

**ExxonMobil**  
**Environmental Services Company**  
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**Jennifer C. Sedlachek**  
Project Manager

**ExxonMobil**

**RECEIVED**

By Alameda County Environmental Health 9:24 am, Nov 02, 2015

July 29, 2015

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

**RE: Former Mobil RAS #99105/6301 San Pablo Avenue, Oakland, California.**

Dear Ms. Detterman:

Attached for your review and comment is a copy of the letter report entitled *Groundwater and Soil Vapor Sampling Reporting, Second Quarter 2015*, dated July 29, 2015, for the above-referenced site. The report was prepared by Cardno, of Petaluma, California, and details activities at the subject site.

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

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

Sincerely,



Jennifer C. Sedlachek  
Project Manager

Attachment: Cardno's *Groundwater and Soil Vapor Sampling Reporting, Second Quarter 2015*, dated July 29, 2015

cc: w/ attachment  
Mr. Leroy Griffin, Oakland Fire Department  
Messrs. On Dan and Nathan Lam

w/o attachment  
Mr. Greg Gurss, Cardno

July 29, 2015  
Cardno 2783C.Q152

Ms. Jennifer C. Sedlachek  
ExxonMobil Environmental Services Company  
4096 Piedmont Avenue, #194  
Oakland, California 94611

Cardno

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[www.cardno.com](http://www.cardno.com)

**SUBJECT**      **Groundwater and Soil Vapor Monitoring Report, Second Quarter 2015**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue, Oakland, California

## INTRODUCTION

At the request of ExxonMobil Environmental Services (EMES), on behalf of ExxonMobil Oil Corporation, Cardno performed second quarter 2015 groundwater and soil vapor monitoring and sampling activities at the subject site. Relevant plates, graphs, tables, and appendices are included at the end of this report. Currently, the site operates as an oil change facility.

## GROUNDWATER MONITORING AND SAMPLING SUMMARY

**Gauging and sampling date:** 06/26/15

**Wells gauged and sampled:** MW6 through MW8

**Presence of NAPL:** None

**Groundwater flow direction:** Southwest

**Laboratory:** Eurofins Calscience, Inc., Garden Grove, California

**Analyses performed:** EPA Method 8015B    TPHd, TPHg  
EPA Method 8260B    BTEX, MTBE, TAME, TBA, DIPE, EDB, 1,2-DCA, ETBE

**Waste disposal:** 21 gallons purge and decon water delivered to Instrat, Inc. of Rio Vista, California, on 07/02/15

## SOIL VAPOR MONITORING AND SAMPLING SUMMARY

**Screening and sampling date:** 06/26/15

**Wells screened and sampled:** VW2 through VW4

**Analyses performed:** EPA Method TO-3    TPHg  
EPA Method TO-15    BTEX, MTBE, Full scan VOCs

July 29, 2015  
 Cardno 2783C.Q152 Former Mobil Service Station 99105, Oakland, California

## RESULTS AND CONCLUSIONS

Dissolved-phase concentrations show overall stable or decreasing trends, with the exception of BTEX concentrations in wells MW7 and MW8, which have only been sampled since August 2014. Dissolved-phase concentrations are limited in extent and adequately delineated:

- Toward the north by former well MW1.
- Toward the northwest by well MW2.
- Toward the west by borings B6 through B8 and AB11.
- Toward the east by well MW6.

PID measurements from the soil vapor samples were consistent with or less than measurements taken in 2014. Additionally, Cardno collected a tedlar bag for laboratory analysis to confirm the PID readings. The results indicated that concentrations at the site remained above ESLs. Cardno was unable to take PID readings or sample wells VW1 or VW5 due to wet conditions in the wells.

## RECOMMENDATIONS

Based on the results of Tedlar samples, Cardno does not recommend collecting Summa™ samples at this time. Cardno recommends continued groundwater monitoring and sampling and additional field screening of soil vapor samples during the groundwater sampling events.

Newly-installed wells MW6 through MW8 have now been sampled for four quarters. Cardno recommends incorporating the wells into the semi-annual sampling schedule.

## 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.

Please contact Mr. Greg Gurss, Cardno's project manager for this site, at [greg.gurss@cardno.com](mailto:greg.gurss@cardno.com) or at (916) 692-3130 with any questions regarding this report.

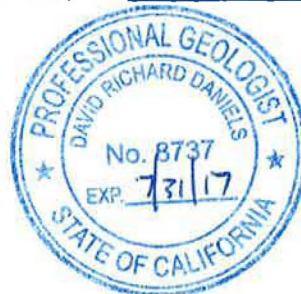
Sincerely,

 SCANNED  
IMAGE

Christine M. Capwell  
 Senior Technical Editor  
 for Cardno  
 707 766 2000  
 Email: [christine.capwell@cardno.com](mailto:christine.capwell@cardno.com)

 SCANNED  
IMAGE

David R. Daniels  
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 Email: [david.daniels@cardno.com](mailto:david.daniels@cardno.com)



July 29, 2015  
Cardno 2783C.Q152 Former Mobil Service Station 99105, Oakland, California

Enclosures:

Acronym List

Plate 1 Site Vicinity Map  
Plate 2 Select Analytical Results  
Plate 3 Groundwater Elevation Map

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Table 1B Additional Cumulative Groundwater Monitoring and Sampling Data  
Table 2 Well Construction Details  
Table 3 Cumulative PID Readings, Vapor Wells  
Table 4 Cumulative Soil Vapor Analytical Data

Appendix A Groundwater Sampling Protocol  
Appendix B Field Data Sheets  
Appendix C Laboratory Analytical Reports  
Appendix D Waste Disposal Documentation

cc: Ms. Karel Detterman, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor, Alameda, California, 94502

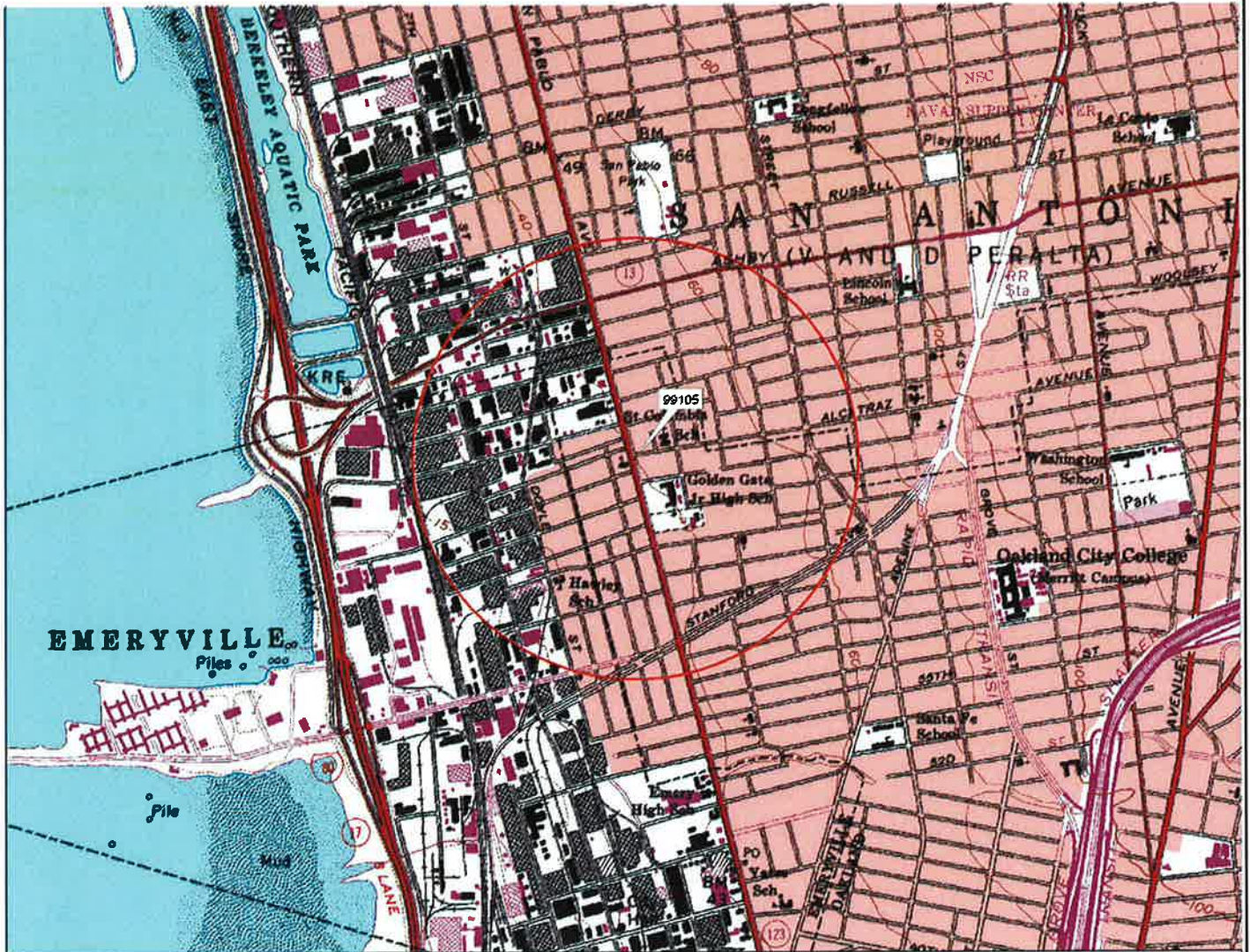
Mr. Leroy Griffin, Oakland Fire Department, 250 Frank H. Ogawa, Suite 3341, Oakland, California, 94612

Messrs. On Dan and Nathan Lam, 200 El Dorado Terrace, San Francisco, California, 94112

July 29, 2015  
 Cardno 2783C.Q152 Former Mobil Service Station 99105, Oakland, California

## ACRONYM LIST

µg/L	Micrograms per liter	NEPA	National Environmental Policy Act
µs	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acfm	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction potential
bgs	Below ground surface	OSHA	Occupational Safety and Health Administration
BTEX	Benzene, toluene, ethylbenzene, and total xylenes	OVA	Organic vapor analyzer
CEQA	California Environmental Quality Act	P&ID	Process & Instrumentation Diagram
cfm	Cubic feet per minute	PAH	Polycyclic aromatic hydrocarbon
COC	Chain of Custody	PCB	Polychlorinated biphenyl
CPT	Cone Penetration (Penetrometer) Test	PCE	Tetrachloroethene 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
HVOC	Halogenated volatile organic compound	SVOC	Semivolatile organic compound
J	Estimated value between MDL and PQL (RL)	TAME	Tertiary amyl methyl ether
LEL	Lower explosive limit	TBA	Tertiary butyl alcohol
LPC	Liquid-phase carbon	TCE	Trichloroethene
LRP	Liquid-ring pump	TOC	Top of well casing elevation; datum is msl
LUFT	Leaking underground fuel tank	TOG	Total oil and grease
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
NAPL	Non-aqueous phase liquid		



DELORME

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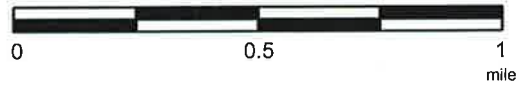
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**EXPLANATION**



1/2-mile radius circle

**APPROXIMATE SCALE**



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



**SITE VICINITY MAP**  
FORMER MOBIL SERVICE STATION 99105  
6301 San Pablo Avenue  
Oakland, California

**PROJECT NO.**

2783

**PLATE**

1

Analyte Concentrations in ug/L  
 Sampled June 26, 2015

- Total Petroleum Hydrocarbons as diesel
- Total Petroleum Hydrocarbons as gasoline
- Benzene
- Methyl Tertiary Butyl Ether

- < Less than the Stated Laboratory Reporting Limit
- ug/L Micrograms per Liter
- g Chromatographic pattern does not match that of the specified standard.



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**SELECT ANALYTICAL RESULTS**  
**June 26, 2015**

FORMER MOBIL SERVICE STATION 99105  
 6301 San Pablo Avenue  
 Oakland, California

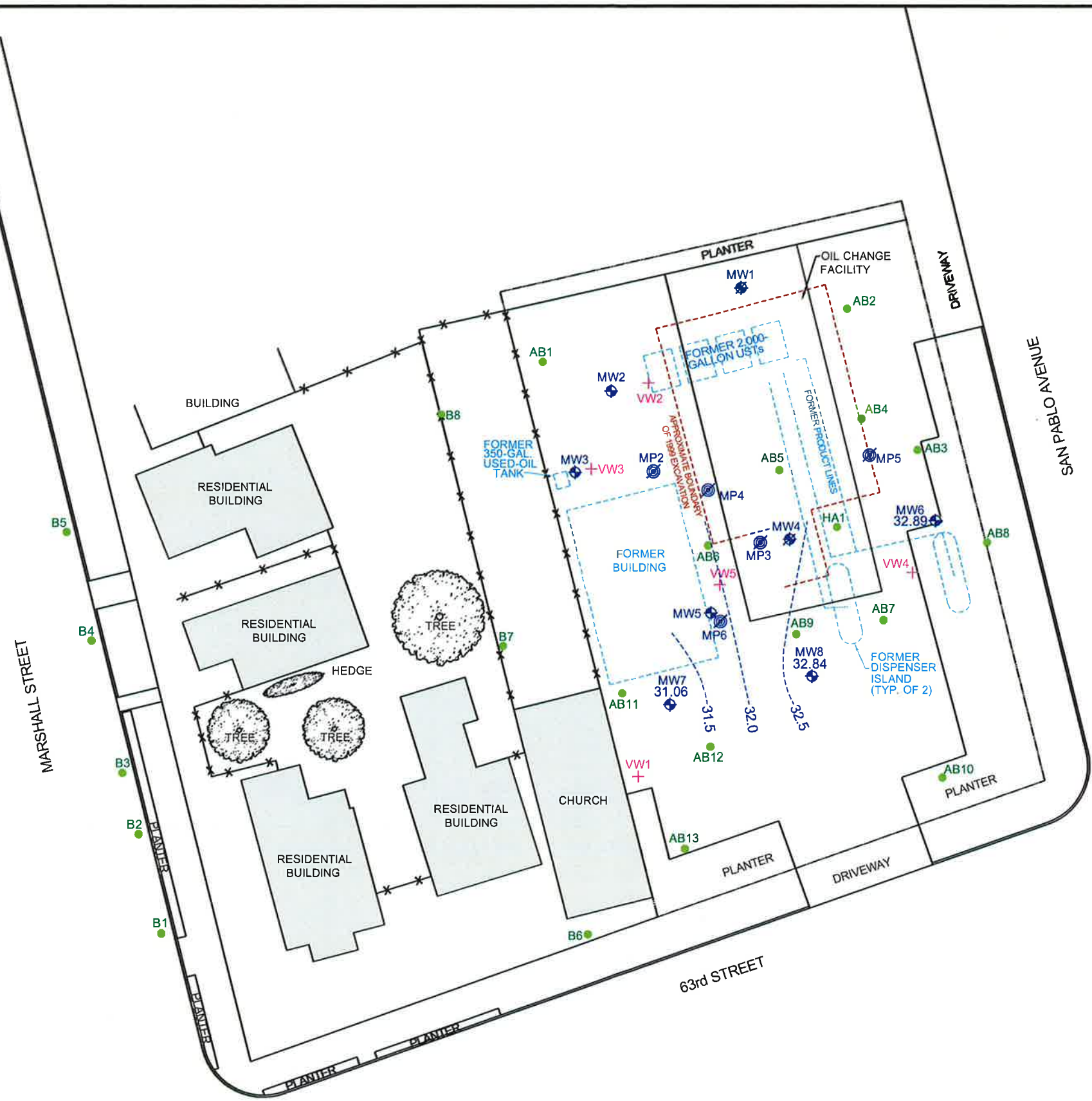
**EXPLANATION**

- MW8 Groundwater Monitoring Well
- MW4 Destroyed Groundwater Monitoring Well
- MP6 Destroyed Observation Well
- AB13 Soil Boring

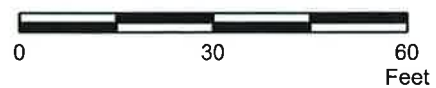
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2783

**PLATE**  
2





APPROXIMATE SCALE



FN 2783 15 2QTR QM



### GROUNDWATER ELEVATION MAP June 26, 2015

FORMER MOBIL SERVICE STATION 99105  
6301 San Pablo Avenue  
Oakland, California

#### EXPLANATION

- MW8 Groundwater Monitoring Well
- 32.84 Groundwater elevation in feet; datum is mean sea level
- MW4 Destroyed Groundwater Monitoring Well
- MP6 Destroyed Observation Well
- 32.5 - - - - Line of Equal Groundwater Elevation; datum is mean sea level
- VW5 Soil Vapor Sampling Well
- AB13 Soil Boring

PROJECT NO.

2783

PLATE

3



**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
(Page 1 of 6)

Well ID	Sampling Date	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8020/8021 (µg/L)	MTBE 8240/8260 (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
<b>Environmental Screening Levels, Groundwater is Current or Potential Drinking Water Source (December 2013)</b>													
Table F-1a		---	---	---	---	100	100	5	5	1	40	30	20
MW1	03/14/96	32.79	4.50	28.29	No	450	610	---	---	0.75	0.54	1.5	59
MW1	05/21/96	32.79	5.64	27.15	No	ND	ND	---	---	ND	ND	ND	ND
MW1	08/13/96	32.79	9.76	23.03	No	ND	ND	---	---	ND	ND	ND	ND
MW1	11/08/96	32.79	10.24	22.55	No	ND	ND	ND	---	ND	0.92	ND	2.1
MW1	01/31/97	32.79	3.83	28.96	No	ND	ND	2.6	ND	ND	0.85	ND	ND
MW1	04/22/97	32.79	9.14	23.65	No	ND	ND	ND	---	ND	ND	ND	ND
MW1	07/29/97	a 32.79	10.18	22.61	No	60e	ND	36	---	0.84	0.95	ND	1.6
MW1	10/09/97	a 32.79	10.46	22.33	No	56e	ND	ND	---	ND	ND	ND	ND
MW1	01/23/98	a 32.79	3.95	28.84	No	33	ND	ND	---	ND	ND	ND	ND
MW1	04/22/98	32.79	5.33	27.46	No	ND	ND	ND	---	ND	ND	ND	ND
MW1	07/21/98	32.79	9.17	23.62	No	---	ND	ND	---	ND	ND	ND	ND
MW1	10/20/98	32.79	10.41	22.38	No	---	ND	ND	---	ND	ND	ND	ND
MW1	01/27/99	32.79	5.51	27.28	No	---	ND	ND	---	ND	ND	ND	ND
MW1	Apr-99	Destroyed during construction activities.											
MW2	03/14/96	32.80	4.51	28.29	No	250	560	---	---	2.0	0.96	4.3	11
MW2	05/21/96	32.80	5.65	27.15	No	560	730	---	---	5.1	1.4	6.7	5.9
MW2	08/13/96	32.80	10.14	22.66	No	380b	490	---	---	25	3.5	7.2	13
MW2	11/08/96	32.80	10.70	22.10	No	160d	520	6.1	---	80	2.7	14	66
MW2	01/31/97	32.80	3.84	28.96	No	130b	74	ND	---	ND	ND	ND	ND
MW2	04/22/97	32.80	9.61	23.19	No	430	260	ND	---	2.7	ND	2.5	ND
MW2	07/29/97	a 32.80	10.53	22.27	No	150d	320	ND	---	28	1.2	10	ND
MW2	10/09/97	a 32.80	10.87	21.93	No	160b	460	2.6	---	43	2.8	2.0	2.6
MW2	01/23/98	a 32.80	3.75	29.05	No	54	ND	ND	---	ND	ND	ND	ND
MW2	04/22/98	32.80	5.36	27.44	No	540	180	ND	---	1.2	0.3	0.4	ND
MW2	07/21/98	32.80	9.55	23.25	No	---	80	ND	---	8.9	2.1	0.6	2.5
MW2	10/20/98	32.80	10.75	22.05	No	---	50	ND	---	0.8	0.7	ND	0.8
MW2	01/27/99	32.80	5.53	27.27	No	---	ND	ND	---	0.6	ND	ND	ND
MW2	07/27/99	32.80	6.20	26.60	No	---	ND	ND	---	ND	0.6	ND	ND
MW2	12/08/99	32.80	9.98	22.82	No	---	ND	ND	---	1.2	0.43	ND	ND
MW2	10/25/00	39.34	11.30	28.04	No	---	<20	<0.30	---	2.0	0.59	0.46	1.3
MW2	01/15/01	39.34	9.41	29.93	No	---	<20	<0.30	---	<0.20	0.46	<0.20	<0.60
MW2	04/10/01	39.34	6.16	33.18	No	---	23	<1.0	---	0.28	<0.20	<0.20	<0.60
MW2	07/24/01	39.34	10.70	28.64	No	---	<50	<0.30	---	<0.20	0.93	<0.20	0.82
MW2	11/27/01	39.34	10.15	29.19	No	---	<50	<0.30	---	1.2	0.22	<0.20	<0.60
MW2	01/18/02	41.99	5.46	36.53	No	---	<50.0	1.40	---	<0.50	<0.50	<0.50	<0.50
MW2	04/10/02	41.99	6.48	35.51	No	---	<50.0	1.80	---	<0.50	<0.50	<0.50	<0.50
MW2	07/12/02	41.99	10.45	31.54	No	---	<50.0	<0.50	---	<0.50	<0.50	<0.50	<0.50
MW2	10/14/02	41.99	11.46	30.53	No	---	<50.0	<0.5	---	<0.5	4.1	0.6	4.0
MW2	01/20/03	41.99	5.39	36.60	No	---	<50.0	0.6	---	<0.50	<0.50	<0.50	<0.50

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
(Page 2 of 6)

Well ID	Sampling Date	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8020/8021 (µg/L)	MTBE 8240/8260 (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
<b>Environmental Screening Levels, Groundwater is Current or Potential Drinking Water Source (December 2013)</b>													
Table F-1a		---	---	---	---	100	100	5	5	1	40	30	20
MW2	04/28/03	41.99	5.87	36.12	No	---	<50.0	<0.50	---	<0.50	<0.50	<0.50	<0.50
MW2	07/15/03	41.99	10.31	31.68	No	---	<50	<0.5	---	<0.5	<0.5	<0.5	<0.5
MW2	10/08/03	41.99	11.20	30.79	No	---	<50	<0.5	---	<0.5	<0.5	<0.5	<0.5
MW2	01/15/04	41.99	5.36	36.63	No	---	63.3	1.0	---	0.70	<0.5	<0.5	<0.5
MW2	Well not sampled from 2004 to 2010.												
MW2	09/17/10	41.99	10.72	31.27	No	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	12/15/10	42.24	Well resurveyed.										
MW2	09/14/11	42.24	10.02	32.22	No	<b>110g</b>	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	01/18/12	42.24	11.24	31.00	No	---	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	01/27/12	42.24	9.65	32.59	No	<50	---	---	---	---	---	---	---
MW2	07/09/12	42.24	10.07	32.17	No	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	01/25/13	42.24	5.62	36.62	No	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	08/23/13	42.24	10.76	31.48	No	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	01/10/14	42.24	11.42	30.82	No	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	07/14/14	42.24	10.52	31.72	No	<49	<50	---	<0.50	<0.50	<0.50	<0.50	0.52
MW2	08/18/14	42.24	11.06	31.18	No	---	---	---	---	---	---	---	---
MW2	11/06/14	42.24	---	---	---	---	---	---	---	---	---	---	---
MW2	01/23/15	42.24	6.10	36.14	No	<50	62g	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	06/26/15	42.24	---	---	---	---	---	---	---	---	---	---	---
MW3	03/14/96	32.80	9.55	23.25	No	<b>1,200</b>	<b>4,200</b>	---	---	<b>220</b>	30	<b>140</b>	<b>520</b>
MW3	05/21/96	32.80	10.16	22.64	No	<b>2,800</b>	<b>8,500</b>	---	---	<b>710</b>	<b>110</b>	<b>440</b>	<b>1,700</b>
MW3	08/13/96	32.80	11.18	21.62	No	<b>2,300c</b>	<b>5,000</b>	---	---	<b>430</b>	ND	<b>200</b>	<b>360</b>
MW3	11/08/96	32.80	11.51	21.29	No	<b>2,900b</b>	<b>8,400</b>	<b>73</b>	ND	<b>890</b>	<b>82</b>	<b>790</b>	<b>1,700</b>
MW3	01/31/97	32.80	7.90	24.90	No	<b>7,500b</b>	<b>16,000</b>	ND	---	<b>660</b>	<b>85</b>	<b>960</b>	<b>1,800</b>
MW3	04/22/97	32.80	10.64	22.16	No	<b>2,700</b>	<b>8,000</b>	<b>200</b>	ND	<b>340</b>	33	<b>400</b>	<b>490</b>
MW3	07/29/97	a 32.80	11.36	21.44	No	<b>2,300b</b>	<b>9,800</b>	ND	---	<b>330</b>	ND	<b>530</b>	<b>530</b>
MW3	10/09/97	a 32.80	11.52	21.28	No	<b>2,600b</b>	<b>7,300</b>	<b>270</b>	ND	<b>300</b>	ND	<b>430</b>	<b>460</b>
MW3	01/23/98	a 32.80	7.50	25.30	No	<b>2,300</b>	<b>6,100</b>	ND	---	<b>190</b>	23	<b>330</b>	<b>320</b>
MW3	04/22/98	32.80	6.81	25.99	No	<b>2,600</b>	<b>4,900</b>	ND	ND	<b>140</b>	12	<b>250</b>	<b>230</b>
MW3	07/21/98	32.80	10.65	22.15	No	---	<b>7,400</b>	<b>74</b>	ND	<b>250</b>	16	<b>400</b>	<b>370</b>
MW3	10/20/98	32.80	11.57	21.23	No	---	<b>6,700</b>	ND	ND	<b>200</b>	18	<b>350</b>	<b>350</b>
MW3	01/27/99	32.80	9.11	23.69	No	---	<b>3,100</b>	<b>13</b>	---	<b>74</b>	4	<b>94</b>	<b>39</b>
MW3	07/27/99	32.80	7.27	25.53	No	---	<b>8,900</b>	ND	---	<b>170</b>	21	<b>360</b>	<b>440</b>
MW3	12/08/99	32.80	10.63	22.17	No	---	<b>4,800</b>	ND	---	<b>94</b>	13	<b>170</b>	<b>210</b>
MW3	10/25/00	39.27	12.08	27.19	No	---	<b>3,800</b>	<50	<5	<b>63</b>	2.9	<b>100</b>	<b>65</b>
MW3	01/15/01	39.27	10.29	28.98	No	---	<b>4,300</b>	<5.0	---	<b>76</b>	9.5	<b>47</b>	<b>76</b>
MW3	04/10/01	39.27	10.11	29.16	No	---	<b>2,700</b>	<20	---	<b>55</b>	4.4	<b>100</b>	<b>37</b>
MW3	07/24/01	39.27	11.57	27.70	No	---	<b>3,100</b>	<1.0	---	<b>110</b>	6.9	<b>110</b>	<b>81</b>
MW3	11/27/01	39.27	10.93	28.34	No	---	<b>2,400</b>	<0.30	---	<b>47</b>	8.9	25	<b>35</b>

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
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Well ID	Sampling Date	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8020/8021 (µg/L)	MTBE 8240/8260 (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
<b>Environmental Screening Levels, Groundwater is Current or Potential Drinking Water Source (December 2013)</b>													
Table F-1a		---	---	---	---	100	100	5	5	1	40	30	20
MW3	01/18/02	41.71	9.47	32.24	No	---	1,130	13.6	---	15.3	2.30	42.0	24.6
MW3	04/10/02	41.71	10.14	31.57	No	---	916	11.2	---	35.1	3.00	22.5	13.8
MW3	07/12/02	41.71	11.34	30.37	No	---	2,330	15.4	---	60.5	2.90	39.8	50.9
MW3	10/14/02	41.71	12.10	29.61	No	---	2,550	<0.5	---	36.9	3.8	20.3	48.0
MW3	01/20/03	41.71	9.20	32.51	No	---	1,750	10.7	---	20.4	304.0	60.7	22.0
MW3	04/28/03	41.71	9.37	32.34	No	---	2,730	11.2	---	10.0	2.7	42.7	20.1
MW3	07/15/03	41.71	11.15	30.56	No	---	1,790	5.6	---	68.8	3.6	39.0	44.7
MW3	10/08/03	41.71	11.89	29.82	No	---	1,320	7.1	---	35.1	4.0	23.6	31.8
MW3	01/15/04	41.71	9.16	32.55	No	---	791	3.4	---	24.4	1.3	40.1	14.7
MW3	Well not sampled from 2004 to 2010.												
MW3	09/17/10	41.71	11.46	30.25	No	99	2,500	---	<0.50	2.6	0.31f	1.8	1.8
MW3	12/15/10	42.18	Well resurveyed.										
MW3	09/14/11	42.18	11.37	30.81	No	270g	1,200	---	<0.50	18	0.95	1.7	1.3
MW3	01/18/12	42.18	12.11	30.07	No	---	910g	---	<0.50	0.89	<0.50	<0.50	0.88
MW3	01/27/12	42.18	10.18	32.00	No	1,000g	---	---	---	---	---	---	---
MW3	07/09/12	42.18	11.15	31.03	No	420g	350g	---	<0.50	7.9	<0.50	<0.50	<0.50
MW3	01/25/13	42.18	9.41	32.77	No	120g	390g	---	<0.50	2.8	<0.50	<0.50	<0.50
MW3	08/23/13	42.18	11.67	30.51	No	310g	640	---	<0.50	1.1	<0.50	<0.50	<0.50
MW3	01/10/14	42.18	12.13	30.05	No	160g	720g	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW3	07/14/14	42.18	11.55	30.63	No	320g	1,100g	---	<0.50	1.8	<0.50	<0.50	0.53
MW3	08/18/14	42.18	11.83	30.35	No	---	---	---	---	---	---	---	---
MW3	11/06/14	42.18	---	---	---	---	---	---	---	---	---	---	---
MW3	01/23/15	41.18	10.19	30.99	No	440g	750g	---	<0.50	5.6	1.7	0.79	1.0
MW3	06/26/15	42.18	---	---	---	---	---	---	---	---	---	---	---
MW4	03/14/96	31.50	4.92	26.58	No	3,500	12,000	---	---	2,200	140	880	2,000
MW4	05/21/96	31.50	8.60	22.90	No	4,200	11,000	---	---	1,700	ND	930	470
MW4	08/13/96	31.50	10.02	21.50	0.02	---	---	---	---	---	---	---	---
MW4	11/08/96	31.50	10.28	21.33	0.15	---	---	---	---	---	---	---	---
MW4	01/31/97	31.50	7.88	23.62	No	8,200b	23,000	ND	---	980	68	1,100	1,400
MW4	04/22/97	31.50	7.40	24.10	No	4,500	8,800	ND	---	950	ND	610	130
MW4	07/29/97	31.50	9.85	21.74	0.12	---	---	---	---	---	---	---	---
MW4	10/09/97	31.50	10.35	21.38	0.30	---	---	---	---	---	---	---	---
MW4	01/23/98	31.50	4.68	27.51	0.92	---	---	---	---	---	---	---	---
MW4	04/22/98	31.50	6.39	25.22	0.14	---	---	---	---	---	---	---	---
MW4	07/21/98	31.50	7.10	24.55	0.20	---	---	---	---	---	---	---	---
MW4	10/20/98	31.50	9.03	22.60	0.17	---	---	---	---	---	---	---	---
MW4	01/27/99	31.50	5.37	26.18	0.07	---	---	---	---	---	---	---	---
MW4	Apr-99	Destroyed during construction activities.											

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
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Well ID	Sampling Date	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8020/8021 (µg/L)	MTBE 8240/8260 (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
<b>Environmental Screening Levels, Groundwater is Current or Potential Drinking Water Source (December 2013)</b>													
Table F-1a		---	---	---	---	100	100	5	5	1	40	30	20
MW5	10/25/00	39.18	10.92	28.26	No	---	2,500	<20	---	79	3.8	66	<20
MW5	01/15/01	39.18	8.32	30.86	No	---	3,900	<5.0	---	120	7.9	280	52
MW5	04/10/01	39.18	7.21	31.97	No	---	8,000	<50	<5	280	4.4	410	100
MW5	07/24/01	39.18	9.54	29.64	No	---	7,000	<1.0	---	360	7.4	380	67
MW5	11/27/01	39.18	8.84	30.34	No	---	5,000	8.9	<2	64	11	340	52
MW5	01/18/02	41.59	6.52	35.07	No	---	6,330	21.8	---	99.1	2.30	103	19.6
MW5	04/10/02	41.59	7.20	34.39	No	---	2,140	<2.50	---	275	8.00	183	24.5
MW5	07/12/02	41.59	8.83	32.76	No	---	3,940	20	<0.50	350	<0.50	268	14
MW5	10/14/02	41.59	10.74	30.85	No	---	4,040	<2.5	---	98.5	9.0	169	29.0
MW5	01/20/03	41.59	6.45	35.14	No	---	7,660	59	<0.50	421	10.0	743	96.0
MW5	04/28/03	41.59	6.68	34.91	No	---	7,510	47	<0.50	403	5.5	524	50.5
MW5	07/15/03	41.59	8.68	32.91	No	---	6,080	52.9	<2.5	406	19.8	412	34.7
MW5	10/08/03	41.59	10.56	31.03	No	---	2,460	54.3	<0.5	160	12.8	173	31.7
MW5	01/15/04	41.59	6.56	35.03	No	---	4,630	37.4	<0.5	181	6.0	312	38.5
MW5	Well not sampled from 2004 to 2010.												
MW5	09/17/10	41.59	9.99	31.60	No	5,700	6,600	---	<5.0	19	<5.0	16	1.4f
MW5	12/15/10	41.86	Well resurveyed.										
MW5	09/14/11	41.86	7.33	34.53	No	1,600g	7,200	---	<2.0	23	<2.0	8.6	<2.0
MW5	01/18/12	41.86	9.46	32.40	No	---	3,600g	---	<1.0	14	<1.0	7.6	<1.0
MW5	01/27/12	41.86	8.81	33.05	No	3,100g	---	---	---	---	---	---	---
MW5	07/09/12	41.86	8.91	32.95	Sheen	29,000g	9,300g	---	<2.5	21	<2.5	6.9	<2.5
MW5	01/25/13	41.86	6.01	35.85	Sheen	22,000g	4,900g	---	<2.0	46	<2.0	4.5	<2.0
MW5	08/23/13	41.86	9.12	32.74	No	34,000g	17,000	---	<2.0	17	<2.0	6.3	<2.0
MW5	01/10/14	41.86	10.30	31.56	No	36,000g	62,000	---	<2.0	4.7	<2.0	3.5	<2.0
MW5	07/14/14	41.86	8.70	33.16	No	88,000g	90,000g	---	<5.0	100	<5.0	12	<5.0
MW5	08/18/14	41.86	9.40	32.46	No	---	---	---	---	---	---	---	---
MW5	08/22/14	41.86	9.60	32.26	No	5,800g	5,100	---	<5.0	520	<5.0	320	81
MW5	11/06/14	41.86	---	---	---	---	---	---	---	---	---	---	---
MW5	01/23/15	41.86	7.30	34.56	No	19,000g	3,300g	---	<5.0	130	<5.0	65	26
MW5	06/26/15	41.86	---	---	---	---	---	---	---	---	---	---	---
MW6	08/18/14	42.00	Well surveyed.										
MW6	08/18/14	42.00	13.12	28.88	No	350g	410g	---	0.60	<0.50	<0.50	<0.50	<0.50
MW6	08/22/14	42.00	11.20	30.80	No	1,000g	1,500g	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW6	11/06/14	42.00	10.77	31.23	No	640g	840g	---	0.80	<0.50	<0.50	<0.50	<0.50
MW6	01/23/15	42.00	7.38	34.62	No	170g	120g	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW6	06/26/15	42.00	9.11	32.89	No	160g	170g	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW7	08/18/14	41.34	Well surveyed.										
MW7	08/18/14	41.34	13.81	27.53	No	<51	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
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Well ID	Sampling Date	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8020/8021 (µg/L)	MTBE 8240/8260 (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
<b>Environmental Screening Levels, Groundwater is Current or Potential Drinking Water Source (December 2013)</b>													
Table F-1a		---	---	---	---	100	100	5	5	1	40	30	20
MW7	08/22/14	41.34	Dry	---	---	---	---	---	---	---	---	---	---
MW7	11/06/14	41.34	11.73	29.61	No	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW7	01/23/15	41.34	10.81	30.53	No	57g	140	---	<0.50	4.2	2.8	6.4	6.1
MW7	06/26/15	41.34	10.28	31.06	No	49g	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
MW8	08/18/14	41.30	Well surveyed.										
MW8	08/18/14	41.30	12.18	29.12	No	440g	1,600	---	<0.50	39	<0.50	19	44
MW8	08/22/14	41.30	13.10	28.20	No	350g	950g	---	<0.50	5.7	<0.50	4.2	6.4
MW8	11/06/14	41.30	10.96	30.34	No	260g	910g	---	<0.50	54	<0.50	25	11
MW8	01/23/15	41.30	6.83	34.47	No	440g	1,000g	---	<0.50	110	1.8	19	10
MW8	06/26/15	41.30	8.46	32.84	No	650g	1,100	---	<2.0	100	<2.0	24	6.2
<b>Grab Groundwater Samples</b>													
<i>Former Gasoline Tank Cavity</i>													
TW1	01/04/96	---	6.00	---	No	700	ND	---	---	ND	ND	ND	ND
<i>Used-Oil Tank Cavity</i>													
WW1	01/04/96	---	3.00	---	No	---	ND	---	---	ND	ND	ND	ND
AB1	03/05/98	---	4.5	---	No	---	1,600	ND	---	31	5.3	79	130
AB2	03/05/98	---	8.0	---	No	---	ND	ND	---	ND	2.9	0.9	5.7
AB3	03/05/98	---	5.5	---	No	---	6,800	230	---	680	100	1,500	2,300
AB4	03/05/98	---	4.0	---	No	---	8,500	ND	---	240	ND	260	720
AB6	03/05/98	---	4.5	---	No	---	12,000	ND	---	350	ND	310	100
AB9	03/05/98	---	6.0	---	No	---	1,000	ND	---	57	12	44	93
AB10	03/05/98	---	2.0	---	No	---	200	ND	---	3.0	1.2	3.2	2.8
AB11	03/05/98	---	8.5	---	No	---	ND	ND	---	ND	ND	ND	ND
AB12	03/05/98	---	6.0	---	No	---	8,800	37	---	660	50	630	940
AB13	03/05/98	---	8.0	---	No	---	210	ND	---	11	0.8	10	15
HA1	01/25/00	---	---	---	---	---	<500	<5.0	---	<0.3	<0.3	<0.3	<0.6
B1	11/18/10	---	Dry	---	---	---	---	---	---	---	---	---	---
B2	11/19/10	---	Dry	---	---	---	---	---	---	---	---	---	---
B3	11/19/10	---	8.45	---	---	<50	<50	---	<0.50	<0.50	<0.50	0.053f	0.21f
B4	11/19/10	---	Dry	---	---	---	---	---	---	---	---	---	---
B5	11/18/10	---	8.95	---	---	<50	<50	---	<0.50	<0.50	<0.50	0.047f	0.21f
W-15-B6	06/19/12	---	15	---	---	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
W-15-B7	06/19/12	---	15	---	---	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50
W-9.5-B8	06/19/12	---	9.5	---	---	230g	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50

**TABLE 1A**  
**CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
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Notes:	Adapted from	ETIC's <i>Report of Groundwater Monitoring, Third Quarter 2010.</i>
TOC Elev.	=	Top of casing elevation.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation.
NAPL	=	Non-aqueous phase liquid.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
MTBE 8020/8021	=	Methyl tertiary butyl ether analyzed using EPA Method 8020 or 8021B.
MTBE 8240/8260	=	Methyl tertiary butyl ether analyzed using EPA Method 8260B or 8240.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B.
DIPE	=	Di-isopropyl ether analyzed using EPA Method 8260B.
ETBE	=	Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	=	Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	=	Tertiary butyl alcohol analyzed using EPA Method 8260B.
1,2-DCA	=	1,2-dichloroethane analyzed using EPA Method 8260B.
EDB	=	1,2-dibromoethane analyzed using EPA Method 8260B.
Ethanol	=	Ethanol analyzed using EPA Method 8260B.
ND	=	Not detected at or above the laboratory reporting limit.
µg/L	=	Micrograms per liter.
<	=	Less than the stated laboratory reporting limit.
---	=	Not analyzed/Not applicable.
a	=	Well sampled using no-purge method.
b	=	Diesel and unidentified hydrocarbons <C15.
c	=	Diesel and unidentified hydrocarbons <C15>C25.
d	=	Diesel and unidentified hydrocarbons >C20.
e	=	Unidentified hydrocarbons >C18.
f	=	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit.
g	=	Chromatographic pattern does not match that of the specified standard.

**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
(Page 1 of 3)

Well ID	Sampling Date	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Ethanol (µg/L)
<b>Environmental Screening Levels, Groundwater is Current or Potential Drinking Water Source (December 2013)</b>								
Table F-1a		---	---	---	12	0.50	0.05	---
MW1	03/14/96 - 01/27/99	Not analyzed for these analytes						
MW1	Apr-99	Destroyed during construction activities.						
MW2	03/14/96 - 01/15/04	Not analyzed for these analytes						
MW2	09/17/10	<0.50	<0.50	<0.50	<10	<0.50	<0.50	---
MW2	09/14/11	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50
MW2	01/18/12	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50
MW2	01/27/12	---	---	---	---	---	---	---
MW2	07/09/12	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW2	01/25/13	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW2	08/23/13	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW2	01/10/14	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW2	07/14/14	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW2	08/18/14	---	---	---	---	---	---	---
MW2	08/22/14	---	---	---	---	---	---	---
MW2	11/06/14	---	---	---	---	---	---	---
MW2	01/23/15	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW2	06/26/15	---	---	---	---	---	---	---
MW3	03/14/96 - 01/15/04	Not analyzed for these analytes						
MW3	09/17/10	0.17f	<0.50	<0.50	9.8f	1.9	<0.50	---
MW3	09/14/11	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<50
MW3	01/18/12	<0.50	<0.50	<0.50	23	<0.50	<0.50	<50
MW3	01/27/12	---	---	---	---	---	---	---
MW3	07/09/12	<0.50	<0.50	<0.50	9.1	1.1	<0.50	---
MW3	01/25/13	<0.50	<0.50	<0.50	9.6	1.1	<0.50	---
MW3	08/23/13	<0.50	<0.50	<0.50	7.2	0.90	<0.50	---
MW3	01/10/14	<0.50	<0.50	<0.50	12	1.1	<0.50	---
MW3	07/14/14	<0.50	<0.50	<0.50	11	1.1	<0.50	---
MW3	08/18/14	---	---	---	---	---	---	---
MW3	08/22/14	---	---	---	---	---	---	---
MW3	11/06/14	---	---	---	---	---	---	---
MW3	01/23/15	<0.50	<0.50	<0.50	8.1	0.70	<0.50	---
MW3	06/26/15	---	---	---	---	---	---	---
MW4	03/14/96 - 01/27/99	Not analyzed for these analytes						
MW4	Apr-99	Destroyed during construction activities.						
MW5	10/25/00 - 01/15/04	Not analyzed for these analytes						
MW5	09/17/10	<5.0	<5.0	<5.0	<100	<5.0	<5.0	---
MW5	09/14/11	<2.0	<2.0	<2.0	25	<2.0	<2.0	<200

**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
(Page 2 of 3)

Well ID	Sampling Date	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	TBA (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Ethanol (µg/L)
<b>Environmental Screening Levels, Groundwater is Current or Potential Drinking Water Source (December 2013)</b>								
Table F-1a		---	---	---	12	0.50	0.05	---
MW5	01/18/12	<1.0	<1.0	<1.0	37	<1.0	<1.0	<100
MW5	01/27/12	---	---	---	---	---	---	---
MW5	07/09/12	<2.5	<2.5	<2.5	36	<2.5	<2.5	---
MW5	01/25/13	<2.0	<2.0	<2.0	45	<2.0	<2.0	---
MW5	08/23/13	<2.0	<2.0	<2.0	42	<2.0	<2.0	---
MW5	01/10/14	<2.0	<2.0	<2.0	36	<2.0	<2.0	---
MW5	07/14/14	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---
MW5	08/18/14	---	---	---	---	---	---	---
MW5	08/22/14	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---
MW5	11/06/14	---	---	---	---	---	---	---
MW5	01/23/15	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---
MW5	06/26/15	---	---	---	---	---	---	---
MW6	08/18/14	<0.50	<0.50	<0.50	14	1.1	<0.50	---
MW6	08/22/14	<0.50	<0.50	<0.50	12	<0.50	<0.50	---
MW6	11/06/14	<0.50	<0.50	<0.50	14	1.3	<0.50	---
MW6	01/23/15	<0.50	<0.50	<0.50	6.7	<0.50	<0.50	---
MW6	06/26/15	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---
MW7	08/18/14	<0.50	<0.50	<0.50	21	3.1	<0.50	---
MW7	08/22/14	Dry	---	---	---	---	---	---
MW7	11/06/14	<0.50	<0.50	<0.50	15	3.9	<0.50	---
MW7	01/23/15	<0.50	<0.50	<0.50	23	5.1	<0.50	---
MW7	06/26/15	<0.50	<0.50	<0.50	11	3.4	<0.50	---
MW8	08/18/14	<0.50	<0.50	<0.50	20	0.78	<0.50	---
MW8	08/22/14	<0.50	<0.50	<0.50	31	<0.50	<0.50	---
MW8	11/06/14	<0.50	<0.50	<0.50	34	2.8	<0.50	---
MW8	01/23/15	<0.50	<0.50	<0.50	20	<0.50	<0.50	---
MW8	06/26/15	<2.0	<2.0	<2.0	20	<2.0	<2.0	---

**Grab Groundwater Samples**

Not analyzed for these analytes prior to 2010.

B1	11/18/10	---	---	---	---	---	---	---
B3	11/19/10	---	---	---	---	8.7	---	---
B4	11/19/10	---	---	---	---	---	---	---
B5	11/18/10	---	---	---	---	0.099f	---	---
W-15-B6	06/19/12	<0.50	<0.50	<0.50	<5.0	---	---	---
W-15-B7	06/19/12	<0.50	<0.50	<0.50	<5.0	---	---	---
W-9.5-B8	06/19/12	<0.50	<0.50	<0.50	<5.0	---	---	---



**TABLE 1B**  
**ADDITIONAL CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
(Page 3 of 3)

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Notes:	Adapted from ETIC's <i>Report of Groundwater Monitoring, Third Quarter 2010</i> .
TOC Elev.	= Top of casing elevation.
DTW	= Depth to water.
GW Elev.	= Groundwater elevation.
NAPL	= Non-aqueous phase liquid.
TPHd	= Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015B.
TPHg	= Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
MTBE 8020/8021	= Methyl tertiary butyl ether analyzed using EPA Method 8020 or 8021B.
MTBE 8240/8260	= Methyl tertiary butyl ether analyzed using EPA Method 8260B or 8240.
BTEX	= Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8260B.
DIPE	= Di-isopropyl ether analyzed using EPA Method 8260B.
ETBE	= Ethyl tertiary butyl ether analyzed using EPA Method 8260B.
TAME	= Tertiary amyl methyl ether analyzed using EPA Method 8260B.
TBA	= Tertiary butyl alcohol analyzed using EPA Method 8260B.
1,2-DCA	= 1,2-dichloroethane analyzed using EPA Method 8260B.
EDB	= 1,2-dibromoethane analyzed using EPA Method 8260B.
Ethanol	= Ethanol analyzed using EPA Method 8260B.
ND	= Not detected at or above the laboratory reporting limit.
µg/L	= Micrograms per liter.
<	= Less than the stated laboratory reporting limit.
---	= Not analyzed/Not applicable.
a	= Well sampled using no-purge method.
b	= Diesel and unidentified hydrocarbons <C15.
c	= Diesel and unidentified hydrocarbons <C15>C25.
d	= Diesel and unidentified hydrocarbons >C20.
e	= Unidentified hydrocarbons >C18.
f	= Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit.
g	= Chromatographic pattern does not match that of the specified standard.

**TABLE 2**  
**WELL CONSTRUCTION DETAILS**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
(Page 1 of 1)

Well ID	Well Installation Date	Well Destruction Date	TOC Elevation (feet)	Well Casing Material	Total Depth (feet)	Well Depth (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (feet)	Filter Pack Material
MW1	03/01/96	Apr-99	32.79	PVC	21.5	21.5	10	4	5-20	0.010	4.5-21.5	#12 Sand
MW2	03/01/96	---	42.24	PVC	21.5	21.5	10	4	5-20	0.010	4.5-21.5	#12 Sand
MW3	03/01/96	---	42.18	PVC	21.5	21.5	10	4	5-20	0.010	4.5-21.5	#12 Sand
MW4	03/01/96	Apr-99	31.50	PVC	26.5	25	10	4	5-25	0.010	4.5-21.5	#12 Sand
MW5	09/06/00	---	41.86	PVC	21.5	21.5	10	4	5-20	0.010	4-21.5	#2/12 Sand
MW6	08/11/14	---	42.00	PVC	18	15	12	4	5-15	0.020	4-15	#2/12 Sand
MW7	08/11/14	---	41.34	PVC	16	15	10	2	5-15	0.020	4-15	#2/12 Sand
MW8	08/15/14	---	41.30	PVC	16	15	12	4	5-15	0.020	4-15	#2/12 Sand
VW1	11/01/10	---	---	Stainless Steel	6	6	4	0.25	5.25-5.75	0.0057	5-6	#2/12 Sand
VW2	11/02/10	---	---	Stainless Steel	6	6	4	0.25	5.25-5.75	0.0057	5-6	#2/12 Sand
VW3	11/01/10	---	---	Stainless Steel	6	6	4	0.25	5.25-5.75	0.0057	5-6	#2/12 Sand
VW4	11/02/10	---	---	Stainless Steel	6	6	4	0.25	5.25-5.75	0.0057	5-6	#2/12 Sand
VW5	11/02/10	---	---	Stainless Steel	6	6	4	0.25	5.25-5.75	0.0057	5-6	#2/12 Sand
MP1	11/16/98	1998	---	PVC	23	23	1.5	1	4-23	0.020	2.5-23	#3 Sand
MP2	11/16/98	1998	---	PVC	20	20	1.5	1	5-20	0.020	4-20	#3 Sand
MP3	11/16/98	1998	---	PVC	18	18	1.5	1	3-18	0.020	2-18	#3 Sand
MP4	11/16/98	1998	---	PVC	18	18	1.5	1	3-18	0.020	2-18	#3 Sand
MP5	11/16/98	1998	---	PVC	18	18	1.5	1	3-18	0.020	2-18	#3 Sand
MP6	11/16/98	1998	---	PVC	17.5	17.5	1.5	1	3.5-17.5	0.020	2.5-17.5	#3 Sand
SVS1	06/18/12	---	38.78	PVC/Stainless Steel	5.5	5	3.25	0.25	4.75-5	0.010	4.5-5	#3 Sand
SVS2	06/18/12	---	41.05	PVC/Stainless Steel	5.5	5	3.25	0.25	4.75-5	0.010	4.5-5	#3 Sand
SVS3	06/18/12	---	42.64	PVC/Stainless Steel	5.5	5	3.25	0.25	4.75-5	0.010	4.5-5	#3 Sand

Notes:  
TOC = Top of casing.  
PVC = Polyvinyl chloride.  
--- = Not applicable/Not available.

**TABLE 3**  
**CUMULATIVE PID READINGS, VAPOR WELLS**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
(Page 1 of 1)

Sample Date	VW1 (ppm)	VW2 (ppm)	VW3 (ppm)	VW4 (ppm)	VW5 (ppm)
08/01/14	559	118	146	>7,000	500
08/18/14	317	1.9	85.8	1,780	395
08/22/14	62	0.4	122	>9,000	473
12/31/14	75.2	Wet	178.1	1,499	165.4
01/23/15	1.2	2.2	64	3,680	18
06/26/15	Wet	0.7	79.5	2,319	Wet

Notes:  
ppm = Parts per million.



**TABLE 4**  
**CUMULATIVE SOIL VAPOR ANALYTICAL DATA**  
Former Mobil Service Station 99105  
6301 San Pablo Avenue  
Oakland, California  
(Page 2 of 2)

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Notes:	
O <sub>2</sub> + A	= Oxygen plus argon analyzed using ASTM D-1946.
Methane	= Methane analyzed using ASTM D-1946.
CO <sub>2</sub>	= Carbon dioxide analyzed using ASTM D-1946.
Helium	= Helium analyzed using ASTM D-1946.
Vacuum	= Vacuum collected using a vacuum gauge.
TPHg	= Total petroleum hydrocarbons analyzed using EPA Method TO-3M.
MTBE	= Methyl tertiary butyl ether analyzed using EPA Method TO-15.
BTEX	= Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method TO-15.
1,2-DCA	= 1,2-dichloroethane analyzed using EPA Method TO-15.
EDB	= 1,2-dibromoethene analyzed using EPA Method TO-15.
TBA	= Tertiary butyl alcohol analyzed using EPA Method TO-15.
Ethanol	= Ethanol analyzed using EPA Method TO-15.
Add'l VOCs	= Additional volatile organic carbons analyzed using EPA Method TO-15.
feet bgs	= Feet below ground surface.
%V	= Percent by volume.
µg/m <sup>3</sup>	= Micrograms per cubic meter.
---	= Not analyzed.
a	= 1,2-dichlorobenzene.
b	= 1,4-dichlorobenzene.
c	= 1,3,5-trimethylbenzene.
d	= 1,2,4-trimethylbenzene.
e	= Bromodichloromethane.
f	= Leak detection compound reported, biased low.
g	= Acetone.
h	= 2-Butanone.
i	= Carbon disulfide.
j	= Chlorobenzene.
k	= Chloroform.
l	= Chloromethane.
m	= 4-ethyltoluene.
n	= Trichloroethene.
o	= Tetrachloroethene.
p	= Samples collected in a tedlar bag.
q	= Unable to sample well due to wet conditions.

**APPENDIX A**  
**GROUNDWATER SAMPLING PROTOCOL**

## 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 well casing volume =  $\pi r^2 h (7.48)$  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

Cardno



Project ID #: 99105 Cardno Job # 2703  
Subject: M/S SVS Date: 6/26/15  
Equipment Used: DTW meter, PID, h/roots Sheet: 1051  
Name(s): Azot R. Magdonov  
Time Arrived On Site: 0515 Time Departed Site: 1115 Total Travel: -

Arrived on site conducted M/S meeting, reviewed applicable JSAs, and issued GW permit. Calibrated PID and water multimeter prepared vacuum box and tedlar bags. 0600-0645 checked with PID and sampled VW2 and VW3 vapor wells. 0600 - opened all GW wells (MW6, 7, 8) and test them recharge before gauging. 0700 measured DTW in MW6, 7, 8. 0700-0810 - hand-bailed MW6, 7, 8. All wells went dry at 2 case volumes. Let wells recharge and checked vapor wells VW1, VW4, VW5. VW1 and VW5 - 'wet', couldn't sample. Sampled VW4.

0905-1045 sampled MW6, 7, 8 Wells do not recharge to 80% in 2 hrs.

1115 closed the permit, checked the site, and left.

VOC concentrations measured by Mini RAE 2000 PID calibrated at 100ppm Hexone:  
VW1 - wet (not measured);  
VW2 - 0.7 ppm;  
VW3 - 79.5 ppm;  
VW4 - 2319 ppm;  
VW5 - wet (not measured).

Water produced on site:  
Purge - 21 gal.  
Decon - 0 gal.  
Total - 21 gal.

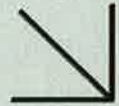
\*M/P/S 3 WELLS      \*M/S - WELLS      \*M/S LOW FLOW - WELLS  
\*MO - WELLS      \*O/P - WELLS      \*POTABLE - WELLS  
\*TOOK TWO AT 1000 AM  
TOTAL PURGED GALLONS: 21  
\* - T/C SET UPS







**APPENDIX C**  
**LABORATORY ANALYTICAL REPORTS**



**WORK ORDER NUMBER: 15-06-2174**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Cardno ERI

**Client Project Name:** ExxonMobil 99105/022783C

**Attention:** Greg Gurst  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

*Cecile de Guia*

Approved for release on 07/09/2015 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: 15-06-2174

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 06/27/15. They were assigned to Work Order 15-06-2174.

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  $\leq 15$  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

Client: Cardno ERI	Work Order:	15-06-2174
601 North McDowell Blvd.	Project Name:	ExxonMobil 99105/022783C
Petaluma, CA 94954-2312	PO Number:	022783C
	Date/Time Received:	06/27/15 10:20
	Number of Containers:	26

Attn: Greg Gurs

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
MW6	15-06-2174-1	06/26/15 10:45	8	Aqueous
MW7	15-06-2174-2	06/26/15 09:30	8	Aqueous
MW8	15-06-2174-3	06/26/15 10:15	8	Aqueous
QCBB	15-06-2174-4	06/26/15 09:05	2	Aqueous

## Analytical Report

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

Date Received: 06/27/15  
Work Order: 15-06-2174  
Preparation: EPA 3510/SG 0.5  
Method: EPA 8015B (M)  
Units: ug/L

Project: ExxonMobil 99105/022783C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	15-06-2174-1-J	06/26/15 10:45	Aqueous	GC 45	06/29/15	06/29/15 23:42	150629B05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Diesel		160		48		1.00	SG,HD
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		82		68-140			
MW7	15-06-2174-2-J	06/26/15 09:30	Aqueous	GC 45	06/29/15	06/30/15 10:54	150629B05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Diesel		49		48		1.00	SG,HD
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		82		68-140			
MW8	15-06-2174-3-J	06/26/15 10:15	Aqueous	GC 45	06/29/15	06/30/15 00:19	150629B05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Diesel		650		48		1.00	SG,HD
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		77		68-140			
Method Blank	099-15-304-1075	N/A	Aqueous	GC 45	06/29/15	06/29/15 21:33	150629B05
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Diesel		ND		50		1.00	
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
n-Octacosane		74		68-140			

Return to Contents

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

**Analytical Report**

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

Date Received: 06/27/15  
Work Order: 15-06-2174  
Preparation: EPA 5030C  
Method: EPA 8015B (M)  
Units: ug/L

Project: ExxonMobil 99105/022783C

Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	15-06-2174-1-H	06/26/15 10:45	Aqueous	GC 1	07/02/15	07/02/15 19:18	150702L017
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		170		50		1.00	HD
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
1,4-Bromofluorobenzene		69		38-134			
MW7	15-06-2174-2-H	06/26/15 09:30	Aqueous	GC 1	07/02/15	07/02/15 19:54	150702L017
<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		65		38-134			
MW8	15-06-2174-3-H	06/26/15 10:15	Aqueous	GC 1	07/02/15	07/02/15 20:30	150702L017
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		1100		50		1.00	
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
1,4-Bromofluorobenzene		93		38-134			
Method Blank	099-12-436-10194	N/A	Aqueous	GC 1	07/02/15	07/02/15 15:09	150702L017
<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		64		38-134			

Return to Contents ↑

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

## Analytical Report

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

Date Received: 06/27/15  
Work Order: 15-06-2174  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 99105/022783C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	15-06-2174-1-A	06/26/15 10:45	Aqueous	GC/MS L	07/01/15	07/01/15 21:10	150701L006

<u>Parameter</u>	<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	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	102	68-120	
Dibromofluoromethane	98	80-127	
1,2-Dichloroethane-d4	107	80-128	
Toluene-d8	100	80-120	

Return to Contents

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

## Analytical Report

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

Date Received: 06/27/15  
Work Order: 15-06-2174  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 99105/022783C

Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW7	15-06-2174-2-A	06/26/15 09:30	Aqueous	GC/MS L	07/01/15	07/01/15 21:39	150701L006
<u>Parameter</u>		<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)		11		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	
1,2-Dibromoethane		ND		0.50		1.00	
1,2-Dichloroethane		3.4		0.50		1.00	
<u>Surrogate</u>		<u>Rec. (%)</u>		<u>Control Limits</u>		<u>Qualifiers</u>	
1,4-Bromofluorobenzene		102		68-120			
Dibromofluoromethane		98		80-127			
1,2-Dichloroethane-d4		108		80-128			
Toluene-d8		98		80-120			


 Return to Contents

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

**Analytical Report**

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

Date Received: 06/27/15  
Work Order: 15-06-2174  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 99105/022783C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW8	15-06-2174-3-A	06/26/15 10:15	Aqueous	GC/MS L	07/01/15	07/01/15 22:07	150701L006

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Benzene	100	2.0	4.00	
Toluene	ND	2.0	4.00	
Ethylbenzene	24	2.0	4.00	
o-Xylene	ND	2.0	4.00	
p/m-Xylene	6.2	2.0	4.00	
Xylenes (total)	6.2	2.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	4.00	
Tert-Butyl Alcohol (TBA)	20	20	4.00	
Diisopropyl Ether (DIPE)	ND	2.0	4.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.0	4.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.0	4.00	
1,2-Dibromoethane	ND	2.0	4.00	
1,2-Dichloroethane	ND	2.0	4.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	102	68-120	
Dibromofluoromethane	100	80-127	
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	98	80-120	


 Return to Contents

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

## Analytical Report

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

Date Received: 06/27/15  
Work Order: 15-06-2174  
Preparation: EPA 5030C  
Method: EPA 8260B  
Units: ug/L

Project: ExxonMobil 99105/022783C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-884-1265	N/A	Aqueous	GC/MS L	07/01/15	07/01/15 11:52	150701L006

<u>Parameter</u>	<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	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	

<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	101	80-127	
1,2-Dichloroethane-d4	100	80-128	
Toluene-d8	99	80-120	

Return to Contents

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



**Quality Control - Spike/Spike Duplicate**

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

Date Received: 06/27/15  
Work Order: 15-06-2174  
Preparation: EPA 5030C  
Method: EPA 8015B (M)

Project: ExxonMobil 99105/022783C

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-06-2161-1	Sample	Aqueous	GC 1	07/02/15	07/02/15 15:45	150702S009
15-06-2161-1	Matrix Spike	Aqueous	GC 1	07/02/15	07/02/15 16:20	150702S009
15-06-2161-1	Matrix Spike Duplicate	Aqueous	GC 1	07/02/15	07/02/15 16:56	150702S009

Parameter	<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>
TPH as Gasoline	ND	2000	1952	98	1937	97	68-122	1	0-18	

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RPD: Relative Percent Difference. CL: Control Limits



**Quality Control - Spike/Spike Duplicate**

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

Date Received: 06/27/15  
 Work Order: 15-06-2174  
 Preparation: EPA 5030C  
 Method: EPA 8260B

Project: ExxonMobil 99105/022783C

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number				
15-06-2176-25	Sample	Aqueous	GC/MS L	07/01/15	07/01/15 13:00	150701S006				
15-06-2176-25	Matrix Spike	Aqueous	GC/MS L	07/01/15	07/01/15 15:26	150701S006				
15-06-2176-25	Matrix Spike Duplicate	Aqueous	GC/MS L	07/01/15	07/01/15 15:55	150701S006				
<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	10.42	104	10.50	105	75-125	1	0-20	
Toluene	ND	10.00	10.29	103	10.41	104	75-125	1	0-20	
Ethylbenzene	ND	10.00	10.58	106	10.63	106	75-125	1	0-20	
o-Xylene	ND	10.00	9.834	98	9.967	100	75-127	1	0-20	
p/m-Xylene	ND	20.00	20.73	104	20.82	104	75-125	0	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.840	98	11.17	112	71-131	13	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	57.13	114	51.36	103	20-180	11	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	10.79	108	11.44	114	64-136	6	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	9.128	91	10.39	104	73-133	13	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	8.488	85	9.814	98	75-125	15	0-20	
1,2-Dibromoethane	ND	10.00	10.11	101	11.05	110	75-126	9	0-20	
1,2-Dichloroethane	ND	10.00	10.35	103	10.95	110	75-127	6	0-20	

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RPD: Relative Percent Difference. CL: Control Limits



Quality Control - LCS/LCSD

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

Date Received: 06/27/15  
Work Order: 15-06-2174  
Preparation: EPA 3510/SG 0.5  
Method: EPA 8015B (M)

Project: ExxonMobil 99105/022783C

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-304-1075	LCS	Aqueous	GC 45	06/29/15	06/29/15 21:51	150629B05
099-15-304-1075	LCSD	Aqueous	GC 45	06/29/15	06/29/15 22:09	150629B05

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	2000	2271	114	2305	115	75-117	1	0-13	

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RPD: Relative Percent Difference. CL: Control Limits

## Quality Control - LCS

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

Date Received: 06/27/15  
Work Order: 15-06-2174  
Preparation: EPA 5030C  
Method: EPA 8015B (M)

Project: ExxonMobil 99105/022783C

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-436-10194	LCS	Aqueous	GC 1	07/02/15	07/02/15 14:33	150702L017
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
TPH as Gasoline		2000	1922	96	78-120	

## Quality Control - LCS

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

Date Received: 06/27/15  
Work Order: 15-06-2174  
Preparation: EPA 5030C  
Method: EPA 8260B

Project: ExxonMobil 99105/022783C

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-884-1265	LCS	Aqueous	GC/MS L	07/01/15	07/01/15 11:07	150701L006
Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	9.931	99	80-120	73-127	
Toluene	10.00	9.946	99	80-120	73-127	
Ethylbenzene	10.00	10.19	102	80-120	73-127	
o-Xylene	10.00	9.599	96	80-120	73-127	
p/m-Xylene	20.00	20.02	100	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	9.468	95	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	52.29	105	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	10.19	102	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	9.125	91	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	8.497	85	80-120	73-127	
1,2-Dibromoethane	10.00	10.08	101	80-120	73-127	
1,2-Dichloroethane	10.00	10.11	101	80-122	73-129	

Total number of LCS compounds: 12

Total number of ME compounds: 0

Total number of ME compounds allowed: 1

LCS ME CL validation result: Pass

Return to Contents 

RPD: Relative Percent Difference. CL: Control Limits

**Sample Analysis Summary Report**

Work Order: 15-06-2174

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 5030C	902	GC 1	2
EPA 8015B (M)	EPA 3510/SG 0.5	972	GC 45	1
EPA 8260B	EPA 5030C	316	GC/MS L	2

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

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

<u>Qualifiers</u>	<u>Definition</u>
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to suspected matrix interference.
BB	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
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 stnds.
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.





800-322-5555 www.gso.com

2174

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

**Tracking #: 528404883**

**SDS**



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

**ORC**  
**GARDEN GROVE**

**A**

**COD: \$0.00**  
**Weight: 0 lb(s)**  
**Reference:**  
THE SOURCE GROUP, CARDNO ERI  
**Delivery Instructions:**

**D92845A**



39409944

**Signature Type: REQUIRED**

Print Date: 6/26/2015 2:05 PM

**LABEL INSTRUCTIONS:**

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

Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer. Securely attach this label to your package, do not cover the barcode.

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Calscience

WORK ORDER NUMBER: 15-06-2174

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 1

CLIENT: Cardno ERI

DATE: 06/27/2015

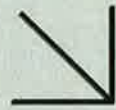
**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)  
 Thermometer ID: SC2 (CF:-0.3°C); Temperature (w/o CF): 3.8°C (w/ CF): 3.5°C;  Blank  Sample  
 Sample(s) outside temperature criteria (PM/APM contacted by: \_\_\_\_\_)  
 Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling  
 Sample(s) received at ambient temperature; placed on ice for transport by courier  
 Ambient Temperature:  Air  Filter Checked by: 802

**CUSTODY SEAL:**  
 Cooler  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 802  
 Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A Checked by: 1020

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Container(s) for certain analysis free of headspace .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**CONTAINER TYPE:** B (Trip Blank Lot Number: \_\_\_\_\_)  
 Aqueous:  VOA  VOA<sub>h</sub>  VOAn<sub>2</sub>  100PJ  100PJn<sub>2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB  
 125PBz<sub>na</sub>  250AGB  250CGB  250CGB<sub>s</sub>  250PB  250PB<sub>n</sub>  500AGB  500AGJ  500AGJ<sub>s</sub>  
 500PB  1AGB  1AGBn<sub>2</sub>  1AGB<sub>s</sub>  1PB  1PBn<sub>2</sub>  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
 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: 1020  
 s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, z<sub>na</sub> = Zn(CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed by: 802

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**WORK ORDER NUMBER: 15-06-2169**

*The difference is service*



AIR | SOIL | WATER | MARINE CHEMISTRY

**Analytical Report For**

**Client:** Cardno ERI

**Client Project Name:** ExxonMobil 99105/022783C

**Attention:** Greg Gurss  
601 North McDowell Blvd.  
Petaluma, CA 94954-2312

*Cecile de Guia*

Approved for release on 07/10/2015 by:  
Cecile deGuia  
Project Manager

ResultLink ▶

Email your PM ▶



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Work Order Number: 15-06-2169

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Work Order: 15-06-2169

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**Condition Upon Receipt:**

Samples were received under Chain-of-Custody (COC) on 06/27/15. They were assigned to Work Order 15-06-2169.

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  $\leq 15$  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

Client: Cardno ERI	Work Order:	15-06-2169
601 North McDowell Blvd.	Project Name:	ExxonMobil 99105/022783C
Petaluma, CA 94954-2312	PO Number:	022783C
	Date/Time Received:	06/27/15 10:20
	Number of Containers:	3

Attn: Greg Gurst

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
VW2	15-06-2169-1	06/26/15 06:15	1	Air
VW3	15-06-2169-2	06/26/15 06:45	1	Air
VW4	15-06-2169-3	06/26/15 09:00	1	Air

**Analytical Report**

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

Date Received: 06/27/15  
Work Order: 15-06-2169  
Preparation: N/A  
Method: EPA TO-15M  
Units: mg/m3

Project: ExxonMobil 99105/022783C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW2	15-06-2169-1-A	06/26/15 06:15	Air	GC/MS NN	N/A	06/27/15 19:39	150627L03
Parameter	Result	RL	DF	Qualifiers			
Benzene	0.0047	0.0016	1.00				
Toluene	0.026	0.019	1.00				
Ethylbenzene	0.012	0.0022	1.00				
o-Xylene	0.0085	0.0022	1.00				
p/m-Xylene	0.020	0.0087	1.00				
Xylenes (total)	0.029	0.0022	1.00				
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00				
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00				
Diisopropyl Ether (DIPE)	ND	0.0084	1.00				
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00				
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00				
1,1,1-Trichloroethane	ND	0.0027	1.00				
1,1,1,2-Tetrachloroethane	ND	0.0069	1.00				
1,1,2-Trichloroethane	ND	0.0027	1.00				
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.00				
1,1-Dichloroethane	ND	0.0020	1.00				
1,1-Dichloroethene	ND	0.0020	1.00				
1,2,4-Trichlorobenzene	ND	0.015	1.00				
1,2,4-Trimethylbenzene	ND	0.0074	1.00				
1,3,5-Trimethylbenzene	ND	0.0025	1.00				
c-1,2-Dichloroethene	ND	0.0020	1.00				
1,2-Dibromoethane	ND	0.0038	1.00				
1,2-Dichlorobenzene	ND	0.0030	1.00				
1,2-Dichloroethane	ND	0.0020	1.00				
1,2-Dichloropropane	ND	0.0023	1.00				
t-1,2-Dichloroethene	ND	0.0020	1.00				
c-1,3-Dichloropropene	ND	0.0023	1.00				
1,3-Dichlorobenzene	ND	0.0030	1.00				
t-1,3-Dichloropropene	ND	0.0045	1.00				
1,4-Dichlorobenzene	ND	0.0030	1.00				
4-Methyl-2-Pentanone	ND	0.0061	1.00				
4-Ethyltoluene	ND	0.0025	1.00				
Acetone	ND	0.12	1.00				
Benzyl Chloride	ND	0.0078	1.00				
Bromoform	ND	0.0052	1.00				


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

## Analytical Report

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

Date Received: 06/27/15  
Work Order: 15-06-2169  
Preparation: N/A  
Method: EPA TO-15M  
Units: mg/m3

Project: ExxonMobil 99105/022783C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Bromomethane	ND	0.0019	1.00	
Carbon Disulfide	ND	0.031	1.00	
Carbon Tetrachloride	ND	0.0031	1.00	
Chlorobenzene	ND	0.0023	1.00	
Dibromochloromethane	ND	0.0043	1.00	
Chloroethane	ND	0.0013	1.00	
Chloroform	ND	0.0024	1.00	
Chloromethane	ND	0.0010	1.00	
Bromodichloromethane	ND	0.0034	1.00	
Dichlorodifluoromethane	ND	0.0025	1.00	
Dichlorotetrafluoroethane	ND	0.014	1.00	
Hexachloro-1,3-Butadiene	ND	0.016	1.00	
2-Butanone	0.0089	0.0044	1.00	
Methylene Chloride	ND	0.017	1.00	
2-Hexanone	ND	0.0061	1.00	
Styrene	ND	0.0064	1.00	
Tetrachloroethene	ND	0.0034	1.00	
Trichloroethene	ND	0.0027	1.00	
Trichlorofluoromethane	ND	0.0056	1.00	
Vinyl Acetate	ND	0.0070	1.00	
Vinyl Chloride	ND	0.0013	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	105	57-129		
1,2-Dichloroethane-d4	120	47-137		
Toluene-d8	104	78-156		

Return to Contents

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

## Analytical Report

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

Date Received: 06/27/15  
Work Order: 15-06-2169  
Preparation: N/A  
Method: EPA TO-15M  
Units: mg/m3

Project: ExxonMobil 99105/022783C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW3	15-06-2169-2-A	06/26/15 06:45	Air	GC/MS II	N/A	06/28/15 23:09	150628L02

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Benzene	0.0060	0.0032	2.00	
Toluene	ND	0.038	2.00	
Ethylbenzene	0.084	0.0043	2.00	
o-Xylene	0.0097	0.0043	2.00	
p/m-Xylene	0.058	0.017	2.00	
Xylenes (total)	0.068	0.0043	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.014	2.00	
Tert-Butyl Alcohol (TBA)	ND	0.030	2.00	
Diisopropyl Ether (DIPE)	ND	0.017	2.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.017	2.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.017	2.00	
1,1,1-Trichloroethane	ND	0.0055	2.00	
1,1,2,2-Tetrachloroethane	ND	0.014	2.00	
1,1,2-Trichloroethane	ND	0.0055	2.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.023	2.00	
1,1-Dichloroethane	ND	0.0040	2.00	
1,1-Dichloroethene	ND	0.0040	2.00	
1,2,4-Trichlorobenzene	ND	0.030	2.00	
1,2,4-Trimethylbenzene	0.18	0.015	2.00	
1,3,5-Trimethylbenzene	0.076	0.0049	2.00	
c-1,2-Dichloroethene	ND	0.0040	2.00	
1,2-Dibromoethane	ND	0.0077	2.00	
1,2-Dichlorobenzene	ND	0.0060	2.00	
1,2-Dichloroethane	ND	0.0040	2.00	
1,2-Dichloropropane	ND	0.0046	2.00	
t-1,2-Dichloroethene	ND	0.0040	2.00	
c-1,3-Dichloropropene	ND	0.0045	2.00	
1,3-Dichlorobenzene	ND	0.0060	2.00	
t-1,3-Dichloropropene	ND	0.0091	2.00	
1,4-Dichlorobenzene	ND	0.0060	2.00	
4-Methyl-2-Pentanone	ND	0.012	2.00	
4-Ethyltoluene	0.046	0.0049	2.00	
Acetone	ND	0.24	2.00	
Benzyl Chloride	ND	0.016	2.00	
Bromoform	ND	0.010	2.00	

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



**Analytical Report**

Cardno ERI	Date Received:	06/27/15
601 North McDowell Blvd.	Work Order:	15-06-2169
Petaluma, CA 94954-2312	Preparation:	N/A
	Method:	EPA TO-15M
	Units:	mg/m3

Project: ExxonMobil 99105/022783C Page 4 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Bromomethane	ND	0.0039	2.00	
Carbon Disulfide	ND	0.062	2.00	
Carbon Tetrachloride	ND	0.0063	2.00	
Chlorobenzene	ND	0.0046	2.00	
Dibromochloromethane	ND	0.0085	2.00	
Chloroethane	ND	0.0026	2.00	
Chloroform	ND	0.0049	2.00	
Chloromethane	ND	0.0021	2.00	
Bromodichloromethane	ND	0.0067	2.00	
Dichlorodifluoromethane	ND	0.0049	2.00	
Dichlorotetrafluoroethane	ND	0.028	2.00	
Hexachloro-1,3-Butadiene	ND	0.032	2.00	
2-Butanone	ND	0.0088	2.00	
Methylene Chloride	ND	0.035	2.00	
2-Hexanone	ND	0.012	2.00	
Styrene	ND	0.013	2.00	
Tetrachloroethene	ND	0.0068	2.00	
Trichloroethene	ND	0.0054	2.00	
Trichlorofluoromethane	ND	0.011	2.00	
Vinyl Acetate	ND	0.014	2.00	
Vinyl Chloride	ND	0.0026	2.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	126	57-129		
1,2-Dichloroethane-d4	108	47-137		
Toluene-d8	60	78-156	AZ	

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

## Analytical Report

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

Date Received: 06/27/15  
Work Order: 15-06-2169  
Preparation: N/A  
Method: EPA TO-15M  
Units: mg/m3

Project: ExxonMobil 99105/022783C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW4	15-06-2169-3-A	06/26/15 09:00	Air	GC/MS II	N/A	06/28/15 23:57	150628L02

Parameter	Result	RL	DF	Qualifiers
Benzene	18	1.6	1000	
Toluene	ND	19	1000	
Ethylbenzene	50	2.2	1000	
o-Xylene	ND	2.2	1000	
p/m-Xylene	21	8.7	1000	
Xylenes (total)	21	2.2	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	7.2	1000	
Tert-Butyl Alcohol (TBA)	ND	15	1000	
Diisopropyl Ether (DIPE)	ND	8.4	1000	
Ethyl-t-Butyl Ether (ETBE)	ND	8.4	1000	
Tert-Amyl-Methyl Ether (TAME)	ND	8.4	1000	
1,1,1-Trichloroethane	ND	2.7	1000	
1,1,2,2-Tetrachloroethane	ND	6.9	1000	
1,1,2-Trichloroethane	ND	2.7	1000	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	11	1000	
1,1-Dichloroethane	ND	2.0	1000	
1,1-Dichloroethene	ND	2.0	1000	
1,2,4-Trichlorobenzene	ND	15	1000	
1,2,4-Trimethylbenzene	30	7.4	1000	
1,3,5-Trimethylbenzene	15	2.5	1000	
c-1,2-Dichloroethene	ND	2.0	1000	
1,2-Dibromoethane	ND	3.8	1000	
1,2-Dichlorobenzene	ND	3.0	1000	
1,2-Dichloroethane	ND	2.0	1000	
1,2-Dichloropropane	ND	2.3	1000	
t-1,2-Dichloroethene	ND	2.0	1000	
c-1,3-Dichloropropene	ND	2.3	1000	
1,3-Dichlorobenzene	ND	3.0	1000	
t-1,3-Dichloropropene	ND	4.5	1000	
1,4-Dichlorobenzene	ND	3.0	1000	
4-Methyl-2-Pentanone	ND	6.1	1000	
4-Ethyltoluene	11	2.5	1000	
Acetone	ND	120	1000	
Benzyl Chloride	ND	7.8	1000	
Bromoform	ND	5.2	1000	

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

## Analytical Report

Cardno ERI	Date Received:	06/27/15
601 North McDowell Blvd.	Work Order:	15-06-2169
Petaluma, CA 94954-2312	Preparation:	N/A
	Method:	EPA TO-15M
	Units:	mg/m3

Project: ExxonMobil 99105/022783C Page 6 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Bromomethane	ND	1.9	1000	
Carbon Disulfide	ND	31	1000	
Carbon Tetrachloride	ND	3.1	1000	
Chlorobenzene	ND	2.3	1000	
Dibromochloromethane	ND	4.3	1000	
Chloroethane	ND	1.3	1000	
Chloroform	ND	2.4	1000	
Chloromethane	ND	1.0	1000	
Bromodichloromethane	ND	3.4	1000	
Dichlorodifluoromethane	ND	2.5	1000	
Dichlorotetrafluoroethane	ND	14	1000	
Hexachloro-1,3-Butadiene	ND	16	1000	
2-Butanone	ND	4.4	1000	
Methylene Chloride	ND	17	1000	
2-Hexanone	ND	6.1	1000	
Styrene	ND	6.4	1000	
Tetrachloroethene	ND	3.4	1000	
Trichloroethene	ND	2.7	1000	
Trichlorofluoromethane	ND	5.6	1000	
Vinyl Acetate	ND	7.0	1000	
Vinyl Chloride	ND	1.3	1000	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	106	57-129		
1,2-Dichloroethane-d4	93	47-137		
Toluene-d8	86	78-156		

 Return to Contents 

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

## Analytical Report

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

Date Received: 06/27/15  
Work Order: 15-06-2169  
Preparation: N/A  
Method: EPA TO-15M  
Units: mg/m3

Project: ExxonMobil 99105/022783C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-12-981-5544	N/A	Air	GC/MS NN	N/A	06/27/15 17:04	150627L03

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,1,1-Trichloroethane	ND	0.0027	1.00	
1,1,2,2-Tetrachloroethane	ND	0.0069	1.00	
1,1,2-Trichloroethane	ND	0.0027	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.011	1.00	
1,1-Dichloroethane	ND	0.0020	1.00	
1,1-Dichloroethene	ND	0.0020	1.00	
1,2,4-Trichlorobenzene	ND	0.015	1.00	
1,2,4-Trimethylbenzene	ND	0.0074	1.00	
1,3,5-Trimethylbenzene	ND	0.0025	1.00	
c-1,2-Dichloroethene	ND	0.0020	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichlorobenzene	ND	0.0030	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	
1,2-Dichloropropane	ND	0.0023	1.00	
t-1,2-Dichloroethene	ND	0.0020	1.00	
c-1,3-Dichloropropene	ND	0.0023	1.00	
1,3-Dichlorobenzene	ND	0.0030	1.00	
t-1,3-Dichloropropene	ND	0.0045	1.00	
1,4-Dichlorobenzene	ND	0.0030	1.00	
4-Methyl-2-Pentanone	ND	0.0061	1.00	
4-Ethyltoluene	ND	0.0025	1.00	
Acetone	ND	0.12	1.00	
Benzyl Chloride	ND	0.0078	1.00	
Bromoform	ND	0.0052	1.00	

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

**Analytical Report**

Cardno ERI	Date Received:	06/27/15
601 North McDowell Blvd.	Work Order:	15-06-2169
Petaluma, CA 94954-2312	Preparation:	N/A
	Method:	EPA TO-15M
	Units:	mg/m3

Project: ExxonMobil 99105/022783C Page 8 of 10

<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Bromomethane	ND	0.0019	1.00	
Carbon Disulfide	ND	0.031	1.00	
Carbon Tetrachloride	ND	0.0031	1.00	
Chlorobenzene	ND	0.0023	1.00	
Dibromochloromethane	ND	0.0043	1.00	
Chloroethane	ND	0.0013	1.00	
Chloroform	ND	0.0024	1.00	
Chloromethane	ND	0.0010	1.00	
Bromodichloromethane	ND	0.0034	1.00	
Dichlorodifluoromethane	ND	0.0025	1.00	
Dichlorotetrafluoroethane	ND	0.014	1.00	
Hexachloro-1,3-Butadiene	ND	0.016	1.00	
2-Butanone	ND	0.0044	1.00	
Methylene Chloride	ND	0.017	1.00	
2-Hexanone	ND	0.0061	1.00	
Styrene	ND	0.0064	1.00	
Tetrachloroethene	ND	0.0034	1.00	
Trichloroethene	ND	0.0027	1.00	
Trichlorofluoromethane	ND	0.0056	1.00	
Vinyl Acetate	ND	0.0070	1.00	
Vinyl Chloride	ND	0.0013	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	107	57-129		
1,2-Dichloroethane-d4	118	47-137		
Toluene-d8	103	78-156		


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

## Analytical Report

Cardno ERI	Date Received:	06/27/15
601 North McDowell Blvd.	Work Order:	15-06-2169
Petaluma, CA 94954-2312	Preparation:	N/A
	Method:	EPA TO-15M
	Units:	mg/m3

Project: ExxonMobil 99105/022783C

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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>099-12-981-5546</b>	<b>N/A</b>	<b>Air</b>	<b>GC/MS II</b>	<b>N/A</b>	<b>06/28/15 16:19</b>	<b>150628L02</b>
<u>Parameter</u>		<u>Result</u>		<u>RL</u>	<u>DF</u>		<u>Qualifiers</u>
Benzene		ND		0.0016	1.00		
Toluene		ND		0.019	1.00		
Ethylbenzene		ND		0.0022	1.00		
o-Xylene		ND		0.0022	1.00		
p/m-Xylene		ND		0.0087	1.00		
Xylenes (total)		ND		0.0022	1.00		
Methyl-t-Butyl Ether (MTBE)		ND		0.0072	1.00		
Tert-Butyl Alcohol (TBA)		ND		0.015	1.00		
Diisopropyl Ether (DIPE)		ND		0.0084	1.00		
Ethyl-t-Butyl Ether (ETBE)		ND		0.0084	1.00		
Tert-Amyl-Methyl Ether (TAME)		ND		0.0084	1.00		
1,1,1-Trichloroethane		ND		0.0027	1.00		
1,1,2,2-Tetrachloroethane		ND		0.0069	1.00		
1,1,2-Trichloroethane		ND		0.0027	1.00		
1,1,2-Trichloro-1,2,2-Trifluoroethane		ND		0.011	1.00		
1,1-Dichloroethane		ND		0.0020	1.00		
1,1-Dichloroethene		ND		0.0020	1.00		
1,2,4-Trichlorobenzene		ND		0.015	1.00		
1,2,4-Trimethylbenzene		ND		0.0074	1.00		
1,3,5-Trimethylbenzene		ND		0.0025	1.00		
c-1,2-Dichloroethene		ND		0.0020	1.00		
1,2-Dibromoethane		ND		0.0038	1.00		
1,2-Dichlorobenzene		ND		0.0030	1.00		
1,2-Dichloroethane		ND		0.0020	1.00		
1,2-Dichloropropane		ND		0.0023	1.00		
t-1,2-Dichloroethene		ND		0.0020	1.00		
c-1,3-Dichloropropene		ND		0.0023	1.00		
1,3-Dichlorobenzene		ND		0.0030	1.00		
t-1,3-Dichloropropene		ND		0.0045	1.00		
1,4-Dichlorobenzene		ND		0.0030	1.00		
4-Methyl-2-Pentanone		ND		0.0061	1.00		
4-Ethyltoluene		ND		0.0025	1.00		
Acetone		ND		0.12	1.00		
Benzyl Chloride		ND		0.0078	1.00		
Bromoform		ND		0.0052	1.00		

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

## Analytical Report

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

Date Received: 06/27/15  
Work Order: 15-06-2169  
Preparation: N/A  
Method: EPA TO-15M  
Units: mg/m3

Project: ExxonMobil 99105/022783C

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<u>Parameter</u>	<u>Result</u>	<u>RL</u>	<u>DF</u>	<u>Qualifiers</u>
Bromomethane	ND	0.0019	1.00	
Carbon Disulfide	ND	0.031	1.00	
Carbon Tetrachloride	ND	0.0031	1.00	
Chlorobenzene	ND	0.0023	1.00	
Dibromochloromethane	ND	0.0043	1.00	
Chloroethane	ND	0.0013	1.00	
Chloroform	ND	0.0024	1.00	
Chloromethane	ND	0.0010	1.00	
Bromodichloromethane	ND	0.0034	1.00	
Dichlorodifluoromethane	ND	0.0025	1.00	
Dichlorotetrafluoroethane	ND	0.014	1.00	
Hexachloro-1,3-Butadiene	ND	0.016	1.00	
2-Butanone	ND	0.0044	1.00	
Methylene Chloride	ND	0.017	1.00	
2-Hexanone	ND	0.0061	1.00	
Styrene	ND	0.0064	1.00	
Tetrachloroethene	ND	0.0034	1.00	
Trichloroethene	ND	0.0027	1.00	
Trichlorofluoromethane	ND	0.0056	1.00	
Vinyl Acetate	ND	0.0070	1.00	
Vinyl Chloride	ND	0.0013	1.00	
<u>Surrogate</u>	<u>Rec. (%)</u>	<u>Control Limits</u>	<u>Qualifiers</u>	
1,4-Bromofluorobenzene	100	57-129		
1,2-Dichloroethane-d4	108	47-137		
Toluene-d8	99	78-156		

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

**Analytical Report**

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

Date Received: 06/27/15  
Work Order: 15-06-2169  
Preparation: N/A  
Method: EPA TO-3M  
Units: mg/m3

Project: ExxonMobil 99105/022783C

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
VW2	15-06-2169-1-A	06/26/15 06:15	Air	GC 13	N/A	06/27/15 11:58	150627L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		ND		7.0		1.00	
VW3	15-06-2169-2-A	06/26/15 06:45	Air	GC 13	N/A	06/27/15 12:13	150627L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		260		7.0		1.00	
VW4	15-06-2169-3-A	06/26/15 09:00	Air	GC 13	N/A	06/27/15 12:46	150627L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		140000		700		100	
Method Blank	098-01-005-6481	N/A	Air	GC 13	N/A	06/27/15 09:02	150627L01
<u>Parameter</u>		<u>Result</u>		<u>RL</u>		<u>DF</u>	<u>Qualifiers</u>
TPH as Gasoline		ND		7.0		1.00	

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





**Quality Control - Sample Duplicate**

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

Date Received: 06/27/15  
 Work Order: 15-06-2169  
 Preparation: N/A  
 Method: EPA TO-3M

Project: ExxonMobil 99105/022783C

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
VW3	Sample	Air	GC 13	N/A	06/27/15 12:13	150627D01
VW3	Sample Duplicate	Air	GC 13	N/A	06/27/15 12:25	150627D01
<u>Parameter</u>		<u>Sample Conc.</u>	<u>DUP Conc.</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
TPH as Gasoline		261.2	268.6	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

**Quality Control - LCS/LCSD**

Cardno ERI	Date Received:	06/27/15
601 North McDowell Blvd.	Work Order:	15-06-2169
Petaluma, CA 94954-2312	Preparation:	N/A
Project: ExxonMobil 99105/022783C	Method:	EPA TO-15M

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-981-5546	LCS	Air	GC/MS II	N/A	06/28/15 12:18	150628L02				
099-12-981-5546	LCSD	Air	GC/MS II	N/A	06/28/15 13:10	150628L02				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.06812	85	0.06947	87	60-156	44-172	2	0-40	
Toluene	0.09421	0.08238	87	0.08337	88	56-146	41-161	1	0-43	
Ethylbenzene	0.1086	0.09563	88	0.09601	88	52-154	35-171	0	0-38	
o-Xylene	0.1086	0.09576	88	0.09583	88	52-148	36-164	0	0-38	
p/m-Xylene	0.2171	0.1940	89	0.1928	89	42-156	23-175	1	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.07812	87	0.07933	88	50-150	33-167	2	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.09912	65	0.1224	81	60-140	47-153	21	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.07875	75	0.08034	77	60-140	47-153	2	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.08420	81	0.08581	82	60-140	47-153	2	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.08476	81	0.08697	83	60-140	47-153	3	0-30	
1,1,1-Trichloroethane	0.1364	0.1219	89	0.1213	89	50-150	33-167	0	0-35	
1,1,2,2-Tetrachloroethane	0.1716	0.1444	84	0.1443	84	50-150	33-167	0	0-35	
1,1,2-Trichloroethane	0.1364	0.1226	90	0.1244	91	65-149	51-163	2	0-37	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.1916	0.1781	93	0.1780	93	50-150	33-167	0	0-35	
1,1-Dichloroethane	0.1012	0.08331	82	0.08470	84	50-150	33-167	2	0-35	
1,1-Dichloroethene	0.09912	0.08764	88	0.09109	92	50-150	33-167	4	0-35	
1,2,4-Trichlorobenzene	0.1855	0.2018	109	0.1900	102	50-150	33-167	6	0-35	
1,2,4-Trimethylbenzene	0.1229	0.1170	95	0.1158	94	50-150	33-167	1	0-35	
1,3,5-Trimethylbenzene	0.1229	0.1103	90	0.1102	90	50-150	33-167	0	0-35	
c-1,2-Dichloroethene	0.09912	0.08170	82	0.08297	84	50-150	33-167	2	0-35	
1,2-Dibromoethane	0.1921	0.1772	92	0.1767	92	54-144	39-159	0	0-36	
1,2-Dichlorobenzene	0.1503	0.1424	95	0.1423	95	34-160	13-181	0	0-47	
1,2-Dichloroethane	0.1012	0.09554	94	0.09608	95	69-153	55-167	1	0-35	
1,2-Dichloropropane	0.1155	0.09816	85	0.1006	87	67-157	52-172	2	0-35	
t-1,2-Dichloroethene	0.09912	0.08299	84	0.08406	85	50-150	33-167	1	0-35	
c-1,3-Dichloropropene	0.1135	0.1097	97	0.1105	97	61-157	45-173	1	0-35	
1,3-Dichlorobenzene	0.1503	0.1438	96	0.1426	95	50-150	33-167	1	0-35	
t-1,3-Dichloropropene	0.1135	0.1251	110	0.1255	111	50-150	33-167	0	0-35	
1,4-Dichlorobenzene	0.1503	0.1441	96	0.1435	95	36-156	16-176	0	0-47	
4-Methyl-2-Pentanone	0.1024	0.09271	91	0.09410	92	50-150	33-167	1	0-35	
4-Ethyltoluene	0.1229	0.1136	92	0.1128	92	50-150	33-167	1	0-35	
Acetone	0.05939	0.05464	92	0.05681	96	50-150	33-167	4	0-35	
Benzyl Chloride	0.1294	0.1346	104	0.1346	104	50-150	33-167	0	0-35	
Bromoform	0.2584	0.2532	98	0.2494	97	50-150	33-167	1	0-38	
Bromomethane	0.09708	0.09521	98	0.09890	102	50-150	33-167	4	0-35	
Carbon Disulfide	0.07785	0.06805	87	0.06867	88	50-150	33-167	1	0-35	

RPD: Relative Percent Difference. CL: Control Limits

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**Quality Control - LCS/LCSD**

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

Date Received: 06/27/15  
 Work Order: 15-06-2169  
 Preparation: N/A  
 Method: EPA TO-15M

Project: ExxonMobil 99105/022783C

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<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>ME CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Carbon Tetrachloride	0.1573	0.1567	100	0.1548	98	64-154	49-169	1	0-32	
Chlorobenzene	0.1151	0.1029	89	0.1038	90	50-150	33-167	1	0-35	
Dibromochloromethane	0.2130	0.1962	92	0.1958	92	50-150	33-167	0	0-35	
Chloroethane	0.06596	0.06025	91	0.06287	95	50-150	33-167	4	0-35	
Chloroform	0.1221	0.1079	88	0.1077	88	50-150	33-167	0	0-35	
Chloromethane	0.05163	0.04828	94	0.04856	94	50-150	33-167	1	0-35	
Bromodichloromethane	0.1675	0.1592	95	0.1590	95	50-150	33-167	0	0-35	
Dichlorodifluoromethane	0.1236	0.1176	95	0.1157	94	50-150	33-167	2	0-35	
Dichlorotetrafluoroethane	0.1748	0.1354	78	0.1377	79	50-150	33-167	2	0-35	
Hexachloro-1,3-Butadiene	0.2666	0.2647	99	0.2421	91	50-150	33-167	9	0-35	
2-Butanone	0.07373	0.06734	91	0.06782	92	50-150	33-167	1	0-35	
Methylene Chloride	0.08684	0.05769	66	0.06818	79	50-150	33-167	17	0-35	
2-Hexanone	0.1024	0.09024	88	0.09081	89	50-150	33-167	1	0-35	
Styrene	0.1065	0.09812	92	0.09848	92	50-150	33-167	0	0-35	
Tetrachloroethene	0.1696	0.1572	93	0.1561	92	56-152	40-168	1	0-40	
Trichloroethene	0.1343	0.1219	91	0.1236	92	63-159	47-175	1	0-34	
Trichlorofluoromethane	0.1405	0.1249	89	0.1386	99	50-150	33-167	10	0-35	
Vinyl Acetate	0.08803	0.06846	78	0.06922	79	50-150	33-167	1	0-35	
Vinyl Chloride	0.06391	0.05785	91	0.05835	91	45-177	23-199	1	0-36	

Total number of LCS compounds: 55

Total number of ME compounds: 0

Total number of ME compounds allowed: 3

LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

**Quality Control - LCS/LCSD**

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

 Date Received: 06/27/15  
 Work Order: 15-06-2169  
 Preparation: N/A  
 Method: EPA TO-15M

Project: ExxonMobil 99105/022783C

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number				
099-12-981-5544	LCS	Air	GC/MS NN	N/A	06/27/15 12:46	150627L03				
099-12-981-5544	LCSD	Air	GC/MS NN	N/A	06/27/15 13:39	150627L03				
Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.08089	101	0.08467	106	60-156	44-172	5	0-40	
Toluene	0.09421	0.1048	111	0.1117	119	56-146	41-161	6	0-43	
Ethylbenzene	0.1086	0.1221	112	0.1295	119	52-154	35-171	6	0-38	
o-Xylene	0.1086	0.1204	111	0.1273	117	52-148	36-164	6	0-38	
p/m-Xylene	0.2171	0.2503	115	0.2662	123	42-156	23-175	6	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.1024	114	0.1068	119	50-150	33-167	4	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1508	100	0.1396	92	60-140	47-153	8	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.1009	97	0.1063	102	60-140	47-153	5	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.1157	111	0.1219	117	60-140	47-153	5	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.1143	109	0.1192	114	60-140	47-153	4	0-30	
1,1,1-Trichloroethane	0.1364	0.1540	113	0.1597	117	50-150	33-167	4	0-35	
1,1,2,2-Tetrachloroethane	0.1716	0.1670	97	0.1761	103	50-150	33-167	5	0-35	
1,1,2-Trichloroethane	0.1364	0.1394	102	0.1435	105	65-149	51-163	3	0-37	
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.1916	0.1886	98	0.1972	103	50-150	33-167	4	0-35	
1,1-Dichloroethane	0.1012	0.1039	103	0.1087	107	50-150	33-167	4	0-35	
1,1-Dichloroethene	0.09912	0.1000	101	0.1049	106	50-150	33-167	5	0-35	
1,2,4-Trichlorobenzene	0.1855	0.1906	103	0.1927	104	50-150	33-167	1	0-35	
1,2,4-Trimethylbenzene	0.1229	0.1364	111	0.1425	116	50-150	33-167	4	0-35	
1,3,5-Trimethylbenzene	0.1229	0.1360	111	0.1428	116	50-150	33-167	5	0-35	
c-1,2-Dichloroethene	0.09912	0.09290	94	0.09702	98	50-150	33-167	4	0-35	
1,2-Dibromoethane	0.1921	0.2073	108	0.2190	114	54-144	39-159	5	0-36	
1,2-Dichlorobenzene	0.1503	0.1453	97	0.1493	99	34-160	13-181	3	0-47	
1,2-Dichloroethane	0.1012	0.1152	114	0.1196	118	69-153	55-167	4	0-35	
1,2-Dichloropropane	0.1155	0.1187	103	0.1239	107	67-157	52-172	4	0-35	
t-1,2-Dichloroethene	0.09912	0.09483	96	0.09959	100	50-150	33-167	5	0-35	
c-1,3-Dichloropropene	0.1135	0.1261	111	0.1323	117	61-157	45-173	5	0-35	
1,3-Dichlorobenzene	0.1503	0.1495	99	0.1550	103	50-150	33-167	4	0-35	
t-1,3-Dichloropropene	0.1135	0.1451	128	0.1508	133	50-150	33-167	4	0-35	
1,4-Dichlorobenzene	0.1503	0.1486	99	0.1539	102	36-156	16-176	3	0-47	
4-Methyl-2-Pentanone	0.1024	0.1072	105	0.1124	110	50-150	33-167	5	0-35	
4-Ethyltoluene	0.1229	0.1339	109	0.1398	114	50-150	33-167	4	0-35	
Acetone	0.05939	0.06348	107	0.06558	110	50-150	33-167	3	0-35	
Benzyl Chloride	0.1294	0.1548	120	0.1591	123	50-150	33-167	3	0-35	
Bromoform	0.2584	0.2801	108	0.2939	114	50-150	33-167	5	0-38	
Bromomethane	0.09708	0.1032	106	0.1085	112	50-150	33-167	5	0-35	
Carbon Disulfide	0.07785	0.07693	99	0.08058	104	50-150	33-167	5	0-35	

RPD: Relative Percent Difference. CL: Control Limits

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## Quality Control - LCS/LCSD

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

Date Received: 06/27/15  
Work Order: 15-06-2169  
Preparation: N/A  
Method: EPA TO-15M

Project: ExxonMobil 99105/022783C

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Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Carbon Tetrachloride	0.1573	0.1905	121	0.1968	125	64-154	49-169	3	0-32	
Chlorobenzene	0.1151	0.1234	107	0.1298	113	50-150	33-167	5	0-35	
Dibromochloromethane	0.2130	0.2454	115	0.2594	122	50-150	33-167	6	0-35	
Chloroethane	0.06596	0.06498	99	0.06818	103	50-150	33-167	5	0-35	
Chloroform	0.1221	0.1266	104	0.1324	108	50-150	33-167	5	0-35	
Chloromethane	0.05163	0.05099	99	0.05443	105	50-150	33-167	7	0-35	
Bromodichloromethane	0.1675	0.1952	117	0.2004	120	50-150	33-167	3	0-35	
Dichlorodifluoromethane	0.1236	0.1072	87	0.1114	90	50-150	33-167	4	0-35	
Dichlorotetrafluoroethane	0.1748	0.1516	87	0.1575	90	50-150	33-167	4	0-35	
Hexachloro-1,3-Butadiene	0.2666	0.2657	100	0.2821	106	50-150	33-167	6	0-35	
2-Butanone	0.07373	0.07622	103	0.07964	108	50-150	33-167	4	0-35	
Methylene Chloride	0.08684	0.07679	88	0.08077	93	50-150	33-167	5	0-35	
2-Hexanone	0.1024	0.1086	106	0.1163	114	50-150	33-167	7	0-35	
Styrene	0.1065	0.1119	105	0.1189	112	50-150	33-167	6	0-35	
Tetrachloroethene	0.1696	0.1818	107	0.1925	114	56-152	40-168	6	0-40	
Trichloroethene	0.1343	0.1428	106	0.1492	111	63-159	47-175	4	0-34	
Trichlorofluoromethane	0.1405	0.1557	111	0.1610	115	50-150	33-167	3	0-35	
Vinyl Acetate	0.08803	0.08454	96	0.08856	101	50-150	33-167	5	0-35	
Vinyl Chloride	0.06391	0.06648	104	0.06980	109	45-177	23-199	5	0-36	

Total number of LCS compounds: 55

Total number of ME compounds: 0

Total number of ME compounds allowed: 3

LCS ME CL validation result: Pass

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RPD: Relative Percent Difference. CL: Control Limits

**Quality Control - LCS**

Cardno ERI	Date Received:	06/27/15
601 North McDowell Blvd.	Work Order:	15-06-2169
Petaluma, CA 94954-2312	Preparation:	N/A
Project: ExxonMobil 99105/022783C	Method:	EPA TO-3M

Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
098-01-005-6481	LCS	Air	GC 13	N/A	06/27/15 08:48	150627L01
<u>Parameter</u>		<u>Spike Added</u>	<u>Conc. Recovered</u>	<u>LCS %Rec.</u>	<u>%Rec. CL</u>	<u>Qualifiers</u>
TPH as Gasoline		932.5	924.5	99	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

**Sample Analysis Summary Report**

Work Order: 15-06-2169

Page 1 of 1

<u>Method</u>	<u>Extraction</u>	<u>Chemist ID</u>	<u>Instrument</u>	<u>Analytical Location</u>
EPA TO-15M	N/A	866	GC/MS II	2
EPA TO-15M	N/A	866	GC/MS NN	2
EPA TO-3M	N/A	929	GC 13	2

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

<u>Qualifiers</u>	<u>Definition</u>
AZ	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
B	Analyte was present in the associated method blank.
BA	The MS/MSD RPD was out of control due to suspected matrix interference.
BB	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
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 stnds.
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.





2169



800-322-5555 www.gso.com

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

**Tracking #: 528404903**

**SDS**



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

**ORC**  
**GARDEN GROVE**

**A**

**COD: \$0.00**  
**Weight: 0 lb(s)**  
**Reference:**  
CARDNO ERI, TRC  
**Delivery Instructions:**

**D92845A**



39409980

**Signature Type: REQUIRED**

Print Date: 6/26/2015 2:06 PM

**LABEL INSTRUCTIONS:**

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

Use the "Print Label" button on this page to print the shipping label on a laser or inkjet printer. Securely attach this label to your package, do not cover the barcode.

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Calscience

WORK ORDER NUMBER: 15-06-2169

SAMPLE RECEIPT CHECKLIST

BOX 1 OF 1

CLIENT: Cardno ERI

DATE: 06/27/2015

**TEMPERATURE:** (Criteria: 0.0°C – 6.0°C, not frozen except sediment/tissue)  
 Thermometer ID: SC2 (CF:-0.3°C); Temperature (w/o CF): \_\_\_\_\_ °C (w/ CF): \_\_\_\_\_ °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 courier  
 Ambient Temperature:  Air  Filter

Checked by: SR

**CUSTODY SEAL:**  
 Box  Present and Intact  Present but Not Intact  Not Present  N/A  
 Sample(s)  Present and Intact  Present but Not Intact  Not Present  N/A

Checked by: SR  
Checked by: 1013

SAMPLE CONDITION:	Yes	No	N/A
Chain-of-Custody (COC) document(s) received with samples .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Sampling date <input type="checkbox"/> Sampling time <input type="checkbox"/> Matrix <input type="checkbox"/> Number of containers			
<input type="checkbox"/> No analysis requested <input type="checkbox"/> Not relinquished <input type="checkbox"/> No relinquished date <input type="checkbox"/> No relinquished time			
Sampler's name indicated on COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container label(s) consistent with COC .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sample container(s) intact and in good condition .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Proper containers for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume/mass for analyses requested .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Samples received within holding time .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aqueous samples for certain analyses received within 15-minute holding time			
<input type="checkbox"/> pH <input type="checkbox"/> Residual Chlorine <input type="checkbox"/> Dissolved Sulfide <input type="checkbox"/> Dissolved Oxygen .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Proper preservation chemical(s) noted on COC and/or sample container .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Unpreserved aqueous sample(s) received for certain analyses			
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Total Metals <input type="checkbox"/> Dissolved Metals			
Container(s) for certain analysis free of headspace .....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Volatile Organics <input type="checkbox"/> Dissolved Gases (RSK-175) <input type="checkbox"/> Dissolved Oxygen (SM 4500)			
<input type="checkbox"/> Carbon Dioxide (SM 4500) <input type="checkbox"/> Ferrous Iron (SM 3500) <input type="checkbox"/> Hydrogen Sulfide (Hach)			
Tedlar™ bag(s) free of condensation .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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**CONTAINER TYPE:** (Trip Blank Lot Number: \_\_\_\_\_)  
 Aqueous:  VOA  VOA<sub>h</sub>  VOA<sub>na2</sub>  100PJ  100PJ<sub>na2</sub>  125AGB  125AGB<sub>h</sub>  125AGB<sub>p</sub>  125PB  
 125PB<sub>znna</sub>  250AGB  250CGB  250CGB<sub>s</sub>  250PB  250PB<sub>n</sub>  500AGB  500AG<sub>J</sub>  500AG<sub>J</sub><sub>s</sub>  
 500PB  1AGB  1AGB<sub>na2</sub>  1AGB<sub>s</sub>  1PB  1PB<sub>na</sub>  \_\_\_\_\_  \_\_\_\_\_  \_\_\_\_\_  
 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: 1013  
 s = H<sub>2</sub>SO<sub>4</sub>, u = ultra-pure, znna = Zn(CH<sub>3</sub>CO<sub>2</sub>)<sub>2</sub> + NaOH Reviewed 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. 248320150626	2. Page 1 of 1
3. Generator's Name and Mailing address ExxonMobil Environmental Services/Manpower Contractor 3700 W. 190 <sup>th</sup> St. NTO #1106, Torrance, CA 90504		1301 S. Pollack Ave. Oakland, CA (EM 99105)		
4. Generator's Phone : (310) 212 2938				
5. Transporter 1 Company Name CARONO	6. US EPA ID Number	A. State Transporter's ID 707-755-2000		
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter 1 Phone		
9. Designated Facility Name and Site Address INSTRIAT INC. 1105 C. AIRPORT ROAD RIO VISTA, CA 94571	10. US EPA ID Number	C. State Transporter's ID		
		D. Transporter 2 Phone		
		E. State Facility's ID		
		F. Facility's Phone 530-753-1820		
11. WASTE DESCRIPTION		12. Containers No.	Type	13. Total Quantity
a. NON-HAZARDOUS PURGE WATER		01	Twister	21
b.				
c.				
d.				
G. Additional Descriptions for Materials Listed Above		H. Handling Codes for Wastes Listed Above		
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 On behalf of ExxonMobil Asset R. Magdonov		Signature <i>[Signature]</i>		Date Month Day Year 06   26   15
17. Transporter 1 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name Sean R. Schiller		Signature <i>[Signature]</i>		Month Day Year 7   2   15
18. Transporter 2 Acknowledgement of Receipt of Materials		Date		
Printed/Typed Name		Signature		Month Day Year
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 MICHAEL WHITEHEAD		Signature <i>[Signature]</i>		Date Month Day Year 7   2   15

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY