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Jennifer C. Sedlachek
Project Manager

ExxonMobil

April 4, 2017

RECEIVED
By Alameda County Environmental Health 2:58 pm, Apr 05, 2017

Ms. Karel Detterman
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Suite 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 letter report entitled ***Groundwater and Soil Vapor Monitoring Report, First Quarter 2017,*** dated April 4, 2017, for the above-referenced site. The letter was prepared by Cardno, of Petaluma, California, and details activities at the subject site.

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

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

Sincerely,

Jennifer C. Sedlachek
Project Manager

Attachment: Cardno's ***Groundwater and Soil Vapor Monitoring Report, First Quarter 2017,*** dated April 4, 2017

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

w/o attachment
Mr. Scott Perkins, Cardno

April 4, 2017
Cardno 2783C.Q171

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

SUBJECT **Groundwater and Soil Vapor Monitoring Report, First Quarter 2017**
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 first quarter 2017 groundwater and soil vapor monitoring and sampling activities at the 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 AND SOIL VAPOR MONITORING AND SAMPLING SUMMARY

Monitoring and sampling date:		03/02/17
Groundwater wells gauged and sampled:		MW2, MW3, MW5 through MW8
Vapor wells monitored:		VW1 through VW5
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:	117 gallons purge and decon water delivered to Instrat, Inc. of Rio Vista, California, on 03/10/17	

RESULTS

Dissolved-phase concentrations show overall stable or decreasing trends, with the exception of concentrations in well MW8, which has shown an overall increasing trend since it was installed in 2014. Currently, the maximum benzene concentration reported at the site (270 µg/L) is in well MW8.

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.
- Toward the south by borings AB10 and AB13.

PID measurements from the soil vapor samples have not shown a significant decrease since the feasibility study performed in 2014 (Cardno ERI, 2014).

RECOMMENDATIONS

Soil vapor monitoring wells have been monitored since the DPE feasibility study conducted in August 2014 (Cardno ERI, 2014). It does not appear that the DPE event caused a significant reduction in the soil vapor concentrations. Further review of the DPE feasibility data and the subsequent soil vapor data indicate that additional remediation by DPE is not likely to reduce the reported soil vapor concentrations. The vapor flow rate extracted from the subsurface (approximately 25 scfm) does not appear to be adequate to remove the residual concentrations from the underlying soil.

Cardno recommends conducting the work proposed in Cardno's *Work Plan for Additional Soil Vapor Assessment* (Work Plan), dated September 8, 2016 (Cardno, 2016).

Cardno submitted the *Response to Request for Work Plan Addendum*, dated January 6, 2017 (Cardno, 2017), requesting to perform the work proposed in the Work Plan.

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

Sincerely,

Christine M. Capwell
Senior Technical Editor
for Cardno
707 766 2000
Email: christine.capwell@cardno.com

David R. Daniels
P.G. 8737
for Cardno
707 766 2000
Email: david.daniels@cardno.com

Enclosures:

References
Acronym List

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

Table 1	Cumulative Groundwater Monitoring and Sampling Data
Table 2	Well Construction Details
Table 3	Cumulative PID Readings, Vapor Wells

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

cc: Ms. Karel Detterman, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, 2nd 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

REFERENCES

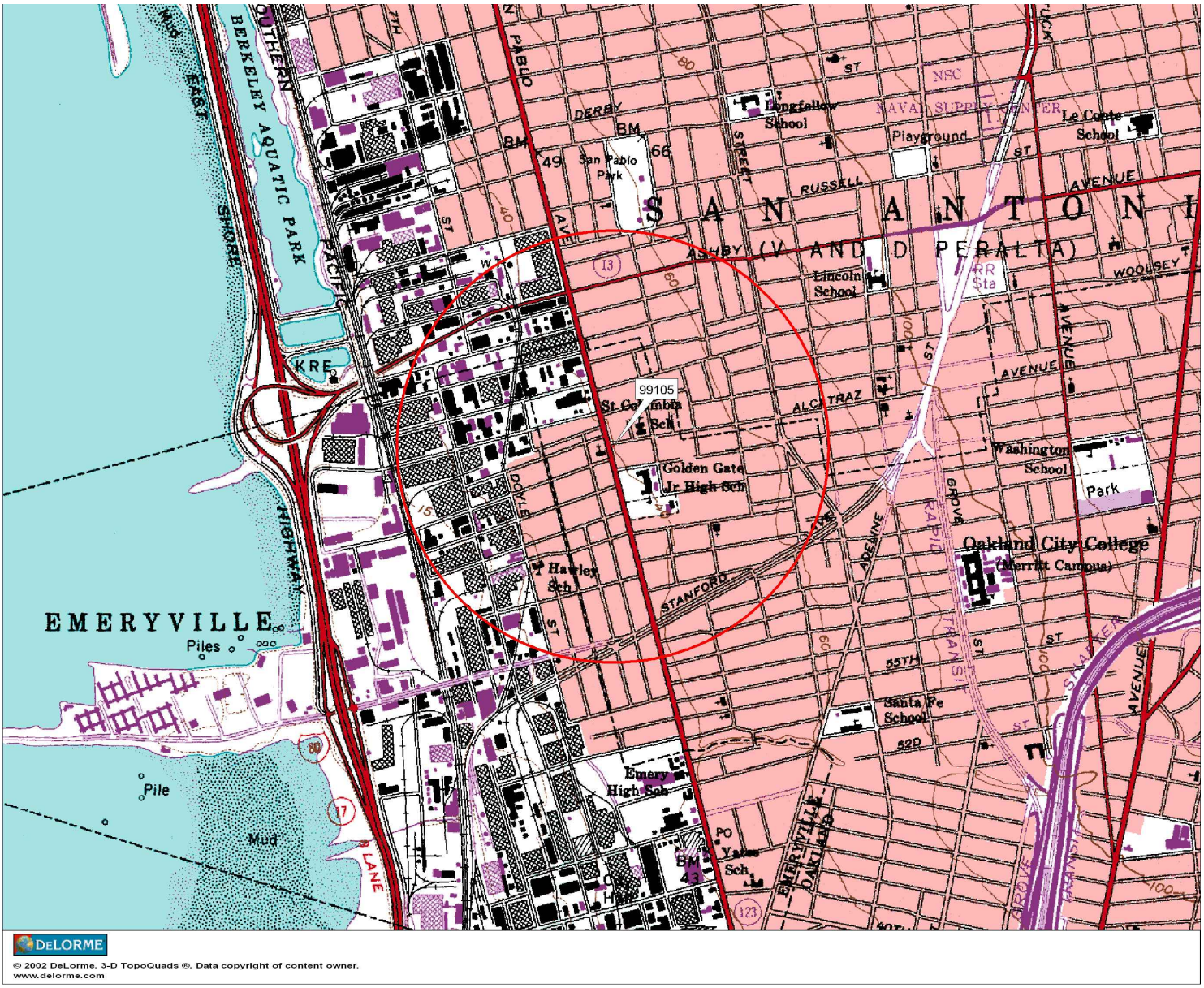
Cardno. September 8, 2016. *Work Plan for Additional Soil Vapor Assessment, Former Mobil Service Station 99105, 6301 San Pablo Avenue, Oakland, California.*

Cardno. January 6, 2017. *Response to Request for Work Plan Addendum, Former Mobil Service Station 99105, 6301 San Pablo Avenue, Oakland, California.*

Cardno ERI. September 10, 2014. *Well Installation and Feasibility Study, Former Mobil Service Station 99105, 6301 San Pablo Avenue, Oakland, California.*

ACRONYM LIST

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



FN 2783TOPO

EXPLANATION

1/2-mile radius circle

N

APPROXIMATE SCALE

0 0.5 1 mile

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

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PROJECT NO.
2783

PLATE
1

Analyte Concentrations in ug/L
Sampled March 02, 2017

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.

APPROXIMATE SCALE
0 30 60 Feet

FN 2783 17 1QTR QM

Cardno Shaping the Future

SELECT ANALTYICAL RESULTS
March 02, 2017

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

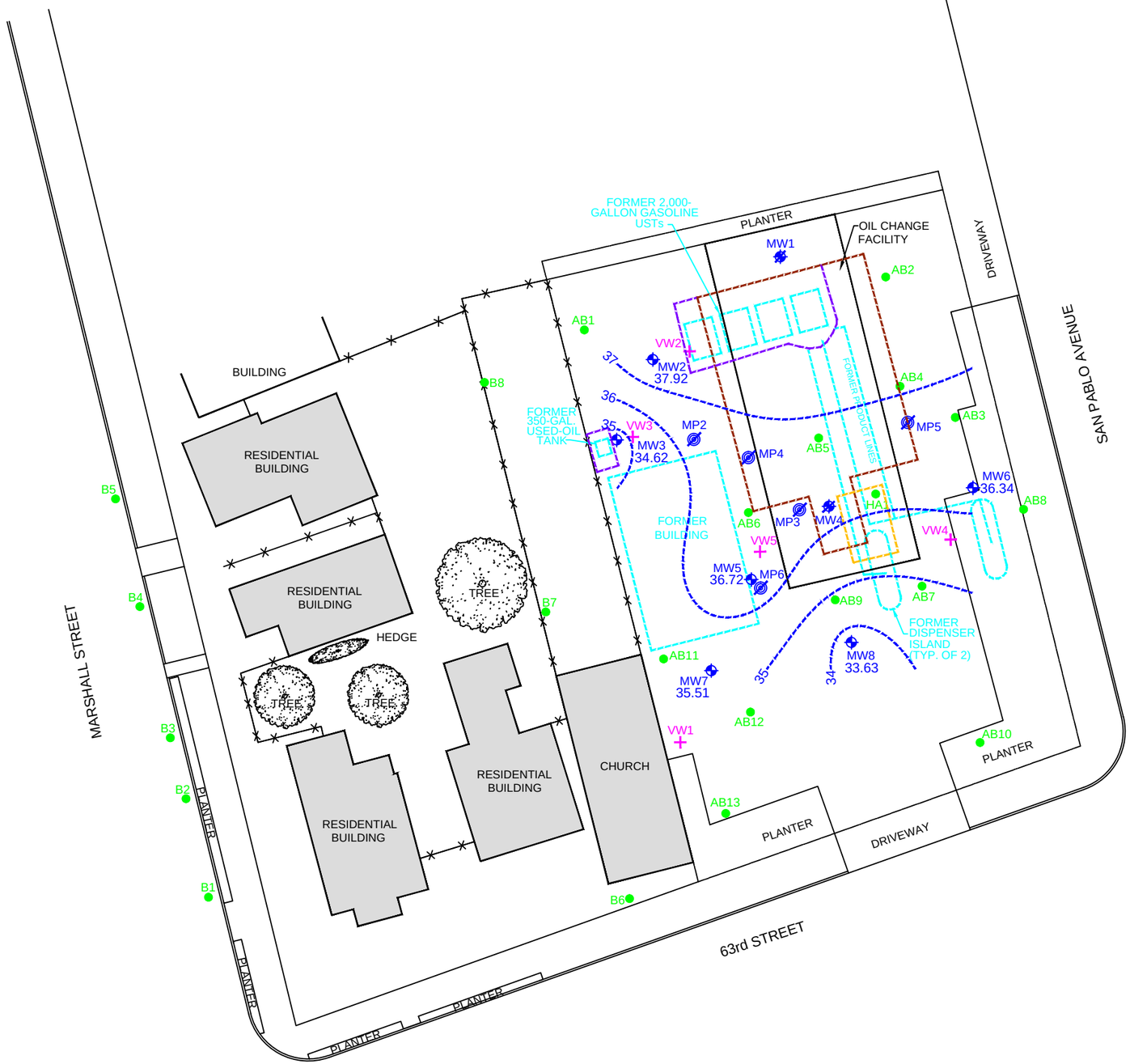
EXPLANATION

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

1994 Areas of Excavation
1996 Area of Excavation
1999 Area of Excavation

PROJECT NO. 2783

PLATE 2



APPROXIMATE SCALE

0 30 60 Feet

FN 2783 17 1QTR QM

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GROUNDWATER ELEVATION MAP
March 02, 2017

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

EXPLANATION

- MW8 — Groundwater Monitoring Well
- 33.63 — Groundwater elevation in feet; datum is mean sea level
- MW4 — Destroyed Groundwater Monitoring Well
- MP6 — Destroyed Observation Well
- 37 — Line of Equal Groundwater Elevation; datum is mean sea level
- AB13 — Soil Boring
- VW5 — Soil Vapor Sampling Well
- 1994 Areas of Excavation
- 1996 Area of Excavation
- 1999 Area of Excavation

PROJECT NO. 2783

PLATE 3

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Mobil Service Station 99105
6301 San Pablo Avenue
Oakland, California

Well ID	Sampling Date	TOC Elev (feet)	DTW (feet)	GW Elev (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	ETBE (µg/L)	TAME (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
Tier 1 Environmental Screening Levels (February 2016)						100	100	5	5	1	40	13	20	12	0.05	0.50	---	---	---	---
Groundwater Monitoring Wells																				
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	32.79	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	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Mobil Service Station 99105
6301 San Pablo Avenue
Oakland, California

Well ID	Sampling Date	TOC Elev (feet)	DTW (feet)	GW Elev (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	ETBE (µg/L)	TAME (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
Tier 1 Environmental Screening Levels (February 2016)						100	100	5	5	1	40	13	20	12	0.05	0.50	---	---	---	---
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	<10	**<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	**110g**	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	<50
MW2	01/18/12	42.24	11.24	31.00	No	---	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	<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	<5.0	**<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	<5.0	**<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	<5.0	**<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	<5.0	**<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	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
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	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW2	06/26/15	42.24	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW2	08/14/15	42.24	11.45	30.79	No	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW2	03/25/16	42.24	4.62	37.62	No	<45	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW2	07/12/16	42.24	10.37	31.87	No	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW2	03/02/17	42.24	4.32	37.92	No	<45	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW3	03/14/96	32.80	9.55	23.25	No	**1,200**	**4,200**	---	---	**220**	30	**140**	**520**	---	---	---	---	---	---	---
MW3	05/21/96	32.80	10.16	22.64	No	**2,800**	**8,500**	---	---	**710**	**110**	**440**	**1,700**	---	---	---	---	---	---	---
MW3	08/13/96	32.80	11.18	21.62	No	**2,300c**	**5,000**	---	---	**430**	ND	**200**	**360**	---	---	---	---	---	---	---
MW3	11/08/96	32.80	11.51	21.29	No	**2,900b**	**8,400**	**73**	ND	**890**	**82**	**790**	**1,700**	---	---	---	---	---	---	---
MW3	01/31/97	32.80	7.90	24.90	No	**7,500b**	**16,000**	ND	---	**660**	**85**	**960**	**1,800**	---	---	---	---	---	---	---
MW3	04/22/97	32.80	10.64	22.16	No	**2,700**	**8,000**	**200**	ND	**340**	33	**400**	**490**	---	---	---	---	---	---	---
MW3	07/29/97 a	32.80	11.36	21.44	No	**2,300b**	**9,800**	ND	---	**330**	ND	**530**	**530**	---	---	---	---	---	---	---
MW3	10/09/97 a	32.80	11.52	21.28	No	**2,600b**	**7,300**	**270**	ND	**300**	ND	**430**	**460**	---	---	---	---	---	---	---
MW3	01/23/98 a	32.80	7.50	25.30	No	**2,300**	**6,100**	ND	---	**190**	23	**330**	**320**	---	---	---	---	---	---	---
MW3	04/22/98	32.80	6.81	25.99	No	**2,600**	**4,900**	ND	ND	**140**	12	**250**	**230**	---	---	---	---	---	---	---
MW3	07/21/98	32.80	10.65	22.15	No	---	**7,400**	**74**	ND	**250**	16	**400**	**370**	---	---	---	---	---	---	---
MW3	10/20/98	32.80	11.57	21.23	No	---	**6,700**	ND	ND	**200**	18	**350**	**350**	---	---	---	---	---	---	---
MW3	01/27/99	32.80	9.11	23.69	No	---	**3,100**	**13**	---	**74**	4	**94**	**39**	---	---	---	---	---	---	---
MW3	07/27/99	32.80	7.27	25.53	No	---	**8,900**	ND	---	**170**	21	**360**	**440**	---	---	---	---	---	---	---
MW3	12/08/99	32.80	10.63	22.17	No	---	**4,800**	ND	---	**94**	13	**170**	**210**	---	---	---	---	---	---	---
MW3	10/25/00	39.27	12.08	27.19	No	---	**3,800**	**<50**	**<5**	**63**	2.9	**100**	**65**	---	---	---	---	---	---	---
MW3	01/15/01	39.27	10.29	28.98	No	---	**4,300**	**<5.0**	---	**76**	9.5	**47**	**76**	---	---	---	---	---	---	---
MW3	04/10/01	39.27	10.11	29.16	No	---	**2,700**	**<20**	---	**55**	4.4	**100**	**37**	---	---	---	---	---	---	---
MW3	07/24/01	39.27	11.57	27.70	No	---	**3,100**	<1.0	---	**110**	6.9	**110**	**81**	---	---	---	---	---	---	---
MW3	11/27/01	39.27	10.93	28.34	No	---	**2,400**	<0.30	---	**47**	8.9	**25**	**35**	---	---	---	---	---	---	---
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**	---	---	---	---	---	---	---

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Mobil Service Station 99105
6301 San Pablo Avenue
Oakland, California

Well ID	Sampling Date	TOC Elev (feet)	DTW (feet)	GW Elev (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	ETBE (µg/L)	TAME (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
Tier 1 Environmental Screening Levels (February 2016)						100	100	5	5	1	40	13	20	12	0.05	0.50	---	---	---	---
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	9.8f	**<0.50**	**1.9**	<0.50	<0.50	0.17f	---
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	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	<50
MW3	01/18/12	42.18	12.11	30.07	No	---	**910g**	---	<0.50	0.89	<0.50	<0.50	0.88	**23**	**<0.50**	<0.50	<0.50	<0.50	<0.50	<50
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	9.1	**<0.50**	**1.1**	<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	9.6	**<0.50**	**1.1**	<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	7.2	**<0.50**	**0.90**	<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	**12**	**<0.50**	**1.1**	<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	11	**<0.50**	**1.1**	<0.50	<0.50	<0.50	---
MW3	08/18/14	42.18	11.83	30.35	No	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	11/06/14	42.18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	01/23/15	42.18	10.19	31.99	No	**440g**	**750g**	---	<0.50	**5.6**	1.7	0.79	1.0	8.1	**<0.50**	**0.70**	<0.50	<0.50	<0.50	---
MW3	06/26/15	42.18	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW3	08/14/15	42.18	12.25	29.93	No	**120g**	**710g**	---	<0.50	**2.0**	0.50	<0.50	1.3	<5.0	**<0.50**	**1.3**	<0.50	<0.50	<0.50	---
MW3	03/25/16	42.18	8.05	34.13	No	**190g**	**320g**	---	<0.50	**1.6**	<0.50	0.91	<0.50	<5.0	**<0.50**	**1.0**	<0.50	<0.50	<0.50	---
MW3	07/12/16	42.18	11.47	30.71	No	**230g**	**340g**	---	<0.50	**2.0**	<0.50	<0.50	<0.50	5.5	**<0.50**	**1.1**	<0.50	<0.50	<0.50	---
MW3	03/02/17	42.18	7.56	34.62	No	**130g**	**350g**	---	<0.50	**2.5**	<0.50	<0.50	<0.50	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
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	31.50	Destroyed during construction activities.																	
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**	---	---	---	---	---	---	---

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Mobil Service Station 99105
6301 San Pablo Avenue
Oakland, California

Well ID	Sampling Date	TOC Elev (feet)	DTW (feet)	GW Elev (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	ETBE (µg/L)	TAME (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
Tier 1 Environmental Screening Levels (February 2016)						100	100	5	5	1	40	13	20	12	0.05	0.50	---	---	---	---
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	**<100**	**<5.0**	**<5.0**	<5.0	<5.0	<5.0	---
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	**25**	**<2.0**	**<2.0**	<2.0	<2.0	<2.0	<200
MW5	01/18/12	41.86	9.46	32.40	No	---	**3,600g**	---	<1.0	**14**	<1.0	7.6	<1.0	**37**	**<1.0**	**<1.0**	<1.0	<1.0	<1.0	<100
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	**36**	**<2.5**	**<2.5**	<2.5	<2.5	<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	**45**	**<2.0**	**<2.0**	<2.0	<2.0	<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	**42**	**<2.0**	**<2.0**	<2.0	<2.0	<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	**36**	**<2.0**	**<2.0**	<2.0	<2.0	<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	**<50**	**<5.0**	**<5.0**	<5.0	<5.0	<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**	**<50**	**<5.0**	**<5.0**	<5.0	<5.0	<5.0	---
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**	**<50**	**<5.0**	**<5.0**	<5.0	<5.0	<5.0	---
MW5	06/26/15	41.86	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW5	08/14/15	41.86	9.87	31.99	Sheen	**4,900g**	**10,000g**	---	<2.0	**27**	<2.0	**24**	17	**23**	**<2.0**	**<2.0**	<2.0	<2.0	<2.0	---
MW5	03/25/16	41.86	5.67	36.19	No	**2,300g**	**4,500g**	---	<2.0	**91**	<2.0	**23**	8.3	**<20**	**<2.0**	**<2.0**	<2.0	<2.0	<2.0	---
MW5	07/12/16	41.86	8.90	32.96	Sheen	**2,800g**	**1,500g**	---	<2.0	**54**	<2.0	12	6.0	**<20**	**<2.0**	**<2.0**	<2.0	<2.0	<2.0	---
MW5	03/02/17	41.86	5.14	36.72	No	**3,400g**	**650g**	---	<2.0	**71**	<2.0	8.5	5.2	**<20**	**<2.0**	**<2.0**	<2.0	<2.0	<2.0	---
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	**14**	**<0.50**	**1.1**	<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	**12**	**<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	**14**	**<0.50**	**1.3**	<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	6.7	**<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	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW6	08/14/15	42.00	9.89	32.11	No	91g	**120g**	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<0.50**	**0.59**	<0.50	<0.50	<0.50	---
MW6	03/25/16	42.00	6.06	35.94	No	82g	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW6	07/12/16	42.00	9.09	32.91	No	**130g**	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW6	03/02/17	42.00	5.66	36.34	No	84	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<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	**21**	**<0.50**	**3.1**	<0.50	<0.50	<0.50	---
MW7	08/22/14	41.34	Dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Mobil Service Station 99105
6301 San Pablo Avenue
Oakland, California

Well ID	Sampling Date	TOC Elev (feet)	DTW (feet)	GW Elev (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	ETBE (µg/L)	TAME (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
Tier 1 Environmental Screening Levels (February 2016)						100	100	5	5	1	40	13	20	12	0.05	0.50	---	---	---	---
MW7	11/06/14	41.34	11.73	29.61	No	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	**15**	**<0.50**	**3.9**	<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	**23**	**<0.50**	**5.1**	<0.50	<0.50	<0.50	---
MW7	06/26/15	41.34	10.28	31.06	No	49g	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	11	**<0.50**	**3.4**	<0.50	<0.50	<0.50	---
MW7	08/14/15	41.34	11.41	29.93	No	<47	58g	---	<0.50	<0.50	<0.50	<0.50	<0.50	6.6	**<0.50**	**2.5**	<0.50	<0.50	<0.50	---
MW7	03/25/16	41.34	9.72	31.62	No	55g	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	9.5	**<0.50**	**1.9**	<0.50	<0.50	<0.50	---
MW7	07/12/16	41.34	10.66	30.68	No	88g	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	10	**<0.50**	**2.0**	<0.50	<0.50	<0.50	---
MW7	03/02/17	41.34	5.83	35.51	No	<45	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	**<0.50**	**0.62**	<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**	**20**	**<0.50**	**0.78**	<0.50	<0.50	<0.50	---
MW8	08/22/14	41.30	13.10	28.20	No	**350g**	**950g**	---	<0.50	**5.7**	<0.50	4.2	6.4	**31**	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW8	11/06/14	41.30	10.96	30.34	No	**260g**	**910g**	---	<0.50	**54**	<0.50	**25**	11	**34**	**<0.50**	**2.8**	<0.50	<0.50	<0.50	---
MW8	01/23/15	41.30	6.83	34.47	No	**440g**	**1,000g**	---	<0.50	**110**	1.8	**19**	10	**20**	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW8	06/26/15	41.30	8.46	32.84	No	**650g**	**1,100**	---	<2.0	**100**	<2.0	**24**	6.2	**20**	**<2.0**	**<2.0**	<2.0	<2.0	<2.0	---
MW8	08/14/15	41.30	9.85	31.45	No	**770g**	**2,000g**	---	<0.50	**92**	1.2	**14**	13	**15**	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW8	03/25/16	41.30	8.18	33.12	No	**1,200g**	**4,000g**	---	<0.50	**160**	1.6	**130**	**37**	**17**	**<0.50**	<0.50	<0.50	<0.50	<0.50	---
MW8	07/12/16	41.30	7.96	33.34	Sheen	**1,500g**	**2,000**	---	<2.5	**160**	<2.5	**84**	11	**29**	**<2.5**	**<2.5**	<2.5	<2.5	<2.5	---
MW8	03/02/17	41.30	7.67	33.63	No	**1,800g**	**1,500g**	---	<2.5	**270**	<2.5	**190**	16	**<25**	**<2.5**	**<2.5**	<2.5	<2.5	<2.5	---
Grab Groundwater Samples																				
AB1	03/05/98	---	4.5	---	No	---	**1,600**	ND	---	**31**	5.3	**79**	**130**	---	---	---	---	---	---	---
AB10	03/05/98	---	2.0	---	No	---	**200**	ND	---	**3.0**	1.2	3.2	2.8	---	---	---	---	---	---	---
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**	---	---	---	---	---	---	---
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	---	---	**8.7**	---	---	---	---
B4	11/19/10	---	Dry	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
B5	11/18/10	---	8.95	---	---	<50	<50	---	<0.50	<0.50	<0.50	0.047f	0.21f	---	---	0.099f	---	---	---	---
W-15-B6	06/19/12	---	15	---	---	<50	<50	---	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	---	---	<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	<5.0	---	---	<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	<5.0	---	---	<0.50	<0.50	<0.50	---

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Mobil Service Station 99105
6301 San Pablo Avenue
Oakland, California

Well ID	Sampling Date	TOC Elev (feet)	DTW (feet)	GW Elev (feet)	NAPL (feet)	TPHd (µg/L)	TPHg (µg/L)	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	TBA (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	ETBE (µg/L)	TAME (µg/L)	DIPE (µg/L)	Ethanol (µg/L)
Tier 1 Environmental Screening Levels (February 2016)						100	100	5	5	1	40	13	20	12	0.05	0.50	---	---	---	---
Former Used-Oil Tank Cavity Sample																				
WW1	01/04/96	---	3.00	---	No	---	ND	---	---	ND	ND	ND	ND	---	---	---	---	---	---	---
Former Gasoline Tank Cavity Sample																				
TW1	01/04/96	---	6.00	---	No	**700**	ND	---	---	ND	ND	ND	ND	---	---	---	---	---	---	

Notes: Adapted from ETIC's Report of Groundwater Monitoring, Third Quarter 2010.

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

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

Notes:
TOC Elevation = Top of casing elevation.
PVC = Polyvinyl chloride.
bgs = Below ground surface.
--- = No applicable.

TABLE 3
CUMULATIVE PID READINGS, VAPOR WELLS
Former Mobil Service Station 99105
6301 San Pablo Avenue
Oakland, California

Sampling 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
08/14/15	Wet	6.2	16.6	2,740	Wet
03/25/16	18.3	Wet	69.3	1,447	Wet
07/12/16	7.5	1.1	46.2	2,244	Wet
03/02/17	Wet	Wet	0.5	1,345	Wet

Notes:
ppm = Parts per million.

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
π	=	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

SV assesement
FIELD WORK REQUEST

Site #:	99105	Cardno ERI Project #:	2783
Address:	6301 San Pablo Ave.	Date:	1st Quarter 2017
City	Oakland	Project Manager:	Scott Perkins

WORK REQUESTED

PID Following VW wells (use compressor and tedlar bags)
Previous results in ppm are listed below for your info.

Bring Vacuum Pump, PID, Tedlar Bag(s), Silicon Tubing, Poly Tubing

Point	8/14/2015	3/25/2016	7/12/2016	__/__/2017
VW1	**Wet**	**18.3**	**7.5**	wet
VW2	**6.2**	Wet	1.1	wet
VW3	**16.6**	69.3	46.2	0.5
VW4	**2740**	1447	2244	1345
VW5	**Wet**	Wet	Wet	wet

Cardno
Shaping the Future

Daily Field Report

Project ID #: EMES 99105 | Cardno Job # 2783
Subject: Groundwater Sampling | Date: 3.2.17
Equipment Used: | Sheet: 1 of 1
Name(s): Andre Bruny, Hugo Chung
Time Arrived On Site: 0500 | Time Departed Site: 1000 | Total Travel: 1.50

0500 AB, HC onsite Safety Meeting, Permit, sign in
0510 - Begin open wells
0520 - All wells open
0550 - All wells open ½ hour - gauging begins

0605 - 0730 Purge wells MW3, MW2, MW5, MW7, MW6, MW8
Only MW2 recharges quickly and is sampled
0745 - 0830 AB, HC begin Vapor sampling setup
VW2 - wet
VW3 - 0.5 ppm
VW5 - wet
VW1 - wet
VW4 - 1345 ppm
0845 - 0945 Sampling all wells that had been purged
0945 - 1000 cleanup
1000 AB, HC offsite

Purge volumes - 20 gal
decon volumes - 97 gal
117 gal

117 event total

Cardno Groundwater M+S
Depth To Water

Case Volume= (TD-DTW) x F
80% Recharge= ((TD-DTW) x 0.8) - TD) x (-1.0)

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

Project 2783 | Location 99105 | Date 3/2/17 | Name(s) Hugo Cheung, Andre Bruny

WELL ID	WELL DIAMETER Inches	Previous TD Feet	2017 TD Feet	Pre-Purge DTW Feet	Case volume Gal.	80% r/chrg. DTW Feet	COMMENTS
MW2	4	18.59	18.57	4.32	9.30	7.17	
MW3	4	18.18	18.24	7.56	6.92	9.68	
MW5	4	14.27	19.86	5.14	5.95	6.97	Wrong TD in previous year.
MW6	4	14.47	14.49	5.66	5.74	7.42	
MW7	2	14.50	14.51	5.83	1.41	7.56	
MW8	4	14.45	14.25	7.67	4.42	9.03	

GROUNDWATER SAMPLING FIELD LOG

Client Name: Exxon Mobil
Location: 99105
Field Crew: Hugo Chung, Andre Bruny

Cardno Job #: 2783

Date: 3/2/17 Page 1 of 2

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

0.163 for 2" inside-diameter well casing
0.652 for 4" inside-diamter well casing
1.457 for 6" inside-diamter well casing

Well ID	Time	Case Volume	Purge Volume	Temp	Cond	pH	Post-Purge DTW	80% Recharge	BB	40mil	Amber	DO	ORP	Comments Well Box Condition
9.68							11.60	NO						
MW3	0609		ZERO	13.6	959	6.86								
	0614		7	14.9	967	6.58	Sample Date: 3/2/17							
	0618		14	15.9	883	6.50	Sample Name: MW3							Dry @ 16 gal
			21				Sample Time: 0840							
							2.46	YES						
MW2	0614		ZERO	15.1	39.2	6.67								
	0619		10	15.2	384	6.71	Sample Date: 3/2/17							
	0625		20	15.3	369	6.53	Sample Name: MW2							
	0630		30	15.4	392	6.47	Sample Time: 0645							
6.97							8.05	NO						
MW5	0629		ZERO	16.3	956	6.33								
	0633		6	16.3	949	6.49	Sample Date: 3/2/17							
	0636		12	15.9	921	6.57	Sample Name: MW5							
	0640		18	16.5	911	6.38	Sample Time: 0845							
8							12.34	NO						
MW7	0659		ZERO	14.2	1107	6.80								
	0700		2	14.7	1094	6.74	Sample Date: 3/2/17							
	0701		4	15.2	1115	6.70	Sample Name: MW7							
	0702		6	16.0	1102	6.67	Sample Time: 0910							
7.42							13.25	NO						
MW6	0719		ZERO	15.6	1072	6.73								
	0723		6	15.0	1097	6.76	Sample Date: 3/2/17							Dry @ 16 gal
	0726		12	15.7	1084	6.74	Sample Name: MW6							
			18				Sample Time: 0930							

Additional Remarks:

GROUNDWATER SAMPLING FIELD LOG

Client Name: Emes

Location: 99105

Field Crew: AB, HC

Cardno Job #: 2783

Date: ______ Page 2 of 2

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

0.163 for 2" inside-diameter well casing
0.652 for 4" inside-diamter well casing
1.457 for 6" inside-diamter well casing

Well ID	Time	Case Volume	Purge Volume	Temp	Cond	pH	Post-Purge DTW	80% Recharge	BB	40mil	Amber	DO	ORP	Comments Well Box Condition
	0712	4.42					1893	NO						
MW3	0713		ZERO	13.7	989	6.91								DRY @ 11
	0716		5	16.6	1003	6.68	Sample Date: 3.2.17							
	0719		10	17.6	1007	6.66	Sample Name: MW3							
	—		15	—	—	—	Sample Time: 0920							
			ZERO											
							Sample Date:							
							Sample Name:							
							Sample Time:							
			ZERO											
							Sample Date:							
							Sample Name:							
							Sample Time:							
			ZERO											
							Sample Date:							
							Sample Name:							
							Sample Time:							
			ZERO											
							Sample Date:							
							Sample Name:							
							Sample Time:							

Additional Remarks:

WATER SAMPLING SITE STATUS

Date: 2783

Inspected by: Hugo Chung, Andre Bu...

Cardno Job No.: 2783 Station No.: 99105 Site Address: 6301 San Pablo Ave, Oakland, CA.

Well ID	Well Head Screws	Rubber Gasket	Well Cap Locking	Lock on Well Cap	Concrete Well Seal	Well Head PVC	Water in Well Vault	Tabs	Well Cover	Fence/Gate Condition	# Drums	Drum Contents	Building Condition	Site Appearance	Comments / Well Covers
	N/R/ok	N/R/ok	N/R/ok	N/R/ok	N/R/ok	N/R/ok	Y / N	N/R/ok	N/R/ok	N/R/ok		s/w/e	g/v/o	N/R/ok	
MW2	NA	ok	ok	N	ok	N	N	ok	ok	ok	NA	NA	ok	ok	Cracked PVC
MW3	NA	ok	ok	N	ok	ok	N	ok	ok						
MW5	ok	ok	ok	N	ok	ok	N	ok	ok						
MW6	ok	ok	ok	N	ok	ok	N	ok	ok						
MW7	ok	N	ok	N	ok	ok	Y	ok	ok						
MW8	ok	N	ok	N	ok	ok	Y	ok	ok						

N = Not repairable in time available-see comments.
R = Repaired-see comments
ok = No action needed.

Y = Yes.
N = No.

s = Soil.
w = Water.
e = Empty.

g = Graffiti on walls.
v = Vagrants (or evidence of).
o = Open (not secured).

APPENDIX C

LABORATORY ANALYTICAL REPORT

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Supplemental Report 1

The original report has been revised/corrected.

WORK ORDER NUMBER: 17-03-0350

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno

Client Project Name: ExxonMobil 99105/022783C

Attention: Scott Perkins
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Approved for release on 03/20/2017 by:
Cecile deGuia
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: ExxonMobil 99105/022783C
Work Order Number: 17-03-0350

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Work Order Narrative

Work Order: 17-03-0350 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 03/04/17. They were assigned to Work Order 17-03-0350.

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

Holding Times:

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

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

Quality Control:

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

Subcontractor Information:

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

Additional Comments:

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

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

EPA 8260B:
LCS Batch Number 170307L055: All target analytes were within acceptance criteria with the exception of 1,2-Dibromoethane. The LCS recovery for this analyte was below the lower control limit of 80%, but was above the NELAC-defined lower marginal exceedance (ME) limit of 73%. (ME = +/- 4 standard deviations.) Based upon the number of analytes spiked into the LCS, and per NELAC, the laboratory is allowed to report associated data when there is, in this case, one marginal exceedance in the LCS.

Return to Contents

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Sample Summary

Client:	Cardno	Work Order:	17-03-0350
	601 North McDowell Blvd.	Project Name:	ExxonMobil 99105/022783C
	Petaluma, CA 94954-2312	PO Number:	022783C
		Date/Time Received:	03/04/17 08:40
		Number of Containers:	62
Attn:	Scott Perkins		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
MW2	17-03-0350-1	03/02/17 06:45	10	Aqueous
MW3	17-03-0350-2	03/02/17 08:40	10	Aqueous
MW5	17-03-0350-3	03/02/17 08:45	10	Aqueous
MW6	17-03-0350-4	03/02/17 09:30	10	Aqueous
MW7	17-03-0350-5	03/02/17 09:10	10	Aqueous
MW8	17-03-0350-6	03/02/17 09:20	10	Aqueous
QCBB	17-03-0350-7	03/02/17 09:05	2	Aqueous

Return to Contents

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Analytical Report

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

Project: ExxonMobil 99105/022783C

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 3510C
Method: EPA 8015B (M)
Units: ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW2	**17-03-0350-1-J**	**03/02/17 06:45**	**Aqueous**	**GC 47**	**03/07/17**	**03/07/17 16:09**	**170307B04S**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	45	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	90	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3	**17-03-0350-2-J**	**03/02/17 08:40**	**Aqueous**	**GC 47**	**03/07/17**	**03/07/17 16:30**	**170307B04S**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	130	45	1.00	HD,SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW5	**17-03-0350-3-J**	**03/02/17 08:45**	**Aqueous**	**GC 47**	**03/07/17**	**03/07/17 16:51**	**170307B04S**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	3400	45	1.00	HD,SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	107	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	**17-03-0350-4-J**	**03/02/17 09:30**	**Aqueous**	**GC 47**	**03/07/17**	**03/07/17 17:12**	**170307B04S**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	84	45	1.00	HD,SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	115	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW7	**17-03-0350-5-J**	**03/02/17 09:10**	**Aqueous**	**GC 47**	**03/07/17**	**03/07/17 17:33**	**170307B04S**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	45	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	106	68-140	

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

Return to Contents

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Analytical Report

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

Project: ExxonMobil 99105/022783C

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 3510C
Method: EPA 8015B (M)
Units: ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW8	**17-03-0350-6-J**	**03/02/17 09:20**	**Aqueous**	**GC 47**	**03/07/17**	**03/07/17 17:54**	**170307B04S**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	1800	45	1.00	HD,SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	105	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-304-1674**	**N/A**	**Aqueous**	**GC 47**	**03/07/17**	**03/07/17 15:01**	**170307B04S**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	112	68-140	

Return to Contents

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

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Analytical Report

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

Project: ExxonMobil 99105/022783C

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 5030C
Method: EPA 8015B (M)
Units: ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW2	**17-03-0350-1-F**	**03/02/17 06:45**	**Aqueous**	**GC 1**	**03/09/17**	**03/10/17 01:06**	**170309L036**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3	**17-03-0350-2-F**	**03/02/17 08:40**	**Aqueous**	**GC 1**	**03/09/17**	**03/10/17 02:53**	**170309L036**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	350	50	1.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	82	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW5	**17-03-0350-3-F**	**03/02/17 08:45**	**Aqueous**	**GC 1**	**03/09/17**	**03/10/17 05:15**	**170309L036**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	650	100	2.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	82	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	**17-03-0350-4-F**	**03/02/17 09:30**	**Aqueous**	**GC 1**	**03/09/17**	**03/10/17 01:42**	**170309L036**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	76	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW7	**17-03-0350-5-F**	**03/02/17 09:10**	**Aqueous**	**GC 1**	**03/09/17**	**03/10/17 02:17**	**170309L036**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	73	38-134	

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

Return to Contents

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Analytical Report

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

Project: ExxonMobil 99105/022783C

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 5030C
Method: EPA 8015B (M)
Units: ug/L

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW8	**17-03-0350-6-F**	**03/02/17 09:20**	**Aqueous**	**GC 1**	**03/09/17**	**03/10/17 03:28**	**170309L036**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	1500	100	2.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-436-11323**	**N/A**	**Aqueous**	**GC 1**	**03/09/17**	**03/09/17 15:00**	**170309L036**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	75	38-134	

Return to Contents

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

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Analytical Report

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

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 99105/022783C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW2	**17-03-0350-1-A**	**03/02/17 06:45**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/04/17 21:28**	**170304L009**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	101	80-127	
1,2-Dichloroethane-d4	105	80-128	
Toluene-d8	98	80-120	

Return to Contents

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

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Analytical Report

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

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 99105/022783C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3	**17-03-0350-2-A**	**03/02/17 08:40**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/04/17 21:59**	**170304L009**

Parameter	Result	RL	DF	Qualifiers
Benzene	2.5	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	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	68-120	
Dibromofluoromethane	103	80-127	
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	101	80-120	

Return to Contents

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

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Analytical Report

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

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 99105/022783C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW5	**17-03-0350-3-A**	**03/02/17 08:45**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/04/17 23:00**	**170304L009**

Parameter	Result	RL	DF	Qualifiers
Benzene	71	2.0	4.00	
Toluene	ND	2.0	4.00	
Ethylbenzene	8.5	2.0	4.00	
o-Xylene	ND	2.0	4.00	
p/m-Xylene	5.2	2.0	4.00	
Xylenes (total)	5.2	2.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.0	4.00	
Tert-Butyl Alcohol (TBA)	ND	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	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-120	
Dibromofluoromethane	104	80-127	
1,2-Dichloroethane-d4	106	80-128	
Toluene-d8	104	80-120	

Return to Contents

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

eurofins | Calscience

Analytical Report

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

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 99105/022783C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	**17-03-0350-4-A**	**03/02/17 09:30**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/04/17 22:30**	**170304L009**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	103	80-127	
1,2-Dichloroethane-d4	107	80-128	
Toluene-d8	97	80-120	

Return to Contents

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

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Analytical Report

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

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 99105/022783C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW7	**17-03-0350-5-A**	**03/02/17 09:10**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/05/17 02:36**	**170304L025**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	0.62	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	102	80-127	
1,2-Dichloroethane-d4	108	80-128	
Toluene-d8	99	80-120	

Return to Contents

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

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Analytical Report

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

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 99105/022783C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW8	**17-03-0350-6-A**	**03/02/17 09:20**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/05/17 03:07**	**170304L025**

Parameter	Result	RL	DF	Qualifiers
Toluene	ND	2.5	5.00	
Ethylbenzene	190	2.5	5.00	
o-Xylene	ND	2.5	5.00	
p/m-Xylene	16	2.5	5.00	
Xylenes (total)	16	2.5	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	2.5	5.00	
Tert-Butyl Alcohol (TBA)	ND	25	5.00	
Diisopropyl Ether (DIPE)	ND	2.5	5.00	
Ethyl-t-Butyl Ether (ETBE)	ND	2.5	5.00	
Tert-Amyl-Methyl Ether (TAME)	ND	2.5	5.00	
1,2-Dibromoethane	ND	2.5	5.00	
1,2-Dichloroethane	ND	2.5	5.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-120	
Dibromofluoromethane	105	80-127	
1,2-Dichloroethane-d4	107	80-128	
Toluene-d8	103	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW8	**17-03-0350-6-B**	**03/02/17 09:20**	**Aqueous**	**GC/MS FFF**	**03/07/17**	**03/07/17 20:37**	**170307L055**

Parameter	Result	RL	DF	Qualifiers
Benzene	270	5.0	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	
Dibromofluoromethane	113	80-127	
1,2-Dichloroethane-d4	114	80-128	
Toluene-d8	101	80-120	

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

Return to Contents

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Analytical Report

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

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 99105/022783C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-884-1391**	**N/A**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/04/17 13:10**	**170304L009**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	68-120	
Dibromofluoromethane	102	80-127	
1,2-Dichloroethane-d4	105	80-128	
Toluene-d8	99	80-120	

Return to Contents

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

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Analytical Report

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

Date Received: 03/04/17
Work Order: 17-03-0350
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 99105/022783C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-884-1392**	**N/A**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/05/17 02:06**	**170304L025**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	105	80-127	
1,2-Dichloroethane-d4	108	80-128	
Toluene-d8	97	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-884-1393**	**N/A**	**Aqueous**	**GC/MS FFF**	**03/07/17**	**03/07/17 12:07**	**170307L055**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	106	80-127	
1,2-Dichloroethane-d4	104	80-128	
Toluene-d8	101	80-120	

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

Return to Contents

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Quality Control - Spike/Spike Duplicate

Cardno		Date Received:	03/04/17
601 North McDowell Blvd.		Work Order:	17-03-0350
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: ExxonMobil 99105/022783C			Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-0392-3	**Sample**	**Aqueous**	**GC 1**	**03/09/17**	**03/09/17 15:36**	**170309S017**
17-03-0392-3	**Matrix Spike**	**Aqueous**	**GC 1**	**03/09/17**	**03/09/17 16:12**	**170309S017**
17-03-0392-3	**Matrix Spike Duplicate**	**Aqueous**	**GC 1**	**03/09/17**	**03/09/17 16:47**	**170309S017**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	483.4	2000	1881	70	2030	77	68-122	8	0-18	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Cardno		Date Received:	03/04/17
601 North McDowell Blvd.		Work Order:	17-03-0350
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 99105/022783C			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-0116-1	**Sample**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/04/17 13:46**	**170304S003**
17-03-0116-1	**Matrix Spike**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/04/17 14:16**	**170304S003**
17-03-0116-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/04/17 14:47**	**170304S003**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	11.33	113	10.63	106	75-125	6	0-20	
Toluene	0.5544	10.00	11.88	113	11.20	106	75-125	6	0-20	
Ethylbenzene	3.346	10.00	14.70	114	13.99	106	75-125	5	0-20	
o-Xylene	ND	10.00	11.39	114	10.80	108	75-127	5	0-20	
p/m-Xylene	1.413	20.00	23.97	113	22.87	107	75-125	5	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	10.50	105	10.56	106	71-131	1	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	31.43	63	35.80	72	20-180	13	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	11.31	113	10.80	108	64-136	5	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	11.00	110	10.66	107	73-133	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	10.55	105	10.37	104	75-125	2	0-20	
1,2-Dibromoethane	ND	10.00	10.27	103	10.36	104	75-126	1	0-20	
1,2-Dichloroethane	ND	10.00	10.55	105	10.24	102	75-127	3	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Cardno		Date Received:	03/04/17
601 North McDowell Blvd.		Work Order:	17-03-0350
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 99105/022783C			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
MW7	**Sample**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/05/17 02:36**	**170304S013**
MW7	**Matrix Spike**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/05/17 03:38**	**170304S013**
MW7	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/05/17 04:09**	**170304S013**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	10.73	107	10.62	106	75-125	1	0-20	
Toluene	ND	10.00	10.60	106	10.66	107	75-125	1	0-20	
Ethylbenzene	ND	10.00	10.65	106	10.59	106	75-125	1	0-20	
o-Xylene	ND	10.00	10.77	108	10.73	107	75-127	0	0-20	
p/m-Xylene	ND	20.00	21.46	107	21.28	106	75-125	1	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	10.86	109	10.81	108	71-131	0	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	44.24	88	49.91	100	20-180	12	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	11.26	113	11.16	112	64-136	1	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	10.74	107	10.65	106	73-133	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	10.46	105	10.24	102	75-125	2	0-20	
1,2-Dibromoethane	ND	10.00	10.66	107	10.31	103	75-126	3	0-20	
1,2-Dichloroethane	0.6174	10.00	11.48	109	11.19	106	75-127	3	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Cardno		Date Received:	03/04/17
601 North McDowell Blvd.		Work Order:	17-03-0350
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 99105/022783C			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
17-03-0389-1	**Sample**	**Aqueous**	**GC/MS FFF**	**03/07/17**	**03/07/17 12:52**	**170307S011**
17-03-0389-1	**Matrix Spike**	**Aqueous**	**GC/MS FFF**	**03/07/17**	**03/07/17 13:23**	**170307S011**
17-03-0389-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS FFF**	**03/07/17**	**03/07/17 13:54**	**170307S011**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	10.40	104	11.04	110	75-125	6	0-20	
Toluene	ND	10.00	10.42	104	11.19	112	75-125	7	0-20	
Ethylbenzene	ND	10.00	10.32	103	10.68	107	75-125	3	0-20	
o-Xylene	ND	10.00	10.16	102	10.77	108	75-127	6	0-20	
p/m-Xylene	ND	20.00	20.94	105	21.83	109	75-125	4	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	10.05	101	10.80	108	71-131	7	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	49.25	98	51.84	104	20-180	5	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	10.75	108	11.44	114	64-136	6	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	10.05	101	10.77	108	73-133	7	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	10.13	101	10.77	108	75-125	6	0-20	
1,2-Dibromoethane	ND	10.00	9.836	98	10.57	106	75-126	7	0-20	
1,2-Dichloroethane	ND	10.00	10.27	103	11.19	112	75-127	9	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS/LCSD

Cardno		Date Received:	03/04/17
601 North McDowell Blvd.		Work Order:	17-03-0350
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
Project: ExxonMobil 99105/022783C			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-304-1674	**LCS**	**Aqueous**	**GC 47**	**03/07/17**	**03/07/17 15:23**	**170307B04S**
099-15-304-1674	**LCSD**	**Aqueous**	**GC 47**	**03/07/17**	**03/07/17 15:44**	**170307B04S**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	2000	1737	87	1738	87	75-117	0	0-13	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	03/04/17
601 North McDowell Blvd.		Work Order:	17-03-0350
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: ExxonMobil 99105/022783C			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-436-11323	**LCS**	**Aqueous**	**GC 1**	**03/09/17**	**03/09/17 14:01**	**170309L036**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	2000	1699	85	78-120	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	03/04/17
601 North McDowell Blvd.		Work Order:	17-03-0350
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 99105/022783C			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-884-1391	**LCS**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/04/17 11:57**	**170304L009**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	10.51	105	80-120	73-127	
Toluene	10.00	10.51	105	80-120	73-127	
Ethylbenzene	10.00	10.37	104	80-120	73-127	
o-Xylene	10.00	10.48	105	80-120	73-127	
p/m-Xylene	20.00	20.95	105	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.11	101	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	49.42	99	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	11.00	110	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	10.38	104	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	9.896	99	80-120	73-127	
1,2-Dibromoethane	10.00	9.528	95	80-120	73-127	
1,2-Dichloroethane	10.00	10.09	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

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Quality Control - LCS

Cardno		Date Received:	03/04/17
601 North McDowell Blvd.		Work Order:	17-03-0350
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 99105/022783C			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-884-1392	**LCS**	**Aqueous**	**GC/MS FFF**	**03/04/17**	**03/05/17 01:04**	**170304L025**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	10.66	107	80-120	73-127	
Toluene	10.00	10.56	106	80-120	73-127	
Ethylbenzene	10.00	10.63	106	80-120	73-127	
o-Xylene	10.00	10.84	108	80-120	73-127	
p/m-Xylene	20.00	21.45	107	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.95	110	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	44.75	90	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	11.04	110	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	10.78	108	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	10.76	108	80-120	73-127	
1,2-Dibromoethane	10.00	10.77	108	80-120	73-127	
1,2-Dichloroethane	10.00	10.86	109	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

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Quality Control - LCS

Cardno		Date Received:	03/04/17
601 North McDowell Blvd.		Work Order:	17-03-0350
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 99105/022783C			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-884-1393	**LCS**	**Aqueous**	**GC/MS FFF**	**03/07/17**	**03/07/17 10:46**	**170307L055**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	8.484	85	80-120	73-127	
Toluene	10.00	8.694	87	80-120	73-127	
Ethylbenzene	10.00	8.552	86	80-120	73-127	
o-Xylene	10.00	8.645	86	80-120	73-127	
p/m-Xylene	20.00	17.35	87	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	7.888	79	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	43.82	88	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	8.793	88	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	8.186	82	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	8.165	82	80-120	73-127	
1,2-Dibromoethane	10.00	7.884	79	80-120	73-127	LR,RU
1,2-Dichloroethane	10.00	8.226	82	80-122	73-129	

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

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 17-03-0350 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3510C	972	GC 47	1
EPA 8015B (M)	EPA 5030C	1083	GC 1	2
EPA 8260B	EPA 5030C	849	GC/MS FFF	2

Return to Contents

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Glossary of Terms and Qualifiers

Work Order: 17-03-0350 Page 1 of 1

Qualifiers	Definition
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.

Return to Contents

Jonathan Diaz

From: NorCal Labs <norcallabs@cardno.com>
Sent: Monday, March 20, 2017 1:20 PM
To: Jonathan Diaz
Cc: Scott Perkins
Subject: FW: ExxonMobil 99105/022783C / ECI 17-03-0350 / Invoice #1375466
Attachments: 17-03-0350.pdf; 17030350_EDF 99105.zip; 17030350.xls; 1375466.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Jonathan,

The total xylenes value was missing from the report. Can you please reissue it with total xylenes?

Thanks!

Christine Capwell
SENIOR TECHNICAL EDITOR
CARDNO

Office +1 707 766 2000 Direct +1 707 766 2055 Fax +1 707 789 0414
Address 601 North McDowell Boulevard, Petaluma, California 94954
Email christine.capwell@cardno.com Web www.cardno.com

Return to Contents

From: Jonathan Diaz [mailto:JonathanDiaz@eurofinsUS.com]
Sent: Wednesday, March 15, 2017 4:20 PM
To: Scott Perkins <Scott.Perkins@cardno.com>
Cc: NorCal Labs <norcallabs@cardno.com>; Nikki Bertolini <Nicole.Bertolini@cardno.com>
Subject: ExxonMobil 99105/022783C / ECI 17-03-0350 / Invoice #1375466

Analytical report, EDDs, & invoice for the above project is attached.

Please process invoice for payment.

Thanks,
Jonathan

(714) 895-5494

Eurofins Calscience Inc.

7440 Lincoln Way
Garden Grove, CA 92841

Phone: 714-895-5494
Fax: 714-894-7501

ExxonMobil
17-03-0350

Consultant Name: Cardno ERI
Consultant Address: 601 N McDowell
Consultant City/State/Zip: Petaluma, CA 94954
ExxonMobil Project Mgr: Jennifer Sedlachek
Consultant Project Mgr: Scott Perkins
Consultant Telephone Number: (707) 766-2000 **Fax No.:** (707) 789-0414
Sampler Name (Print): HUGO CHUNG
Sampler Signature:

Account #: NA **PO#:** Direct Bill Cardno ERI
Invoice To: Direct Bill Cardno ERI
Report To: Scott Perkins
Project Name: 02 2783 C
ExxonMobil Site #: 99105 **Major Project (AFE #):**
Site Address: 6301 San Pablo Ave
Site City, State, Zip: Oakland, CA
Oversight Agency: Alameda County Environmental Health Department

	Sample ID	Field Point Name	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: Methanol	Sodium Bisulfate	HCl	NaOH	H_2SO_4 Plastic	H_2SO_4 Glass	HNO_3	Ice	Other	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify): Distilled Water	Analyze For: TPHd 8015B*		TPHg 8015B	BTEX 8260B	Methanol by 8015	8260 see list		Ethanol	RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
1	MW2	MW2	3/2/17	0645	8V/2A	x					8V					x		2A	x							x		x	x		x					x	
2	MW3	MW3	3/2/17	0840	8V/2A	x					8V					x		2A	x							x		x	x		x					x	
3	MW5	MW5	3/2/17	0845	8V/2A	x					8V					x		2A	x							x		x	x		x					x	
4	MW6	MW6	3/2/17	0930	8V/2A	x					8V					x		2A	x							x		x	x		x					x	
5	MW7	MW7	3/2/17	0910	8V/2A	x					8V					x		2A	x							x		x	x		x					x	
6	MW8	MW8	3/2/17	0920	8V/2A	x					8V					x		2A	x							x		x	x		x					x	
7	QCBB	QCBB	3/2/17	0905	2V						2V					x												H	O	L	D						

Comments/Special Instructions:
Only include requested data in report
OXY's report MTBE, DIPE, TBA, TAME, EDB, ETBE, 1,2 DCA
*Use silica-gel clean-up for TPHd

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

GLOBAL ID # T0600101855

Relinquished by:		Date	Time	Received by:	Date	Time
		3/3/17	1235	Tom O'Malley ECI	3/3/17	1238
Tom O'Malley ECI 650		3/3/17	1730		3/4/17	0840

Received by (Lab personnel):

Laboratory Comments:
Temperature Upon Receipt:
Sample Containers Intact? Y N
VOCs Free of Headspace? Y N
QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please attach pre-schedule w/ Calscience Project Manager or attach specific instructions

Return to Contents

GSO GOLDEN STATE OVERNIGHT

800-322-5555 www.gso.com

0350

SDS

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

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

COD: $0.00
Weight: 0 lb(s)
Reference:
CARDNO ERI
Delivery Instructions:

Signature Type: REQUIRED

Tracking #: 535250782

ORC **A**
GARDEN GROVE

D92845A

63626679

Print Date: 3/3/2017 4:05 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.

Return to Contents

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WORK ORDER NUMBER: 17-03- 0350

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF

CLIENT: Cardno

DATE: 03 / 04 / 2017

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

Thermometer ID: SC3B (CF: 0.0°C); Temperature (w/o CF): 2.3 °C (w/ CF): 2.3 °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:

Cooler ☑ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A Checked by: SR

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: TM

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

CONTAINER TYPE: (Trip Blank Lot Number: _____)

Aqueous: ☐ VOA ☑ VOA**h** (3) ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☑ 500AGJ (3) ☐ 500AGJ**s**

☐ 500PB ☐ 1AGB ☐ 1AGB**na$_2$** ☐ 1AGB**s** ☐ 1PB ☐ 1PB**na** ☐ _____ ☐ _____ ☐ _____ ☐ _____

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_3, **na** = NaOH, **na$_2$** = $Na_2S_2O_3$, **p** = H_3PO_4, Labeled/Checked by: TM

s = H_2SO_4, **u** = ultra-pure, **x** = Na_2SO_3+$NaHSO_4.H_2O$, **znna** = Zn $(CH_3CO_2)_2$ + NaOH Reviewed by: SR

Return to Contents

APPENDIX D

WASTE DISPOSAL DOCUMENTATION

NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. ERT 27832 OFT 0302

2. Page 1 of 1

Generator's Name and Mailing address
ExxonMobil Environmental Services/ c/o Cardno
01 N. McDowell Blvd, CA 94954
Generator's Phone : (707) 766 2000

INSTRAT
6301 San Pablo Ave
Oakland, CA
EM# 99105

5. Transporter 1 Company Name: CARDNO

6. US EPA ID Number:

A. State Transporter's ID: 707-766-2000

B. Transporter 1 Phone:

7. Transporter 2 Company Name:

8. US EPA ID Number:

C. State Transporter's ID:

D. Transporter 2 Phone:

9. Designated Facility Name and Site Address
INSTRAT INC.
1105 C. AIRPORT ROAD
RIO VISTA, CA 94571

10. US EPA ID Number:

E. State Facility's ID:

F. Facility's Phone: 530-753-1629

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZARDOUS PURGE WATER	1	TRAILER	117	GAL
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 Exxon Mobil Sean R. Johnson

Signature

Date: Month 03 Day 02 Year 17

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Nicole Bertolini

Signature

Date: Month 3 Day 10 Year 17

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name:

Signature

Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Instrat Inc Ruben Gonzalez

Signature

Date: Month 3 Day 10 Year 17

NON-HAZARDOUS WASTE

Rev. 3/95