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jennifer.c.sedlachek@exxonmobil.com

**Jennifer C. Sedlachek**  
Project Manager



December 15, 2017

**RECEIVED**

By Alameda County Environmental Health 3:29 pm, Dec 15, 2017

Mr. Mark Detterman  
Alameda County Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, Room 250  
Alameda, California 94502-6577

**RE: Former Exxon RAS #79374/990 San Pablo Avenue, Albany, California.**

Dear Mr. Detterman:

Attached for your review and comment is a copy of the report entitled ***Semi-Annual Groundwater Monitoring and Remediation status Report, Fourth Quarter 2017***, dated December 15, 2017, for the above-referenced site. The report was prepared by Cardno of Petaluma, California, and details activities related to the subject site.

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website.

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

Sincerely,

Jennifer C. Sedlachek  
Project Manager

Attachment: Cardno's ***Semi-Annual Groundwater Monitoring and Remediation status Report, Fourth Quarter 2017***, dated December 15, 2017

cc: w/ attachment  
Ms. Muriel T. Blank, Trustee, The Blank Family Trust  
Reverend Deborah Blank, Trustee, The Blank Family Trust  
Ms. Marcia Blank Kelly, The Blank Family Trust  
Mr. Charles Drexler, Esq.

w/o attachment  
Mr. Scott Perkins, Cardno



December 15, 2017  
Cardno 2735C.Q174

Ms. Jennifer C. Sedlachek  
ExxonMobil Environmental Services Company  
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Oakland, California 94611

Cardno  
601 N. McDowell Boulevard  
Petaluma, CA 94954  
USA

Phone: +1 800 382 9105  
Fax: +1 707 789 0414  
Contractor: #997036

**SUBJECT**      **Semi-Annual Groundwater Monitoring and Remediation Status Report,  
Fourth Quarter 2017**  
Former Exxon Service Station 79374  
990 San Pablo Avenue, Albany, California

Alameda County RO#2974

## INTRODUCTION

At the request of ExxonMobil Environmental Services (EMES), on behalf of Exxon Mobil Corporation, Cardno performed fourth quarter 2017 groundwater monitoring and sampling at the subject site. Relevant plates, tables, and appendices are included at the end of this report. Currently, the site is occupied by a retail outlet for paints and painting products.

## GROUNDWATER MONITORING AND SAMPLING SUMMARY

<b>Gauging and sampling date:</b>	10/26/17
<b>Wells gauged and sampled:</b>	MW1 through MW3, MW3A, MW4 through MW8
<b>Wells gauged only:</b>	AS1, SVE1 through SVE3, MW9
<b>Presence of NAPL:</b>	None
<b>Laboratory:</b>	Eurofins Calscience, Inc., Garden Grove, California
<b>Analyses performed:</b>	EPA Method 8015B                          TPHd, TPHg, TPHmo EPA Method 8260B                                  BTEX, MTBE, ETBE, TAME, TBA, DIPE, EDB, 1,2-DCA, additional VOCs (HVOCs)
<b>Waste disposal:</b>	106 gallons of purge and decon water were delivered to InStrat, Inc., of Rio Vista, California, on 11/22/17

December 15, 2017  
Cardno 2735C.Q174 Former Exxon Service Station 79374, Albany, California

## RESULTS AND CONCLUSIONS

### Groundwater Flow Direction and Hydraulic Gradient

Due to varying well construction, the wells are separated into shallow and deep water-bearing zones. Wells MW3A, MW4, MW5, MW7 through MW9, and SVE1 through SVE7 are screened no deeper than 15 feet bgs and are referred to as the shallow water-bearing zone; wells MW1 through MW3 and MW6 have screened intervals that extend deeper than 15 feet bgs and are referred to as the deep water-bearing zone. The groundwater elevations in wells screened deeper than 15 feet are commonly irregular and do not agree with the distribution of petroleum hydrocarbon concentrations. Although the water-bearing zones are referred to as shallow and deep, they likely do not represent unique water-bearing zones.

During the quarter, the groundwater flow direction in the shallow water-bearing zone was towards the southwest under a hydraulic gradient of approximately 0.04. Due to varying well construction, the groundwater flow in the deep water-bearing zone was not calculated. Groundwater elevation maps for the shallow and deep water-bearing zones are included as Plates 3 and 4, respectively.

### Hydrocarbons in Groundwater

Maximum petroleum hydrocarbon concentrations were reported in well MW3, located in the vicinity of the former USTs; wells MW4 and MW5, located west of the former USTs; and off-site well MW7. Petroleum hydrocarbon concentrations were consistent with recent results.

Maximum PCE and TCE concentrations were reported in well MW1 and do not coincide with petroleum hydrocarbon concentrations.

Based on the results of the groundwater sampling to date, it appears that the existing well network along with soil borings in Buchanan Street adequately define the area of dissolved-phase petroleum hydrocarbon concentrations.

## RECOMMENDATIONS AND WORK IN PROGRESS

Cardno recommends continued semi-annual groundwater monitoring and sampling during the second and fourth quarters and conducting additional remedial activities at the site. Remediation activities will commence as soon as power is acquired from Pacific Gas & Electric (PG&E). PG&E currently anticipates performing the work in January 2018.

Additional soil vapor assessment activities are expected to be performed during first quarter 2018.

## LIMITATIONS

For documents cited that were not generated by Cardno, the data taken from those documents is used "as is" and is assumed to be accurate. Cardno does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated in these documents.

This document and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability, and specialized knowledge necessary to perform the work in a good and workmanlike manner and within all accepted standards pertaining to providers of environmental services in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

December 15, 2017  
 Cardno 2735C.Q174 Former Exxon Service Station 79374, Albany, California

Please contact Mr. Scott Perkins, Cardno's project manager for this site, at [scott.perkins@cardno.com](mailto:scott.perkins@cardno.com) or at (707) 766-2000 with any questions regarding this report.

Sincerely,

*Christine Capwell*  
 SCANNED IMAGE

Christine M. Capwell  
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 for Cardno  
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 Email: [christine.capwell@cardno.com](mailto:christine.capwell@cardno.com)

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 for Cardno  
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Enclosures:

#### Acronym List

Plate 1	Site Vicinity Map
Plate 2	Select Analytical Results
Plate 3	Groundwater Elevation Map, Shallow Water-Bearing Zone
Plate 4	Groundwater Elevation Map, Deep Water-Bearing Zone
Table 1A	Cumulative Groundwater Monitoring and Sampling Data
Table 1B	Additional Cumulative Groundwater Monitoring and Sampling Data – VOCs
Table 1C	Additional Cumulative Groundwater Monitoring and Sampling Data – VOCs
Table 2	Well Construction Details
Appendix A	Protocols
Appendix B	Field Data Sheets
Appendix C	Laboratory Analytical Report
Appendix D	Waste Disposal Documentation

cc: Mr. Mark Detterman, Alameda County Health Care Services Agency, Environmental Health Services,  
 1131 Harbor Bay Parkway, Suite 250, Alameda, California, 94502-6577

Ms. Muriel T. Blank, Trustee, The Blank Family Trusts, 1164 Solano Avenue, #406, Albany, California,  
 94706

Reverend Deborah Blank, Trustee, The Blank Family Trust, 1563 Solano Avenue, #344, Berkeley,  
 California, 94707

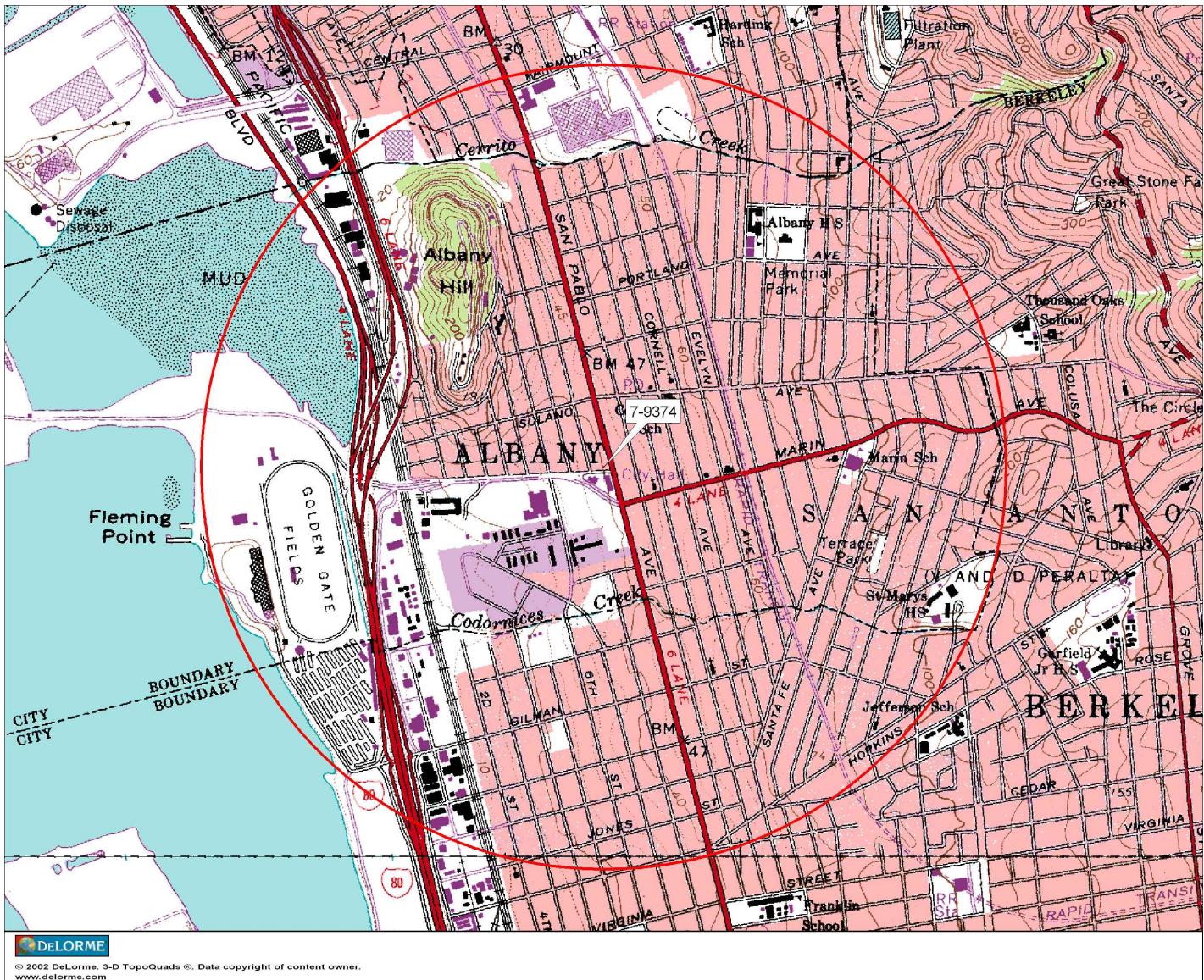
Ms. Marcia Blank, Trustee, The Blank Family Trust, 641 SW Morningside Road, Topeka, Kansas, 66606

Mr. Charles Drexler, Esq., 1724 Mandela Parkway, Suite 1, Oakland, California, 94607

December 15, 2017  
 Cardno 2735C.Q174 Former Exxon Service Station 79374, Albany, California

## ACRONYM LIST

$\mu\text{g/L}$	Micrograms per liter	NAPL	Non-aqueous phase liquid
$\mu\text{g/m}^3$	Micrograms per cubic meter	NEPA	National Environmental Policy Act
$\mu\text{s}$	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acf m	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction potential
AST	Aboveground storage tank	OSHA	Occupational Safety and Health Administration
bgs	Below ground surface	OVA	Organic vapor analyzer
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	P&ID	Process and Instrumentation Diagram
cfm	Cubic feet per minute	PAH	Polycyclic aromatic (or poliaromatic) hydrocarbon
COC	Chain-of-Custody	PCB	Polychlorinated biphenyl
CPT	Cone Penetration (Penetrometer) Test	PCE	Tetrachloroethylene or perchloroethylene
DIPE	Di-isopropyl ether	PID	Photo-ionization detector
DO	Dissolved oxygen	PLC	Programmable logic control
DOT	Department of Transportation	POTW	Publicly-owned treatment works
DPE	Dual-phase extraction	ppmv	Parts per million by volume
DTW	Depth to water	PQL	Practical quantitation limit
EDB	1,2-dibromoethane	psi	Pounds per square inch
EPA	Environmental Protection Agency	PVC	Polyvinyl chloride
ESL	Environmental screening level	QA/QC	Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA	Resource Conservation and Recovery Act
fpm	Feet per minute	RL	Reporting limit
GAC	Granular activated carbon	scfm	Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpm	Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS	Groundwater pump and treat system	SVE	Soil vapor extraction
HIT	High-intensity targeted	SVOC	Semi-volatile organic compound
HVOC	Halogenated volatile organic compound	TAME	Tertiary amyl methyl ether
J	Estimated value between MDL and PQL (RL)	TBA	Tertiary butyl alcohol
LEL	Lower explosive limit	TCE	Trichloroethene
LPC	Liquid-phase carbon	TOC	Top of well casing elevation; datum is msl
LRP	Liquid-ring pump	TOG	Total oil and grease
LUFT	Leaking underground fuel tank	TPH	Total petroleum hydrocarbons
LUST	Leaking underground storage tank	TPHd	Total petroleum hydrocarbons as diesel
MCL	Maximum contaminant level	TPHg	Total petroleum hydrocarbons as gasoline
MDL	Method detection limit	TPHmo	Total petroleum hydrocarbons as motor oil
mg/kg	Milligrams per kilogram	TPHs	Total petroleum hydrocarbons as stoddard solvent
mg/L	Milligrams per liter	TRPH	Total recoverable petroleum hydrocarbons
mg/m <sup>3</sup>	Milligrams per cubic meter	UCL	Upper confidence level
MPE	Multi-phase extraction	USCS	Unified Soil Classification System
MRL	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI	Natural attenuation indicators	VPC	Vapor-phase carbon



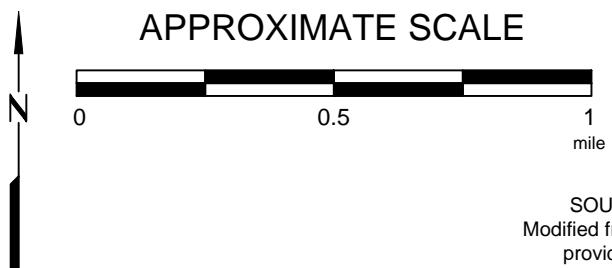
FN 2735 TOPO

### EXPLANATION



1/2-mile radius circle

### APPROXIMATE SCALE



SOURCE:  
Modified from a map  
provided by  
DeLorme 3-D TopoQuads



**SITE VICINITY MAP**  
FORMER EXXON SERVICE STATION 79374  
990 San Pablo Avenue  
Albany, California

PROJECT NO.	2735
PLATE	1

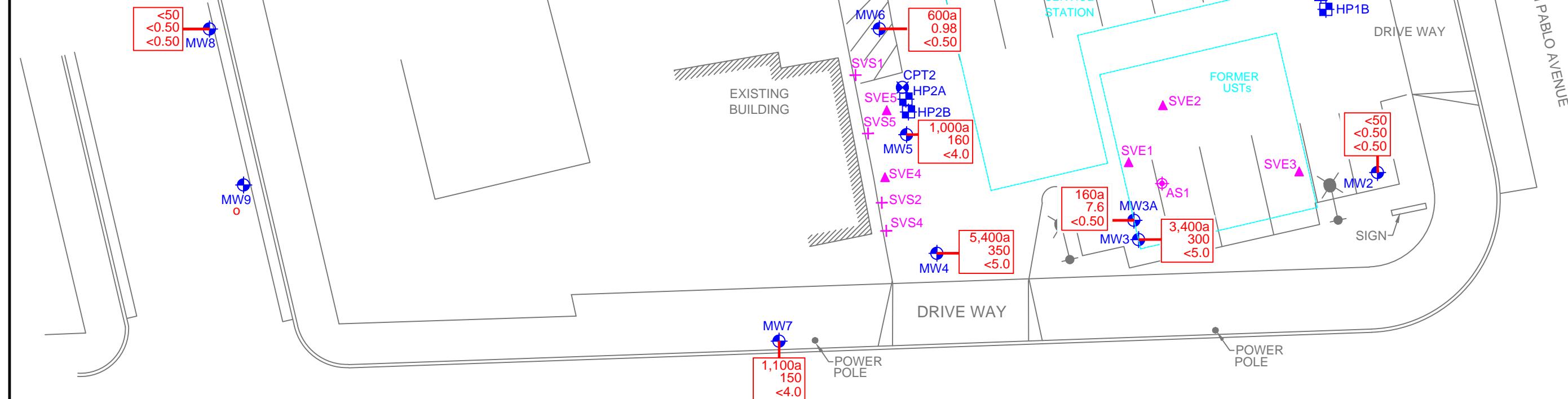
Analyte Concentrations in ug/L  
Sampled October 26, 2017

Total Petroleum Hydrocarbons  
as gasoline  
Benzene  
Methyl Tertiary Butyl Ether

< Less than the Stated Laboratory Reporting Limit  
ug/L Micrograms per Liter

a The chromatographic pattern does not match that of the specified standard.  
o Not sampled due to vehicle blocking well.

NOTE:  
Air sparge and soil vapor extraction wells not routinely sampled.



APPROXIMATE SCALE

0 20 40  
Feet

FN 2735 17 4QTR QM



## SELECT ANALYTICAL RESULTS

October 26, 2017

FORMER EXXON SERVICE STATION 79374  
990 San Pablo Avenue  
Albany, California

### EXPLANATION

MW6 Groundwater Monitoring Well

CPT2 Cone Penetration Test Boring

HP2B Hydropunch Boring

AS1 Air Sparge Well

SVE7 Soil Vapor Extraction Well

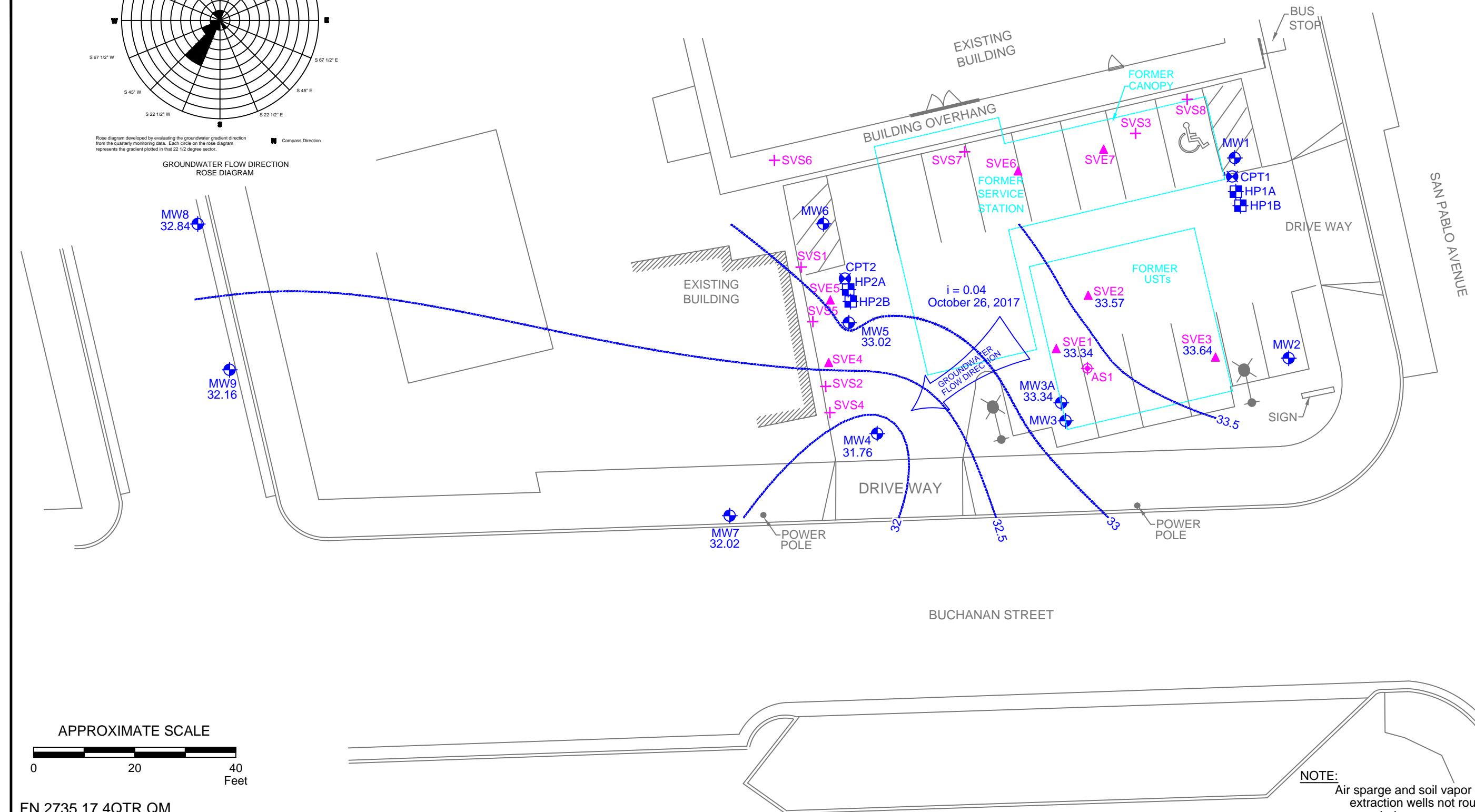
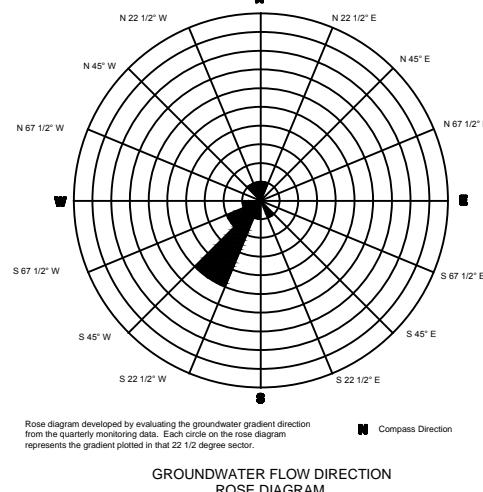
SVS8 Soil Vapor Sampling Well

PROJECT NO.

2735

PLATE

2





Cardno® Shaping the Future	<b>GROUNDWATER ELEVATION MAP DEEP WATER-BEARING ZONE</b> <b>October 26, 2017</b> FORMER EXXON SERVICE STATION 79374 990 San Pablo Avenue Albany, California	<b>EXPLANATION</b> MW6 Groundwater Monitoring Well 32.96 Groundwater elevation in feet; datum is NAVD88	CPT2 Cone Penetration Test Boring HP2B Hydropunch Boring AS1 Air Sparge Well SVE7 Soil Vapor Extraction Well SVS8 Soil Vapor Sampling Well	<b>PROJECT NO.</b> 2735 <b>PLATE</b> 4
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**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
<b>Monitoring Well Samples</b>															
MW1	11/04/10	---													
MW1	12/01/10	---	41.45		Well surveyed.										
MW1	12/16/10	---	41.45	9.18	32.27	No	---	<250	71a	54	<0.50	1.4	0.65	0.58	1.6
MW1	01/31/11	---	41.45	8.78	32.67	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	04/07/11	---	41.45	8.45	33.00	No	---	<250	65a	160a	<0.50	2.9	0.92	<0.50	1.7
MW1	07/18/11	---	41.45	9.49	31.96	No	---	<250	<50	63a	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	10/13/11	---	41.45	9.86	31.59	No	---	<250	54	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	04/06/12	---	41.45	8.11	33.34	No	---	<250	130	130	<0.50	2.1	<0.50	<0.50	<0.50
MW1	10/19/12	---	41.45	10.42	31.03	No	---	<250	<50	<50	<0.50	0.51	2.2	<0.50	0.65
MW1	06/11/13	---	41.45	10.48	30.97	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	12/19/13	---	41.45	10.67	30.78	No	---	<250	<50	<50	<0.50	<0.50	1.3	<0.50	0.53
MW1	04/03/14	---	44.19		Elevation converted to NAVD88.										
MW1	04/30/14	---	44.19	9.49	34.70	No	---	---	---	---	---	---	---	---	---
MW1	05/01/14	---	44.19	---	---	---	---	<240	<48	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	10/28/14	---	44.19	10.85	33.34	No	---	<250	61a	59	<0.50	1.2	<0.50	0.64	<0.50
MW1	06/02/15	---	44.19	10.35	33.84	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	11/18/15	---	44.19	10.72	33.47	No	---	---	---	---	---	---	---	---	---
MW1	11/19/15	---	44.19	---	---	---	---	<240	<47	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	05/02/16	---	44.19	11.14	33.05	No	---	320a	210a	<50	<2.0	<2.0	<2.0	<2.0	<2.0
MW1	10/07/16	---	44.19	10.65	33.54	No	---	<250	<50	<50	<1.0n	<1.0n	<1.0n	<1.0n	<1.0n
MW1	05/26/17	---	44.19	9.28	34.91	No	---	<230	93a	94a	<0.50	1.3	<0.50	<0.50	<0.50
<b>MW1</b>	<b>10/26/17</b>	---	<b>44.19</b>	<b>10.51</b>	<b>33.68</b>	<b>No</b>	---	<b>&lt;240</b>	<b>56a</b>	<b>81a</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
MW2	11/04/10	---			Well installed.										
MW2	12/01/10	---	41.25		Well surveyed.										
MW2	12/16/10	---	41.25	8.11	33.14	No	---	<250	110a	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	01/31/11	---	41.25	9.29	31.96	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	04/07/11	---	41.25	8.21	33.04	No	---	<250	<50	<50	0.51	<0.50	<0.50	<0.50	<0.50
MW2	07/18/11	---	41.25	9.52	31.73	No	---	<250	<50	54a	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	10/13/11	---	41.25	9.56	31.69	No	---	<250	98	75a	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	04/06/12	---	41.25	8.68	32.57	No	---	<250	60	68	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	10/19/12	---	41.25	11.03	30.22	No	---	<250	<50	59a	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	06/11/13	---	41.25	10.67	30.58	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	12/19/13	---	41.25	10.77	30.48	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	04/03/14	---	43.99		Elevation converted to NAVD88.										
MW2	04/30/14	---	43.99	9.63	34.36	No	---	---	---	---	---	---	---	---	---
MW2	05/01/14	---	43.99	---	---	---	---	<240	<48	53a	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	10/28/14	---	43.99	11.03	32.96	No	---	<250	78a	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	06/02/15	---	43.99	10.50	33.49	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	11/18/15	---	43.99	10.87	33.12	No	---	---	---	---	---	---	---	---	---
MW2	11/19/15	---	43.99	---	---	---	---	<240	60a	<50	<0.50	<0.50	<0.50	<0.50	<0.50

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW2	05/02/16	---	43.99	10.02	33.97	No	---	290a	180a	<50	<1.0	<1.0	<1.0	<1.0	<1.0
MW2	10/07/16	---	43.99	10.91	33.08	No	---	<250	<50	<50	<1.0n	<1.0n	<1.0n	<1.0n	<1.0n
MW2	05/26/17	---	43.99	9.61	34.38	No	---	<230	<45	<50	<0.50	<0.50	<0.50	<0.50	<0.50
<b>MW2</b>	<b>10/26/17</b>	---	<b>43.99</b>	<b>10.76</b>	<b>33.23</b>	<b>No</b>	---	<b>&lt;240</b>	<b>&lt;48</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
MW3	11/08/10	---	Well installed.												
MW3	12/01/10	---	40.42	Well surveyed.											
MW3	12/16/10	---	40.42	8.18	32.24	No	---	<250	2,900a	19,000	<12	350	130	940	290
MW3	01/31/11	---	40.42	7.64	32.78	No	---	390	2,800a	17,000a	<12	540	140	700	270
MW3	04/07/11	---	40.42	5.88	34.54	No	---	<250	2,700a	14,000	<10	600	150	780	230
MW3	07/18/11	---	40.42	8.31	32.11	No	---	<250	1,700a	19,000	<10	650	140	660	220
MW3	10/13/11	---	40.42	8.76	31.66	No	---	<250	1,900a	16,000	<10	520	150	900	270
MW3	04/06/12	---	40.42	8.13	32.29	No	---	<250	3,200a	18,000	<20	300	120	1,100	180
MW3	10/19/12	---	40.42	9.37	31.05	No	---	<250	1,700a	11,000a	<10	380	120	740	150
MW3	06/11/13	---	40.42	9.48	30.94	No	---	<250	2,700a	17,000	<10	270	110	990	140
MW3	12/19/13	---	40.42	10.00	30.42	No	---	---	---	---	---	---	---	---	---
MW3	12/20/13	---	40.42	---	---	---	---	<250	2,000a	16,000	<10	310	120	710	120
MW3	04/03/14	---	43.16	Elevation converted to NAVD88.											
MW3	04/30/14	---	43.16	9.17	33.99	No	---	---	---	---	---	---	---	---	---
MW3	05/01/14	---	43.16	---	---	---	---	<240	3,100a	18,000	<10	230	110	1,100	170
MW3	10/28/14	---	43.16	10.10	33.06	No	---	<250	4,800a	17,000	<20	330	120	1,200	150
MW3	06/02/15	---	43.16	9.30	33.86	No	---	<250	3,900a	18,000a	<20	290	110	850	140
MW3	11/18/15	---	43.16	10.06	33.10	No	---	---	---	---	---	---	---	---	---
MW3	11/19/15	---	43.16	---	---	---	---	<240	3,000a	1,500a	<5.0	290	110	340	100
MW3	05/02/16	---	43.16	7.09	36.07	No	---	350a	3,400a	16,000a	<5.0	310	110	1,000	150
MW3	10/07/16	---	43.16	10.13	33.03	No	---	<250	3,200a	14,000a	<10	270	100	390	89
MW3	05/26/17	---	43.16	8.06	35.10	No	---	<230	2,700a	1,000a	<10	370	110	530	98
<b>MW3</b>	<b>10/26/17</b>	---	<b>43.16</b>	<b>10.88</b>	<b>32.28</b>	<b>No</b>	---	<b>&lt;250</b>	<b>2,100a</b>	<b>3,400a</b>	<b>&lt;5.0</b>	<b>300</b>	<b>99</b>	<b>300</b>	<b>73</b>
MW3A	01/18/12	---	Well installed.												
MW3A	02/06/12	---	40.68	Well surveyed.											
MW3A	04/06/12	---	40.68	6.02	34.66	No	---	<250	170a	1,300	<2.0	41	7.5	140	38
MW3A	10/19/12	---	40.68	10.44	30.24	No	---	<250	860a	4,400a	<5.0	390	59	410	82
MW3A	06/11/13	---	40.68	9.75	30.93	No	---	<250	160a	1,100	<2.0	99	14	110	3.6
MW3A	12/19/13	---	40.68	10.05	30.63	No	---	<250	270a	1,800	<2.0	150	18	65	4.7
MW3A	04/03/14	---	43.42	Elevation converted to NAVD88.											
MW3A	04/30/14	---	43.42	7.55	35.87	No	---	---	---	---	---	---	---	---	---
MW3A	05/01/14	---	43.42	---	---	---	---	<240	<48	130a	<0.50	7.0	1.2	7.4	1.3
MW3A	10/28/14	---	43.42	10.33	33.09	No	---	<250	330a	1,600	<0.50	150	17	26	4.0
MW3A	06/02/15	---	43.42	9.48	33.94	No	---	<250	89a	170a	<0.50	14	0.95	6.7	1.8
MW3A	11/18/15	---	43.42	10.15	33.27	No	---	---	---	---	---	---	---	---	---
MW3A	11/19/15	---	43.42	---	---	---	---	<240	240a	660a	<2.0	86	7.2	3.8	3.6
MW3A	05/02/16	---	43.42	7.72	35.70	No	---	270a	200a	92a	<0.50	1.7	<0.50	1.5	<0.50
MW3A	10/07/16	---	43.42	10.31	33.11	No	---	<250	110a	520a	<0.50	26	2.9	1.1	1.1

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	
MW3A	05/26/17	---	43.42	7.96	35.46	No	---	<230	<45	<50	<0.50	0.92	<0.50	0.72	<0.50	
<b>MW3A</b>	<b>10/26/17</b>	---	<b>43.42</b>	<b>10.08</b>	<b>33.34</b>	<b>No</b>	---	<b>&lt;240</b>	<b>69a</b>	<b>160a</b>	<b>&lt;0.50</b>	<b>7.6</b>	<b>1.1</b>	<b>0.73</b>	<b>0.59</b>	
MW4	11/05/10	---	Well installed.													
MW4	12/01/10	---	39.30	Well surveyed.												
MW4	12/16/10	---	39.30	6.10	33.20	No	---	<250	2,000a	9,900	<5.0	440	40	170	380	
MW4	01/31/11	---	39.30	6.84	32.46	No	---	260	3,900a	13,000	<10	500	59	320	740	
MW4	04/07/11	---	39.30	5.29	34.01	No	---	<250	1,900a	9,600	<10	530	59	250	340	
MW4	07/18/11	---	39.30	7.36	31.94	No	---	<250	2,800a	14,000	<10	570	66	320	510	
MW4	10/13/11	---	39.30	7.83	31.47	No	---	320	7,200a	14,000	<10	350	43	340	690	
MW4	04/06/12	---	39.30	6.21	33.09	No	---	<250	1,800a	9,100a	<10	380	40	220	410	
MW4	10/19/12	---	39.30	10.64	28.66	No	---	1,400a	20,000a	270,000	<10	440	88	2,100	3,800	
MW4	03/06/13	---	39.30	8.02	31.28	No	---	---	---	---	---	---	---	---	---	
MW4	06/11/13	---	39.30	9.05	30.25	No	---	<250	3,400a	16,000	<10	430	48	520	820	
MW4	12/19/13	---	39.30	8.95	30.35	No	---	---	---	---	---	---	---	---	---	
MW4	12/20/13	---	39.30	---	---	---	---	<250	2,800a	13,000	<10	590	41	430	530	
MW4	03/05/14	---	39.30	---	---	No	---	---	---	---	---	---	---	---	---	
MW4	04/03/14	---	42.04	Elevation converted to NAVD88.												
MW4	04/30/14	---	42.04	6.25	35.79	No	---	---	---	---	---	---	---	---	---	
MW4	05/01/14	---	42.04	---	---	---	---	<240	3,000a	13,000	<10	520	46	310	340	
MW4	10/28/14	---	42.04	10.20	31.84	No	---	<250	7,400a	15,000	<10	590	42	360	230	
MW4	06/02/15	---	42.04	9.60	32.44	Sheen	---	<250	5,100a	22,000	<10	490	36	280	170	
MW4	11/18/15	---	42.04	8.58	33.46	No	---	---	---	---	---	---	---	---	---	
MW4	11/19/15	---	42.04	---	---	---	---	930a	7,600a	1,800a	<5.0	290	21	180	140	
MW4	05/02/16	---	42.04	6.31	35.73	No	---	1,900a	14,000a	13,000a	<5.0	530	40	250	220	
MW4	10/07/16	---	42.04	9.53	32.51	No	---	<250	3,700a	7,000a	<10	300	27	140	120	
MW4	05/26/17	---	42.04	6.85	35.19	No	---	<230	3,400a	9,600a	<5.0	510	33	190	85	
<b>MW4</b>	<b>10/26/17</b>	---	<b>42.04</b>	<b>10.28</b>	<b>31.76</b>	<b>No</b>	<b>---</b>	<b>&lt;240</b>	<b>2,900a</b>	<b>5,400a</b>	<b>&lt;5.0</b>	<b>350</b>	<b>20</b>	<b>210</b>	<b>42</b>	
MW5	11/11/10	---	Well installed.													
MW5	12/01/10	---	40.38	Well surveyed.												
MW5	12/16/10	---	40.38	7.69	32.69	No	---	<250	1,100a	6,200	<2.5	150	96	270	980	
MW5	01/31/11	---	40.38	8.00	32.38	No	---	270	4,600a	15,000	<10	520	310	1,100	2,500	
MW5	04/07/11	---	40.38	6.73	33.65	No	---	<250	610a	2,500	<2.5	61	32	180	390	
MW5	07/18/11	---	40.38	7.63	32.75	No	---	<250	2,000a	11,000	<2.5	340	160	990	1,800	
MW5	10/13/11	---	40.38	9.31	31.07	No	---	660	7,600a	23,000	<20	390	160	1,200	3,100	
MW5	04/06/12	---	40.38	6.77	33.61	No	---	<250	880a	6,000a	<5.0	62	17	360	680	
MW5	10/19/12	---	40.38	10.64	29.74	No	---	280a	2,100a	15,000	<20	580	63	950	1,400	
MW5	06/11/13	---	40.38	10.06	30.32	No	---	<250	2,700a	13,000	<20	540	36	930	1,200	
MW5	12/19/13	---	40.38	9.85	30.53	No	---	---	---	---	---	---	---	---	---	
MW5	12/20/13	---	40.38	---	---	---	---	<250	2,100a	21,000	<20	370	36	1,500	1,400	
MW5	04/03/14	---	43.12	Elevation converted to NAVD88.												
MW5	04/30/14	---	43.12	7.51	35.61	No	---	---	---	---	---	---	---	---	---	
MW5	05/01/14	---	43.12	---	---	---	---	<240	2,000a	10,000	<10	170	10	600	510	

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW5	10/28/14	---	43.12	10.00	33.12	No	---	360a	6,200a	16,000	<10	550	17	890	360
MW5	06/02/15	---	43.12	9.68	33.44	Sheen	---	340a	4,400a	19,000	<20	340	<20	880	430
MW5	11/18/15	---	43.12	9.18	33.94	No	---	---	---	---	---	---	---	---	---
MW5	11/19/15	---	43.12	---	---	---	---	1,200a	8,300a	5,000	<20	230	<20	710	320
MW5	05/02/16	---	43.12	7.42	35.70	No	---	360a	3,000a	15,000	<20	110	<20	470	200
MW5	10/07/16	---	43.12	10.51	32.61	No	---	830a	7,400a	12,000a	<10	330	<10	480	58
MW5	05/26/17	---	43.12	7.77	35.35	No	---	720a	3,800a	820a	<4.0	100	<4.0	160	29
<b>MW5</b>	<b>10/26/17</b>	<b>---</b>	<b>43.12</b>	<b>10.10</b>	<b>33.02</b>	<b>No</b>	<b>---</b>	<b>&lt;240</b>	<b>2,200a</b>	<b>1,000a</b>	<b>&lt;4.0</b>	<b>160</b>	<b>&lt;4.0</b>	<b>55</b>	<b>&lt;4.0</b>
MW6	11/03/10	---	Well installed.												
MW6	12/01/10	---	41.06	Well surveyed.											
MW6	12/16/10	---	41.06	8.55	32.51	No	---	<250	110a	1,700	<0.50	2.8	1.2	61	46
MW6	01/31/11	---	41.06	8.52	32.54	No	---	<250	800a	2,000a	<1.0	6.0	<1.0	30	24
MW6	04/07/11	---	41.06	7.78	33.28	No	---	<250	660a	2,000	<0.50	10	1.0	20	19
MW6	07/18/11	---	41.06	9.27	31.79	No	---	<250	350a	1,000a	<0.50	2.5	<0.50	3.8	3.5
MW6	10/13/11	---	41.06	10.21	30.85	No	---	<250	370a	890a	<0.50	2.8	<0.50	7.9	5.5
MW6	04/06/12	---	41.06	7.19	33.87	No	---	<250	440a	1,400a	<0.50	2.4	<0.50	13	15
MW6	10/19/12	---	41.06	11.36	29.70	No	---	<250	99a	510a	<0.50	4.2	1.6	8.0	7.0
MW6	06/11/13	---	41.06	10.81	30.25	No	---	<250	150a	500	<0.50	<0.50	<0.50	2.4	1.1
MW6	12/19/13	---	41.06	10.78	30.28	No	---	<250	68a	440	<0.50	<0.50	<0.50	2.3	0.87
MW6	04/03/14	---	43.80	Elevation converted to NAVD88.											
MW6	04/30/14	---	43.80	8.23	35.57	No	---	---	---	---	---	---	---	---	---
MW6	05/01/14	---	43.80	---	---	---	---	<240	450a	1,500	<0.50	2.8	0.57	13	4.8
MW6	10/28/14	---	43.80	10.91	32.89	No	---	<250	94a	260	<0.50	0.60	<0.50	0.56	<0.50
MW6	06/02/15	---	43.80	10.40	33.40	No	---	<250	360a	1,000	<0.50	0.81	<0.50	2.0	1.1
MW6	11/18/15	---	43.80	10.06	33.74	No	---	---	---	---	---	---	---	---	---
MW6	11/19/15	---	43.80	---	---	---	---	<240	370a	530a	<0.50	1.1	<0.50	5.3	1.7
MW6	05/02/16	---	43.80	7.75	36.05	No	---	<230	790a	1,800a	<0.50	17	0.91	10	4.7
MW6	10/07/16	---	43.80	11.20	32.60	No	---	<250	180a	500a	<0.50	0.67	<0.50	<0.50	<0.50
MW6	05/26/17	---	43.80	8.52	35.28	No	---	<230	730a	510a	<0.50	3.1	0.64	3.0	2.7
<b>MW6</b>	<b>10/26/17</b>	<b>---</b>	<b>43.80</b>	<b>10.84</b>	<b>32.96</b>	<b>No</b>	<b>---</b>	<b>&lt;240</b>	<b>140a</b>	<b>600a</b>	<b>&lt;0.50</b>	<b>0.98</b>	<b>&lt;0.50</b>	<b>1.5</b>	<b>1.0</b>
MW7	12/08/14	---	Well installed.												
MW7	12/23/14	---	41.21	Well surveyed.											
MW7	12/30/14	---	41.21	5.36	35.85	No	---	<250	2,900a	7,300a	<5.0	52	8.9	32	15
MW7	06/02/15	---	41.21	8.75	32.46	No	---	<250	2,700a	7,800a	<5.0	110	13	39	16
MW7	11/18/15	---	41.21	7.41	33.80	No	---	---	---	---	---	---	---	---	---
MW7	11/19/15	---	41.21	---	---	---	---	1,100a	3,700a	660a	<5.0	77	8.1	27	12
MW7	05/02/16	---	41.21	7.31	33.90	No	---	1,700a	8,100a	9,000a	<5.0	100	8.1	19	11
MW7	10/07/16	---	41.21	9.52	31.69	No	---	<250	2,200a	5,600a	<4.0	140	5.7	5.7	9.0
MW7	05/26/17	---	41.21	7.11	34.10	No	---	570a	7,800a	980a	<2.5	200	11	23	17
<b>MW7</b>	<b>10/26/17</b>	<b>---</b>	<b>41.21</b>	<b>9.19</b>	<b>32.02</b>	<b>No</b>	<b>---</b>	<b>&lt;240</b>	<b>2,500a</b>	<b>1,100a</b>	<b>&lt;4.0</b>	<b>150</b>	<b>8.8</b>	<b>9.4</b>	<b>11</b>
MW8	12/08/14	---	Well installed.												

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW8	12/23/14	---	39.65	Well surveyed.											
MW8	12/30/14	---	39.65	3.20	36.45	No	---	<250	<49	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW8	06/02/15	---	39.65	6.33	33.32	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW8	11/18/15	---	39.65	5.24	34.41	No	---	<240	<47	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW8	05/02/16	---	39.65	5.01	34.64	No	---	280a	180a	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW8	10/07/16	---	39.65	7.06	32.59	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW8	05/26/17	---	39.65	5.80	33.85	No	---	<230	<45	<50	<0.50	<0.50	<0.50	<0.50	<0.50
<b>MW8</b>	<b>10/26/17</b>	<b>---</b>	<b>39.65</b>	<b>6.81</b>	<b>32.84</b>	<b>No</b>	<b>---</b>	<b>&lt;240</b>	<b>&lt;47</b>	<b>&lt;50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
MW9	10/08/15	---	Well installed.												
MW9	10/16/15	---	39.50	6.45	33.05	No	---	<250	270a	360a	<0.50	<0.50	<0.50	<0.50	<0.50
MW9	10/26/15	---	39.50	Well surveyed.											
MW9	11/18/15	---	39.50	5.50	34.00	No	---	<240	<47	81	<0.50	<0.50	<0.50	<0.50	<0.50
MW9	05/02/16	---	39.50	5.12	34.38	No	---	<230	150a	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW9	10/07/16	---	39.50	8.03	31.47	No	---	<250	<50	120a	<0.50	<0.50	<0.50	<0.50	<0.50
MW9	05/26/17	---	39.50	6.10	33.40	No	---	<230	260a	58a	<0.50	<0.50	<0.50	<0.50	<0.50
<b>MW9</b>	<b>10/26/17 o</b>	<b>---</b>	<b>39.50</b>	<b>7.34</b>	<b>32.16</b>	<b>No</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
AS1	01/18/12	---	Well installed.												
AS1	10/19/12	---	---	10.32	---	No	---	---	---	---	---	---	---	---	---
AS1	06/11/13	---	---	9.82	---	No	---	---	---	---	---	---	---	---	---
AS1	12/19/13	---	---	10.12	---	No	---	---	---	---	---	---	---	---	---
AS1	04/30/14	---	---	7.95	---	No	---	---	---	---	---	---	---	---	---
AS1	10/28/14	---	---	10.35	---	No	---	---	---	---	---	---	---	---	---
AS1	06/02/15	---	---	9.50	---	No	---	---	---	---	---	---	---	---	---
AS1	11/18/15	---	---	10.26	---	No	---	---	---	---	---	---	---	---	---
AS1	05/02/16	---	---	8.16	---	No	---	---	---	---	---	---	---	---	---
AS1	10/07/16	---	---	10.20	---	No	---	---	---	---	---	---	---	---	---
AS1	05/26/17	---	---	8.04	---	No	---	---	---	---	---	---	---	---	---
<b>AS1</b>	<b>10/26/17</b>	<b>---</b>	<b>9.98</b>	<b>---</b>	<b>No</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>
SVE1	01/17/12	---	Well installed.												
SVE1	02/06/12	---	40.58	Well surveyed.											
SVE1	10/19/12	---	40.58	10.21	30.37	No	---	---	---	---	---	---	---	---	---
SVE1	06/11/13	---	40.58	9.63	30.95	No	---	---	---	---	---	---	---	---	---
SVE1	12/19/13	---	40.58	9.89	30.69	No	---	---	---	---	---	---	---	---	---
SVE1	04/03/14	---	43.32	Elevation converted to NAVD88.											
SVE1	04/30/14	---	43.32	7.70	35.62	No	---	---	---	---	---	---	---	---	---
SVE1	10/28/14	---	43.32	10.17	33.15	No	---	---	---	---	---	---	---	---	---
SVE1	06/02/15	---	43.32	9.35	33.97	No	---	---	---	---	---	---	---	---	---
SVE1	11/18/15	---	43.32	9.98	33.34	No	---	---	---	---	---	---	---	---	---
SVE1	05/02/16	---	43.32	7.87	35.45	No	---	---	---	---	---	---	---	---	---
SVE1	10/07/16	---	43.32	10.06	33.26	No	---	---	---	---	---	---	---	---	---
SVE1	05/26/17	---	43.32	7.79	35.53	No	---	---	---	---	---	---	---	---	---

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
<b>SVE1</b>	<b>10/26/17</b>	---	<b>43.32</b>	<b>9.98</b>	<b>33.34</b>	No	---	---	---	---	---	---	---	---	---
SVE2	01/17/12	---			Well installed.										
SVE2	02/06/12	---	40.94		Well surveyed.										
SVE2	10/19/12	---	40.94	10.48	30.46	No	---	---	---	---	---	---	---	---	---
SVE2	06/11/13	---	40.94	9.94	31.00	No	---	---	---	---	---	---	---	---	---
SVE2	12/19/13	---	40.94	10.20	30.74	No	---	---	---	---	---	---	---	---	---
SVE2	04/03/14	---	43.68		Elevation converted to NAVD88.										
SVE2	04/30/14	---	43.68	8.09	35.59	No	---	---	---	---	---	---	---	---	---
SVE2	10/28/14	---	43.68	10.50	33.18	No	---	---	---	---	---	---	---	---	---
SVE2	06/02/15	---	43.68	9.69	33.99	No	---	---	---	---	---	---	---	---	---
SVE2	11/18/15	---	43.68	10.39	33.29	No	---	---	---	---	---	---	---	---	---
SVE2	05/02/16	---	43.68	8.26	35.42	No	---	---	---	---	---	---	---	---	---
SVE2	10/07/16	---	43.68	10.36	33.32	No	---	---	---	---	---	---	---	---	---
SVE2	05/26/17	---	43.68	8.24	35.44	No	---	---	---	---	---	---	---	---	---
<b>SVE2</b>	<b>10/26/17</b>	---	<b>43.68</b>	<b>10.11</b>	<b>33.57</b>	<b>No</b>	---	---	---	---	---	---	---	---	---
SVE3	01/17/12	---			Well installed.										
SVE3	02/06/12	---	40.93		Well surveyed.										
SVE3	10/19/12	---	40.93	10.39	30.54	No	---	---	---	---	---	---	---	---	---
SVE3	06/11/13	---	40.93	9.65	31.28	No	---	---	---	---	---	---	---	---	---
SVE3	12/19/13	---	40.93	10.31	30.62	No	---	---	---	---	---	---	---	---	---
SVE3	04/03/14	---	43.67		Elevation converted to NAVD88.										
SVE3	04/30/14	---	43.67	7.79	35.88	No	---	---	---	---	---	---	---	---	---
SVE3	10/28/14	---	43.67	10.48	33.19	No	---	---	---	---	---	---	---	---	---
SVE3	06/02/15	---	43.67	9.40	34.27	No	---	---	---	---	---	---	---	---	---
SVE3	11/18/15	---	43.67	10.56	33.11	No	---	---	---	---	---	---	---	---	---
SVE3	05/02/16	---	43.67	7.84	35.83	No	---	---	---	---	---	---	---	---	---
SVE3	10/07/16	---	43.67	10.25	33.42	No	---	---	---	---	---	---	---	---	---
SVE3	05/26/17	---	43.67	7.84	35.83	No	---	---	---	---	---	---	---	---	---
<b>SVE3</b>	<b>10/26/17</b>	---	<b>43.67</b>	<b>10.03</b>	<b>33.64</b>	<b>No</b>	---	---	---	---	---	---	---	---	---
SVE4	10/09/15	---			Well installed.										
SVE4	10/16/15	---	43.10	10.28	32.82	No	---	<250	840a	830a	<0.50	37	1.2	5.0	26
SVE4	10/26/15	---	43.10		Well surveyed.										
SVE4	11/18/15	---	43.10	8.87	34.23	No	---	---	---	---	---	---	---	---	---
SVE4	05/02/16	---	43.10	7.71	35.39	No	---	---	---	---	---	---	---	---	---
SVE4	10/07/16	- Present	43.10		Well not gauged or sampled.										
SVE5	10/09/15	---			Well installed.										
SVE5	10/16/15	---	43.70	10.55	33.15	No	---	<250	2,000a	1,700a	<20	29	25	130	2,300
SVE5	10/26/15	---	43.70		Well surveyed.										
SVE5	11/18/15	---	43.70	9.07	34.63	No	---	---	---	---	---	---	---	---	---
SVE5	05/02/16	---	43.70	7.33	36.37	No	---	---	---	---	---	---	---	---	---

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
SVE5	10/07/16	- Present	43.70	Well not gauged or sampled.											
SVE6	10/09/15	---	Well installed.												
SVE6	10/16/15	---	44.37	10.87	33.50	No	---	<240	390a	490	<0.50	31	1.8	4.2	15
SVE6	10/26/15	---	44.37	Well surveyed.											
SVE6	11/18/15	---	44.37	10.33	34.04	No	---	---	---	---	---	---	---	---	---
SVE6	05/02/16	---	44.37	8.14	36.23	No	---	---	---	---	---	---	---	---	---
SVE6	10/07/16	- Present	44.37	Well not gauged or sampled.											
SVE7	10/09/15	---	Well installed.												
SVE7	10/16/15	---	44.48	11.07	33.41	No	---	<240	240a	440a	<0.50	<0.50	<0.50	0.70	2.3
SVE7	10/26/15	---	44.48	Well surveyed.											
SVE7	11/18/15	---	44.48	10.47	34.01	No	---	---	---	---	---	---	---	---	---
SVE7	05/02/16	---	44.48	9.04	35.44	No	---	---	---	---	---	---	---	---	---
SVE7	10/07/16	- Present	44.48	Well not gauged or sampled.											
<b>Grab Groundwater Samples</b>															
B-1W	01/06/08	---	---	---	---	---	26c,d	<5,000	99,000c,g,j	76,000c,f,k	<50	<50	93	3,100	9,600
B-2W	01/06/08	---	---	---	---	---	---	310d	23,000c,d,g	77,000 c,d,e	<50	1,500	300	2,000	6,800
B-3W	01/06/08	---	---	---	---	---	---	<250d	2,000d,g	6,200d,e	<10	170	32	740	250
B-4W	01/06/08	---	---	---	---	---	---	<250d	3,100d,g	7,700d,e	<10	360	<10	240	20
B-5W	01/06/08	---	---	---	---	---	---	<250d	120d,g	120d,i	<0.5	<0.5	<0.5	<0.5	<0.5
B-6W	01/06/08	---	---	---	---	---	---	<250d	830d,g	1,700d,e	<2.5	5.2	<2.5	100	8.6
DR-W	01/06/08	---	---	---	---	---	---	<250	96g	730f,k	<0.5	<0.5	<0.5	6.9	14
W-27.5-HP1A	10/28/10	27.5	---	---	---	---	---	260	330a	63a	<0.50	<0.50	<0.50	<0.50	<0.50
W-36-HP1A	10/28/10	36	---	---	---	---	---	<250	220a	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-46.5-HP1A	10/28/10	46.5	---	---	---	---	---	<420	<83	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-59-HP1B	10/27/10	59	---	---	---	---	---	<250	130	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-27.5-HP2A	10/29/10	27.5	---	---	---	---	---	<250	100a	340	<0.50	1.7	2.1	20	46
W-52-HP2A	10/29/10	52	---	---	---	---	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-60.5-HP2B	10/27/10	60.5	---	---	---	---	---	<250	62	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-10-SVE1-2	01/31/12	10	---	---	---	---	---	890a	1,500a	1,400	<1.0	46	2.0	24	23
W-10-SVE1-1	01/31/12	10	---	---	---	---	---	990a	1,900a	2,000	<2.0	87	2.1	13	23
W-5-B7	02/27/14	5	---	---	---	---	---	<310	<62	<50	<0.50	<0.50	<0.50	<0.50	<0.50

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
W-12-B8	02/28/14	12	---	---	---	---	---	<240	130a	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-5-B9	02/27/14	5	---	---	---	---	---	<310	370a	1,400a	<0.50	<0.50	<0.50	<0.50	<0.50
W-5.5-B10	02/27/14	5.5	---	---	---	---	---	<310	<62	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-14-B11	03/05/14	14	---	---	---	---	---	<310	<62	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-10-B12	02/26/14	10	---	---	---	---	---	<250	800a	5,900	<0.50	<0.50	<0.50	1.9	<0.50
W-10-B13	02/28/14	10	---	---	---	---	---	<250	1,500a	6,300	<5.0	12	8.8	290	22
B14	03/05/14 b	---	---	---	---	---	---	---	---	---	---	---	---	---	---
W-14-B15	03/05/14	14	---	---	---	---	---	<310	<62	<50	1.3	<0.50	<0.50	<0.50	<0.50
W-14-B16	02/26/14	14	---	---	---	---	---	<250	180a	170a	<0.50	1.1	<0.50	5.4	<0.50
W-10-B17	02/27/14	10	---	---	---	---	---	<270	<54	110a	<0.50	<0.50	<0.50	<0.50	<0.50

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Notes:

TOC	= Top of well casing elevation; datum is NAVD88, prior to April 2014, datum was mean sea level.
DTW	= Depth to water.
GW Elev.	= Groundwater elevation; datum is NAVD88, prior to April 2014, datum was mean sea level. If liquid-phase hydrocarbons present, elevation adjusted using TOC - [DTW - (PT x 0.76)].
NAPL	= Non-aqueous phase liquid.
O&G	= Oil and grease with silica gel clean-up analyzed using Standard Method 5520B/F.
TPHmo	= Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015 (modified).
TPHd	= Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015 (modified).
TPHg	= Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015 (modified).
MTBE	= Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	= Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B.
EDB	= 1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	= 1,2-dichloroethane analyzed using EPA Method 8260B.
TAME	= Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	= Tertiary butyl alcohol analyzed using EPA Method 8260B.
ETBE	= Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
DIPE	= Di-isopropyl ether analyzed using EPA Method 8260B.
PCE	= Tetrachloroethene analyzed using EPA Method 8260B.
TCE	= Trichloroethene analyzed using EPA Method 8260B.
VOCs	= Volatile organic compounds or halogenated volatile organic compounds analyzed using EPA Method 8260B.
µg/L	= Micrograms per liter.
ND	= Not detected at or above laboratory reporting limits.
---	= Not measured/Not sampled/Not analyzed.
<	= Less than the stated laboratory reporting limit.
a	= The chromatographic pattern does not match that of the specified standard.
b	= Groundwater did not enter boring; sample not collected.
c	= Lighter than water immiscible sheen/product is present.
d	= Liquid sample that contains greater than approximately 1 volume % sediment.
e	= Unmodified or weakly modified gasoline is significant.
f	= Heavier gasoline-range compounds are significant.
g	= Gasoline-range compounds are significant.
h	= Analyzed beyond the EPA-recommended hold time.
i	= Strongly aged gasoline-range or diesel-range compounds are significant.
j	= Diesel-range compounds are significant; no recognizable pattern.
k	= No recognizable pattern.
l	= Additional analyses: CAM 5 metals analyzed using EPA Method 6010B and semi-volatile organic compounds analyzed using EPA Method 8270C. Results were ND except for naphthalene (4,000 µg/L) and 2-methylnaphthalene (3,900 µg/L).
m	= Additional analyses: CAM 5 metals analyzed using EPA Method 6010B. Results were ND except for dissolved chromium (54 µg/L).
n	= Reporting limits elevated due to high level of non-target analytes.
o	= Not sampled due to vehicle blocking well.

**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA - VOCs**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	PCE (µg/L)	TCE (µg/L)	Naphthalene (µg/L)	Ace-tone (µg/L)	2-butane (µg/L)	Bromo-benzene (µg/L)	Bromodichloro-methane (µg/L)	Bromo-methane (µg/L)	n-Butyl-benzene (µg/L)	sec-Butyl-benzene (µg/L)
<b>Monitoring Well Samples</b>																		
MW1	11/04/10	---	Well installed.															
MW1	12/16/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW1	01/31/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW1	04/07/11	---	<0.50	<0.50	<0.50	10	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW1	07/18/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW1	10/13/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW1	04/06/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW1	10/19/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW1	06/11/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW1	12/19/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW1	05/01/14	---	<0.50	<0.50	<0.50	5.1	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW1	10/28/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	85h	9.8	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
MW1	06/02/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	110	9.3	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
MW1	11/19/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	92h	8.8	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
MW1	05/02/16	---	<2.0	<2.0	<2.0	<20	<2.0	<2.0	82	9.2	<4.0	<40	<20	<2.0	<2.0	<4.0	<2.0	<2.0
MW1	10/07/16 n	---	<1.0	<1.0	<1.0	<10	<1.0	<1.0	57	8.0	<2.0	<20	<10	<1.0	<1.0	<2.0	<1.0	<1.0
MW1	05/26/17	---	<0.50	<0.50	<0.50	6.2	<0.50	<0.50	15	4.0	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	2.1
<b>MW1</b>	<b>10/26/17</b>	<b>---</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>12</b>	<b>5.4</b>	<b>&lt;1.0</b>	<b>&lt;10</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50</b>	<b>1.6</b>
MW2	11/04/10	---	Well installed.															
MW2	12/16/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW2	01/31/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW2	04/07/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW2	07/18/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW2	10/13/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW2	04/06/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW2	10/19/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW2	06/11/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW2	12/19/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW2	05/01/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW2	10/28/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	73h	8.9	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
MW2	06/02/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	78	6.9	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
MW2	11/19/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	79h	7.7	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
MW2	05/02/16	---	<1.0	<1.0	<1.0	<10	<1.0	<1.0	49	5.4	<2.0	<20	<10	<1.0	<1.0	<2.0	<1.0	<1.0
MW2	10/07/16 n	---	<1.0	<1.0	<1.0	<10	<1.0	<1.0	58	6.5	<2.0	<20	<10	<1.0	<1.0	<2.0	<1.0	<1.0
MW2	05/26/17	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	24	3.1	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
<b>MW2</b>	<b>10/26/17</b>	<b>---</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>37</b>	<b>5.6</b>	<b>&lt;1.0</b>	<b>&lt;10</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
MW3	11/08/10	---	Well installed.															

**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA - VOCs**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	PCE (µg/L)	TCE (µg/L)	Naphthalene (µg/L)	Ace-tone (µg/L)	2-butane (µg/L)	Bromo-benzene (µg/L)	Bromodichloro-methane (µg/L)	Bromo-methane (µg/L)	n-Butyl-benzene (µg/L)	sec-Butyl-benzene (µg/L)
MW3	12/16/10	---	<12	<12	<12	<120	<12	<12	---	---	---	---	---	---	---	---	---	
MW3	01/31/11	---	<12	<12	<12	<120	<12	<12	---	---	---	---	---	---	---	---	---	
MW3	04/07/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW3	07/18/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW3	10/13/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW3	04/06/12	---	<20	<20	<20	<200	<20	<20	---	---	---	---	---	---	---	---	---	
MW3	10/19/12	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW3	06/11/13	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW3	12/20/13	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW3	05/01/14	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW3	10/28/14	---	<20	<20	<20	<200	<20	<20	<20	290	<400	<200	<20	<20	<40	30	<20	
MW3	06/02/15	---	<20	<20	<20	<200	<20	<20	<20	240	<400	<200	<20	<20	<40	21	<20	
MW3	11/19/15	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	120	<100	<50	<5.0	<5.0	<10	22	14	
MW3	05/02/16	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	250	<100	<50	<5.0	<5.0	<10	28	17	
MW3	10/07/16	---	<10	<10	<10	<100	<10	<10	<10	140	<200	<100	<10	<10	<20	22	14	
MW3	05/26/17	---	<10	<10	<10	<100	<10	<10	<10	170	220	<100	<10	<10	<20	19	13	
<b>MW3</b>	<b>10/26/17</b>	<b>---</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;50</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>98</b>	<b>&lt;100</b>	<b>&lt;50</b>	<b>&lt;5.0</b>	<b>&lt;5.0</b>	<b>&lt;10</b>	<b>22</b>	<b>15</b>	
MW3A	01/18/12	---	Well installed.															
MW3A	04/06/12	---	<2.0	<2.0	<2.0	<20	<2.0	<2.0	---	---	---	---	---	---	---	---	---	
MW3A	10/19/12	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---	---	---	---	---	---	---	---	---	
MW3A	06/11/13	---	<2.0	<2.0	<2.0	<20	<2.0	<2.0	---	---	---	---	---	---	---	---	---	
MW3A	12/19/13	---	<2.0	<2.0	<2.0	<20	<2.0	<2.0	---	---	---	---	---	---	---	---	---	
MW3A	05/01/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW3A	10/28/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	4.6	<10	<5.0	<0.50	<0.50	<1.0	5.4	6.3	
MW3A	06/02/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	1.4	<10	<5.0	<0.50	<0.50	<1.0	1.1	2.5	
MW3A	11/19/15	---	<2.0	<2.0	<2.0	<20	<2.0	<2.0	<2.0	6.5	<40	<20	<2.0	<2.0	<4.0	3.3	3.5	
MW3A	05/02/16	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50	
MW3A	10/07/16	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	1.4	<10	<5.0	<0.50	<0.50	<1.0	1.7	2.3	
MW3A	05/26/17	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50	
<b>MW3A</b>	<b>10/26/17</b>	<b>---</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;10</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50</b>	<b>1.2</b>	
MW4	11/05/10	---	Well installed.															
MW4	12/16/10	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---	---	---	---	---	---	---	---	---	
MW4	01/31/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW4	04/07/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW4	07/18/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW4	10/13/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW4	04/06/12	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW4	10/19/12	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW4	06/11/13	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	
MW4	12/20/13	---	<10	<10	<10	<100	<10	<10	---	---	---	---	---	---	---	---	---	



**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA - VOCs**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	PCE (µg/L)	TCE (µg/L)	Naphthalene (µg/L)	Ace-tone (µg/L)	2-butane (µg/L)	Bromo-benzene (µg/L)	Bromodichloro-methane (µg/L)	Bromo-methane (µg/L)	n-Butyl-benzene (µg/L)	sec-Butyl-benzene (µg/L)
MW6	05/02/16	---	<0.50	<0.50	<0.50	5.5	<0.50	<0.50	<0.50	<0.50	22	<10	<5.0	<0.50	<0.50	<1.0	13	7.8
MW6	10/07/16	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	0.61	0.60
MW6	05/26/17	---	<0.50	<0.50	<0.50	5.5	<0.50	<0.50	<0.50	<0.50	14	<10	<5.0	<0.50	<0.50	<1.0	11	6.7
<b>MW6</b>	<b>10/26/17</b>	---	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>4.8</b>	<b>&lt;10</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>3.7</b>	<b>2.6</b>
MW7	12/08/14	---	Well installed.															
MW7	12/30/14	---	<5.0	<5.0	<5.0	<50	<5.0	13	---	---	---	---	---	---	---	---	---	
MW7	06/02/15	---	<5.0	<5.0	<5.0	<50	<5.0	19	<5.0	<5.0	150	<100	<50	<5.0	<5.0	<10	45	24
MW7	11/19/15	---	<5.0	<5.0	<5.0	<50	<5.0	13	<5.0	<5.0	220	<100	<50	<5.0	<5.0	<10	36	18
MW7	05/02/16	---	<5.0	<5.0	<5.0	<50	<5.0	15	<5.0	<5.0	84	<100	<50	<5.0	<5.0	<10	72	33
MW7	10/07/16	---	<4.0	<4.0	<4.0	<40	<4.0	18	<4.0	<4.0	52	<80	<40	<4.0	<4.0	<8.0	39	18
MW7	05/26/17	---	<2.5	<2.5	<2.5	<25	<2.5	14	<2.5	<2.5	140	100	42	<2.5	<2.5	<5.0	110	50
<b>MW7</b>	<b>10/26/17</b>	---	<b>&lt;4.0</b>	<b>&lt;4.0</b>	<b>&lt;4.0</b>	<b>&lt;40</b>	<b>&lt;4.0</b>	<b>18</b>	<b>&lt;4.0</b>	<b>&lt;4.0</b>	<b>69</b>	<b>&lt;80</b>	<b>&lt;40</b>	<b>&lt;4.0</b>	<b>&lt;4.0</b>	<b>&lt;8.0</b>	<b>48</b>	<b>23</b>
MW8	12/08/14	---	Well installed.															
MW8	12/30/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
MW8	06/02/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	0.85	<1.0	<0.50	<0.50
MW8	11/18/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
MW8	05/02/16	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
MW8	10/07/16	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
MW8	05/26/17	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
<b>MW8</b>	<b>10/26/17</b>	---	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;10</b>	<b>&lt;5.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>	<b>&lt;1.0</b>	<b>&lt;0.50</b>	<b>&lt;0.50</b>
MW9	10/08/15	---	Well installed.															
MW9	10/16/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	1.4	0.93
MW9	11/18/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	0.60	<0.50
MW9	05/02/16	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	<0.50	<0.50
MW9	10/07/16	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	0.66	<0.50
MW9	05/26/17	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	1.8	0.77
<b>MW9</b>	<b>10/26/17 o</b>	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
AS1	01/18/12	---	Well installed.															
AS1	10/19/12 - Present	Not sampled.																
SVE1	01/17/12	---	Well installed.															
SVE1	10/19/12 - Present	Not sampled.																
SVE2	01/17/12	---	Well installed.															
SVE2	10/19/12 - Present	Not sampled.																
SVE3	01/17/12	---	Well installed.															
SVE3	10/19/12 - Present	Not sampled.																

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Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	PCE (µg/L)	TCE (µg/L)	Naphthalene (µg/L)	Ace-tone (µg/L)	2-butane (µg/L)	Bromo-benzene (µg/L)	Bromodichloro-methane (µg/L)	Bromo-methane (µg/L)	n-Butyl-benzene (µg/L)	sec-Butyl-benzene (µg/L)
SVE4	10/09/15	---	Well installed.															
SVE4	10/16/15	---	<0.50	<0.50	<0.50	5.4	<0.50	<0.50	<0.50	<0.50	15	<10	<5.0	<0.50	<0.50	<1.0	2.5	1.5
SVE4	11/18/15 - Present	Not sampled.																
SVE5	10/09/15	---	Well installed.															
SVE5	10/16/15	---	<20	<20	<20	<20	<20	<20	<20	<20	140	<400	<200	<20	<20	<40	24	<20
SVE5	11/18/15 - Present	Not sampled.																
SVE6	10/09/15	---	Well installed.															
SVE6	10/16/15	---	<0.50	<0.50	<0.50	5.7	<0.50	<0.50	<0.50	<0.50	1.9	<10	<5.0	<0.50	<0.50	<1.0	3.1	1.0
SVE6	11/18/15 - Present	Not sampled.																
SVE7	10/09/15	---	Well installed.															
SVE7	10/16/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	<1.0	<10	<5.0	<0.50	<0.50	<1.0	0.97	1.7
SVE7	11/18/15 - Present	Not sampled.																
<b>Grab Groundwater Samples</b>																		
B-1W	01/06/08 l		<50	<50	<50	<200	<50	<50	<50	<50	1,500	<1,000	<200	<50	<50	<50	210	68
B-2W	01/06/08	---	<50	<50	<50	<200	<50	<50	<50	<50	610	<1,000	<200	<50	<50	<50	110	<50
B-3W	01/06/08	---	<10	<10	<10	<40	<10	<10	<10	<10	55	<200	<40	<10	<10	<10	25	11
B-4W	01/06/08	---	<10	<10	<10	<40	<10	<10	<10	<10	100	<200	<40	<10	<10	<10	46	19
B-5W	01/06/08	---	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	6.5	<10	<2.0	<0.5	<0.5	<0.5	2.6	<0.5
B-6W	01/06/08	---	<2.5	<2.5	<2.5	<10	<2.5	<2.5	<2.5	<2.5	38	<50	10	<2.5	<2.5	<2.5	14	5.6
DR-W	01/06/08 m		<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	7.0	<10	<2.0	<0.5	<0.5	<0.5	6.9	2.4
W-27.5-HP1A	10/28/10	27.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	---
W-36-HP1A	10/28/10	36	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	---
W-46.5-HP1A	10/28/10	46.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	---
W-59-HP1B	10/27/10	59	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	---
W-27.5-HP2A	10/29/10	27.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	---
W-52-HP2A	10/29/10	52	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	---

**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA - VOCs**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	PCE (µg/L)	TCE (µg/L)	Naphthalene (µg/L)	Ace-tone (µg/L)	2-butane (µg/L)	Bromo-benzene (µg/L)	Bromodichloro-methane (µg/L)	Bromo-methane (µg/L)	n-Butyl-benzene (µg/L)	sec-Butyl-benzene (µg/L)
W-60.5-HP2B	10/27/10	60.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---	---	---	---	---	---	
W-10-SVE1-1	01/31/12	10	<2.0	<2.0	<2.0	62	<2.0	<2.0	---	---	---	---	---	---	---	---	---	
W-10-SVE1-2	01/31/12	10	<1.0	<1.0	<1.0	57	<1.0	<1.0	---	---	---	---	---	---	---	---	---	
W-5-B7	02/27/14	5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	
W-12-B8	02/28/14	12	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	
W-5-B9	02/27/14	5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	
W-5.5-B10	02/27/14	5.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	
W-14-B11	03/05/14	14	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	
W-10-B12	02/26/14	10	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	
W-10-B13	02/28/14	10	<5.0	<5.0	<5.0	<50	<5.0	<5.0	<5.0	<5.0	---	---	---	---	---	---	---	
B14	03/05/14 b		---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
W-14-B15	03/05/14	14	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	32	2.6	---	---	---	---	---	---	---	
W-14-B16	02/26/14	14	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	---	---	---	---	---	---	---	
W-10-B17	02/27/14	10	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	0.65	---	---	---	---	---	---	---	

**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA - VOCs**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Notes:

TOC	= Top of well casing elevation; datum is NAVD88, prior to April 2014, datum was mean sea level.
DTW	= Depth to water.
GW Elev.	= Groundwater elevation; datum is NAVD88, prior to April 2014, datum was mean sea level. If liquid-phase hydrocarbons present, elevation adjusted using TOC - [DTW - (PT x 0.76)].
NAPL	= Non-aqueous phase liquid.
O&G	= Oil and grease with silica gel clean-up analyzed using Standard Method 5520B/F.
TPHmo	= Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015 (modified).
TPHd	= Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015 (modified).
TPHg	= Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015 (modified).
MTBE	= Methyl tertiary butyl ether analyzed using EPA Method 8260B.
BTEX	= Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B.
EDB	= 1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	= 1,2-dichloroethane analyzed using EPA Method 8260B.
TAME	= Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	= Tertiary butyl alcohol analyzed using EPA Method 8260B.
ETBE	= Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
DIPE	= Di-isopropyl ether analyzed using EPA Method 8260B.
PCE	= Tetrachloroethene analyzed using EPA Method 8260B.
TCE	= Trichloroethene analyzed using EPA Method 8260B.
VOCs	= Volatile organic compounds or halogenated volatile organic compounds analyzed using EPA Method 8260B.
µg/L	= Micrograms per liter.
ND	= Not detected at or above laboratory reporting limits.
---	= Not measured/Not sampled/Not analyzed.
<	= Less than the stated laboratory reporting limit.
a	= The chromatographic pattern does not match that of the specified standard.
b	= Groundwater did not enter boring; sample not collected.
c	= Lighter than water immiscible sheen/product is present.
d	= Liquid sample that contains greater than approximately 1 volume % sediment.
e	= Unmodified or weakly modified gasoline is significant.
f	= Heavier gasoline-range compounds are significant.
g	= Gasoline-range compounds are significant.
h	= Analyzed beyond the EPA-recommended hold time.
i	= Strongly aged gasoline-range or diesel-range compounds are significant.
j	= Diesel-range compounds are significant; no recognizable pattern.
k	= No recognizable pattern.
l	= Additional analyses: CAM 5 metals analyzed using EPA Method 6010B and semi-volatile organic compounds analyzed using EPA Method 8270C. Results were ND except for naphthalene (4,000 µg/L) and 2-methylnaphthalene (3,900 µg/L).
m	= Additional analyses: CAM 5 metals analyzed using EPA Method 6010B. Results were ND except for dissolved chromium (54 µg/L).
n	= Reporting limits elevated due to high level of non-target analytes.
o	= Not sampled due to vehicle blocking well.











**TABLE 1C**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA - VOCs**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Sampling Date	Depth (feet)	Carbon Disulfide (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloro-form (µg/L)	Chloro-toluene (µg/L)	4-Chloro-dichloro-ethene (µg/L)	cis-1,2-dichloro-ethene (µg/L)	1,2-dibromo-3-chloro-propane (µg/L)	1,2-Dichloro-benzene (µg/L)	Dichloro-ethene (µg/L)	Iso-propylbenzene (µg/L)	n-propylbenzene (µg/L)	p-isopropyl-toluene (µg/L)	Styrene (µg/L)	1,2,4-trimethylbenzene (µg/L)	1,3,5-trimethylbenzene (µg/L)	tert-butylbenzene (µg/L)	Additional VOCs (µg/L)
W-5-B7	02/27/14	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W-12-B8	02/28/14	12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W-5-B9	02/27/14	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W-5.5-B10	02/27/14	5.5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W-14-B11	03/05/14	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W-10-B12	02/26/14	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W-10-B13	02/28/14	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
B14	03/05/14 b	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W-14-B15	03/05/14	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W-14-B16	02/26/14	14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W-10-B17	02/27/14	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

**TABLE 1C**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA - VOCs**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Notes:

TOC	= Top of well casing elevation; datum is NAVD88, prior to April 2014, datum was mean sea level.
DTW	= Depth to water.
GW Elev.	= Groundwater elevation; datum is NAVD88, prior to April 2014, datum was mean sea level. If liquid-phase hydrocarbons present, elevation adjusted using TOC - [DTW - (PT x 0.76)].
NAPL	= Non-aqueous phase liquid.
O&G	= Oil and grease with silica gel clean-up analyzed using Standard Method 5520B/F.
TPHmo	= Total petroleum hydrocarbons as motor oil analyzed using EPA Method 8015 (modified).
TPHd	= Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015 (modified).
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EDB	= 1,2-dibromoethane analyzed using EPA Method 8260B.
1,2-DCA	= 1,2-dichloroethane analyzed using EPA Method 8260B.
TAME	= Tertiary amyl methyl ether analyzed using EPA Method 8260B.
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ETBE	= Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
DIPE	= Di-isopropyl ether analyzed using EPA Method 8260B.
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TCE	= Trichloroethene analyzed using EPA Method 8260B.
VOCs	= Volatile organic compounds or halogenated volatile organic compounds analyzed using EPA Method 8260B.
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c	= Lighter than water immiscible sheen/product is present.
d	= Liquid sample that contains greater than approximately 1 volume % sediment.
e	= Unmodified or weakly modified gasoline is significant.
f	= Heavier gasoline-range compounds are significant.
g	= Gasoline-range compounds are significant.
h	= Analyzed beyond the EPA-recommended hold time.
i	= Strongly aged gasoline-range or diesel-range compounds are significant.
j	= Diesel-range compounds are significant; no recognizable pattern.
k	= No recognizable pattern.
l	= Additional analyses: CAM 5 metals analyzed using EPA Method 6010B and semi-volatile organic compounds analyzed using EPA Method 8270C. Results were ND except for naphthalene (4,000 µg/L) and 2-methylnaphthalene (3,900 µg/L).
m	= Additional analyses: CAM 5 metals analyzed using EPA Method 6010B. Results were ND except for dissolved chromium (54 µg/L).
n	= Reporting limits elevated due to high level of non-target analytes.
o	= Not sampled due to vehicle blocking well.

**TABLE 2**  
**WELL CONSTRUCTION DETAILS**  
Former Exxon Service Station 79374  
990 San Pablo Avenue  
Albany, California

Well ID	Well Installation Date	TOC Elevation (feet)	Borehole Diameter (inches)	Total Depth of Boring (feet bgs)	Well Depth (feet bgs)	Casing Diameter (inches)	Well Casing Material	Screened Interval (feet bgs)	Slot Size (inches)	Filter Pack Interval (feet bgs)	Filter Pack Material
MW1	11/04/10	44.19	8	17	17	2	Schedule 40 PVC	12-17	0.020	10-17	#3 Sand
MW2	11/04/10	43.99	8	17	17	4	Schedule 40 PVC	12-17	0.020	10-17	#3 Sand
MW3	11/08/10	43.16	8	17	17	4	Schedule 40 PVC	11-16	0.020	9-16	#3 Sand
MW3A	01/18/12	43.42	10	15.5	15.5	4	Schedule 40 PVC	5-15	0.020	4.5-15.5	#2/12 Sand
MW4	11/05/10	42.04	8	17	13	2	Schedule 40 PVC	8-13	0.020	6-13	#3 Sand
MW5	11/05/10	43.12	8	17	14	2	Schedule 40 PVC	9-14	0.020	7-14	#3 Sand
MW6	11/03/10	43.80	10	20	20	2	Schedule 40 PVC	15-20	0.020	13-20	#3 Sand
MW7	12/08/14	41.21	10	15	15	2	Schedule 40 PVC	5-15	0.020	4-15	#3 Sand
MW8	12/08/14	39.65	10	15	15	2	Schedule 40 PVC	5-15	0.020	4-15	#3 Sand
MW9	10/08/15	39.50	10	16	15	2	Schedule 40 PVC	5-15	0.020	4-15	#3 Sand
AS1	01/18/12	---	8	15.5	15.5	1	Schedule 80 PVC	10.25-13.5	#60 mesh	10.5-15.5	#2/12 Sand
SVE1	01/17/12	43.32	10	15.5	15.5	4	Schedule 40 PVC	5-15	0.020	4.5-15.5	#2/12 Sand
SVE2	01/17/12	43.68	10	15	15	4	Schedule 40 PVC	5-15	0.020	4.5-15	#2/12 Sand
SVE3	01/17/12	43.67	10	15	15	4	Schedule 40 PVC	5-15	0.020	4.5-15.5	#2/12 Sand
SVE4	10/09/15	43.10	12	16	15	4	Schedule 40 PVC	5-15	0.020	4-15	#3 Sand
SVE5	10/09/15	43.70	12	16	15	4	Schedule 40 PVC	5-15	0.020	4-15	#3 Sand
SVE6	10/09/15	44.37	12	16	15	4	Schedule 40 PVC	5-15	0.020	4-15	#3 Sand
SVE7	10/09/15	44.48	12	16	15	4	Schedule 40 PVC	5-15	0.020	4-15	#3 Sand
SVS1	02/25/14	---	4	5.6	5.6	0.25	PVC	5.4-5.6	0.010	4.6-5.6	#3 Sand
SVS2	02/25/14	---	4	5.6	5.6	0.25	PVC	5.4-5.6	0.010	4.6-5.6	#3 Sand
SVS3	02/25/14	---	4	5.6	5.6	0.25	PVC	5.4-5.6	0.010	4.6-5.6	#3 Sand
SVS4	09/28/16	---	2.25	2.5	2.5	0.25	PVC	2.1-2.3	0.010	2-2.5	#3 Sand
SVS5	09/28/16	---	2.25	2.5	2.5	0.25	PVC	2.1-2.3	0.010	2-2.5	#3 Sand
SVS6	09/28/16	---	2.25	3.0	2.5	0.25	PVC	2.1-2.3	0.010	2-3	#3 Sand
SVS7	09/28/16	---	2.25	2.5	2.5	0.25	PVC	2.1-2.3	0.010	2-2.5	#3 Sand
SVS8	09/28/16	---	2.25	2.5	2.5	0.25	PVC	2.1-2.3	0.010	2-2.5	#3 Sand

Notes:

TOC = Top of well casing elevation; datum is NAVD88.  
PVC = Polyvinyl chloride.  
feet bgs = Feet below ground surface.

**APPENDIX A**

**PROTOCOLS**

## GROUNDWATER SAMPLING PROTOCOL

The static water level and separate-phase product level, if present, in each well that contained water and/or separate-phase product are measured with a ORS Interface Probe, which is accurate to the nearest 0.01 foot. To calculate groundwater elevations and evaluate groundwater gradient, depth to water (DTW) levels are subtracted from top of casing elevations.

Groundwater samples collected for subjective evaluation are collected by gently lowering approximately half the length of a clean Teflon® or polypropylene bailer past the air-water interface (if possible) and collecting a sample from near the surface of the water in the well. The samples are checked for measurable free-phase hydrocarbons or sheen. If appropriate, free-phase hydrocarbons are removed from the well.

Before water samples are collected from the groundwater monitoring wells, the wells are purged until a minimum of three well casing volumes is purged and stabilization of the temperature, pH, and conductivity is obtained. Water samples from the wells that do not obtain stability of the temperature, pH, and conductivity are considered to be "grab samples." The quantity of water purged from each well is calculated as follows:

$$1 \text{ well casing volume} = \pi r^2 h(7.48) \text{ where:}$$

r	=	radius of the well casing in feet
h	=	column of water in the well in feet (depth to bottom - depth to water)
7.48	=	conversion constant from cubic feet to gallons
$\pi$	=	ratio of the circumference of a circle to its diameter

Gallons of water purged/gallons in 1 well casing volume = well casing volumes removed.

The wells are purged using a submersible pump. Prior to use at the site and between wells the pump is cleaned.

Five gallons of water are placed in three 15-gallon tubs. Liquinox detergent is added to the first tub of water. The pump and tubing are submerged in the first tub and the water is pumped through the pump. The process is repeated in the second and third tub.

After purging, each well is allowed to recharge to at least 80% of the initial water level. Water samples from wells that do not recover at least 80% (due to slow recharging of the well) between purging and sampling are considered to be "grab samples." Water samples are collected with a new, disposable Teflon® or polypropylene bailer. The groundwater is carefully poured into selected sample containers (40-milliliter [ml] glass vials, 1,000-ml glass amber bottles, etc.), which are filled so as to produce a positive meniscus.

Depending on the required analysis, each sample container is preserved with hydrochloric acid, nitric acid, etc., or it is preservative free. The type of preservative used for each sample is specified on the Chain-of-Custody record.

Each vial and glass amber bottle is sealed with a cap containing a Teflon® septum, and subsequently examined for air bubbles to avoid headspace, which would allow volatilization to occur. The samples are promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain-of-Custody record, to a California state-certified laboratory.

Water generated during purging and cleaning is contained and transported off site for treatment and disposal.

**APPENDIX B**

**FIELD DATA SHEETS**

# Daily Field Report



Project ID #:	Former Exxon Mobil # 79374
Subject:	Power pole hole digging / 4Q GW Monitoring & Sampling
Equipment Used:	DW Tape, Hand hammers, GW pump, shovels, dry box
Name(s):	Scott Sanko, Nick Hager
Time Arrived On Site:	0430
Time Departed Site:	1630

SS Arrived on site @ 0430

- Held safety tailgate meeting, and reviewed HASP/JSA's /Emergency Plan.
- SS opened all wells for 0.5 hr to allow equalization

0445 - 0530

NH Arrived on site @ 0515

- NH began continuing digging work from yesterday after reviewing HASP/JSA's /Emergency plan

0530 - 0545

- SS began gauging all wells on site

0545 - 0715 0550 - 0730

- SS set up decon station in truck @ and decontaminated pumps

0730 - 0800 0745 - 0750 0800 - 0805

\* - SS purged MW 9 dry 0833 - 0836 4 gallons

- SS purged MW 8 dry 0858 - 0902 4 gallons sampled @ 1525 @ 8.21 ft

- SS purged MW 1 1016 - 1034 Sampled @ 1330 @ 10.74 ft

- SS purged MW 2 dry 1103 - 1110 7 gallons sampled @ 1350 @ 10.76 ft

- SS purged MW 6 1144 - 1206 Sampled @ 1420 @ 15.31 ft

- SS purged MW 5 dry 1238 - 1250 2 gallons sampled @ 1455 @ 11.69 ft

- NH finished digging @ 1030 and set up decon station

- NH purged MW 3 A dry 1119 - 1125 7 gallons sampled @ 1440 @ 14.80 ft

- NH purged MW 3 dry 1150 - 1210 7 gallons sampled @ 1450 @ 14.82 ft

- NH purged MW 7 1230 - 1254 Sampled @ 1550 @ 9.76 ft

- NH purged MW 4 1330 - 1353 Sampled @ 1540 @ 11.25 ft

\* Could not grab sample from MW9 due to car blocking well. Went back next day to see if well was open but it was not.

- Cleaned site and work trucks

OFF SITE @ 1630

Total water used for event:

Decon H<sub>2</sub>O : 60 gallons

Purge H<sub>2</sub>O = 46 gallons

Total H<sub>2</sub>O = 106 gallons

# **Cardno Groundwater M+S**

## **Depth To Water**

Case Volume= (TD-DTW) x F

$$80\% \text{ Recharge} = ((TD - DTW) \times 0.8) - TD \times (-1.0)$$

Where F= 0.163 for 2" inside-diameter well casing  
0.652 for 4" inside-diameter well casing  
1.457 for 6" inside-diameter well casing

Project	Location	Date	Name(s)
2735c	79374	10/26/17	SS, NH

# GROUNDWATER SAMPLING FIELD LOG

Client Name: EMES

Location: 79374

Field Crew: SS, NH

Cardno Job #: 2735C

Date: \_\_\_\_\_ Page 1 of 2

Case Volume = (TD - DTW) x F where F =

0.163 for 2" inside-diameter well casing

0.652 for 4" inside-diameter well casing

1.457 for 6" inside-diameter well casing

Well ID	Time	Case Volume	Purge Volume	Temp	Cond	pH	Post-Purge DTW	80% Recharge	BB	40mil	Amber	DO	ORP	Comments Well Box Condition
---------	------	-------------	--------------	------	------	----	----------------	--------------	----	-------	-------	----	-----	-----------------------------

MW8	0833	1.19	2	Dry	No									Dry Ø 4 gall Sampled Ø 00000
	0933		ZERO	19.2	555	6.69								
	0934		2	19.9	627	7.11								Sample Date:
	0936		4	19.2	620	7.52								Sample Name:
	-		6	-	-	-								Sample Time: 0000
MW8	0950	1.24	2	Dry	No									Dry Ø 4 gall
	0958		ZERO	18.6	610	7.2								
	0900		2	20.3	600	7.01								Sample Date: 10/26/17
	0902		4	20.5	619	7.00								Sample Name: MW8
	-		6	-	-	-								Sample Time: 1525
MW1	1016	0.99	1	14.04	Yes									Take sample @ 10.74
	1016		ZERO	21.6	1185	6.67								
	1021		1	21.6	1219	6.63								Sample Date: 10/26/17
	1028		2	21.5	1235	6.63								Sample Name: MW1
	1034		3	21.5	1242	6.62								Sample Time: 1330
MW2	1103	3.99	4	Dry	Yes									Dry Ø 7 gallours Sampled Ø 10.76
	1103		ZERO	21.8	1077	6.69								
	1106		4	23.0	956	6.62								Sample Date: 10/26/17
	1110		3	22.7	1030	6.54								Sample Name: MW2
	-		12	-	-	-								Sample Time: 1300
MW6	1144	1.42	2	18.30	No									Sampled @ 15.31
	1144		ZERO	22.7	742	6.72								
	1153		2	21.9	786	6.62								Sample Date: 10/26/17
	1204		4	22.1	756	6.48								Sample Name: MW6
	1206		6	22.0	870	6.52								Sample Time: 1420

Additional Remarks:

## GROUNDWATER SAMPLING FIELD LOG

Client Name: EMES

Date: \_\_\_\_\_ Page 2 of 2

Location: 79374

Cardno Job #: 2735C

Case Volume = (TD - DTW) x F where F =

Field Crew: SS, NH

0.163 for 2" inside-diameter well casing

0.652 for 4" inside-diamter well casing

1.457 for 6" inside-diamter well casing

Well ID	Time	Case Volume	Purge Volume	Temp	Cond	pH	Post-Purge DTW	80% Recharge	BB	40mil	Amber	DO	ORP	Comments
Well Box Condition														

MW3A		3.21	4				Dry	No						
1119	ZERO	23.1	634	6.65										
	4	23.0	565	6.63										Went dry at 7 gallons
	6	23.1	560	6.60										Sampled at DTW OF
	18	-	-	-										14.8
MW3		2.42	3				Dry	No						
1150	ZERO	26.2	1002	6.58										
	3	24.2	1010	5.20										Went dry at 7
	6	24.3	995	6.50										sampled at DTW OF
	9	-	-	-										14.82
MW7		.86	1				9.76	yes						
1230	ZERO	23.3	864	6.40										
	1	24.0	821	7.22										Sample Date: 10/26/17
	2	23.2	863	7.40										Sample Name: MW7
	3	22.4	840	7.43										Sample Time: 1450
MW4		1.46	1				11.25	No						
1330	ZERO	25.6	1016	4.89										
	1	26.3	1008	6.52										Sampled at DTW OF
	2	23.4	1013	6.52										11.25
	3	24.4	1016	6.52										
MW5	1238	0.53	1				Dry	No						Dry @ 2 gallons
1238	ZERO	23.7	825	6.46										
	1	23.8	820	6.40										Sampled @ 11.69 ft
	2	23.1	834	6.44										
	3	-	-	-										

Additional Remarks:

11/26/17  
SS, NH



**APPENDIX C**

**LABORATORY ANALYTICAL REPORT**



**WORK ORDER NUMBER: 17-10-2182**



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Cardno

**Client Project Name:** ExxonMobil 79374/022735C

**Attention:** Scott Perkins

601 North McDowell Blvd.  
Petaluma, CA 94954-2312

*Cecile L. deGuia*

---

Approved for release on 11/13/2017 by:  
Cecile deGuia  
Project Manager

ResultLink ▶

Email your PM ▶

Eurofins Calscience, 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.

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Work Order Number: 17-10-2182

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## Work Order Narrative

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Work Order: 17-10-2182

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### **Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 10/28/17. They were assigned to Work Order 17-10-2182.

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.

### **Subcontractor Information:**

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

### **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.

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.



## Sample Summary

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Client:	Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Work Order:	17-10-2182
		Project Name:	ExxonMobil 79374/022735C
		PO Number:	022735C
		Date/Time Received:	10/28/17 10:00
		Number of Containers:	92
<b>Attn:</b> Scott Perkins			

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Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
QCBB	17-10-2182-1	10/26/17 07:00	2	Aqueous
MW1	17-10-2182-2	10/26/17 13:30	10	Aqueous
MW2	17-10-2182-3	10/26/17 13:50	10	Aqueous
MW3	17-10-2182-4	10/26/17 14:50	10	Aqueous
MW3A	17-10-2182-5	10/26/17 14:40	10	Aqueous
MW4	17-10-2182-6	10/26/17 15:40	10	Aqueous
MW5	17-10-2182-7	10/26/17 14:55	10	Aqueous
MW6	17-10-2182-8	10/26/17 14:20	10	Aqueous
MW7	17-10-2182-9	10/26/17 15:50	10	Aqueous
MW8	17-10-2182-10	10/26/17 15:25	10	Aqueous

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 3510C  
Method: EPA 8015B (M)  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW1</b>	<b>17-10-2182-2-I</b>	<b>10/26/17 13:30</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 17:47</b>	<b>171102B02S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Motor Oil		ND	240	1.00		SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		85	68-140				
<b>MW2</b>	<b>17-10-2182-3-I</b>	<b>10/26/17 13:50</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 18:09</b>	<b>171102B02S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Motor Oil		ND	240	1.00		SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		87	68-140				
<b>MW3</b>	<b>17-10-2182-4-I</b>	<b>10/26/17 14:50</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 18:33</b>	<b>171102B02S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Motor Oil		ND	250	1.00		SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		77	68-140				
<b>MW3A</b>	<b>17-10-2182-5-I</b>	<b>10/26/17 14:40</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 18:55</b>	<b>171102B02S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Motor Oil		ND	240	1.00		SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		78	68-140				
<b>MW4</b>	<b>17-10-2182-6-I</b>	<b>10/26/17 15:40</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 19:18</b>	<b>171102B02S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Motor Oil		ND	240	1.00		SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		83	68-140				

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

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 3510C  
Method: EPA 8015B (M)  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW5</b>	<b>17-10-2182-7-I</b>	<b>10/26/17 14:55</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 20:26</b>	<b>171102B02S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Motor Oil		ND	240	1.00		SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		76	68-140				
<b>MW6</b>	<b>17-10-2182-8-I</b>	<b>10/26/17 14:20</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 20:48</b>	<b>171102B02S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Motor Oil		ND	240	1.00		SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		79	68-140				
<b>MW7</b>	<b>17-10-2182-9-I</b>	<b>10/26/17 15:50</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 21:10</b>	<b>171102B02S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Motor Oil		ND	240	1.00		SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		101	68-140				
<b>MW8</b>	<b>17-10-2182-10-I</b>	<b>10/26/17 15:25</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 21:32</b>	<b>171102B02S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Motor Oil		ND	240	1.00		SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		80	68-140				
<b>Method Blank</b>	<b>099-15-278-1484</b>	<b>N/A</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 15:33</b>	<b>171102B02S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Motor Oil		ND	250	1.00			
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		86	68-140				

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## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 3510C  
Method: EPA 8015B (M)  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW1</b>	<b>17-10-2182-2-I</b>	<b>10/26/17 13:30</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 17:47</b>	<b>171102B01S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Diesel		56	47	1.00		HD,SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		85	68-140				
<b>MW2</b>	<b>17-10-2182-3-I</b>	<b>10/26/17 13:50</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 18:09</b>	<b>171102B01S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Diesel		ND	48	1.00		SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		87	68-140				
<b>MW3</b>	<b>17-10-2182-4-I</b>	<b>10/26/17 14:50</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 18:33</b>	<b>171102B01S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Diesel		2100	50	1.00		HD,SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		77	68-140				
<b>MW3A</b>	<b>17-10-2182-5-I</b>	<b>10/26/17 14:40</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 18:55</b>	<b>171102B01S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Diesel		69	47	1.00		HD,SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		78	68-140				
<b>MW4</b>	<b>17-10-2182-6-I</b>	<b>10/26/17 15:40</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 19:18</b>	<b>171102B01S</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Diesel		2900	47	1.00		HD,SG	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
n-Octacosane		83	68-140				

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

## Analytical Report

Cardno  
 601 North McDowell Blvd.  
 Petaluma, CA 94954-2312

Date Received: 10/28/17  
 Work Order: 17-10-2182  
 Preparation: EPA 3510C  
 Method: EPA 8015B (M)  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW5</b>	<b>17-10-2182-7-I</b>	<b>10/26/17 14:55</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 20:26</b>	<b>171102B01S</b>
<u>Parameter</u> TPH as Diesel		<u>Result</u> 2200	<u>RL</u> 48	<u>DF</u> 1.00		<u>Qualifiers</u> HD,SG	
<u>Surrogate</u> n-Octacosane		<u>Rec. (%)</u> 76	<u>Control Limits</u> 68-140			<u>Qualifiers</u>	
<b>MW6</b>	<b>17-10-2182-8-I</b>	<b>10/26/17 14:20</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 20:48</b>	<b>171102B01S</b>
<u>Parameter</u> TPH as Diesel		<u>Result</u> 140	<u>RL</u> 47	<u>DF</u> 1.00		<u>Qualifiers</u> HD,SG	
<u>Surrogate</u> n-Octacosane		<u>Rec. (%)</u> 79	<u>Control Limits</u> 68-140			<u>Qualifiers</u>	
<b>MW7</b>	<b>17-10-2182-9-I</b>	<b>10/26/17 15:50</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 21:10</b>	<b>171102B01S</b>
<u>Parameter</u> TPH as Diesel		<u>Result</u> 2500	<u>RL</u> 47	<u>DF</u> 1.00		<u>Qualifiers</u> HD,SG	
<u>Surrogate</u> n-Octacosane		<u>Rec. (%)</u> 101	<u>Control Limits</u> 68-140			<u>Qualifiers</u>	
<b>MW8</b>	<b>17-10-2182-10-I</b>	<b>10/26/17 15:25</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 21:32</b>	<b>171102B01S</b>
<u>Parameter</u> TPH as Diesel		<u>Result</u> ND	<u>RL</u> 47	<u>DF</u> 1.00		<u>Qualifiers</u> SG	
<u>Surrogate</u> n-Octacosane		<u>Rec. (%)</u> 80	<u>Control Limits</u> 68-140			<u>Qualifiers</u>	
<b>Method Blank</b>	<b>099-15-304-1883</b>	<b>N/A</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 15:33</b>	<b>171102B01S</b>
<u>Parameter</u> TPH as Diesel		<u>Result</u> ND	<u>RL</u> 50	<u>DF</u> 1.00		<u>Qualifiers</u>	
<u>Surrogate</u> n-Octacosane		<u>Rec. (%)</u> 86	<u>Control Limits</u> 68-140			<u>Qualifiers</u>	

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

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8015B (M)  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW1</b>	<b>17-10-2182-2-G</b>	<b>10/26/17 13:30</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/01/17</b>	<b>11/01/17 16:01</b>	<b>171101L079</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Gasoline		81	50	1.00		HD	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
1,4-Bromofluorobenzene		79	38-134				
<b>MW2</b>	<b>17-10-2182-3-G</b>	<b>10/26/17 13:50</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/01/17</b>	<b>11/01/17 12:11</b>	<b>171101L079</b>
<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		76	38-134				
<b>MW3</b>	<b>17-10-2182-4-G</b>	<b>10/26/17 14:50</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/07/17</b>	<b>11/08/17 09:05</b>	<b>171107L061</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Gasoline		3400	100	2.00		HD	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
1,4-Bromofluorobenzene		102	38-134				
<b>MW3A</b>	<b>17-10-2182-5-G</b>	<b>10/26/17 14:40</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/01/17</b>	<b>11/01/17 17:07</b>	<b>171101L079</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Gasoline		160	50	1.00		HD	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
1,4-Bromofluorobenzene		80	38-134				
<b>MW4</b>	<b>17-10-2182-6-G</b>	<b>10/26/17 15:40</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/01/17</b>	<b>11/01/17 18:13</b>	<b>171101L079</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Gasoline		5400	500	10.0		HD	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
1,4-Bromofluorobenzene		85	38-134				

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## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8015B (M)  
Units: ug/L

Project: ExxonMobil 79374/022735C

Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW5</b>	<b>17-10-2182-7-G</b>	<b>10/26/17 14:55</b>	Aqueous	GC 22	11/01/17	11/01/17 23:12	<b>171101L079</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Gasoline		1000	250	5.00		HD	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
1,4-Bromofluorobenzene		70	38-134				
<b>MW6</b>	<b>17-10-2182-8-G</b>	<b>10/26/17 14:20</b>	Aqueous	GC 22	11/01/17	11/01/17 17:40	<b>171101L079</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Gasoline		600	50	1.00		HD	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
1,4-Bromofluorobenzene		75	38-134				
<b>MW7</b>	<b>17-10-2182-9-G</b>	<b>10/26/17 15:50</b>	Aqueous	GC 22	11/01/17	11/02/17 01:24	<b>171101L079</b>
<u>Parameter</u>		<u>Result</u>	<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>	
TPH as Gasoline		1100	250	5.00		HD	
<u>Surrogate</u>		<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>			
1,4-Bromofluorobenzene		79	38-134				
<b>MW8</b>	<b>17-10-2182-10-G</b>	<b>10/26/17 15:25</b>	Aqueous	GC 22	11/02/17	11/02/17 14:00	<b>171102L063</b>
<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				
<b>Method Blank</b>	<b>099-12-436-11729</b>	<b>N/A</b>	Aqueous	GC 22	11/01/17	11/01/17 11:38	<b>171101L079</b>
<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		72	38-134				

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Calscience

## Analytical Report

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8015B (M)  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-436-11730</b>	<b>N/A</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/02/17</b>	<b>11/02/17 11:49</b>	<b>171102L063</b>
<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		66	38-134				
<b>Method Blank</b>	<b>099-12-436-11741</b>	<b>N/A</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/07/17</b>	<b>11/07/17 19:38</b>	<b>171107L061</b>
<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		69	38-134				

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

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW1	17-10-2182-2-A	10/26/17 13:30	Aqueous	GC/MS L	11/04/17	11/05/17 05:09	171104L021

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-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	5.0	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	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
c-1,2-Dichloroethene	6.3	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	


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

## Analytical Report

Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Date Received: Work Order: Preparation: Method: Units:	10/28/17 17-10-2182 EPA 5030C EPA 8260B ug/L
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Project: ExxonMobil 79374/022735C

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Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pantanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	0.50	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	1.6	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	12	0.50	1.00	
Trichloroethene	5.4	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
Surrogate	Rec. (%)	Control Limits	Qualifiers	
1,4-Bromofluorobenzene	96	68-120		

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

## Analytical Report

Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Date Received: Work Order: Preparation: Method: Units:	10/28/17 17-10-2182 EPA 5030C EPA 8260B ug/L
Project: ExxonMobil 79374/022735C		Page 3 of 36

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	102	80-127	
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	100	80-120	

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



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## Analytical Report

Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Date Received: Work Order: Preparation: Method: Units:	10/28/17 17-10-2182 EPA 5030C EPA 8260B ug/L
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Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW2</b>	<b>17-10-2182-3-A</b>	<b>10/26/17 13:50</b>	<b>Aqueous</b>	<b>GC/MS L</b>	<b>11/04/17</b>	<b>11/05/17 05:38</b>	<b>171104L021</b>

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-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	5.0	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	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
c-1,2-Dichloroethene	8.2	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	

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

## Analytical Report

Cardno  
 601 North McDowell Blvd.  
 Petaluma, CA 94954-2312

Date Received: 10/28/17  
 Work Order: 17-10-2182  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	37	0.50	1.00	
Trichloroethene	5.6	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	91	68-120		

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

## Analytical Report

Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Date Received: Work Order: Preparation: Method: Units:	10/28/17 17-10-2182 EPA 5030C EPA 8260B ug/L
Project: ExxonMobil 79374/022735C		Page 6 of 36

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	101	80-127	
1,2-Dichloroethane-d4	99	80-128	
Toluene-d8	99	80-120	

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

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW3</b>	<b>17-10-2182-4-C</b>	<b>10/26/17 14:50</b>	<b>Aqueous</b>	<b>GC/MS UU</b>	<b>11/08/17</b>	<b>11/09/17 04:03</b>	<b>171108L051</b>

Parameter	Result	RL	DF	Qualifiers
Benzene	300	5.0	10.0	
Toluene	99	5.0	10.0	
Ethylbenzene	300	5.0	10.0	
o-Xylene	15	5.0	10.0	
p/m-Xylene	59	5.0	10.0	
Xylenes (total)	73	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	10.0	
Tert-Butyl Alcohol (TBA)	ND	50	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	
1,1,1,2-Tetrachloroethane	ND	5.0	10.0	
1,1,1-Trichloroethane	ND	5.0	10.0	
1,1,2,2-Tetrachloroethane	ND	5.0	10.0	
1,1,2-Trichloroethane	ND	5.0	10.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	10.0	
1,1-Dichloroethane	ND	5.0	10.0	
1,1-Dichloroethene	ND	5.0	10.0	
1,1-Dichloropropene	ND	5.0	10.0	
1,2,3-Trichlorobenzene	ND	5.0	10.0	
1,2,3-Trichloropropane	ND	10	10.0	
1,2,4-Trichlorobenzene	ND	5.0	10.0	
1,2,4-Trimethylbenzene	8.5	5.0	10.0	
1,3,5-Trimethylbenzene	22	5.0	10.0	
c-1,2-Dichloroethene	ND	5.0	10.0	
1,2-Dibromo-3-Chloropropane	ND	50	10.0	
1,2-Dibromoethane	ND	5.0	10.0	
1,2-Dichlorobenzene	ND	5.0	10.0	
1,2-Dichloroethane	ND	5.0	10.0	
1,2-Dichloropropane	ND	5.0	10.0	
t-1,2-Dichloroethene	ND	5.0	10.0	
c-1,3-Dichloropropene	ND	5.0	10.0	
1,3-Dichlorobenzene	ND	5.0	10.0	
1,3-Dichloropropane	ND	10	10.0	
t-1,3-Dichloropropene	ND	5.0	10.0	

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

## Analytical Report

Cardno  
 601 North McDowell Blvd.  
 Petaluma, CA 94954-2312

Date Received: 10/28/17  
 Work Order: 17-10-2182  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	5.0	10.0	
2,2-Dichloropropane	ND	10	10.0	
2-Chlorotoluene	ND	5.0	10.0	
4-Chlorotoluene	ND	5.0	10.0	
4-Methyl-2-Pentanone	ND	50	10.0	
Acetone	ND	100	10.0	
Bromobenzene	ND	5.0	10.0	
Bromochloromethane	ND	10	10.0	
Bromoform	ND	5.0	10.0	
Bromomethane	ND	10	10.0	
Carbon Disulfide	ND	10	10.0	
Carbon Tetrachloride	ND	5.0	10.0	
Chlorobenzene	ND	5.0	10.0	
Dibromochloromethane	ND	5.0	10.0	
Chloroethane	ND	5.0	10.0	
Chloroform	ND	5.0	10.0	
Chloromethane	ND	5.0	10.0	
Dibromomethane	ND	5.0	10.0	
Bromodichloromethane	ND	5.0	10.0	
Dichlorodifluoromethane	ND	10	10.0	
Hexachloro-1,3-Butadiene	ND	20	10.0	
Isopropylbenzene	83	5.0	10.0	
2-Butanone	ND	50	10.0	
Methylene Chloride	ND	10	10.0	
2-Hexanone	ND	100	10.0	
Naphthalene	98	10	10.0	
n-Butylbenzene	22	5.0	10.0	
n-Propylbenzene	130	5.0	10.0	
p-Isopropyltoluene	14	5.0	10.0	
sec-Butylbenzene	15	5.0	10.0	
Styrene	ND	5.0	10.0	
tert-Butylbenzene	10	5.0	10.0	
Tetrachloroethene	ND	5.0	10.0	
Trichloroethene	ND	5.0	10.0	
Trichlorofluoromethane	ND	5.0	10.0	
Vinyl Chloride	ND	5.0	10.0	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	101	68-120		

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

## Analytical Report

Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Date Received: Work Order: Preparation: Method: Units:	10/28/17 17-10-2182 EPA 5030C EPA 8260B ug/L
Project: ExxonMobil 79374/022735C		Page 9 of 36

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	108	80-127	
1,2-Dichloroethane-d4	110	80-128	
Toluene-d8	104	80-120	

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

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW3A</b>	<b>17-10-2182-5-A</b>	<b>10/26/17 14:40</b>	<b>Aqueous</b>	<b>GC/MS L</b>	<b>11/04/17</b>	<b>11/05/17 06:38</b>	<b>171104L021</b>
Parameter		Result	RL	DF			Qualifiers
Benzene		7.6	0.50	1.00			
Toluene		1.1	0.50	1.00			
Ethylbenzene		0.73	0.50	1.00			
o-Xylene		ND	0.50	1.00			
p/m-Xylene		0.59	0.50	1.00			
Xylenes (total)		0.59	0.50	1.00			
Methyl-t-Butyl Ether (MTBE)		ND	0.50	1.00			
Tert-Butyl Alcohol (TBA)		ND	5.0	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			
1,1,1,2-Tetrachloroethane		ND	0.50	1.00			
1,1,1-Trichloroethane		ND	0.50	1.00			
1,1,2,2-Tetrachloroethane		ND	0.50	1.00			
1,1,2-Trichloroethane		ND	0.50	1.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	0.50	1.00			
1,1-Dichloroethane		ND	0.50	1.00			
1,1-Dichloroethene		ND	0.50	1.00			
1,1-Dichloropropene		ND	0.50	1.00			
1,2,3-Trichlorobenzene		ND	0.50	1.00			
1,2,3-Trichloropropane		ND	1.0	1.00			
1,2,4-Trichlorobenzene		ND	0.50	1.00			
1,2,4-Trimethylbenzene		ND	0.50	1.00			
1,3,5-Trimethylbenzene		0.55	0.50	1.00			
c-1,2-Dichloroethene		ND	0.50	1.00			
1,2-Dibromo-3-Chloropropane		ND	5.0	1.00			
1,2-Dibromoethane		ND	0.50	1.00			
1,2-Dichlorobenzene		ND	0.50	1.00			
1,2-Dichloroethane		ND	0.50	1.00			
1,2-Dichloropropane		ND	0.50	1.00			
t-1,2-Dichloroethene		ND	0.50	1.00			
c-1,3-Dichloropropene		ND	0.50	1.00			
1,3-Dichlorobenzene		ND	0.50	1.00			
1,3-Dichloropropane		ND	1.0	1.00			
t-1,3-Dichloropropene		ND	0.50	1.00			

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

**Analytical Report**

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	1.3	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	1.2	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	1.2	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	0.94	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	95	68-120		

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

## Analytical Report

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Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Date Received: Work Order: Preparation: Method: Units:	10/28/17 17-10-2182 EPA 5030C EPA 8260B ug/L
Project: ExxonMobil 79374/022735C		Page 12 of 36

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	97	80-127	
1,2-Dichloroethane-d4	99	80-128	
Toluene-d8	100	80-120	

## Analytical Report

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW4</b>	<b>17-10-2182-6-B</b>	<b>10/26/17 15:40</b>	<b>Aqueous</b>	<b>GC/MS UU</b>	<b>11/07/17</b>	<b>11/07/17 18:51</b>	<b>171107L044</b>

Parameter	Result	RL	DF	Qualifiers
Benzene	350	5.0	10.0	
Toluene	20	5.0	10.0	
Ethylbenzene	210	5.0	10.0	
o-Xylene	12	5.0	10.0	
p/m-Xylene	30	5.0	10.0	
Xylenes (total)	42	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	10.0	
Tert-Butyl Alcohol (TBA)	ND	50	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	
1,1,1,2-Tetrachloroethane	ND	5.0	10.0	
1,1,1-Trichloroethane	ND	5.0	10.0	
1,1,2,2-Tetrachloroethane	ND	5.0	10.0	
1,1,2-Trichloroethane	ND	5.0	10.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	10.0	
1,1-Dichloroethane	ND	5.0	10.0	
1,1-Dichloroethene	ND	5.0	10.0	
1,1-Dichloropropene	ND	5.0	10.0	
1,2,3-Trichlorobenzene	ND	5.0	10.0	
1,2,3-Trichloropropane	ND	10	10.0	
1,2,4-Trichlorobenzene	ND	5.0	10.0	
1,2,4-Trimethylbenzene	43	5.0	10.0	
1,3,5-Trimethylbenzene	86	5.0	10.0	
c-1,2-Dichloroethene	ND	5.0	10.0	
1,2-Dibromo-3-Chloropropane	ND	50	10.0	
1,2-Dibromoethane	ND	5.0	10.0	
1,2-Dichlorobenzene	ND	5.0	10.0	
1,2-Dichloroethane	ND	5.0	10.0	
1,2-Dichloropropane	ND	5.0	10.0	
t-1,2-Dichloroethene	ND	5.0	10.0	
c-1,3-Dichloropropene	ND	5.0	10.0	
1,3-Dichlorobenzene	ND	5.0	10.0	
1,3-Dichloropropane	ND	10	10.0	
t-1,3-Dichloropropene	ND	5.0	10.0	

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

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	5.0	10.0	
2,2-Dichloropropane	ND	10	10.0	
2-Chlorotoluene	ND	5.0	10.0	
4-Chlorotoluene	ND	5.0	10.0	
4-Methyl-2-Pentanone	ND	50	10.0	
Acetone	ND	100	10.0	
Bromobenzene	ND	5.0	10.0	
Bromoform	ND	10	10.0	
Bromomethane	ND	5.0	10.0	
Carbon Disulfide	ND	10	10.0	
Carbon Tetrachloride	ND	5.0	10.0	
Chlorobenzene	ND	5.0	10.0	
Dibromochloromethane	ND	5.0	10.0	
Chloroethane	ND	5.0	10.0	
Chloroform	ND	5.0	10.0	
Chloromethane	ND	5.0	10.0	
Dibromomethane	ND	5.0	10.0	
Bromodichloromethane	ND	5.0	10.0	
Dichlorodifluoromethane	ND	10	10.0	
Hexachloro-1,3-Butadiene	ND	20	10.0	
Isopropylbenzene	73	5.0	10.0	
2-Butanone	ND	50	10.0	
Methylene Chloride	ND	10	10.0	
2-Hexanone	ND	100	10.0	
Naphthalene	220	10	10.0	
n-Butylbenzene	72	5.0	10.0	
n-Propylbenzene	200	5.0	10.0	
p-Isopropyltoluene	7.0	5.0	10.0	
sec-Butylbenzene	23	5.0	10.0	
Styrene	ND	5.0	10.0	
tert-Butylbenzene	8.6	5.0	10.0	
Tetrachloroethene	ND	5.0	10.0	
Trichloroethene	ND	5.0	10.0	
Trichlorofluoromethane	ND	5.0	10.0	
Vinyl Chloride	ND	5.0	10.0	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	98	68-120		

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

## Analytical Report

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Cardno	Date Received:	10/28/17
601 North McDowell Blvd.	Work Order:	17-10-2182
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 15 of 36

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	106	80-127	
1,2-Dichloroethane-d4	112	80-128	
Toluene-d8	107	80-120	

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW5</b>	<b>17-10-2182-7-A</b>	<b>10/26/17 14:55</b>	<b>Aqueous</b>	<b>GC/MS L</b>	<b>11/04/17</b>	<b>11/05/17 07:37</b>	<b>171104L021</b>
Parameter		Result	RL	DF		Qualifiers	
Benzene		160	4.0	8.00			
Toluene		ND	4.0	8.00			
Ethylbenzene		55	4.0	8.00			
o-Xylene		ND	4.0	8.00			
p/m-Xylene		ND	4.0	8.00			
Xylenes (total)		ND	4.0	1.00			
Methyl-t-Butyl Ether (MTBE)		ND	4.0	8.00			
Tert-Butyl Alcohol (TBA)		ND	40	8.00			
Diisopropyl Ether (DIPE)		ND	4.0	8.00			
Ethyl-t-Butyl Ether (ETBE)		ND	4.0	8.00			
Tert-Amyl-Methyl Ether (TAME)		ND	4.0	8.00			
1,1,1,2-Tetrachloroethane		ND	4.0	8.00			
1,1,1-Trichloroethane		ND	4.0	8.00			
1,1,2,2-Tetrachloroethane		ND	4.0	8.00			
1,1,2-Trichloroethane		ND	4.0	8.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	4.0	8.00			
1,1-Dichloroethane		ND	4.0	8.00			
1,1-Dichloroethene		ND	4.0	8.00			
1,1-Dichloropropene		ND	4.0	8.00			
1,2,3-Trichlorobenzene		ND	4.0	8.00			
1,2,3-Trichloropropane		ND	8.0	8.00			
1,2,4-Trichlorobenzene		ND	4.0	8.00			
1,2,4-Trimethylbenzene		63	4.0	8.00			
1,3,5-Trimethylbenzene		17	4.0	8.00			
c-1,2-Dichloroethene		ND	4.0	8.00			
1,2-Dibromo-3-Chloropropane		ND	40	8.00			
1,2-Dibromoethane		ND	4.0	8.00			
1,2-Dichlorobenzene		ND	4.0	8.00			
1,2-Dichloroethane		ND	4.0	8.00			
1,2-Dichloropropane		ND	4.0	8.00			
t-1,2-Dichloroethene		ND	4.0	8.00			
c-1,3-Dichloropropene		ND	4.0	8.00			
1,3-Dichlorobenzene		ND	4.0	8.00			
1,3-Dichloropropane		ND	8.0	8.00			
t-1,3-Dichloropropene		ND	4.0	8.00			

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

## Analytical Report

Cardno  
 601 North McDowell Blvd.  
 Petaluma, CA 94954-2312

Date Received: 10/28/17  
 Work Order: 17-10-2182  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	4.0	8.00	
2,2-Dichloropropane	ND	8.0	8.00	
2-Chlorotoluene	ND	4.0	8.00	
4-Chlorotoluene	ND	4.0	8.00	
4-Methyl-2-Pentanone	ND	40	8.00	
Acetone	ND	80	8.00	
Bromobenzene	ND	4.0	8.00	
Bromoform	ND	8.0	8.00	
Bromomethane	ND	4.0	8.00	
Carbon Disulfide	ND	8.0	8.00	
Carbon Tetrachloride	ND	4.0	8.00	
Chlorobenzene	ND	4.0	8.00	
Dibromochloromethane	ND	4.0	8.00	
Chloroethane	ND	4.0	8.00	
Chloroform	ND	4.0	8.00	
Chloromethane	ND	4.0	8.00	
Dibromomethane	ND	4.0	8.00	
Bromodichloromethane	ND	4.0	8.00	
Dichlorodifluoromethane	ND	8.0	8.00	
Hexachloro-1,3-Butadiene	ND	16	8.00	
Isopropylbenzene	61	4.0	8.00	
2-Butanone	ND	40	8.00	
Methylene Chloride	ND	8.0	8.00	
2-Hexanone	ND	80	8.00	
Naphthalene	41	8.0	8.00	
n-Butylbenzene	63	4.0	8.00	
n-Propylbenzene	200	4.0	8.00	
p-Isopropyltoluene	6.4	4.0	8.00	
sec-Butylbenzene	32	4.0	8.00	
Styrene	ND	4.0	8.00	
tert-Butylbenzene	ND	4.0	8.00	
Tetrachloroethene	ND	4.0	8.00	
Trichloroethene	ND	4.0	8.00	
Trichlorofluoromethane	ND	4.0	8.00	
Vinyl Chloride	ND	4.0	8.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	95	68-120		

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

## Analytical Report

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Cardno	Date Received:	10/28/17
601 North McDowell Blvd.	Work Order:	17-10-2182
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C	Page 18 of 36	

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	96	80-127	
1,2-Dichloroethane-d4	97	80-128	
Toluene-d8	99	80-120	

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW6</b>	<b>17-10-2182-8-B</b>	<b>10/26/17 14:20</b>	<b>Aqueous</b>	<b>GC/MS UU</b>	<b>11/07/17</b>	<b>11/07/17 19:21</b>	<b>171107L044</b>
Parameter		Result	RL	DF			Qualifiers
Benzene		0.98	0.50	1.00			
Toluene		ND	0.50	1.00			
Ethylbenzene		1.5	0.50	1.00			
o-Xylene		ND	0.50	1.00			
p/m-Xylene		1.0	0.50	1.00			
Xylenes (total)		1.0	0.50	1.00			
Methyl-t-Butyl Ether (MTBE)		ND	0.50	1.00			
Tert-Butyl Alcohol (TBA)		ND	5.0	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			
1,1,1,2-Tetrachloroethane		ND	0.50	1.00			
1,1,1-Trichloroethane		ND	0.50	1.00			
1,1,2,2-Tetrachloroethane		ND	0.50	1.00			
1,1,2-Trichloroethane		ND	0.50	1.00			
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	0.50	1.00			
1,1-Dichloroethane		ND	0.50	1.00			
1,1-Dichloroethene		ND	0.50	1.00			
1,1-Dichloropropene		ND	0.50	1.00			
1,2,3-Trichlorobenzene		ND	0.50	1.00			
1,2,3-Trichloropropane		ND	1.0	1.00			
1,2,4-Trichlorobenzene		ND	0.50	1.00			
1,2,4-Trimethylbenzene		ND	0.50	1.00			
1,3,5-Trimethylbenzene		ND	0.50	1.00			
c-1,2-Dichloroethene		ND	0.50	1.00			
1,2-Dibromo-3-Chloropropane		ND	5.0	1.00			
1,2-Dibromoethane		ND	0.50	1.00			
1,2-Dichlorobenzene		ND	0.50	1.00			
1,2-Dichloroethane		ND	0.50	1.00			
1,2-Dichloropropane		ND	0.50	1.00			
t-1,2-Dichloroethene		ND	0.50	1.00			
c-1,3-Dichloropropene		ND	0.50	1.00			
1,3-Dichlorobenzene		ND	0.50	1.00			
1,3-Dichloropropane		ND	1.0	1.00			
t-1,3-Dichloropropene		ND	0.50	1.00			

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

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	6.7	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	4.8	1.0	1.00	
n-Butylbenzene	3.7	0.50	1.00	
n-Propylbenzene	18	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	2.6	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	96	68-120		

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

## Analytical Report

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Cardno	Date Received:	10/28/17
601 North McDowell Blvd.	Work Order:	17-10-2182
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C	Page 21 of 36	

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	88	80-127	
1,2-Dichloroethane-d4	91	80-128	
Toluene-d8	98	80-120	

**Analytical Report**

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW7</b>	<b>17-10-2182-9-B</b>	<b>10/26/17 15:50</b>	<b>Aqueous</b>	<b>GC/MS UU</b>	<b>11/07/17</b>	<b>11/07/17 19:51</b>	<b>171107L044</b>
<u>Parameter</u>	<u>Result</u>		<u>RL</u>		<u>DF</u>		<u>Qualifiers</u>
Benzene	150		4.0		8.00		
Toluene	8.8		4.0		8.00		
Ethylbenzene	9.4		4.0		8.00		
o-Xylene	ND		4.0		8.00		
p/m-Xylene	11		4.0		8.00		
Xylenes (total)	11		4.0		1.00		
Methyl-t-Butyl Ether (MTBE)	ND		4.0		8.00		
Tert-Butyl Alcohol (TBA)	ND		40		8.00		
Diisopropyl Ether (DIPE)	18		4.0		8.00		
Ethyl-t-Butyl Ether (ETBE)	ND		4.0		8.00		
Tert-Amyl-Methyl Ether (TAME)	ND		4.0		8.00		
1,1,1,2-Tetrachloroethane	ND		4.0		8.00		
1,1,1-Trichloroethane	ND		4.0		8.00		
1,1,2,2-Tetrachloroethane	ND		4.0		8.00		
1,1,2-Trichloroethane	ND		4.0		8.00		
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		4.0		8.00		
1,1-Dichloroethane	ND		4.0		8.00		
1,1-Dichloroethene	ND		4.0		8.00		
1,1-Dichloropropene	ND		4.0		8.00		
1,2,3-Trichlorobenzene	ND		4.0		8.00		
1,2,3-Trichloropropane	ND		8.0		8.00		
1,2,4-Trichlorobenzene	ND		4.0		8.00		
1,2,4-Trimethylbenzene	ND		4.0		8.00		
1,3,5-Trimethylbenzene	4.1		4.0		8.00		
c-1,2-Dichloroethene	ND		4.0		8.00		
1,2-Dibromo-3-Chloropropane	ND		40		8.00		
1,2-Dibromoethane	ND		4.0		8.00		
1,2-Dichlorobenzene	ND		4.0		8.00		
1,2-Dichloroethane	ND		4.0		8.00		
1,2-Dichloropropane	ND		4.0		8.00		
t-1,2-Dichloroethene	ND		4.0		8.00		
c-1,3-Dichloropropene	ND		4.0		8.00		
1,3-Dichlorobenzene	ND		4.0		8.00		
1,3-Dichloropropane	ND		8.0		8.00		
t-1,3-Dichloropropene	ND		4.0		8.00		

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

## Analytical Report

Cardno  
 601 North McDowell Blvd.  
 Petaluma, CA 94954-2312

Date Received: 10/28/17  
 Work Order: 17-10-2182  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	4.0	8.00	
2,2-Dichloropropane	ND	8.0	8.00	
2-Chlorotoluene	ND	4.0	8.00	
4-Chlorotoluene	ND	4.0	8.00	
4-Methyl-2-Pentanone	ND	40	8.00	
Acetone	ND	80	8.00	
Bromobenzene	ND	4.0	8.00	
Bromoform	ND	8.0	8.00	
Bromomethane	ND	4.0	8.00	
Carbon Disulfide	ND	8.0	8.00	
Carbon Tetrachloride	ND	4.0	8.00	
Chlorobenzene	ND	4.0	8.00	
Dibromochloromethane	ND	4.0	8.00	
Chloroethane	ND	4.0	8.00	
Chloroform	ND	4.0	8.00	
Chloromethane	ND	4.0	8.00	
Dibromomethane	ND	4.0	8.00	
Bromodichloromethane	ND	4.0	8.00	
Dichlorodifluoromethane	ND	8.0	8.00	
Hexachloro-1,3-Butadiene	ND	16	8.00	
Isopropylbenzene	72	4.0	8.00	
2-Butanone	ND	40	8.00	
Methylene Chloride	ND	8.0	8.00	
2-Hexanone	ND	80	8.00	
Naphthalene	69	8.0	8.00	
n-Butylbenzene	48	4.0	8.00	
n-Propylbenzene	200	4.0	8.00	
p-Isopropyltoluene	ND	4.0	8.00	
sec-Butylbenzene	23	4.0	8.00	
Styrene	ND	4.0	8.00	
tert-Butylbenzene	4.6	4.0	8.00	
Tetrachloroethene	ND	4.0	8.00	
Trichloroethene	ND	4.0	8.00	
Trichlorofluoromethane	ND	4.0	8.00	
Vinyl Chloride	ND	4.0	8.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	97	68-120		

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

## Analytical Report

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Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Date Received: Work Order: Preparation: Method: Units:	10/28/17 17-10-2182 EPA 5030C EPA 8260B ug/L
Project: ExxonMobil 79374/022735C		Page 24 of 36

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	104	80-127	
1,2-Dichloroethane-d4	117	80-128	
Toluene-d8	115	80-120	

# Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>MW8</b>	<b>17-10-2182-10-A</b>	<b>10/26/17 15:25</b>	<b>Aqueous</b>	<b>GC/MS L</b>	<b>11/04/17</b>	<b>11/05/17 09:06</b>	<b>171104L021</b>

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-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	5.0	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	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	

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

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromoform	ND	1.0	1.00	
Bromomethane	ND	0.50	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	2.3	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	94	68-120		

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

## Analytical Report

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Cardno	Date Received:	10/28/17
601 North McDowell Blvd.	Work Order:	17-10-2182
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C	Page 27 of 36	

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	97	80-127	
1,2-Dichloroethane-d4	97	80-128	
Toluene-d8	99	80-120	

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-880-1562</b>	<b>N/A</b>	<b>Aqueous</b>	<b>GC/MS L</b>	<b>11/04/17</b>	<b>11/05/17 01:41</b>	<b>171104L021</b>
Parameter		<u>Result</u>	<u>RL</u>	<u>DF</u>			<u>Qualifiers</u>
Benzene		ND	0.50		1.00		
Toluene		ND	0.50		1.00		
Ethylbenzene		ND	0.50		1.00		
o-Xylene		ND	0.50		1.00		
p/m-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	5.0		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		
1,1,1,2-Tetrachloroethane		ND	0.50		1.00		
1,1,1-Trichloroethane		ND	0.50		1.00		
1,1,2,2-Tetrachloroethane		ND	0.50		1.00		
1,1,2-Trichloroethane		ND	0.50		1.00		
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	0.50		1.00		
1,1-Dichloroethane		ND	0.50		1.00		
1,1-Dichloroethene		ND	0.50		1.00		
1,1-Dichloropropene		ND	0.50		1.00		
1,2,3-Trichlorobenzene		ND	0.50		1.00		
1,2,3-Trichloropropane		ND	1.0		1.00		
1,2,4-Trichlorobenzene		ND	0.50		1.00		
1,2,4-Trimethylbenzene		ND	0.50		1.00		
1,3,5-Trimethylbenzene		ND	0.50		1.00		
c-1,2-Dichloroethene		ND	0.50		1.00		
1,2-Dibromo-3-Chloropropane		ND	5.0		1.00		
1,2-Dibromoethane		ND	0.50		1.00		
1,2-Dichlorobenzene		ND	0.50		1.00		
1,2-Dichloroethane		ND	0.50		1.00		
1,2-Dichloropropane		ND	0.50		1.00		
t-1,2-Dichloroethene		ND	0.50		1.00		
c-1,3-Dichloropropene		ND	0.50		1.00		
1,3-Dichlorobenzene		ND	0.50		1.00		
1,3-Dichloropropane		ND	1.0		1.00		
t-1,3-Dichloropropene		ND	0.50		1.00		

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

## Analytical Report

Cardno  
 601 North McDowell Blvd.  
 Petaluma, CA 94954-2312

Date Received: 10/28/17  
 Work Order: 17-10-2182  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	90	68-120		

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

## Analytical Report

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Cardno	Date Received:	10/28/17
601 North McDowell Blvd.	Work Order:	17-10-2182
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C	Page 30 of 36	

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	103	80-127	
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	100	80-120	

## Analytical Report

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-880-1563</b>	<b>N/A</b>	<b>Aqueous</b>	<b>GC/MS UU</b>	<b>11/07/17</b>	<b>11/07/17 10:20</b>	<b>171107L044</b>
Parameter		<u>Result</u>	<u>RL</u>	<u>DF</u>			<u>Qualifiers</u>
Benzene		ND	0.50		1.00		
Toluene		ND	0.50		1.00		
Ethylbenzene		ND	0.50		1.00		
o-Xylene		ND	0.50		1.00		
p/m-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	5.0		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		
1,1,1,2-Tetrachloroethane		ND	0.50		1.00		
1,1,1-Trichloroethane		ND	0.50		1.00		
1,1,2,2-Tetrachloroethane		ND	0.50		1.00		
1,1,2-Trichloroethane		ND	0.50		1.00		
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	0.50		1.00		
1,1-Dichloroethane		ND	0.50		1.00		
1,1-Dichloroethene		ND	0.50		1.00		
1,1-Dichloropropene		ND	0.50		1.00		
1,2,3-Trichlorobenzene		ND	0.50		1.00		
1,2,3-Trichloropropane		ND	1.0		1.00		
1,2,4-Trichlorobenzene		ND	0.50		1.00		
1,2,4-Trimethylbenzene		ND	0.50		1.00		
1,3,5-Trimethylbenzene		ND	0.50		1.00		
c-1,2-Dichloroethene		ND	0.50		1.00		
1,2-Dibromo-3-Chloropropane		ND	5.0		1.00		
1,2-Dibromoethane		ND	0.50		1.00		
1,2-Dichlorobenzene		ND	0.50		1.00		
1,2-Dichloroethane		ND	0.50		1.00		
1,2-Dichloropropane		ND	0.50		1.00		
t-1,2-Dichloroethene		ND	0.50		1.00		
c-1,3-Dichloropropene		ND	0.50		1.00		
1,3-Dichlorobenzene		ND	0.50		1.00		
1,3-Dichloropropane		ND	1.0		1.00		
t-1,3-Dichloropropene		ND	0.50		1.00		

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

## Analytical Report

Cardno  
 601 North McDowell Blvd.  
 Petaluma, CA 94954-2312

Date Received: 10/28/17  
 Work Order: 17-10-2182  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	91	68-120		

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

## Analytical Report

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Cardno	Date Received:	10/28/17
601 North McDowell Blvd.	Work Order:	17-10-2182
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C	Page 33 of 36	

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	91	80-127	
1,2-Dichloroethane-d4	87	80-128	
Toluene-d8	97	80-120	

## Analytical Report

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
<b>Method Blank</b>	<b>099-12-880-1564</b>	<b>N/A</b>	<b>Aqueous</b>	<b>GC/MS UU</b>	<b>11/08/17</b>	<b>11/08/17 20:33</b>	<b>171108L051</b>
Parameter		<u>Result</u>	<u>RL</u>	<u>DF</u>			<u>Qualifiers</u>
Benzene		ND	0.50		1.00		
Toluene		ND	0.50		1.00		
Ethylbenzene		ND	0.50		1.00		
o-Xylene		ND	0.50		1.00		
p/m-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	5.0		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		
1,1,1,2-Tetrachloroethane		ND	0.50		1.00		
1,1,1-Trichloroethane		ND	0.50		1.00		
1,1,2,2-Tetrachloroethane		ND	0.50		1.00		
1,1,2-Trichloroethane		ND	0.50		1.00		
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND	0.50		1.00		
1,1-Dichloroethane		ND	0.50		1.00		
1,1-Dichloroethene		ND	0.50		1.00		
1,1-Dichloropropene		ND	0.50		1.00		
1,2,3-Trichlorobenzene		ND	0.50		1.00		
1,2,3-Trichloropropane		ND	1.0		1.00		
1,2,4-Trichlorobenzene		ND	0.50		1.00		
1,2,4-Trimethylbenzene		ND	0.50		1.00		
1,3,5-Trimethylbenzene		ND	0.50		1.00		
c-1,2-Dichloroethene		ND	0.50		1.00		
1,2-Dibromo-3-Chloropropane		ND	5.0		1.00		
1,2-Dibromoethane		ND	0.50		1.00		
1,2-Dichlorobenzene		ND	0.50		1.00		
1,2-Dichloroethane		ND	0.50		1.00		
1,2-Dichloropropane		ND	0.50		1.00		
t-1,2-Dichloroethene		ND	0.50		1.00		
c-1,3-Dichloropropene		ND	0.50		1.00		
1,3-Dichlorobenzene		ND	0.50		1.00		
1,3-Dichloropropane		ND	1.0		1.00		
t-1,3-Dichloropropene		ND	0.50		1.00		

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

## Analytical Report

Cardno  
 601 North McDowell Blvd.  
 Petaluma, CA 94954-2312

Date Received: 10/28/17  
 Work Order: 17-10-2182  
 Preparation: EPA 5030C  
 Method: EPA 8260B  
 Units: ug/L

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	98	68-120		

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

## Analytical Report

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Cardno	Date Received:	10/28/17
601 North McDowell Blvd.	Work Order:	17-10-2182
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C	Page 36 of 36	

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<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
Dibromofluoromethane	105	80-127	
1,2-Dichloroethane-d4	105	80-128	
Toluene-d8	101	80-120	



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## Quality Control - Spike/Spike Duplicate

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8015B (M)

Project: ExxonMobil 79374/022735C Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
<b>MW2</b>	<b>Sample</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/01/17</b>	<b>11/01/17 12:11</b>	<b>171101S043</b>				
<b>MW2</b>	<b>Matrix Spike</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/01/17</b>	<b>11/01/17 12:44</b>	<b>171101S043</b>				
<b>MW2</b>	<b>Matrix Spike Duplicate</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/01/17</b>	<b>11/01/17 13:17</b>	<b>171101S043</b>				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	2216	111	2272	114	68-122	2	0-18	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8015B (M)

Project: ExxonMobil 79374/022735C Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
17-10-2096-6	Sample	Aqueous	GC 22	11/02/17	11/02/17 12:22	171102S038				
17-10-2096-6	Matrix Spike	Aqueous	GC 22	11/02/17	11/02/17 12:55	171102S038				
17-10-2096-6	Matrix Spike Duplicate	Aqueous	GC 22	11/02/17	11/02/17 13:28	171102S038				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	2136	107	2108	105	68-122	1	0-18	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - Spike/Spike Duplicate

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8015B (M)  
 Project: ExxonMobil 79374/022735C Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
17-11-0144-1	<b>Sample</b>	Aqueous	GC 22	11/07/17	11/07/17 20:17	171107S029				
17-11-0144-1	<b>Matrix Spike</b>	Aqueous	GC 22	11/07/17	11/07/17 20:50	171107S029				
17-11-0144-1	<b>Matrix Spike Duplicate</b>	Aqueous	GC 22	11/07/17	11/07/17 21:24	171107S029				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	2030	102	1990	99	68-122	2	0-18	



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## Quality Control - Spike/Spike Duplicate

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8260B

Project: ExxonMobil 79374/022735C Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
17-11-0168-7	Sample	Aqueous	GC/MS L	11/04/17	11/05/17 02:11	171104S010				
17-11-0168-7	Matrix Spike	Aqueous	GC/MS L	11/04/17	11/05/17 01:12	171104S010				
17-11-0168-7	Matrix Spike Duplicate	Aqueous	GC/MS L	11/04/17	11/05/17 01:42	171104S010				
Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	9.336	93	9.473	95	75-125	1	0-20	
Toluene	ND	10.00	9.312	93	9.354	94	75-125	0	0-20	
Ethylbenzene	ND	10.00	9.264	93	9.437	94	75-125	2	0-20	
o-Xylene	ND	10.00	9.277	93	9.374	94	75-127	1	0-20	
p/m-Xylene	ND	20.00	18.24	91	18.64	93	75-125	2	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	8.946	89	8.770	88	71-131	2	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	77.79	156	61.74	123	20-180	23	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	9.394	94	9.411	94	64-136	0	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	8.635	86	8.594	86	73-133	0	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	8.366	84	8.416	84	75-125	1	0-20	
1,1-Dichloroethene	ND	10.00	9.412	94	9.447	94	66-126	0	0-20	
1,2-Dibromoethane	ND	10.00	9.542	95	9.660	97	75-126	1	0-20	
1,2-Dichlorobenzene	ND	10.00	9.433	94	9.578	96	75-125	2	0-20	
1,2-Dichloroethane	ND	10.00	9.208	92	9.236	92	75-127	0	0-20	
Carbon Tetrachloride	ND	10.00	9.770	98	10.03	100	69-135	3	0-20	
Chlorobenzene	ND	10.00	9.423	94	9.426	94	75-125	0	0-20	
Trichloroethene	ND	10.00	9.553	96	9.632	96	75-125	1	0-20	
Vinyl Chloride	ND	10.00	10.50	105	10.21	102	52-142	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8260B

Project: ExxonMobil 79374/022735C Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-11-0180-2	Sample	Aqueous	GC/MS UU	11/07/17	11/07/17 10:53	171107S004
17-11-0180-2	Matrix Spike	Aqueous	GC/MS UU	11/07/17	11/07/17 11:23	171107S004
17-11-0180-2	Matrix Spike Duplicate	Aqueous	GC/MS UU	11/07/17	11/07/17 11:53	171107S004

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	8.290	83	8.384	84	75-125	1	0-20	
Toluene	ND	10.00	8.734	87	8.989	90	75-125	3	0-20	
Ethylbenzene	ND	10.00	8.656	87	8.703	87	75-125	1	0-20	
o-Xylene	ND	10.00	8.808	88	8.872	89	75-127	1	0-20	
p/m-Xylene	ND	20.00	17.27	86	17.39	87	75-125	1	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	8.671	87	8.884	89	71-131	2	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	48.57	97	52.44	105	20-180	8	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	7.594	76	7.718	77	64-136	2	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	8.283	83	8.362	84	73-133	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	9.147	91	9.205	92	75-125	1	0-20	
1,1,1,2-Tetrachloroethane	ND	10.00	10.29	103	10.35	103	75-127	1	0-20	
1,1,1-Trichloroethane	ND	10.00	8.031	80	8.288	83	72-132	3	0-20	
1,1,2,2-Tetrachloroethane	ND	10.00	9.756	98	9.861	99	75-132	1	0-20	
1,1,2-Trichloroethane	ND	10.00	8.969	90	8.951	90	75-125	0	0-20	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10.00	7.340	73	7.116	71	70-130	3	0-20	
1,1-Dichloroethane	ND	10.00	7.605	76	7.757	78	68-128	2	0-20	
1,1-Dichloroethene	ND	10.00	6.443	64	6.896	69	66-126	7	0-20	HX
1,1-Dichloropropene	ND	10.00	7.581	76	7.732	77	74-134	2	0-20	
1,2,3-Trichlorobenzene	ND	10.00	10.32	103	10.76	108	75-125	4	0-20	
1,2,3-Trichloropropane	ND	10.00	8.829	88	8.608	86	75-125	3	0-20	
1,2,4-Trichlorobenzene	ND	10.00	10.42	104	10.59	106	75-125	2	0-20	
1,2,4-Trimethylbenzene	ND	10.00	8.727	87	8.904	89	75-125	2	0-20	
1,3,5-Trimethylbenzene	ND	10.00	9.054	91	9.272	93	75-127	2	0-20	
c-1,2-Dichloroethene	ND	10.00	8.295	83	8.449	84	75-130	2	0-20	
1,2-Dibromo-3-Chloropropane	ND	10.00	9.560	96	9.947	99	75-127	4	0-20	
1,2-Dibromoethane	ND	10.00	10.01	100	10.01	100	75-126	0	0-20	
1,2-Dichlorobenzene	ND	10.00	9.728	97	9.797	98	75-125	1	0-20	
1,2-Dichloroethane	ND	10.00	8.875	89	8.928	89	75-127	1	0-20	
1,2-Dichloropropane	ND	10.00	8.182	82	8.385	84	75-125	2	0-20	
t-1,2-Dichloroethene	ND	10.00	7.824	78	8.166	82	73-133	4	0-20	
c-1,3-Dichloropropene	ND	10.00	9.124	91	9.106	91	75-128	0	0-20	
1,3-Dichlorobenzene	ND	10.00	9.451	95	9.507	95	75-126	1	0-20	
1,3-Dichloropropane	ND	10.00	8.968	90	9.027	90	75-125	1	0-20	
t-1,3-Dichloropropene	ND	10.00	9.325	93	9.159	92	75-125	2	0-20	
1,4-Dichlorobenzene	ND	10.00	9.174	92	9.319	93	75-125	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Cardno  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

Date Received: 10/28/17  
Work Order: 17-10-2182  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: ExxonMobil 79374/022735C

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<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
2,2-Dichloropropane	ND	10.00	8.578	86	8.749	87	52-160	2	0-20	
2-Chlorotoluene	ND	10.00	8.603	86	8.660	87	75-128	1	0-20	
4-Chlorotoluene	ND	10.00	8.524	85	8.642	86	75-125	1	0-20	
4-Methyl-2-Pentanone	ND	10.00	9.152	92	9.157	92	65-137	0	0-20	
Acetone	ND	10.00	6.961	70	7.081	71	20-180	2	0-52	
Bromobenzene	ND	10.00	10.22	102	10.09	101	75-125	1	0-20	
Bromochloromethane	ND	10.00	9.620	96	9.474	95	75-128	2	0-20	
Bromoform	ND	10.00	9.799	98	9.890	99	71-137	1	0-20	
Bromomethane	ND	10.00	2.560	26	1.863	19	37-181	32	0-22	HX,BA
Carbon Disulfide	ND	10.00	7.855	79	8.233	82	58-136	5	0-20	
Carbon Tetrachloride	ND	10.00	8.198	82	8.424	84	69-135	3	0-20	
Chlorobenzene	ND	10.00	9.008	90	9.040	90	75-125	0	0-20	
Dibromochloromethane	ND	10.00	9.898	99	10.14	101	75-125	2	0-20	
Chloroethane	ND	10.00	8.010	80	7.620	76	20-180	5	0-20	
Chloroform	ND	10.00	8.291	83	8.368	84	75-128	1	0-20	
Chloromethane	ND	10.00	6.600	66	6.261	63	41-149	5	0-20	
Dibromomethane	ND	10.00	9.452	95	9.309	93	75-129	2	0-20	
Bromodichloromethane	ND	10.00	9.409	94	9.400	94	75-125	0	0-20	
Dichlorodifluoromethane	ND	10.00	13.80	138	11.01	110	28-172	23	0-20	BA
Hexachloro-1,3-Butadiene	ND	10.00	10.69	107	11.03	110	75-129	3	0-20	
Isopropylbenzene	ND	10.00	8.818	88	9.102	91	75-130	3	0-20	
2-Butanone	ND	10.00	7.314	73	7.672	77	20-180	5	0-40	
Methylene Chloride	ND	10.00	8.166	82	8.189	82	74-128	0	0-20	
2-Hexanone	ND	10.00	7.630	76	7.858	79	74-122	3	0-20	
Naphthalene	ND	10.00	10.47	105	10.89	109	75-136	4	0-20	
n-Butylbenzene	ND	10.00	8.446	84	8.814	88	75-125	4	0-20	
n-Propylbenzene	ND	10.00	8.620	86	8.928	89	75-129	4	0-20	
p-Isopropyltoluene	ND	10.00	8.792	88	9.057	91	75-125	3	0-20	
sec-Butylbenzene	ND	10.00	8.376	84	8.722	87	75-129	4	0-20	
Styrene	ND	10.00	8.611	86	9.157	92	28-166	6	0-30	
tert-Butylbenzene	ND	10.00	8.989	90	9.245	92	75-129	3	0-20	
Tetrachloroethene	ND	10.00	6.518	65	6.713	67	58-124	3	0-20	
Trichloroethene	ND	10.00	8.328	83	8.589	86	75-125	3	0-20	
Trichlorofluoromethane	ND	10.00	7.895	79	6.994	70	68-134	12	0-20	
Vinyl Chloride	ND	10.00	7.911	79	7.726	77	52-142	2	0-20	

RPD: Relative Percent Difference. CL: Control Limits



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## Quality Control - Spike/Spike Duplicate

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8260B

Project: ExxonMobil 79374/022735C Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
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17-11-0195-2	Sample	Aqueous	GC/MS UU	11/08/17	11/08/17 21:03	171108S019
17-11-0195-2	Matrix Spike	Aqueous	GC/MS UU	11/08/17	11/08/17 19:04	171108S019
17-11-0195-2	Matrix Spike Duplicate	Aqueous	GC/MS UU	11/08/17	11/08/17 19:34	171108S019

<u>Parameter</u>	<u>Sample Conc.</u>	<u>Spike Added</u>	<u>MS Conc.</u>	<u>MS %Rec.</u>	<u>MSD Conc.</u>	<u>MSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Benzene	ND	10.00	9.969	100	9.848	98	75-125	1	0-20	
Toluene	ND	10.00	9.875	99	9.995	100	75-125	1	0-20	
Ethylbenzene	ND	10.00	9.724	97	9.830	98	75-125	1	0-20	
o-Xylene	ND	10.00	9.758	98	9.722	97	75-127	0	0-20	
p/m-Xylene	ND	20.00	19.40	97	19.27	96	75-125	1	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	10.54	105	10.68	107	71-131	1	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	64.68	129	62.85	126	20-180	3	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	10.43	104	10.64	106	64-136	2	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	10.29	103	10.54	105	73-133	2	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	10.49	105	10.36	104	75-125	1	0-20	
1,1-Dichloroethene	ND	10.00	9.255	93	9.612	96	66-126	4	0-20	
1,2-Dibromoethane	ND	10.00	10.68	107	10.56	106	75-126	1	0-20	
1,2-Dichlorobenzene	ND	10.00	9.972	100	10.20	102	75-125	2	0-20	
1,2-Dichloroethane	ND	10.00	10.26	103	9.826	98	75-127	4	0-20	
Carbon Tetrachloride	ND	10.00	9.547	95	9.862	99	69-135	3	0-20	
Chlorobenzene	ND	10.00	9.834	98	9.729	97	75-125	1	0-20	
Trichloroethene	ND	10.00	9.834	98	9.646	96	75-125	2	0-20	
Vinyl Chloride	ND	10.00	11.53	115	11.21	112	52-142	3	0-20	

[Return to Contents](#)

RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS/LCSD

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 3510C  
 Method: EPA 8015B (M)

Project: ExxonMobil 79374/022735C Page 1 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
<b>099-15-278-1484</b>	<b>LCS</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 16:39</b>	<b>171102B02S</b>			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	2000	2447	122	2361	118	75-117	4	0-13	LQ,IL

## Quality Control - LCS/LCSD

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 3510C  
 Method: EPA 8015B (M)

Project: ExxonMobil 79374/022735C Page 2 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
<b>099-15-304-1883</b>	<b>LCS</b>	<b>Aqueous</b>	<b>GC 45</b>	<b>11/02/17</b>	<b>11/07/17 15:56</b>	<b>171102B01S</b>			
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	2000	2247	112	1885	94	69-123	17	0-30	




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RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

---

Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Date Received: Work Order: Preparation: Method:	10/28/17 17-10-2182 EPA 5030C EPA 8015B (M)
Project: ExxonMobil 79374/022735C		Page 3 of 8

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-436-11729</b>	<b>LCS</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/01/17</b>	<b>11/01/17 11:05</b>	<b>171101L079</b>	
Parameter		Spike Added		Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline		2000		2331	117	78-120	



## Quality Control - LCS

---

Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Date Received: Work Order: Preparation: Method:	10/28/17 17-10-2182 EPA 5030C EPA 8015B (M)
Project: ExxonMobil 79374/022735C		Page 4 of 8

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-436-11730</b>	<b>LCS</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/02/17</b>	<b>11/02/17 11:16</b>	<b>171102L063</b>	
Parameter		Spike Added		Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline		2000		2148	107	78-120	



## Quality Control - LCS

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Cardno 601 North McDowell Blvd. Petaluma, CA 94954-2312	Date Received: Work Order: Preparation: Method:	10/28/17 17-10-2182 EPA 5030C EPA 8015B (M)
Project: ExxonMobil 79374/022735C		Page 5 of 8

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-436-11741</b>	<b>LCS</b>	<b>Aqueous</b>	<b>GC 22</b>	<b>11/07/17</b>	<b>11/07/17 19:05</b>	<b>171107L061</b>	
Parameter		Spike Added		Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline		2000		2017	101	78-120	



Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8260B

Project: ExxonMobil 79374/022735C Page 6 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
Parameter		Aqueous	GC/MS L	11/04/17	11/05/17 00:43	171104L021
Benzene		10.00	9.832	98	80-120	73-127
Toluene		10.00	9.802	98	80-120	73-127
Ethylbenzene		10.00	9.868	99	80-120	73-127
o-Xylene		10.00	9.671	97	80-120	73-127
p/m-Xylene		20.00	19.75	99	80-120	73-127
Methyl-t-Butyl Ether (MTBE)		10.00	8.722	87	75-123	67-131
Tert-Butyl Alcohol (TBA)		50.00	52.01	104	80-120	73-127
Diisopropyl Ether (DIPE)		10.00	9.520	95	73-121	65-129
Ethyl-t-Butyl Ether (ETBE)		10.00	8.670	87	76-124	68-132
Tert-Amyl-Methyl Ether (TAME)		10.00	8.504	85	80-120	73-127
1,1-Dichloroethene		10.00	10.03	100	77-120	70-127
1,2-Dibromoethane		10.00	9.729	97	80-120	73-127
1,2-Dichlorobenzene		10.00	9.705	97	80-120	73-127
1,2-Dichloroethane		10.00	9.450	95	80-122	73-129
Carbon Tetrachloride		10.00	9.968	100	80-129	72-137
Chlorobenzene		10.00	9.597	96	80-120	73-127
Trichloroethene		10.00	10.21	102	80-120	73-127
Vinyl Chloride		10.00	10.03	100	63-135	51-147

Total number of LCS compounds: 18

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8260B

Project: ExxonMobil 79374/022735C Page 7 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number	
<b>099-12-880-1563</b>	<b>LCS</b>	<b>Aqueous</b>	<b>GC/MS UU</b>	<b>11/07/17</b>	<b>11/07/17 09:50</b>	<b>171107L044</b>	
Parameter		Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene		10.00	9.781	98	80-120	73-127	
Toluene		10.00	10.51	105	80-120	73-127	
Ethylbenzene		10.00	10.41	104	80-120	73-127	
o-Xylene		10.00	10.27	103	80-120	73-127	
p/m-Xylene		20.00	20.85	104	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)		10.00	9.899	99	75-123	67-131	
Tert-Butyl Alcohol (TBA)		50.00	56.08	112	80-120	73-127	
Diisopropyl Ether (DIPE)		10.00	11.08	111	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)		10.00	9.145	91	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)		10.00	9.902	99	80-120	73-127	
1,1-Dichloroethene		10.00	7.991	80	77-120	70-127	
1,2-Dibromoethane		10.00	10.75	107	80-120	73-127	
1,2-Dichlorobenzene		10.00	10.63	106	80-120	73-127	
1,2-Dichloroethane		10.00	9.682	97	80-122	73-129	
Carbon Tetrachloride		10.00	10.43	104	80-129	72-137	
Chlorobenzene		10.00	10.42	104	80-120	73-127	
Trichloroethene		10.00	10.44	104	80-120	73-127	
Vinyl Chloride		10.00	7.928	79	63-135	51-147	

Total number of LCS compounds: 18

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Cardno Date Received: 10/28/17  
 601 North McDowell Blvd. Work Order: 17-10-2182  
 Petaluma, CA 94954-2312 Preparation: EPA 5030C  
 Method: EPA 8260B

Project: ExxonMobil 79374/022735C Page 8 of 8

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
Parameter		Aqueous	GC/MS UU	11/08/17	11/08/17 18:34	171108L051
Benzene		10.00	10.22	102	80-120	73-127
Toluene		10.00	10.20	102	80-120	73-127
Ethylbenzene		10.00	10.34	103	80-120	73-127
o-Xylene		10.00	10.15	102	80-120	73-127
p/m-Xylene		20.00	20.07	100	80-120	73-127
Methyl-t-Butyl Ether (MTBE)		10.00	10.56	106	75-123	67-131
Tert-Butyl Alcohol (TBA)		50.00	52.03	104	80-120	73-127
Diisopropyl Ether (DIPE)		10.00	10.56	106	73-121	65-129
Ethyl-t-Butyl Ether (ETBE)		10.00	10.37	104	76-124	68-132
Tert-Amyl-Methyl Ether (TAME)		10.00	10.20	102	80-120	73-127
1,1-Dichloroethene		10.00	10.11	101	77-120	70-127
1,2-Dibromoethane		10.00	10.59	106	80-120	73-127
1,2-Dichlorobenzene		10.00	10.13	101	80-120	73-127
1,2-Dichloroethane		10.00	10.12	101	80-122	73-129
Carbon Tetrachloride		10.00	10.48	105	80-129	72-137
Chlorobenzene		10.00	10.19	102	80-120	73-127
Trichloroethene		10.00	10.28	103	80-120	73-127
Vinyl Chloride		10.00	10.73	107	63-135	51-147

Total number of LCS compounds: 18

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

## Sample Analysis Summary Report

Work Order: 17-10-2182

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA 8015B (M)	EPA 3510C	682	GC 45	1
EPA 8015B (M)	EPA 5030C	1101	GC 22	2
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B	EPA 5030C	996	GC/MS UU	2



Location 1: 7440 Lincoln Way, Garden Grove, CA 92841

Location 2: 7445 Lampson Avenue, Garden Grove, CA 92841

## Glossary of Terms and Qualifiers

Work Order: 17-10-2182

Page 1 of 1

<b>Qualifiers</b>	<b>Definition</b>
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.
CI	See case narrative.
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.

**Eurofins  
Calscience, Inc.**

7440 Lincoln Way  
Garden Grove, CA 92841

Phone: 714-895-5494

Fax: 714-894-7501

**ExxonMobil  
17-10-2182**

Consultant Name:	Cardno ERI	Account #:	NA	PO#:	Direct Bill Cardno ERI
Consultant Address:	601 N. McDowell Boulevard	Invoice To:	Direct Bill Cardno ERI		
Consultant City/State/Zip:	Petaluma, California, 94954	Report To:	Scott Perkins		
ExxonMobil Project Mgr:	Jennifer Sedlachek	Project Name:	02 2735 C		
Consultant Project Mgr:	Scott Perkins	ExxonMobil Site #:	79374	Major Project (AFE)	
Consultant Telephone Number:	707-766-2000	Fax No.:	707-789-0414	Site Address:	990 San Pablo Avenue
Sampler Name (Print):	Scott Perkins	Site City, State, Zip:	Albany, California		
Sampler Signature:	Oversight Agency: Alameda County Environmental Health Department				

Sample ID	Field Point Name	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative		Matrix		Analyze For:		RUSH TAT (Pre-Schedule)											
								Methanol	Sodium Bisulfate	HCl	NaOH	H <sub>2</sub> SO <sub>4</sub> Plastic	H <sub>2</sub> SO <sub>4</sub> Glass	HNO <sub>3</sub>	Ice	Other: Unpreserved	None	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify): Distilled Water	
1	QCBB	QCBB	10/26/17	0700	2					2							X		TPHg 8015M						
2	MW1	MW1	10/26/17	1330	10					8							2	X		X	X	X	X	X	
3	MW2	MW2	10/26/17	1350	10					8							2	X		X	X	X	X	X	
4	MW3	MW3	10/26/17	1450	10					8							2	X		X	X	X	X	X	
5	MW3A	MW3A	10/26/17	1440	10					8							2	X		X	X	X	X	X	
6	MW4	MW4	10/26/17	1540	10					8							2	X		X	X	X	X	X	
7	MW5	MW5	10/26/17	1455	10					8							2	X		X	X	X	X	X	
8	MW6	MW6	10/26/17	1420	10					8							2	X		X	X	X	X	X	
9	MW7	MW7	10/26/17	1550	10					8							2	X		X	X	X	X	X	
10	MW8	MW8	10/26/17	1525	10					8							2	X		X	X	X	X	X	
	MW9	MW9	10/26/17	10						8							2	X		*	X	X	X	X	

Comments/Special Instructions:

PLEASE E-MAIL ALL PDF FILES TO  
norcallabs@eri-us.com

GLOBAL ID # T0619716673

Relinquished by:

Date

10/27/17

Time

1030

Received by:

Tor O'Malley EC1

Date

10/27/17

Time

1030

Relinquished by:

Date

10/27/17

Time

1230

Received by (Lab personnel):

J. S. S.

Date

10/28/17

Time

1000

Laboratory Comments:

Temperature Upon Receipt:

Y

N

Sample Containers Intact?

Y

N

VOCs Free of Headspace?

Y

N

QC Deliverables (please circle one)

Level 2

Level 3

Level 4

Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions



800-322-5555

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2182

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

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

COD: \$0.00

Weight: 0 lb(s)

Reference:

CARDNO

Delivery Instructions:

Signature Type: REQUIRED

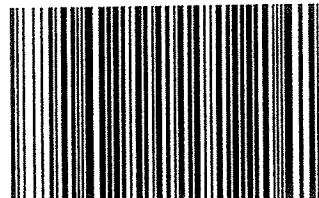
Tracking #: 538164011

SDS



**ORC**  
**GARDEN GROVE**

D92845A



74335172

Print Date: 10/27/2017 4:06 PM

Package 2 of 2

**LABEL INSTRUCTIONS:**

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

Step 1: Use the "Print Label" 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 and do not cover the barcode.

**TERMS AND CONDITIONS:**

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800-322-5555

www.gso.com

(2182)

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

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

COD: \$0.00

Weight: 0 lb(s)

Reference:

CARDNO

Delivery Instructions:

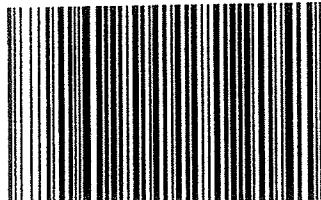
Signature Type: REQUIRED

Tracking #: 538164010

SDS



**ORC**  
**GARDEN GROVE**

**D92845A**

74335171

Print Date: 10/27/2017 4:06 PM

Package 1 of 2

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Step 3: Securely attach this label to your package and do not cover the barcode.

**TERMS AND CONDITIONS:**

By giving us your shipment to deliver, you agree to all of the GSO service terms & conditions including, but not limited to; limits of liability, declared value conditions, and claim procedures which are available on our website at [www.gso.com](http://www.gso.com).

CLIENT: Cardno

## SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2DATE: 10/28/2017

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

Thermometer ID: SC6 (CF: -0.4°C); Temperature (w/o CF): 3.0 °C (w/ CF): 2.6 °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 Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature:  Air  FilterChecked by: frz

## CUSTODY SEAL:

Cooler	<input checked="" type="checkbox"/> Present and Intact	<input type="checkbox"/> Present but Not Intact	<input type="checkbox"/> Not Present	<input type="checkbox"/> N/A	Checked by: <u>frz</u>
Sample(s)	<input type="checkbox"/> Present and Intact	<input type="checkbox"/> Present but Not Intact	<input checked="" type="checkbox"/> Not Present	<input type="checkbox"/> N/A	Checked by: <u>1050</u>

## SAMPLE CONDITION:

Chain-of-Custody (COC) document(s) received with samples .....   COC document(s) received complete .....    Sampling date  Sampling time  Matrix  Number of containers No analysis requested  Not relinquished  No relinquished date  No relinquished timeSampler's name indicated on COC .....   Sample container label(s) consistent with COC .....   Sample container(s) intact and in good condition .....   Proper containers for analyses requested .....   Sufficient volume/mass for analyses requested .....   Samples received within holding time .....   

Aqueous samples for certain analyses received within 15-minute holding time

 pH  Residual Chlorine  Dissolved Sulfide  Dissolved Oxygen .....   Proper preservation chemical(s) noted on COC and/or sample container .....   

Unpreserved aqueous sample(s) received for certain analyses

 Volatile Organics  Total Metals  Dissolved MetalsAcid/base preserved samples - pH within acceptable range .....   Container(s) for certain analysis free of headspace .....    Volatile Organics  Dissolved Gases (RSK-175)  Dissolved Oxygen (SM 4500) Carbon Dioxide (SM 4500)  Ferrous Iron (SM 3500)  Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation .....   CONTAINER TYPE: B (Trip Blank Lot Number: \_\_\_\_\_)Aqueous:  VOA  VOAh  VOAna<sub>2</sub>  100PJ  100PJna<sub>2</sub>  125AGB  125AGBh  125AGBp  125PB  125PBznna (pH\_9) 250AGB  250CGB  250CGBs (pH\_2)  250PB  250PBn (pH\_2)  500AGB  500AGJ  500AGJs (pH\_2)  500PB 1AGB  1AGBna<sub>2</sub>  1AGBs (pH\_2)  1AGBs (O&G)  1PB  1PBna (pH\_12)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_Solid:  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (\_\_\_\_)  EnCores® (\_\_\_\_)  TerraCores® (\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_Air:  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ Other Matrix (\_\_\_\_):  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1050s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOHReviewed by: frz

**SAMPLE RECEIPT CHECKLIST**COOLER 2 OF 2CLIENT: CardnoDATE: 10/28/2017**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)Thermometer ID: SC6 (CF: -0.4°C); Temperature (w/o CF): 2.8 °C (w/ CF): 2.4 °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 Sample(s) received at ambient temperature; placed on ice for transport by courierAmbient Temperature:  Air  FilterChecked by: SR**CUSTODY SEAL:**Cooler  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: SRSample(s)  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 1050**SAMPLE CONDITION:**Yes  No  N/A Chain-of-Custody (COC) document(s) received with samples .....   COC document(s) received complete .....    Sampling date  Sampling time  Matrix  Number of containers No analysis requested  Not relinquished  No relinquished date  No relinquished timeSampler's name indicated on COC .....   Sample container label(s) consistent with COC .....   Sample container(s) intact and in good condition .....   Proper containers for analyses requested .....   Sufficient volume/mass for analyses requested .....   Samples received within holding time .....   

Aqueous samples for certain analyses received within 15-minute holding time

 pH  Residual Chlorine  Dissolved Sulfide  Dissolved Oxygen .....   Proper preservation chemical(s) noted on COC and/or sample container .....   

Unpreserved aqueous sample(s) received for certain analyses

 Volatile Organics  Total Metals  Dissolved MetalsAcid/base preserved samples - pH within acceptable range .....   Container(s) for certain analysis free of headspace .....    Volatile Organics  Dissolved Gases (RSK-175)  Dissolved Oxygen (SM 4500) Carbon Dioxide (SM 4500)  Ferrous Iron (SM 3500)  Hydrogen Sulfide (Hach)Tedlar™ bag(s) free of condensation .....   **CONTAINER TYPE:**  (Trip Blank Lot Number: \_\_\_\_\_)Aqueous:  VOA  VOAh  VOAna<sub>2</sub>  100PJ  100PJna<sub>2</sub>  125AGB  125AGBh  125AGBp  125PB  125PBznna (pH\_9) 250AGB  250CGB  250CGBs (pH\_2)  250PB  250PBn (pH\_2)  500AGB  500AGJ  500AGJs (pH\_2)  500PB 1AGB  1AGBna<sub>2</sub>  1AGBs (pH\_2)  1AGBs (O&G)  1PB  1PBna (pH\_12)  \_\_\_\_\_  \_\_\_\_\_ Solid:  4ozCGJ  8ozCGJ  16ozCGJ  Sleeve (\_\_\_\_\_)  EnCores® (\_\_\_\_\_)  TerraCores® (\_\_\_\_\_)  \_\_\_\_\_  \_\_\_\_\_Air:  Tedlar™  Canister  Sorbent Tube  PUF  \_\_\_\_\_ Other Matrix (\_\_\_\_\_) :  \_\_\_\_\_  \_\_\_\_\_ 

Container: A = Amber, B = Bottle, C = Clear, E = Envelope, G = Glass, J = Jar, P = Plastic, and Z = Ziploc/Resealable Bag

Preservative: b = buffered, f = filtered, h = HCl, n = HNO<sub>3</sub>, na = NaOH, na<sub>2</sub> = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, p = H<sub>3</sub>PO<sub>4</sub>, Labeled/Checked by: 1050s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, x = Na<sub>2</sub>SO<sub>3</sub>+NaHSO<sub>4</sub>.H<sub>2</sub>O, znna = Zn (CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOHReviewed by: SR

**APPENDIX D**

**WASTE DISPOSAL DOCUMENTATION**

# NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

<b>NON-HAZARDOUS WASTE MANIFEST</b>		1. Generator's US EPA ID No.		Manifest Document No. <i>EX1273520171106</i>	2. Page 1 of 1		
GENERATOR	3. Generator's Name and Mailing address <b>ExxonMobil Environmental Services</b> / c/o Cardno 601 N. McDowell Blvd, Petaluma, CA 94954		TRANSPORTER 990 SAN PABLO AVE. ALBANY, CA EN # 79374				
	4. Generator's Phone: (707) 766 2000						
	5. Transporter 1 Company Name <i>CARDNO</i>		6. US EPA ID Number		A. State Transporter's ID <b>707-766-2000</b>		
					B. Transporter 1 Phone		
	7. Transporter 2 Company Name		8. US EPA ID Number		C. State Transporter's ID		
					D. Transporter 2 Phone		
	9. Designated Facility Name and Site Address <b>INSTRAT INC.</b> <b>1105 C. AIRPORT ROAD</b> <b>RIO VISTA, CA 94571</b>		10. US EPA ID Number		E. State Facility's ID		
					F. Facility's Phone <b>530-753-1829</b>		
	11. WASTE DESCRIPTION  <b>a. NON-HAZARDOUS PURGE WATER</b>				12. Containers No.	13. Total Quantity	14. Unit Wt./Vol.
					<i>0</i>	<i>TRAILER</i>	<i>106</i>
TRANSPORTER	b.						
	c.						
	d.						
	G. Additional Descriptions for Materials Listed Above  <i>022735CX 28L, *** 11174007004 125.34</i>				H. Handling Codes for Wastes Listed Above  <i>80 12.4.17 MST 12.1A.17</i>		
	15. Special Handling Instructions and Additional Information						
	16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.						
	Printed/Typed Name <i>ON BEHALF OF EXXON MOBIL</i> <i>SCOTT PERKINS</i>				Signature <i>Scott Perkins</i>		
Date			Month <i>11</i>	Day <i>06</i>	Year <i>17</i>		
17. Transporter 1 Acknowledgement of Receipt of Materials							
Printed/Typed Name <i>NICK HAGERT</i>				Signature <i>Nick Hagert</i>			
Date			Month <i>11</i>	Day <i>22</i>	Year <i>17</i>		
18. Transporter 2 Acknowledgement of Receipt of Materials							
Printed/Typed Name				Signature			
Date			Month	Day	Year		
FACILITY	19. Discrepancy Indication Space						
	20. Facility Owner or Operator; Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.						
	Printed/Typed Name <i>ISI</i> <i>Ruben Gonzalez</i>				Signature <i>Rubén González</i>		
Date			Month <i>11</i>	Day <i>22</i>	Year <i>17</i>		