Inc.
898 North Fair Oaks Avenue, Suite A
Pasadena, California 91103
(626) 432-5999

A handwritten signature in black ink, appearing to read "Robert Owoc".

Robert Owoc, P.G. #7690
Senior Project Manager



6/26/14
Date

June 2014

SITE CONTACTS

Site Name: Former Exxon Service Station 70234

Site Address: 3450 35th Avenue
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.
898 North Fair Oaks Avenue, Suite A
Pasadena, California 91103
(626) 432-5999

ETIC Project Manager: Sean Bowen

Regulatory Oversight: Keith Nowell
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577
(510) 567-6764

INTRODUCTION

ETIC Engineering, Inc. (ETIC) has prepared this semiannual groundwater monitoring report for ExxonMobil Environmental Services Company on behalf of ExxonMobil Oil Corporation (ExxonMobil) for Former Exxon Service Station 70234. 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 conducted from 9 November 2013, the date of the previous monitoring event, until 12 May 2014, the date of the most 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, including groundwater data for Unocal No. 6129, located across Quigley Street southwest of site 70234.

GENERAL SITE INFORMATION

Site name: Former Exxon Service Station 70234
Site address: 3450 35th Avenue, Oakland, California
Current property owner: Mr. Zack Spencer
Current site use: Vacant
Current phase of project: Groundwater monitoring
Number of groundwater monitoring wells: 7

GROUNDWATER MONITORING SUMMARY

Gauging and sampling date: 12 May 2014
Wells gauged and sampled: MW4, MW5, MW6, MW7, MW8, RW1
Wells gauged only: None
Wells inaccessible: MW9
Groundwater flow direction: Southwest
Hydraulic gradient: 0.014
Well screens submerged: None
Well screens not submerged: MW4, MW5, MW6, MW7, MW8, RW1
Liquid-phase hydrocarbons: Not observed or detected
Laboratory: Calscience Environmental Laboratories, Inc., Garden Grove, California
Concurrently sampled: Unocal No. 6129, 3420 35th Avenue (however, not concurrent for second quarter 2014)
Unocal Data provided by: AECOM, Sacramento, California

Analyses performed:

- Total Petroleum Hydrocarbons as gasoline by EPA Method 8015B (M)
- Benzene, toluene, ethylbenzene, and xylenes by EPA Method 8260B
- Methyl tertiary butyl ether, tertiary butyl alcohol, diisopropyl ether, ethyl tertiary butyl ether, tertiary amyl methyl ether, 1,2-dibromoethane, and 1,2-dichloroethane by EPA Method 8260B

Waste disposal:

- 37 gallons of purge water as well as 2 drums containing "decon" water produced from site assessment activities were delivered to Instrat, Inc. of Rio Vista, California on 19 May 2014.

ADDITIONAL ACTIVITIES PERFORMED

In April 2014, ETIC oversaw the installation and sampling of five soil vapor monitoring wells (V-1 through V-5), the advancement of three cone penetrometer test (CPT) borings (H1-CPT, H2-CPT and H3-CPT), the advancement of three hydropunch borings at two different depths (H1-70, H1-95, H2-62, H2-80, H3-65, and H3-90), and advancement of two soil borings (H1-S and H3-S). The results from the assessment are presented in the *Soil and Water Investigation and Focused Site Conceptual Model Report* submitted to the ACHCSA on 9 June 2014.

WORK PROPOSED FOR NEXT QUARTER

ETIC plans to research and properly decommission the cathodic protection well, anode, and vent lines onsite as appropriate. In addition, ETIC plans to install proposed soil vapor monitoring well V6 and update the SCM as warranted including evaluation of the downgradient extent of dissolved-phase TPH-g and MTBE.

In accordance with ACHCSA directives, groundwater monitoring will not be conducted in the third quarter of 2014. The next semiannual groundwater monitoring event will be conducted in the fourth quarter of 2014.

Attachments:

Figure 1: Site Location and Topographic Map

Figure 2: Site Map

Figure 3: Groundwater Elevation Contour Map

Figure 4: Groundwater Analytical Data

Table 1: Well Construction Details

Table 2: Groundwater Monitoring Data

Table 3: Additional Groundwater Monitoring Data

Table 4: Groundwater Monitoring Plan

Appendix A: Field Protocols

Appendix B: Field Documents

Appendix C: Waste Manifests

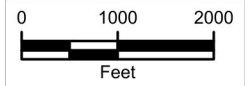
Appendix D: Laboratory Analytical Reports and Chain-of-Custody Documentation

Appendix E: Groundwater Monitoring and Sampling Data for Unocal No. 6129

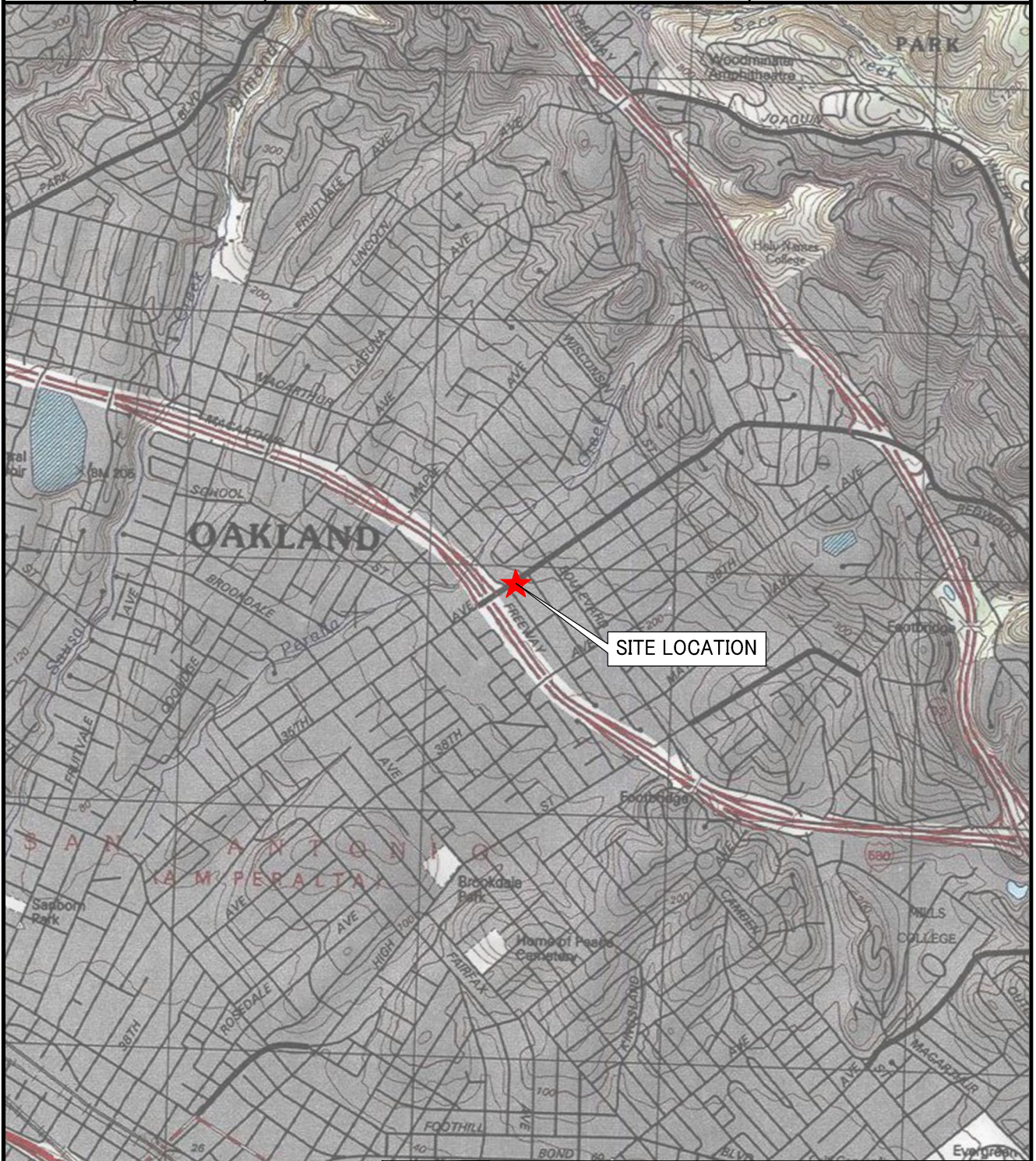
Figures



COORDINATE SYSTEM: NAD 1983 HARN CALIFORNIA TEALE ALBERS
 PROJECTION: ALBERS
 DATUM: NORTH AMERICAN 1983 HARN
 FALSE EASTING: 0.0000
 FALSE NORTHING: -4,000,000.0000
 CENTRAL MERIDIAN: -120.0000
 STANDARD PARALLEL 1: 34.0000
 STANDARD PARALLEL 2: 40.5000
 LATITUDE OF ORIGIN: 0.0000
 UNITS: METER




1 inch = 2,000 feet

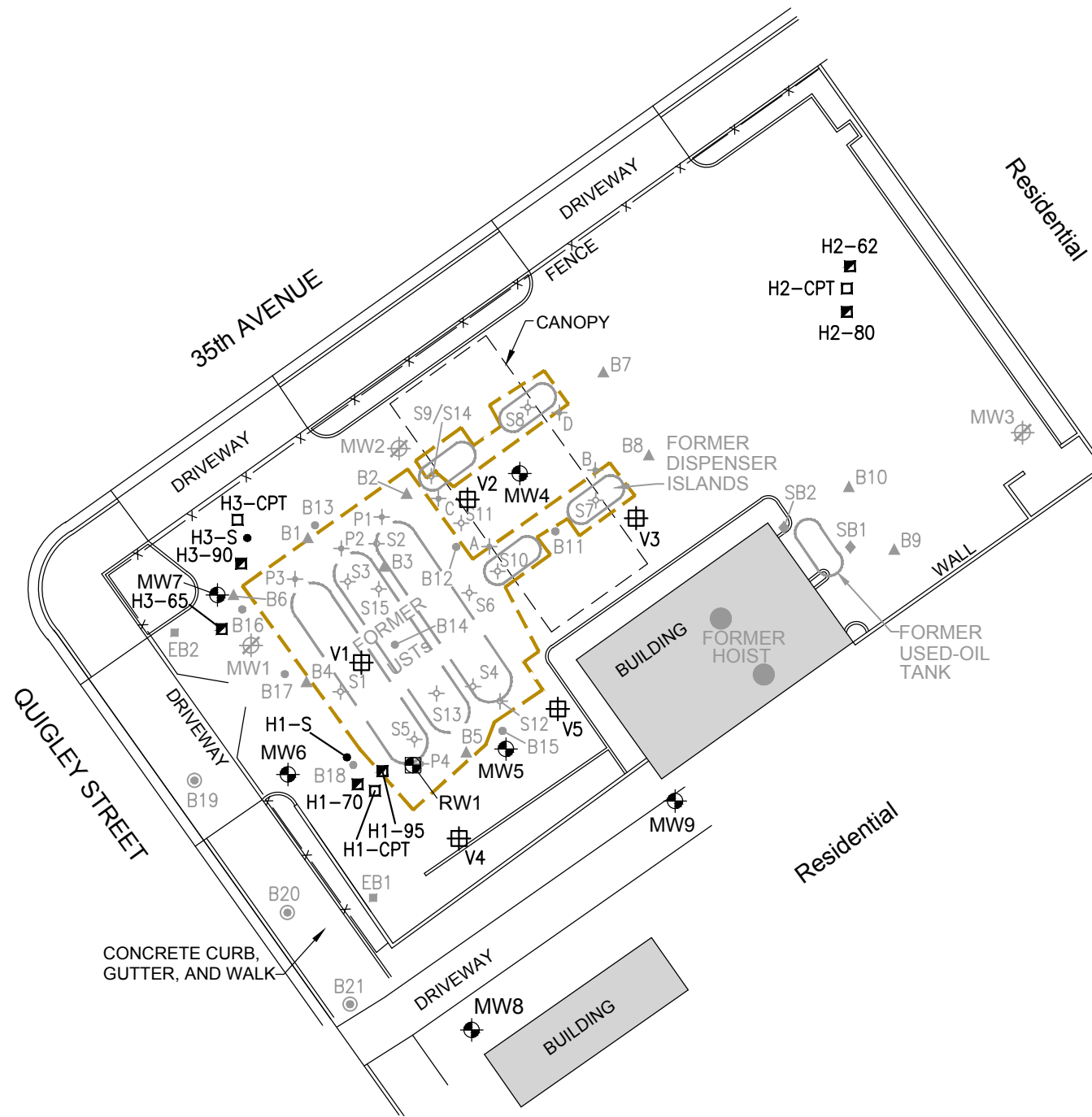
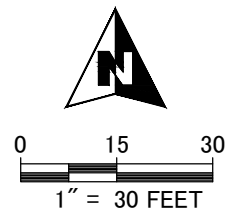


SITE LOCATION

06/25/2014, 13:38, G:\Graphics\14\070234\QMR-2014.dwg, Tab: F1

 <p>2285 MORELLO AVENUE PLEASANT HILL, CA 94523 (925) 602-4710 eticeng.com</p>	14-070234-UP	EXXONMOBIL OIL CORPORATION		FIGURE: 1
	OR: TEN	SITE LOCATION AND TOPOGRAPHIC MAP		
	DR: AJW	FORMER EXXON SERVICE STATION 70234		
	CK:	3450 35th AVENUE		
	FR:	OAKLAND, CALIFORNIA		

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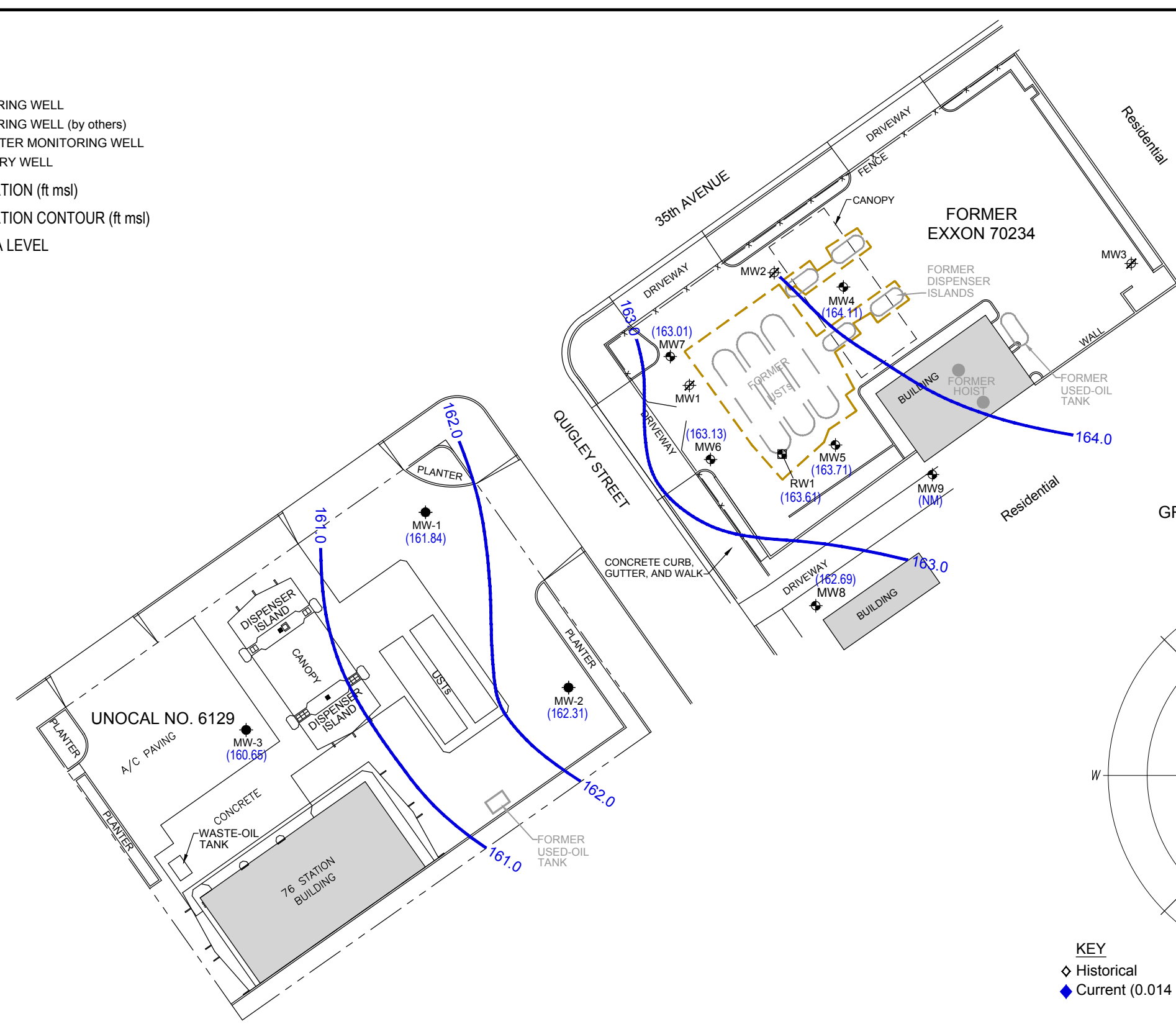


- LEGEND:**
- EXCAVATED AREA
 - GROUNDWATER MONITORING WELL
 - GROUNDWATER MONITORING WELL (by others)
 - DESTROYED GROUNDWATER MONITORING WELL
 - GROUNDWATER RECOVERY WELL
 - V1 SOIL VAPOR MONITORING WELL
 - H3-CPT CONE PENETROMETER TESTING BORING
 - H3-65 HYDROPUNCH GROUNDWATER SAMPLING LOCATION (WITH DEPTH BELOW GROUND SURFACE NOTED)
 - H3-S SOIL BORING
 - SOIL BORING (GTI, 1986)
 - SOIL BORING (HLA, 1988)
 - SOIL BORING (Alton, 1991)
 - SOIL SAMPLE (Alton, 1991)
 - SOIL SAMPLE (TRC, 2002)
 - SOIL BORING (ERI, 2007)
 - SOIL BORING (ERI, 2009)

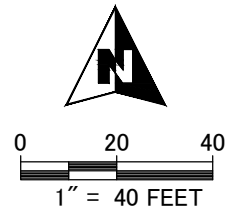
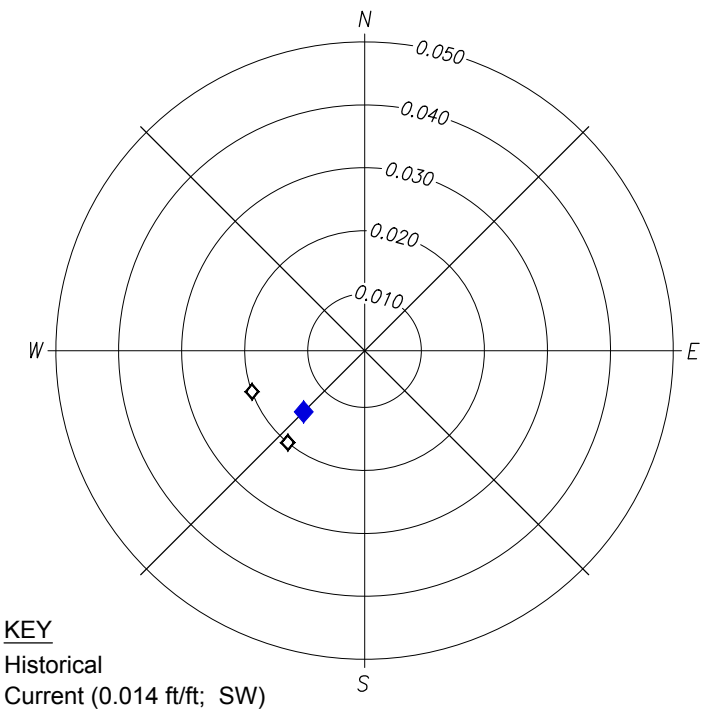
ETIC ENGINEERING
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 PLEASANT HILL, CA 94523
 (925) 602-4710
 eticeng.com

14-070234-UP	EXXONMOBIL OIL CORPORATION	
OR: TEN	SITE MAP FORMER EXXON SERVICE STATION 70234 3450 35th AVENUE OAKLAND, CALIFORNIA	
DR: AJW		FIGURE:
CK:		2
FR:		

- LEGEND:**
- EXCAVATED AREA
 - GROUNDWATER MONITORING WELL
 - GROUNDWATER MONITORING WELL (by others)
 - DESTROYED GROUNDWATER MONITORING WELL
 - GROUNDWATER RECOVERY WELL
- (163.13) GROUNDWATER ELEVATION (ft msl)
- GROUNDWATER ELEVATION CONTOUR (ft msl)
- ft msl FEET ABOVE MEAN SEA LEVEL
- NM NOT MEASURED



GROUNDWATER FLOW DIRECTION AND HYDRAULIC GRADIENT



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14-070234-UP	EXXONMOBIL OIL CORPORATION	FIGURE: 3
OR: TEN	GROUNDWATER ELEVATION CONTOUR MAP	
DR: AJW	12 MAY 2014	
CK:	FORMER EXXON SERVICE STATION 70234	
FR:	3450 35th AVENUE	
	OAKLAND, CALIFORNIA	

- LEGEND:**
- EXCAVATED AREA
 - GROUNDWATER MONITORING WELL
 - GROUNDWATER MONITORING WELL (by others)
 - DESTROYED GROUNDWATER MONITORING WELL
 - GROUNDWATER RECOVERY WELL

TPH-g TOTAL PETROLEUM HYDROCARBONS AS GASOLINE

MTBE METHYL TERTIARY BUTYL ETHER

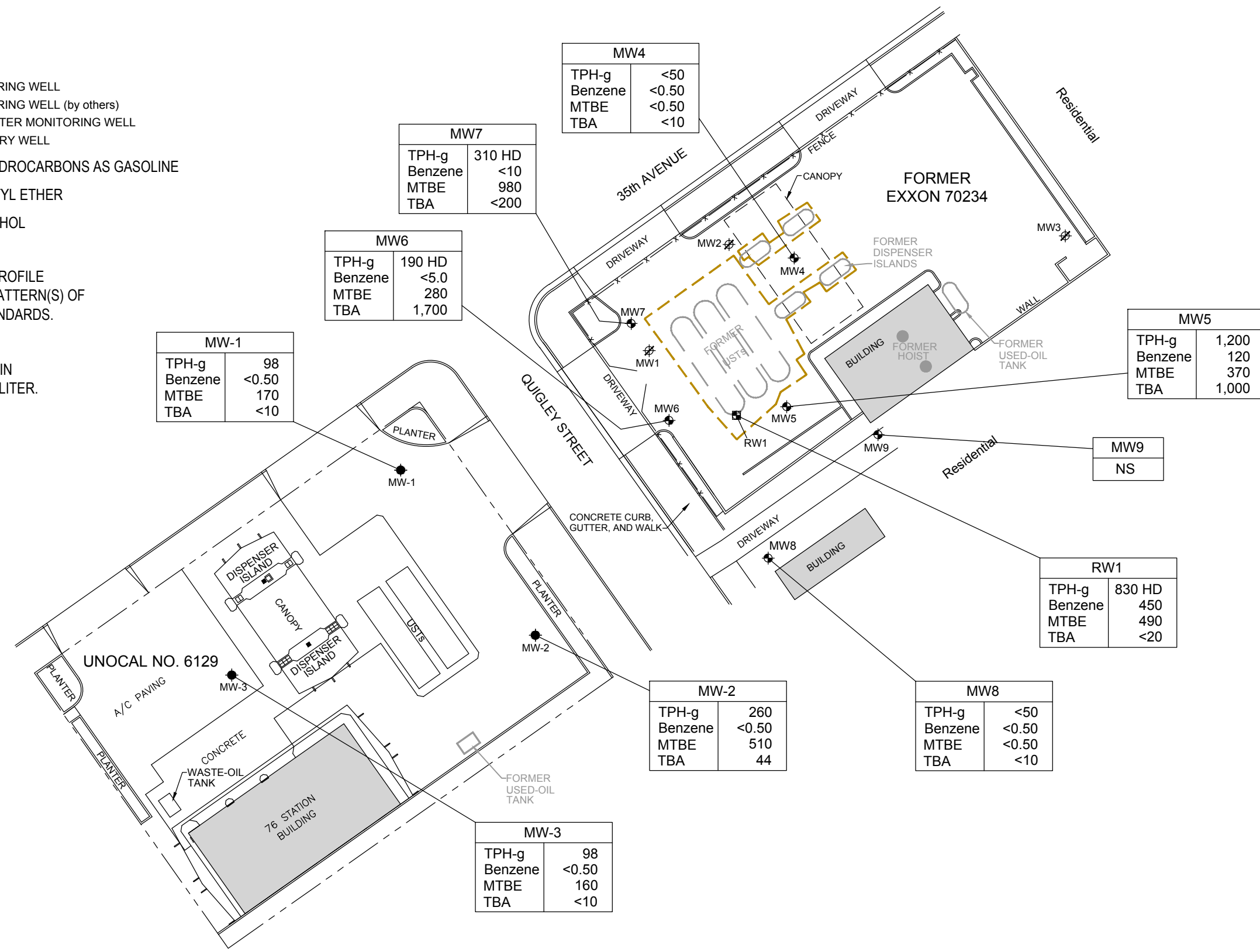
TBA TERTIARY BUTYL ALCOHOL

NS NOT SAMPLED

HD CHROMATOGRAPHIC PROFILE
INCONSISTENT WITH PATTERN(S) OF
REFERENCE FUEL STANDARDS.

NOTE:

1. CONCENTRATIONS IN
MICROGRAMS PER LITER.



MW-1	
TPH-g	98
Benzene	<0.50
MTBE	170
TBA	<10

MW6	
TPH-g	190 HD
Benzene	<5.0
MTBE	280
TBA	1,700

MW7	
TPH-g	310 HD
Benzene	<10
MTBE	980
TBA	<200

MW4	
TPH-g	<50
Benzene	<0.50
MTBE	<0.50
TBA	<10

MW5	
TPH-g	1,200
Benzene	120
MTBE	370
TBA	1,000

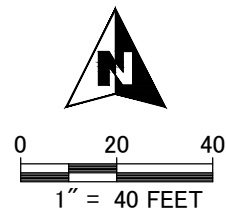
MW9	
NS	

RW1	
TPH-g	830 HD
Benzene	450
MTBE	490
TBA	<20

MW-2	
TPH-g	260
Benzene	<0.50
MTBE	510
TBA	44

MW8	
TPH-g	<50
Benzene	<0.50
MTBE	<0.50
TBA	<10

MW-3	
TPH-g	98
Benzene	<0.50
MTBE	160
TBA	<10



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14-070234-UP	EXXONMOBIL OIL CORPORATION	
	GROUNDWATER ANALYTICAL DATA	
OR: TEN	12 MAY 2014	FIGURE: 4
DR: AJW	FORMER EXXON SERVICE STATION 70234	
CK:	3450 35th AVENUE	
FR:	OAKLAND, CALIFORNIA	

Tables

TABLE 1 WELL CONSTRUCTION DETAILS,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date Installed	Date Destroyed	Elevation TOC (feet)	Borehole Diameter (inches)	Total Depth of Boring (feet bgs)	Well Depth (feet bgs)	Casing Diameter (inches)	Casing Material	Screened Interval (feet bgs)	Slot Size (inches)	Filter Pack Interval (feet bgs)	Filter Pack Material
MW1	07/15/92	06/00	192.00	11	45	45	4	Sch. 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW2	07/15/92	06/00	194.85	11	45	45	4	Sch. 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW3	07/15/92	06/00	196.90	11	45	45	4	Sch. 40 PVC	25-45	0.010	23-45	2/12 Lonestar Sand
MW4	03/02/09	---	197.62	8	45	45	2	Sch. 40 PVC	35-45	0.020	33-45	#3 Sand
MW5	03/06/09	---	196.35	8	40	40	2	Sch. 40 PVC	30-40	0.020	28-40	#3 Sand
MW6	03/09/09	---	192.41	8	40	39	2	Sch. 40 PVC	29-39	0.020	27-39	#3 Sand
MW7	03/09/09	---	194.34	8	40	40	2	Sch. 40 PVC	30-40	0.020	28-40	#3 Sand
MW8	03/04/09	---	192.96	8	40	40	2	Sch. 40 PVC	30-40	0.020	28-40	#3 Sand
MW9	03/05/09	---	195.16	8	40	40	2	Sch. 40 PVC	30-40	0.020	28-40	#3 Sand
RW1	12/22/11	---	195.15	10	40	40	4	Stainless Steel	25-39.5	0.020	23-40	#2/12 Sand

TOC Top of well casing elevation; datum is mean sea level.
PVC Polyvinyl chloride.
feet bgs Feet below ground surface.
--- Not applicable.

Notes: Data prior to 2013 provided by Cardno ERI.

TABLE 2 CURRENT GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/l)
MW4	SCREEN INTERVAL (feet bgs) 35-45										
MW4	05/12/14	a	197.62	33.51	164.11	0.00	<50	<0.50	<0.50	<0.50	<0.50
MW5	SCREEN INTERVAL (feet bgs) 30-40										
MW5	05/12/14	a	196.35	32.64	163.71	0.00	1,200	120	<5.0	<5.0	490
MW6	SCREEN INTERVAL (feet bgs) 29-39										
MW6	05/12/14	a	192.41	29.28	163.13	0.00	190 HD	<5.0	<5.0	<5.0	280
MW7	SCREEN INTERVAL (feet bgs) 30-40										
MW7	05/12/14	a	194.34	31.33	163.01	0.00	310 HD	<10	<10	<10	980
MW8	SCREEN INTERVAL (feet bgs) 30-40										
MW8	05/12/14	a	192.96	30.27	162.69	0.00	<50	<0.50	<0.50	<0.50	<0.50
MW9	SCREEN INTERVAL (feet bgs) 30-40										
MW9	05/12/14	b	195.16	---	---	---	---	---	---	---	---
RW1	SCREEN INTERVAL (feet bgs) 29-39.5										
RW1	05/12/14	a	195.15	31.54	163.61	0.00	830 HD	450	<10	13	<10

TOC Top of casing. bgs Below ground surface.
LPH Liquid-phase hydrocarbons. µg/L Micrograms per liter.
TPH-g Total Petroleum Hydrocarbons as gasoline. --- Not sampled or not analyzed.
MTBE Methyl tertiary butyl ether. NA Not available.
NM Not measured. NC Not calculated.

a Well purged prior to sampling.
b Well inaccessible.
HD Chromat. profile inconsistent with the ref. fuel stnds.

Notes: Data prior to 1999 provided by EA Engineering, Science, and Technology. Data prior to 2013 provided by Cardno ERI.

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/l)	Total Pb (µg/L)	Organic Pb (mg/L)
MW1	SCREEN INTERVAL (feet bgs) 25-45												
MW1	07/15/92	---	Well installed.										
MW1	07/17/92	192.00	33.02	158.98	0.00	67	6.6	6.9	2.0	4.5	---	17	---
MW1	10/22/92	192.00	34.07	157.93	0.00	<50	2.9	<0.5	<0.5	<0.5	---	16	---
MW1	02/04/93	192.00	29.43	162.57	0.00	<50	0.8	<0.5	<0.5	<0.5	---	4	---
MW1	05/03/93	192.00	29.72	162.28	0.00	71	2.8	7.2	2.2	22	---	40	---
MW1	07/30/93	192.00	32.95	159.05	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	5	---
MW1	10/19/93	192.00	34.34	157.66	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	12	---
MW1	02/23/94	192.00	31.72	160.28	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	4	---
MW1	06/06/94	192.00	31.77	160.23	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW1	08/18/94	192.00	33.76	158.24	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	130	---
MW1	11/15/94	192.00	34.08	157.92	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3.0	<100
MW1	02/06/95	192.00	28.50	163.50	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW1	05/10/95	192.00	29.30	162.70	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW1	09/20/99	192.00	33.30	158.70	0.00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<50
MW1	Well destroyed in June 2000.												
MW2	SCREEN INTERVAL (feet bgs) 25-45												
MW2	07/15/92	---	Well installed.										
MW2	07/17/92	194.85	34.65	160.20	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW2	10/22/92	194.85	35.64	159.21	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	--	---
MW2	02/04/93	194.85	31.13	163.72	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW2	05/03/93	194.85	31.08	163.77	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	3	---
MW2	07/30/93	194.85	34.34	160.51	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	14	---
MW2	10/19/93	194.85	36.00	158.85	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW2	02/23/94	194.85	33.92	160.93	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW2	06/06/94	194.85	33.50	161.35	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW2	08/18/94	194.85	35.38	159.47	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3.0	---
MW2	11/15/94	194.85	35.93	158.92	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3.0	<100
MW2	02/06/95	194.85	30.38	164.47	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW2	05/10/95	194.85	30.77	164.08	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW2	09/20/99	194.85	35.15	159.70	0.00	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<75	<0.5
MW2	Well destroyed in June 2000.												
MW3	SCREEN INTERVAL (feet bgs) 25-45												
MW3	07/15/92	---	Well installed.										
MW3	07/17/92	196.90	37.24	159.66	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	50	---
MW3	10/22/92	196.90	35.95	160.95	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	9	---
MW3	02/04/93	196.90	29.85	167.05	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW3	05/03/93	196.90	29.87	167.03	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	3	---
MW3	07/30/93	196.90	33.85	163.05	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	22	---
MW3	10/19/93	196.90	35.89	161.01	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	12	---
MW3	02/23/94	196.90	32.88	164.02	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	25	---

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/l)	Total Pb (µg/L)	Organic Pb (mg/L)
MW3	06/06/94	196.90	32.40	164.50	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3	---
MW3	08/18/94	196.90	35.07	161.83	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3.0	---
MW3	11/15/94	196.90	35.97	160.93	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	<3.0	<100
MW3	02/06/95	196.90	28.39	168.51	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW3	05/10/95	196.90	28.90	168.00	0.00	<50	<0.5	<0.5	<0.5	<0.5	---	---	---
MW3	09/20/99	196.90	34.68	162.22	0.00	75.0	<0.5	11.5	1.8	18.0	1.87	<75	<0.5
MW3	Well destroyed in June 2000.												
MW4	SCREEN INTERVAL (feet bgs) 35-45												
MW4	03/02/09	---	Well installed.										
MW4	03/30/09	197.62	30.94	166.68	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	04/02/09	197.62	Well surveyed.										
MW4	05/28/09	197.62	32.00	165.62	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	08/31/09	197.62	35.43	162.19	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	12/11/09	197.62	35.01	162.61	0.00	<50	<0.50	0.83	<0.50	1.1	<0.50	---	---
MW4	05/07/10	197.62	29.11	168.51	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW4	11/01/10	197.62	34.95	162.67	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW4	05/27/11 d	197.62	30.65	166.97	0.00	---	---	---	---	---	---	---	---
MW4	11/23/11	197.62	33.49	164.13	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW4	05/24/12	197.62	30.02	167.60	0.00	58	0.84	4.4	0.64c	3.5	<0.50	---	---
MW4	10/31/12	197.62	35.14	162.48	0.00	110	5.3	45	4.2	21	<0.50	---	---
MW4	05/02/13 e	197.62	32.03	165.59	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	11/09/13	197.62	36.53	161.09	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW4	05/12/14 a	197.62	33.51	164.11	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW5	SCREEN INTERVAL (feet bgs) 30-40												
MW5	03/06/09	---	Well installed.										
MW5	03/30/09	196.35	30.05	166.30	0.00	4,200	540	140	<12	310	1,900	---	---
MW5	04/02/09	196.35	Well surveyed.										
MW5	05/28/09	196.35	31.45	164.90	0.00	5,300	890	150	<25	140	3,600	---	---
MW5	08/31/09	196.35	34.70	161.65	0.00	5,800	550	<100	<100	<100	3,500	---	---
MW5	12/11/09	196.35	34.52	161.83	0.00	4,000b	230	<100	<100	<100	3,800	---	---
MW5	05/07/10	196.35	30.84	165.51	0.00	2,700b	73	5.3	3.6	6.5	1,700	---	---
MW5	11/01/10	196.35	33.93	162.42	0.00	2,400b	320	71	21	40	3,400	---	---
MW5	05/27/11 d	196.35	31.65	164.70	0.00	---	---	---	---	---	---	---	---
MW5	11/23/11	196.35	32.58	163.77	0.00	1,900b	72	2.7	3.1	8.1	3,200	---	---
MW5	05/24/12	196.35	30.26	166.09	0.00	2,900b	54	31	5.2	17	1,700	---	---
MW5	10/31/12	196.35	33.94	162.41	0.00	2,200b	220	72	8.7	47	2,700	---	---
MW5	05/02/13 e	196.35	31.33	165.02	0.00	2,200b	61	<0.50	3.8	7.9	1,300	---	---
MW5	11/09/13	196.35	35.69	160.66	0.00	1,300b	120	<5.0	<5.0	8.8	370	---	---
MW5	05/12/14 a	196.35	32.64	163.71	0.00	1,200	120	<5.0	<5.0	<5.0	490	---	---
MW6	SCREEN INTERVAL (feet bgs) 29-39												

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/l)	Total Pb (µg/L)	Organic Pb (mg/L)
MW6	03/09/09	---	Well installed.										
MW6	03/30/09	192.41	26.94	165.47	0.00	2,800	0.91	<0.50	<0.50	<0.50	4,800	---	---
MW6	04/02/09	192.41	Well surveyed.										
MW6	05/28/09	192.41	28.04	164.37	0.00	2,800	<100	<100	<100	<100	6,000	---	---
MW6	08/31/09	192.41	30.57	161.84	0.00	4,900	<100	<100	<100	<100	6,600	---	---
MW6	12/11/09	192.41	30.78	161.63	0.00	4,900b	<100	<100	<100	<100	6,200	---	---
MW6	05/07/10	192.41	25.42	166.99	0.00	2,900b	2.7	<0.50	0.74c	<1.0	3,700	---	---
MW6	11/01/10	192.41	30.68	161.73	0.00	850b	2.1	<0.50	<0.50	<1.0	6,100	---	---
MW6	05/27/11 d	192.41	27.07	165.34	0.00	---	---	---	---	---	---	---	---
MW6	11/23/11	192.41	29.25	163.16	0.00	1,600b	<0.50	<0.50	<0.50	<1.0	6,400	---	---
MW6	05/24/12	192.41	26.36	166.05	0.00	2,000b	1.3c	9.7	0.97c	5.5	3,400	---	---
MW6	10/31/12	192.41	30.74	161.67	0.00	1,400b	3.8	28	2.2	11	5,400	---	---
MW6	05/02/13	192.41	27.91	164.50	0.00	1,900b	<0.50	<0.50	<0.50	<0.50	2,600	---	---
MW6	11/09/13	192.41	32.15	160.26	0.00	3,600b	<40	<40	<40	<40	4,800	---	---
MW6	05/12/14 a	192.41	29.28	163.13	0.00	190 HD	<5.0	<5.0	<5.0	<5.0	280	---	---
MW7	SCREEN INTERVAL (feet bgs) 30-40												
MW7	03/09/09	---	Well installed.										
MW7	03/30/09	194.34	29.15	165.19	0.00	55	<0.50	<0.50	<0.50	<0.50	66	---	---
MW7	04/02/09	194.34	Well surveyed.										
MW7	05/28/09	194.34	30.16	164.18	0.00	50	<1.0	<1.0	<1.0	<1.0	67	---	---
MW7	08/31/09	194.34	33.31	161.03	0.00	<50	<0.50	0.60	<0.50	<0.50	12	---	---
MW7	12/11/09	194.34	32.71	161.63	0.00	<50	0.78	1.7	0.62	2.4	31	---	---
MW7	05/07/10	194.34	27.54	166.80	0.00	510b	<0.50	<0.50	<0.50	<1.0	700	---	---
MW7	11/01/10	194.34	32.82	161.52	0.00	68b	<0.50	<0.50	<0.50	<1.0	140	---	---
MW7	05/27/11 d	194.34	28.85	165.49	0.00	---	---	---	---	---	---	---	---
MW7	11/23/11	194.34	31.39	162.95	0.00	190b	<0.50	<0.50	<0.50	<1.0	300	---	---
MW7	05/24/12 d	194.34	28.31	166.03	0.00	---	---	---	---	---	---	---	---
MW7	10/31/12	194.34	32.86	161.48	0.00	230b	2.9	21	1.8	9.2	290	---	---
MW7	05/02/13	194.34	29.93	164.41	0.00	570b	<0.50	<0.50	<0.50	<0.50	790	---	---
MW7	11/09/13	194.34	34.23	160.11	0.00	370b	<10	<10	<10	<10	460	---	---
MW7	05/12/14 a	194.34	31.33	163.01	0.00	310 HD	<10	<10	<10	<10	980	---	---
MW8	SCREEN INTERVAL (feet bgs) 30-40												
MW8	03/04/09	---	Well installed.										
MW8	03/30/09	192.96	27.35	165.61	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	04/02/09	192.96	Well surveyed.										
MW8	05/28/09	192.96	28.72	164.24	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	08/31/09	192.96	31.93	161.03	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	12/11/09	192.96	31.24	161.72	0.00	<50	0.74	1.6	0.59	2.3	<0.50	---	---
MW8	05/07/10	192.96	25.68	167.28	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW8	11/01/10	192.96	31.18	161.78	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW8	05/27/11	192.96	27.55	165.41	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/l)	Total Pb (µg/L)	Organic Pb (mg/L)
MW8	11/23/11	192.96	29.74	163.22	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW8	05/24/12	192.96	26.93	166.03	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW8	10/31/12	192.96	31.35	161.61	0.00	75	2.5	19	1.7	8.7	<0.50	---	---
MW8	05/02/13	192.96	28.44	164.52	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	11/09/13	192.96	32.89	160.07	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW8	05/12/14 a	192.96	30.27	162.69	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	SCREEN INTERVAL (feet bgs) 30-40												
MW9	03/05/09	---	Well installed.										
MW9	03/30/09	195.16	28.31	166.85	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	04/02/09	195.16	Well surveyed.										
MW9	05/28/09	195.16	29.69	165.47	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	08/31/09	195.16	33.20	161.96	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	12/11/09	195.16	32.62	162.54	0.00	<50	0.73	1.7	0.54	2.2	<0.50	---	---
MW9	05/07/10	195.16	26.59	168.57	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW9	11/01/10	195.16	32.45	162.71	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW9	05/27/11	195.16	29.62	165.54	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW9	11/23/11	195.16	30.56	164.60	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW9	05/24/12	195.16	27.94	167.22	0.00	<50	<0.50	<0.50	<0.50	<1.0	<0.50	---	---
MW9	10/31/12	195.16	32.66	162.50	0.00	140	6.9	38	2.7	13	<0.50	---	---
MW9	05/02/13	195.16	29.58	165.58	0.00	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
MW9	11/09/13	195.16	Well inaccessible.										
MW9	05/12/14 b	195.16	Well inaccessible.										
RW1	SCREEN INTERVAL (feet bgs) 29-39.5												
RW1	12/22/11	---	Well installed.										
RW1	12/30/11	195.15	Well surveyed.										
RW1	05/24/12	195.15	28.55	166.60	0.00	5,500b	920	5.9c	51	14	2,500	---	---
RW1	10/31/12 d	195.15	---	---	---	---	---	---	---	---	---	---	---
RW1	05/02/13 e	195.15	30.27	164.88	0.00	4,300b	1,200	<2.5	41	14	2,300	---	---
RW1	11/09/13	195.15	34.64	160.51	0.00	810b	210	<10	<10	<10	520	---	---
RW1	05/12/14 a	195.15	31.54	163.61	0.00	830 HD	450	<10	13	<10	490	---	---
Grab Groundwater Samples													
Pit Water	06/14/02	---	---	---	---	5,600	140	840	100	530	12,000	---	---
UST Pit	06/19/02	---	---	---	---	680	2.7	36	18	130	640	---	---
W-38-B11	11/14/07	---	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	<0.50	---	---
W-15-B12	11/13/07	---	---	---	---	8,400	67	<5.0	140	150	78	---	---
W-40-B13	11/12/07	---	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	0.53	---	---
W-15-B14	11/13/07	---	---	---	---	2,500	1.7	3.0	26	13	16	---	---
W-38-B15	11/15/07	---	---	---	---	18,000	3,400	2,500	330	2,000	12,000	---	---

TABLE 3 HISTORICAL GROUNDWATER MONITORING DATA,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Elevation TOC (feet)	Depth to Water (feet below TOC)	Groundwater Elevation (feet)	LPH Thickness (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE 8260B (µg/l)	Total Pb (µg/L)	Organic Pb (mg/L)
W-40-B16	11/15/07	---	---	---	---	<50	<0.50	<0.50	<0.50	<0.50	7.7	---	---
W-37-B17	11/13/07	---	---	---	---	630	1.8	<0.50	4.1	1.4	2,200	---	---
W-38-B18	11/12/07	---	---	---	---	4,300	52	<12	56	96	1,400	---	---
W-35-B19	03/03/09	---	---	---	---	4,400	<0.50	<0.50	<0.50	<1.0	7,100	---	---
W-35-B20	03/03/09	---	---	---	---	640	<0.50	<0.50	<0.50	<1.0	440	---	---
W-35-B21	03/03/09	---	---	---	---	<50	<0.50	<0.50	<0.50	<1.0	1.4	---	---

TOC	Top of casing.	bgs	Below ground surface.
LPH	Liquid-phase hydrocarbons.	µg/L	Micrograms per liter.
TPH-g	Total Petroleum Hydrocarbons as gasoline.	--	Not sampled or not analyzed.
MTBE	Methyl tertiary butyl ether.	NA	Not available.
NM	Not measured.	NC	Not calculated.

Total Pb Total lead analyzed using EPA Method 6010.

Organic Pb Organic lead analyzed using CA DHS LUFT method.

- a Approximate depth to groundwater surface at time of sampling.
- b Hydrocarbon pattern does not match that of the specified standard.
- c Analyte presence was not confirmed by second column or GC/MS analysis.
- d Well inaccessible.
- e Well sampled the following day.
- HD Chromat. profile inconsistent with the ref. fuel stnds.

Notes: Data prior to 1999 provided by EA Engineering, Science, and Technology. Data prior to 2013 provided by Cardno ERI.

TABLE 4 GROUNDWATER ANALYTICAL RESULTS FOR DETECTED VOCs,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	Naphthalene (µg/L)
MW1	7/17/1992 - 09/20/1999		Not analyzed for these analytes.							
MW1			Well destroyed in June 2000.							
MW2	7/17/1992 - 09/20/1999		Not analyzed for these analytes.							
MW2			Well destroyed in June 2000.							
MW3	7/17/1992 - 09/20/1999		Not analyzed for these analytes.							
MW3			Well destroyed in June 2000.							
MW4	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW4	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW4	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW4	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW4	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW4	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW4	05/27/11	d	---	---	---	---	---	---	---	---
MW4	11/23/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW4	05/24/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW4	10/31/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW4	05/03/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW4	11/09/13	---	<0.50	<0.50	<0.50	<10	<0.50	<0.50	---	---
MW4	05/12/14	---	<0.50	<0.50	<0.50	<10	<0.50	<0.50	---	<1.0
MW5	03/30/09	---	<12	17	<12	450	<12	<12	---	---
MW5	05/28/09	---	<25	<25	<25	530	<25	<25	---	---
MW5	08/31/09	---	<100	<100	<100	<1,000	<100	<100	---	---
MW5	12/11/09	---	<100	<100	<100	2,000	<100	<100	---	---
MW5	05/07/10	---	<25	<25	<25	400	<25	<25	---	---
MW5	11/01/10	---	<50	<50	<50	1,500	<50	<50	---	---
MW5	05/27/11	d	---	---	---	---	---	---	---	---
MW5	11/23/11	---	<50	<50	<50	<500	<50	<50	---	---
MW5	05/24/12	---	<50	<50	<50	1,400	<50	<50	---	---
MW5	10/31/12	---	<50	<50	<50	730	<50	<50	---	---
MW5	05/03/13	---	<20	<20	<20	590	<20	<20	---	---
MW5	11/09/13	---	<5.0	<5.0	<5.0	1,100	<5.0	<5.0	---	---
MW5	05/12/14	---	<5.0	<5.0	<5.0	1,000	<5.0	<5.0	---	<10
MW6	03/30/09	---	<0.50	<0.50	1.3	410	<0.50	0.82	---	---
MW6	05/28/09	---	<100	<100	<100	<1,000	<100	<100	---	---
MW6	08/31/09	---	<100	<100	<100	1,100	<100	<100	---	---
MW6	12/11/09	---	<100	<100	<100	2,600	<100	<100	---	---
MW6	05/07/10	---	<100	<100	<100	<1,000	<100	<100	---	---
MW6	11/01/10	---	<50	<50	<50	2,400	<50	<50	---	---
MW6	05/27/11	d	---	---	---	---	---	---	---	---
MW6	11/23/11	---	<100	<100	<100	<1,000	<100	<100	---	---
MW6	05/24/12	---	<100	<100	<100	2,700	<100	<100	---	---
MW6	10/31/12	---	<100	<100	<100	<1,000	<100	<100	---	---
MW6	05/02/13	---	<40	<40	<40	570	<40	<40	---	---
MW6	11/09/13	---	<40	<40	<40	2,100	<40	<40	---	---
MW6	05/12/14	---	<5.0	<5.0	<5.0	1,700	<5.0	<5.0	---	<10
MW7	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW7	05/28/09	---	<1.0	<1.0	<1.0	<10	<1.0	<1.0	---	---
MW7	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW7	12/11/09	---	<0.50	<0.50	<0.50	12	<0.50	<0.50	---	---
MW7	05/07/10	---	<0.50	<0.50	<0.50	130	<0.50	<0.50	---	---

TABLE 4 GROUNDWATER ANALYTICAL RESULTS FOR DETECTED VOCs,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	Naphthalene (µg/L)
MW7	11/01/10	---	<2.5	<2.5	<2.5	27	<2.5	<2.5	---	---
MW7	05/27/11	d	---	---	---	---	---	---	---	---
MW7	11/23/11	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---	---
MW7	05/24/12	d	---	---	---	---	---	---	---	---
MW7	10/31/12	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---	---
MW7	05/02/13	---	<5.0	<5.0	<5.0	57	<5.0	<5.0	---	---
MW7	11/09/13	---	<10	<10	<10	<200	<10	<10	---	---
MW7	05/12/14	---	<10	<10	<10	<200	<10	<10	---	<20
MW8	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	05/27/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	11/23/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	05/24/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	10/31/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	05/02/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW8	11/09/13	---	<0.50	<0.50	<0.50	<10	<0.50	<0.50	---	---
MW8	05/12/14	---	<0.50	<0.50	<0.50	<10	<0.50	<0.50	---	<1.0
MW9	03/30/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	05/28/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	08/31/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	12/11/09	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	05/07/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	11/01/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	05/27/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	11/23/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	05/24/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	10/31/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	05/02/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
MW9	11/09/13	---	Well inaccessible.							
RW1	05/24/12	---	<50	<50	<50	1,900	<50	<50	---	---
RW1	10/31/12	d	---	---	---	---	---	---	---	---
RW1	05/03/13	---	<40	<40	<40	880	<40	<40	---	---
RW1	11/09/13	---	<10	<10	<10	1,100	<10	<10	---	---
RW1	05/12/14	---	<10	<10	<10	840	<10	<10	---	<20

Grab Groundwater Samples

Pit Water	06/14/02	11.5a	---	---	---	---	---	---	---	---
UST Pit	06/19/02	13.5a	---	---	---	---	---	---	---	---
W-38-B11	11/14/07	38	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<50	---
W-15-B12	11/13/07	15	<5.0	<5.0	<5.0	<100	<5.0	<5.0	<500	---
W-40-B13	11/12/07	40	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<50	---
W-15-B14	11/13/07	15	<1.0	<1.0	<1.0	<20	<1.0	<1.0	<100	---
W-38-B15	11/15/07	38	<25	<25	<25	1,900	<25	<25	<2,500	---
W-40-B16	11/15/07	40	<0.50	<0.50	<0.50	<10	<0.50	<0.50	85	---
W-37-B17	11/13/07	37	<0.50	<0.50	<0.50	58	<0.50	<0.50	<50	---
W-38-B18	11/12/07	38	<12	<12	<12	<250	<12	<12	<1,200	---

TABLE 4 GROUNDWATER ANALYTICAL RESULTS FOR DETECTED VOCs,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	Ethanol (µg/L)	Naphthalene (µg/L)
W-35-B19	03/03/09	35	<50	<50	<50	<500	<50	<50	<5,000	---
W-35-B20	03/03/09	35	<0.50	<0.50	<0.50	12	<0.50	<0.50	<50	---
W-35-B21	03/03/09	35	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50	---

- EDB 1,2-Dibromoethane analyzed using EPA Method 8260B.
1,2-DCA 1,2-Dichloroethane analyzed using EPA Method 8260B.
TBA Tertiary butyl alcohol analyzed using EPA Method 8260B.
TAME Tertiary amyl methyl ether analyzed using EPA Method 8260B.
ETBE Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
DIPE Di-isopropyl ether analyzed using EPA Method 8260B.
Ethanol Ethanol analyzed using EPA Method 8260B.
µg/L Micrograms per liter.
--- Not sampled/Not analyzed/Not measured/Not applicable.
a Approximate depth to groundwater surface at time of sampling.
d Well inaccessible.

Notes: Data prior to 1999 provided by EA Engineering, Science, and Technology, data prior to 2013 provided by Cardno ERI.

TABLE 5 GROUNDWATER MONITORING PLAN,
FORMER EXXON SERVICE STATION 70234,
3450 35TH AVENUE, OAKLAND, CALIFORNIA

Well Number	Groundwater Gauging Frequency	Groundwater Sampling and Analysis Frequency			
		BTEX	TPH-g	MTBE	TBA
MW4	SA	SA	SA	SA	SA
MW5	SA	SA	SA	SA	SA
MW6	SA	SA	SA	SA	SA
MW7	SA	SA	SA	SA	SA
MW8	SA	SA	SA	SA	SA
MW9	SA	SA	SA	SA	SA
RW1	SA	SA	SA	SA	SA

Notes:

- BTEX Benzene, toluene, ethylbenzene, and xylenes.
- TPH-g Total Petroleum Hydrocarbons as gasoline.
- MTBE Methyl tertiary butyl ether.
- TBA Tertiary butyl alcohol.
- SA Semiannually (performed during the second and fourth quarters of each year).

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 foot 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, or if 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

Client: Exxon Mobil Site Location: _____
 Project Number: 14-070234-UP Task Number: 4.1A, 4.2D
 On-Site Field Personnel: C. Mitchell

	Water	Soil	Empty	
Number of Waste Drums/ Containers on Site:	3	2	—	Container Size/Number of Total Drums/Containers: 55 gal / 5

SUMMARY:

- On site 07:00
- Opened and gauged wells MW4 thru MW8 and RW1 with WLM.
- Purged and sampled wells MW4 thru MW8 and RW1 with disposable bailers. Well RW1 dewatered at ≈ 13 gal. Well was sampled after recharging, 80% +.
- No access to MW9, well not sampled.
- Closed all wells
- Drummed ≈ 40 gal. of purge water on site
- Off site 13:00

Preparer Name: *C. Mitchell* Date: 5/2/14

Office Location: PH MRTZ PAS CM
 FRE ROS BAR SD



FIELD SUMMARY REPORT

Client: Exxon Mobil Site Location: _____
 Project Number: 14-070234-44 Task Number: 4.5D
 On-Site Field Personnel: C. M. Fike

	Water	Soil	Empty	Container Size/Number of Total Drums/Containers:
Number of Waste Drums/ Containers on Site:	—	—	—	

SUMMARY:

- On site 1030
- Dillard on site 1045
- Dillard removed 2 drums of solid waste and 3 drums of water from the site
- Dillard off site 12:00
- Off site 12:00

Preparer Name: *Christy L. Metcal* Date: 5/19/14

Office Location: PH MRTZ PAS CM
 FRE ROS BAR SD



MONITORING WELL DATA FORM

Client: ExxonMobil

Date: 5/12/14

Project Number: UP70234, Activity 4

Station Number: 70234

Site Location: 3450 35th Avenue, Oakland, CA

Sampler: C. Mitchell

MONITORING WELL NUMBER	DEPTH TO WATER (FEET)	DEPTH TO PRODUCT (FEET)	APPARENT PRODUCT THICKNESS (FEET)	AMOUNT OF PRODUCT REMOVED	SHEEN (Y/N)	MONITORING WELL INTEGRITY	DEPTH TO BOTTOM (FEET)	WELL CASING DIAMETER
MW4	33.51						44.64	2"
MW5	32.64						39.70	2"
MW6	29.28						38.21	2"
MW7	31.33						38.64	2"
MW8	30.27						39.63	2"
MW9	No access							2"
RW1	31.54						40.09	4"



GROUNDWATER PURGE AND SAMPLE

Project Name: Former Exxon 70234 Well No: MW4 Date: 5/12/14
 Project No: UP70234. Activity 4 Monitoring and Sampling Personnel: C. M. Fisher

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)
				1	2	4	6		
	<u>44.64</u>	<u>33.51</u>	<u>11.13</u>	<u>0.04</u>	<u>0.16</u>	<u>0.64</u>	<u>1.44</u>	<u>1.78</u>	<u>5.34</u>

PURGING DATA

Purge Method: WATERRA / BAILER / SUB Purge Depth: Screen Purge Rate: (gpm)

Time	09:13	09:19	09:25			
Volume Purge (gal)	<u>2</u>	<u>4</u>	<u>6</u>			
Total Time (min)	<u>19.01</u>	<u>18.88</u>	<u>18.90</u>			
pH	<u>6.52</u>	<u>6.51</u>	<u>6.46</u>			
Sp. Conductivity	<u>561 us</u>	<u>603 us</u>	<u>597</u>			
Turbidity/Color	<u>light / Ben</u>	<u>light / Ben</u>	<u>light / Ben</u>			
odor (Y/N)	<u>N</u>	<u>N</u>	<u>N</u>			
Casing Volume	<u>1</u>	<u>2</u>	<u>3</u>			
Deaerated (Y/N)	<u>N</u>	<u>N</u>	<u>N</u>			

Comments/Observations:

SAMPLING DATA

Time Sampled: 09:30 Approximate Depth to Water During Sampling: 34 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml of 1)	Turbidity/Color	Analysis Method
<u>MW4</u>	<u>6</u>	<u>VOA</u>	<u>HCL</u>	<u>40 ml</u>	<u>/</u>	<u>See COC</u>

Total Purge Volume: 6 (gallons) Disposal: SYSTEM

Weather Conditions: Sunny / Dry BOLTS (Y) / N

Condition of Well Box and Casing at Time of Sampling: Good CAP & LOCK (Y) / N

Well Head Conditions Requiring Correction: None GROUT (Y) / N

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

Comments: SECURED (Y) / N



GROUNDWATER PURGE AND SAMPLE

Project Name: Former Exxon 70234 Well No: MW5 Date: 5/13/14
 Project No: UP70234. Activity 4 Monitoring and Sampling Personnel: C. M. L. King II

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				Gassing Volume (gal)	Total Purge Volume (gal)
		<u>39.70</u>	<u>32.64</u>	<u>7.06</u>	<u>1</u>	<u>2</u>	<u>4</u>	<u>6</u>	<u>1.13</u>
				0.04	0.16	0.64	1.44		

PURGING DATA

Purge Method: WATERRA / BAILER / SUB Purge Depth: Screen Purge Rate: (gpm)

Time	11:11	11:16	11:21			
Volume Purge (gal)	<u>1.5</u>	<u>3.0</u>	<u>4.5</u>			
Temperature (C)	<u>18.18</u>	<u>18.17</u>	<u>18.18</u>			
pH	<u>6.38</u>	<u>6.41</u>	<u>6.41</u>			
Sp. Cond. (µS/cm)	<u>756 µS</u>	<u>753 µS</u>	<u>753 µS</u>			
Turbidity/Color	<u>light grey</u>	<u>Med grey</u>	<u>Med grey</u>			
Clear (Y/N)	<u>Y</u>	<u>Y</u>	<u>Y</u>			
Casing Volume	<u>1</u>	<u>2</u>	<u>3</u>			
Deaerated (Y/N)	<u>N</u>	<u>N</u>	<u>N</u>			

Comments/Observations:

SAMPLING DATA

Time Sampled: 11:30 Approximate Depth to Water During Sampling: 33 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or L)	Turbidity/Color	Analysis Method
<u>MW5</u>	<u>6</u>	<u>VOA</u>	<u>HCL</u>	<u>40 ml</u>		<u>See COC</u>

Total Purge Volume: 4.5 (gallons)

Disposal: SYSTEM

Weather Conditions: Sunny / Dry BOLTS (Y) / (N)

Condition of Well Box and Casing at Time of Sampling: Good CAP & LOCK (Y) / (N)

Well Head Conditions Requiring Correction: None GROUT (Y) / (N)

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

Comments: SECURED (Y) / (N)



GROUNDWATER PURGE AND SAMPLE

Project Name: Former Exxon 70234	Well No: MW6	Date: 5/12/14
Project No: UP70234. Activity 4 Monitoring and Sampling	Personnel: C. M. Finkel	

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				Gauging Volume (gal)	Total Purge Volume (gal)
	38.21	29.28	8.93	1	2	4	6	1.43	4.29
				0.04	0.16	0.64	1.44		

PURGING DATA

Purge Method: WATERRA / BAILER / SUB Purge Depth: Screen Purge Rate: (gpm)

Time	10:19	10:23	10:27			
Volume Purged (gal)	1.5	3.0	4.5			
Temperature (°C)	18.81	16.78	16.78			
pH	6.55	6.45	6.47			
Sp. Cond. (µS/cm)	912 µS	913 µS	919 µS			
Turbidity/Color	1.5 NTU / <u>brn</u>	Med / <u>brn</u>	Med / <u>brn</u>			
Odor (M/M)	N	N	N			
Casing Volume	1	2	3			
De-aerated (Y/N)	N	N	N			

Comments/Observations:

SAMPLING DATA

Time Sampled: 10:35 Approximate Depth to Water During Sampling: 29.5 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or L)	Turbidity/Color	Analysis Method
<u>MW6</u>	6	VOA	HCL	40 ml	/	See COC

Total Purge Volume: 4.5 (gallons) Disposal: SYSTEM

Weather Conditions: <u>Sunny / Dry</u>	BOLTS	(Y) / (I) / (N)
Condition of Well Box and Casing at Time of Sampling: <u>Good</u>	CAP & LOCK	(Y) / (I) / (N)
Well Head Conditions Requiring Correction: <u>None</u>	GROUT	(Y) / (I) / (N)
Problems Encountered During Purging and Sampling: <u>None</u>	WELL BOX	(Y) / (I) / (N)
Comments:	SECURED	(Y) / (I) / (N)



GROUNDWATER PURGE AND SAMPLE

Project Name: Former Exxon 70234 Well No: MW7 Date: 5/12/14
 Project No: UP70234. Activity 4 Monitoring and Sampling Personnel: C. Mitchell

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				Gauging Volume (gal)	Total Purge Volume (gal)
	38.64	31.33	7.31	1	2	4	6	1.17	3.51
				0.04	0.16	0.64	1.44		

PURGING DATA

Purge Method: WATERRA / BAILER / SUB Purge Depth: Screen Purge Rate: (gpm)

Time	Volume Purge (gal)	Temperature (°C)	pH	Sp. Cond. (µm/cm)	Turbidity/Color	Odor (V/M)	Gauging Volume (gal)	Dewatered (Y/N)
09:47	1.5	19.45	6.45	752 µS	light	N	1	N
09:53	3.0	19.39	6.46	776 µS	light	N	2	N
09:58	4.5	19.41	6.45	783 µS	med	N	3	N

Comments/Observations:

SAMPLING DATA

Time Sampled: 10:05 Approximate Depth to Water During Sampling: 31.5 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml of)	Turbidity/Color	Analysis Method
	6	VOA	HCL	40 ml		See COC

Total Purge Volume: 4.5 (gallons)

Disposal: SYSTEM

Weather Conditions: Sunny / Dry BOLTS (Y) / N

Condition of Well Box and Casing at Time of Sampling: Good CAP & LOCK (Y) / N

Well Head Conditions Requiring Correction: None GROUT (Y) / N

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

Comments: SECURED (Y) / N



GROUNDWATER PURGE AND SAMPLE

Project Name: Former Exxon 70234	Well No: MW8	Date: 5/12/14
Project No: UP70234. Activity 4 Monitoring and Sampling	Personnel: C. M. Kelly	

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)
		39.63	30.27	9.36	1 0.04	2 0.16	4 0.64	6 1.44	1,950

PURGING DATA

Purge Method: WATERRA / BAILER / SUB Purge Depth: Screen Purge Rate: (gpm)

Time	08:36	08:40	08:45			
Volume Purge (gal)	1.5	3.0	4.5			
Temperature (C)	17.50	17.53	17.50			
pH	6.94	6.86	6.67			
Sp. Cond. (µS/cm)	542 µS	596 µS	628 µS			
Turbidity/Color	Nil Bwn	Med Bwn	Med Bwn			
Odor (V/N)	N	N	N			
Casing Volume (gal)	1	2	3			
Dechlorinated (Y/N)	N	N	N			

Comments/Observations:

SAMPLING DATA

Time Sampled: 09:00 Approximate Depth to Water During Sampling: 30.5 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (mL of 5)	Turbidity/Color	Analysis Method
MW8	6	VOA	HCL	40 ml		See COC

Total Purge Volume: 4.5 (gallons) Disposal: SYSTEM

Weather Conditions: Sunny 10.14 BOLTS / / N

Condition of Well Box and Casing at Time of Sampling: Good CAP & LOCK / / N

Well Head Conditions Requiring Correction: None GROUT / / N

Problems Encountered During Purging and Sampling: None WELL BOX / / N

Comments: SECURED / / N



GROUNDWATER PURGE AND SAMPLE

Project Name: Former Exxon 70234 Well No: RW1 Date: 5/2/14
 Project No: UP70234. Activity 4 Monitoring and Sampling Personnel: C. M. Fehy II

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)
		40.09	31.57	8.55	1 0.04	2 0.16	4 0.64	6 1.44	5.47

PURGING DATA

Purge Method: WATERRA / BAILER / SUB Purge Depth: Screen Purge Rate: (gpm)

Time	1	2	3			
Volume Purge (gal)	5.5	11.0	16.5			
Temperature (C)	18.48	18.44				
pH	6.50	6.50				
Sp. Cond. (S/cm)	908 μ S	903 μ S				
Turbidity/Color	1.0 NTU / Ben	1.0 NTU / Ben				
Oil (Y/N)	N	N				
Casing Volume	1	2	3			
Deaerated (Y/N)	N	N	Y			

Comments/Observations: Well deaerated at ~13 gal.

SAMPLING DATA

Time Sampled: 12:05 Approximate Depth to Water During Sampling: 32.5 (feet)

Comments:

Sample Number	Number of Containers	Container Type	Preservative	Volume Filled (ml or L)	Turbidity/Color	Analysis Method
RW1	6	VOA	HCL	40 ml		See COC

Total Purge Volume: 13 (gallons) Disposal: SYSTEM

Weather Conditions: Sunny / Dry BOLTS (Y) / (N)

Condition of Well Box and Casing at Time of Sampling: good CAP & LOCK (Y) / (N)

Well Head Conditions Requiring Correction: None GROUT (Y) / (N)

Problems Encountered During Purging and Sampling: well deaerated WELL BOX (Y) / (N)

Comments: SECURED (Y) / (N)

Appendix C
Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number: N/A
 2. Page 1 of 1
 3. Emergency Response Phone: 500-675-1055
 4. Waste Tracking Number: 05092014A

5. Generator's Name and Mailing Address: Exxon Mobil Oil Corporation (70234), 2555 W. 190TH Street, # 1105, Torrance, CA 90504 USA
 Generator's Site Address (if different than mailing address): 3450 38th Ave, Oakland, CA 94604 USA
 Generator's Phone: 310-212-2938-32

6. Transporter 1 Company Name: DILLARD ENVIRONMENTAL SERVICES
 U.S. EPA ID Number: CAD982523433

7. Transporter 2 Company Name: _____
 U.S. EPA ID Number: _____

8. Designated Facility Name and Site Address: 1105 AIRPORT DRIVE, RIO VISTA, CA 94571
 Facility's Phone: 520-753-1829
 U.S. EPA ID Number: _____

9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.
	No.	Type		
1. Non Hazardous Waste Liquid (Monitoring Well) Purge Water	3	DM	150	G
2.				
3.				
4.				

13. Special Handling Instructions and Additional Information: DES. JOB #911-233
 3xSS DM1
 ON BEHALF OF EXXONMOBIL OIL CORPORATION

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offerer's Printed/Typed Name: JOHN HABERLAND
 Signature: [Signature]
 Month: _____ Day: _____ Year: _____

15. International Shipments: Import to U.S. Export from U.S.
 Port of entry/exit: _____
 Date leaving U.S.: _____

16. Transporter Acknowledgment of Receipt of Materials
 Transporter Signature (for exports only): _____
 Date leaving U.S.: _____

Transporter 1 Printed/Typed Name: KEN WILSON
 Signature: [Signature]
 Month: 5 Day: 9 Year: 14

Transporter 2 Printed/Typed Name: _____
 Signature: _____
 Month: _____ Day: _____ Year: _____

17. Discrepancy
 17a. Discrepancy Indication Space: Quantity Type Residue Partial Rejection Full Rejection

Manifest Reference Number: _____

17b. Alternate Facility (or Generator): _____
 U.S. EPA ID Number: _____

Facility's Phone: _____

17c. Signature of Alternate Facility (or Generator): _____
 Month: _____ Day: _____ Year: _____

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

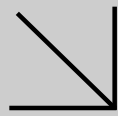
Printed/Typed Name: MICHAEL WHITEHEAD
 Signature: [Signature]
 Month: 5 Day: 21 Year: 14

GENERATOR
TRANSPORTER INT'L
DESIGNATED FACILITY

MAY 21 2014

Appendix D

Laboratory Analytical Reports and Chain-of-Custody Documentation



CALSCIENCE

WORK ORDER NUMBER: 14-05-1131

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: ETIC Engineering, Inc.

Client Project Name: ExxonMobil 70234

Attention: Sean Bowen
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Cecile L. deGuia

Approved for release on 05/28/2014 by:
Cecile deGuia
Project Manager

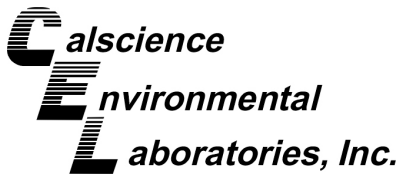
ResultLink ▶

Email your PM ▶



Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.





Contents

Client Project Name: ExxonMobil 70234
Work Order Number: 14-05-1131

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2	Sample Summary.	4
3	Client Sample Data.	5
	3.1 EPA 8015B (M) TPH Gasoline (Aqueous).	5
	3.2 EPA 8260B Volatile Organics (Aqueous).	7
4	Quality Control Sample Data.	15
	4.1 MS/MSD.	15
	4.2 LCS/LCSD.	18
5	Glossary of Terms and Qualifiers.	21
6	Chain of Custody/Sample Receipt Form.	22

Work Order Narrative

Work Order: 14-05-1131

Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 05/15/14. They were assigned to Work Order 14-05-1131.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the Calscience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

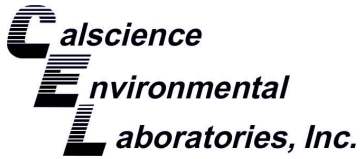
Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.

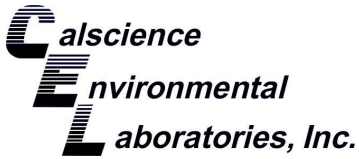


Sample Summary

Client: ETIC Engineering, Inc. 2285 Morello Avenue Pleasant Hill, CA 94523-1850	Work Order: 14-05-1131 Project Name: ExxonMobil 70234 PO Number: 4410169993 Date/Time Received: 05/15/14 10:55 Number of Containers: 36
---	---

Attn: Sean Bowen

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
MW4	14-05-1131-1	05/12/14 09:30	6	Aqueous
MW5	14-05-1131-2	05/12/14 11:30	6	Aqueous
MW6	14-05-1131-3	05/12/14 10:35	6	Aqueous
MW7	14-05-1131-4	05/12/14 10:05	6	Aqueous
MW8	14-05-1131-5	05/12/14 09:00	6	Aqueous
RW1	14-05-1131-6	05/12/14 12:05	6	Aqueous



Analytical Report

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8015B (M)
Units: ug/L

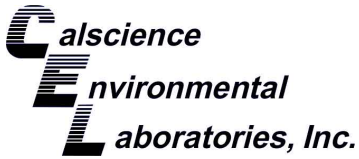
Project: ExxonMobil 70234

Page 1 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW4	14-05-1131-1-E	05/12/14 09:30	Aqueous	GC 4	05/16/14	05/17/14 06:10	140516L063
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		ND		50		1.00	
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
1,4-Bromofluorobenzene		74		38-134			
MW5	14-05-1131-2-E	05/12/14 11:30	Aqueous	GC 4	05/16/14	05/17/14 06:43	140516L063
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		1200		50		1.00	
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
1,4-Bromofluorobenzene		78		38-134			
MW6	14-05-1131-3-E	05/12/14 10:35	Aqueous	GC 4	05/16/14	05/17/14 07:48	140516L063
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		190		50		1.00	HD
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
1,4-Bromofluorobenzene		77		38-134			
MW7	14-05-1131-4-E	05/12/14 10:05	Aqueous	GC 4	05/16/14	05/17/14 08:21	140516L063
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		310		50		1.00	HD
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
1,4-Bromofluorobenzene		76		38-134			
MW8	14-05-1131-5-E	05/12/14 09:00	Aqueous	GC 4	05/16/14	05/17/14 08:54	140516L063
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		ND		50		1.00	
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
1,4-Bromofluorobenzene		73		38-134			

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8015B (M)
Units: ug/L

Project: ExxonMobil 70234

Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RW1	14-05-1131-6-E	05/12/14 12:05	Aqueous	GC 4	05/16/14	05/17/14 09:27	140516L063

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline	830	50	1.00	HD

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	74	38-134	

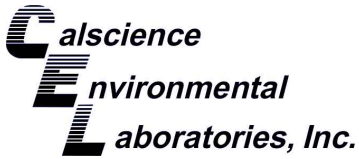
Method Blank	099-12-436-9345	N/A	Aqueous	GC 4	05/16/14	05/16/14 23:37	140516L063
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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline	ND	50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	77	38-134	

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 70234

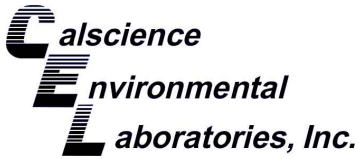
Page 1 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW4	14-05-1131-1-A	05/12/14 09:30	Aqueous	GC/MS L	05/21/14	05/22/14 06:25	140521L040

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
Naphthalene	ND	1.0	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	94	68-120		
Dibromofluoromethane	107	80-127		
1,2-Dichloroethane-d4	109	80-128		
Toluene-d8	100	80-120		

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 70234

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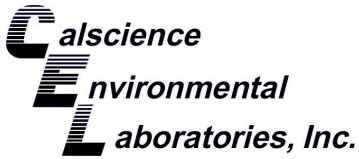
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW5	14-05-1131-2-A	05/12/14 11:30	Aqueous	GC/MS L	05/21/14	05/22/14 06:53	140521L040

Parameter	Result	RL	DF	Qualifiers
Benzene	120	5.0	10.0	
1,2-Dibromoethane	ND	5.0	10.0	
1,2-Dichloroethane	ND	5.0	10.0	
Ethylbenzene	ND	5.0	10.0	
Toluene	ND	5.0	10.0	
p/m-Xylene	ND	5.0	10.0	
o-Xylene	ND	5.0	10.0	
Xylenes (total)	ND	5.0	1.00	
Tert-Butyl Alcohol (TBA)	1000	100	10.0	
Diisopropyl Ether (DIPE)	ND	5.0	10.0	
Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10.0	
Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10.0	
Naphthalene	ND	10	10.0	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	95	68-120		
Dibromofluoromethane	108	80-127		
1,2-Dichloroethane-d4	109	80-128		
Toluene-d8	101	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW5	14-05-1131-2-B	05/12/14 11:30	Aqueous	GC/MS L	05/22/14	05/22/14 16:06	140522L032

Parameter	Result	RL	DF	Qualifiers
Methyl-t-Butyl Ether (MTBE)	490	12	25.0	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	95	68-120		
Dibromofluoromethane	104	80-127		
1,2-Dichloroethane-d4	101	80-128		
Toluene-d8	101	80-120		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 70234

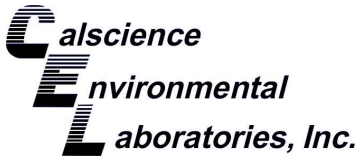
Page 3 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	14-05-1131-3-B	05/12/14 10:35	Aqueous	GC/MS L	05/22/14	05/22/14 16:33	140522L032

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	5.0	10.0	
1,2-Dibromoethane	ND	5.0	10.0	
1,2-Dichloroethane	ND	5.0	10.0	
Ethylbenzene	ND	5.0	10.0	
Toluene	ND	5.0	10.0	
p/m-Xylene	ND	5.0	10.0	
o-Xylene	ND	5.0	10.0	
Xylenes (total)	ND	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	280	5.0	10.0	
Tert-Butyl Alcohol (TBA)	1700	100	10.0	
Diisopropyl Ether (DIPE)	ND	5.0	10.0	
Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10.0	
Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10.0	
Naphthalene	ND	10	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	93	68-120	
Dibromofluoromethane	108	80-127	
1,2-Dichloroethane-d4	104	80-128	
Toluene-d8	101	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 70234

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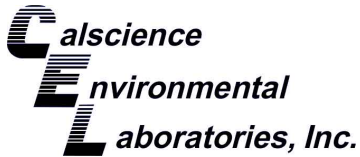
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MW7	14-05-1131-4-A	05/12/14 10:05	Aqueous	GC/MS L	05/21/14	05/22/14 07:47	140521L040

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	10	20.0	
1,2-Dibromoethane	ND	10	20.0	
1,2-Dichloroethane	ND	10	20.0	
Ethylbenzene	ND	10	20.0	
Toluene	ND	10	20.0	
p/m-Xylene	ND	10	20.0	
o-Xylene	ND	10	20.0	
Xylenes (total)	ND	10	1.00	
Tert-Butyl Alcohol (TBA)	ND	200	20.0	
Diisopropyl Ether (DIPE)	ND	10	20.0	
Ethyl-t-Butyl Ether (ETBE)	ND	10	20.0	
Tert-Amyl-Methyl Ether (TAME)	ND	10	20.0	
Naphthalene	ND	20	20.0	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	92	68-120		
Dibromofluoromethane	109	80-127		
1,2-Dichloroethane-d4	109	80-128		
Toluene-d8	102	80-120		

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW7	14-05-1131-4-B	05/12/14 10:05	Aqueous	GC/MS L	05/22/14	05/22/14 17:00	140522L032

Parameter	Result	RL	DF	Qualifiers
Methyl-t-Butyl Ether (MTBE)	980	20	40.0	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	93	68-120		
Dibromofluoromethane	108	80-127		
1,2-Dichloroethane-d4	105	80-128		
Toluene-d8	99	80-120		

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 70234

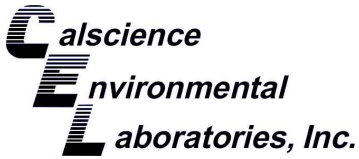
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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW8	14-05-1131-5-A	05/12/14 09:00	Aqueous	GC/MS L	05/21/14	05/22/14 08:13	140521L040

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
Naphthalene	ND	1.0	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	94	68-120		
Dibromofluoromethane	106	80-127		
1,2-Dichloroethane-d4	105	80-128		
Toluene-d8	102	80-120		

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 70234

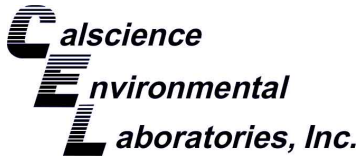
Page 6 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
RW1	14-05-1131-6-A	05/12/14 12:05	Aqueous	GC/MS L	05/21/14	05/22/14 08:40	140521L040

Parameter	Result	RL	DF	Qualifiers
Benzene	450	10	20.0	
1,2-Dibromoethane	ND	10	20.0	
1,2-Dichloroethane	ND	10	20.0	
Ethylbenzene	13	10	20.0	
Toluene	ND	10	20.0	
p/m-Xylene	ND	10	20.0	
o-Xylene	ND	10	20.0	
Xylenes (total)	ND	10	1.00	
Methyl-t-Butyl Ether (MTBE)	490	10	20.0	
Tert-Butyl Alcohol (TBA)	840	200	20.0	
Diisopropyl Ether (DIPE)	ND	10	20.0	
Ethyl-t-Butyl Ether (ETBE)	ND	10	20.0	
Tert-Amyl-Methyl Ether (TAME)	ND	10	20.0	
Naphthalene	ND	20	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	105	80-127	
1,2-Dichloroethane-d4	103	80-128	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 70234

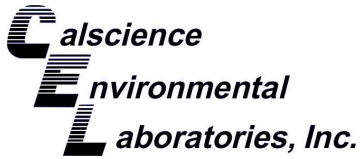
Page 7 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-10-025-3067	N/A	Aqueous	GC/MS L	05/21/14	05/21/14 23:40	140521L040

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Benzene	ND	0.50	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
Naphthalene	ND	1.0	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	93	68-120		
Dibromofluoromethane	109	80-127		
1,2-Dichloroethane-d4	107	80-128		
Toluene-d8	100	80-120		

Return to Contents

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 70234

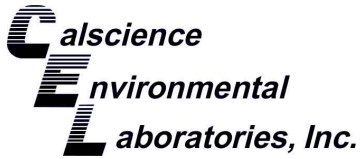
Page 8 of 8

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-10-025-3071	N/A	Aqueous	GC/MS L	05/22/14	05/22/14 11:34	140522L032

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
Naphthalene	ND	1.0	1.00	
Toluene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	10	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	110	80-127	
1,2-Dichloroethane-d4	108	80-128	
Toluene-d8	100	80-120	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Quality Control - Spike/Spike Duplicate

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: ExxonMobil 70234

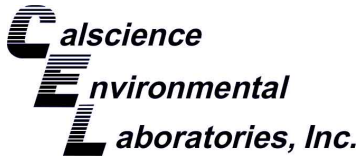
Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-0914-2	Sample	Aqueous	GC 4	05/16/14	05/17/14 00:43	140516S039
14-05-0914-2	Matrix Spike	Aqueous	GC 4	05/16/14	05/17/14 01:15	140516S039
14-05-0914-2	Matrix Spike Duplicate	Aqueous	GC 4	05/16/14	05/17/14 01:48	140516S039

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	1735	87	1721	86	68-122	1	0-18	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Spike/Spike Duplicate

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B

Project: ExxonMobil 70234

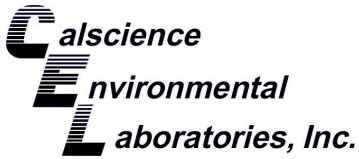
Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1342-2	Sample	Aqueous	GC/MS L	05/21/14	05/22/14 00:34	140521S019
14-05-1342-2	Matrix Spike	Aqueous	GC/MS L	05/21/14	05/22/14 03:43	140521S019
14-05-1342-2	Matrix Spike Duplicate	Aqueous	GC/MS L	05/21/14	05/22/14 04:10	140521S019

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	9.757	98	9.638	96	75-125	1	0-20	
1,2-Dibromoethane	ND	10.00	10.06	101	10.40	104	75-126	3	0-20	
1,2-Dichloroethane	ND	10.00	10.04	100	9.894	99	75-127	1	0-20	
Ethylbenzene	ND	10.00	9.909	99	9.910	99	75-125	0	0-20	
Toluene	ND	10.00	10.02	100	9.858	99	75-125	2	0-20	
p/m-Xylene	ND	20.00	20.01	100	19.92	100	75-125	0	0-20	
o-Xylene	ND	10.00	9.998	100	10.16	102	75-127	2	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.217	92	9.580	96	71-131	4	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	55.70	111	54.13	108	20-180	3	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	9.300	93	9.337	93	64-136	0	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	9.177	92	9.310	93	73-133	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	8.802	88	9.090	91	75-125	3	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - Spike/Spike Duplicate

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B

Project: ExxonMobil 70234

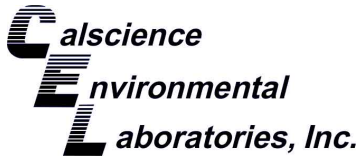
Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-05-1378-7	Sample	Aqueous	GC/MS L	05/22/14	05/22/14 12:03	140522S001
14-05-1378-7	Matrix Spike	Aqueous	GC/MS L	05/22/14	05/22/14 15:12	140522S001
14-05-1378-7	Matrix Spike Duplicate	Aqueous	GC/MS L	05/22/14	05/22/14 15:39	140522S001

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	9.222	92	9.409	94	75-125	2	0-20	
1,2-Dibromoethane	ND	10.00	9.633	96	9.824	98	75-126	2	0-20	
1,2-Dichloroethane	ND	10.00	9.175	92	9.049	90	75-127	1	0-20	
Ethylbenzene	ND	10.00	9.684	97	9.825	98	75-125	1	0-20	
Toluene	ND	10.00	9.542	95	9.762	98	75-125	2	0-20	
p/m-Xylene	0.7960	20.00	20.10	97	20.46	98	75-125	2	0-20	
o-Xylene	0.7558	10.00	10.64	99	10.81	101	75-127	2	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.021	90	9.002	90	71-131	0	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	49.89	100	54.26	109	20-180	8	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	8.809	88	9.026	90	64-136	2	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	9.064	91	9.140	91	73-133	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	8.939	89	8.786	88	75-125	2	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS

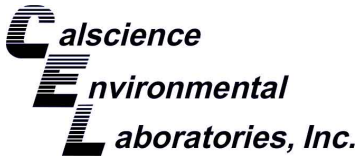
ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project: ExxonMobil 70234

Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-436-9345	LCS	Aqueous	GC 4	05/16/14	05/17/14 00:10	140516L063
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
TPH as Gasoline		2000	1818	91	78-120	



Quality Control - LCS

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
Work Order: 14-05-1131
Preparation: EPA 5030C
Method: EPA 8260B

Project: ExxonMobil 70234

Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
099-10-025-3067	LCS	Aqueous	GC/MS L	05/21/14	05/21/14 22:46	140521L040	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Benzene		10.00	9.304	93	80-120	73-127	
1,2-Dibromoethane		10.00	9.492	95	80-120	73-127	
1,2-Dichloroethane		10.00	9.371	94	80-122	73-129	
Ethylbenzene		10.00	9.723	97	80-120	73-127	
Toluene		10.00	9.642	96	80-120	73-127	
p/m-Xylene		20.00	19.56	98	80-120	73-127	
o-Xylene		10.00	9.974	100	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)		10.00	8.786	88	75-123	67-131	
Tert-Butyl Alcohol (TBA)		50.00	49.03	98	80-120	73-127	
Diisopropyl Ether (DIPE)		10.00	8.854	89	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)		10.00	8.682	87	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)		10.00	8.489	85	80-120	73-127	

Total number of LCS compounds: 12

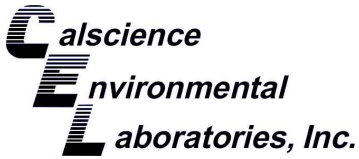
Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS

ETIC Engineering, Inc.
 2285 Morello Avenue
 Pleasant Hill, CA 94523-1850

Date Received: 05/15/14
 Work Order: 14-05-1131
 Preparation: EPA 5030C
 Method: EPA 8260B

Project: ExxonMobil 70234

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
099-10-025-3071	LCS	Aqueous	GC/MS L	05/22/14	05/22/14 10:32	140522L032	
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>Qualifiers</u>
Benzene		10.00	9.674	97	80-120	73-127	
1,2-Dibromoethane		10.00	9.600	96	80-120	73-127	
1,2-Dichloroethane		10.00	9.296	93	80-122	73-129	
Ethylbenzene		10.00	10.41	104	80-120	73-127	
Toluene		10.00	9.967	100	80-120	73-127	
p/m-Xylene		20.00	20.86	104	80-120	73-127	
o-Xylene		10.00	10.32	103	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)		10.00	8.699	87	75-123	67-131	
Tert-Butyl Alcohol (TBA)		50.00	49.13	98	80-120	73-127	
Diisopropyl Ether (DIPE)		10.00	9.049	90	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)		10.00	8.690	87	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)		10.00	8.382	84	80-120	73-127	

Total number of LCS compounds: 12
 Total number of ME compounds: 0
 Total number of ME compounds allowed: 1
 LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

Glossary of Terms and Qualifiers

Work Order: 14-05-1131

Page 1 of 1

<u>Qualifiers</u>	<u>Definition</u>
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to suspected matrix interference.
BB	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
DF	Reporting limits elevated due to matrix interferences.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
GE	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
HD	Chromat. profile inconsistent with pattern(s) of ref. fuel stdns.
HO	High concentration matrix spike recovery out of limits
HT	Analytical value calculated using results from associated tests.
HX	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS was in control.
IL	Relative percent difference out of control.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
LD	Analyte presence was not confirmed by second column or GC/MS analysis.
LP	The LCS and/or LCSD recoveries for this analyte were above the upper control limit. The associated sample was non-detected. Therefore, the sample data was reported without further clarification.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
ND	Parameter not detected at the indicated reporting limit.
QO	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
RU	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
SG	A silica gel cleanup procedure was performed.
SN	See applicable analysis comment.

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of <= 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 . FAX: (714) 894-7501

Site Name	
[Redacted]	
Provides MRN for retail or AFE for major projects	
Retail Project (MRN)	
Major Project (AFE)	
Project Name	Former Retail Site 70234

CHAIN OF CUSTODY RECORD

DATE: 5/12/14
PAGE: 1 OF 1

ExxonMobil PM: Jennifer Sedlachek

LABORATORY CLIENT: ExxonMobil C/O ETIC Engineering, Inc.		GLOBAL ID # COELT LOG CODE: T06019757161		P.O. 4410169993
ADDRESS: 2285 Morello Avenue		PROJECT CONTACT: Sean Bowen, ETIC Engineering, Inc.		LABORATORY NUMBER 14-05-1131
CITY: Pleasant Hill, CA		SAMPLER(S) (SIGNATURE) <i>[Signature]</i>		
TEL: 925-602-4710 Ext. 2127	FAX: 925-602-4720	EMAIL: sbowen@eticeng.com		COOLER RECEIPT Temp = _____ °C

TURNAROUND TIME
 SAME DAY 24 HR 48 HR 72 HR 5 DAYS 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
 RWQCB REPORTING ARCHIVE SAMPLES UNTIL _____

SPECIAL INSTRUCTIONS:
edf file required, Global ID #T06019757161
email report to eticiabreports@eticeng.com, klamb@eticeng.com
Fuel Oxygenates and Additives include: MTBE, TBA, ETBE, DIPE, TAME, 1,2-DCA and 1,2-DBA. Naphthalene
Set TBA detection limit at or below 12 ug/L.

REQUESTED ANALYSIS

LAB USE ONLY	SAMPLE ID	LOCATION/ DESCRIPTION	SAMPLING		MATRIX	NO. OF CONT.	ANALYSIS										CONTAINER TYPE			
			DATE	TIME			1	2	3	4	5	6	7	8	9	10				
	1	MW4	5/13/14	0930	water	6	X	X												6 X40 ml clear VOA VIALS w/HCl
	2	MW5		1130	water	6	X	X												6 X40 ml clear VOA VIALS w/HCl
	3	MW6		1035	water	6	X	X												6 X40 ml clear VOA VIALS w/HCl
	4	MW7		1005	water	6	X	X												6 X40 ml clear VOA VIALS w/HCl
	5	MW8		0900	water	6	X	X												6 X40 ml clear VOA VIALS w/HCl
	6	MW9			water	6	X	X												6 X40 ml clear VOA VIALS w/HCl
	6	RW1		1205	water	6	X	X												6 X40 ml clear VOA VIALS w/HCl

Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date, & Time: 5/14/14 / 16:30
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date, & Time: 5/15/14 10:15
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date, & Time:

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800-322-5555 www.gso.com

1131

Ship From:
ALAN KEMP
CAL SCIENCE- CONCORD
5063 COMMERCIAL CIRCLE #H
CONCORD, CA 94520

Tracking #: 524657358



NPS

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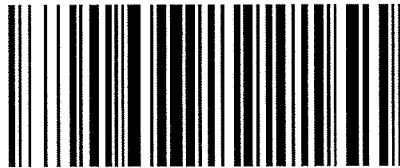
A

Ship To:
SAMPLE RECEIVING
CEL
7440 LINCOLN WAY
GARDEN GROVE, CA 92841

GARDEN GROVE

D92843A

OD:
\$0.00



24441314

Reference:
ETIC

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Print Date : 05/14/14 16:36 PM

Package 1 of 12

Print All

LABEL INSTRUCTIONS:

Do not copy or reprint this label for additional shipments - each package must have a unique barcode.

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.

STEP 2 - Fold this page in half.

STEP 3 - Securely attach this label to your package, do not cover the barcode.

STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section. Our liability for loss or damage to any package is limited to your actual damages or \$100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is \$500. For other shipments the highest declared value is \$10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is \$500. Items of "extraordinary value" include, but not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

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SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Exxon Mobil / ETIC

DATE: 05/15/14

TEMPERATURE: Thermometer ID: SC2 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

Temperature 3 . 5 °C - 0.3 °C (CF) = 3 . 2 °C Blank Sample

Sample(s) outside temperature criteria (PM/APM contacted by: _____)

Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

Received at ambient temperature, placed on ice for transport by Courier.

Ambient Temperature: Air Filter

Checked by: 836

CUSTODY SEALS INTACT:

Cooler _____ No (Not Intact) Not Present N/A Checked by: 836

Sample _____ No (Not Intact) Not Present Checked by: 659

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Collection date/time, matrix, and/or # of containers logged in based on sample labels. <input type="checkbox"/> No analysis requested. <input type="checkbox"/> Not relinquished. <input type="checkbox"/> No date/time relinquished.			
Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfides <input type="checkbox"/> Dissolved Oxygen.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation noted on COC or sample container.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CONTAINER TYPE:			
Solid: <input type="checkbox"/> 4ozCGJ <input type="checkbox"/> 8ozCGJ <input type="checkbox"/> 16ozCGJ <input type="checkbox"/> Sleeve (____) <input type="checkbox"/> EnCores® <input type="checkbox"/> TerraCores® <input type="checkbox"/> _____			
Aqueous: <input type="checkbox"/> VOA <input checked="" type="checkbox"/> VOAh <input type="checkbox"/> VOAna ₂ <input type="checkbox"/> 125AGB <input type="checkbox"/> 125AGBh <input type="checkbox"/> 125AGBp <input type="checkbox"/> 1AGB <input type="checkbox"/> 1AGBna ₂ <input type="checkbox"/> 1AGBs			
<input type="checkbox"/> 500AGB <input checked="" type="checkbox"/> 500AGJ <input type="checkbox"/> 500AGJs <input type="checkbox"/> 250AGB <input type="checkbox"/> 250CGB <input type="checkbox"/> 250CGBs <input type="checkbox"/> 1PB <input type="checkbox"/> 1PBna <input type="checkbox"/> 500PB			
<input type="checkbox"/> 250PB <input type="checkbox"/> 250PBn <input type="checkbox"/> 125PB <input type="checkbox"/> 125PBz _{na} <input type="checkbox"/> 100PJ <input type="checkbox"/> 100PJna ₂ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____			
Air: <input type="checkbox"/> Tedlar® <input type="checkbox"/> Canister Other: <input type="checkbox"/> _____ Trip Blank Lot#: _____ Labeled/Checked by: <u>659</u>			
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope Reviewed by: <u>739</u>			
Preservative: h: HCL n: HNO ₃ na ₂ : Na ₂ S ₂ O ₃ na: NaOH p: H ₃ PO ₄ s: H ₂ SO ₄ u: Ultra-pure z _{na} : ZnAc ₂ +NaOH f: Filtered Scanned by: <u>739</u>			

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Appendix E

Groundwater Monitoring and Sampling Data for Unocal No. 6129

Table 1
Current Groundwater Monitoring Data and Analytical Results
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL (ft)	TPH-g (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
MW-1	190.79	5/12/2014	28.95	161.84	0	98 ¹	<0.50	<0.50	<0.50	<1.0	
MW-2	190.80	5/12/2014	28.49	162.31	0	260	<0.50	<0.50	<0.50	<1.0	
MW-3	188.58	5/12/2014	27.93	160.65	0	98 ¹	<0.50	<0.50	<0.50	<1.0	

NOTES:

* TOC and GWE are in feet above mean sea level.

<# = Analyte not detected at or above indicated laboratory practical quantitation limit

BTEX compounds analyzed by Unites States Environmental Protection Agency Method 8260B

TPH-g analyzed by Luft-GC/MS method.

ID = Identification

TOC = Top of casing

ft = Feet

DTW = Depth to water

GWE = Groundwater elevation

µg/L = Micrograms per liter

LNAPL = Light Non-Aqueous Phase Liquid

¹ = TPH-g does not exhibit a "gasoline" pattern. TPH-g is entirely due to MTBE.

B = Benzene

T = Toluene

E = Ethylbenzene

X = Total Xylenes

TPH-g = Total Petroleum Hydrocarbons as Gasoline

TPH-g reported as TPPH (total purgeable petroluem hydrocarbons) on some laboratory reports

Table 2
Current Groundwater Analytical Results - Oxygenate Compounds
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	DATE	MTBE (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	ETBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)
MW-1	5/12/2014	170 ¹	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
MW-2	5/12/2014	510 ¹	44	<250	<0.50	12	<0.50	<0.50	<0.50
MW-3	5/12/2014	160 ¹	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50

NOTES:

Oxygenate compounds analyzed by Unites States Environmental Protection Agency Method 8260B

<# = Analyte not detected at or above indicated laboratory practical quantitation limit

ID = Identification

µg/L = Micrograms per liter

MTBE = Methyl t-butyl ether

TBA = T-butyl alcohol

DIPE = Diisopropyl ether

ETBE = Ethyl t-butyl ether

TAME = T-amyl methyl ether

EDB = 1,2-Dibromoethane

EDC = 1,2-Dichloroethane

¹ = PQL's and MDL's are raised due to sample dilution.

Table 3
Historical Groundwater Monitoring Data and Analytical Results
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL (ft)	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-1	190.79	1/5/1990	32.80	157.99	--	<30	<0.30	<0.30	<0.30	<0.30	
screened	190.79	5/11/1990	31.80	158.99	--	<30	<0.30	7.1	<0.30	<0.30	
24 to 44' bgs	190.79	8/9/1990	32.37	158.42	--	<30	<0.30	<0.30	<0.30	<0.30	
	190.79	11/14/1990	33.32	157.47	--	<30	<0.30	<0.30	<0.30	<0.30	
	190.79	2/12/1991	33.02	157.77	--	<30	0.32	<0.30	<0.30	<0.30	
	190.79	5/9/1991	30.95	159.84	--	<30	<0.30	<0.30	<0.30	<0.30	
	190.79	11/13/2003	--	--	--	180	<1.0	<1.0	<1.0	<2.0	
	190.79	8/27/2004	30.65	160.14	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	11/23/2004	29.35	161.44	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	2/9/2005	26.89	163.90	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	5/17/2005	26.56	164.23	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	7/27/2005	27.33	163.46	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	12/6/2005	29.59	161.20	0	<50	<0.50	0.93	<0.50	1.80	
	190.79	2/21/2006	28.27	162.52	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	6/8/2006	26.07	164.72	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	9/15/2006	28.86	161.93	0	<50	<0.50	<0.50	<0.50	<0.50	
	190.79	12/14/2006	29.49	161.30	0	<50	<0.50	<0.50	<0.50	<0.50	
	190.79	3/28/2007	27.24	163.55	0	<50	<0.50	<0.50	<0.50	<0.50	
	190.79	6/25/2007	28.30	162.49	0	<50	<0.50	<0.50	<0.50	<0.50	
	190.79	9/22/2007	30.61	160.18	0	<50	<0.50	<0.50	<0.50	<0.50	
	190.79	12/14/2007	30.30	160.49	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	3/17/2008	27.22	163.57	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	6/20/2008	30.10	160.69	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	9/11/2008	31.04	159.75	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	11/25/2008	30.88	159.91	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	3/9/2009	27.50	163.29	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	5/28/2009	28.25	162.54	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	12/11/2009	30.60	160.19	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	5/7/2010	26.06	164.73	0	67	<0.50	<0.50	<0.50	<1.0	
	190.79	11/1/2010	30.18	160.61	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.79	5/27/2011	26.87	163.92	0	110	<0.50	<0.50	<0.50	<1.0	
	190.79	11/23/2011	29.14	161.65	0	1,101	<0.50	<0.50	<0.50	<1.0	

Table 3
Historical Groundwater Monitoring Data and Analytical Results
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL (ft)	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-1 cont.	190.79	5/24/2012	26.58	164.21	0	140	<0.50	<0.50	<0.50	<1.0	
	190.79	10/23/2012	30.51	160.28	0	130	<0.50	<0.50	<0.50	<1.0	
	190.79	5/2/2013	28.30	162.49	0	150 ¹	<0.50	<0.50	<0.50	<1.0	
	190.79	11/13/2013	31.65	159.14	0	240	<0.50	<0.50	<0.50	<1.0	
	190.79	5/12/2014	28.95	161.84	0	98¹	<0.50	<0.50	<0.50	<1.0	
MW-2 screened 24 to 44' bgs	190.80	1/5/1990	33.02	157.78	--	<30	<>0.30	<>0.30	<>0.30	<>0.30	
	190.80	5/11/1990	31.98	158.82	--	<30	<>0.30	<>0.30	<>0.30	<>0.30	
	190.80	8/9/1990	32.45	158.35	--	<30	<>0.30	<>0.30	<>0.30	<>0.30	
	190.80	11/14/1990	33.47	157.33	--	<30	<>0.30	<>0.30	<>0.30	<>0.30	
	190.80	2/12/1991	33.15	157.65	--	<30	<>0.30	0.42	<0.30	0.51	
	190.80	5/9/1991	30.88	159.92	--	<30	<>0.30	<>0.30	<>0.30	<>0.30	
	190.80	11/13/2003	--	--	--	<2,000	<20	<20	<20	<40	
	190.80	8/27/2004	30.28	160.52	0	950	<5.0	<5.0	<5.0	<10	
	190.80	11/23/2004	28.75	162.05	0	53	<0.50	<0.50	<0.50	<1.0	
	190.80	2/9/2005	26.08	164.72	0	<500	<0.50	<0.50	<0.50	<1.0	
	190.80	5/17/2005	24.53	166.27	0	<50	<0.50	<0.50	<0.50	<1.0	
	190.80	7/27/2005	27.51	163.29	0	<500	<5.0	<5.0	<5.0	<10	
	190.80	12/6/2005	29.13	161.67	0	340	<0.50	<0.50	<0.50	<1.0	
	190.80	2/21/2006	29.23	161.57	0	190	<0.50	<0.50	<0.50	<1.0	
	190.80	6/8/2006	25.76	165.04	0	<500	<5.0	<5.0	<5.0	<10	
	190.80	9/15/2006	29.17	161.63	0	<500	<5.0	<5.0	<5.0	<5.0	
	190.80	12/14/2006	29.11	161.69	0	520	<0.50	<0.50	<0.50	<0.50	
	190.80	3/28/2007	26.68	164.12	0	290	<0.50	<0.50	<0.50	<0.50	
	190.80	6/25/2007	25.91	164.89	0	<50	<0.50	<0.50	<0.50	<0.50	
	190.80	9/22/2007	30.18	160.62	0	400	<0.50	<0.50	<0.50	<0.50	
	190.80	12/14/2007	29.96	160.84	0	400	<0.50	<0.50	<0.50	<1.0	
	190.80	3/17/2008	26.74	164.06	0	570	<5.0	<5.0	<5.0	<10	
	190.80	6/20/2008	29.78	161.02	0	580	<0.50	<0.50	<0.50	<1.0	
	190.80	9/11/2008	30.62	160.18	0	220	<0.50	<0.50	<0.50	<1.0	
190.80	11/25/2008	30.48	160.32	0	500	<0.50	<0.50	<0.50	<1.0		
190.80	3/9/2009	25.75	165.05	0	910	<5.0	<5.0	<5.0	<10		
190.80	5/28/2009	27.71	163.09	0	460	<0.50	<0.50	<0.50	<1.0		
190.80	12/11/2009	29.80	161.00	0	640	<5.0	<5.0	<5.0	<10		

Table 3
Historical Groundwater Monitoring Data and Analytical Results
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL (ft)	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-2 cont.	190.80	5/7/2010	25.11	165.69	0	600	<1.0	<1.0	<1.0	<2.0	
	190.80	11/1/2010	29.90	160.90	0	140	<0.50	<0.50	<0.50	<1.0	
	190.80	5/27/2011	26.44	164.36	0	560	<0.50	<0.50	<0.50	<1.0	
	190.80	11/23/2011	28.53	162.27	0	830	<0.50	<0.50	<0.50	<1.0	
	190.80	5/24/2012	25.97	164.83	0	1,000	<0.50	<0.50	<0.50	<1.0	
	190.80	10/23/2012	30.14	160.66	0	750	<0.50	<0.50	<0.50	<1.0	
	190.80	5/2/2013	27.14	163.66	0	290 ¹	<0.50	<0.50	<0.50	<1.0	
	190.80	11/13/2013	31.37	159.43	0	1,200	<0.50	<0.50	<0.50	<1.0	
	190.80	5/12/2014	28.49	162.31	0	260.00	<0.50	<0.50	<0.50	<1.0	
MW-3 screened 23 to 43' bgs	188.58	1/5/1990	31.88	156.70	--	<30	<0.30	<0.30	<0.30	<0.30	
	188.58	5/11/1990	31.25	157.33	--	<30	<0.30	<0.30	<0.30	<0.30	
	188.58	8/9/1990	31.53	157.05	--	<30	<0.30	<0.30	<0.30	<0.30	
	188.58	11/14/1990	33.30	155.28	--	<30	<0.30	<0.30	<0.30	<0.30	
	188.58	2/12/1991	32.05	156.53	--	<30	<0.30	<0.30	<0.30	<0.30	
	188.58	5/9/1991	30.37	158.21	--	<30	<0.30	<0.30	<0.30	<0.30	
	188.58	11/13/2003	--	--	--	2,600	<20	<20	<20	<40	
	188.58	8/27/2004	29.61	158.97	0	1,700	<10	<10	<10	<20	
	188.58	11/23/2004	28.48	160.10	0	1,500	<10	<10	<10	<20	
	188.58	2/9/2005	26.45	162.13	0	<1,000	<0.50	<0.50	<0.50	<1.0	
	188.58	5/17/2005	25.61	162.97	0	<1,000	<0.50	<0.50	<0.50	<1.0	
	188.58	7/27/2005	27.35	161.23	0	<1,000	<10	<10	<10	<20	
	188.58	12/6/2005	28.78	159.80	0	430	<0.50	1.6	<0.50	3.6	
	188.58	2/21/2006	28.91	159.67	0	420	<0.50	<0.50	<0.50	<1.0	
	188.58	6/8/2006	25.97	162.61	0	<1,200	<12	<12	<12	<25	
	188.58	9/15/2006	28.73	159.85	0	<1,200	<12	<12	<12	<12	
	188.58	12/14/2006	28.62	159.96	0	<1,000	<10	<10	<10	<10	
	188.58	3/28/2007	26.69	161.89	0	500	<1.0	<1.0	<1.0	<1.0	
	188.58	6/25/2007	26.74	161.84	0	270	<0.50	<0.50	<0.50	<0.50	
	188.58	9/22/2007	29.57	159.01	0	500	<0.50	<0.50	<0.50	<0.50	
	188.58	12/14/2007	29.30	159.28	0	270	<0.50	<0.50	<0.50	<1.0	
188.58	3/17/2008	26.82	161.76	0	220	<0.50	<0.50	<0.50	<1.0		
188.58	6/20/2008	29.10	159.48	0	490	<0.50	<0.50	<0.50	<1.0		
188.58	9/11/2008	29.89	158.69	0	630	<5.0	<5.0	<5.0	<10		

Table 3
Historical Groundwater Monitoring Data and Analytical Results
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	TOC* (ft)	DATE	DTW (ft)	GWE* (ft)	LNAPL (ft)	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	Comments
MW-3 cont.	188.58	11/25/2008	29.74	158.84	0	380	<0.50	<0.50	<0.50	<1.0	
	188.58	3/9/2009	25.56	163.02	0	310	<0.50	<0.50	<0.50	<1.0	
	188.58	5/28/2009	27.55	161.03	0	410	<0.50	<0.50	<0.50	<1.0	
	188.58	12/11/2009	29.10	159.48	0	220	<0.50	<0.50	<0.50	<1.0	
	188.58	5/7/2010	25.72	162.86	0	360	<0.50	<0.50	<0.50	<1.0	
	188.58	11/1/2010	29.29	159.29	0	120	<0.50	<0.50	<0.50	<1.0	
	188.58	5/27/2011	26.53	162.05	0	340	<0.50	<0.50	<0.50	<1.0	
	188.58	5/24/2012	25.95	162.63	0	660	<0.50	<0.50	<0.50	<1.0	
	188.58	10/23/2012	29.39	159.19	0	480	<0.50	<0.50	<0.50	<1.0	
	188.58	5/2/2013	26.98	161.60	0	130 ¹	<0.50	<0.50	<0.50	<1.0	
	188.58	11/13/2013	30.28	158.30	0	110	<0.50	<0.50	<0.50	<1.0	
	188.58	5/12/2014	27.93	160.65	0	98¹	<0.50	<0.50	<0.50	<1.0	

NOTES:

* TOC and GWE are in feet above mean sea level.

<# = Analyte not detected at or above indicated laboratory practical quantitation limit

BTEX compounds analyzed by Unites States Environmental Protection Agency Method 8260B

TPH-g analyzed by Luft-GC/MS method.

ID = Identification

TOC = Top of casing

ft = Feet

fbg = feet below grade

DTW = Depth to water

GWE = Groundwater elevation

-- = Not available/Not analyzed

µg/L = Micrograms per liter

LNAPL = Light Non-Aqueous Phase Liquid

B = Benzene

T = Toluene

E = Ethylbenzene

X = Total Xylenes

TPH-g = Total Petroleum Hydrocarbons as Gasoline

¹ = TPH-g does not exhibit a "gasoline" pattern. TPH-g is entirely due to MTBE.

TPH-g reported as TPPH (total purgeable petroluem hydrocarbons) on some laboratory reports

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	DATE	MTBE (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)
MW-1	1/5/1990	--	--	--	--	--	--	--	--
	5/11/1990	--	--	--	--	--	--	--	--
	8/9/1990	--	--	--	--	--	--	--	--
	11/14/1990	--	--	--	--	--	--	--	--
	2/12/1991	--	--	--	--	--	--	--	--
	5/9/1991	--	--	--	--	--	--	--	--
	11/13/2003	240	<200	<1,000	<4.0	<4.0	<4.0	<4.0	<4.0
	8/27/2004	<0.50	<5.0	<50	<0.50	<1.0	<0.50	<0.50	<0.50
	11/23/2004	<0.50	<5.0	<50	<0.50	<1.0	<0.50	<0.50	<0.50
	2/9/2005	9.3	<5.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	5/17/2005	1.9	<5.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	7/27/2005	<0.50	<5.0	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/6/2005	<0.50	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	2/21/2006	2.6	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	6/8/2006	11	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	9/15/2006	1.4	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	12/14/2006	3.5	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	3/28/2007	0.64	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	6/25/2007	<0.50	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	9/22/2007	4.10	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	12/14/2007	0.65	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	3/17/2008	14	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	6/20/2008	11	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	9/11/2008	1.3	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/25/2008	5.8	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2009	25	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/28/2009	17	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	12/11/2009	18	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/7/2010	64	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/1/2010	92	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	DATE	MTBE (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)
MW-1 cont.	5/27/2011	220	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/23/2011	150	41	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/24/2012	190	66	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	10/23/2012	140	47	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/2/2013	270	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/13/2013	270	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/12/2014	170¹	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
MW-2	1/5/1990	--	--	--	--	--	--	--	--
	5/11/1990	--	--	--	--	--	--	--	--
	8/9/1990	--	--	--	--	--	--	--	--
	11/14/1990	--	--	--	--	--	--	--	--
	2/12/1991	--	--	--	--	--	--	--	--
	5/9/1991	--	--	--	--	--	--	--	--
	11/13/2003	2,100	<4,000	<20,000	<80	<80	<80	<80	<80
	8/27/2004	1,400	<5.0	<500	<5.0	24	<5.0	<5.0	<5.0
	11/23/2004	4.2	<5.0	<50	<0.50	18	<0.50	<0.50	<0.50
	2/9/2005	400	<5.0	<500	<5.0	19	<5.0	<5.0	<5.0
	5/17/2005	330	<5.0	<50	<0.50	12	<0.50	<0.50	<0.50
	7/27/2005	580	140	<500	<5.0	16	<5.0	<5.0	<5.0
	12/6/2005	780	61	<250	<0.50	15	<0.50	<0.50	<0.50
	2/21/2006	340	<10	<250	<0.50	18	<0.50	<0.50	<0.50
	6/8/2006	440	<100	<2,500	<5.0	14	<5.0	<5.0	<5.0
	9/15/2006	570	<100	<2,500	<5.0	17	<5.0	<5.0	<5.0
	12/14/2006	770	27	<250	<0.50	20	<0.50	<0.50	<0.50
	3/28/2007	460	260	<250	<0.50	23	<0.50	<0.50	<0.50
	6/25/2007	1.2	<10	<250	<0.50	23	<0.50	<0.50	<0.50
	9/22/2007	530	<10	<250	<0.50	35	<0.50	<0.50	<0.50
12/14/2007	930	48	<250	<0.50	24	<0.50	<0.50	<0.50	
3/17/2008	630	<100	<2,500	<5.0	18	<5.0	<5.0	<5.0	
6/20/2008	1,200	<10	<250	<0.50	16	<0.50	<0.50	<0.50	

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	DATE	MTBE (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)
MW-2 cont.	9/11/2008	29	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/25/2008	1,500	<10	<250	<0.50	19	<0.50	<0.50	<0.50
	3/9/2009	1,400	<100	<2,500	<5.0	15	<5.0	<5.0	<5.0
	5/28/2009	740	<10	<250	<0.50	20	<0.50	<0.50	<0.50
	12/11/2009	1,300	<100	<2,500	<5.0	19	<5.0	<5.0	<5.0
	5/7/2010	940	<20	<500	<1.0	14	<1.0	<1.0	<1.0
	11/1/2010	730	<10	<250	<0.50	28	<0.50	<0.50	<0.50
	5/27/2011	1,100	210.00	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/23/2011	1,500	400.00	<250	<0.50	9.00	<0.50	<0.50	<0.50
	5/24/2012	1,200	430	<250	<0.50	8.8	<0.50	<0.50	<0.50
	10/23/2012	1,300	420	<250	<0.50	14	<0.50	<0.50	<0.50
	5/2/2013	460	<10	<250	6.2	<0.50	<0.50	<0.50	<0.50
	11/13/2013	1,300	<10	<250	17	<0.50	<0.50	<0.50	<0.50
	5/12/2014	510¹	44	<250	12	<0.50	<0.50	<0.50	<0.50
MW-3	1/5/1990	--	--	--	--	--	--	--	--
	5/11/1990	--	--	--	--	--	--	--	--
	8/9/1990	--	--	--	--	--	--	--	--
	11/14/1990	--	--	--	--	--	--	--	--
	2/12/1991	--	--	--	--	--	--	--	--
	5/9/1991	--	--	--	--	--	--	--	--
	11/13/2003	3,700	<4,000	<20,000	<80	<80	<80	<80	<80
	8/27/2004	2,600	<100	<1,000	<10	<20	<10	<10	<10
	11/23/2004	1,800	<100	<1,000	<10	<20	<10	<10	<10
	2/9/2005	2,100	130	<1,000	<10	<10	<10	<10	<10
	5/17/2005	1,200	<100	<1,000	<10	<10	<10	<10	<10
	7/27/2005	1,400	360	<1,000	<10	<10	<10	<10	<10
	12/6/2005	1,800	160	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	2/21/2006	1,100	88	<250	<0.50	<0.50	0.58	<0.50	<0.50
6/8/2006	1,000	<250	<6,200	<12	<12	<12	<12	<12	
9/15/2006	1,200	<250	<6,200	<12	<12	<12	<12	<12	

Table 4
Historical Groundwater Analytical Results - Oxygenate Compounds
Unocal No. 6129 (351639)
3420 35th Avenue
Oakland, California

WELL ID	DATE	MTBE (µg/L)	TBA (µg/L)	ETHANOL (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	EDB (µg/L)	EDC (µg/L)
MW-3 cont.	12/14/2006	1,300	<200	<5,000	<10	<10	<10	<10	<10
	3/28/2007	860	500	<500	<1.0	<1.0	<1.0	<1.0	<1.0
	6/25/2007	570	11	<250	<0.50	<0.50	<0.50	<0.50	0.65
	9/22/2007	980	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	12/14/2007	570	26	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	3/17/2008	520	<10	<250	<0.50	<0.50	<0.50	<0.50	0.65
	6/20/2008	1,300	49	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	9/11/2008	1,200	<100	<2,500	<5.0	<5.0	<5.0	<5.0	<5.0
	11/25/2008	870	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	3/9/2009	720	15	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/28/2009	750	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	12/11/2009	620	63	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/7/2010	660	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/1/2010	490	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/27/2011	890	73	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/24/2012	1,100	300	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	10/23/2012	500	160	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/2/2013	220	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	11/13/2013	100	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50
	5/12/2014	160 ¹	<10	<250	<0.50	<0.50	<0.50	<0.50	<0.50

NOTES:

Oxygenate compounds analyzed by Unites States Environmental Protection Agency Method 8260B

<# = Analyte not detected at or above indicated laboratory practical quantitation limit

ID = Identification

-- = Not available/Not Analyzed

µg/L = Micrograms per liter

MTBE = Methyl t-butyl ether

TBA = T-butyl alcohol

DIPE = Diisopropyl ether

ETBE = Ethyl t-butyl ether

TAME = T-amyl methyl ether

EDB = 1,2-Dibromoethane

EDC = 1,2-Dichloroethane

¹ = PQL's and MDL's are raised due o sample dilution.