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

Jennifer C. Sedlachek
Project Manager

ExxonMobil

December 17, 2015

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

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

Dear Mr. Detterman:

Attached for your review and comment is a copy of the letter report entitled ***Groundwater Monitoring and Remediation Status Report, Fourth Quarter 2015,*** dated December 17, 2015, for the above-referenced site. The report was prepared by Cardno of Petaluma, California, and details activities at the subject site.

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

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

Sincerely,

Jennifer C. Sedlachek
Project Manager

Attachment: Cardno's ***Groundwater Monitoring and Remediation Status Report, Fourth Quarter 2015,*** dated December 17, 2015

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

w/o attachment
Mr. Scott Perkins, Cardno

December 17, 2015
Cardno 2735C.Q154

Cardno

601 N. McDowell Boulevard
Petaluma, CA 94954
USA

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

www.cardno.com

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

SUBJECT **Groundwater Monitoring and Remediation Status Report, Fourth Quarter 2015**
Former Exxon Service Station 79374
990 San Pablo Avenue, Albany, California

Alameda County RO#2974

INTRODUCTION

At the request of ExxonMobil Environmental Services (EMES), on behalf of Exxon Mobil Corporation, Cardno performed fourth quarter 2015 groundwater monitoring and sampling and remedial activities at the subject site. Relevant plates, tables, and appendices are included at the end of this report. Currently, the site is occupied by a retail outlet for paints and painting products.

GROUNDWATER MONITORING AND SAMPLING SUMMARY

Gauging date:		11/18/15
Sampling dates:		11/18/15 and 11/19/15
Wells gauged and sampled:		MW1 through MW3, MW3A, MW4 through MW9
Wells gauged only:		AS1, SVE1 through SVE7
Presence of NAPL:		None
Laboratory:		Eurofins Calscience, Inc., Garden Grove, California
Analyses performed:	EPA Method 8015B	TPHd, TPHg, TPHmo
	EPA Method 8260B	BTEX, MTBE, ETBE, TAME, TBA, DIPE, EDB, 1,2-DCA, additional VOCs (HVOCs)

Waste disposal:

- 71 gallons of purge and decon water from this sampling event were delivered to InStrat, Inc., of Rio Vista, California, on 11/24/15.
- 250 gallons of purge and decon water from the October well installation were delivered to InStrat, Inc., of Rio Vista, California, on 11/24/15.
- 55 gallons of purge and decon water from the October well installation were delivered to Demenno Kerdoon of Compton, California, on 11/23/15.
- 13 drums of soil were delivered to Soil Safe in Adelanto, California, on 11/20/15.

HIGH-INTENSITY TARGETED EVENT

From October 21 to 29, 2015, Cardno conducted a high-intensity targeted (HIT) event at the site using a mobile SVE system to extract from wells (SVE4 through SVE7) where maximum vapor-phase concentrations have been reported as well as well SVE1, located near the former USTS. The SVE system consists of a 10-horsepower regenerative blower vacuum pump; an electric catalytic oxidizer; and associated conveyance piping, noise abatement equipment, control devices, and instrumentation. Soil vapor is treated through an electric catalytic oxidizer prior to discharge into the atmosphere under the rules and regulations of the Bay Area Air Quality Management District (BAAQMD). There are currently seven SVE wells (SVE1 through SVE7) installed at the site.

Cardno collected influent and effluent air samples from the system for laboratory analysis and submitted the samples to a California state-certified laboratory, under COC protocol. Analytical results and hydrocarbon removal and emissions rates are presented in Table 3. Hydrocarbon removal rates were calculated in accordance with the protocol included in Appendix A.

RESULTS AND CONCLUSIONS

High-Intensity Targeted Event

Vapor was extracted from wells SVE1 and SVE4 through SVE7 during the HIT event. The concentrations and flows extracted from each well are summarized in the following table. Varying amounts of dilution air were introduced during the event to ensure proper operation of the abatement device. The concentrations extracted from the wells are greater than the reported influent concentration, which includes ambient air used for dilution.

Well	Flow Rate			Influent TPHg Concentration		Influent Benzene Concentration	
	Minimum (scfm)	Maximum (scfm)	Average (scfm)	Minimum (mg/m^3)	Maximum (mg/m^3)	Minimum (mg/m^3)	Maximum (mg/m^3)
SVE1	65.7	143.2	108.0	3,600	8,600	6.4	14
SVE4	22.2	37.0	24.5	4,600	6,100	0.63	0.73
SVE5	22.2	96.9	35.8	8,200	8,200	0.62	0.85
SVE6	85.5	116.4	94.5	7,100	7,100	1.4	1.7
SVE7	39.3	64.4	48.3	3,400	4,000	0.85	0.94

The maximum average flow rate (108 scfm) was observed in well SVE1, located near the former USTs. The average flow in wells SVE4 through SVE7 ranged from 24.5 scfm to 94.5 scfm, with the maximum observed in well SVE6. Influent TPHg concentrations ranged from 3,400 mg/m^3 to 8,600 mg/m^3. Influent benzene concentrations were up to 10 times higher in well SVE1 than in the remaining wells. Well SVE1 had the highest maximum flow, average flow, and maximum influent concentrations, consistent with the USTs being the source of hydrocarbon concentrations. The system removed approximately 75.04 pounds of TPHg and 0.092 pound of benzene during approximately 40 hours of operation, for an approximate average removal rate of 2 pounds per hour.

Groundwater Flow Direction and Hydraulic Gradient

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

During the quarter, the groundwater flow direction in the shallow water-bearing zone was towards the south-southeast under a hydraulic gradient of approximately 0.025. Due to varying well construction, the groundwater flow in the deep water-bearing zone was not calculated. Groundwater elevation maps for the shallow and deep water-bearing zones are included as Plates 3 and 4, respectively.

Non-Aqueous Phase Liquid

During the fourth quarter 2012 sampling event, concentrations of TPHg (270,000 µg/L) were two orders of magnitude higher in well MW4 than previous concentrations, potentially indicative of the presence of NAPL. Although the TPHg concentrations increased, BTEX concentrations were consistent with previous data. NAPL has not been observed at the site. Concentrations of TPHg reported in well MW4 since second quarter 2013 have been consistent with historical results. A sheen was observed in wells MW4 and MW5 during second quarter 2015. Sheen was not observed in site wells during the fourth quarter 2015 event.

Hydrocarbons in Groundwater

Maximum petroleum hydrocarbon concentrations were reported in well MW3, located in the vicinity of the former USTs, and wells MW4 and MW5, located west of the former USTs. Total petroleum hydrocarbon concentrations showed an overall decreasing trend with concentrations of TPHg decreasing an order of magnitude in wells MW3 through MW7 and MW9. Remaining petroleum hydrocarbon concentrations were consistent with recent results. Based on the results of the groundwater sampling to date, it appears that the existing well network and previous soil borings adequately define the area of dissolved-phase concentrations.

RECOMMENDATIONS

Cardno recommends continued semi-annual groundwater monitoring and sampling during the second and fourth quarters and conducting additional HIT Events at the site. The remediation activities conducted to date have been performed under the BAAQMD feasibility testing waiver and using portable generators. Cardno recommends acquiring a site specific permit from the BAAQMD and acquiring a semi-permanent source of power to permit longer HIT events in the future.

Cardno recommends continuing quarterly status reports. In correspondence dated August 25, 2015, the Alameda County Health Care Services Agency requested the submittal of monthly remedial progress report (Appendix E). In Cardno's opinion, there will not be significant data to report on a monthly basis and quarterly reporting will be adequate.

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, Shallow Water-Bearing Zone
Plate 4	Groundwater Elevation Map, Deep Water-Bearing Zone
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Table 1B	Additional Cumulative Groundwater Monitoring and Sampling Data
Table 2	Well Construction Details
Table 3	Operation and Performance Data for Air Sparge/Soil Vapor Extraction System
Appendix A	Protocols
Appendix B	Field Data Sheets
Appendix C	Laboratory Analytical Reports
Appendix D	Waste Disposal Documentation
Appendix E	Correspondence

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

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

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

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

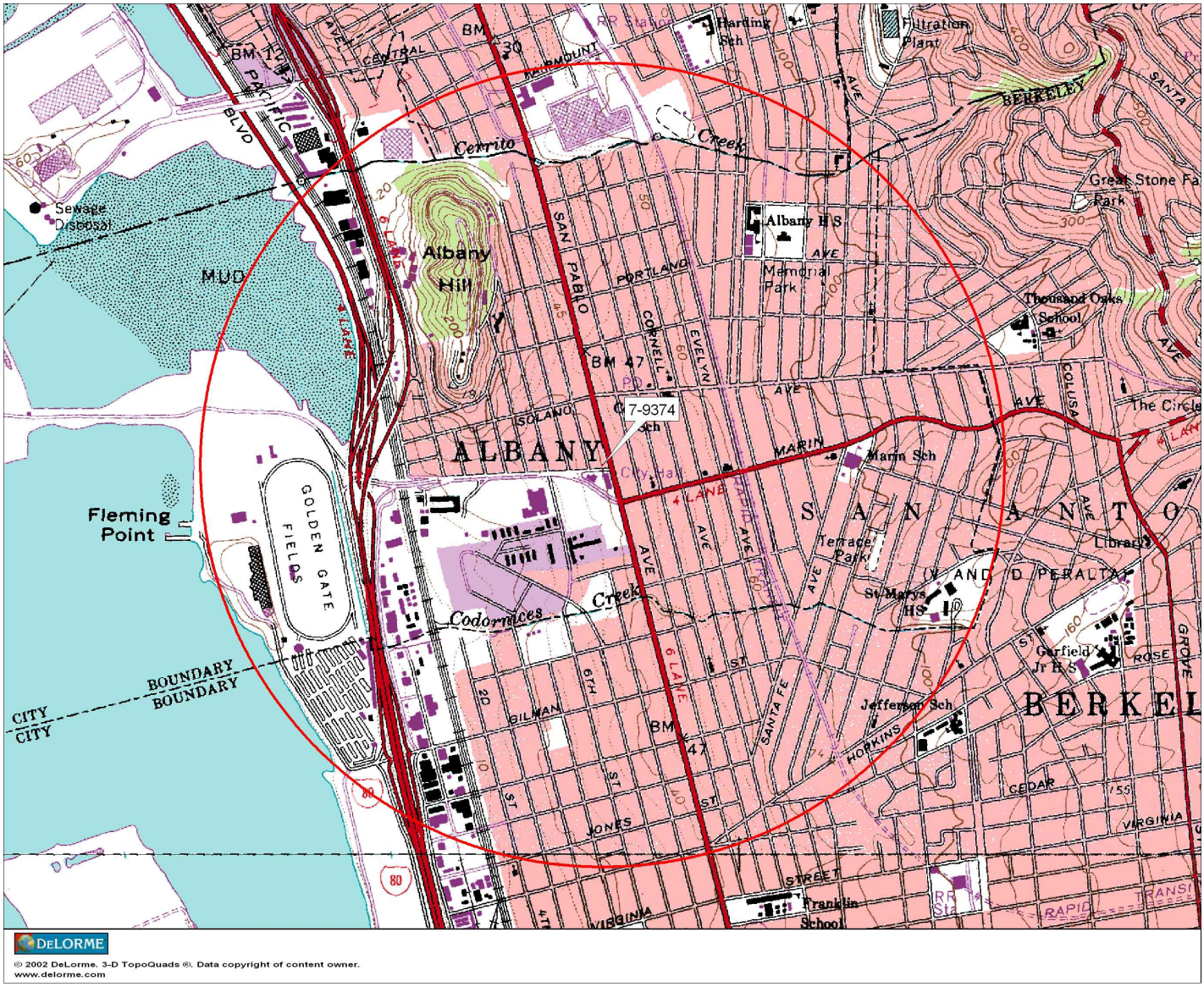
REFERENCES

Cardno. May 15, 2015. *Remedial Design Implementation Plan and Data Gap Investigation Work Plan, Former Exxon Service Station 79374, 990 San Pablo Avenue, Albany, California..*

Cardno ERI. February 4, 2015. *Feasibility Study/Corrective Action Plan, Former Exxon Service Station 79374, 990 San Pablo Avenue, Albany, 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 2735 TOPO

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 EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

Cardno Shaping the Future

PROJECT NO. 2735

PLATE 1

Analyte Concentrations in ug/L
Sampled November 18 and 19, 2015

Total Petroleum Hydrocarbons as gasoline
Benzene
Methyl Tertiary Butyl Ether

< Less than the Stated Laboratory Reporting Limit
ug/L Micrograms per Liter
a The chromatographic pattern does not match that of the specified standard.

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

APPROXIMATE SCALE
0 20 40 Feet

FN 2735 15 4QTR QM

Cardno Shaping the Future

SELECT ANALYTICAL RESULTS
November 18 and 19, 2015

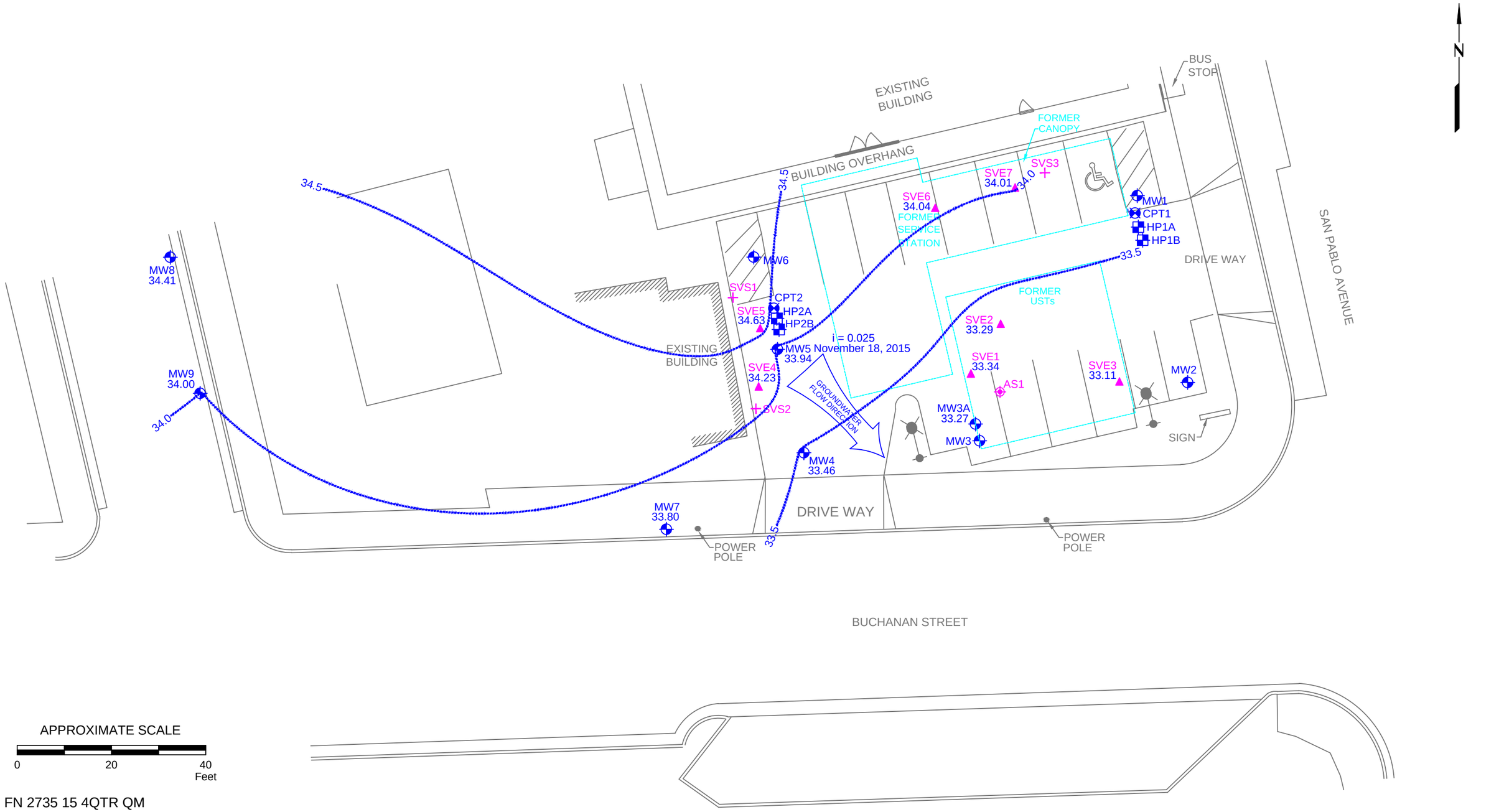
FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

EXPLANATION

- MW9 Groundwater Monitoring Well
- HP2B Hydropunch Boring
- AS1 Air Sparge Well
- CPT2 Cone Penetration Test Boring
- SVE7 Soil Vapor Extraction Well
- SVS3 Soil Vapor Sampling Well

PROJECT NO. 2735

PLATE 2



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GROUNDWATER ELEVATION MAP
SHALLOW WATER-BEARING ZONE
November 18, 2015

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

EXPLANATION

- MW9 — Groundwater Monitoring Well
- 33.32 — Groundwater elevation in feet; datum is NAVD88
- i = Interpreted Hydraulic Gradient
- HP2B — Hydropunch Boring
- CPT2 — Cone Penetration Test Boring
- 34.0 — Line of Equal Groundwater Elevation; datum is NAVD88
- AS1 — Air Sparge Well
- SVE7 — Soil Vapor Extraction Well
- SVS3 — Soil Vapor Sampling Well

PROJECT NO. 2735

PLATE 3

FN 2735 15 4QTR QM

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GROUNDWATER ELEVATION MAP
DEEP WATER-BEARING ZONE
November 18, 2015

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

EXPLANATION

- MW9 — Groundwater Monitoring Well
- 33.74 — Groundwater elevation in feet; datum is NAVD88
- HP2B — Hydropunch Boring
- CPT2 — Cone Penetration Test Boring
- AS1 — Air Sparge Well
- SVE7 — Soil Vapor Extraction Well
- SVS3 — Soil Vapor Sampling Well

PROJECT NO. 2735

PLATE 4

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
Monitoring Well Samples															
MW1	11/04/10	---	Well installed.												
MW1	12/01/10	---	41.45	Well surveyed.											
MW1	12/16/10	---	41.45	9.18	32.27	No	---	<250	71a	54	<0.50	1.4	0.65	0.58	1.6
MW1	01/31/11	---	41.45	8.78	32.67	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	04/07/11	---	41.45	8.45	33.00	No	---	<250	65a	160a	<0.50	2.9	0.92	<0.50	1.7
MW1	07/18/11	---	41.45	9.49	31.96	No	---	<250	<50	63a	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	10/13/11	---	41.45	9.86	31.59	No	---	<250	54	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	04/06/12	---	41.45	8.11	33.34	No	---	<250	130	130	<0.50	2.1	<0.50	<0.50	<0.50
MW1	10/19/12	---	41.45	10.42	31.03	No	---	<250	<50	<50	<0.50	0.51	2.2	<0.50	0.65
MW1	06/11/13	---	41.45	10.48	30.97	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	12/19/13	---	41.45	10.67	30.78	No	---	<250	<50	<50	<0.50	<0.50	1.3	<0.50	0.53
MW1	04/03/14	---	44.19	Elevation converted to NAVD88.											
MW1	04/30/14	---	44.19	9.49	34.70	No	---	---	---	---	---	---	---	---	---
MW1	05/01/14	---	44.19	---	---	---	---	<240	<48	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	10/28/14	---	44.19	10.85	33.34	No	---	<250	61a	59	<0.50	1.2	<0.50	0.64	<0.50
MW1	06/02/15	---	44.19	10.35	33.84	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW1	**11/18/15**	**---**	**44.19**	**10.72**	**33.47**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
MW1	**11/19/15**	**---**	**44.19**	**---**	**---**	**---**	**---**	**<240**	**<47**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW2	11/04/10	---	Well installed.												
MW2	12/01/10	---	41.25	Well surveyed.											
MW2	12/16/10	---	41.25	8.11	33.14	No	---	<250	110a	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	01/31/11	---	41.25	9.29	31.96	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	04/07/11	---	41.25	8.21	33.04	No	---	<250	<50	<50	0.51	<0.50	<0.50	<0.50	<0.50
MW2	07/18/11	---	41.25	9.52	31.73	No	---	<250	<50	54a	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	10/13/11	---	41.25	9.56	31.69	No	---	<250	98	75a	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	04/06/12	---	41.25	8.68	32.57	No	---	<250	60	68	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	10/19/12	---	41.25	11.03	30.22	No	---	<250	<50	59a	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	06/11/13	---	41.25	10.67	30.58	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	12/19/13	---	41.25	10.77	30.48	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	04/03/14	---	43.99	Elevation converted to NAVD88.											
MW2	04/30/14	---	43.99	9.63	34.36	No	---	---	---	---	---	---	---	---	---
MW2	05/01/14	---	43.99	---	---	---	---	<240	<48	53a	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	10/28/14	---	43.99	11.03	32.96	No	---	<250	78a	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	06/02/15	---	43.99	10.50	33.49	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW2	**11/18/15**	**---**	**43.99**	**10.87**	**33.12**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
MW2	**11/19/15**	**---**	**43.99**	**---**	**---**	**---**	**---**	**<240**	**60a**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW3	11/08/10	---	Well installed.												
MW3	12/01/10	---	40.42	Well surveyed.											
MW3	12/16/10	---	40.42	8.18	32.24	No	---	<250	2,900a	19,000	<12	350	130	940	290

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW3	01/31/11	---	40.42	7.64	32.78	No	---	390	2,800a	17,000a	<12	540	140	700	270
MW3	04/07/11	---	40.42	5.88	34.54	No	---	<250	2,700a	14,000	<10	600	150	780	230
MW3	07/18/11	---	40.42	8.31	32.11	No	---	<250	1,700a	19,000	<10	650	140	660	220
MW3	10/13/11	---	40.42	8.76	31.66	No	---	<250	1,900a	16,000	<10	520	150	900	270
MW3	04/06/12	---	40.42	8.13	32.29	No	---	<250	3,200a	18,000	<20	300	120	1,100	180
MW3	10/19/12	---	40.42	9.37	31.05	No	---	<250	1,700a	11,000a	<10	380	120	740	150
MW3	06/11/13	---	40.42	9.48	30.94	No	---	<250	2,700a	17,000	<10	270	110	990	140
MW3	12/19/13	---	40.42	10.00	30.42	No	---	---	---	---	---	---	---	---	---
MW3	12/20/13	---	40.42	---	---	---	---	<250	2,000a	16,000	<10	310	120	710	120
MW3	04/03/14	---	43.16	Elevation converted to NAVD88.											
MW3	04/30/14	---	43.16	9.17	33.99	No	---	---	---	---	---	---	---	---	---
MW3	05/01/14	---	43.16	---	---	---	---	<240	3,100a	18,000	<10	230	110	1,100	170
MW3	10/28/14	---	43.16	10.10	33.06	No	---	<250	4,800a	17,000	<20	330	120	1,200	150
MW3	06/02/15	---	43.16	9.30	33.86	No	---	<250	3,900a	18,000a	<20	290	110	850	140
MW3	**11/18/15**	**---**	**43.16**	**10.06**	**33.10**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
MW3	**11/19/15**	**---**	**43.16**	**---**	**---**	**---**	**---**	**<240**	**3,000a**	**1,500a**	**<5.0**	**290**	**110**	**340**	**100**
MW3A	01/18/12	---	Well installed.												
MW3A	02/06/12	---	40.68	Well surveyed.											
MW3A	04/06/12	---	40.68	6.02	34.66	No	---	<250	170a	1,300	<2.0	41	7.5	140	38
MW3A	10/19/12	---	40.68	10.44	30.24	No	---	<250	860a	4,400a	<5.0	390	59	410	82
MW3A	06/11/13	---	40.68	9.75	30.93	No	---	<250	160a	1,100	<2.0	99	14	110	3.6
MW3A	12/19/13	---	40.68	10.05	30.63	No	---	<250	270a	1,800	<2.0	150	18	65	4.7
MW3A	04/03/14	---	43.42	Elevation converted to NAVD88.											
MW3A	04/30/14	---	43.42	7.55	35.87	No	---	---	---	---	---	---	---	---	---
MW3A	05/01/14	---	43.42	---	---	---	---	<240	<48	130a	<0.50	7.0	1.2	7.4	1.3
MW3A	10/28/14	---	43.42	10.33	33.09	No	---	<250	330a	1,600	<0.50	150	17	26	4.0
MW3A	06/02/15	---	43.42	9.48	33.94	No	---	<250	89a	170a	<0.50	14	0.95	6.7	1.8
MW3A	**11/18/15**	**---**	**43.42**	**10.15**	**33.27**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
MW3A	**11/19/15**	**---**	**43.42**	**---**	**---**	**---**	**---**	**<240**	**240a**	**660a**	**<2.0**	**86**	**7.2**	**3.8**	**3.6**
MW4	11/05/10	---	Well installed.												
MW4	12/01/10	---	39.30	Well surveyed.											
MW4	12/16/10	---	39.30	6.10	33.20	No	---	<250	2,000a	9,900	<5.0	440	40	170	380
MW4	01/31/11	---	39.30	6.84	32.46	No	---	260	3,900a	13,000	<10	500	59	320	740
MW4	04/07/11	---	39.30	5.29	34.01	No	---	<250	1,900a	9,600	<10	530	59	250	340
MW4	07/18/11	---	39.30	7.36	31.94	No	---	<250	2,800a	14,000	<10	570	66	320	510
MW4	10/13/11	---	39.30	7.83	31.47	No	---	320	7,200a	14,000	<10	350	43	340	690
MW4	04/06/12	---	39.30	6.21	33.09	No	---	<250	1,800a	9,100a	<10	380	40	220	410
MW4	10/19/12	---	39.30	10.64	28.66	No	---	1,400a	20,000a	270,000	<10	440	88	2,100	3,800
MW4	03/06/13	---	39.30	8.02	31.28	No	---	---	---	---	---	---	---	---	---
MW4	06/11/13	---	39.30	9.05	30.25	No	---	<250	3,400a	16,000	<10	430	48	520	820
MW4	12/19/13	---	39.30	8.95	30.35	No	---	---	---	---	---	---	---	---	---
MW4	12/20/13	---	39.30	---	---	---	---	<250	2,800a	13,000	<10	590	41	430	530

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW4	03/05/14	---	39.30	---	---	No	---	---	---	---	---	---	---	---	---
MW4	04/03/14	---	42.04	Elevation converted to NAVD88.											
MW4	04/30/14	---	42.04	6.25	35.79	No	---	---	---	---	---	---	---	---	---
MW4	05/01/14	---	42.04	---	---	---	---	<240	3,000a	13,000	<10	520	46	310	340
MW4	10/28/14	---	42.04	10.20	31.84	No	---	<250	7,400a	15,000	<10	590	42	360	230
MW4	06/02/15	---	42.04	9.60	32.44	Sheen	---	<250	5,100a	22,000	<10	490	36	280	170
MW4	**11/18/15**	**---**	**42.04**	**8.58**	**33.46**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
MW4	**11/19/15**	**---**	**42.04**	**---**	**---**	**---**	**---**	**930a**	**7,600a**	**1,800a**	**<5.0**	**290**	**21**	**180**	**140**
MW5	11/11/10	---	Well installed.												
MW5	12/01/10	---	40.38	Well surveyed.											
MW5	12/16/10	---	40.38	7.69	32.69	No	---	<250	1,100a	6,200	<2.5	150	96	270	980
MW5	01/31/11	---	40.38	8.00	32.38	No	---	270	4,600a	15,000	<10	520	310	1,100	2,500
MW5	04/07/11	---	40.38	6.73	33.65	No	---	<250	610a	2,500	<2.5	61	32	180	390
MW5	07/18/11	---	40.38	7.63	32.75	No	---	<250	2,000a	11,000	<2.5	340	160	990	1,800
MW5	10/13/11	---	40.38	9.31	31.07	No	---	660	7,600a	23,000	<20	390	160	1,200	3,100
MW5	04/06/12	---	40.38	6.77	33.61	No	---	<250	880a	6,000a	<5.0	62	17	360	680
MW5	10/19/12	---	40.38	10.64	29.74	No	---	280a	2,100a	15,000	<20	580	63	950	1,400
MW5	06/11/13	---	40.38	10.06	30.32	No	---	<250	2,700a	13,000	<20	540	36	930	1,200
MW5	12/19/13	---	40.38	9.85	30.53	No	---	---	---	---	---	---	---	---	---
MW5	12/20/13	---	40.38	---	---	---	---	<250	2,100a	21,000	<20	370	36	1,500	1,400
MW5	04/03/14	---	43.12	Elevation converted to NAVD88.											
MW5	04/30/14	---	43.12	7.51	35.61	No	---	---	---	---	---	---	---	---	---
MW5	05/01/14	---	43.12	---	---	---	---	<240	2,000a	10,000	<10	170	10	600	510
MW5	10/28/14	---	43.12	10.00	33.12	No	---	360a	6,200a	16,000	<10	550	17	890	360
MW5	06/02/15	---	43.12	9.68	33.44	Sheen	---	340a	4,400a	19,000	<20	340	<20	880	430
MW5	**11/18/15**	**---**	**43.12**	**9.18**	**33.94**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
MW5	**11/19/15**	**---**	**43.12**	**---**	**---**	**---**	**---**	**1,200a**	**8,300a**	**5,000**	**<20**	**230**	**<20**	**710**	**320**
MW6	11/03/10	---	Well installed.												
MW6	12/01/10	---	41.06	Well surveyed.											
MW6	12/16/10	---	41.06	8.55	32.51	No	---	<250	110a	1,700	<0.50	2.8	1.2	61	46
MW6	01/31/11	---	41.06	8.52	32.54	No	---	<250	800a	2,000a	<1.0	6.0	<1.0	30	24
MW6	04/07/11	---	41.06	7.78	33.28	No	---	<250	660a	2,000	<0.50	10	1.0	20	19
MW6	07/18/11	---	41.06	9.27	31.79	No	---	<250	350a	1,000a	<0.50	2.5	<0.50	3.8	3.5
MW6	10/13/11	---	41.06	10.21	30.85	No	---	<250	370a	890a	<0.50	2.8	<0.50	7.9	5.5
MW6	04/06/12	---	41.06	7.19	33.87	No	---	<250	440a	1,400a	<0.50	2.4	<0.50	13	15
MW6	10/19/12	---	41.06	11.36	29.70	No	---	<250	99a	510a	<0.50	4.2	1.6	8.0	7.0
MW6	06/11/13	---	41.06	10.81	30.25	No	---	<250	150a	500	<0.50	<0.50	<0.50	2.4	1.1
MW6	12/19/13	---	41.06	10.78	30.28	No	---	<250	68a	440	<0.50	<0.50	<0.50	2.3	0.87
MW6	04/03/14	---	43.80	Elevation converted to NAVD88.											
MW6	04/30/14	---	43.80	8.23	35.57	No	---	---	---	---	---	---	---	---	---
MW6	05/01/14	---	43.80	---	---	---	---	<240	450a	1,500	<0.50	2.8	0.57	13	4.8
MW6	10/28/14	---	43.80	10.91	32.89	No	---	<250	94a	260	<0.50	0.60	<0.50	0.56	<0.50

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW6	06/02/15	---	43.80	10.40	33.40	No	---	<250	360a	1,000	<0.50	0.81	<0.50	2.0	1.1
MW6	**11/18/15**	**---**	**43.80**	**10.06**	**33.74**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
MW6	**11/19/15**	**---**	**43.80**	**---**	**---**	**---**	**---**	**<240**	**370a**	**530a**	**<0.50**	**1.1**	**<0.50**	**5.3**	**1.7**
MW7	12/08/14	---	Well installed.												
MW7	12/23/14	---	41.21	Well surveyed.											
MW7	12/30/14	---	41.21	5.36	35.85	No	---	<250	2,900a	7,300a	<5.0	52	8.9	32	15
MW7	06/02/15	---	41.21	8.75	32.46	No	---	<250	2,700a	7,800a	<5.0	110	13	39	16
MW7	**11/18/15**	**---**	**41.21**	**7.41**	**33.80**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
MW7	**11/19/15**	**---**	**41.21**	**---**	**---**	**---**	**---**	**1,100a**	**3,700a**	**660a**	**<5.0**	**77**	**8.1**	**27**	**12**
MW8	12/08/14	---	Well installed.												
MW8	12/23/14	---	39.65	Well surveyed.											
MW8	12/30/14	---	39.65	3.20	36.45	No	---	<250	<49	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW8	06/02/15	---	39.65	6.33	33.32	No	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
MW8	**11/18/15**	**---**	**39.65**	**5.24**	**34.41**	**No**	**---**	**<240**	**<47**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
MW9	10/08/15	---	Well installed.												
MW9	10/16/15	---	39.50	6.45	33.05	No	---	<250	270a	360a	<0.50	<0.50	<0.50	<0.50	<0.50
MW9	10/26/15	---	39.50	Well surveyed.											
MW9	**11/18/15**	**---**	**39.50**	**5.50**	**34.00**	**No**	**---**	**<240**	**<47**	**81**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**
AS1	01/18/12	---	Well installed.												
AS1	10/19/12	---	---	10.32	---	No	---	---	---	---	---	---	---	---	---
AS1	06/11/13	---	---	9.82	---	No	---	---	---	---	---	---	---	---	---
AS1	12/19/13	---	---	10.12	---	No	---	---	---	---	---	---	---	---	---
AS1	04/30/14	---	---	7.95	---	No	---	---	---	---	---	---	---	---	---
AS1	10/28/14	---	---	10.35	---	No	---	---	---	---	---	---	---	---	---
AS1	06/02/15	---	---	9.50	---	No	---	---	---	---	---	---	---	---	---
AS1	**11/18/15**	**---**	**---**	**10.26**	**---**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE1	01/17/12	---	Well installed.												
SVE1	02/06/12	---	40.58	Well surveyed.											
SVE1	10/19/12	---	40.58	10.21	30.37	No	---	---	---	---	---	---	---	---	---
SVE1	06/11/13	---	40.58	9.63	30.95	No	---	---	---	---	---	---	---	---	---
SVE1	12/19/13	---	40.58	9.89	30.69	No	---	---	---	---	---	---	---	---	---
SVE1	04/03/14	---	43.32	Elevation converted to NAVD88.											
SVE1	04/30/14	---	43.32	7.70	35.62	No	---	---	---	---	---	---	---	---	---
SVE1	10/28/14	---	43.32	10.17	33.15	No	---	---	---	---	---	---	---	---	---
SVE1	06/02/15	---	43.32	9.35	33.97	No	---	---	---	---	---	---	---	---	---
SVE1	**11/18/15**	**---**	**43.32**	**9.98**	**33.34**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE2	01/17/12	---	Well installed.												
SVE2	02/06/12	---	40.94	Well surveyed.											
SVE2	10/19/12	---	40.94	10.48	30.46	No	---	---	---	---	---	---	---	---	---

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
SVE2	06/11/13	---	40.94	9.94	31.00	No	---	---	---	---	---	---	---	---	---
SVE2	12/19/13	---	40.94	10.20	30.74	No	---	---	---	---	---	---	---	---	---
SVE2	04/03/14	---	43.68	Elevation converted to NAVD88.											
SVE2	04/30/14	---	43.68	8.09	35.59	No	---	---	---	---	---	---	---	---	---
SVE2	10/28/14	---	43.68	10.50	33.18	No	---	---	---	---	---	---	---	---	---
SVE2	06/02/15	---	43.68	9.69	33.99	No	---	---	---	---	---	---	---	---	---
SVE2	**11/18/15**	**---**	**43.68**	**10.39**	**33.29**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE3	01/17/12	---	Well installed.												
SVE3	02/06/12	---	40.93	Well surveyed.											
SVE3	10/19/12	---	40.93	10.39	30.54	No	---	---	---	---	---	---	---	---	---
SVE3	06/11/13	---	40.93	9.65	31.28	No	---	---	---	---	---	---	---	---	---
SVE3	12/19/13	---	40.93	10.31	30.62	No	---	---	---	---	---	---	---	---	---
SVE3	04/03/14	---	43.67	Elevation converted to NAVD88.											
SVE3	04/30/14	---	43.67	7.79	35.88	No	---	---	---	---	---	---	---	---	---
SVE3	10/28/14	---	43.67	10.48	33.19	No	---	---	---	---	---	---	---	---	---
SVE3	06/02/15	---	43.67	9.40	34.27	No	---	---	---	---	---	---	---	---	---
SVE3	**11/18/15**	**---**	**43.67**	**10.56**	**33.11**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE4	10/09/15	---	Well installed.												
SVE4	10/16/15	---	43.10	10.28	32.82	No	---	<250	840a	830a	<0.50	37	1.2	5.0	26
SVE4	10/26/15	---	43.10	Well surveyed.											
SVE4	**11/18/15**	**---**	**43.10**	**8.87**	**34.23**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE5	10/09/15	---	Well installed.												
SVE5	10/16/15	---	43.70	10.55	33.15	No	---	<250	2,000a	1,700a	<20	29	25	130	2,300
SVE5	10/26/15	---	43.70	Well surveyed.											
SVE5	**11/18/15**	**---**	**43.70**	**9.07**	**34.63**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE6	10/09/15	---	Well installed.												
SVE6	10/16/15	---	44.37	10.87	33.50	No	---	<240	390a	490	<0.50	31	1.8	4.2	15
SVE6	10/26/15	---	44.37	Well surveyed.											
SVE6	**11/18/15**	**---**	**44.37**	**10.33**	**34.04**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE7	10/09/15	---	Well installed.												
SVE7	10/16/15	---	44.48	11.07	33.41	No	---	<240	240a	440a	<0.50	<0.50	<0.50	0.70	2.3
SVE7	10/26/15	---	44.48	Well surveyed.											
SVE7	**11/18/15**	**---**	**44.48**	**10.47**	**34.01**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
Grab Groundwater Samples															
B-1W	01/06/08	---	---	---	---	---	26r,s	<5,000	99,000o,n,r	76,000m,p,r	<50	<50	93	3,100	9,600
B-2W	01/06/08	---	---	---	---	---	---	310s	23,000o,r,s	77,000 l,r,s	<50	1,500	300	2,000	6,800

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
B-3W	01/06/08	---	---	---	---	---	---	<250s	2,000o,s	6,200 l,s	<10	170	32	740	250
B-4W	01/06/08	---	---	---	---	---	---	<250s	3,100o,s	7,700 l,s	<10	360	<10	240	20
B-5W	01/06/08	---	---	---	---	---	---	<250s	120o,s	120q,s	<0.5	<0.5	<0.5	<0.5	<0.5
B-6W	01/06/08	---	---	---	---	---	---	<250s	830o,s	1,700 l,s	<2.5	5.2	<2.5	100	8.6
DR-W	01/06/08	---	---	---	---	---	---	<250	96o	730m,p	<0.5	<0.5	<0.5	6.9	14
W-27.5-HP1A	10/28/10	27.5	---	---	---	---	---	260	330a	63a	<0.50	<0.50	<0.50	<0.50	<0.50
W-36-HP1A	10/28/10	36	---	---	---	---	---	<250	220a	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-46.5-HP1A	10/28/10	46.5	---	---	---	---	---	<420	<83	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-59-HP1B	10/27/10	59	---	---	---	---	---	<250	130	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-27.5-HP2A	10/29/10	27.5	---	---	---	---	---	<250	100a	340	<0.50	1.7	2.1	20	46
W-52-HP2A	10/29/10	52	---	---	---	---	---	<250	<50	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-60.5-HP2B	10/27/10	60.5	---	---	---	---	---	<250	62	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-10-SVE1-1	01/31/12	10	---	---	---	---	---	990a	1,900a	2,000	<2.0	87	2.1	13	23
W-10-SVE1-2	01/31/12	10	---	---	---	---	---	890a	1,500a	1,400	<1.0	46	2.0	24	23
W-5-B7	02/27/14	5	---	---	---	---	---	<310	<62	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-12-B8	02/28/14	12	---	---	---	---	---	<240	130a	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-5-B9	02/27/14	5	---	---	---	---	---	<310	370a	1,400a	<0.50	<0.50	<0.50	<0.50	<0.50
W-5.5-B10	02/27/14	5.5	---	---	---	---	---	<310	<62	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-14-B11	03/05/14	14	---	---	---	---	---	<310	<62	<50	<0.50	<0.50	<0.50	<0.50	<0.50
W-10-B12	02/26/14	10	---	---	---	---	---	<250	800a	5,900	<2.0	<2.0	<2.0	7.5	<2.0
W-10-B13	02/28/14	10	---	---	---	---	---	<250	1,500a	6,300	<5.0	12	8.8	290	22
B14	03/05/14 t	---	---	---	---	---	---	---	---	---	---	---	---	---	---
W-14-B15	03/05/14	14	---	---	---	---	---	<310	<62	<50	1.3	<0.50	<0.50	<0.50	<0.50
W-14-B16	02/26/14	14	---	---	---	---	---	<250	180a	170a	<0.50	1.1	<0.50	5.4	<0.50
W-10-B17	02/27/14	10	---	---	---	---	---	<270	<54	110a	<0.50	<0.50	<0.50	<0.50	<0.50

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

Notes:

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

Notes:

v = tert-butylbenzene.
w = cis-1,2-dichloroethene.
x = p-isopropyltoluene.
y = Chloroform.
z = Bromodichloromethane.
α = 1,2-Dichlorobenzene.
β = Acetone.
δ = 2-butanone.

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

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	PCE (µg/L)	TCE (µg/L)	Add'l VOCs (µg/L)	Add'l SVOCs (µg/L)
Monitoring Well Samples												
MW1	11/04/10	---	Well installed.									
MW1	12/16/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW1	01/31/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW1	04/07/11	---	<0.50	<0.50	<0.50	10	<0.50	<0.50	---	---	---	---
MW1	07/18/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW1	10/13/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW1	04/06/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW1	10/19/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW1	06/11/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW1	12/19/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW1	05/01/14	---	<0.50	<0.50	<0.50	5.1	<0.50	<0.50	---	---	---	---
MW1	10/28/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	85u	9.8	0.67f, 18w	---
MW1	06/02/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	110	9.3	19w	---
MW1	**11/19/15**	**---**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**92u**	**8.8**	**20w**	**---**
MW2	11/04/10	---	Well installed.									
MW2	12/16/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW2	01/31/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW2	04/07/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW2	07/18/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW2	10/13/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW2	04/06/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW2	10/19/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW2	06/11/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW2	12/19/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW2	05/01/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW2	10/28/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	73u	8.9	8.8e	---
MW2	06/02/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	78	6.9	8.4w	---
MW2	**11/19/15**	**---**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**79u**	**7.7**	**9.7w**	**---**
MW3	11/08/10	---	Well installed.									
MW3	12/16/10	---	<12	<12	<12	<120	<12	<12	---	---	---	---
MW3	01/31/11	---	<12	<12	<12	<120	<12	<12	---	---	---	---
MW3	04/07/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW3	07/18/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW3	10/13/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW3	04/06/12	---	<20	<20	<20	<200	<20	<20	---	---	---	---
MW3	10/19/12	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW3	06/11/13	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW3	12/20/13	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW3	05/01/14	---	<10	<10	<10	<100	<10	<10	---	---	---	---

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

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	PCE (µg/L)	TCE (µg/L)	Add'l VOCs (µg/L)	Add'l SVOCs (µg/L)
MW3	10/28/14	---	<20	<20	<20	<200	<20	<20	<20	<20	30b, 110d, 210e, 36g, 290h	---
MW3	06/02/15	---	<20	<20	<20	<200	<20	<20	<20	<20	21b, 90d, 130e, 40g, 240h	---
MW3	**11/19/15**	**---**	**<5.0**	**<5.0**	**<5.0**	**<50**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**22b, 14c, 95d, 140e, 9.5f, 24g, 120h, 9.6v, 16x**	**---**
MW3A	01/18/12	---	Well installed.									
MW3A	04/06/12	---	<2.0	<2.0	<2.0	<20	<2.0	<2.0	---	---	---	---
MW3A	10/19/12	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---	---	---	---
MW3A	06/11/13	---	<2.0	<2.0	<2.0	<20	<2.0	<2.0	---	---	---	---
MW3A	12/19/13	---	<2.0	<2.0	<2.0	<20	<2.0	<2.0	---	---	---	---
MW3A	05/01/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW3A	10/28/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	5.4b, 6.3c, 20d, 28e, 4.6f, 1.6g, 4.6h, 2.9v, 2.0x	---
MW3A	06/02/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	1.1b, 2.5c, 2.4d, 3.3e, 2.5f, 0.61g, 1.4h, 0.89v	---
MW3A	**11/19/15**	**---**	**<2.0**	**<2.0**	**<2.0**	**<20**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**3.3b, 3.5c, 11d, 13e, 3.2f, 6.5h, 2.3v**	**---**
MW4	11/05/10	---	Well installed.									
MW4	12/16/10	---	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---	---	---	---
MW4	01/31/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW4	04/07/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW4	07/18/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW4	10/13/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW4	04/06/12	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW4	10/19/12	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW4	06/11/13	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW4	12/20/13	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW4	05/01/14	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW4	10/28/14	---	<10	<10	<10	<100	<10	<10	<10	<10	72b, 24c, 75d, 190e, 350f, 160g, 270h	---
MW4	06/02/15	---	<10	<10	<10	<100	<10	<10	<10	<10	83b, 27c, 70d, 170e, 320f, 130g, 170h, 10v	---
MW4	**11/19/15**	**---**	**<5.0**	**<5.0**	**<5.0**	**<50**	**<5.0**	**<5.0**	**<5.0**	**<5.0**	**98b, 26c, 56d, 140e, 340f, 140g, 150h, 9.9v, 12x**	**---**
MW5	11/11/10	---	Well installed.									
MW5	12/16/10	---	<2.5	<2.5	<2.5	<25	<2.5	<2.5	---	---	---	---
MW5	01/31/11	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW5	04/07/11	---	<2.5	<2.5	<2.5	<25	<2.5	<2.5	---	---	---	---
MW5	07/18/11	---	<2.5	<2.5	<2.5	<25	<2.5	<2.5	---	---	---	---
MW5	10/13/11	---	<20	<20	<20	<200	<20	<20	---	---	---	---
MW5	04/06/12	---	<0.50	<5.0	<5.0	<50	<5.0	<5.0	---	---	---	---
MW5	10/19/12	---	<20	<20	<20	<200	<20	<20	---	---	---	---
MW5	06/11/13	---	<20	<20	<20	<200	<20	<20	---	---	---	---
MW5	12/20/13	---	<20	<20	<20	<200	<20	<20	---	---	---	---
MW5	05/01/14	---	<10	<10	<10	<100	<10	<10	---	---	---	---
MW5	10/28/14	---	<10	<10	<10	<100	<10	<10	<10	<10	82b, 33c, 120d, 380e, 730f, 130g, 250h, 14x	---
MW5	06/02/15	---	<20	<20	<20	<200	<20	<20	<20	<20	110b, 42c, 120d, 390e, 820f, 150g, 210h	---
MW5	**11/19/15**	**---**	**<20**	**<20**	**<20**	**<200**	**<20**	**<20**	**<20**	**<20**	**79b, 29c, 98d, 280e, 620f, 130g, 210h**	**---**

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

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	PCE (µg/L)	TCE (µg/L)	Add'l VOCs (µg/L)	Add'l SVOCs (µg/L)
MW6	11/03/10	---	Well installed.									
MW6	12/16/10	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW6	01/31/11	---	<1.0	<1.0	<1.0	<10	<1.0	<1.0	---	---	---	---
MW6	04/07/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW6	07/18/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW6	10/13/11	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW6	04/06/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW6	10/19/12	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW6	06/11/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW6	12/19/13	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW6	05/01/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW6	10/28/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	0.73c, 0.84d, 1.9e, 1.4h	---
MW6	06/02/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	3.2b, 2.9c, 4.6d, 11e, 3.3h	---
MW6	**11/19/15**	**---**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**7.0b, 5.0c, 12d, 29e, 0.60f, 10h, 16β, 6.5δ**	**---**
MW7	12/08/14	---	Well installed.									
MW7	12/30/14	---	<5.0	<5.0	<5.0	<50	<5.0	13	---	---	---	---
MW7	06/02/15	---	<5.0	<5.0	<5.0	<50	<5.0	19	<5.0	<5.0	45b, 24c, 110d, 270e, 150h	---
MW7	**11/19/15**	**---**	**<5.0**	**<5.0**	**<5.0**	**<50**	**<5.0**	**13**	**<5.0**	**<5.0**	**36b, 18c, 86d, 220e, 220h**	**---**
MW8	12/08/14	---	Well installed.									
MW8	12/30/14	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
MW8	06/02/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	23y, 0.85z	---
MW8	**11/18/15**	**---**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**3.2y**	**---**
MW9	10/08/15	---	Well installed.									
MW9	10/16/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	1.4b, 0.93c, 1.6d, 1.9e, 4.1y	---
MW9	**11/18/15**	**---**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**0.60b, 0.53e, 3.0y**	**---**
AS1	01/18/12	---	Well installed.									
AS1	10/19/12 - Present	Not sampled.										
SVE1	01/17/12	---	Well installed.									
SVE1	10/19/12 - Present	Not sampled.										
SVE2	01/17/12	---	Well installed.									
SVE2	10/19/12 - Present	Not sampled.										
SVE3	01/17/12	---	Well installed.									
SVE3	10/19/12 - Present	Not sampled.										
SVE4	10/09/15	---	Well installed.									

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

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	PCE (µg/L)	TCE (µg/L)	Add'l VOCs (µg/L)	Add'l SVOCs (µg/L)
SVE4	10/16/15	---	<0.50	<0.50	<0.50	5.4	<0.50	<0.50	<0.50	<0.50	2.5b, 1.5c, 4.3d, 2.8e, 7.2f, 11g, 15h, 0.75v, 0.59x, 0.68α	---
SVE4	**11/18/15**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE5	10/09/15	---	Well installed.									
SVE5	10/16/15	---	<20	<20	<20	<200	<20	<20	<20	<20	24b, 28d, 520f, 210g, 140h	---
SVE5	**11/18/15**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE6	10/09/15	---	Well installed.									
SVE6	10/16/15	---	<0.50	<0.50	<0.50	5.7	<0.50	<0.50	<0.50	<0.50	3.1b, 1.0c, 1.3d, 0.80e, 1.8f, 14g, 1.9h, 0.99x	---
SVE6	**11/18/15**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE7	10/09/15	---	Well installed.									
SVE7	10/16/15	---	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	<0.50	<0.50	0.97b, 1.7c, 2.2d, 2.4e	---
SVE7	**11/18/15**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
Grab Groundwater Samples												
B-1W	01/06/08	---	<50	<50	<50	<200	<50	<50	<50	<50	210b, 68c, 370d, 1,100e, 3,800f, 1,300g, 1,500h	4,000h, 3,900k
B-2W	01/06/08	---	<50	<50	<50	<200	<50	<50	<50	<50	110b, 140e, 440f, 2,400g, 730h, 610i, 32j	---
B-3W	01/06/08	---	<10	<10	<10	<40	<10	<10	<10	<10	25b, 11c, 74d, 190e, 290f, 49g, 55i	---
B-4W	01/06/08	---	<10	<10	<10	<40	<10	<10	<10	<10	46b, 19c, 48d, 160e, 16f, 100h	---
B-5W	01/06/08	---	ND	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	2.6b, 0.83e, 4.8f, 1.2g, 6.5h	---
B-6W	01/06/08	---	<2.5	<2.5	<2.5	<10	<2.5	<2.5	<2.5	<2.5	14b, 5.6c, 17d, 60e, 32f, 5.8g, 38h, 10i	---
DR-W	01/06/08	---	<0.5	<0.5	<0.5	<2.0	<0.5	<0.5	<0.5	<0.5	6.9b, 2.4c, 2.5d, 11e, 17f, 5.5g, 7.0h	---
W-27.5-HP1A	10/28/10	27.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-36-HP1A	10/28/10	36	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-46.5-HP1A	10/28/10	46.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-59-HP1B	10/27/10	59	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-27.5-HP2A	10/29/10	27.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-52-HP2A	10/29/10	52	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-60.5-HP2B	10/27/10	60.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-10-SVE1-1	01/31/12	10	<2.0	<2.0	<2.0	62	<2.0	<2.0	---	---	---	---

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

Well ID	Sampling Date	Depth (feet)	EDB (µg/L)	1,2-DCA (µg/L)	TAME (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	PCE (µg/L)	TCE (µg/L)	Add'l VOCs (µg/L)	Add'l SVOCs (µg/L)
W-10-SVE1-2	01/31/12	10	<1.0	<1.0	<1.0	57	<1.0	<1.0	---	---	---	---
W-5-B7	02/27/14	5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-12-B8	02/28/14	12	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-5-B9	02/27/14	5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-5.5-B10	02/27/14	5.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-14-B11	03/05/14	14	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-10-B12	02/26/14	10	<2.0	<2.0	<2.0	<20	<2.0	<2.0	---	---	---	---
W-10-B13	02/28/14	10	<5.0	<5.0	<5.0	<50	<5.0	<5.0	---	---	---	---
B14	03/05/14 t		---	---	---	---	---	---	---	---	---	---
W-14-B15	03/05/14	14	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-14-B16	02/26/14	14	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---
W-10-B17	02/27/14	10	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---	---	---

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

Notes:

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

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

Notes:

v = tert-butylbenzene.
w = cis-1,2-dichloroethene.
x = p-isopropyltoluene.
y = Chloroform.
z = Bromodichloromethane.
α = 1,2-Dichlorobenzene.
β = Acetone.
δ = 2-butanone.

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

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

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

TABLE 3
OPERATION AND PERFORMANCE DATA FOR AIR SPARGE/SOIL VAPOR EXTRACTION SYSTEM
Former Exxon Service Station 79374
990 San Pablo Avenue
Albany, California

Date	Time	System Hours	Field Measurements: Temp (deg F)	Blower Vacuum ("Hg)	Well Vacuum ("H_2O)	Catox Temp. (deg C)	Catox Temp. (deg F)	Flow (fpm)	Flow (acfm)	Flow (scfm)	Sample ID	PID (ppmv)	Destruction Efficiency (%)	Analytical Results: TPHg (mg/m^3)	Analytical Results: Benzene (mg/m^3)	TPHg Removal: Period (pounds)	TPHg Removal: Cumulative (pounds)	Benzene Removal: Period (pounds)	Benzene Removal: Cumulative (pounds)	TPHg Emission (lbs/day)	Benzene Emission (lbs/day)
Extraction Well SVE7																					
10/21/15	9:45	System started for HIT event.																			
10/21/15	9:45	0:00	92.0	3.0	58	347	657	840	41.2	39.3	V-INF-OX0	1,916	100.00	3,400	0.85	0.00	0.00	0.000	0.000		
											V-DSCHG	0.0		8.4	<0.0016					0.030	0.00001
10/21/15	11:45	2:00	90.0	12.5	18	491	916	900	44.2	41.3	V-INF-OX0	6,671	99.88	4,000	0.94	1.11	1.11	0.000	0.000		
											V-DSCHG	7.7		---	---					---	---
10/21/15	12:45	3:00	90.0	11.0	50	348	658	1,400	68.7	64.4	V-INF-OX0	9,275	99.88								
											V-DSCHG	10.7									
10/21/15	13:35	3:50	---	---	---	603	1,117	---	---	---	V-INF-OX0	---	---								
											V-DSCHG	---									
10/21/15	13:35	System shut down due to high catox temperature.																			
Extraction Well SVE4																					
10/22/15	9:00	System started for HIT event.																			
10/22/15	9:00	3:50	88.0	10.5	76	343	649	1,200	58.9	37.0	V-INF-OX0	3,672	99.90	6,100	0.66	1.35	2.47	0.000	0.000		
											V-DSCHG	3.8		---	---					---	---
10/22/15	9:30	4:20	84.0	16.5	47	377	711	1,200	58.9	25.7	V-INF-OX0	1,588	100.00								
											V-DSCHG	0.0									
10/22/15	10:00	4:50	85.0	16.0	10	465	869	1,000	49.1	22.2	V-INF-OX0	3.1	100.00								
											V-DSCHG	0.0									
10/22/15	10:30	5:20	86.0	16.5	45	412	774	1,150	56.5	24.6	V-INF-OX0	950	100.00								
											V-DSCHG	0.0									
10/22/15	11:00	5:50	88.0	16.5	35	389	732	1,200	58.9	25.5	V-INF-OX0	789	100.00								
											V-DSCHG	0.0									
10/22/15	11:30	6:20	88.0	16.5	42	450	842	1,200	58.9	25.5	V-INF-OX0	1,215	100.00								
											V-DSCHG	0.0									
10/22/15	12:00	6:50	90.0	16.0	15	464	867	1,050	51.5	23.1	V-INF-OX0	684	100.00								
											V-DSCHG	0.0									
10/22/15	12:30	7:20	90.0	16.5	36	428	802	1,100	54.0	23.3	V-INF-OX0	3,784	100.00	4,600	0.63	2.11	4.58	0.000	0.001		
											V-DSCHG	0.0		---	---					---	---
10/22/15	13:00	7:50	90.0	16.5	38	420	788	1,100	54.0	23.3	V-INF-OX0	2,984	100.00								
											V-DSCHG	0.0									
10/22/15	13:30	8:20	92.0	17.0	39	449	840	1,100	54.0	22.4	V-INF-OX0	4,574	100.00								
											V-DSCHG	0.0									
10/22/15	14:00	8:50	92.0	17.0	39	450	842	1,100	54.0	22.4	V-INF-OX0	4,982	100.00								
											V-DSCHG	0.0									
10/22/15	14:30	9:20	92.0	17.0	39	444	831	1,150	56.5	23.4	V-INF-OX0	5,337	100.00								
											V-DSCHG	0.0									
10/22/15	15:00	9:50	92.0	17.0	39	442	828	1,100	54.0	22.4	V-INF-OX0	5,506	100.00								
											V-DSCHG	0.0									
10/22/15	15:30	10:20	92.0	17.5	40	442	828	1,150	56.5	22.5	V-INF-OX0	5,783	100.00	4,600	0.73	1.18	5.76	0.000	0.001		
											V-DSCHG	0.0		---	---					---	---
10/22/15	15:30	System shut down.																			
Extraction Well SVE5																					
10/23/15	8:00	System started for HIT event.																			
10/23/15	8:00	10:20	96.0	7.0	40	343	649	1,100	54.0	39.4	V-INF-OX0	241	100.00								
											V-DSCHG	0.0									

TABLE 3
OPERATION AND PERFORMANCE DATA FOR AIR SPARGE/SOIL VAPOR EXTRACTION SYSTEM
Former Exxon Service Station 79374
990 San Pablo Avenue
Albany, California

Date	Time	System Hours	Field Measurements										Destruction Efficiency (%)	Analytical Results		TPHg Removal		Benzene Removal		TPHg Emission (lbs/day)	Benzene Emission (lbs/day)
			Temp (deg F)	Blower Vacuum ("Hg)	Well Vacuum ("H_2O)	Catox Temp. (deg C)	(deg F)	Flow (fpm)	Flow (acfm)	Flow (scfm)	Sample ID	PID (ppmv)		TPHg (mg/m^3)	Benzene (mg/m^3)	Period (pounds)	Cumulative (pounds)	Period (pounds)	Cumulative (pounds)		
10/23/15	8:15	10:35	100.0	6.0	65	352	666	2,600	127.6	96.6	V-INF-OX0	5,731	99.67	8,200	0.62	0.36	6.12	0.000	0.001		
											V-DSCHG	19.1		---	---					---	---
10/23/15	8:30	10:50	92.0	16.0	40	538	1,000	1,075	52.8	23.6	V-INF-OX0	2,589	100.00								
											V-DSCHG	0.0									
10/23/15	9:00	11:20	86.0	16.0	36	434	813	1,000	49.1	22.2	V-INF-OX0	1,934	100.00								
											V-DSCHG	0.0									
10/23/15	9:30	11:50	86.0	16.0	35	528	982	1,100	54.0	24.4	V-INF-OX0	1,882	100.00								
											V-DSCHG	0.0									
10/23/15	10:00	12:20	86.0	16.0	40	536	997	1,025	50.3	22.7	V-INF-OX0	3,559	100.00								
											V-DSCHG	0.0									
10/23/15	10:30	12:50	68.0	16.0	40	533	991	1,200	58.9	27.5	V-INF-OX0	3,967	100.00								
											V-DSCHG	0.0									
10/23/15	11:00	13:20	68.0	16.0	40	564	1,047	1,350	66.3	30.9	V-INF-OX0	3,054	100.00	8,200	0.85	5.38	11.49	0.000	0.001		
10/23/15	11:00	System shut down.																			
Extraction Well SVE6																					
10/23/15	11:45	System started for HIT event.																			
											V-DSCHG	0.0		---	---					---	---
10/23/15	11:45	13:20	72.0	5.0	58	344	651	2,100	103.1	85.5	V-INF-OX0	164	100.00								
											V-DSCHG	0.0									
10/23/15	12:00	13:35	71.0	5.0	47	353	667	2,375	116.6	96.9	V-INF-OX0	7,200	100.00	7,100	1.7	0.46	11.95	0.000	0.002		
											V-DSCHG	0.0		---	---					---	---
10/23/15	12:30	14:05	73.0	3.0	15	452	846	2,650	130.1	116.4	V-INF-OX0	31.6	100.00								
											V-DSCHG	0.0									
10/23/15	13:00	14:35	72.0	5.0	15	345	653	2,350	115.4	95.7	V-INF-OX0	4,609	#VALUE!								
											V-DSCHG	0.0									
10/23/15	13:30	15:05	71.0	7.0	30	461	862	2,500	122.7	93.8	V-INF-OX0	4,007	100.00								
											V-DSCHG	6.1									
10/23/15	14:00	15:35	72.0	7.0	50	455	851	2,450	120.3	91.8	V-INF-OX0	3,272	99.96								
											V-DSCHG	0.0									
10/23/15	14:30	16:05	78.0	7.5	47	537	999	2,400	117.8	87.0	V-INF-OX0	4,384	100.00								
											V-DSCHG	5.1									
10/23/15	14:45	16:20	78.0	7.5	46	533	991	2,450	120.3	88.8	V-INF-OX0	9,925	100.00	7,100	1.4	6.78	18.73	0.001	0.003		
											V-DSCHG	7.3		---	---					---	---
10/23/15	14:45	System shut down.																			
Extraction Well SVE1																					
10/26/15	9:30	System started for HIT event.																			
10/26/15	9:30	16:20	67.0	5.0	50	353	667	2,750	135.0	113.1	V-INF-OX0	3,533	100.00								
											V-DSCHG	0.0									
10/26/15	10:00	16:50	67.0	3.0	45	471	880	2,800	137.4	124.4	V-INF-OX0	4,543	100.00	5,100	10	1.22	19.95	0.001	0.004		
											V-DSCHG	0.0		31	0.0045					0.346	0.00005
10/26/15	10:30	17:20	---	---	---	571	1,060	---	---	---	V-INF-OX0	---	---								
											V-DSCHG	---									
10/26/15	11:00	17:50	70.0	5.5	48	392	738	2,950	144.8	118.2	V-INF-OX0	4,449	100.00								
											V-DSCHG	0.0									
10/26/15	11:30	18:20	70.0	6.0	50	534	993	2,800	137.4	109.9	V-INF-OX0	3,775	99.97								
											V-DSCHG	1.3									
10/26/15	12:00	18:50	76.0	6.0	42	508	946	2,850	139.9	110.6	V-INF-OX0	5,171	100.00								
											V-DSCHG	0.0									

TABLE 3
OPERATION AND PERFORMANCE DATA FOR AIR SPARGE/SOIL VAPOR EXTRACTION SYSTEM
Former Exxon Service Station 79374
990 San Pablo Avenue
Albany, California

Date	Time	System Hours	Field Measurements										Destruction Efficiency (%)	Analytical Results		TPHg Removal		Benzene Removal		TPHg Emission (lbs/day)	Benzene Emission (lbs/day)
			Temp (deg F)	Blower Vacuum ("Hg)	Well Vacuum ("H_2O)	Catox Temp. (deg C)	Catox Temp. (deg F)	Flow (fpm)	Flow (acfm)	Flow (scfm)	Sample ID	PID (ppmv)		TPHg (mg/m^3)	Benzene (mg/m^3)	Period (pounds)	Cumulative (pounds)	Period (pounds)	Cumulative (pounds)		
10/26/15	12:30	19:20	72.0	6.0	43	504	939	2,450	120.3	95.8	V-INF-OX0	3,104	100.00								
											V-DSCHG	0.0									
10/26/15	13:00	19:50	73.0	6.0	45	507	945	2,550	125.2	99.5	V-INF-OX0	3,718	100.00								
											V-DSCHG	0.0									
10/26/15	13:30	20:20	73.0	6.0	44	506	943	2,550	125.2	99.5	V-INF-OX0	6,526	100.00	3,600	6.4	6.37	26.32	0.012	0.016		
											V-DSCHG	0.0		---	---					---	---
10/26/15	14:00	20:50	76.0	6.0	45	505	941	2,500	122.7	97.0	V-INF-OX0	5,987	99.81								
											V-DSCHG	11.3									
10/26/15	14:30	21:20	81.0	6.0	44	505	941	2,700	132.5	103.8	V-INF-OX0	5,219	99.39								
											V-DSCHG	31.9									
10/26/15	15:00	21:50	81.0	6.5	44	503	937	2,500	122.7	94.1	V-INF-OX0	4,321	99.23								
											V-DSCHG	33.2									
10/26/15	15:00	System shut down.																			
Extraction Well SVE1																					
10/27/15	8:00	System started for HIT event.																			
10/27/15	8:00	21:50	66.0	3.5	12	354	669	2,800	137.4	122.3	V-INF-OX0	136	100.00								
											V-DSCHG	0.0									
10/27/15	8:30	22:20	66.0	5.5	58	377	711	2,050	100.6	82.7	V-INF-OX0	10,418	100.00								
											V-DSCHG	0.0									
10/27/15	9:00	22:50	67.0	6.5	83	547	1,017	1,700	83.4	65.7	V-INF-OX0	10,219	99.94	8,600	14	4.71	31.03	0.008	0.024		
											V-DSCHG	5.8		---	---					---	---
10/27/15	9:05	System shut down due to high catox temperature.																			
10/27/15	12:00	System restarted.																			
10/27/15	12:00	22:50	69.0	5.0	12	397	747	2,600	127.6	106.5	V-INF-OX0	1,177	100.00								
											V-DSCHG	0.0									
10/27/15	12:30	23:20	68.0	6.0	78	437	819	2,450	120.3	96.5	V-INF-OX0	7,555	100.00								
											V-DSCHG	0.0									
10/27/15	13:00	23:50	72.0	5.0	55	412	774	3,300	162.0	134.4	V-INF-OX0	8,669	99.94								
											V-DSCHG	4.8									
10/27/15	13:30	24:20	74.0	5.0	70	505	941	3,100	152.2	125.8	V-INF-OX0	9,299	99.96								
											V-DSCHG	3.9									
10/27/15	14:00	24:50	77.0	5.0	70	501	934	3,550	174.3	143.2	V-INF-OX0	10,523	99.89								
											V-DSCHG	11.3									
10/27/15	14:30	25:20	76.0	5.0	70	499	930	3,200	157.1	129.4	V-INF-OX0	10,433	99.89								
											V-DSCHG	11.4									
10/27/15	15:00	25:50	78.0	5.0	70	497	927	2,900	142.4	116.8	V-INF-OX0	10,113	99.90								
											V-DSCHG	10.4									
10/27/15	15:00	System shut down.																			
Extraction Well SVE1																					
10/28/15	8:00	System started for HIT event.																			
10/28/15	8:00	25:50	66.0	4.5	45	417	783	2,600	127.6	109.2	V-INF-OX0	3,263	100.00								
											V-DSCHG	0.0									
10/28/15	8:30	26:20	68.0	5.0	57	498	928	2,700	132.5	110.8	V-INF-OX0	10,313	100.00								
											V-DSCHG	0.0									
10/28/15	9:00	26:50	68.0	5.0	58	514	957	2,600	127.6	106.7	V-INF-OX0	10,527	100.00	5,800	9.4	9.28	40.31	0.015	0.039		
											V-DSCHG	0.0		---	---					---	---

TABLE 3
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Former Exxon Service Station 79374
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Albany, California

Date	Time	System Hours	Field Measurements										Destruction Efficiency (%)	Analytical Results		TPHg Removal		Benzene Removal		TPHg Emission (lbs/day)	Benzene Emission (lbs/day)
			Temp (deg F)	Blower Vacuum ("Hg)	Well Vacuum ("H_2O)	Catox Temp. (deg C)	Catox Temp. (deg F)	Flow (fpm)	Flow (acfm)	Flow (scfm)	Sample ID	PID (ppmv)		TPHg (mg/m^3)	Benzene (mg/m^3)	Period (pounds)	Cumulative (pounds)	Period (pounds)	Cumulative (pounds)		
10/28/15	9:30	27:20	74.0	5.0	60	515	959	2,800	137.4	113.6	V-INF-OX0	10,467	100.00								
											V-DSCHG	0.0									
10/28/15	10:00	27:50	71.0	5.0	60	522	972	2,500	122.7	102.0	V-INF-OX0	10,586	100.00								
											V-DSCHG	0.0									
10/28/15	10:30	28:20	73.0	5.0	42	466	871	2,800	137.4	113.8	V-INF-OX0	10,759	100.00								
											V-DSCHG	0.0									
10/28/15	11:00	28:50	72.0	5.0	40	458	856	2,500	122.7	101.8	V-INF-OX0	10,329	100.00								
											V-DSCHG	0.0									
10/28/15	11:30	29:20	75.0	5.0	56	489	912	2,650	130.1	107.3	V-INF-OX0	10,523	100.00								
											V-DSCHG	0.0									
10/28/15	12:00	29:50	75.0	5.0	53	498	928	2,650	130.1	107.3	V-INF-OX0	10,283	100.00								
											V-DSCHG	0.0									
10/28/15	12:30	30:20	74.0	5.0	52	496	925	2,400	117.8	97.4	V-INF-OX0	10,513	100.00								
											V-DSCHG	0.0									
10/28/15	13:00	30:50	76.0	5.0	54	494	921	2,600	127.6	105.1	V-INF-OX0	10,288	100.00								
											V-DSCHG	0.0									
10/28/15	13:30	31:20	76.0	5.0	53	493	919	2,450	120.3	99.0	V-INF-OX0	10,493	100.00								
											V-DSCHG	0.0									
10/28/15	14:00	31:50	78.0	5.0	53	490	914	2,600	127.6	104.7	V-INF-OX0	10,767	100.00								
											V-DSCHG	0.0									
10/28/15	14:30	32:20	76.0	5.5	52	489	912	2,550	125.2	101.0	V-INF-OX0	10,267	100.00								
											V-DSCHG	0.0									
10/28/15	15:00	32:50	77.0	5.0	54	487	909	2,250	110.4	90.8	V-INF-OX0	10,639	99.99								
											V-DSCHG	0.0									
10/28/15	15:00	System shut down.																			
Extraction Well SVE1																					
10/29/15	8:00	System started for HIT event.																			
10/29/15	8:00	32:50	65.0	5.0	64	384	723	2,550	125.2	105.2	V-INF-OX0	10,029	100.00								
											V-DSCHG	0.0									
10/29/15	8:30	33:20	66.0	5.0	62	507	945	2,500	122.7	103.0	V-INF-OX0	9,210	99.99								
											V-DSCHG	1.3									
10/29/15	9:00	33:50	75.0	5.0	63	510	950	3,350	164.4	135.7	V-INF-OX0	6,810	99.67								
											V-DSCHG	22.3									
10/29/15	9:30	34:20	80.0	5.0	63	512	954	3,800	186.5	152.5	V-INF-OX0	7,359	99.34	5,800	8.9	21.08	61.40	0.033	0.072		
											V-DSCHG	48.3		---	---					---	---
10/29/15	10:00	34:50	76.0	5.0	63	511	952	3,000	147.3	121.3	V-INF-OX0	10,024	99.38								
											V-DSCHG	61.7									
10/29/15	10:30	35:20	78.0	5.0	63	512	954	3,100	152.2	124.8	V-INF-OX0	10,481	99.47	5,600	7.8	2.96	64.35	0.004	0.077		
											V-DSCHG	55.6		---	---					---	---
10/29/15	11:00	35:50	79.0	5.0	64	513	955	3,100	152.2	124.6	V-INF-OX0	10,767	99.45								
											V-DSCHG	59.3									
10/29/15	11:30	36:20	78.0	5.5	63	512	954	2,700	132.5	106.6	V-INF-OX0	10,481	99.93								
											V-DSCHG	7.1									
10/29/15	12:00	36:50	80.0	5.5	62	511	952	2,550	125.2	100.3	V-INF-OX0	10,281	99.20								
											V-DSCHG	82.7									
10/29/15	12:30	37:20	78.0	5.5	63	507	945	2,350	115.4	92.7	V-INF-OX0	10,815	99.41								
											V-DSCHG	63.9									
10/29/15	13:00	37:50	79.0	5.5	63	508	946	2,350	115.4	92.6	V-INF-OX0	10,343	99.88								
											V-DSCHG	77.2									
10/29/15	13:30	38:20	81.0	6.0	62	506	943	2,600	127.6	99.9	V-INF-OX0	10,625	100.00								

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Date	Time	System Hours	Field Measurements									Destruction Efficiency (%)	Analytical Results		TPHg Removal		Benzene Removal		TPHg Emission (lbs/day)	Benzene Emission (lbs/day)
			Temp (deg F)	Blower Vacuum ("Hg)	Well Vacuum ("H_2O)	Catox Temp. (deg C)	Catox Temp. (deg F)	Flow (fpm)	Flow (acfm)	Flow (scfm)	Sample ID	PID (ppmv)		TPHg (mg/m^3)	Benzene (mg/m^3)	Period (pounds)	Cumulative (pounds)	Period (pounds)	Cumulative (pounds)		
											V-DSCHG	49.3								
10/29/15	14:00	38:50	81.0	6.0	63	504	939	2,450	120.3	94.2	V-INF-OX0	10,297	100.00								
											V-DSCHG	51.2								
10/29/15	14:30	39:20	82.0	6.0	63	507	945	2,450	120.3	94.0	V-INF-OX0	10,343	100.00								
											V-DSCHG	63.2								
10/29/15	15:00	39:50	80.0	6.0	63	505	941	2,650	130.1	102.1	V-INF-OX0	10,148	100.00	---	---	10.69	75.04	0.015	0.092		
											V-DSCHG	12.2		---	---					---	---
10/29/15	15:00	System shut down.																			

Notes:

V-INF-OX0	=	Influent vapor sample.
V-DSCHG	=	Effluent vapor sample.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using EPA Method TO-3M.
Benzene	=	Benzene analyzed using EPA Method TO-15M.
Temp	=	Temperature of vapor stream.
Catox Temp.	=	Catalytic oxidizer catalyst inlet temperature.
deg F	=	Degrees Fahrenheit.
deg C	=	Degrees Celsius.
"Hg	=	Inches of mercury column.
"H_2O	=	Inches of water column.
PID	=	Photo-ionization detector measurement.
fpm	=	Linear feet per minute.
acfm	=	Actual cubic feet per minute.
scfm	=	Standard cubic feet per minute.
ppmv	=	Parts per million by volume.
mg/m^3	=	Milligrams per cubic meter.
lbs/day	=	Pounds per day.
---	=	Not measured.
>	=	Greater than the stated measurement.
<	=	Less than the stated laboratory reporting limit.

APPENDIX A

PROTOCOLS

GROUNDWATER SAMPLING PROTOCOL

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

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

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

1 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.

SOP-25: Hydrocarbon Removal from a Vadose Well
Pounds of Hydrocarbon in a Vapor Stream

Input Data

1. Vapor flow rate acfm (usually by Pitot tube)
2. Vapor pressure at the flow measuring device (in inches of H_2O) (use {-} for vacuum)
3. Vapor temperature at the flow-measuring device
4. Hydrocarbon content of vapor (usually in mg/m^3) for ppmv you need molecular weight.
5. Length of time (usually hours) over which flow rate occurred)

From periodic measurements, a calculation of total pounds of hydrocarbons removed from a well or from a system is calculated. The input data listed above are measured at a point in time. To calculate quantities removed, some assumptions must be made about what was happening between measurements. The following assumptions will be used for the sake of consistency:

Assumptions

1. Vapor flow for the period equals the average of the initial and final reading for the period.
2. Pressure and temperature for the entire period will be the final reading.
3. Hydrocarbon concentration for the period equals the average of the initial and final reading.
4. The hours of operation can be taken from an hour meter, an electric meter or will be assumed to be equal to the time between measurements.
5. If the unit is found down - try to determine how many hours it did operate and use the data taken for the previous period to make the calculations. Restart the unit and then take data to start the next period.

Sample Data and Calculations

Date	Time	Temperature (deg F)	Pressure (in H_2O)	Concentration (mg/m^3)	Vapor Flow (acfm)	Calculation (pounds removed)
01/06/95	11:00	70	-46	2,000	120	
01/07/95	13:00	55	-50	1,350	90	
01/08/95	10:00	80	-13	750	100	7.4

Calculate the pounds of hydrocarbon removed from the system during the period from 13:00 (1:00 pm) on the 7th to 10 am on the 8th. Pressure and temperature of the measurements (at the flow meter) must be corrected to the P and T used to report the concentration (which are P = 1 atm and T = 70 deg F). 1 atm = 14.7psia, 760 mm Hg, or 407 in H_2O. T_{abs} = 460 + T deg F.

Hours of operation = 21, T = 80, P = -13, HC = (1350+750)/2 = 1050 mg/m^3, Flow = 95

$$21 \times 60 \times 95 \times \frac{(460+70)}{(460+80)} \times \frac{(407-13)}{407} \times \frac{28.3}{1000} \times \frac{1050}{1000} \times \frac{1}{454} = 7.4 \text{ lb}$$

$$\frac{\text{hr}}{\text{basis}} \times \frac{\text{min}}{\text{hr}} \times \frac{\text{cu ft}}{\text{min}} \times T_{Corr} \times P_{Corr} \times \frac{m^3}{\text{cu ft}} \times \frac{g}{m^3} \times \frac{\text{lb}}{g} = \frac{\text{lb}}{\text{basis}}$$

$$21 \times 60 \times 95 \times 0.98 \times 0.97 \times 0.0283 \times 1.050 \times 1/454 = 7.4 \text{ lb}$$

cumulative lbs (the running total) = the sum of all the previous periods.

Note: If results are given in ppm, an assumption about the molecular weight of the hydrocarbon must be made to convert ppm into mg/m^3. ppmv x molecular wt. /24.1 = mg/m^3. (Use 102 for gasoline)

APPENDIX B

FIELD DATA SHEETS

Daily Field Report

Cardno ERI
Shaping the Future

Project ID #: 79374 ERI Job # 2735
Subject: H&S Date: 11/18-19/15
Equipment Used: DTW meter Sub pump. Sheet: 1 of 1
Name(s): Azat R. Mogdanov
Time Arrived On Site: 0700 Time Departed Site: 1030 (18/11/15)
0600 1230 (19/11/15)

18/11/15 - Arrived on site issued GW Permit, conducted H&S meeting, reviewed JSAs and HASP.
Openned all wells, let them equalite for 30 min and measured DTW.
0910 - 1030 hand bailed and sampled MW9 and MW8.
Off site 1030

19/11/15 - Arrived on site, extended work permit and conducted H&S meeting.
Set up decon station.
0630 - 1215 purged and sampled: MW1, MW2, MW3, MW3A, MW4, MW5, MW6, MW7.

Off site 1230.
Total water for the event:
Purge water - 53 gal.
Decon Water - 18 gal.
Total Water - 71 gal.

Cardno ERI Groundwater M+S
Depth To Water

Case Volume= H(r^2x0.163)

H=Height of Water Column in Feet
r=Radius of well casing in inches

Common conversion factors:
2"=0.163, 4"=0.652, 6"=1.457

Project	Location	Date	Name
2735	79374	11/18/15	Azat R. Magdanov

WELL ID	WELL DIAMETER inches	ODOR? SHEEN?	TOTAL DEPTH feet	Pre-Purge DTW feet	Case Vol. Gal.	80% recharge feet	COMMENTS
AS1	1		—	10.26	—	—	
SVE1	4		—	9.98	—	—	
SVE2	4		—	10.39	—	—	
SVE3	4		—	10.56	—	—	
MW1	2		16.61	10.72	0.96	11.90	
MW2	4		16.89	10.87	3.92	12.07	
MW8	2		14.46	5.24	1.50	7.08	—
MW3A	4		14.98	10.15	3.15	11.11	
MW9	2		14.37	5.50	1.45	7.27	—
MW6	2		19.26	10.06	1.50	11.90	
MW7	2		14.44	7.41	1.15	8.82	
MW5	2		13.40	9.18	0.69	10.02	
MW3	4		15.20	10.06	3.35	11.09	
MW4	2		13.10	8.58	0.74	9.48	
SVE4	4		—	8.87	—	—	
SVE5	4		—	9.07	—	—	
SVE6	4		—	10.33	—	—	
SVE7	4		—	10.47	—	—	

WATER SAMPLING SITE STATUS

Date: 11/18/15

Inspected by: ARM

Cardno ERI Job No.: 2735 Station No.: 79374 Site Address: 990 San Pablo Ave., Albany

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	
MW9	ok	ok	ok	ok	ok	ok	N	ok	ok	NA	NA	NA	NA	ok	
MW8	ok	ok	N	N	ok	ok	N	ok	ok	NA	NA	NA	NA	ok	
MW1	ok	ok	N	N	ok	ok	N	ok	ok	NA	NA	NA	NA	ok	
MW2	ok	ok	N	N	ok	ok	N	ok	ok	NA	NA	NA	NA	ok	
MW6	ok	ok	N	N	ok	ok	N	ok	ok	NA	NA	NA	NA	ok	
MW7	ok	ok	N	N	ok	ok	N	ok	ok	NA	NA	NA	NA	ok	
MW5	ok	ok	N	N	ok	ok	N	ok	ok	NA	NA	NA	NA	ok	
MW3	ok	ok	N	N	ok	ok	N	ok	ok	NA	NA	NA	NA	ok	
MW4	ok	ok	N	N	ok	ok	N	ok	ok	NA	NA	NA	NA	ok	
MW3A	ok	ok	N	N	ok	ok	N	ok	ok	NA	NA	NA	NA	ok	
SVE1	↓	↓	N	N	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
SVE2			N	N											
SVE3			N	N											
SVE4			ok	ok											
SVE5			ok	ok											
SVE6			N	N											
ASI	↓	↓	NA	NA	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

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).

GROUNDWATER SAMPLING FIELD LOG

Client Name: Exxon Mobil Cardno ERI Job #: 2735 Date: 11/18/15 Page 1 of 2

Location: 79374 Field Cleaning Performed: _____ Case Volume = (TD - DTW) x F where F =

Field Crew: ARM Analysis: _____

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
MW9	0917	1.45	2				7.11	Y						Baited
	0922		2	20.9	190.6	7.61	Sample Date: 11/18/15							
	0927		4	21.3	186.3	7.41	Sample Name: MW9							
	0931		6	21.3	186.2	7.29	Sample Time: 0945							
MW8	0956	1.50	2				6.54	Y						Baited
	1001		2	21.7	164.9	7.16	Sample Date: 11/18/15							
	1005		4	21.3	162.0	7.26	Sample Name: MW8							
	1010		6	21.0	160.8	7.19	Sample Time: 1030							
11/19/15 MW1	0659	0.96	1				10.74	Y						Dry @ 2 gal.
	0700		1	22.0	342	7.89	Sample Date: 11/19/15							
	0700		2	21.5	343	7.69	Sample Name: MW1							
	0702		3				Sample Time: 1000							
MW2	0712	3.92	4				10.97	Y						Dry @ 7 gal.
	0715		4	21.2	345	7.58	Sample Date: 11/19/15							
			8				Sample Name: MW2							
			12				Sample Time: 1020							
MW3A	0731	3.15	4				12.73	N						Dry @ 8 gal.
	0733		4	21.5	302	7.71	Sample Date: 11/19/15							Very slow
	0736		8	21.5	299	7.65	Sample Name: MW3A							recharge
			12				Sample Time: 1215							Does not recharge to 80%
MW6	0745	1.50	2				11.03	Y						
	0746		2	21.2	277	7.04	Sample Date: 11/19/15							
	0747		4	21.3	269	7.03	Sample Name: MW6							
	0749		6	21.2	271	7.08	Sample Time: 1040							
MW7	0758	1.15	2				6.03	Y						
	0759		2	21.3	265	6.95	Sample Date: 11/19/15							
	0800		4	21.5	263	7.00	Sample Name: MW7							
	0801		6	21.4	262	7.08	Sample Time: 1055							

GROUNDWATER SAMPLING FIELD LOG

Client Name: Exxon Mobil

Location: 79374

Field Crew: ARM

Cardno ERI Job #: 2735

Field Cleaning Performed: ______

Analysis: ______

Date: 11/19/15 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
MW5	0815	0.69	1				10.19	N						Dry @ 3 gal.
	0816		1	21.8	267	6.98	Sample Date: 11/19/15							Does not recharge
	0816		2	21.7	307	6.86	Sample Name: MW5							in 2 hrs.
	0818		3	21.9	319	6.85	Sample Time: 1115							
MW3	0827	3.35	4				12.24	N						Dry @ 6 gal.
	0829		4	6.76	328	6.78	Sample Date: 11/19/15							Does not recharge
			8				Sample Name: MW3							in 2 hrs.
			12				Sample Time: 1130							
MW4	0839	0.74	1				9.53	N						No visible
	0840		1	21.8	336	7.33	Sample Date: 11/19/15							NAPL in the well
	0840		2	22.1	345	7.02	Sample Name: MW4							Does not recharge
	0841		3	22.5	346	6.99	Sample Time: 1145							in 2 hrs.
							Sample Date:							
							Sample Name:							
							Sample Time:							
							Sample Date:							
							Sample Name:							
							Sample Time:							
							Sample Date:							
							Sample Name:							
							Sample Time:							
							Sample Date:							
							Sample Name:							
							Sample Time:							

APPENDIX C

LABORATORY ANALYTICAL REPORTS

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Supplemental Report 1

Additional requested analyses have been added to the original report.

WORK ORDER NUMBER: 15-11-1515

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno

Client Project Name: ExxonMobil 79374/022735C

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

Approved for release on 12/14/2015 by:
Cecile deGuia
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: ExxonMobil 79374/022735C
Work Order Number: 15-11-1515

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Work Order Narrative

Work Order: 15-11-1515 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 11/20/15. They were assigned to Work Order 15-11-1515.

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.

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Sample Summary

Client:	Cardno	Work Order:	15-11-1515
	601 North McDowell Blvd.	Project Name:	ExxonMobil 79374/022735C
	Petaluma, CA 94954-2312	PO Number:	022735C
		Date/Time Received:	11/20/15 10:15
		Number of Containers:	102
Attn:	Scott Perkins		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
QCBB	15-11-1515-1	11/19/15 09:10	2	Aqueous
MW1	15-11-1515-2	11/19/15 10:00	10	Aqueous
MW2	15-11-1515-3	11/19/15 10:20	10	Aqueous
MW3	15-11-1515-4	11/19/15 11:30	10	Aqueous
MW3A	15-11-1515-5	11/19/15 12:15	10	Aqueous
MW4	15-11-1515-6	11/19/15 11:45	10	Aqueous
MW5	15-11-1515-7	11/19/15 11:15	10	Aqueous
MW6	15-11-1515-8	11/19/15 10:40	10	Aqueous
MW7	15-11-1515-9	11/19/15 10:55	10	Aqueous
MW8	15-11-1515-10	11/18/15 10:30	10	Aqueous
MW9	15-11-1515-11	11/18/15 09:45	10	Aqueous

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW1	**15-11-1515-2-J**	**11/19/15 10:00**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 19:40**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	240	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	130	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW2	**15-11-1515-3-J**	**11/19/15 10:20**	**Aqueous**	**GC 47**	**11/23/15**	**11/25/15 17:00**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	240	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	134	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3	**15-11-1515-4-J**	**11/19/15 11:30**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 20:15**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	240	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3A	**15-11-1515-5-J**	**11/19/15 12:15**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 20:33**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	240	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	127	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW4	**15-11-1515-6-J**	**11/19/15 11:45**	**Aqueous**	**GC 47**	**11/23/15**	**11/25/15 17:18**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	930	240	1.00	HD,SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	128	68-140	

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 79374/022735C

Date Received: 11/20/15
Work Order: 15-11-1515
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
MW5	**15-11-1515-7-J**	**11/19/15 11:15**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 21:08**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	1200	240	1.00	HD,SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	119	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	**15-11-1515-8-J**	**11/19/15 10:40**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 21:27**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	240	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW7	**15-11-1515-9-J**	**11/19/15 10:55**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 21:45**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	1100	240	1.00	HD,SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	130	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW8	**15-11-1515-10-J**	**11/18/15 10:30**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 22:02**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	240	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW9	**15-11-1515-11-J**	**11/18/15 09:45**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 22:20**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	240	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	123	68-140	

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

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-278-1069**	**N/A**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 18:10**	**151123B19**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	ND	250	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	119	68-140	

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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 79374/022735C

Date Received: 11/20/15
Work Order: 15-11-1515
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
MW1	**15-11-1515-2-J**	**11/19/15 10:00**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 19:40**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	47	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	130	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW2	**15-11-1515-3-J**	**11/19/15 10:20**	**Aqueous**	**GC 47**	**11/23/15**	**11/25/15 17:00**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	60	47	1.00	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	134	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3	**15-11-1515-4-J**	**11/19/15 11:30**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 20:15**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	3000	47	1.00	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3A	**15-11-1515-5-J**	**11/19/15 12:15**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 20:33**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	240	47	1.00	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	127	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW4	**15-11-1515-6-J**	**11/19/15 11:45**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 20:51**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	7600	470	10.0	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	125	68-140	

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 79374/022735C

Date Received: 11/20/15
Work Order: 15-11-1515
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
MW5	**15-11-1515-7-J**	**11/19/15 11:15**	**Aqueous**	**GC 47**	**11/23/15**	**11/25/15 17:37**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	8300	240	5.00	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	129	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	**15-11-1515-8-J**	**11/19/15 10:40**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 21:27**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	370	47	1.00	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	110	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW7	**15-11-1515-9-J**	**11/19/15 10:55**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 21:45**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	3700	47	1.00	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	130	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW8	**15-11-1515-10-J**	**11/18/15 10:30**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 22:02**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	47	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	111	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW9	**15-11-1515-11-J**	**11/18/15 09:45**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 22:20**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	47	1.00	SG

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	123	68-140	

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

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-304-1241**	**N/A**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 18:10**	**151123B18**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	119	68-140	

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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 79374/022735C

Date Received: 11/20/15
Work Order: 15-11-1515
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
MW1	**15-11-1515-2-F**	**11/19/15 10:00**	**Aqueous**	**GC 1**	**11/30/15**	**12/02/15 09:07**	**151130L053**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	52	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW2	**15-11-1515-3-F**	**11/19/15 10:20**	**Aqueous**	**GC 1**	**11/30/15**	**12/02/15 09:42**	**151130L053**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	54	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3	**15-11-1515-4-F**	**11/19/15 11:30**	**Aqueous**	**GC 1**	**12/01/15**	**12/02/15 19:49**	**151130L054**

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

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	68	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3A	**15-11-1515-5-F**	**11/19/15 12:15**	**Aqueous**	**GC 1**	**11/30/15**	**12/02/15 11:29**	**151130L053**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	660	50	1.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	72	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW4	**15-11-1515-6-F**	**11/19/15 11:45**	**Aqueous**	**GC 1**	**12/01/15**	**12/02/15 19:13**	**151130L054**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	1800	100	2.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	65	38-134	

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 79374/022735C

Date Received: 11/20/15
Work Order: 15-11-1515
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
MW5	**15-11-1515-7-F**	**11/19/15 11:15**	**Aqueous**	**GC 1**	**11/30/15**	**12/02/15 12:04**	**151130L053**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	5000	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	160	38-134	AZ

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	**15-11-1515-8-F**	**11/19/15 10:40**	**Aqueous**	**GC 1**	**12/01/15**	**12/02/15 17:24**	**151130L054**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	530	50	1.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	65	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW7	**15-11-1515-9-F**	**11/19/15 10:55**	**Aqueous**	**GC 1**	**12/01/15**	**12/02/15 18:00**	**151130L054**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	660	100	2.00	HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	59	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW8	**15-11-1515-10-F**	**11/18/15 10:30**	**Aqueous**	**GC 1**	**11/30/15**	**12/02/15 10:17**	**151130L053**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	55	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW9	**15-11-1515-11-F**	**11/18/15 09:45**	**Aqueous**	**GC 1**	**11/30/15**	**12/02/15 10:53**	**151130L053**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	81	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	56	38-134	

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 79374/022735C

Date Received: 11/20/15
Work Order: 15-11-1515
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
Method Blank	**099-12-436-10473**	**N/A**	**Aqueous**	**GC 1**	**11/30/15**	**12/01/15 23:05**	**151130L053**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	51	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-436-10476**	**N/A**	**Aqueous**	**GC 1**	**12/01/15**	**12/02/15 15:02**	**151130L054**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	52	38-134	

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW1	**15-11-1515-2-A**	**11/19/15 10:00**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/02/15 04:22**	**151201L077**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
c-1,2-Dichloroethene	20	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 2 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Trichloroethene	8.8	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-120	
Dibromofluoromethane	100	80-127	

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

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 3 of 36

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	108	80-128	
Toluene-d8	100	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW1	**15-11-1515-2-B**	**11/19/15 10:00**	**Aqueous**	**GC/MS L**	**12/11/15**	**12/11/15 13:38**	**151211L018**

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	92	2.0	4.00	BU,ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-120	
Dibromofluoromethane	99	80-127	
1,2-Dichloroethane-d4	111	80-128	
Toluene-d8	104	80-120	

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW2	**15-11-1515-3-A**	**11/19/15 10:20**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/02/15 04:50**	**151201L077**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
c-1,2-Dichloroethene	9.7	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 5 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Trichloroethene	7.7	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	102	80-127	

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

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 6 of 36

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	108	80-128	
Toluene-d8	101	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW2	**15-11-1515-3-B**	**11/19/15 10:20**	**Aqueous**	**GC/MS L**	**12/11/15**	**12/11/15 14:07**	**151211L018**

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	79	2.0	4.00	BU,ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-120	
Dibromofluoromethane	100	80-127	
1,2-Dichloroethane-d4	111	80-128	
Toluene-d8	104	80-120	

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3	**15-11-1515-4-B**	**11/19/15 11:30**	**Aqueous**	**GC/MS L**	**12/02/15**	**12/02/15 14:17**	**151202L069**

Parameter	Result	RL	DF	Qualifiers
Benzene	290	5.0	10.0	
Toluene	110	5.0	10.0	
Ethylbenzene	340	5.0	10.0	
o-Xylene	22	5.0	10.0	
p/m-Xylene	81	5.0	10.0	
Xylenes (total)	100	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	10.0	
Tert-Butyl Alcohol (TBA)	ND	50	10.0	
Diisopropyl Ether (DIPE)	ND	5.0	10.0	
Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10.0	
Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10.0	
1,1,1,2-Tetrachloroethane	ND	5.0	10.0	
1,1,1-Trichloroethane	ND	5.0	10.0	
1,1,2,2-Tetrachloroethane	ND	5.0	10.0	
1,1,2-Trichloroethane	ND	5.0	10.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	10.0	
1,1-Dichloroethane	ND	5.0	10.0	
1,1-Dichloroethene	ND	5.0	10.0	
1,1-Dichloropropene	ND	5.0	10.0	
1,2,3-Trichlorobenzene	ND	5.0	10.0	
1,2,3-Trichloropropane	ND	10	10.0	
1,2,4-Trichlorobenzene	ND	5.0	10.0	
1,2,4-Trimethylbenzene	9.5	5.0	10.0	
1,3,5-Trimethylbenzene	24	5.0	10.0	
c-1,2-Dichloroethene	ND	5.0	10.0	
1,2-Dibromo-3-Chloropropane	ND	50	10.0	
1,2-Dibromoethane	ND	5.0	10.0	
1,2-Dichlorobenzene	ND	5.0	10.0	
1,2-Dichloroethane	ND	5.0	10.0	
1,2-Dichloropropane	ND	5.0	10.0	
t-1,2-Dichloroethene	ND	5.0	10.0	
c-1,3-Dichloropropene	ND	5.0	10.0	
1,3-Dichlorobenzene	ND	5.0	10.0	
1,3-Dichloropropane	ND	10	10.0	
t-1,3-Dichloropropene	ND	5.0	10.0	

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

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 8 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	5.0	10.0	
2,2-Dichloropropane	ND	10	10.0	
2-Chlorotoluene	ND	5.0	10.0	
4-Chlorotoluene	ND	5.0	10.0	
4-Methyl-2-Pentanone	ND	50	10.0	
Acetone	ND	100	10.0	
Bromobenzene	ND	5.0	10.0	
Bromochloromethane	ND	10	10.0	
Bromoform	ND	5.0	10.0	
Bromomethane	ND	10	10.0	
Carbon Disulfide	ND	10	10.0	
Carbon Tetrachloride	ND	5.0	10.0	
Chlorobenzene	ND	5.0	10.0	
Dibromochloromethane	ND	5.0	10.0	
Chloroethane	ND	5.0	10.0	
Chloroform	ND	5.0	10.0	
Chloromethane	ND	5.0	10.0	
Dibromomethane	ND	5.0	10.0	
Bromodichloromethane	ND	5.0	10.0	
Dichlorodifluoromethane	ND	10	10.0	
Hexachloro-1,3-Butadiene	ND	20	10.0	
Isopropylbenzene	95	5.0	10.0	
2-Butanone	ND	50	10.0	
Methylene Chloride	ND	10	10.0	
2-Hexanone	ND	100	10.0	
Naphthalene	120	10	10.0	
n-Butylbenzene	22	5.0	10.0	
n-Propylbenzene	140	5.0	10.0	
p-Isopropyltoluene	16	5.0	10.0	
sec-Butylbenzene	14	5.0	10.0	
Styrene	ND	5.0	10.0	
tert-Butylbenzene	9.6	5.0	10.0	
Tetrachloroethene	ND	5.0	10.0	
Trichloroethene	ND	5.0	10.0	
Trichlorofluoromethane	ND	5.0	10.0	
Vinyl Chloride	ND	5.0	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	103	68-120	

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

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 9 of 36

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

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW3A	**15-11-1515-5-B**	**11/19/15 12:15**	**Aqueous**	**GC/MS L**	**12/02/15**	**12/02/15 13:48**	**151202L069**

Parameter	Result	RL	DF	Qualifiers
Benzene	86	2.0	4.00	
Toluene	7.2	2.0	4.00	
Ethylbenzene	3.8	2.0	4.00	
o-Xylene	ND	2.0	4.00	
p/m-Xylene	3.6	2.0	4.00	
Xylenes (total)	3.6	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	
1,1,1,2-Tetrachloroethane	ND	2.0	4.00	
1,1,1-Trichloroethane	ND	2.0	4.00	
1,1,2,2-Tetrachloroethane	ND	2.0	4.00	
1,1,2-Trichloroethane	ND	2.0	4.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.0	4.00	
1,1-Dichloroethane	ND	2.0	4.00	
1,1-Dichloroethene	ND	2.0	4.00	
1,1-Dichloropropene	ND	2.0	4.00	
1,2,3-Trichlorobenzene	ND	2.0	4.00	
1,2,3-Trichloropropane	ND	4.0	4.00	
1,2,4-Trichlorobenzene	ND	2.0	4.00	
1,2,4-Trimethylbenzene	3.2	2.0	4.00	
1,3,5-Trimethylbenzene	ND	2.0	4.00	
c-1,2-Dichloroethene	ND	2.0	4.00	
1,2-Dibromo-3-Chloropropane	ND	20	4.00	
1,2-Dibromoethane	ND	2.0	4.00	
1,2-Dichlorobenzene	ND	2.0	4.00	
1,2-Dichloroethane	ND	2.0	4.00	
1,2-Dichloropropane	ND	2.0	4.00	
t-1,2-Dichloroethene	ND	2.0	4.00	
c-1,3-Dichloropropene	ND	2.0	4.00	
1,3-Dichlorobenzene	ND	2.0	4.00	
1,3-Dichloropropane	ND	4.0	4.00	
t-1,3-Dichloropropene	ND	2.0	4.00	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 11 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	2.0	4.00	
2,2-Dichloropropane	ND	4.0	4.00	
2-Chlorotoluene	ND	2.0	4.00	
4-Chlorotoluene	ND	2.0	4.00	
4-Methyl-2-Pentanone	ND	20	4.00	
Acetone	ND	40	4.00	
Bromobenzene	ND	2.0	4.00	
Bromochloromethane	ND	4.0	4.00	
Bromoform	ND	2.0	4.00	
Bromomethane	ND	4.0	4.00	
Carbon Disulfide	ND	4.0	4.00	
Carbon Tetrachloride	ND	2.0	4.00	
Chlorobenzene	ND	2.0	4.00	
Dibromochloromethane	ND	2.0	4.00	
Chloroethane	ND	2.0	4.00	
Chloroform	ND	2.0	4.00	
Chloromethane	ND	2.0	4.00	
Dibromomethane	ND	2.0	4.00	
Bromodichloromethane	ND	2.0	4.00	
Dichlorodifluoromethane	ND	4.0	4.00	
Hexachloro-1,3-Butadiene	ND	8.0	4.00	
Isopropylbenzene	11	2.0	4.00	
2-Butanone	ND	20	4.00	
Methylene Chloride	ND	4.0	4.00	
2-Hexanone	ND	40	4.00	
Naphthalene	6.5	4.0	4.00	
n-Butylbenzene	3.3	2.0	4.00	
n-Propylbenzene	13	2.0	4.00	
p-Isopropyltoluene	ND	2.0	4.00	
sec-Butylbenzene	3.5	2.0	4.00	
Styrene	ND	2.0	4.00	
tert-Butylbenzene	2.3	2.0	4.00	
Tetrachloroethene	ND	2.0	4.00	
Trichloroethene	ND	2.0	4.00	
Trichlorofluoromethane	ND	2.0	4.00	
Vinyl Chloride	ND	2.0	4.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-120	

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

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 12 of 36

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	95	80-127	
1,2-Dichloroethane-d4	98	80-128	
Toluene-d8	100	80-120	

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW4	**15-11-1515-6-B**	**11/19/15 11:45**	**Aqueous**	**GC/MS L**	**12/02/15**	**12/02/15 14:46**	**151202L069**

Parameter	Result	RL	DF	Qualifiers
Benzene	290	5.0	10.0	
Toluene	21	5.0	10.0	
Ethylbenzene	180	5.0	10.0	
o-Xylene	21	5.0	10.0	
p/m-Xylene	120	5.0	10.0	
Xylenes (total)	140	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	10.0	
Tert-Butyl Alcohol (TBA)	ND	50	10.0	
Diisopropyl Ether (DIPE)	ND	5.0	10.0	
Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10.0	
Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10.0	
1,1,1,2-Tetrachloroethane	ND	5.0	10.0	
1,1,1-Trichloroethane	ND	5.0	10.0	
1,1,2,2-Tetrachloroethane	ND	5.0	10.0	
1,1,2-Trichloroethane	ND	5.0	10.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	10.0	
1,1-Dichloroethane	ND	5.0	10.0	
1,1-Dichloroethene	ND	5.0	10.0	
1,1-Dichloropropene	ND	5.0	10.0	
1,2,3-Trichlorobenzene	ND	5.0	10.0	
1,2,3-Trichloropropane	ND	10	10.0	
1,2,4-Trichlorobenzene	ND	5.0	10.0	
1,2,4-Trimethylbenzene	340	5.0	10.0	
1,3,5-Trimethylbenzene	140	5.0	10.0	
c-1,2-Dichloroethene	ND	5.0	10.0	
1,2-Dibromo-3-Chloropropane	ND	50	10.0	
1,2-Dibromoethane	ND	5.0	10.0	
1,2-Dichlorobenzene	ND	5.0	10.0	
1,2-Dichloroethane	ND	5.0	10.0	
1,2-Dichloropropane	ND	5.0	10.0	
t-1,2-Dichloroethene	ND	5.0	10.0	
c-1,3-Dichloropropene	ND	5.0	10.0	
1,3-Dichlorobenzene	ND	5.0	10.0	
1,3-Dichloropropane	ND	10	10.0	
t-1,3-Dichloropropene	ND	5.0	10.0	

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

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 14 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	5.0	10.0	
2,2-Dichloropropane	ND	10	10.0	
2-Chlorotoluene	ND	5.0	10.0	
4-Chlorotoluene	ND	5.0	10.0	
4-Methyl-2-Pentanone	ND	50	10.0	
Acetone	ND	100	10.0	
Bromobenzene	ND	5.0	10.0	
Bromochloromethane	ND	10	10.0	
Bromoform	ND	5.0	10.0	
Bromomethane	ND	10	10.0	
Carbon Disulfide	ND	10	10.0	
Carbon Tetrachloride	ND	5.0	10.0	
Chlorobenzene	ND	5.0	10.0	
Dibromochloromethane	ND	5.0	10.0	
Chloroethane	ND	5.0	10.0	
Chloroform	ND	5.0	10.0	
Chloromethane	ND	5.0	10.0	
Dibromomethane	ND	5.0	10.0	
Bromodichloromethane	ND	5.0	10.0	
Dichlorodifluoromethane	ND	10	10.0	
Hexachloro-1,3-Butadiene	ND	20	10.0	
Isopropylbenzene	56	5.0	10.0	
2-Butanone	ND	50	10.0	
Methylene Chloride	ND	10	10.0	
2-Hexanone	ND	100	10.0	
Naphthalene	150	10	10.0	
n-Butylbenzene	98	5.0	10.0	
n-Propylbenzene	140	5.0	10.0	
p-Isopropyltoluene	12	5.0	10.0	
sec-Butylbenzene	26	5.0	10.0	
Styrene	ND	5.0	10.0	
tert-Butylbenzene	9.9	5.0	10.0	
Tetrachloroethene	ND	5.0	10.0	
Trichloroethene	ND	5.0	10.0	
Trichlorofluoromethane	ND	5.0	10.0	
Vinyl Chloride	ND	5.0	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-120	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 15 of 36

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	94	80-127	
1,2-Dichloroethane-d4	97	80-128	
Toluene-d8	99	80-120	

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW5	**15-11-1515-7-A**	**11/19/15 11:15**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/02/15 06:45**	**151201L077**

Parameter	Result	RL	DF	Qualifiers
Benzene	230	20	40.0	
Toluene	ND	20	40.0	
Ethylbenzene	710	20	40.0	
o-Xylene	ND	20	40.0	
p/m-Xylene	320	20	40.0	
Xylenes (total)	320	20	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	20	40.0	
Tert-Butyl Alcohol (TBA)	ND	200	40.0	
Diisopropyl Ether (DIPE)	ND	20	40.0	
Ethyl-t-Butyl Ether (ETBE)	ND	20	40.0	
Tert-Amyl-Methyl Ether (TAME)	ND	20	40.0	
1,1,1,2-Tetrachloroethane	ND	20	40.0	
1,1,1-Trichloroethane	ND	20	40.0	
1,1,2,2-Tetrachloroethane	ND	20	40.0	
1,1,2-Trichloroethane	ND	20	40.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	20	40.0	
1,1-Dichloroethane	ND	20	40.0	
1,1-Dichloroethene	ND	20	40.0	
1,1-Dichloropropene	ND	20	40.0	
1,2,3-Trichlorobenzene	ND	20	40.0	
1,2,3-Trichloropropane	ND	40	40.0	
1,2,4-Trichlorobenzene	ND	20	40.0	
1,2,4-Trimethylbenzene	620	20	40.0	
1,3,5-Trimethylbenzene	130	20	40.0	
c-1,2-Dichloroethene	ND	20	40.0	
1,2-Dibromo-3-Chloropropane	ND	200	40.0	
1,2-Dibromoethane	ND	20	40.0	
1,2-Dichlorobenzene	ND	20	40.0	
1,2-Dichloroethane	ND	20	40.0	
1,2-Dichloropropane	ND	20	40.0	
t-1,2-Dichloroethene	ND	20	40.0	
c-1,3-Dichloropropene	ND	20	40.0	
1,3-Dichlorobenzene	ND	20	40.0	
1,3-Dichloropropane	ND	40	40.0	
t-1,3-Dichloropropene	ND	20	40.0	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 17 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	20	40.0	
2,2-Dichloropropane	ND	40	40.0	
2-Chlorotoluene	ND	20	40.0	
4-Chlorotoluene	ND	20	40.0	
4-Methyl-2-Pentanone	ND	200	40.0	
Acetone	ND	400	40.0	
Bromobenzene	ND	20	40.0	
Bromochloromethane	ND	40	40.0	
Bromoform	ND	20	40.0	
Bromomethane	ND	40	40.0	
Carbon Disulfide	ND	40	40.0	
Carbon Tetrachloride	ND	20	40.0	
Chlorobenzene	ND	20	40.0	
Dibromochloromethane	ND	20	40.0	
Chloroethane	ND	20	40.0	
Chloroform	ND	20	40.0	
Chloromethane	ND	20	40.0	
Dibromomethane	ND	20	40.0	
Bromodichloromethane	ND	20	40.0	
Dichlorodifluoromethane	ND	40	40.0	
Hexachloro-1,3-Butadiene	ND	80	40.0	
Isopropylbenzene	98	20	40.0	
2-Butanone	ND	200	40.0	
Methylene Chloride	ND	40	40.0	
2-Hexanone	ND	400	40.0	
Naphthalene	210	40	40.0	
n-Butylbenzene	79	20	40.0	
n-Propylbenzene	280	20	40.0	
p-Isopropyltoluene	ND	20	40.0	
sec-Butylbenzene	29	20	40.0	
Styrene	ND	20	40.0	
tert-Butylbenzene	ND	20	40.0	
Tetrachloroethene	ND	20	40.0	
Trichloroethene	ND	20	40.0	
Trichlorofluoromethane	ND	20	40.0	
Vinyl Chloride	ND	20	40.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-120	

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

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 18 of 36

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	96	80-127	
1,2-Dichloroethane-d4	102	80-128	
Toluene-d8	100	80-120	

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW6	**15-11-1515-8-A**	**11/19/15 10:40**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/02/15 07:14**	**151201L077**

Parameter	Result	RL	DF	Qualifiers
Benzene	1.1	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	5.3	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	1.7	0.50	1.00	
Xylenes (total)	1.7	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	0.60	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 20 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	16	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	12	0.50	1.00	
2-Butanone	6.5	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	10	1.0	1.00	
n-Butylbenzene	7.0	0.50	1.00	
n-Propylbenzene	29	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	5.0	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	102	68-120	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 21 of 36

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	96	80-127	
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	99	80-120	

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW7	**15-11-1515-9-A**	**11/19/15 10:55**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/02/15 07:43**	**151201L077**

Parameter	Result	RL	DF	Qualifiers
Benzene	77	5.0	10.0	
Toluene	8.1	5.0	10.0	
Ethylbenzene	27	5.0	10.0	
o-Xylene	ND	5.0	10.0	
p/m-Xylene	12	5.0	10.0	
Xylenes (total)	12	5.0	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	5.0	10.0	
Tert-Butyl Alcohol (TBA)	ND	50	10.0	
Diisopropyl Ether (DIPE)	13	5.0	10.0	
Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10.0	
Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10.0	
1,1,1,2-Tetrachloroethane	ND	5.0	10.0	
1,1,1-Trichloroethane	ND	5.0	10.0	
1,1,2,2-Tetrachloroethane	ND	5.0	10.0	
1,1,2-Trichloroethane	ND	5.0	10.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	5.0	10.0	
1,1-Dichloroethane	ND	5.0	10.0	
1,1-Dichloroethene	ND	5.0	10.0	
1,1-Dichloropropene	ND	5.0	10.0	
1,2,3-Trichlorobenzene	ND	5.0	10.0	
1,2,3-Trichloropropane	ND	10	10.0	
1,2,4-Trichlorobenzene	ND	5.0	10.0	
1,2,4-Trimethylbenzene	ND	5.0	10.0	
1,3,5-Trimethylbenzene	ND	5.0	10.0	
c-1,2-Dichloroethene	ND	5.0	10.0	
1,2-Dibromo-3-Chloropropane	ND	50	10.0	
1,2-Dibromoethane	ND	5.0	10.0	
1,2-Dichlorobenzene	ND	5.0	10.0	
1,2-Dichloroethane	ND	5.0	10.0	
1,2-Dichloropropane	ND	5.0	10.0	
t-1,2-Dichloroethene	ND	5.0	10.0	
c-1,3-Dichloropropene	ND	5.0	10.0	
1,3-Dichlorobenzene	ND	5.0	10.0	
1,3-Dichloropropane	ND	10	10.0	
t-1,3-Dichloropropene	ND	5.0	10.0	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 23 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	5.0	10.0	
2,2-Dichloropropane	ND	10	10.0	
2-Chlorotoluene	ND	5.0	10.0	
4-Chlorotoluene	ND	5.0	10.0	
4-Methyl-2-Pentanone	ND	50	10.0	
Acetone	ND	100	10.0	
Bromobenzene	ND	5.0	10.0	
Bromochloromethane	ND	10	10.0	
Bromoform	ND	5.0	10.0	
Bromomethane	ND	10	10.0	
Carbon Disulfide	ND	10	10.0	
Carbon Tetrachloride	ND	5.0	10.0	
Chlorobenzene	ND	5.0	10.0	
Dibromochloromethane	ND	5.0	10.0	
Chloroethane	ND	5.0	10.0	
Chloroform	ND	5.0	10.0	
Chloromethane	ND	5.0	10.0	
Dibromomethane	ND	5.0	10.0	
Bromodichloromethane	ND	5.0	10.0	
Dichlorodifluoromethane	ND	10	10.0	
Hexachloro-1,3-Butadiene	ND	20	10.0	
Isopropylbenzene	86	5.0	10.0	
2-Butanone	ND	50	10.0	
Methylene Chloride	ND	10	10.0	
2-Hexanone	ND	100	10.0	
Naphthalene	220	10	10.0	
n-Butylbenzene	36	5.0	10.0	
n-Propylbenzene	220	5.0	10.0	
p-Isopropyltoluene	ND	5.0	10.0	
sec-Butylbenzene	18	5.0	10.0	
Styrene	ND	5.0	10.0	
tert-Butylbenzene	ND	5.0	10.0	
Tetrachloroethene	ND	5.0	10.0	
Trichloroethene	ND	5.0	10.0	
Trichlorofluoromethane	ND	5.0	10.0	
Vinyl Chloride	ND	5.0	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-120	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 24 of 36

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

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

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Analytical Report

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

Date Received: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW8	**15-11-1515-10-A**	**11/18/15 10:30**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/02/15 08:12**	**151201L077**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 26 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	3.2	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-120	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 27 of 36

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	95	80-127	
1,2-Dichloroethane-d4	101	80-128	
Toluene-d8	100	80-120	

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
MW9	**15-11-1515-11-A**	**11/18/15 09:45**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/02/15 08:41**	**151201L077**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 29 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	3.0	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	0.60	0.50	1.00	
n-Propylbenzene	0.53	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-120	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 30 of 36

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	96	80-127	
1,2-Dichloroethane-d4	100	80-128	
Toluene-d8	99	80-120	

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-880-1408**	**N/A**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/01/15 23:35**	**151201L077**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 32 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	68-120	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 33 of 36

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

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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: 11/20/15
Work Order: 15-11-1515
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-880-1409**	**N/A**	**Aqueous**	**GC/MS L**	**12/02/15**	**12/02/15 11:22**	**151202L069**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
1,1-Dichloropropene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	

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

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Analytical Report

Cardno	Date Received:	11/20/15
601 North McDowell Blvd.	Work Order:	15-11-1515
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 35 of 36

Parameter	Result	RL	DF	Qualifiers
1,4-Dichlorobenzene	ND	0.50	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
Bromodichloromethane	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
Isopropylbenzene	ND	0.50	1.00	
2-Butanone	ND	5.0	1.00	
Methylene Chloride	ND	1.0	1.00	
2-Hexanone	ND	10	1.00	
Naphthalene	ND	1.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
n-Propylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	68-120	

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

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Analytical Report

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 36 of 36

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	95	80-127	
1,2-Dichloroethane-d4	92	80-128	
Toluene-d8	98	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-880-1410**	**N/A**	**Aqueous**	**GC/MS L**	**12/11/15**	**12/11/15 10:04**	**151211L018**

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	68-120	
Dibromofluoromethane	97	80-127	
1,2-Dichloroethane-d4	104	80-128	
Toluene-d8	104	80-120	

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

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Quality Control - Spike/Spike Duplicate

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: ExxonMobil 79374/022735C			Page 1 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-11-1476-2	**Sample**	**Aqueous**	**GC 1**	**11/30/15**	**12/01/15 23:40**	**151130S029**
15-11-1476-2	**Matrix Spike**	**Aqueous**	**GC 1**	**11/30/15**	**12/02/15 00:16**	**151130S029**
15-11-1476-2	**Matrix Spike Duplicate**	**Aqueous**	**GC 1**	**11/30/15**	**12/02/15 00:52**	**151130S029**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	65.13	2000	1926	93	1955	94	68-122	1	0-18	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: ExxonMobil 79374/022735C			Page 2 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-11-1513-2	**Sample**	**Aqueous**	**GC 1**	**12/01/15**	**12/02/15 15:37**	**151130S030**
15-11-1513-2	**Matrix Spike**	**Aqueous**	**GC 1**	**12/01/15**	**12/02/15 16:13**	**151130S030**
15-11-1513-2	**Matrix Spike Duplicate**	**Aqueous**	**GC 1**	**12/01/15**	**12/02/15 16:49**	**151130S030**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	1978	99	1912	96	68-122	3	0-18	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 3 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-12-0044-1	**Sample**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/02/15 00:04**	**151201S026**
15-12-0044-1	**Matrix Spike**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/02/15 01:01**	**151201S026**
15-12-0044-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/02/15 01:30**	**151201S026**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	11.00	110	11.09	111	75-125	1	0-20	
Toluene	ND	10.00	11.02	110	11.10	111	75-125	1	0-20	
Ethylbenzene	ND	10.00	11.08	111	11.12	111	75-125	0	0-20	
o-Xylene	ND	10.00	10.81	108	10.79	108	75-127	0	0-20	
p/m-Xylene	ND	20.00	21.69	108	21.94	110	75-125	1	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	11.35	113	11.60	116	71-131	2	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	50.07	100	49.57	99	20-180	1	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	10.50	105	10.53	105	64-136	0	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	10.45	105	10.67	107	73-133	2	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	10.94	109	11.17	112	75-125	2	0-20	
1,1-Dichloroethene	ND	10.00	11.15	111	11.30	113	66-126	1	0-20	
1,2-Dibromoethane	ND	10.00	11.28	113	11.21	112	75-126	1	0-20	
1,2-Dichlorobenzene	ND	10.00	10.72	107	10.93	109	75-125	2	0-20	
1,2-Dichloroethane	ND	10.00	11.32	113	11.19	112	75-127	1	0-20	
Carbon Tetrachloride	ND	10.00	11.81	118	12.42	124	69-135	5	0-20	
Chlorobenzene	ND	10.00	10.65	106	10.77	108	75-125	1	0-20	
Trichloroethene	ND	10.00	10.70	107	10.85	109	75-125	1	0-20	
Vinyl Chloride	ND	10.00	10.76	108	10.99	110	52-142	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 4 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-11-1485-2	**Sample**	**Aqueous**	**GC/MS L**	**12/02/15**	**12/02/15 12:22**	**151202S005**
15-11-1485-2	**Matrix Spike**	**Aqueous**	**GC/MS L**	**12/02/15**	**12/02/15 12:51**	**151202S005**
15-11-1485-2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**12/02/15**	**12/02/15 13:20**	**151202S005**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	11.06	111	11.06	111	75-125	0	0-20	
Toluene	ND	10.00	11.08	111	10.97	110	75-125	1	0-20	
Ethylbenzene	ND	10.00	11.04	110	11.04	110	75-125	0	0-20	
o-Xylene	ND	10.00	10.81	108	10.77	108	75-127	0	0-20	
p/m-Xylene	ND	20.00	22.19	111	22.02	110	75-125	1	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	11.66	117	11.94	119	71-131	2	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	52.10	104	50.01	100	20-180	4	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	10.60	106	10.79	108	64-136	2	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	10.79	108	10.99	110	73-133	2	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	11.30	113	11.38	114	75-125	1	0-20	
1,1-Dichloroethene	1.849	10.00	13.13	113	13.07	112	66-126	0	0-20	
1,2-Dibromoethane	ND	10.00	11.25	113	11.44	114	75-126	2	0-20	
1,2-Dichlorobenzene	ND	10.00	11.01	110	11.01	110	75-125	0	0-20	
1,2-Dichloroethane	ND	10.00	11.12	111	11.00	110	75-127	1	0-20	
Carbon Tetrachloride	ND	10.00	11.81	118	12.14	121	69-135	3	0-20	
Chlorobenzene	ND	10.00	10.72	107	10.75	107	75-125	0	0-20	
Trichloroethene	6.326	10.00	17.32	110	17.27	109	75-125	0	0-20	
Vinyl Chloride	ND	10.00	10.68	107	10.84	108	52-142	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - Spike/Spike Duplicate

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 5 of 5

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
15-12-0810-3	**Sample**	**Aqueous**	**GC/MS L**	**12/11/15**	**12/11/15 11:15**	**151211S002**
15-12-0810-3	**Matrix Spike**	**Aqueous**	**GC/MS L**	**12/11/15**	**12/11/15 12:41**	**151211S002**
15-12-0810-3	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**12/11/15**	**12/11/15 13:09**	**151211S002**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	2000	2492	125	2429	121	75-125	3	0-20	
Toluene	223.0	2000	2620	120	2547	116	75-125	3	0-20	
Ethylbenzene	ND	2000	2474	124	2446	122	75-125	1	0-20	
o-Xylene	ND	2000	2390	120	2361	118	75-127	1	0-20	
p/m-Xylene	244.6	4000	5075	121	5028	120	75-125	1	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	2000	2481	124	2380	119	71-131	4	0-20	
Tert-Butyl Alcohol (TBA)	ND	10000	11020	110	12070	121	20-180	9	0-40	
Diisopropyl Ether (DIPE)	ND	2000	2559	128	2466	123	64-136	4	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	2000	2413	121	2393	120	73-133	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	2000	2447	122	2392	120	75-125	2	0-20	
1,1-Dichloroethene	163.4	2000	2615	123	2623	123	66-126	0	0-20	
1,2-Dibromoethane	ND	2000	2287	114	2237	112	75-126	2	0-20	
1,2-Dichlorobenzene	ND	2000	2204	110	2125	106	75-125	4	0-20	
1,2-Dichloroethane	ND	2000	2499	125	2401	120	75-127	4	0-20	
Carbon Tetrachloride	ND	2000	2500	125	2551	128	69-135	2	0-20	
Chlorobenzene	ND	2000	2276	114	2253	113	75-125	1	0-20	
Trichloroethene	ND	2000	2404	120	2320	116	75-125	4	0-20	
Vinyl Chloride	1949	2000	4195	112	4332	119	52-142	3	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
Project: ExxonMobil 79374/022735C			Page 1 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-278-1069	**LCS**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 19:05**	**151123B19**
099-15-278-1069	**LCSD**	**Aqueous**	**GC 47**	**11/23/15**	**11/24/15 19:23**	**151123B19**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	2000	2235	112	2265	113	75-117	1	0-13	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
Project: ExxonMobil 79374/022735C			Page 2 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-304-1241	**LCS**	**Aqueous**	**GC 47**	**11/23/15**	**11/25/15 19:29**	**151123B18**
099-15-304-1241	**LCSD**	**Aqueous**	**GC 47**	**11/23/15**	**11/25/15 19:47**	**151123B18**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	2000	2228	111	2209	110	75-117	1	0-13	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: ExxonMobil 79374/022735C			Page 3 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-436-10473	**LCS**	**Aqueous**	**GC 1**	**11/30/15**	**12/01/15 22:29**	**151130L053**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	2000	1904	95	78-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: ExxonMobil 79374/022735C			Page 4 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-436-10476	**LCS**	**Aqueous**	**GC 1**	**12/01/15**	**12/02/15 14:26**	**151130L054**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	2000	1925	96	78-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 5 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-880-1408	**LCS**	**Aqueous**	**GC/MS L**	**12/01/15**	**12/01/15 23:06**	**151201L077**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	11.05	110	80-120	73-127	
Toluene	10.00	11.07	111	80-120	73-127	
Ethylbenzene	10.00	11.17	112	80-120	73-127	
o-Xylene	10.00	10.96	110	80-120	73-127	
p/m-Xylene	20.00	22.42	112	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	9.970	100	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	46.33	93	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	10.12	101	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	9.584	96	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	9.860	99	80-120	73-127	
1,1-Dichloroethene	10.00	10.97	110	77-120	70-127	
1,2-Dibromoethane	10.00	10.26	103	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.67	107	80-120	73-127	
1,2-Dichloroethane	10.00	10.68	107	80-122	73-129	
Carbon Tetrachloride	10.00	12.10	121	80-129	72-137	
Chlorobenzene	10.00	10.76	108	80-120	73-127	
Trichloroethene	10.00	10.95	110	80-120	73-127	
Vinyl Chloride	10.00	10.42	104	63-135	51-147	

Total number of LCS compounds: 18
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 6 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-880-1409	**LCS**	**Aqueous**	**GC/MS L**	**12/02/15**	**12/02/15 10:42**	**151202L069**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	10.89	109	80-120	73-127	
Toluene	10.00	10.86	109	80-120	73-127	
Ethylbenzene	10.00	11.01	110	80-120	73-127	
o-Xylene	10.00	10.83	108	80-120	73-127	
p/m-Xylene	20.00	22.04	110	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.47	105	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	50.49	101	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	10.52	105	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	10.43	104	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	10.56	106	80-120	73-127	
1,1-Dichloroethene	10.00	10.61	106	77-120	70-127	
1,2-Dibromoethane	10.00	10.41	104	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.66	107	80-120	73-127	
1,2-Dichloroethane	10.00	10.11	101	80-122	73-129	
Carbon Tetrachloride	10.00	11.47	115	80-129	72-137	
Chlorobenzene	10.00	10.55	106	80-120	73-127	
Trichloroethene	10.00	10.68	107	80-120	73-127	
Vinyl Chloride	10.00	10.24	102	63-135	51-147	

Total number of LCS compounds: 18
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	11/20/15
601 North McDowell Blvd.		Work Order:	15-11-1515
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 7 of 7

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-880-1410	**LCS**	**Aqueous**	**GC/MS L**	**12/11/15**	**12/11/15 09:22**	**151211L018**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	11.34	113	80-120	73-127	
Toluene	10.00	10.98	110	80-120	73-127	
Ethylbenzene	10.00	11.24	112	80-120	73-127	
o-Xylene	10.00	11.09	111	80-120	73-127	
p/m-Xylene	20.00	22.56	113	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.88	109	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	53.94	108	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	11.54	115	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	11.01	110	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	10.88	109	80-120	73-127	
1,1-Dichloroethene	10.00	11.31	113	77-120	70-127	
1,2-Dibromoethane	10.00	10.34	103	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.36	104	80-120	73-127	
1,2-Dichloroethane	10.00	10.99	110	80-122	73-129	
Carbon Tetrachloride	10.00	12.21	122	80-129	72-137	
Chlorobenzene	10.00	10.58	106	80-120	73-127	
Trichloroethene	10.00	10.89	109	80-120	73-127	
Vinyl Chloride	10.00	10.75	108	63-135	51-147	

Total number of LCS compounds: 18
Total number of ME compounds: 0
Total number of ME compounds allowed: 1
LCS ME CL validation result: Pass

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 15-11-1515 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA 8015B (M)	EPA 3510C	1018	GC 47	1
EPA 8015B (M)	EPA 5030C	902	GC 1	2
EPA 8260B	EPA 5030C	316	GC/MS L	2
EPA 8260B	EPA 5030C	1055	GC/MS L	2

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Glossary of Terms and Qualifiers

Work Order: 15-11-1515 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.

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Sandy Tat

From: Scott Perkins <Scott.Perkins@cardno.com>
Sent: Thursday, December 10, 2015 1:26 PM
To: Sandy Tat
Cc: David R. Daniels; Christine Capwell
Subject: FW: Work order 15-11-1515 (79374 2735)
Attachments: 2735.COC Q154 revised.pdf

Sandy,

I see that Cecile is out. Please see the request below.

Thank you,

Scott

Scott Perkins
SENIOR PROJECT MANAGER
ENGINEERING & ENVIRONMENTAL SERVICES DIVISION
CARDNO

Direct +1 707 766 2000 Mobile +1 925 580 2455 Fax +1 707 789 0414
Address 601 North McDowell Boulevard, Petaluma, CA 94954
Email scott.perkins@cardno.com Web www.cardno.com

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From: Scott Perkins
Sent: Thursday, December 10, 2015 12:08 PM
To: Cecile L de Guia <CecileLdeGuia@eurofinsUS.com>
Cc: Azat Magdanov <azat.magdanov@cardno.com>; David R. Daniels (david.daniels@cardno.com) <david.daniels@cardno.com>; Christine Capwell <christine.capwell@cardno.com>
Subject: Work order 15-11-1515 (79374 2735)

Cecile,

It looks like HVOCs were not included on the original COC and should have been. Can you please provide this data from the 8260B run that was already performed? An oversight on our part. A revised COC with HVOCs listed is attached.

Thanks in advance.

Scott Perkins
SENIOR PROJECT MANAGER
ENGINEERING & ENVIRONMENTAL SERVICES DIVISION
CARDNO

Direct +1 707 766 2000 Mobile +1 925 580 2455 Fax +1 707 789 0414
Address 601 North McDowell Boulevard, Petaluma, CA 94954
Email scott.perkins@cardno.com Web www.cardno.com

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Eurofins Calscience, Inc.
7440 Lincoln Way
Garden Grove, CA 92841
Phone: 714-895-5494
Fax: 714-894-7501

ExxonMobil

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

								Preservative									Matrix							Analyze For:												
Sample ID	Field Point Name	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Methanol	Sodium Bisulfate	HCl	NaOH	H_2SO_4 Plastic	H_2SO_4 Glass	HNO_3	Ice	Other: Unpreserved	None	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify): Distilled Water	TPHg 8015M	TPHd 8015M	TPHmo 8015M	BTEX 8260B	7 Oxygenates 8260B	HVOCs by 8260B			RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
QCBB	QCBB			2						2														X		H	O	L	D						
MW1	MW1			10						8						2		X							X	X	X	X	X	X				X	
MW2	MW2			10						8						2		X							X	X	X	X	X	X				X	
MW3	MW3			10						8						2		X							X	X	X	X	X	X				X	
MW3A	MW3A			10						8						2		X							X	X	X	X	X	X				X	
MW4	MW4			10						8						2		X							X	X	X	X	X	X				X	
MW5	MW5			10						8						2		X							X	X	X	X	X	X				X	
MW6	MW6			10						8						2		X							X	X	X	X	X	X				X	
MW7	MW7			10						8						2		X							X	X	X	X	X	X				X	
MW8	MW8			10						8						2		X							X	X	X	X	X	X				X	
MW9	MW9			10						8						2		X							X	X	X	X	X	X				X	

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO
norcallabs@eri-us.com
GLOBAL ID # T0619716673

Use silica gel cleanup on all TPHd analyses
Oxygenates = MTBE, ETBE, DIPE, TAME, TBA, 1,2-DCA, EDB
Set TBA reporting limit at or below 12 ug/L.

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

Relinquished by:		Date	Time	Received by:	Date	Time
Relinquished by:		Date	Time	Received by (Lab personnel):	Date	Time

QC Deliverables (please circle one)
Level 2
Level 3
Level 4
Site Specific - if yes, please attach pre-schedule w/ TestAmerica Project Manager or attach specific instructions

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Eurofins Calscience, Inc.
7440 Lincoln Way
Garden Grove, CA 92841
Phone: 714-895-5494
Fax: 714-894-7501

ExxonMobil

15-11-1515

Consultant Name: Cardno ERI
Consultant Address: 601 N. McDowell Boulevard
Consultant City/State/Zip: Petaluma, California, 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): Azat R. Mogdanov
Sampler Signature:

Account #: NA **PO#:** Direct Bill Cardno ERI
Invoice To: Direct Bill Cardno ERI
Report To: Scott Perkins
Project Name: 02 2735 C
ExxonMobil Site #: 79374 **ajor Project (AFE #**
Site Address: 990 San Pablo Avenue
Site City, State, Zip: Albany, California
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: Unpreserved	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify): Distilled Water	Analyze For: TPHg 8015M	TPHd 8015M	TPHmo 8015M	BTEX 8260B	7 Oxygenates 8260B				RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
1	QCBB	QCBB	11/19/15	0910	2						2														X		H	O	L	D						
2	MW1	MW1	11/19/15	1000	10						8						2		X							X	X	X	X	X						X	
3	MW2	MW2	11/19/15	1020	10						8						2		X							X	X	X	X	X						X	
4	MW3	MW3	11/19/15	1130	10						8						2		X							X	X	X	X	X						X	
5	MW3A	MW3A	11/19/15	1215	10						8						2		X							X	X	X	X	X						X	
6	MW4	MW4	11/19/15	1145	10						8						2		X							X	X	X	X	X						X	
7	MW5	MW5	11/19/15	1115	10						8						2		X							X	X	X	X	X						X	
8	MW6	MW6	11/19/15	1040	10						8						2		X							X	X	X	X	X						X	
9	MW7	MW7	11/19/15	1055	10						8						2		X							X	X	X	X	X						X	
10	MW8	MW8	11/18/15	1030	10						8						2		X							X	X	X	X	X						X	
11	MW9	MW9	11/18/15	0945	10						8						2		X							X	X	X	X	X						X	

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO
norcallabs@eri-us.com
GLOBAL ID # T0619716673

Use silica gel cleanup on all TPHd analyses
Oxygenates = MTBE, ETBE, DIPE, TAME, TBA, 1,2-DCA, EDB
Set TBA reporting limit at or below 12 ug/L.

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/ TestAmerica
Project Manager or attach specific instructions

		Date	Time		Date	Time
Relinquished by:		11/19/15	1305	Received by: Tom O'Malley GCI	11/19/15	1305
Relinquished by: Tom O'Malley TO 650		11/19/15	1730	Received by (Lab personnel):	11/20/15	1015

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ALAN KEMP
[illegible] OMMERCIAL CIRCLE
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CONCORD, CA 94520

Ship To
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[illegible] RECEIVING
[illegible] LINCOLN WAY
[illegible]EN GROVE, CA 92841

Tracking #: 530015254

NPS

ORC
GARDEN GROVE

A

https://app.gso.com/Shipping/ShippingLabel

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Ship from
[illegible]IENCE- CONCORD
[illegible] KEMP
[illegible] OMMERCIAL CIRCLE

[illegible]RD, CA 94520

Ship To
[illegible]
[illegible] RECEIVING
[illegible] LINCOLN WAY
[illegible]EN GROVE, CA 92841

COD: $0.00
[illegible]: 0 lb(s)
[illegible]nce:
[illegible]ERI
[illegible] Instructions:

Signature Type: REQUIRED

Tracking #: 530015255

NPS

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GARDEN GROVE

A

D92845A

45049637

Print Date: 11/19/2015 1:41 PM

[illegible] 2 of 2

[illegible] INSTRUCTIONS:

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WORK ORDER NUMBER: 15-11- 1515

SAMPLE RECEIPT CHECKLIST

COOLER 1 OF 2

CLIENT: Cardno ERI

DATE: 11 / 20 / 2015

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

Thermometer ID: SC2 (CF:-0.4°C); Temperature (w/o CF): 1.7 °C (w/ CF): 1.3 °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: 836

CUSTODY SEAL:

Cooler	☑ Present and Intact	☐ Present but Not Intact	☐ Not Present	☐ N/A	Checked by: 836
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 965

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 ☑ 8 VOA**h** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☑ 2 500AGJ ☐ 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, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 965

Reviewed by: 962

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WORK ORDER NUMBER: 15-11- 1515

SAMPLE RECEIPT CHECKLIST

COOLER 2 OF 2

CLIENT: Cardno ERI

DATE: 11 / 20 / 2015

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

Thermometer ID: SC2 (CF:-0.4°C); Temperature (w/o CF): 1.8 °C (w/ CF): 1.4 °C; ☑ Blank ☐ Sample

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

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

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☐ Air ☐ Filter

Checked by: 836

CUSTODY SEAL:

Cooler	☑ Present and Intact	☐ Present but Not Intact	☐ Not Present	☐ N/A	Checked by: 836
Sample(s)	☐ Present and Intact	☐ Present but Not Intact	☑ Not Present	☐ N/A	Checked by: 965

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 ☑ VOAh ☐ VOA**na**$_2$ ☐ 100PJ ☐ 100PJ**na**$_2$ ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☑ 500AGJ ☐ 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, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 965

Reviewed by: 862

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WORK ORDER NUMBER: 15-10-1734

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For
Client: Cardno
Client Project Name: ExxonMobil 79374/022735C
Attention: Scott Perkins
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Approved for release on 11/05/2015 by:
Cecile deGuia
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: ExxonMobil 79374/022735C
Work Order Number: 15-10-1734

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Work Order Narrative

Work Order: 15-10-1734 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 10/23/15. They were assigned to Work Order 15-10-1734.

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.

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Sample Summary

Client:	Cardno	Work Order:	15-10-1734
	601 North McDowell Blvd.	Project Name:	ExxonMobil 79374/022735C
	Petaluma, CA 94954-2312	PO Number:	022735C
		Date/Time Received:	10/23/15 10:30
		Number of Containers:	2
Attn:	Scott Perkins		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
V-INF-OX0-1	15-10-1734-1	10/21/15 11:55	1	Air
V-INF-OX0-2	15-10-1734-2	10/22/15 09:00	1	Air

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Analytical Report

Cardno		Date Received:	10/23/15
601 North McDowell Blvd.		Work Order:	15-10-1734
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 1 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-1	**15-10-1734-1-A**	**10/21/15 11:55**	**Air**	**GC/MS KKK**	**N/A**	**10/23/15 23:04**	**151023L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	0.94	0.16	100	
Toluene	ND	1.9	100	
Ethylbenzene	0.49	0.22	100	
o-Xylene	ND	0.22	100	
p/m-Xylene	0.89	0.87	100	
Xylenes (total)	0.89	0.22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.72	100	
Tert-Butyl Alcohol (TBA)	ND	1.5	100	
Diisopropyl Ether (DIPE)	ND	0.84	100	
Ethyl-t-Butyl Ether (ETBE)	ND	0.84	100	
Tert-Amyl-Methyl Ether (TAME)	ND	0.84	100	
1,2-Dibromoethane	ND	0.38	100	
1,2-Dichloroethane	ND	0.20	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	127	57-129	
1,2-Dichloroethane-d4	101	47-137	
Toluene-d8	84	78-156	

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

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Analytical Report

Cardno		Date Received:	10/23/15
601 North McDowell Blvd.		Work Order:	15-10-1734
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 2 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-2	**15-10-1734-2-A**	**10/22/15 09:00**	**Air**	**GC/MS KKK**	**N/A**	**10/24/15 02:23**	**151023L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	0.66	0.32	200	
Toluene	ND	3.8	200	
Ethylbenzene	1.3	0.43	200	
o-Xylene	ND	0.43	200	
p/m-Xylene	ND	1.7	200	
Xylenes (total)	ND	0.43	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.4	200	
Tert-Butyl Alcohol (TBA)	ND	3.0	200	
Diisopropyl Ether (DIPE)	ND	1.7	200	
Ethyl-t-Butyl Ether (ETBE)	ND	1.7	200	
Tert-Amyl-Methyl Ether (TAME)	ND	1.7	200	
1,2-Dibromoethane	ND	0.77	200	
1,2-Dichloroethane	ND	0.40	200	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	107	57-129	
1,2-Dichloroethane-d4	100	47-137	
Toluene-d8	96	78-156	

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

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Analytical Report

Cardno		Date Received:	10/23/15
601 North McDowell Blvd.		Work Order:	15-10-1734
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-5949**	**N/A**	**Air**	**GC/MS KKK**	**N/A**	**10/23/15 21:17**	**151023L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	57-129	
1,2-Dichloroethane-d4	100	47-137	
Toluene-d8	98	78-156	

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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 79374/022735C

Date Received: 10/23/15
Work Order: 15-10-1734
Preparation: N/A
Method: EPA TO-3M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-1	**15-10-1734-1-A**	**10/21/15 11:55**	**Air**	**GC 60**	**N/A**	**10/23/15 16:24**	**151023L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	4000	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-2	**15-10-1734-2-A**	**10/22/15 09:00**	**Air**	**GC 60**	**N/A**	**10/23/15 16:35**	**151023L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	6100	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-6742**	**N/A**	**Air**	**GC 60**	**N/A**	**10/23/15 09:54**	**151023L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7.0	1.00	

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

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Quality Control - Sample Duplicate

Cardno		Date Received:	10/23/15
601 North McDowell Blvd.		Work Order:	15-10-1734
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
15-10-1735-2	**Sample**	**Air**	**GC 60**	**N/A**	**10/23/15 12:25**	**151023D01**
15-10-1735-2	**Sample Duplicate**	**Air**	**GC 60**	**N/A**	**10/23/15 12:39**	**151023D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
TPH as Gasoline	8.365	8.430	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

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

Project: ExxonMobil 79374/022735C

Date Received: 10/23/15
Work Order: 15-10-1734
Preparation: N/A
Method: EPA TO-15M

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-5949	**LCS**	**Air**	**GC/MS KKK**	**N/A**	**10/23/15 18:30**	**151023L03**
099-12-981-5949	**LCSD**	**Air**	**GC/MS KKK**	**N/A**	**10/23/15 19:24**	**151023L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.08835	111	0.08680	109	60-156	44-172	2	0-40	
Toluene	0.09421	0.09134	97	0.09633	102	56-146	41-161	5	0-43	
Ethylbenzene	0.1086	0.1137	105	0.1143	105	52-154	35-171	1	0-38	
o-Xylene	0.1086	0.1051	97	0.1114	103	52-148	36-164	6	0-38	
p/m-Xylene	0.2171	0.2215	102	0.2310	106	42-156	23-175	4	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.1002	111	0.09957	110	50-150	33-167	1	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1711	113	0.1795	118	60-140	47-153	5	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.1262	121	0.1234	118	60-140	47-153	2	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.1150	110	0.1140	109	60-140	47-153	1	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.1080	103	0.1079	103	60-140	47-153	0	0-30	
1,2-Dibromoethane	0.1921	0.1950	102	0.2042	106	54-144	39-159	5	0-36	
1,2-Dichloroethane	0.1012	0.1099	109	0.1086	107	69-153	55-167	1	0-35	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	10/23/15
601 North McDowell Blvd.		Work Order:	15-10-1734
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
098-01-005-6742	**LCS**	**Air**	**GC 60**	**N/A**	**10/23/15 09:34**	**151023L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	932.5	821.8	88	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 15-10-1734 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA TO-15M	N/A	884	GC/MS KKK	2
EPA TO-3M	N/A	1008	GC 60	2

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Glossary of Terms and Qualifiers

Work Order: 15-10-1734 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.

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Eurofins Calscience Environmental Laboratories, Inc.

7440 Lincoln Way
Garden Grove, CA 92841

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

ExxonMobil

15-10-1734

Consultant Name: Cardno ERI | **Account #:** NA | **PO#:** Direct Bill Cardno

Consultant Address: 601 N. McDowell Boulevard | **Invoice To:** Direct Bill Cardno

Consultant City/State/Zip: Petaluma, California, 94954 | **Report To:** Scott Perkins

ExxonMobil Project Mgr: Jennifer Sedlachek | **Project Name:** 02 2735 C

Consultant Project Mgr: Scott Perkins | **ExxonMobil Site #:** 79374 | **Major Project (AFE #):**

Consultant Telephone Number: 707-766-2000 | **Fax No.:** 707-789-0414 | **Site Address:** 990 San Pablo Avenue

Sampler Name (Print): Cade Mitchell | **Site City, State, Zip:** Albany, California

Sampler Signature: | **Oversight Agency:** Alameda County Environmental Health Department

Sample ID	Field Point Name	Date Sampled (2015)	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: Unpreserved	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify): Distilled Water	Analyze For: TPHg TO-3M	BTEX MTBE TO-15	OxygentesTO-15M	BTEX 8260B	7 Oxygenates 8260B				RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
(1) V-INF-OX0-1	OX0	10/21	1155	1													1						1		X	X	X							X	
(2) V-INF-OX0-2	OX0	10/22	0900	1													1						1		X	X	X							X	
(3) V-INF-OX0-3	OX0			1													1						1		X	X	X							X	
(4) V-INF-OX0-4	OX0			1													1						1		X	X	X							X	
PS 10/23/15																																			

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO
norcallabs@eri-us.com
GLOBAL ID # T0619716673

Oxygenates = MTBE, ETBE, DIPE, TAME, TBA, 1,2-DCA, EDB

Relinquished by:	Company	Date	Time	Received by:	Date	Time
	CARDNO	10/22/15	1040	Tom O'Malley ECI	10/22/15	1040
Tom O'Malley TO GSO		10/22/15	1730	Received by (Lab personnel): EY	10/23/15	1030

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 with lab Project Manager or attach specific instructions

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WORK ORDER NUMBER: 15-10- 1734

SAMPLE RECEIPT CHECKLIST

BOX 1 OF 1

CLIENT: Cardno ERI

DATE: 10 / 23 / 2015

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

Thermometer ID: SC2 (CF:-0.4°C); Temperature (w/o CF): _____°C (w/ CF): _____°C; ☐ Blank ☐ Sample

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

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

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☑ Air ☐ Filter Checked by: SB6

CUSTODY SEAL:

Box ☑ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A Checked by: SB6

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: SB6

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** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 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, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: SB6

Reviewed by: 778

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WORK ORDER NUMBER: 15-10-1735

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno

Client Project Name: ExxonMobil 79374/022735C

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

Approved for release on 11/05/2015 by:
Cecile deGuia
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: ExxonMobil 79374/022735C
Work Order Number: 15-10-1735

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Work Order Narrative

Work Order: 15-10-1735 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 10/23/15. They were assigned to Work Order 15-10-1735.

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.

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Sample Summary

Client:	Cardno	Work Order:	15-10-1735
	601 North McDowell Blvd.	Project Name:	ExxonMobil 79374/022735C
	Petaluma, CA 94954-2312	PO Number:	022735C
		Date/Time Received:	10/23/15 10:30
		Number of Containers:	2
Attn:	Scott Perkins		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
V-INF-OX0	15-10-1735-1	10/21/15 09:55	1	Air
V-DSCHG	15-10-1735-2	10/21/15 09:50	1	Air

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Analytical Report

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

Project: ExxonMobil 79374/022735C

Date Received: 10/23/15
Work Order: 15-10-1735
Preparation: N/A
Method: EPA TO-15M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0	**15-10-1735-1-A**	**10/21/15 09:55**	**Air**	**GC/MS KKK**	**N/A**	**10/24/15 10:11**	**151023L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	0.85	0.16	100	
Toluene	ND	1.9	100	
Ethylbenzene	0.30	0.22	100	
o-Xylene	ND	0.22	100	
p/m-Xylene	ND	0.87	100	
Xylenes (total)	ND	0.22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.72	100	
Tert-Butyl Alcohol (TBA)	ND	1.5	100	
Diisopropyl Ether (DIPE)	ND	0.84	100	
Ethyl-t-Butyl Ether (ETBE)	ND	0.84	100	
Tert-Amyl-Methyl Ether (TAME)	ND	0.84	100	
1,2-Dibromoethane	ND	0.38	100	
1,2-Dichloroethane	ND	0.20	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	117	57-129	
1,2-Dichloroethane-d4	96	47-137	
Toluene-d8	79	78-156	

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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 79374/022735C

Date Received: 10/23/15
Work Order: 15-10-1735
Preparation: N/A
Method: EPA TO-15M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-DSCHG	**15-10-1735-2-A**	**10/21/15 09:50**	**Air**	**GC/MS KKK**	**N/A**	**10/23/15 22:11**	**151023L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	103	57-129	
1,2-Dichloroethane-d4	100	47-137	
Toluene-d8	107	78-156	

Return to Contents

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

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Analytical Report

Cardno		Date Received:	10/23/15
601 North McDowell Blvd.		Work Order:	15-10-1735
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 3 of 3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-5949**	**N/A**	**Air**	**GC/MS KKK**	**N/A**	**10/23/15 21:17**	**151023L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	57-129	
1,2-Dichloroethane-d4	100	47-137	
Toluene-d8	98	78-156	

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

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Analytical Report

Cardno		Date Received:	10/23/15
601 North McDowell Blvd.		Work Order:	15-10-1735
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0	**15-10-1735-1-A**	**10/21/15 09:55**	**Air**	**GC 60**	**N/A**	**10/23/15 16:47**	**151023L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	3400	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-DSCHG	**15-10-1735-2-A**	**10/21/15 09:50**	**Air**	**GC 60**	**N/A**	**10/23/15 12:25**	**151023L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	8.4	7.0	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-6742**	**N/A**	**Air**	**GC 60**	**N/A**	**10/23/15 09:54**	**151023L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7.0	1.00	

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

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Quality Control - Sample Duplicate

Cardno		Date Received:	10/23/15
601 North McDowell Blvd.		Work Order:	15-10-1735
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
V-DSCHG	**Sample**	**Air**	**GC 60**	**N/A**	**10/23/15 12:25**	**151023D01**
V-DSCHG	**Sample Duplicate**	**Air**	**GC 60**	**N/A**	**10/23/15 12:39**	**151023D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
TPH as Gasoline	8.365	8.430	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

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

Project: ExxonMobil 79374/022735C

Date Received: 10/23/15
Work Order: 15-10-1735
Preparation: N/A
Method: EPA TO-15M

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-5949	**LCS**	**Air**	**GC/MS KKK**	**N/A**	**10/23/15 18:30**	**151023L03**
099-12-981-5949	**LCSD**	**Air**	**GC/MS KKK**	**N/A**	**10/23/15 19:24**	**151023L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.08835	111	0.08680	109	60-156	44-172	2	0-40	
Toluene	0.09421	0.09134	97	0.09633	102	56-146	41-161	5	0-43	
Ethylbenzene	0.1086	0.1137	105	0.1143	105	52-154	35-171	1	0-38	
o-Xylene	0.1086	0.1051	97	0.1114	103	52-148	36-164	6	0-38	
p/m-Xylene	0.2171	0.2215	102	0.2310	106	42-156	23-175	4	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.1002	111	0.09957	110	50-150	33-167	1	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1711	113	0.1795	118	60-140	47-153	5	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.1262	121	0.1234	118	60-140	47-153	2	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.1150	110	0.1140	109	60-140	47-153	1	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.1080	103	0.1079	103	60-140	47-153	0	0-30	
1,2-Dibromoethane	0.1921	0.1950	102	0.2042	106	54-144	39-159	5	0-36	
1,2-Dichloroethane	0.1012	0.1099	109	0.1086	107	69-153	55-167	1	0-35	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	10/23/15
601 North McDowell Blvd.		Work Order:	15-10-1735
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
098-01-005-6742	**LCS**	**Air**	**GC 60**	**N/A**	**10/23/15 09:34**	**151023L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	932.5	821.8	88	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 15-10-1735 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA TO-15M	N/A	866	GC/MS KKK	2
EPA TO-15M	N/A	884	GC/MS KKK	2
EPA TO-3M	N/A	1008	GC 60	2
EPA TO-3M	N/A	1045	GC 60	2

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Glossary of Terms and Qualifiers

Work Order: 15-10-1735 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.

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Cecile L de Guia

From: David R. Daniels [david.daniels@cardno.com]
Sent: Monday, October 26, 2015 11:00 AM
To: Cecile L de Guia; Scott Perkins; Greg Gurss
Subject: RE: ExxonMobil 79374; 15-10-1735
Attachments: 15-10-1735 Revised.pdf

We would like to add the oxys to EFF as well. Revised COC attached. Thank You

David Daniels PG
PROJECT GEOLOGIST
ENGINEERING & ENVIRONMENTAL SERVICES DIVISION
CARDNO

Direct (+1) 707-766-2024 Mobile (+1) 707-338-6997 Fax (+1) 707-789-0414
Address 601 North McDowell Blvd., Petaluma, CA 94954
Email david.daniels@cardno.com Web www.cardno.com

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From: Cecile L de Guia [mailto:CecileLdeGuia@eurofinsUS.com]
Sent: Monday, October 26, 2015 10:48 AM
To: Scott Perkins <Scott.Perkins@cardno.com>; David R. Daniels <david.daniels@cardno.com>; Greg Gurss <greg.gurss@cardno.com>
Subject: ExxonMobil 79374; 15-10-1735

Good Morning,
Please review the attached COC and confirm if the request for sample V-DSCHG was only for BTEX/MTBE?
Thank you.

Best regards,
Cecile de Guia
Project Manager

Eurofins Calscience
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
Email: ceciledeguia@eurofinsUS.com
Website: www. eurofinsus.com

Eurofins Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841
Phone: 714-895-5494
Fax: 714-894-7501

ExxonMobil

15-10-1735

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

Sample ID	Field Point Name	Date Sampled 2015	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: Unpreserved	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify): Distilled Water	Analyze For: TPHg TO-3M	BTEX MTBE TO-15	OxygenatesTO-15M	BTEX 8260B	7 Oxygenates 8260B				RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
(1) V-INF-OX0	OX0	10/21	955	1													1						1		X	X	X								X	
(2) V-DSCHG	VEFF	10/21	950	1													1						1		X	X	X								X	

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO
norcallabs@eri-us.com
GLOBAL ID # T0619716673

Oxygenates = MTBE, ETBE, DIPE, TAME, TBA, 1,2-DCA, EDB

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 with lab Project Manager or attach specific instructions

Relinquished by:	Date	Time	Received by:	Date	Time
[signature] Cardno	10/22/15	1040	Tom O'Malley, ECI	10/22/15	1040
Relinquished by: Tom O'Malley TO GSO	10/22/15	1730	Received by (Lab personnel): [signature]	10/23/15	1030

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Eurofins Calscience Environmental Laboratories, Inc.

7440 Lincoln Way
Garden Grove, CA 92841

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

ExxonMobil

15-10-1735

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

								Preservative										Matrix							Analyze For:											
Sample ID	Field Point Name	Date Sampled 2015	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Methanol	Sodium Bisulfate	HCl	NaOH	H_2SO_4 Plastic	H_2SO_4 Glass	HNO_3	Ice	Other: Unpreserved	None	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify): Distilled Water	TPHg TO-3M	BTEX MTBE TO-15	OxygentesTO-15M	BTEX 8260B	7 Oxygenates 8260B				RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
(1) V-INF-OX0	OX0	10/21	955	1													1						1		X	X	X								X	
(2) V-DSCHG	VEFF	10/21	950	1													1						1		X	X									X	

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO
norcallabs@eri-us.com
GLOBAL ID # T0619716673

Oxygenates = MTBE, ETBE, DIPE, TAME, TBA, 1,2-DCA, EDB

Relinquished by:		Date	Time	Received by:	Date	Time
[signature]	Cardno	10/22/15	1040	Tom O'Malley ECI	10/22/15	1040
Relinquished by:		**Date**	**Time**	**Received by (Lab personnel):**	**Date**	**Time**
Tom O'Malley to GSO		10/22/15	1730	[signature]	10/23/15	1030

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 with lab Project Manager or attach specific instructions

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WORK ORDER NUMBER: 15-10- 1735

SAMPLE RECEIPT CHECKLIST

BOX 1 OF 1

CLIENT: Cardno ERI

DATE: 10 / 23 / 2015

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

Thermometer ID: SC2 (CF:-0.4°C); Temperature (w/o CF): _____°C (w/ CF): _____°C; ☐ Blank ☐ Sample

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

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

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☑ Air ☐ Filter Checked by: SB6

CUSTODY SEAL:

Box ☑ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A Checked by: SB6

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A Checked by: SB6

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** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 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, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: SB6

Reviewed by: ZTS

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WORK ORDER NUMBER: 15-10-1839

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno

Client Project Name: ExxonMobil 79374/022735C

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

Approved for release on 11/09/2015 by:
Cecile deGuia
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: ExxonMobil 79374/022735C
Work Order Number: 15-10-1839

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Work Order Narrative

Work Order: 15-10-1839 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 10/24/15. They were assigned to Work Order 15-10-1839.

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.

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Sample Summary

Client:	Cardno	Work Order:	15-10-1839
	601 North McDowell Blvd.	Project Name:	ExxonMobil 79374/022735C
	Petaluma, CA 94954-2312	PO Number:	022735C
		Date/Time Received:	10/24/15 08:45
		Number of Containers:	4
Attn:	Scott Perkins		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
V-INF-OX0-1	15-10-1839-1	10/23/15 08:15	1	Air
V-INF-OX0-2	15-10-1839-2	10/23/15 11:00	1	Air
V-INF-OX0-3	15-10-1839-3	10/23/15 12:00	1	Air
V-INF-OX0-4	15-10-1839-4	10/23/15 14:45	1	Air

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Analytical Report

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

Project: ExxonMobil 79374/022735C

Date Received: 10/24/15
Work Order: 15-10-1839
Preparation: N/A
Method: EPA TO-15M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-1	**15-10-1839-1-A**	**10/23/15 08:15**	**Air**	**GC/MS OOO**	**N/A**	**10/25/15 10:04**	**151025L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	0.62	0.40	250	
Toluene	ND	4.7	250	
Ethylbenzene	5.9	0.54	250	
o-Xylene	2.9	0.54	250	
p/m-Xylene	9.9	2.2	250	
Xylenes (total)	13	0.54	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	250	
Tert-Butyl Alcohol (TBA)	ND	3.8	250	
Diisopropyl Ether (DIPE)	ND	2.1	250	
Ethyl-t-Butyl Ether (ETBE)	ND	2.1	250	
Tert-Amyl-Methyl Ether (TAME)	ND	2.1	250	
1,2-Dibromoethane	ND	0.96	250	
1,2-Dichloroethane	ND	0.51	250	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	108	57-129	
1,2-Dichloroethane-d4	111	47-137	
Toluene-d8	109	78-156	

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

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Analytical Report

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1839
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 2 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-2	**15-10-1839-2-A**	**10/23/15 11:00**	**Air**	**GC/MS OOO**	**N/A**	**10/25/15 10:48**	**151025L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	0.85	0.40	250	
Toluene	ND	4.7	250	
Ethylbenzene	4.8	0.54	250	
o-Xylene	2.3	0.54	250	
p/m-Xylene	8.3	2.2	250	
Xylenes (total)	11	0.54	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	250	
Tert-Butyl Alcohol (TBA)	ND	3.8	250	
Diisopropyl Ether (DIPE)	ND	2.1	250	
Ethyl-t-Butyl Ether (ETBE)	ND	2.1	250	
Tert-Amyl-Methyl Ether (TAME)	ND	2.1	250	
1,2-Dibromoethane	ND	0.96	250	
1,2-Dichloroethane	ND	0.51	250	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	111	57-129	
1,2-Dichloroethane-d4	111	47-137	
Toluene-d8	109	78-156	

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

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Analytical Report

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1839
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-3	**15-10-1839-3-A**	**10/23/15 12:00**	**Air**	**GC/MS OOO**	**N/A**	**10/25/15 11:31**	**151025L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	1.7	0.40	250	
Toluene	ND	4.7	250	
Ethylbenzene	2.3	0.54	250	
o-Xylene	ND	0.54	250	
p/m-Xylene	ND	2.2	250	
Xylenes (total)	ND	0.54	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	250	
Tert-Butyl Alcohol (TBA)	ND	3.8	250	
Diisopropyl Ether (DIPE)	ND	2.1	250	
Ethyl-t-Butyl Ether (ETBE)	ND	2.1	250	
Tert-Amyl-Methyl Ether (TAME)	ND	2.1	250	
1,2-Dibromoethane	ND	0.96	250	
1,2-Dichloroethane	ND	0.51	250	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	111	57-129	
1,2-Dichloroethane-d4	112	47-137	
Toluene-d8	111	78-156	

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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 79374/022735C

Date Received: 10/24/15
Work Order: 15-10-1839
Preparation: N/A
Method: EPA TO-15M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-4	**15-10-1839-4-A**	**10/23/15 14:45**	**Air**	**GC/MS OOO**	**N/A**	**10/25/15 12:15**	**151025L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	1.4	0.40	250	
Toluene	ND	4.7	250	
Ethylbenzene	2.1	0.54	250	
o-Xylene	ND	0.54	250	
p/m-Xylene	ND	2.2	250	
Xylenes (total)	ND	0.54	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.8	250	
Tert-Butyl Alcohol (TBA)	ND	3.8	250	
Diisopropyl Ether (DIPE)	ND	2.1	250	
Ethyl-t-Butyl Ether (ETBE)	ND	2.1	250	
Tert-Amyl-Methyl Ether (TAME)	ND	2.1	250	
1,2-Dibromoethane	ND	0.96	250	
1,2-Dichloroethane	ND	0.51	250	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	111	57-129	
1,2-Dichloroethane-d4	112	47-137	
Toluene-d8	110	78-156	

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

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Analytical Report

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1839
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-5955**	**N/A**	**Air**	**GC/MS OOO**	**N/A**	**10/25/15 08:21**	**151025L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	106	57-129	
1,2-Dichloroethane-d4	109	47-137	
Toluene-d8	99	78-156	

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

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Analytical Report

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1839
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 1 of 1

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-1	**15-10-1839-1-A**	**10/23/15 08:15**	**Air**	**GC 13**	**N/A**	**10/24/15 13:27**	**151024L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	8200	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-2	**15-10-1839-2-A**	**10/23/15 11:00**	**Air**	**GC 13**	**N/A**	**10/24/15 13:40**	**151024L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	8200	70	10.0	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-3	**15-10-1839-3-A**	**10/23/15 12:00**	**Air**	**GC 13**	**N/A**	**10/24/15 14:01**	**151024L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	7100	70	10.0	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-4	**15-10-1839-4-A**	**10/23/15 14:45**	**Air**	**GC 13**	**N/A**	**10/24/15 14:23**	**151024L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	7100	70	10.0	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-6744**	**N/A**	**Air**	**GC 13**	**N/A**	**10/24/15 09:26**	**151024L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7.0	1.00	

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

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Quality Control - Sample Duplicate

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1839
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
V-INF-OX0-4	**Sample**	**Air**	**GC 13**	**N/A**	**10/24/15 14:23**	**151024D01**
V-INF-OX0-4	**Sample Duplicate**	**Air**	**GC 13**	**N/A**	**10/24/15 15:15**	**151024D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
TPH as Gasoline	7119	7171	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

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

Project: ExxonMobil 79374/022735C

Date Received: 10/24/15
Work Order: 15-10-1839
Preparation: N/A
Method: EPA TO-15M

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-5955	**LCS**	**Air**	**GC/MS OOO**	**N/A**	**10/25/15 06:42**	**151025L02**
099-12-981-5955	**LCSD**	**Air**	**GC/MS OOO**	**N/A**	**10/25/15 07:26**	**151025L02**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.08358	105	0.08428	106	60-156	44-172	1	0-40	
Toluene	0.09421	0.1002	106	0.1059	112	56-146	41-161	6	0-43	
Ethylbenzene	0.1086	0.1184	109	0.1217	112	52-154	35-171	3	0-38	
o-Xylene	0.1086	0.1272	117	0.1299	120	52-148	36-164	2	0-38	
p/m-Xylene	0.2171	0.2476	114	0.2534	117	42-156	23-175	2	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.09903	110	0.1014	113	50-150	33-167	2	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1688	111	0.1748	115	60-140	47-153	3	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.1065	102	0.1089	104	60-140	47-153	2	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.1091	104	0.1125	108	60-140	47-153	3	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.1068	102	0.1091	104	60-140	47-153	2	0-30	
1,2-Dibromoethane	0.1921	0.2089	109	0.2200	115	54-144	39-159	5	0-36	
1,2-Dichloroethane	0.1012	0.1156	114	0.1177	116	69-153	55-167	2	0-35	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1839
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 2 of 2

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
098-01-005-6744	**LCS**	**Air**	**GC 13**	**N/A**	**10/24/15 09:14**	**151024L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	932.5	926.8	99	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 15-10-1839 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA TO-15M	N/A	953	GC/MS OOO	2
EPA TO-3M	N/A	982	GC 13	2
EPA TO-3M	N/A	1008	GC 13	2

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Glossary of Terms and Qualifiers

Work Order: 15-10-1839 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.

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Eurofins Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841
Phone: 714-895-5494
Fax: 714-894-7501

ExxonMobil

15-10-1839

Consultant Name: Cardno ERI | **Account #:** NA | **PO#:** Direct Bill Cardno
Consultant Address: 601 N. McDowell Boulevard | **Invoice To:** Direct Bill Cardno
Consultant City/State/Zip: Petaluma, California, 94954 | **Report To:** Scott Perkins
ExxonMobil Project Mgr: Jennifer Sedlachek | **Project Name:** 02 2735 C
Consultant Project Mgr: Scott Perkins | **ExxonMobil Site #:** 79374 | **Major Project (AFE #):**
Consultant Telephone Number: 707-766-2000 | **Fax No.:** 707-789-0414 | **Site Address:** 990 San Pablo Avenue
Sampler Name (Print): Carl Mehlig 09 | **Site City, State, Zip:** Albany, California
Sampler Signature: | **Oversight Agency:** Alameda County Environmental Health Department

	Sample ID	Field Point Name	Date Sampled (2015)	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: Unpreserved	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify): Distilled Water	Analyze For: TPHg TO-3M	BTEX MTBE TO-15	OxygentesTO-15M	BTEX 8260B	7 Oxygenates 8260B				RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
1	V-INF-OX0-1	OX0	10/23	0815	1													1						1		X	X	X								X	
2	V-INF-OX0-2	OX0	10/23	1100	1													1						1		X	X	X								X	
3	V-INF-OX0-3	OX0	10/23	1200	1													1						1		X	X	X								X	
4	V-INF-OX0-4	OX0	10/23	1445	1													1						1		X	X	X								X	

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO
norcallabs@eri-us.com
GLOBAL ID # T0619716673

Oxygenates = MTBE, ETBE, DIPE, TAME, TBA, 1,2-DCA, EDB

Relinquished by:		Date	Time	Received by:	Date	Time
	CARDNO	10/23/15	1507		10/23/15	1507
Relinquished by:		Date	Time	Received by (Lab personnel):	Date	Time
	1650	10/23/15	1730	ECI	10/24/15	8:45

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 with lab Project Manager or attach specific instructions

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WORK ORDER NUMBER: 15-10- 1839

SAMPLE RECEIPT CHECKLIST

BOX 1 OF 1

CLIENT: Cardno ERI

DATE: 10 / 24 / 2015

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

Thermometer ID: SC2 (CF:-0.4°C); Temperature (w/o CF): _____°C (w/ CF): _____°C; ☐ Blank ☐ Sample

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

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

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☑ Air ☐ Filter Checked by: 862

CUSTODY SEAL:

Box ☑ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A Checked by: 862

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 862

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** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 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, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 862

Reviewed by: 778

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WORK ORDER NUMBER: 15-10-1840

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For
Client: Cardno
Client Project Name: ExxonMobil 79374/022735C
Attention: Scott Perkins
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Approved for release on 11/09/2015 by:
Cecile deGuia
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: ExxonMobil 79374/022735C
Work Order Number: 15-10-1840

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Work Order Narrative

Work Order: 15-10-1840 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 10/24/15. They were assigned to Work Order 15-10-1840.

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.

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Sample Summary

Client:	Cardno	Work Order:	15-10-1840
	601 North McDowell Blvd.	Project Name:	ExxonMobil 79374/022735C
	Petaluma, CA 94954-2312	PO Number:	022735C
		Date/Time Received:	10/24/15 08:45
		Number of Containers:	2
Attn:	Scott Perkins		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
V-INF-OX0-1	15-10-1840-1	10/22/15 12:30	1	Air
V-INF-OX0-2	15-10-1840-2	10/22/15 15:30	1	Air

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Analytical Report

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

Project: ExxonMobil 79374/022735C

Date Received: 10/24/15
Work Order: 15-10-1840
Preparation: N/A
Method: EPA TO-15M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-1	**15-10-1840-1-A**	**10/22/15 12:30**	**Air**	**GC/MS K**	**N/A**	**10/24/15 15:37**	**151023L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	0.63	0.16	100	
Toluene	ND	1.9	100	
Ethylbenzene	1.1	0.22	100	
o-Xylene	ND	0.22	100	
p/m-Xylene	ND	0.87	100	
Xylenes (total)	ND	0.22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.72	100	
Tert-Butyl Alcohol (TBA)	ND	1.5	100	
Diisopropyl Ether (DIPE)	ND	0.84	100	
Ethyl-t-Butyl Ether (ETBE)	ND	0.84	100	
Tert-Amyl-Methyl Ether (TAME)	ND	0.84	100	
1,2-Dibromoethane	ND	0.38	100	
1,2-Dichloroethane	ND	0.20	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	109	57-129	
1,2-Dichloroethane-d4	108	47-137	
Toluene-d8	90	78-156	

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

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Analytical Report

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1840
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 2 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-2	**15-10-1840-2-A**	**10/22/15 15:30**	**Air**	**GC/MS II**	**N/A**	**10/25/15 01:34**	**151024L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	0.73	0.16	100	
Toluene	ND	1.9	100	
Ethylbenzene	1.2	0.22	100	
o-Xylene	ND	0.22	100	
p/m-Xylene	ND	0.87	100	
Xylenes (total)	ND	0.22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.72	100	
Tert-Butyl Alcohol (TBA)	ND	1.5	100	
Diisopropyl Ether (DIPE)	ND	0.84	100	
Ethyl-t-Butyl Ether (ETBE)	ND	0.84	100	
Tert-Amyl-Methyl Ether (TAME)	ND	0.84	100	
1,2-Dibromoethane	ND	0.38	100	
1,2-Dichloroethane	ND	0.20	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	106	57-129	
1,2-Dichloroethane-d4	120	47-137	
Toluene-d8	85	78-156	

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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 79374/022735C

Date Received: 10/24/15
Work Order: 15-10-1840
Preparation: N/A
Method: EPA TO-15M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-5952**	**N/A**	**Air**	**GC/MS K**	**N/A**	**10/23/15 23:10**	**151023L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	57-129	
1,2-Dichloroethane-d4	101	47-137	
Toluene-d8	101	78-156	

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

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Analytical Report

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1840
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-5954**	**N/A**	**Air**	**GC/MS II**	**N/A**	**10/24/15 19:37**	**151024L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	92	57-129	
1,2-Dichloroethane-d4	100	47-137	
Toluene-d8	101	78-156	

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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 79374/022735C

Date Received: 10/24/15
Work Order: 15-10-1840
Preparation: N/A
Method: EPA TO-3M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-1	**15-10-1840-1-A**	**10/22/15 12:30**	**Air**	**GC 13**	**N/A**	**10/24/15 12:57**	**151024L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	4600	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-2	**15-10-1840-2-A**	**10/22/15 15:30**	**Air**	**GC 13**	**N/A**	**10/24/15 13:09**	**151024L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	4600	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-6744**	**N/A**	**Air**	**GC 13**	**N/A**	**10/24/15 09:26**	**151024L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7.0	1.00	

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

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Quality Control - Sample Duplicate

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1840
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
15-10-1839-4	**Sample**	**Air**	**GC 13**	**N/A**	**10/24/15 14:23**	**151024D01**
15-10-1839-4	**Sample Duplicate**	**Air**	**GC 13**	**N/A**	**10/24/15 15:15**	**151024D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
TPH as Gasoline	7119	7171	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1840
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
Project: ExxonMobil 79374/022735C			Page 1 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-5952	**LCS**	**Air**	**GC/MS K**	**N/A**	**10/23/15 20:35**	**151023L03**
099-12-981-5952	**LCSD**	**Air**	**GC/MS K**	**N/A**	**10/23/15 21:23**	**151023L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.09370	117	0.09285	116	60-156	44-172	1	0-40	
Toluene	0.09421	0.1141	121	0.1155	123	56-146	41-161	1	0-43	
Ethylbenzene	0.1086	0.1319	121	0.1328	122	52-154	35-171	1	0-38	
o-Xylene	0.1086	0.1335	123	0.1329	122	52-148	36-164	0	0-38	
p/m-Xylene	0.2171	0.2715	125	0.2711	125	42-156	23-175	0	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.1046	116	0.1029	114	50-150	33-167	2	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1753	116	0.1712	113	60-140	47-153	2	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.1237	118	0.1204	115	60-140	47-153	3	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.1204	115	0.1182	113	60-140	47-153	2	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.1172	112	0.1142	109	60-140	47-153	3	0-30	
1,2-Dibromoethane	0.1921	0.2388	124	0.2413	126	54-144	39-159	1	0-36	
1,2-Dichloroethane	0.1012	0.1203	119	0.1208	119	69-153	55-167	0	0-35	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1840
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
Project: ExxonMobil 79374/022735C			Page 2 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-5954	**LCS**	**Air**	**GC/MS II**	**N/A**	**10/24/15 16:59**	**151024L02**
099-12-981-5954	**LCSD**	**Air**	**GC/MS II**	**N/A**	**10/24/15 17:50**	**151024L02**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.08052	101	0.08093	101	60-156	44-172	1	0-40	
Toluene	0.09421	0.09024	96	0.09071	96	56-146	41-161	1	0-43	
Ethylbenzene	0.1086	0.1042	96	0.1054	97	52-154	35-171	1	0-38	
o-Xylene	0.1086	0.1016	94	0.1024	94	52-148	36-164	1	0-38	
p/m-Xylene	0.2171	0.2002	92	0.2033	94	42-156	23-175	2	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.09829	109	0.09902	110	50-150	33-167	1	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1472	97	0.1566	103	60-140	47-153	6	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.09813	94	0.09902	95	60-140	47-153	1	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.1113	107	0.1124	108	60-140	47-153	1	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.1134	109	0.1118	107	60-140	47-153	1	0-30	
1,2-Dibromoethane	0.1921	0.1901	99	0.1916	100	54-144	39-159	1	0-36	
1,2-Dichloroethane	0.1012	0.1116	110	0.1135	112	69-153	55-167	2	0-35	

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RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS

Cardno		Date Received:	10/24/15
601 North McDowell Blvd.		Work Order:	15-10-1840
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
098-01-005-6744	**LCS**	**Air**	**GC 13**	**N/A**	**10/24/15 09:14**	**151024L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	932.5	926.8	99	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 15-10-1840 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA TO-15M	N/A	866	GC/MS II	2
EPA TO-15M	N/A	884	GC/MS K	2
EPA TO-3M	N/A	982	GC 13	2
EPA TO-3M	N/A	1008	GC 13	2

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Glossary of Terms and Qualifiers

Work Order: 15-10-1840 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.

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Eurofins Calscience Environmental Laboratories, Inc.

7440 Lincoln Way
Garden Grove, CA 92841

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

ExxonMobil

15-10-1840

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

								Preservative										Matrix							Analyze For:										
Sample ID	Field Point Name	Date Sampled 2015	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Methanol	Sodium Bisulfate	HCl	NaOH	H_2SO_4 Plastic	H_2SO_4 Glass	HNO_3	Ice	Other: Unpreserved	None	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify): Distilled Water	TPHg TO-3M	BTEX MTBE TO-15	OxygentesTO-15M	BTEX 8260B	7 Oxygenates 8260B			RUSH TAT (Pre-Schedule	5-day TAT	Standard 10-day TAT	Due Date of Report
V-INF-OX0-1	OX0	10/22	1230	1													1						1		X	X	X							X	
V-INF-OX0-2	OX0	10/22	1530	1													1						1		X	X	X							X	
V-INF-OX0-3	OX0			1													1						1		X	X	X							X	
V-INF-OX0-4	OX0			1													1						1		X	X	X							X	

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO norcallabs@eri-us.com
Oxygenates = MTBE, ETBE, DIPE, TAME, TBA, 1,2-DCA, EDB
GLOBAL ID # T0619716673

Relinquished by:		Date	Time	Received by:	Date	Time
[signature]	CARDNO	10/23/15	1507	TOmally ECI	10/23/15	1503
Relinquished by: TOmally TO 680		10/23/15	1730	Received by (Lab personnel): [signature] ECI	10/24/15	8:45

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 with lab Project Manager or attach specific instructions

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WORK ORDER NUMBER: 15-10- 1840

SAMPLE RECEIPT CHECKLIST

BOX 1 OF 1

CLIENT: Cardno ERI

DATE: 10 / 24 / 2015

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

Thermometer ID: SC2 (CF:-0.4°C); Temperature (w/o CF): _____°C (w/ CF): _____°C; ☐ Blank ☐ Sample

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

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

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☑ Air ☐ Filter Checked by: TG2

CUSTODY SEAL:

Box ☑ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A Checked by: TG2

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: TG2

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** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 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, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: TG2

Reviewed by: TTE

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WORK ORDER NUMBER: 15-10-2051

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno

Client Project Name: ExxonMobil 79374/022735C

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

Approved for release on 11/10/2015 by:
Cecile deGuia
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: ExxonMobil 79374/022735C
Work Order Number: 15-10-2051

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Work Order Narrative

Work Order: 15-10-2051 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 10/28/15. They were assigned to Work Order 15-10-2051.

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.

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Sample Summary

Client:	Cardno	Work Order:	15-10-2051
	601 North McDowell Blvd.	Project Name:	ExxonMobil 79374/022735C
	Petaluma, CA 94954-2312	PO Number:	022735C
		Date/Time Received:	10/28/15 10:00
		Number of Containers:	4
Attn:	Scott Perkins		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
V-INF-OX0	15-10-2051-1	10/26/15 10:00	1	Air
V-DSCHG	15-10-2051-2	10/26/15 10:10	1	Air
V-INF-OX0-1	15-10-2051-3	10/26/15 13:30	1	Air
V-INF-OX0-2	15-10-2051-4	10/27/15 09:00	1	Air

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Analytical Report

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

Project: ExxonMobil 79374/022735C

Date Received: 10/28/15
Work Order: 15-10-2051
Preparation: N/A
Method: EPA TO-15M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0	**15-10-2051-1-A**	**10/26/15 10:00**	**Air**	**GC/MS KKK**	**N/A**	**10/29/15 08:52**	**151028L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	10	0.20	125	
Toluene	ND	2.4	125	
Ethylbenzene	3.9	0.27	125	
o-Xylene	0.60	0.27	125	
p/m-Xylene	2.6	1.1	125	
Xylenes (total)	3.2	0.27	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.90	125	
Tert-Butyl Alcohol (TBA)	ND	1.9	125	
Diisopropyl Ether (DIPE)	ND	1.0	125	
Ethyl-t-Butyl Ether (ETBE)	ND	1.0	125	
Tert-Amyl-Methyl Ether (TAME)	ND	1.0	125	
1,2-Dibromoethane	ND	0.48	125	
1,2-Dichloroethane	ND	0.25	125	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	110	57-129	
1,2-Dichloroethane-d4	92	47-137	
Toluene-d8	82	78-156	

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

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Analytical Report

Cardno		Date Received:	10/28/15
601 North McDowell Blvd.		Work Order:	15-10-2051
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 2 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-DSCHG	**15-10-2051-2-A**	**10/26/15 10:10**	**Air**	**GC/MS OOO**	**N/A**	**10/29/15 20:54**	**151029L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	0.0045	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	0.0033	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	132	57-129	AZ
1,2-Dichloroethane-d4	105	47-137	
Toluene-d8	102	78-156	

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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 79374/022735C

Date Received: 10/28/15
Work Order: 15-10-2051
Preparation: N/A
Method: EPA TO-15M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-1	**15-10-2051-3-A**	**10/26/15 13:30**	**Air**	**GC/MS KKK**	**N/A**	**10/29/15 20:28**	**151029L01**

Parameter	Result	RL	DF	Qualifiers
Benzene	6.4	0.16	100	
Toluene	ND	1.9	100	
Ethylbenzene	3.2	0.22	100	
o-Xylene	0.41	0.22	100	
p/m-Xylene	1.8	0.87	100	
Xylenes (total)	2.2	0.22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.72	100	
Tert-Butyl Alcohol (TBA)	ND	1.5	100	
Diisopropyl Ether (DIPE)	ND	0.84	100	
Ethyl-t-Butyl Ether (ETBE)	ND	0.84	100	
Tert-Amyl-Methyl Ether (TAME)	ND	0.84	100	
1,2-Dibromoethane	ND	0.38	100	
1,2-Dichloroethane	ND	0.20	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	114	57-129	
1,2-Dichloroethane-d4	94	47-137	
Toluene-d8	80	78-156	

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

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Analytical Report

Cardno		Date Received:	10/28/15
601 North McDowell Blvd.		Work Order:	15-10-2051
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 4 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-2	**15-10-2051-4-A**	**10/27/15 09:00**	**Air**	**GC/MS KKK**	**N/A**	**10/30/15 02:27**	**151029L01**

Parameter	Result	RL	DF	Qualifiers
Benzene	14	0.32	200	
Toluene	ND	3.8	200	
Ethylbenzene	8.1	0.43	200	
o-Xylene	1.1	0.43	200	
p/m-Xylene	5.0	1.7	200	
Xylenes (total)	6.2	0.43	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	1.4	200	
Tert-Butyl Alcohol (TBA)	ND	3.0	200	
Diisopropyl Ether (DIPE)	ND	1.7	200	
Ethyl-t-Butyl Ether (ETBE)	ND	1.7	200	
Tert-Amyl-Methyl Ether (TAME)	ND	1.7	200	
1,2-Dibromoethane	ND	0.77	200	
1,2-Dichloroethane	ND	0.40	200	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	57-129	
1,2-Dichloroethane-d4	96	47-137	
Toluene-d8	82	78-156	

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

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Analytical Report

Cardno		Date Received:	10/28/15
601 North McDowell Blvd.		Work Order:	15-10-2051
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 5 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-5960**	**N/A**	**Air**	**GC/MS KKK**	**N/A**	**10/28/15 16:23**	**151028L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	57-129	
1,2-Dichloroethane-d4	96	47-137	
Toluene-d8	96	78-156	

Return to Contents

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

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Analytical Report

Cardno		Date Received:	10/28/15
601 North McDowell Blvd.		Work Order:	15-10-2051
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 6 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-5962**	**N/A**	**Air**	**GC/MS KKK**	**N/A**	**10/29/15 18:38**	**151029L01**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	57-129	
1,2-Dichloroethane-d4	94	47-137	
Toluene-d8	93	78-156	

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

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Analytical Report

Cardno		Date Received:	10/28/15
601 North McDowell Blvd.		Work Order:	15-10-2051
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 7 of 7

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-5987**	**N/A**	**Air**	**GC/MS OOO**	**N/A**	**10/29/15 15:34**	**151029L03**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	57-129	
1,2-Dichloroethane-d4	106	47-137	
Toluene-d8	98	78-156	

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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 79374/022735C

Date Received: 10/28/15
Work Order: 15-10-2051
Preparation: N/A
Method: EPA TO-3M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0	**15-10-2051-1-A**	**10/26/15 10:00**	**Air**	**GC 13**	**N/A**	**10/28/15 17:23**	**151028L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	5100	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-DSCHG	**15-10-2051-2-A**	**10/26/15 10:10**	**Air**	**GC 13**	**N/A**	**10/28/15 18:47**	**151028L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	31	7.0	1.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-1	**15-10-2051-3-A**	**10/26/15 13:30**	**Air**	**GC 13**	**N/A**	**10/28/15 17:51**	**151028L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	3600	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-2	**15-10-2051-4-A**	**10/27/15 09:00**	**Air**	**GC 13**	**N/A**	**10/28/15 18:17**	**151028L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	8600	70	10.0	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-6750**	**N/A**	**Air**	**GC 13**	**N/A**	**10/28/15 09:42**	**151028L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7.0	1.00	

Return to Contents

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

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Quality Control - Sample Duplicate

Cardno		Date Received:	10/28/15
601 North McDowell Blvd.		Work Order:	15-10-2051
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
15-10-2034-2	**Sample**	**Air**	**GC 13**	**N/A**	**10/28/15 11:34**	**151028D01**
15-10-2034-2	**Sample Duplicate**	**Air**	**GC 13**	**N/A**	**10/28/15 11:46**	**151028D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
TPH as Gasoline	504.4	497.7	1	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

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

Project: ExxonMobil 79374/022735C

Date Received: 10/28/15
Work Order: 15-10-2051
Preparation: N/A
Method: EPA TO-15M

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-5960	**LCS**	**Air**	**GC/MS KKK**	**N/A**	**10/28/15 13:42**	**151028L03**
099-12-981-5960	**LCSD**	**Air**	**GC/MS KKK**	**N/A**	**10/28/15 14:36**	**151028L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.08716	109	0.08705	109	60-156	44-172	0	0-40	
Toluene	0.09421	0.09444	100	0.09359	99	56-146	41-161	1	0-43	
Ethylbenzene	0.1086	0.1134	104	0.1135	105	52-154	35-171	0	0-38	
o-Xylene	0.1086	0.1091	101	0.1094	101	52-148	36-164	0	0-38	
p/m-Xylene	0.2171	0.2181	100	0.2180	100	42-156	23-175	0	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.09468	105	0.09480	105	50-150	33-167	0	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1514	100	0.1533	101	60-140	47-153	1	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.1030	99	0.1023	98	60-140	47-153	1	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.1081	103	0.1082	104	60-140	47-153	0	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.1112	106	0.1120	107	60-140	47-153	1	0-30	
1,2-Dibromoethane	0.1921	0.2072	108	0.2061	107	54-144	39-159	1	0-36	
1,2-Dichloroethane	0.1012	0.1052	104	0.1039	103	69-153	55-167	1	0-35	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

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

Project: ExxonMobil 79374/022735C

Date Received: 10/28/15
Work Order: 15-10-2051
Preparation: N/A
Method: EPA TO-15M

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-5962	**LCS**	**Air**	**GC/MS KKK**	**N/A**	**10/29/15 14:15**	**151029L01**
099-12-981-5962	**LCSD**	**Air**	**GC/MS KKK**	**N/A**	**10/29/15 15:07**	**151029L01**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.08819	110	0.08818	110	60-156	44-172	0	0-40	
Toluene	0.09421	0.09713	103	0.09746	103	56-146	41-161	0	0-43	
Ethylbenzene	0.1086	0.1140	105	0.1152	106	52-154	35-171	1	0-38	
o-Xylene	0.1086	0.1089	100	0.1097	101	52-148	36-164	1	0-38	
p/m-Xylene	0.2171	0.2192	101	0.2204	102	42-156	23-175	1	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.09677	107	0.09626	107	50-150	33-167	1	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1542	102	0.1538	101	60-140	47-153	0	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.1052	101	0.1041	100	60-140	47-153	1	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.1096	105	0.1094	105	60-140	47-153	0	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.1129	108	0.1131	108	60-140	47-153	0	0-30	
1,2-Dibromoethane	0.1921	0.2112	110	0.2097	109	54-144	39-159	1	0-36	
1,2-Dichloroethane	0.1012	0.1056	104	0.1050	104	69-153	55-167	1	0-35	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

Cardno		Date Received:	10/28/15
601 North McDowell Blvd.		Work Order:	15-10-2051
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
Project: ExxonMobil 79374/022735C			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-5987	**LCS**	**Air**	**GC/MS OOO**	**N/A**	**10/29/15 13:52**	**151029L03**
099-12-981-5987	**LCSD**	**Air**	**GC/MS OOO**	**N/A**	**10/29/15 14:36**	**151029L03**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.07528	94	0.07428	93	60-156	44-172	1	0-40	
Toluene	0.09421	0.08798	93	0.09351	99	56-146	41-161	6	0-43	
Ethylbenzene	0.1086	0.1058	98	0.1072	99	52-154	35-171	1	0-38	
o-Xylene	0.1086	0.1093	101	0.1075	99	52-148	36-164	2	0-38	
p/m-Xylene	0.2171	0.2129	98	0.2147	99	42-156	23-175	1	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.08234	91	0.08432	94	50-150	33-167	2	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1388	92	0.1459	96	60-140	47-153	5	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.09911	95	0.09820	94	60-140	47-153	1	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.09576	92	0.09761	93	60-140	47-153	2	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.09664	93	0.09700	93	60-140	47-153	0	0-30	
1,2-Dibromoethane	0.1921	0.1868	97	0.1938	101	54-144	39-159	4	0-36	
1,2-Dichloroethane	0.1012	0.1004	99	0.1010	100	69-153	55-167	1	0-35	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	10/28/15
601 North McDowell Blvd.		Work Order:	15-10-2051
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
098-01-005-6750	**LCS**	**Air**	**GC 13**	**N/A**	**10/28/15 09:21**	**151028L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	932.5	920.5	99	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 15-10-2051 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA TO-15M	N/A	866	GC/MS KKK	2
EPA TO-15M	N/A	866	GC/MS OOO	2
EPA TO-3M	N/A	982	GC 13	2

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Glossary of Terms and Qualifiers

Work Order: 15-10-2051 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.

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Cecile L de Guia

From: David R. Daniels [david.daniels@cardno.com]
Sent: Thursday, October 29, 2015 8:13 AM
To: Cecile L de Guia; Scott Perkins
Cc: Sandy Tat
Subject: RE: ExxonMobil 79374; 15-10-2051
Attachments: 15-10-2051 Revised.pdf

Cecile,

I have added the additional VOCs to the revised COC that is attached.

David Daniels PG
PROJECT GEOLOGIST
ENGINEERING & ENVIRONMENTAL SERVICES DIVISION
CARDNO

Direct (+1) 707-766-2024 Mobile (+1) 707-338-6997 Fax (+1) 707-789-0414
Address 601 North McDowell Blvd., Petaluma, CA 94954
Email david.daniels@cardno.com Web www.cardno.com

Return to Contents

From: Cecile L de Guia [mailto:CecileLdeGuia@eurofinsUS.com]
Sent: Wednesday, October 28, 2015 8:52 PM
To: Scott Perkins <Scott.Perkins@cardno.com>; David R. Daniels <david.daniels@cardno.com>
Cc: Sandy Tat <SandyTat@eurofinsUS.com>
Subject: ExxonMobil 79374; 15-10-2051

Good Evening,
Please review the attached COC and let me know if V-DSCHG sample is only for BTEX/MTNE?
Thank you.

Best regards,
Cecile de Guia
Project Manager

Eurofins Calscience
7440 Lincoln Way
Garden Grove, CA 92841-1427
(714) 895-5494
Email: ceciledeguia@eurofinsUS.com
Website: www. eurofinsus.com

Eurofins Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841
Phone: 714-895-5494
Fax: 714-894-7501

ExxonMobil

15-10-2051

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

Sample ID	Field Point Name	Date Sampled (2015)	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: Unpreserved	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify); Distilled Water	Analyze For: TPHg TO-3M	BTEX MTBE TO-15	OxygentesTO-15M	BTEX 8260B	7 Oxygenates 8260B			RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
(1) V-INF-OX0	OX0	10/26	0000	1													1						1		X	X	X							X	
(2) V-DSCHG	VEFF	10/26	1010	1													1						1		X	X	X							X	
(3) V-INF-OX0-1	OX0	10/26	1330	1													1						1		X	X	X							X	
(4) V-INF-OX0-2	OX0	10/27	900	1													1						1		X	X	X							X	

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO
norcallabs@eri-us.com
GLOBAL ID # T0619716673

Oxygenates = MTBE, ETBE, DIPE, TAME, TBA, 1,2-DCA, EDB

Relinquished by:		Date	Time	Received by:	Date	Time
	Cardno	10/27/15	1125	Tom Malley GCI	10/27/15	1125
Relinquished by: Tom O'Malley	TOGO	10/27/15	1730	Received by (Lab personnel):	10/28/15	1000

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 with lab
Project Manager or attach specific instructions

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Eurofins Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841
Phone: 714-895-5494
Fax: 714-894-7501

ExxonMobil

15-10-2051

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

Sample ID	Field Point Name	Date Sampled (2015)	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: Unpreserved	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify); Distilled Water	Analyze For: TPHg TO-3M	BTEX MTBE TO-15	OxygentesTO-15M	BTEX 8260B	7 Oxygenates 8260B			RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
(1) V-INF-OX0	OX0	10/26	0000	1													1						1		X	X	X							X	
(2) V-DSCHG	VEFF	10/26	1010	1													1						1		X	X								X	
(3) V-INF-OX0-1	OX0	10/26	1330	1													X						X		X	X	X							X	
(4) V-INF-OX0-2	OX0	10/27	900	1													X						X		X	X	X							X	

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO
norcallabs@eri-us.com
GLOBAL ID # T0619716673

Oxygenates = MTBE, ETBE, DIPE, TAME, TBA, 1,2-DCA, EDB

Relinquished by:	Company	Date	Time	Received by:	Date	Time
	Cardno	10/27/15	1125	Tom Malley GEL	10/27/15	1125
Tom O'Malley	TOGSO	10/27/15	1730		10/28/15	1000

Relinquished by: | 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 with lab Project Manager or attach specific instructions

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WORK ORDER NUMBER: 15-10- 2051

SAMPLE RECEIPT CHECKLIST

BOX 1 OF 1

CLIENT: Cardno ERI

DATE: 10 / 28 / 2015

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

Thermometer ID: SC2 (CF:-0.4°C); Temperature (w/o CF): _____°C (w/ CF): _____°C; ☐ Blank ☐ Sample

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

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

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☑ Air ☐ Filter Checked by: SB6

CUSTODY SEAL:

Box ☑ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A Checked by: SB6

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: SB6

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 ☐ VOAh ☐ VOAna_2 ☐ 100PJ ☐ 100PJna_2 ☐ 125AGB ☐ 125AGBh ☐ 125AGBp ☐ 125PB

☐ 125PBznna ☐ 250AGB ☐ 250CGB ☐ 250CGBs ☐ 250PB ☐ 250PBn ☐ 500AGB ☐ 500AGJ ☐ 500AGJs

☐ 500PB ☐ 1AGB ☐ 1AGBna_2 ☐ 1AGBs ☐ 1PB ☐ 1PBna ☐ _____ ☐ _____ ☐ _____ ☐ _____

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, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: SB6

Reviewed by: TH

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Supplemental Report 1

The original report has been revised/corrected.

WORK ORDER NUMBER: 15-10-2237

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno

Client Project Name: ExxonMobil 79374/022735C

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

Approved for release on 11/17/2015 by:
Cecile deGuia
Project Manager

ResultLink

Email your PM

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Contents

Client Project Name: ExxonMobil 79374/022735C
Work Order Number: 15-10-2237

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Work Order Narrative

Work Order: 15-10-2237 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 10/30/15. They were assigned to Work Order 15-10-2237.

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.

Please note that the report has been amended to include the corrected sampling collection date for sample 15-10-2237-1 (V-INF-OX0-1) from October 29, 2015 to October 28,2015.

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Sample Summary

Client:	Cardno	Work Order:	15-10-2237
	601 North McDowell Blvd.	Project Name:	ExxonMobil 79374/022735C
	Petaluma, CA 94954-2312	PO Number:	022735C
		Date/Time Received:	10/30/15 10:40
		Number of Containers:	3
Attn:	Scott Perkins		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
V-INF-OX0-1	15-10-2237-1	10/28/15 09:00	1	Air
V-INF-OX0-2	15-10-2237-2	10/29/15 09:30	1	Air
V-INF-OX0-3	15-10-2237-3	10/29/15 10:30	1	Air

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Analytical Report

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

Project: ExxonMobil 79374/022735C

Date Received: 10/30/15
Work Order: 15-10-2237
Preparation: N/A
Method: EPA TO-15M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-1	**15-10-2237-1-A**	**10/28/15 09:00**	**Air**	**GC/MS NN**	**N/A**	**10/31/15 08:48**	**151030L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	9.4	0.16	100	
Toluene	ND	1.9	100	
Ethylbenzene	5.3	0.22	100	
o-Xylene	1.1	0.22	100	
p/m-Xylene	4.5	0.87	100	
Xylenes (total)	5.6	0.22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.72	100	
Tert-Butyl Alcohol (TBA)	ND	1.5	100	
Diisopropyl Ether (DIPE)	ND	0.84	100	
Ethyl-t-Butyl Ether (ETBE)	ND	0.84	100	
Tert-Amyl-Methyl Ether (TAME)	ND	0.84	100	
1,2-Dibromoethane	ND	0.38	100	
1,2-Dichloroethane	ND	0.20	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	105	57-129	
1,2-Dichloroethane-d4	98	47-137	
Toluene-d8	64	78-156	AZ

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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 79374/022735C

Date Received: 10/30/15
Work Order: 15-10-2237
Preparation: N/A
Method: EPA TO-15M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-2	**15-10-2237-2-A**	**10/29/15 09:30**	**Air**	**GC/MS NN**	**N/A**	**10/31/15 09:40**	**151030L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	8.9	0.16	100	
Toluene	ND	1.9	100	
Ethylbenzene	7.3	0.22	100	
o-Xylene	1.5	0.22	100	
p/m-Xylene	6.1	0.87	100	
Xylenes (total)	7.6	0.22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.72	100	
Tert-Butyl Alcohol (TBA)	ND	1.5	100	
Diisopropyl Ether (DIPE)	ND	0.84	100	
Ethyl-t-Butyl Ether (ETBE)	ND	0.84	100	
Tert-Amyl-Methyl Ether (TAME)	ND	0.84	100	
1,2-Dibromoethane	ND	0.38	100	
1,2-Dichloroethane	ND	0.20	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	107	57-129	
1,2-Dichloroethane-d4	96	47-137	
Toluene-d8	62	78-156	AZ

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

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Analytical Report

Cardno		Date Received:	10/30/15
601 North McDowell Blvd.		Work Order:	15-10-2237
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 3 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-3	**15-10-2237-3-A**	**10/29/15 10:30**	**Air**	**GC/MS NN**	**N/A**	**10/31/15 20:45**	**151031L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	7.8	0.16	100	
Toluene	ND	1.9	100	
Ethylbenzene	6.7	0.22	100	
o-Xylene	1.2	0.22	100	
p/m-Xylene	5.4	0.87	100	
Xylenes (total)	6.6	0.22	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.72	100	
Tert-Butyl Alcohol (TBA)	ND	1.5	100	
Diisopropyl Ether (DIPE)	ND	0.84	100	
Ethyl-t-Butyl Ether (ETBE)	ND	0.84	100	
Tert-Amyl-Methyl Ether (TAME)	ND	0.84	100	
1,2-Dibromoethane	ND	0.38	100	
1,2-Dichloroethane	ND	0.20	100	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	108	57-129	
1,2-Dichloroethane-d4	97	47-137	
Toluene-d8	60	78-156	AZ

Return to Contents

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

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Analytical Report

Cardno		Date Received:	10/30/15
601 North McDowell Blvd.		Work Order:	15-10-2237
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 4 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-5969**	**N/A**	**Air**	**GC/MS NN**	**N/A**	**10/30/15 17:40**	**151030L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	57-129	
1,2-Dichloroethane-d4	109	47-137	
Toluene-d8	101	78-156	

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

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Analytical Report

Cardno		Date Received:	10/30/15
601 North McDowell Blvd.		Work Order:	15-10-2237
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-15M
		Units:	mg/m3
Project: ExxonMobil 79374/022735C			Page 5 of 5

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-981-5988**	**N/A**	**Air**	**GC/MS NN**	**N/A**	**10/31/15 19:05**	**151031L02**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.0016	1.00	
Toluene	ND	0.019	1.00	
Ethylbenzene	ND	0.0022	1.00	
o-Xylene	ND	0.0022	1.00	
p/m-Xylene	ND	0.0087	1.00	
Xylenes (total)	ND	0.0022	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.0072	1.00	
Tert-Butyl Alcohol (TBA)	ND	0.015	1.00	
Diisopropyl Ether (DIPE)	ND	0.0084	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.0084	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.0084	1.00	
1,2-Dibromoethane	ND	0.0038	1.00	
1,2-Dichloroethane	ND	0.0020	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	101	57-129	
1,2-Dichloroethane-d4	102	47-137	
Toluene-d8	99	78-156	

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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 79374/022735C

Date Received: 10/30/15
Work Order: 15-10-2237
Preparation: N/A
Method: EPA TO-3M
Units: mg/m3

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-1	**15-10-2237-1-A**	**10/28/15 09:00**	**Air**	**GC 60**	**N/A**	**10/30/15 15:05**	**151030L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	5800	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-2	**15-10-2237-2-A**	**10/29/15 09:30**	**Air**	**GC 60**	**N/A**	**10/30/15 15:26**	**151030L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	5800	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
V-INF-OX0-3	**15-10-2237-3-A**	**10/29/15 10:30**	**Air**	**GC 60**	**N/A**	**10/30/15 16:21**	**151030L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	5600	35	5.00	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**098-01-005-6760**	**N/A**	**Air**	**GC 60**	**N/A**	**10/30/15 09:40**	**151030L01**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	7.0	1.00	

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

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Quality Control - Sample Duplicate

Cardno		Date Received:	10/30/15
601 North McDowell Blvd.		Work Order:	15-10-2237
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 1 of 1

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	Duplicate Batch Number
15-10-2176-1	**Sample**	**Air**	**GC 60**	**N/A**	**10/30/15 11:40**	**151030D01**
15-10-2176-1	**Sample Duplicate**	**Air**	**GC 60**	**N/A**	**10/30/15 11:56**	**151030D01**

Parameter	Sample Conc.	DUP Conc.	RPD	RPD CL	Qualifiers
TPH as Gasoline	743.9	729.3	2	0-20	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

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

Project: ExxonMobil 79374/022735C

Date Received: 10/30/15
Work Order: 15-10-2237
Preparation: N/A
Method: EPA TO-15M

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-5969	**LCS**	**Air**	**GC/MS NN**	**N/A**	**10/30/15 14:53**	**151030L02**
099-12-981-5969	**LCSD**	**Air**	**GC/MS NN**	**N/A**	**10/30/15 15:45**	**151030L02**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.08310	104	0.08646	108	60-156	44-172	4	0-40	
Toluene	0.09421	0.09415	100	0.09865	105	56-146	41-161	5	0-43	
Ethylbenzene	0.1086	0.1117	103	0.1177	108	52-154	35-171	5	0-38	
o-Xylene	0.1086	0.1138	105	0.1193	110	52-148	36-164	5	0-38	
p/m-Xylene	0.2171	0.2397	110	0.2520	116	42-156	23-175	5	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.09454	105	0.09873	110	50-150	33-167	4	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1867	123	0.1813	120	60-140	47-153	3	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.1136	109	0.1173	112	60-140	47-153	3	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.1161	111	0.1214	116	60-140	47-153	4	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.1105	106	0.1158	111	60-140	47-153	5	0-30	
1,2-Dibromoethane	0.1921	0.2044	106	0.2144	112	54-144	39-159	5	0-36	
1,2-Dichloroethane	0.1012	0.1090	108	0.1138	112	69-153	55-167	4	0-35	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS/LCSD

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

Project: ExxonMobil 79374/022735C

Date Received: 10/30/15
Work Order: 15-10-2237
Preparation: N/A
Method: EPA TO-15M

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-981-5988	**LCS**	**Air**	**GC/MS NN**	**N/A**	**10/31/15 16:18**	**151031L02**
099-12-981-5988	**LCSD**	**Air**	**GC/MS NN**	**N/A**	**10/31/15 17:09**	**151031L02**

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	0.07987	0.07886	99	0.08073	101	60-156	44-172	2	0-40	
Toluene	0.09421	0.09034	96	0.09247	98	56-146	41-161	2	0-43	
Ethylbenzene	0.1086	0.1071	99	0.1097	101	52-154	35-171	2	0-38	
o-Xylene	0.1086	0.1083	100	0.1111	102	52-148	36-164	3	0-38	
p/m-Xylene	0.2171	0.2297	106	0.2357	109	42-156	23-175	3	0-41	
Methyl-t-Butyl Ether (MTBE)	0.09013	0.09062	101	0.09205	102	50-150	33-167	2	0-35	
Tert-Butyl Alcohol (TBA)	0.1516	0.1154	76	0.1325	87	60-140	47-153	14	0-30	
Diisopropyl Ether (DIPE)	0.1045	0.1034	99	0.1051	101	60-140	47-153	2	0-30	
Ethyl-t-Butyl Ether (ETBE)	0.1045	0.1083	104	0.1102	105	60-140	47-153	2	0-30	
Tert-Amyl-Methyl Ether (TAME)	0.1045	0.1046	100	0.1070	102	60-140	47-153	2	0-30	
1,2-Dibromoethane	0.1921	0.1933	101	0.1978	103	54-144	39-159	2	0-36	
1,2-Dichloroethane	0.1012	0.09943	98	0.1018	101	69-153	55-167	2	0-35	

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RPD: Relative Percent Difference. CL: Control Limits

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Quality Control - LCS

Cardno		Date Received:	10/30/15
601 North McDowell Blvd.		Work Order:	15-10-2237
Petaluma, CA 94954-2312		Preparation:	N/A
		Method:	EPA TO-3M
Project: ExxonMobil 79374/022735C			Page 3 of 3

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
098-01-005-6760	**LCS**	**Air**	**GC 60**	**N/A**	**10/30/15 09:25**	**151030L01**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	Qualifiers
TPH as Gasoline	932.5	815.5	87	80-120	

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RPD: Relative Percent Difference. CL: Control Limits

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Sample Analysis Summary Report

Work Order: 15-10-2237 Page 1 of 1

Method	Extraction	Chemist ID	Instrument	Analytical Location
EPA TO-15M	N/A	866	GC/MS NN	2
EPA TO-3M	N/A	1008	GC 60	2
EPA TO-3M	N/A	1045	GC 60	2

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Glossary of Terms and Qualifiers

Work Order: 15-10-2237 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.

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Sandy Tat

From: NorCal Labs <norcallabs@cardno.com>
Sent: Tuesday, November 17, 2015 11:01 AM
To: Sandy Tat
Subject: FW: ExxonMobil 79374/022735C / CEL 15-10-2237
Attachments: 15-10-2237.pdf; 1339071.pdf; 15102237 79374.zip; 15102237.xls

Hi Sandy,

It looks like there was a handwriting interpretation issue on the attached lab. The sample date for V-INF-OX0-1 is actually October 28. Can we have the lab and EDF revised to list October 28?

Thanks!

Christine

From: Sandy Tat [mailto:SandyTat@eurofinsUS.com]
Sent: Thursday, November 12, 2015 2:34 PM
To: Scott Perkins; NorCal Labs
Subject: ExxonMobil 79374/022735C / CEL 15-10-2237

Hi,

Report, EDDs, 7 Invoice are attached.

Thanks!

Sandy Tat
Project Manager Assistant

Eurofins Calscience, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1427
USA
Phone: (714) 895-5494
Fax: (714) 894-7501

Email: SandyTat@eurofinsus.com
Website: www.Calscience.com

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Eurofins Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841
Phone: 714-895-5494
Fax: 714-894-7501

ExxonMobil

15-10-2237

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

Sample ID	Field Point Name	Date Sampled (2015)	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: Unpreserved	None	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify): Distilled Water	Analyze For: TPHg TO-3M	BTEX MTBE TO-15	OxygentesTO-15M	BTEX 8260B	7 Oxygenates 8260B			RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
V-INF-OX0-1 (1)	OX0	10/29	900	1													1						1		X	X	X							X	
V-INF-OX0-2 (2)	OX0	10/29	930	1													1						1		X	X	X							X	
V-INF-OX0-3 (3)	OX0	10/29	1030	1													1						1		X	X	X							X	
~~V-INF-OX0-4~~	~~OX0~~			~~1~~													~~1~~						1		X	X	X							X	

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO
norcallabs@eri-us.com
GLOBAL ID # T0619716673

Oxygenates = MTBE, ETBE, DIPE, TAME, TBA, 1,2-DCA, EDB

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 with lab
Project Manager or attach specific instructions

Relinquished by:		Date	Time	Received by:	Date	Time
	CARDNO	10/29/15	1138	Tom O'Malley ECI	10/29/15	1138
Relinquished by:		Date	Time	Received by (Lab personnel):	Date	Time
Tom O'Malley TO GSO		10/29/15	1730		10/30/15	1040

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GSO

800-322-5555 www.gso.com

2237

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 #: 529779369

PDS

ORC **A**
GARDEN GROVE

D92845A

44210419

Print Date: 10/29/2015 2:25 PM

LABEL INSTRUCTIONS:

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

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

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eurofins | Calscience

WORK ORDER NUMBER: 15-10- 2237

SAMPLE RECEIPT CHECKLIST

BOX 1 OF 1

CLIENT: Cardno ERI

DATE: 10 / 30 / 2015

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

Thermometer ID: SC2 (CF:-0.4°C); Temperature (w/o CF): _____°C (w/ CF): _____°C; ☐ Blank ☐ Sample

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

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

☐ Sample(s) received at ambient temperature; placed on ice for transport by courier

Ambient Temperature: ☑ Air ☐ Filter Checked by: 836

CUSTODY SEAL:

Box ☑ Present and Intact ☐ Present but Not Intact ☐ Not Present ☐ N/A Checked by: 836

Sample(s) ☐ Present and Intact ☐ Present but Not Intact ☑ Not Present ☐ N/A Checked by: 1048

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** ☐ VOA**na$_2$** ☐ 100PJ ☐ 100PJ**na$_2$** ☐ 125AGB ☐ 125AGB**h** ☐ 125AGB**p** ☐ 125PB

☐ 125PB**znna** ☐ 250AGB ☐ 250CGB ☐ 250CGB**s** ☐ 250PB ☐ 250PB**n** ☐ 500AGB ☐ 500AGJ ☐ 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, **s** = H_2SO_4, **u** = ultra-pure, **znna** = $Zn(CH_3CO_2)_2$ + NaOH

Labeled/Checked by: 1048

Reviewed by: 3W

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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. 27352 ors 11/19

2. Page 1 of 1

3. Generator's Name and Mailing address
ExxonMobil Environmental Services/Manpower Contractor
3700 W. 190th St. NTO #1106, Torrance, CA 90504
4. Generator's Phone: (310) 212 2938

990 Sou Pablo Ave. Albany, CA. EM(79324)

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 530-753-1829

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZARDOUS PURGE WATER	01	Tanker	71	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 ExxonMobil Alan R Mogadhon

Signature

Date: Month 11 Day 19 Year 15

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Ken P Johnson

Signature

Date: Month 11 Day 24 Year 15

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date: Month Day Year

19. Discrepancy Indication Space

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

Printed/Typed Name: MICHAEL WHITEHEAD

Signature

Date: Month 11 Day 24 Year 15

NON-HAZARDOUS WASTE

GENERATOR

TRANSPORTER

FACILITY

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. 2735 2015 1029

2. Page 1 of 1

3. Generator's Name and Mailing address
ExxonMobil Environmental Services/Manpower Contractor
3700 W. 190th St. NTO #1106, Torrance, CA 90504
4. Generator's Phone: (310) 212 2938

990 San Pablo Ave.
Albany, CA.
EM 1 [illegible]

5. Transporter 1 Company Name: CARDNO
6. US EPA ID Number:
A. State Transporter's ID: 707-780-2000
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: 530-753-1829

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZARDOUS PURGE WATER	1	Trailer	160	[illegible]
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	Signature	Month	Day	Year
On behalf of ExxonMobil [illegible]	[signature]	10	29	15

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[illegible] Johnson	[signature]	11	24	15

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

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

Printed/Typed Name	Signature	Month	Day	Year
MICHAEL WHITEHEAD	[signature]	11	24	15

NON-HAZARDOUS WASTE — GENERATOR — TRANSPORTER — FACILITY

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. 27352015 1016

2. Page 1 of 1

3. Generator's Name and Mailing address
ExxonMobil Environmental Services/Manpower Contractor
3700 W. 190th St. NTO #1106, Torrance, CA 90504
4. Generator's Phone: (310) 212 2938

[illegible] Pablo Ave
Albany, CA.
EM (79374)

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 530-753-1829

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZARDOUS PURGE WATER	01	Trailer	90	GAL
b.				
c.				
d.				

GENERATOR

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

NON-HAZARDOUS WASTE

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: On behalf of ExxonMobil [illegible] R. Magdaona
Signature: [signature]
Date: Month 10 Day 16 Year 15

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: [illegible] R. Sabusu
Signature: [signature]
Date: Month 11 Day 24 Year 15

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: MICHAEL WHITEHEAD
Signature: [signature]
Date: Month 11 Day 24 Year 15

NO. 720053

24

NON-HAZARDOUS WASTE DATA FORM

BESI # 260460

GENERATOR

Generator's Name and Mailing Address
EXXONMOBIL OIL CORP.
ATTN: DELILAH RIVERA
3700 W. 190TH ST. #1105
TORRANCE, CA 90504

Generator's Site Address (if different than mailing address)
EXXONMOBIL 79374
990 SAN PABLO AVE
ALBANY, CA 94706

Generator's Phone: 310-212-2936

Container type removed from site:
☒ Drums ☐ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck
☐ Other _____
Quantity 01

Container type transported to receiving facility:
☐ Drums ☒ Vacuum Truck ☐ Roll-off Truck ☐ Dump Truck
☐ Other _____
Quantity 01 Volume 55 gallons

WASTE DESCRIPTION NON-HAZARDOUS WATER

GENERATING PROCESS WELL PURGING / DECON WATER

COMPONENTS OF WASTE	PPM	%
1. WATER		99-100%
2. TPH		<1%
3.		
4.		

Waste Profile _____ PROPERTIES: pH 7-10 ☐ SOLID ☒ LIQUID ☐ SLUDGE ☐ SLURRY ☐ OTHER _____

HANDLING INSTRUCTIONS: _____

Generator Printed/Typed Name: Scott Perkins | Signature: [signature] on BEHALF of EXXONMOBIL | Month 11 Day 05 Year 15

The Generator certifies that the waste as described is 100% non-hazardous

TRANSPORTER

Transporter 1 Company Name: BELSHIRE | Phone#: 949-460-5200

Transporter 1 Printed/Typed Name: Jose Ferreyra | Signature: [signature] | Month 11 Day 12 Year 15

Transporter Acknowledgment of Receipt of Materials

Transporter 2 Company Name: NIETO & SONS TRUCKING, INC. | Phone#: 714-980-6655

Transporter 2 Printed/Typed Name: Jeff Wyrick | Signature: [signature] | Month 11 Day 23 Year 15

Transporter Acknowledgment of Receipt of Materials

RECEIVING FACILITY

Designated Facility Name and Site Address
DEMENNO KERDOON
2000 N. ALAMEDA ST.
COMPTON, CA 90222

Phone#: 310-537-7100

Printed/Typed Name: [illegible] | Signature: [illegible] | Month 11 Day 23 Year 15

Designated Facility Owner or Operator: Certification of receipt of materials covered by this data form.

79374
1254012

Manifest

SOIL SAFE OF CA – TPST
Non-Hazardous Soils

↓ Manifest # ↓

Date of Shipment:	Responsible for Payment:	Transport Truck #:	Facility #:	Approval Number:	Load #
11/20/15		875/733	A07	45110	001

Generator and/or Consultant

Generator's Name and Billing Address:
EXXONMOBIL OIL CORP.
ATTN: DELILAH RIVERA
3700 W. 190TH ST. #1106
TORRANCE, CA 90504

Generator's Phone #: 310-212-2938
Person to Contact:
FAX#:
Customer Account Number:

Consultant's Name and Billing Address:

Consultant's Phone #:
Person to Contact:
FAX#:
Customer Account Number:

Generation Site (Transport from): *(name & address)*
EXXONMOBIL 70374
990 SAN PABLO AVE
ALBANY, CA 94706

Site Phone #:
Person to Contact:
FAX#:

Designated Facility (Transport to): *(name & address)*
SOIL SAFE
12328 HIBISCUS AVENUE
ADELANTO, CA 92301

Facility Phone #: (800) 862-8001
Person to Contact: JOE PROVANSAL
FAX#: (760) 246-8004

Transporter Name and Mailing Address:
BELSHIRE
25971 TOWNE CENTRE DRIVE
FOOTHILL RANCH, CA 92610
BESI: 260460

Transporter's Phone #: 949-460-5200
CAR000183913
Person to Contact: LARRY MOOTHART
450647
FAX#: 949-460-5210
Customer Account Number:

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐	13 DM	Soil	41900	37320	7680
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐					3.86

List any exception to items listed above:
Scale Ticket # 123259

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils descried in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator ☐ Consultant ☑ SCOTT PERKINS
Signature and date: ON BEHALF OF EXXONMOBIL
Month: 11 Day: 05 Year: 15

Transporter

Transporter's certification: I/We acknowledge receipt of the soil referenced above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that the soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: Jose Ferreyra
Signature and date:
Month: 11 Day: 12 Year: 15

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: J. PROVANSAL
Signature and date: 11-20-15

Please print or type.

TRANSPORTER COPY

79374 / 1253348

APPENDIX E

CORRESPONDENCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
ALEX BRISCOE, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

August 26, 2015

Ms. Jennifer Sedlachek
ExxonMobil
4096 Piedmont Ave., #194
Oakland, CA 94611
(Sent via E-mail to:
jennifer.c.sedlachek@exxonmobil.com)

Ms. Muriel Blank
Blank Family Trust
1164 Solano Ave., #406
Albany, CA 94706

Subject: Corrective Action Plan Implementation Approval; Fuel Leak Case No. RO0002974 and GeoTracker Global ID T0619716673, Exxon, 990 San Pablo Ave., Albany, CA 94706

Dear Ms. Sedlachek and Ms. Blank:

Alameda County Environmental Health (ACEH) staff has reviewed the case file for the above referenced site including the recent email from Mr. Scott Perkins of Cardno, dated August 21, 2015. This communication reports that no public comments were received by Cardno as a result of the public notice of proposed corrective actions. Additionally, ACEH has not received any public comments as a result of the notice.

Based on ACEH staff review, the corrective action plan is approved for implementation provided that the technical comments below are incorporated during the proposed work. We request that you address the following technical comments, perform the proposed work, and send us the report described below. Please provide 72-hour advance written notification to this office (e-mail preferred to: mark.detterman@acgov.org) prior to the start of field activities.

TECHNICAL COMMENTS

1. **Corrective Action Plan Approval –** The referenced corrective action plan proposes a series of actions with which ACEH is in general agreement of undertaking; however, ACEH requests the following. Please submit reports as outlined below.
    a. **Remedial Progress Reporting –** Due to the planned corrective action time period of up to three years, monthly Remedial Progress Reports (RPR) are requested, by the dates identified below. These are intended to monitor site progress and DPE system effectiveness. These can be included in groundwater monitoring reports, when appropriate. Please copy ACEH on system discharge reports to the POTW and the BAAQMD.
2. **Groundwater Monitoring and Chlorinated Solvent Analytical Data –** In future groundwater monitoring reports please tabulate chlorinated solvents under separate column headers or as a separate table. The intent is to quickly discern contaminant trends. Please continue to analyze for chlorinated solvents at the site.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACEH ftp site (Attention: Mark Detterman), and to the State Water Resources Control Board's Geotracker website, in accordance with the specified file naming convention below, according to the following schedule:

- **November 13, 2015** – Data Gap Investigation, Vapor Well Installation, and First Monthly DPE System Remedial Progress Report(s); File to be named: RO2974_SWI_REM_R_yyyy-mm-dd

- **December 18, 2015 –** Fourth Quarter 2015 Semi-Annual Groundwater Monitoring
  File to be named: RO2974_GWM_R_yyyy-mm-dd

- **December 18, 2015 –** Second Monthly Remedial Progress Report
  File to be named: RO2974_REM_R_yyyy-mm-dd

- **TBD –** Monthly DPE System Remedial Progress Reports
  File to be named: RO2974_REM_R_yyyy-mm-dd

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Should you have any questions, please contact me at (510) 567--6876 or send me an electronic mail message at mark.detterman@acgov.org.

Sincerely,

Digitally signed by Mark E. Detterman
DN: cn=Mark E. Detterman, o, ou, email, c=US
Date: 2015.08.26 15:34:02 -07'00'

Mark E. Detterman, PG, CEG
Senior Hazardous Materials Specialist

Enclosures: Attachment 1 – Responsible Party (ies) Legal Requirements / Obligations and Electronic Report Upload (ftp) Instructions

cc: Scott Perkins, Cardno, 601 North McDowell Blvd., Petaluma, CA 94954 (Sent via E-mail to: scott.perkins@cardno.com)

David Daniels, Cardno, 601 North McDowell Blvd., Petaluma, CA 94954 (Sent via E-mail to: david.daniels@cardno.com)

Mrs. Marcia B. Kelly, 641 SW Morningside Rd., Topeka, KS 66615 (Sent via E-mail to: marciabkelly@earthlink.net)

Rev. Deborah Blank, 1563 Solano Ave. #344, Berkeley, CA 94707 (Sent via E-mail to: miracoli@earthlink.net)

Dilan Roe (sent via electronic mail to dilan.roe@acgov.org)
Mark Detterman (sent via electronic mail to mark.detterman@acgov.org)
Electronic File, GeoTracker