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 4, 2014

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 Report, Fourth Quarter 2041,*** dated December 4, 2014, for the above-referenced site. The report was prepared by Cardno ERI 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 ERI's ***Groundwater Monitoring Report, Fourth Quarter 2041,*** dated December 4, 2014

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. Greg Gurss, Cardno ERI

Cardno ERI
Shaping the Future

Cardno ERI
License A/C10/C36-611383

601 North McDowell Blvd.
Petaluma, CA 94954

Phone +1 707 766 2000
Fax +1 707 789 0414
www.cardno.com

www.cardnoeri.com

December 4, 2014
Cardno ERI 2735C.Q144

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

SUBJECT **Groundwater Monitoring Report, Fourth Quarter 2014**
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 ERI performed fourth quarter 2014 groundwater monitoring and sampling 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 and sampling date:		10/28/14
Wells gauged and sampled:		MW1 through MW3, MW3A, MW4 through MW6
Wells gauged only:		AS1, SVE1 through SVE3
Presence of NAPL:		Not observed
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:		51 gallons purge and decon water pending delivery to InStrat, Inc., of Rio Vista, California. Waste disposal documentation will be submitted under separate cover.

RESULTS AND CONCLUSIONS

Groundwater Gradient

Due to varying well construction, Cardno ERI separated the wells into shallow and deep water-bearing zones. Wells MW3A, MW4, MW5, and SVE1 through SVE3 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 fourth quarter 2014, the groundwater flow direction in the shallow water-bearing zone was towards the southwest under a hydraulic gradient of approximately 0.007. 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.

Hydrocarbons in Groundwater

Petroleum hydrocarbons, including HVOCs, were reported in each well sampled at the site. Concentrations of TCE and PCE were only reported in upgradient wells MW1 and MW2. 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. Petroleum hydrocarbons increased in wells MW1 and MW3A, located in the eastern portion of the site and the vicinity of the former USTs, respectively, and decreased in well MW6, located in the northwestern portion of the site.

RECOMMENDATIONS AND WORK IN PROGRESS

Cardno ERI submitted the *Work Plan for Well Installation* (Cardno ERI, 2014a), recommending continued semi-annual groundwater monitoring and sampling, conducting a second round of soil vapor sampling during the dry season of 2014, and installing off-site groundwater monitoring wells near borings B9 and B12. Cardno ERI has continued semi-annual groundwater monitoring and sampling and conducted the second round of soil vapor sampling. After the installation and sampling of the proposed off-site monitoring wells, Cardno ERI recommends preparing a feasibility study/corrective action plan (FS/CAP), as detailed in the *Response To Comments and Request For Extension* (Cardno ERI, 2014b).

Groundwater samples have been analyzed for TPHmo since the onset of sampling in 2010. When reported, TPHmo concentrations are typically at least one order of magnitude less than the TPHg or TPHd concentration. Cardno ERI recommends discontinuing TPHmo analysis.

LIMITATIONS

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

This document and the work performed have been undertaken in good faith, with due diligence and with the expertise, experience, capability, and specialized knowledge necessary to perform the work in a good and

workmanlike manner and within all accepted standards pertaining to providers of environmental services in California at the time of investigation. No soil engineering or geotechnical references are implied or should be inferred. The evaluation of the geologic conditions at the site for this investigation is made from a limited number of data points. Subsurface conditions may vary away from these data points.

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

Sincerely,

SCANNED IMAGE

SCANNED IMAGE

PROFESSIONAL GEOLOGIST
DAVID RICHARD DANIELS
No. 8737
EXP. 7/31/15
STATE OF CALIFORNIA

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

David R. Daniels
P.G. 8737
for Cardno ERI
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
Table 1A	Cumulative Groundwater Monitoring and Sampling Data
Table 1B	Additional Cumulative Groundwater Monitoring and Sampling Data
Table 2	Well Construction Details
Appendix A	Groundwater Sampling Protocol
Appendix B	Field Data Sheets
Appendix C	Laboratory Analytical Report

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

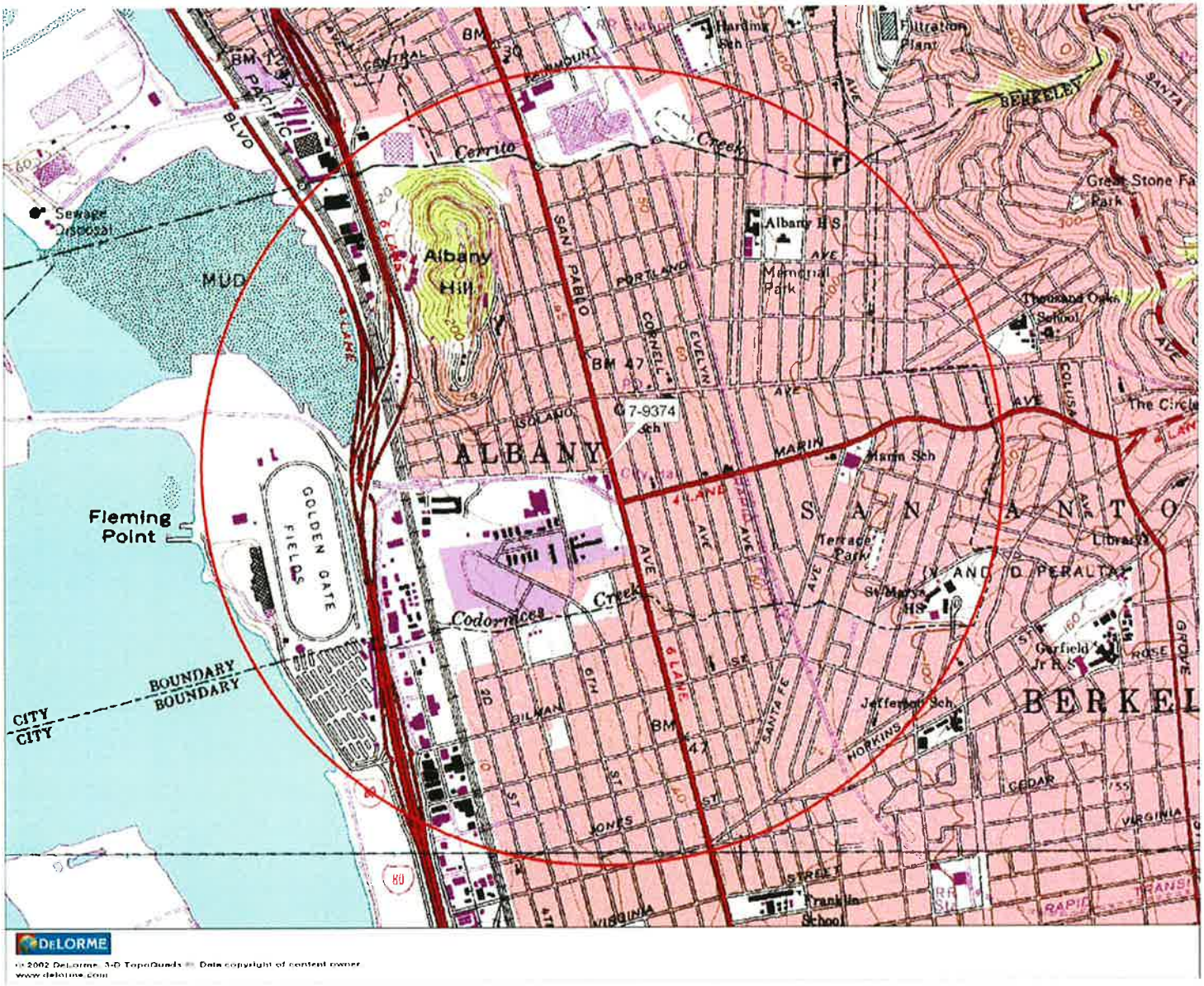
REFERENCES

Cardno ERI. July 7, 2014a. *Work Plan for Well Installation, Former Exxon Service Station 79374, 990 San Pablo Avenue, Albany, California.*

Cardno ERI. September 5, 2014b. *Response To Comments and Request For Extension, 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	Semivolatile 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

Cardno ERI
Shaping the Future

SITE VICINITY MAP

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

PROJECT NO. 2735

PLATE 1

Analyte Concentrations in ug/L
Sampled October 28, 2014

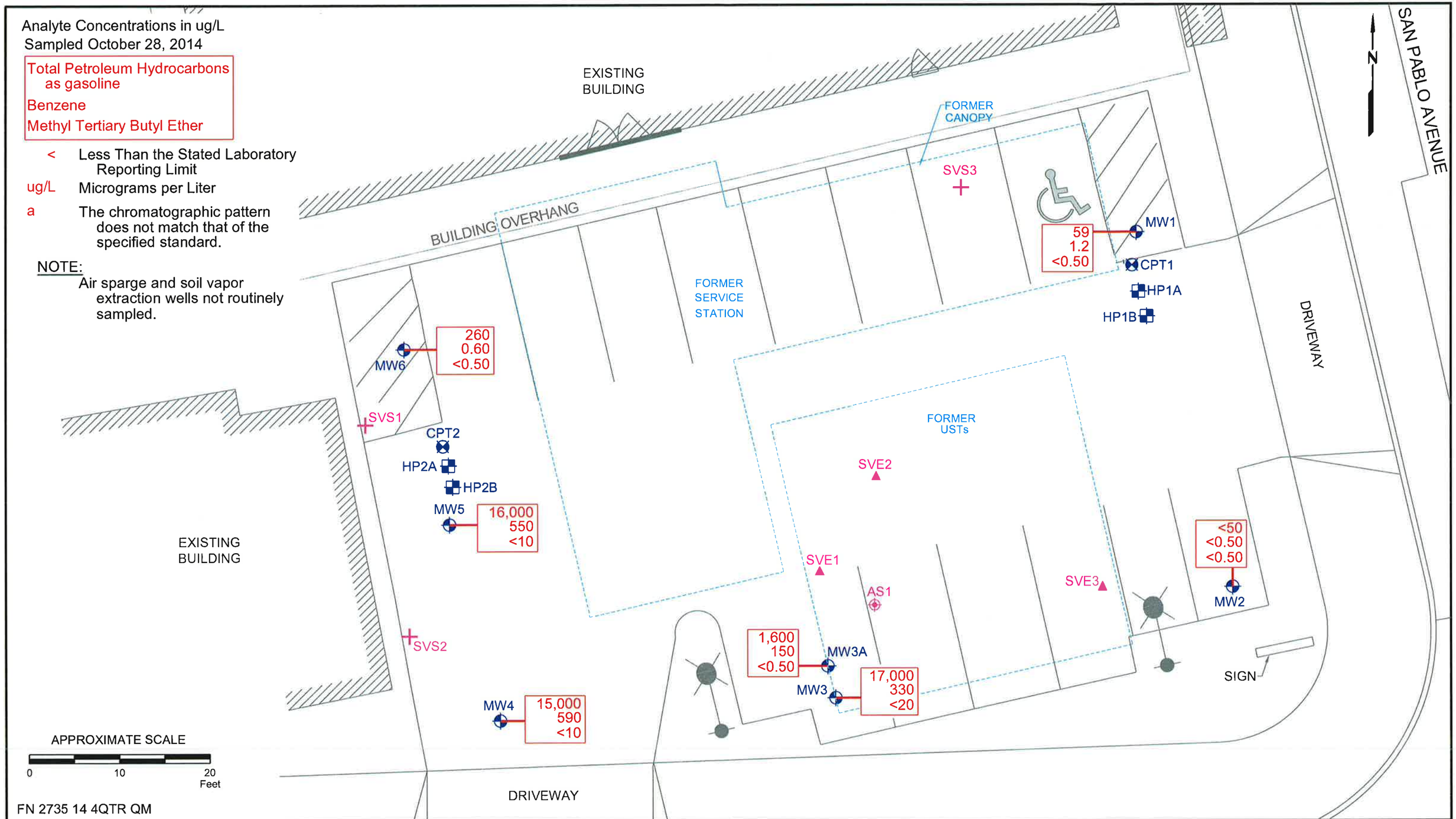
Total Petroleum Hydrocarbons as gasoline
Benzene
Methyl Tertiary Butyl Ether

< 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.



FN 2735 14 4QTR QM

Cardno ERI
Shaping the Future

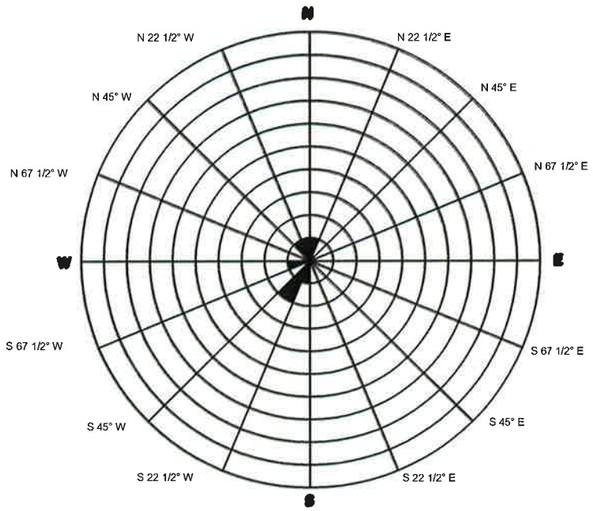
SELECT ANALYTICAL RESULTS
October 28, 2014
FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

EXPLANATION

- MW6 Groundwater Monitoring Well
- HP2B Hydropunch Boring
- CPT2 Cone Penetration Test Boring
- AS1 Air Sparge Well
- SVE3 Soil Vapor Extraction Well
- SVS3 Soil Vapor Sampling Well

PROJECT NO. 2735

PLATE 2



Rose diagram developed by evaluating the groundwater gradient direction from the quarterly monitoring data. Each circle on the rose diagram represents the gradient plotted in that 22 1/2 degree sector.

N Compass Direction

GROUNDWATER FLOW DIRECTION ROSE DIAGRAM

EXISTING BUILDING

BUILDING OVERHANG

FORMER CANOPY

SVS3

MW1

CPT1

HP1A

HP1B

FORMER SERVICE STATION

DRIVEWAY

SAN PABLO AVENUE

N

MW6

SVS1

CPT2

HP2A

HP2B

MW5
33.12

33.0

i = 0.007
October 28, 2014

GROUNDWATER FLOW DIRECTION

32.5

SVS2

32.0

MW4
31.84

FORMER USTs

SVE2
33.18

SVE1
33.15

AS1

SVE3
33.19

MW2

MW3A
33.09

MW3

SIGN

EXISTING BUILDING

DRIVEWAY

APPROXIMATE SCALE

0 10 20 Feet

FN 2735 14 4QTR QM

Cardno ERI
Shaping the Future

GROUNDWATER ELEVATION MAP
SHALLOW WATER-BEARING ZONE
October 28, 2014

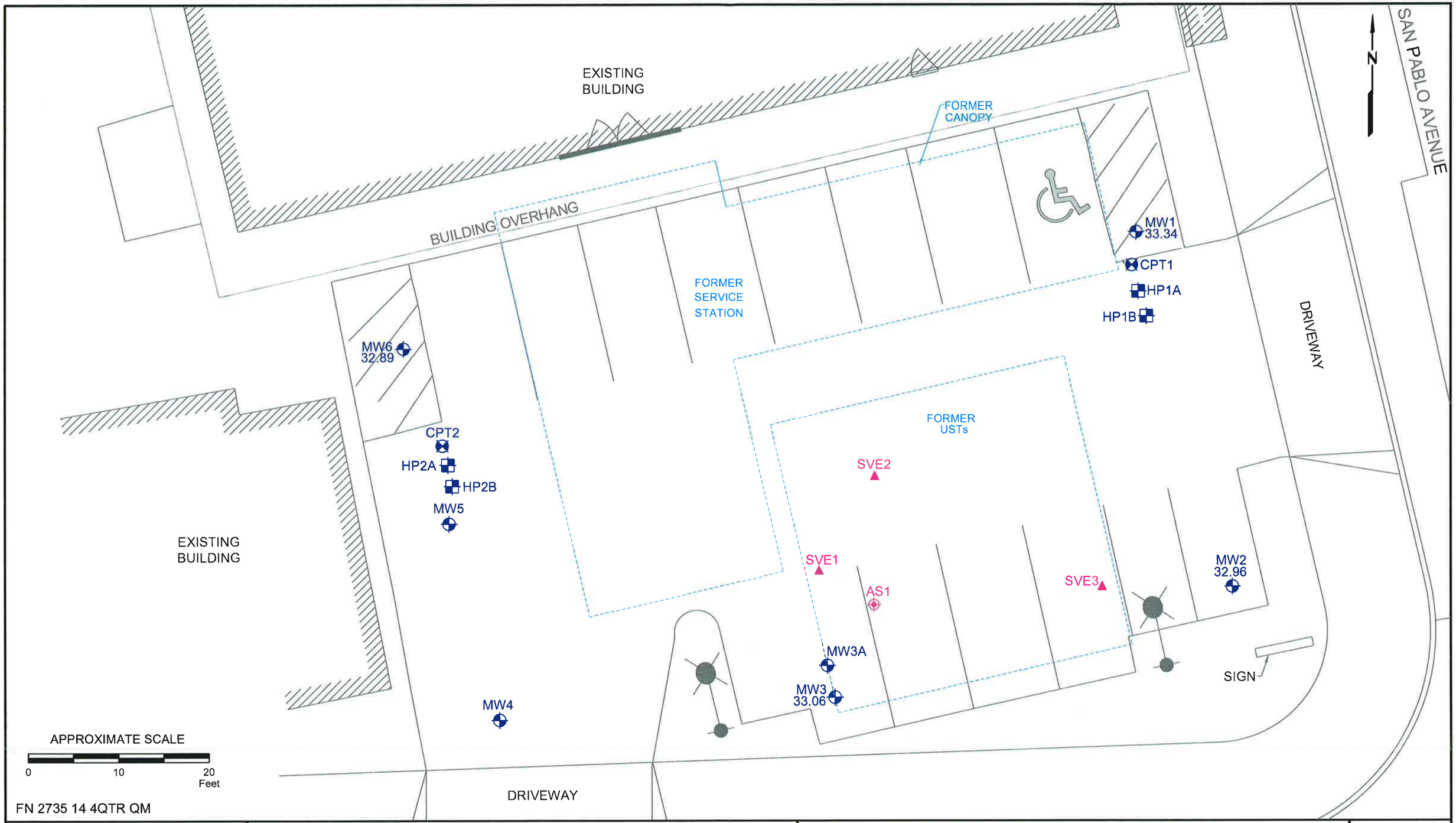
FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

EXPLANATION

- MW5 — Groundwater Monitoring Well
- 33.12 — Groundwater elevation in feet; datum is NAVD88
- i = Interpreted Hydraulic Gradient
- HP2B — Hydropunch Boring
- CPT2 — Cone Penetration Test Boring
- 33.0 — Line of Equal Groundwater Elevation; datum is NAVD88
- AS1 — Air Sparge Well
- SVE3 — Soil Vapor Extraction Well
- SVS3 — Soil Vapor Sampling Well

PROJECT NO. 2735

PLATE 3



Cardno ERI
Shaping the Future

GROUNDWATER ELEVATION MAP
DEEP WATER-BEARING ZONE
October 28, 2014

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

EXPLANATION

- MW6 — Groundwater Monitoring Well
- 32.89 — Groundwater elevation in feet; datum is NAVD88
- HP2B — Hydropunch Boring
- CPT2 — Cone Penetration Test Boring
- AS1 — Air Sparge Well
- SVE3 — Soil Vapor Extraction Well

NOTE: Wells not contoured due to varying well construction.

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**
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**
MW3	11/08/10	---	Well installed.												
MW3	12/01/10	---	40.42	Well surveyed.											
MW3	12/16/10	---	40.42	8.18	32.24	No	---	<250	2,900a	19,000	<12	350	130	940	290
MW3	01/31/11	---	40.42	7.64	32.78	No	---	390	2,800a	17,000a	<12	540	140	700	270
MW3	04/07/11	---	40.42	5.88	34.54	No	---	<250	2,700a	14,000	<10	600	150	780	230
MW3	07/18/11	---	40.42	8.31	32.11	No	---	<250	1,700a	19,000	<10	650	140	660	220
MW3	10/13/11	---	40.42	8.76	31.66	No	---	<250	1,900a	16,000	<10	520	150	900	270
MW3	04/06/12	---	40.42	8.13	32.29	No	---	<250	3,200a	18,000	<20	300	120	1,100	180
MW3	10/19/12	---	40.42	9.37	31.05	No	---	<250	1,700a	11,000a	<10	380	120	740	150

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	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**
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**
MW4	11/05/10	---	Well installed.												
MW4	12/01/10	---	39.30	Well surveyed.											
MW4	12/16/10	---	39.30	6.10	33.20	No	---	<250	2,000a	9,900	<5.0	440	40	170	380
MW4	01/31/11	---	39.30	6.84	32.46	No	---	260	3,900a	13,000	<10	500	59	320	740
MW4	04/07/11	---	39.30	5.29	34.01	No	---	<250	1,900a	9,600	<10	530	59	250	340
MW4	07/18/11	---	39.30	7.36	31.94	No	---	<250	2,800a	14,000	<10	570	66	320	510
MW4	10/13/11	---	39.30	7.83	31.47	No	---	320	7,200a	14,000	<10	350	43	340	690
MW4	04/06/12	---	39.30	6.21	33.09	No	---	<250	1,800a	9,100a	<10	380	40	220	410
MW4	10/19/12	---	39.30	10.64	28.66	No	---	1,400a	20,000a	270,000	<10	440	88	2,100	3,800
MW4	03/06/13	---	39.30	8.02	31.28	No	---	---	---	---	---	---	---	---	---
MW4	06/11/13	---	39.30	9.05	30.25	No	---	<250	3,400a	16,000	<10	430	48	520	820
MW4	12/19/13	---	39.30	8.95	30.35	No	---	---	---	---	---	---	---	---	---
MW4	12/20/13	---	39.30	---	---	---	---	<250	2,800a	13,000	<10	590	41	430	530
MW4	03/05/14	---	39.30	---	---	No	---	---	---	---	---	---	---	---	---
MW4	04/03/14	---	42.04	Elevation converted to NAVD88.											
MW4	04/30/14	---	42.04	6.25	35.79	No	---	---	---	---	---	---	---	---	---
MW4	05/01/14	---	42.04	---	---	---	---	<240	3,000a	13,000	<10	520	46	310	340
MW4	**10/28/14**	**---**	**42.04**	**10.20**	**31.84**	**No**	**---**	**<250**	**7,400a**	**15,000**	**<10**	**590**	**42**	**360**	**230**
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

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)
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**
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**
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**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
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**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE2	01/17/12	---	Well installed.												

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
SVE2	02/06/12	---	40.94	Well surveyed.											
SVE2	10/19/12	---	40.94	10.48	30.46	No	---	---	---	---	---	---	---	---	---
SVE2	06/11/13	---	40.94	9.94	31.00	No	---	---	---	---	---	---	---	---	---
SVE2	12/19/13	---	40.94	10.20	30.74	No	---	---	---	---	---	---	---	---	---
SVE2	04/03/14	---	43.68	Elevation converted to NAVD88.											
SVE2	04/30/14	---	43.68	8.09	35.59	No	---	---	---	---	---	---	---	---	---
SVE2	**10/28/14**	**---**	**43.68**	**10.50**	**33.18**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
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**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
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
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-SVE1-2	01/31/12	10	---	---	---	---	---	890a	1,500a	1,400	<1.0	46	2.0	24	23
W-10-SVE1-1	01/31/12	10	---	---	---	---	---	990a	1,900a	2,000	<2.0	87	2.1	13	23

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev.	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
W-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.
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.
v	=	tert-butylbenzene.
w	=	cis-1,2-dichloroethene.

Notes:

x = p-isopropyltoluene.
y = Tetrachloroethene.
z = Trichloroethene.

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)	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**	**0.67f, 18w, 85u,y, 9.8,z**	**---**
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**	**8.8e, 73u,y, 8.9z**	**---**
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	---	---
MW3	**10/28/14**	**---**	**<20**	**<20**	**<20**	**<200**	**<20**	**<20**	**30b, 110d, 210e, 36g, 290h**	**---**
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	---	---

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)	Add'l VOCs (µg/L)	Add'l SVOCs (µg/L)
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**	**5.4b, 6.3c, 20d, 28e, 4.6f, 1.6g, 4.6h, 2.9v, 2.0x**	**---**
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**	**72b, 24c, 75d, 190e, 350f, 160g, 270h**	**---**
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**	**82b, 33c, 120d, 380e, 730f, 130g, 250h, 14x**	**---**
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**	**0.73c, 0.84d, 1.9e, 1.4h**	**---**
AS1	01/18/12	---	Well installed.							
AS1	10/19/12	- Present	Not sampled.							

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)	Add'l VOCs (µg/L)	Add'l SVOCs (µg/L)
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.								
Grab Groundwater Samples										
B-1W	01/06/08	---	<50	<50	<50	<200	<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	110b, 140e, 440f, 2,400g, 730h, 610i, 32j	---
B-3W	01/06/08	---	<10	<10	<10	<40	<10	<10	25b, 11c, 74d, 190e, 290f, 49g, 55i	---
B-4W	01/06/08	---	<10	<10	<10	<40	<10	<10	46b, 19c, 48d, 160e, 16f, 100h	---
B-5W	01/06/08	---	ND	<0.5	<0.5	<2.0	<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	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	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-SVE1-2	01/31/12	10	<1.0	<1.0	<1.0	57	<1.0	<1.0	---	---
W-10-SVE1-1	01/31/12	10	<2.0	<2.0	<2.0	62	<2.0	<2.0	---	---
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		---	---	---	---	---	---	---	---

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)	Add'l VOCs (µg/L)	Add'l SVOCs (µg/L)
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.
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.
v	=	tert-butylbenzene.
w	=	cis-1,2-dichloroethene.

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

Notes:

x = p-isopropyltoluene.
y = Tetrachloroethene.
z = Trichloroethene.

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
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
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.

APPENDIX A

GROUNDWATER SAMPLING PROTOCOL

GROUNDWATER SAMPLING PROTOCOL

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

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

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

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

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

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

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

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

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

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

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

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

APPENDIX B

FIELD DATA SHEETS

Cardno ERI
Shaping the Future

Daily Field Report

Project/TO #: 79374 ERI Job #: 2735
Subject: Monitoring + Sampling Date: 10-28-14
Equipment Used: Sub pump, DTW Tape Sheet: 1 of 1
Name(s): Darin Finkell
Time Arrived On Site: Time Departed Site: Total Travel:

On Site		700
H + S Meeting		700-715
Opened Wells		715-730
Decon Equipment		730-800
DTW on Wells		800-825
Purged Wells	MW6, MW5, MW1 MW2, MW3A, MW3, MW4	831-1112
Sampled Wells	MW6, MW5, MW1 MW2, MW3A, MW3, MW4	945-1230
off site		1300

Decon Water: 24 gal.
Purge Water: 27 gal.
Total Water: 51 gal.

Purged + Sampled MW6 and MW5 out of order per employee's request due to multiple deliveries occuring throughout the day. Used separate pump on remaining wells.

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	10-28-14	Darin Einhell

WELL ID	WELL DIAMETER inches	ODOR? SHEEN?	TOTAL DEPTH feet	Pre-Purge DTW feet	Case volume Gal.	80% r/chrg. DTW feet	COMMENTS
AS1	1		—	10.35	—	—	DTW only
SVE 1	4		—	10.17	—	—	↓
SVE 2	4		—	10.50	—	—	↓
SVE 3	4		—	10.48	—	—	↓
MW1	2		16.61	10.85	0.94	12.80	
MW2	4		16.89	11.03	3.82	12.20	
MW3A	4		14.98	10.33	3.03	11.26	
MW6	2		19.26	10.91	1.36	12.58	
MW5	2		13.40	10.00	0.55	10.68	
MW3	4		15.20	10.10	3.33	11.12	
MW4	2		13.10	10.20	0.47	10.78	

WATER SAMPLING SITE STATUS

Date: 10-28-14

Inspected by: Darin Eichell

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

Well ID	Well Head Screws	Rubber Gasket	Well Cap Locking	Lock on Well Cap	Concrete Well Seal	Well Head PVC	Water in Well Vault	Tabs	Well Cover	Fence/Gate Condition	# Drums	Drum Contents	Building Condition	Site Appearance	Comments / Well Covers
	N/R/ok	N/R/ok	N/R/ok	N/R/ok	N/R/ok	N/R/ok	Y / N	N/R/ok	N/R/ok	N/R/ok		s/w/e	g/v/o	N/R/ok	
AS1	OK	OK	OK	N	OK	OK	N	OK	OK	NA	NA	NA	NA	OK	No Lock
SVE1	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
SVE2															
SVE3															
MW6				↓											
MW5		↓	↓	Y			↓								↓
MW1		R	R	N			Y								Replaced well cap
MW2		OK	OK	↓			↓								No Lock
MW3A		↓	↓												↓
MW3															
MW4	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

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

GROUNDWATER SAMPLING FIELD LOG

Client Name: EXXON MOBIL Cardno ERI Job #: 2735 Date: 10-28-14 Page 1 of 1

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

Field Crew: Darin Einhell Analysis: _____

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

Well ID	Time	Case Volume	Purge Volume	Temp	Cond	pH	Post-Purge DTW	80% Recharge	BB	40mil	Amber	DO	ORP	Comments Well Box Condition
MW6	831	1.36					16.60	N						Dry @ 5 gal
	832		2	19.6	731	6.88	W- 17- MW6 @ 945							Slow recharge
	832	2	4	19.8	753	6.85								
			6											
MW5	853	0.55					11.80	N						Dry @ 2 gal
	854		1	21.0	983	6.84								Slow recharge
	855	1	2	21.5	1020	6.78	W- 12 - MW5 @ 1005							
			3											
MW1	914	0.44					11.90	Y						
	915		1	21.9	1066	7.19								
	915	1	2	22.3	1063	7.16	W - 12 - MW1 @ 1015							
	916		3	22.1	1058	7.14								
MW2	1028	3.82					12.85	N						Dry @ 6 gal
	1030		4	23.6	1138	6.83								Slow recharge
		4	8				W - 13 - MW2 @ 1130							
			12											
MW3A	1051	3.03					14.20	N						Dry @ 6 gal
	1053		4	24.0	881	6.92								Slow recharge
		4	8				W - 14 - MW3A @ 1200							
			12				1 Amber							
MW3	1100	3.33					14.35	N						Dry @ 5 gal
	1102		4	23.3	1056	6.83								Slow recharge
		4	8				W - 14 - MW3 @ 1215							
			12				1 Amber							
MW4	1110	0.47					10.28	Y						
	1111		1	23.5	1079	6.88								
	1112	1	2	23.7	1066	6.82	W - 10 - MW4 @ 1230							
	1112		3	23.4	1071	6.93								

@ CBB @ 1245

APPENDIX C

LABORATORY ANALYTICAL REPORT

eurofins | Calscience

Supplemental Report 1

Additional requested analyses have been added to the original report.

WORK ORDER NUMBER: 14-10-2375

The difference is service

AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Cardno ERI

Client Project Name: ExxonMobil 79374/022735C

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

Approved for release on 12/01/2014 by:
Cecile deGuia
Project Manager

ResultLink ▸

Email your PM ▸

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

eurofins | Calscience

Contents

Client Project Name: ExxonMobil 79374/022735C
Work Order Number: 14-10-2375

eurofins | Calscience

Work Order Narrative

Work Order: 14-10-2375 Page 1 of 1

Condition Upon Receipt:

Samples were received under Chain-of-Custody (COC) on 10/30/14. They were assigned to Work Order 14-10-2375.

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

Holding Times:

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

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

Quality Control:

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

Additional Comments:

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

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

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

Subcontractor Information:

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

Return to Contents

eurofins | Calscience

Sample Summary

Client:	Cardno ERI	Work Order:	14-10-2375
	601 North McDowell Blvd.	Project Name:	ExxonMobil 79374/022735C
	Petaluma, CA 94954-2312	PO Number:	022735C
		Date/Time Received:	10/30/14 10:30
		Number of Containers:	56
Attn:	Greg Gurss		

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
QCBB	14-10-2375-1	10/28/14 12:45	2	Aqueous
W-12-MW1	14-10-2375-2	10/28/14 10:15	8	Aqueous
W-13-MW2	14-10-2375-3	10/28/14 11:30	8	Aqueous
W-14-MW3	14-10-2375-4	10/28/14 12:15	7	Aqueous
W-14-MW3A	14-10-2375-5	10/28/14 12:00	7	Aqueous
W-10-MW4	14-10-2375-6	10/28/14 12:30	8	Aqueous
W-12-MW5	14-10-2375-7	10/28/14 10:05	8	Aqueous
W-17-MW6	14-10-2375-8	10/28/14 09:45	8	Aqueous

Return to Contents

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
Preparation: EPA 3510C
Method: EPA 8015B (M)
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
W-12-MW1	**14-10-2375-2-G**	**10/28/14 10:15**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 11:41**	**141031B04**

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

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW2	**14-10-2375-3-G**	**10/28/14 11:30**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 12:00**	**141031B04**

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

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	109	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-14-MW3	**14-10-2375-4-G**	**10/28/14 12:15**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 12:18**	**141031B04**

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

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	81	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-14-MW3A	**14-10-2375-5-G**	**10/28/14 12:00**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 12:37**	**141031B04**

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

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-10-MW4	**14-10-2375-6-G**	**10/28/14 12:30**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 12:55**	**141031B04**

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

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	68-140	

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

Return to Contents

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
Preparation: EPA 3510C
Method: EPA 8015B (M)
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
W-12-MW5	**14-10-2375-7-G**	**10/28/14 10:05**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 13:14**	**141031B04**

Parameter	Result	RL	DF	Qualifiers
TPH as Motor Oil	360	250	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
W-17-MW6	**14-10-2375-8-G**	**10/28/14 09:45**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 14:10**	**141031B04**

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

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-278-745**	**N/A**	**Aqueous**	**GC 45**	**10/31/14**	**10/31/14 19:58**	**141031B04**

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

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	94	68-140	

Return to Contents

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

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
Preparation: EPA 3510C
Method: EPA 8015B (M)
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
W-12-MW1	**14-10-2375-2-G**	**10/28/14 10:15**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 11:41**	**141031B03**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	61	50	1.00	SG,HD

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW2	**14-10-2375-3-G**	**10/28/14 11:30**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 12:00**	**141031B03**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	78	50	1.00	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	109	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-14-MW3	**14-10-2375-4-G**	**10/28/14 12:15**	**Aqueous**	**GC 45**	**10/31/14**	**11/03/14 18:24**	**141031B03**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	4800	250	5.00	SG,HD

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-14-MW3A	**14-10-2375-5-G**	**10/28/14 12:00**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 12:37**	**141031B03**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	330	50	1.00	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	98	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-10-MW4	**14-10-2375-6-G**	**10/28/14 12:30**	**Aqueous**	**GC 45**	**10/31/14**	**11/03/14 18:43**	**141031B03**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	7400	250	5.00	SG,HD

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

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI		Date Received:	10/30/14
601 North McDowell Blvd.		Work Order:	14-10-2375
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 2 of 2

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-12-MW5	**14-10-2375-7-G**	**10/28/14 10:05**	**Aqueous**	**GC 45**	**10/31/14**	**11/03/14 19:00**	**141031B03**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	6200	250	5.00	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
W-17-MW6	**14-10-2375-8-G**	**10/28/14 09:45**	**Aqueous**	**GC 45**	**10/31/14**	**11/01/14 14:10**	**141031B03**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	94	50	1.00	SG,HD

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	104	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-304-850**	**N/A**	**Aqueous**	**GC 45**	**10/31/14**	**10/31/14 19:58**	**141031B03**

Parameter	Result	RL	DF	Qualifiers
TPH as Diesel	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
n-Octacosane	94	68-140	

Return to Contents

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

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
Preparation: EPA 5030C
Method: EPA 8015B (M)
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
W-12-MW1	**14-10-2375-2-F**	**10/28/14 10:15**	**Aqueous**	**GC 4**	**11/04/14**	**11/04/14 20:49**	**141104L032**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	59	50	1.00	

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW2	**14-10-2375-3-F**	**10/28/14 11:30**	**Aqueous**	**GC 4**	**11/04/14**	**11/04/14 21:22**	**141104L032**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	80	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-14-MW3	**14-10-2375-4-F**	**10/28/14 12:15**	**Aqueous**	**GC 4**	**11/04/14**	**11/04/14 21:55**	**141104L032**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	17000	1000	20.0	

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-14-MW3A	**14-10-2375-5-F**	**10/28/14 12:00**	**Aqueous**	**GC 4**	**11/04/14**	**11/04/14 22:27**	**141104L032**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	1600	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-10-MW4	**14-10-2375-6-F**	**10/28/14 12:30**	**Aqueous**	**GC 4**	**11/04/14**	**11/04/14 23:00**	**141104L032**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	15000	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	86	38-134	

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

Return to Contents

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
Preparation: EPA 5030C
Method: EPA 8015B (M)
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
W-12-MW5	**14-10-2375-7-F**	**10/28/14 10:05**	**Aqueous**	**GC 4**	**11/04/14**	**11/04/14 23:33**	**141104L032**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	16000	500	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	81	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-17-MW6	**14-10-2375-8-F**	**10/28/14 09:45**	**Aqueous**	**GC 4**	**11/04/14**	**11/05/14 00:06**	**141104L032**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	260	50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	83	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-436-9645**	**N/A**	**Aqueous**	**GC 4**	**11/04/14**	**11/04/14 11:32**	**141104L032**

Parameter	Result	RL	DF	Qualifiers
TPH as Gasoline	ND	50	1.00	

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

Return to Contents

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

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
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
W-12-MW1	**14-10-2375-2-A**	**10/28/14 10:15**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 02:06**	**141107L062**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	10	1.00	
Benzene	1.2	0.50	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	0.50	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
2-Butanone	ND	5.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
c-1,2-Dichloroethene	18	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

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

Return to Contents

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	0.64	0.50	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
Methylene Chloride	ND	1.0	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Naphthalene	ND	1.0	1.00	
n-Propylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
Trichloroethene	9.8	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trimethylbenzene	0.67	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	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	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	86	80-127	

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 3 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	92	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
W-12-MW1	**14-10-2375-2-C**	**10/28/14 10:15**	**Aqueous**	**GC/MS L**	**11/28/14**	**11/29/14 08:01**	**141128L049**

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	85	2.5	5.00	BU,ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	68-120	
Dibromofluoromethane	100	80-127	
1,2-Dichloroethane-d4	111	80-128	
Toluene-d8	99	80-120	

Return to Contents

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

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
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
W-13-MW2	**14-10-2375-3-A**	**10/28/14 11:30**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 02:35**	**141107L062**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	10	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	0.50	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
2-Butanone	ND	5.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
c-1,2-Dichloroethene	8.8	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 5 of 24

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
Methylene Chloride	ND	1.0	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Naphthalene	ND	1.0	1.00	
n-Propylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
Trichloroethene	8.9	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	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	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	94	68-120	
Dibromofluoromethane	85	80-127	

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 6 of 24

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

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW2	**14-10-2375-3-B**	**10/28/14 11:30**	**Aqueous**	**GC/MS L**	**11/28/14**	**11/29/14 08:30**	**141128L049**

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	73	2.5	5.00	BU,ET

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	91	68-120	
Dibromofluoromethane	103	80-127	
1,2-Dichloroethane-d4	114	80-128	
Toluene-d8	100	80-120	

Return to Contents

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

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
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
W-14-MW3	**14-10-2375-4-A**	**10/28/14 12:15**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 03:03**	**141107L062**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	400	40.0	
Benzene	330	20	40.0	
Bromobenzene	ND	20	40.0	
Bromochloromethane	ND	40	40.0	
Bromodichloromethane	ND	20	40.0	
Bromoform	ND	20	40.0	
Bromomethane	ND	40	40.0	
2-Butanone	ND	200	40.0	
n-Butylbenzene	30	20	40.0	
sec-Butylbenzene	ND	20	40.0	
tert-Butylbenzene	ND	20	40.0	
Carbon Disulfide	ND	40	40.0	
Carbon Tetrachloride	ND	20	40.0	
Chlorobenzene	ND	20	40.0	
Chloroethane	ND	20	40.0	
Chloroform	ND	20	40.0	
Chloromethane	ND	20	40.0	
2-Chlorotoluene	ND	20	40.0	
4-Chlorotoluene	ND	20	40.0	
Dibromochloromethane	ND	20	40.0	
1,2-Dibromo-3-Chloropropane	ND	200	40.0	
1,2-Dibromoethane	ND	20	40.0	
Dibromomethane	ND	20	40.0	
1,2-Dichlorobenzene	ND	20	40.0	
1,3-Dichlorobenzene	ND	20	40.0	
1,4-Dichlorobenzene	ND	20	40.0	
Dichlorodifluoromethane	ND	40	40.0	
1,1-Dichloroethane	ND	20	40.0	
1,2-Dichloroethane	ND	20	40.0	
1,1-Dichloroethene	ND	20	40.0	
c-1,2-Dichloroethene	ND	20	40.0	
t-1,2-Dichloroethene	ND	20	40.0	
1,2-Dichloropropane	ND	20	40.0	
1,3-Dichloropropane	ND	40	40.0	
2,2-Dichloropropane	ND	40	40.0	

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 8 of 24

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	20	40.0	
c-1,3-Dichloropropene	ND	20	40.0	
t-1,3-Dichloropropene	ND	20	40.0	
Ethylbenzene	1200	20	40.0	
2-Hexanone	ND	400	40.0	
Isopropylbenzene	110	20	40.0	
p-Isopropyltoluene	ND	20	40.0	
Methylene Chloride	ND	40	40.0	
4-Methyl-2-Pentanone	ND	200	40.0	
Naphthalene	290	40	40.0	
n-Propylbenzene	210	20	40.0	
Styrene	ND	20	40.0	
1,1,1,2-Tetrachloroethane	ND	20	40.0	
1,1,2,2-Tetrachloroethane	ND	20	40.0	
Tetrachloroethene	ND	20	40.0	
Toluene	120	20	40.0	
1,2,3-Trichlorobenzene	ND	20	40.0	
1,2,4-Trichlorobenzene	ND	20	40.0	
1,1,1-Trichloroethane	ND	20	40.0	
Hexachloro-1,3-Butadiene	ND	80	40.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	20	40.0	
1,1,2-Trichloroethane	ND	20	40.0	
Trichloroethene	ND	20	40.0	
Trichlorofluoromethane	ND	20	40.0	
1,2,3-Trichloropropane	ND	40	40.0	
1,2,4-Trimethylbenzene	ND	20	40.0	
1,3,5-Trimethylbenzene	36	20	40.0	
Vinyl Chloride	ND	20	40.0	
p/m-Xylene	120	20	40.0	
o-Xylene	27	20	40.0	
Xylenes (total)	150	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	

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

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 9 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	84	80-127	
1,2-Dichloroethane-d4	93	80-128	
Toluene-d8	105	80-120	

Return to Contents

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

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
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
W-14-MW3A	**14-10-2375-5-A**	**10/28/14 12:00**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 03:32**	**141107L062**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	10	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	0.50	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
2-Butanone	ND	5.0	1.00	
n-Butylbenzene	5.4	0.50	1.00	
sec-Butylbenzene	6.3	0.50	1.00	
tert-Butylbenzene	2.9	0.50	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	
1,1-Dichloropropene	ND	0.50	1.00	

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

Return to Contents

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Parameter	Result	RL	DF	Qualifiers
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	26	0.50	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	20	0.50	1.00	
p-Isopropyltoluene	2.0	0.50	1.00	
Methylene Chloride	ND	1.0	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Naphthalene	4.6	1.0	1.00	
n-Propylbenzene	28	0.50	1.00	
Styrene	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Toluene	17	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trimethylbenzene	4.6	0.50	1.00	
1,3,5-Trimethylbenzene	1.6	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	4.0	0.50	1.00	
o-Xylene	ND	0.50	1.00	
Xylenes (total)	4.0	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	5.0	1.00	
Diisopropyl Ether (DIPE)	ND	0.50	1.00	
Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1.00	
Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-120	
Dibromofluoromethane	85	80-127	

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI		Date Received:	10/30/14
601 North McDowell Blvd.		Work Order:	14-10-2375
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 12 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	88	80-128	
Toluene-d8	111	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-14-MW3A	**14-10-2375-5-B**	**10/28/14 12:00**	**Aqueous**	**GC/MS FFF**	**11/09/14**	**11/09/14 14:25**	**141109L031**

Parameter	Result	RL	DF	Qualifiers
Benzene	150	5.0	10.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	68-120	
Dibromofluoromethane	83	80-127	
1,2-Dichloroethane-d4	85	80-128	
Toluene-d8	103	80-120	

Return to Contents

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

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
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
W-10-MW4	**14-10-2375-6-A**	**10/28/14 12:30**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 04:00**	**141107L062**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	200	20.0	
Benzene	590	10	20.0	
Bromobenzene	ND	10	20.0	
Bromochloromethane	ND	20	20.0	
Bromodichloromethane	ND	10	20.0	
Bromoform	ND	10	20.0	
Bromomethane	ND	20	20.0	
2-Butanone	ND	100	20.0	
n-Butylbenzene	72	10	20.0	
sec-Butylbenzene	24	10	20.0	
tert-Butylbenzene	ND	10	20.0	
Carbon Disulfide	ND	20	20.0	
Carbon Tetrachloride	ND	10	20.0	
Chlorobenzene	ND	10	20.0	
Chloroethane	ND	10	20.0	
Chloroform	ND	10	20.0	
Chloromethane	ND	10	20.0	
2-Chlorotoluene	ND	10	20.0	
4-Chlorotoluene	ND	10	20.0	
Dibromochloromethane	ND	10	20.0	
1,2-Dibromo-3-Chloropropane	ND	100	20.0	
1,2-Dibromoethane	ND	10	20.0	
Dibromomethane	ND	10	20.0	
1,2-Dichlorobenzene	ND	10	20.0	
1,3-Dichlorobenzene	ND	10	20.0	
1,4-Dichlorobenzene	ND	10	20.0	
Dichlorodifluoromethane	ND	20	20.0	
1,1-Dichloroethane	ND	10	20.0	
1,2-Dichloroethane	ND	10	20.0	
1,1-Dichloroethene	ND	10	20.0	
c-1,2-Dichloroethene	ND	10	20.0	
t-1,2-Dichloroethene	ND	10	20.0	
1,2-Dichloropropane	ND	10	20.0	
1,3-Dichloropropane	ND	20	20.0	
2,2-Dichloropropane	ND	20	20.0	

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

Return to Contents

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	10	20.0	
c-1,3-Dichloropropene	ND	10	20.0	
t-1,3-Dichloropropene	ND	10	20.0	
Ethylbenzene	360	10	20.0	
2-Hexanone	ND	200	20.0	
Isopropylbenzene	75	10	20.0	
p-Isopropyltoluene	ND	10	20.0	
Methylene Chloride	ND	20	20.0	
4-Methyl-2-Pentanone	ND	100	20.0	
Naphthalene	270	20	20.0	
n-Propylbenzene	190	10	20.0	
Styrene	ND	10	20.0	
1,1,1,2-Tetrachloroethane	ND	10	20.0	
1,1,2,2-Tetrachloroethane	ND	10	20.0	
Tetrachloroethene	ND	10	20.0	
Toluene	42	10	20.0	
1,2,3-Trichlorobenzene	ND	10	20.0	
1,2,4-Trichlorobenzene	ND	10	20.0	
1,1,1-Trichloroethane	ND	10	20.0	
Hexachloro-1,3-Butadiene	ND	40	20.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	20.0	
1,1,2-Trichloroethane	ND	10	20.0	
Trichloroethene	ND	10	20.0	
Trichlorofluoromethane	ND	10	20.0	
1,2,3-Trichloropropane	ND	20	20.0	
1,2,4-Trimethylbenzene	350	10	20.0	
1,3,5-Trimethylbenzene	160	10	20.0	
Vinyl Chloride	ND	10	20.0	
p/m-Xylene	200	10	20.0	
o-Xylene	29	10	20.0	
Xylenes (total)	230	10	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	10	20.0	
Tert-Butyl Alcohol (TBA)	ND	100	20.0	
Diisopropyl Ether (DIPE)	ND	10	20.0	
Ethyl-t-Butyl Ether (ETBE)	ND	10	20.0	
Tert-Amyl-Methyl Ether (TAME)	ND	10	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 15 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	83	80-127	
1,2-Dichloroethane-d4	87	80-128	
Toluene-d8	100	80-120	

Return to Contents

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

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
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
W-12-MW5	**14-10-2375-7-A**	**10/28/14 10:05**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 04:28**	**141107L062**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	200	20.0	
Benzene	550	10	20.0	
Bromobenzene	ND	10	20.0	
Bromochloromethane	ND	20	20.0	
Bromodichloromethane	ND	10	20.0	
Bromoform	ND	10	20.0	
Bromomethane	ND	20	20.0	
2-Butanone	ND	100	20.0	
n-Butylbenzene	82	10	20.0	
sec-Butylbenzene	33	10	20.0	
tert-Butylbenzene	ND	10	20.0	
Carbon Disulfide	ND	20	20.0	
Carbon Tetrachloride	ND	10	20.0	
Chlorobenzene	ND	10	20.0	
Chloroethane	ND	10	20.0	
Chloroform	ND	10	20.0	
Chloromethane	ND	10	20.0	
2-Chlorotoluene	ND	10	20.0	
4-Chlorotoluene	ND	10	20.0	
Dibromochloromethane	ND	10	20.0	
1,2-Dibromo-3-Chloropropane	ND	100	20.0	
1,2-Dibromoethane	ND	10	20.0	
Dibromomethane	ND	10	20.0	
1,2-Dichlorobenzene	ND	10	20.0	
1,3-Dichlorobenzene	ND	10	20.0	
1,4-Dichlorobenzene	ND	10	20.0	
Dichlorodifluoromethane	ND	20	20.0	
1,1-Dichloroethane	ND	10	20.0	
1,2-Dichloroethane	ND	10	20.0	
1,1-Dichloroethene	ND	10	20.0	
c-1,2-Dichloroethene	ND	10	20.0	
t-1,2-Dichloroethene	ND	10	20.0	
1,2-Dichloropropane	ND	10	20.0	
1,3-Dichloropropane	ND	20	20.0	
2,2-Dichloropropane	ND	20	20.0	

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

Return to Contents

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	10	20.0	
c-1,3-Dichloropropene	ND	10	20.0	
t-1,3-Dichloropropene	ND	10	20.0	
2-Hexanone	ND	200	20.0	
Isopropylbenzene	120	10	20.0	
p-Isopropyltoluene	14	10	20.0	
Methylene Chloride	ND	20	20.0	
4-Methyl-2-Pentanone	ND	100	20.0	
Naphthalene	250	20	20.0	
n-Propylbenzene	380	10	20.0	
Styrene	ND	10	20.0	
1,1,1,2-Tetrachloroethane	ND	10	20.0	
1,1,2,2-Tetrachloroethane	ND	10	20.0	
Tetrachloroethene	ND	10	20.0	
Toluene	17	10	20.0	
1,2,3-Trichlorobenzene	ND	10	20.0	
1,2,4-Trichlorobenzene	ND	10	20.0	
1,1,1-Trichloroethane	ND	10	20.0	
Hexachloro-1,3-Butadiene	ND	40	20.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	10	20.0	
1,1,2-Trichloroethane	ND	10	20.0	
Trichloroethene	ND	10	20.0	
Trichlorofluoromethane	ND	10	20.0	
1,2,3-Trichloropropane	ND	20	20.0	
1,2,4-Trimethylbenzene	730	10	20.0	
1,3,5-Trimethylbenzene	130	10	20.0	
Vinyl Chloride	ND	10	20.0	
p/m-Xylene	340	10	20.0	
o-Xylene	23	10	20.0	
Xylenes (total)	360	10	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	10	20.0	
Tert-Butyl Alcohol (TBA)	ND	100	20.0	
Diisopropyl Ether (DIPE)	ND	10	20.0	
Ethyl-t-Butyl Ether (ETBE)	ND	10	20.0	
Tert-Amyl-Methyl Ether (TAME)	ND	10	20.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	83	80-127	

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 18 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,2-Dichloroethane-d4	92	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
W-12-MW5	**14-10-2375-7-B**	**10/28/14 10:05**	**Aqueous**	**GC/MS FFF**	**11/09/14**	**11/09/14 14:53**	**141109L031**

Parameter	Result	RL	DF	Qualifiers
Ethylbenzene	890	25	50.0	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-120	
Dibromofluoromethane	84	80-127	
1,2-Dichloroethane-d4	93	80-128	
Toluene-d8	101	80-120	

Return to Contents

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

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
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
W-17-MW6	**14-10-2375-8-A**	**10/28/14 09:45**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 04:57**	**141107L062**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	10	1.00	
Benzene	0.60	0.50	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	0.50	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
2-Butanone	ND	5.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
sec-Butylbenzene	0.73	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

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

Return to Contents

eurofins | Calscience

Analytical Report

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

Date Received: 10/30/14
Work Order: 14-10-2375
Preparation: EPA 5030C
Method: EPA 8260B
Units: ug/L

Project: ExxonMobil 79374/022735C

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	0.56	0.50	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	0.84	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
Methylene Chloride	ND	1.0	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Naphthalene	1.4	1.0	1.00	
n-Propylbenzene	1.9	0.50	1.00	
Styrene	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	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	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	97	68-120	

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 21 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	82	80-127	
1,2-Dichloroethane-d4	90	80-128	
Toluene-d8	102	80-120	

Return to Contents

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

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 22 of 24

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-880-1300**	**N/A**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 01:38**	**141107L062**

Parameter	Result	RL	DF	Qualifiers
Acetone	ND	10	1.00	
Benzene	ND	0.50	1.00	
Bromobenzene	ND	0.50	1.00	
Bromochloromethane	ND	1.0	1.00	
Bromodichloromethane	ND	0.50	1.00	
Bromoform	ND	0.50	1.00	
Bromomethane	ND	1.0	1.00	
2-Butanone	ND	5.0	1.00	
n-Butylbenzene	ND	0.50	1.00	
sec-Butylbenzene	ND	0.50	1.00	
tert-Butylbenzene	ND	0.50	1.00	
Carbon Disulfide	ND	1.0	1.00	
Carbon Tetrachloride	ND	0.50	1.00	
Chlorobenzene	ND	0.50	1.00	
Chloroethane	ND	0.50	1.00	
Chloroform	ND	0.50	1.00	
Chloromethane	ND	0.50	1.00	
2-Chlorotoluene	ND	0.50	1.00	
4-Chlorotoluene	ND	0.50	1.00	
Dibromochloromethane	ND	0.50	1.00	
1,2-Dibromo-3-Chloropropane	ND	5.0	1.00	
1,2-Dibromoethane	ND	0.50	1.00	
Dibromomethane	ND	0.50	1.00	
1,2-Dichlorobenzene	ND	0.50	1.00	
1,3-Dichlorobenzene	ND	0.50	1.00	
1,4-Dichlorobenzene	ND	0.50	1.00	
Dichlorodifluoromethane	ND	1.0	1.00	
1,1-Dichloroethane	ND	0.50	1.00	
1,2-Dichloroethane	ND	0.50	1.00	
1,1-Dichloroethene	ND	0.50	1.00	
c-1,2-Dichloroethene	ND	0.50	1.00	
t-1,2-Dichloroethene	ND	0.50	1.00	
1,2-Dichloropropane	ND	0.50	1.00	
1,3-Dichloropropane	ND	1.0	1.00	
2,2-Dichloropropane	ND	1.0	1.00	

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 23 of 24

Parameter	Result	RL	DF	Qualifiers
1,1-Dichloropropene	ND	0.50	1.00	
c-1,3-Dichloropropene	ND	0.50	1.00	
t-1,3-Dichloropropene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	
2-Hexanone	ND	10	1.00	
Isopropylbenzene	ND	0.50	1.00	
p-Isopropyltoluene	ND	0.50	1.00	
Methylene Chloride	ND	1.0	1.00	
4-Methyl-2-Pentanone	ND	5.0	1.00	
Naphthalene	ND	1.0	1.00	
n-Propylbenzene	ND	0.50	1.00	
Styrene	ND	0.50	1.00	
1,1,1,2-Tetrachloroethane	ND	0.50	1.00	
1,1,2,2-Tetrachloroethane	ND	0.50	1.00	
Toluene	ND	0.50	1.00	
1,2,3-Trichlorobenzene	ND	0.50	1.00	
1,2,4-Trichlorobenzene	ND	0.50	1.00	
1,1,1-Trichloroethane	ND	0.50	1.00	
Hexachloro-1,3-Butadiene	ND	2.0	1.00	
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.50	1.00	
1,1,2-Trichloroethane	ND	0.50	1.00	
Trichloroethene	ND	0.50	1.00	
Trichlorofluoromethane	ND	0.50	1.00	
Tetrachloroethene	ND	0.50	1.00	
1,2,3-Trichloropropane	ND	1.0	1.00	
1,2,4-Trimethylbenzene	ND	0.50	1.00	
1,3,5-Trimethylbenzene	ND	0.50	1.00	
Vinyl Chloride	ND	0.50	1.00	
p/m-Xylene	ND	0.50	1.00	
o-Xylene	ND	0.50	1.00	
Xylenes (total)	ND	0.50	1.00	
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1.00	
Tert-Butyl Alcohol (TBA)	ND	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	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	95	68-120	

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

Return to Contents

eurofins | Calscience

Analytical Report

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8260B
	Units:	ug/L
Project: ExxonMobil 79374/022735C		Page 24 of 24

Surrogate	Rec. (%)	Control Limits	Qualifiers
Dibromofluoromethane	88	80-127	
1,2-Dichloroethane-d4	93	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
Method Blank	**099-12-880-1301**	**N/A**	**Aqueous**	**GC/MS FFF**	**11/09/14**	**11/09/14 12:03**	**141109L031**

Parameter	Result	RL	DF	Qualifiers
Benzene	ND	0.50	1.00	
Ethylbenzene	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	96	68-120	
Dibromofluoromethane	85	80-127	
1,2-Dichloroethane-d4	94	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
Method Blank	**099-12-880-1305**	**N/A**	**Aqueous**	**GC/MS L**	**11/28/14**	**11/28/14 23:57**	**141128L049**

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	ND	0.50	1.00	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	91	68-120	
Dibromofluoromethane	114	80-127	
1,2-Dichloroethane-d4	120	80-128	
Toluene-d8	104	80-120	

Return to Contents

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

eurofins | Calscience

Quality Control - Spike/Spike Duplicate

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 5030C
	Method:	EPA 8015B (M)
Project: ExxonMobil 79374/022735C		Page 1 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-10-1918-2	Sample	Aqueous	GC 4	11/04/14	11/04/14 13:10	141104S019
14-10-1918-2	Matrix Spike	Aqueous	GC 4	11/04/14	11/04/14 13:43	141104S019
14-10-1918-2	Matrix Spike Duplicate	Aqueous	GC 4	11/04/14	11/04/14 14:16	141104S019

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	126.1	2000	2185	103	2126	100	68-122	3	0-18	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - Spike/Spike Duplicate

Cardno ERI		Date Received:	10/30/14
601 North McDowell Blvd.		Work Order:	14-10-2375
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 2 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-11-1775-1	**Sample**	**Aqueous**	**GC/MS L**	**11/28/14**	**11/29/14 00:25**	**141128S028**
14-11-1775-1	**Matrix Spike**	**Aqueous**	**GC/MS L**	**11/28/14**	**11/29/14 03:17**	**141128S028**
14-11-1775-1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS L**	**11/28/14**	**11/29/14 03:45**	**141128S028**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	10.76	108	10.35	104	75-125	4	0-20	
Toluene	ND	10.00	10.75	107	10.44	104	75-125	3	0-20	
Ethylbenzene	ND	10.00	10.66	107	10.25	103	75-125	4	0-20	
o-Xylene	ND	10.00	10.94	109	10.47	105	75-127	4	0-20	
p/m-Xylene	ND	20.00	21.63	108	20.64	103	75-125	5	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	10.69	107	10.33	103	71-131	3	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	61.63	123	51.42	103	20-180	18	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	11.90	119	11.45	114	64-136	4	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	10.66	107	10.19	102	73-133	4	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	10.42	104	10.27	103	75-125	1	0-20	
1,1-Dichloroethene	ND	10.00	10.29	103	9.845	98	66-126	4	0-20	
1,2-Dibromoethane	ND	10.00	10.24	102	10.05	101	75-126	2	0-20	
1,2-Dichlorobenzene	ND	10.00	10.47	105	10.29	103	75-125	2	0-20	
1,2-Dichloroethane	ND	10.00	10.67	107	10.43	104	75-127	2	0-20	
Carbon Tetrachloride	ND	10.00	9.378	94	9.138	91	69-135	3	0-20	
Chlorobenzene	ND	10.00	10.42	104	10.06	101	75-125	3	0-20	
Trichloroethene	ND	10.00	10.16	102	9.722	97	75-125	4	0-20	
Vinyl Chloride	ND	10.00	10.99	110	10.81	108	52-142	2	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - Spike/Spike Duplicate

Cardno ERI		Date Received:	10/30/14
601 North McDowell Blvd.		Work Order:	14-10-2375
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 3 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-12-MW1	**Sample**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 02:06**	**141107S028**
W-12-MW1	**Matrix Spike**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 05:25**	**141107S028**
W-12-MW1	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 05:54**	**141107S028**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	1.246	10.00	12.42	112	12.78	115	75-125	3	0-20	
Carbon Tetrachloride	ND	10.00	8.564	86	9.139	91	69-135	6	0-20	
Chlorobenzene	ND	10.00	11.07	111	11.12	111	75-125	0	0-20	
1,2-Dibromoethane	ND	10.00	11.20	112	11.12	111	75-126	1	0-20	
1,2-Dichlorobenzene	ND	10.00	10.81	108	10.97	110	75-125	1	0-20	
1,2-Dichloroethane	ND	10.00	10.60	106	10.75	107	75-127	1	0-20	
1,1-Dichloroethene	ND	10.00	9.918	99	10.27	103	66-126	3	0-20	
Ethylbenzene	0.6388	10.00	12.06	114	12.19	116	75-125	1	0-20	
Toluene	ND	10.00	11.50	115	11.36	114	75-125	1	0-20	
Trichloroethene	9.783	10.00	19.74	100	19.91	101	75-125	1	0-20	
Vinyl Chloride	ND	10.00	8.053	81	8.408	84	52-142	4	0-20	
p/m-Xylene	ND	20.00	22.20	111	22.54	113	75-125	2	0-20	
o-Xylene	ND	10.00	11.06	111	11.09	111	75-127	0	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.254	93	9.584	96	71-131	4	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	64.11	128	57.66	115	20-180	11	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	10.19	102	10.70	107	64-136	5	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	9.661	97	9.769	98	73-133	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	9.868	99	9.930	99	75-125	1	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - Spike/Spike Duplicate

Cardno ERI		Date Received:	10/30/14
601 North McDowell Blvd.		Work Order:	14-10-2375
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 4 of 4

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
14-11-0281-2	**Sample**	**Aqueous**	**GC/MS FFF**	**11/09/14**	**11/09/14 12:31**	**141109S004**
14-11-0281-2	**Matrix Spike**	**Aqueous**	**GC/MS FFF**	**11/09/14**	**11/09/14 13:28**	**141109S004**
14-11-0281-2	**Matrix Spike Duplicate**	**Aqueous**	**GC/MS FFF**	**11/09/14**	**11/09/14 13:56**	**141109S004**

Parameter	Sample Conc.	Spike Added	MS Conc.	MS %Rec.	MSD Conc.	MSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
Benzene	ND	10.00	12.48	125	12.15	121	75-125	3	0-20	
Toluene	ND	10.00	12.64	126	11.87	119	75-125	6	0-20	HX
Ethylbenzene	ND	10.00	12.85	128	12.26	123	75-125	5	0-20	HX
o-Xylene	ND	10.00	12.14	121	11.59	116	75-127	5	0-20	
p/m-Xylene	ND	20.00	24.87	124	23.65	118	75-125	5	0-20	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.020	90	9.301	93	71-131	3	0-20	
Tert-Butyl Alcohol (TBA)	ND	50.00	64.85	130	63.16	126	20-180	3	0-40	
Diisopropyl Ether (DIPE)	ND	10.00	10.28	103	10.22	102	64-136	1	0-20	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	9.507	95	9.445	94	73-133	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	9.938	99	9.878	99	75-125	1	0-20	
1,1-Dichloroethene	ND	10.00	11.10	111	11.04	110	66-126	1	0-20	
1,2-Dibromoethane	ND	10.00	11.31	113	11.29	113	75-126	0	0-20	
1,2-Dichlorobenzene	ND	10.00	11.31	113	10.94	109	75-125	3	0-20	
1,2-Dichloroethane	ND	10.00	10.79	108	10.71	107	75-127	1	0-20	
Carbon Tetrachloride	ND	10.00	10.92	109	10.48	105	69-135	4	0-20	
Chlorobenzene	ND	10.00	11.90	119	11.42	114	75-125	4	0-20	
Trichloroethene	ND	10.00	12.31	123	11.69	117	75-125	5	0-20	
Vinyl Chloride	ND	10.00	9.692	97	9.706	97	52-142	0	0-20	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS/LCSD

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 3510C
	Method:	EPA 8015B (M)
Project: ExxonMobil 79374/022735C		Page 1 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-278-745	LCS	Aqueous	GC 45	10/31/14	10/31/14 20:54	141031B04
099-15-278-745	LCSD	Aqueous	GC 45	10/31/14	10/31/14 21:12	141031B04

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	2000	2164	108	2215	111	75-117	2	0-13	

RPD: Relative Percent Difference. CL: Control Limits

Return to Contents

eurofins | Calscience

Quality Control - LCS/LCSD

Cardno ERI	Date Received:	10/30/14
601 North McDowell Blvd.	Work Order:	14-10-2375
Petaluma, CA 94954-2312	Preparation:	EPA 3510C
	Method:	EPA 8015B (M)
Project: ExxonMobil 79374/022735C		Page 2 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-304-850	LCS	Aqueous	GC 45	10/31/14	10/31/14 20:16	141031B03
099-15-304-850	LCSD	Aqueous	GC 45	10/31/14	10/31/14 20:35	141031B03

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Diesel	2000	2089	104	2061	103	75-117	1	0-13	

RPD: Relative Percent Difference. CL: Control Limits

Return to Contents

eurofins | Calscience

Quality Control - LCS/LCSD

Cardno ERI		Date Received:	10/30/14
601 North McDowell Blvd.		Work Order:	14-10-2375
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)
Project: ExxonMobil 79374/022735C			Page 3 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-436-9645	LCS	Aqueous	GC 4	11/04/14	11/04/14 12:05	141104L032
099-12-436-9645	LCSD	Aqueous	GC 4	11/04/14	11/04/14 12:38	141104L032

Parameter	Spike Added	LCS Conc.	LCS %Rec.	LCSD Conc.	LCSD %Rec.	%Rec. CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	2000	2297	115	2230	112	78-120	3	0-10	

Return to Contents

RPD: Relative Percent Difference. CL: Control Limits

eurofins | Calscience

Quality Control - LCS

Cardno ERI		Date Received:	10/30/14
601 North McDowell Blvd.		Work Order:	14-10-2375
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 4 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-880-1305	**LCS**	**Aqueous**	**GC/MS L**	**11/28/14**	**11/28/14 23:00**	**141128L049**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	10.70	107	80-120	73-127	
Toluene	10.00	10.94	109	80-120	73-127	
Ethylbenzene	10.00	10.97	110	80-120	73-127	
o-Xylene	10.00	11.13	111	80-120	73-127	
p/m-Xylene	20.00	22.37	112	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	10.30	103	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	50.14	100	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	11.53	115	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	10.22	102	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	10.27	103	80-120	73-127	
1,1-Dichloroethene	10.00	10.45	105	77-120	70-127	
1,2-Dibromoethane	10.00	10.35	104	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.69	107	80-120	73-127	
1,2-Dichloroethane	10.00	10.56	106	80-122	73-129	
Carbon Tetrachloride	10.00	9.789	98	80-129	72-137	
Chlorobenzene	10.00	10.74	107	80-120	73-127	
Trichloroethene	10.00	10.17	102	80-120	73-127	
Vinyl Chloride	10.00	11.20	112	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

eurofins | Calscience

Quality Control - LCS

Cardno ERI		Date Received:	10/30/14
601 North McDowell Blvd.		Work Order:	14-10-2375
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 5 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-880-1300	**LCS**	**Aqueous**	**GC/MS FFF**	**11/07/14**	**11/08/14 00:41**	**141107L062**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	10.43	104	80-120	73-127	
Carbon Tetrachloride	10.00	8.423	84	80-129	72-137	
Chlorobenzene	10.00	10.31	103	80-120	73-127	
1,2-Dibromoethane	10.00	10.13	101	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.17	102	80-120	73-127	
1,2-Dichloroethane	10.00	9.919	99	80-122	73-129	
1,1-Dichloroethene	10.00	9.435	94	77-120	70-127	
Ethylbenzene	10.00	10.67	107	80-120	73-127	
Toluene	10.00	10.58	106	80-120	73-127	
Trichloroethene	10.00	10.21	102	80-120	73-127	
Vinyl Chloride	10.00	8.012	80	63-135	51-147	
p/m-Xylene	20.00	20.69	103	80-120	73-127	
o-Xylene	10.00	10.49	105	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	8.448	84	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	53.98	108	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	9.561	96	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	8.757	88	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	9.032	90	80-120	73-127	

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

eurofins | Calscience

Quality Control - LCS

Cardno ERI		Date Received:	10/30/14
601 North McDowell Blvd.		Work Order:	14-10-2375
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
Project: ExxonMobil 79374/022735C			Page 6 of 6

Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS Batch Number
099-12-880-1301	**LCS**	**Aqueous**	**GC/MS FFF**	**11/09/14**	**11/09/14 10:58**	**141109L031**

Parameter	Spike Added	Conc. Recovered	LCS %Rec.	%Rec. CL	ME CL	Qualifiers
Benzene	10.00	10.60	106	80-120	73-127	
Toluene	10.00	10.44	104	80-120	73-127	
Ethylbenzene	10.00	10.82	108	80-120	73-127	
o-Xylene	10.00	10.34	103	80-120	73-127	
p/m-Xylene	20.00	21.01	105	80-120	73-127	
Methyl-t-Butyl Ether (MTBE)	10.00	8.846	88	75-123	67-131	
Tert-Butyl Alcohol (TBA)	50.00	57.77	116	80-120	73-127	
Diisopropyl Ether (DIPE)	10.00	9.734	97	73-121	65-129	
Ethyl-t-Butyl Ether (ETBE)	10.00	9.048	90	76-124	68-132	
Tert-Amyl-Methyl Ether (TAME)	10.00	9.345	93	80-120	73-127	
1,1-Dichloroethene	10.00	9.759	98	77-120	70-127	
1,2-Dibromoethane	10.00	10.48	105	80-120	73-127	
1,2-Dichlorobenzene	10.00	10.27	103	80-120	73-127	
1,2-Dichloroethane	10.00	9.890	99	80-122	73-129	
Carbon Tetrachloride	10.00	9.805	98	80-129	72-137	
Chlorobenzene	10.00	10.28	103	80-120	73-127	
Trichloroethene	10.00	10.27	103	80-120	73-127	
Vinyl Chloride	10.00	8.567	86	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

eurofins | Calscience

Glossary of Terms and Qualifiers

Work Order: 14-10-2375 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.
DF	Reporting limits elevated due to matrix interferences.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
GE	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
HD	Chromat. profile inconsistent with pattern(s) of ref. fuel stnds.
HO	High concentration matrix spike recovery out of limits
HT	Analytical value calculated using results from associated tests.
HX	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS was in control.
IL	Relative percent difference out of control.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
LD	Analyte presence was not confirmed by second column or GC/MS analysis.
LP	The LCS and/or LCSD recoveries for this analyte were above the upper control limit. The associated sample was non-detected. Therefore, the sample data was reported without further clarification.
LQ	LCS recovery above method control limits.
LR	LCS recovery below method control limits.
ND	Parameter not detected at the indicated reporting limit.
QO	Compound did not meet method-described identification guidelines. Identification was based on additional GC/MS characteristics.
RU	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
SG	A silica gel cleanup procedure was performed.
SN	See applicable analysis comment.

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

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

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

Return to Contents

Cecile L de Guia

From: David R. Daniels [david.daniels@cardno.com]
Sent: Tuesday, November 18, 2014 11:30 AM
To: Cecile L de Guia; Azat Magdanov (Petaluma)
Cc: Christine Capwell
Subject: RE: HVOCs at 2735 (79374)

Cecile,

Please analyze past hold time.

Thanks,

David R. Daniels, PG 8737
PROJECT GEOLOGIST
CARDNO ERI

Phone (+1) 707-766-2000 Fax (+1) 707-789-0414 Direct (+1) 707-766-2024 Mobile (+1) 707-338-6997
Address 601 North McDowell Blvd., Petaluma, CA 94954-2312 USA
Email david.daniels@cardno.com Web www.cardno.com www.cardnoeri.com

From: Cecile L de Guia [mailto:CecileLdeGuia@eurofinsUS.com]
Sent: Tuesday, November 18, 2014 10:32 AM
To: Azat Magdanov (Petaluma)
Cc: David R. Daniels; Christine Capwell
Subject: RE: HVOCs at 2735 (79374)

Do you need us to perform dilution analysis past the holding time? Please advise.
Thank you.

Best regards,
Cecile de Guia
Project Manager
Eurofins Calscience Inc.

From: Azat Magdanov (Petaluma) [mailto:azat.magdanov@cardno.com]
Sent: Tuesday, November 18, 2014 10:29 AM
To: Cecile L de Guia
Cc: David R. Daniels; Christine Capwell
Subject: Re: HVOCs at 2735 (79374)

Great thanks, Cecile!

Sent from my iPhone

On Nov 18, 2014, at 10:09 AM, "Cecile L de Guia" <CecileLdeGuia@eurofinsUS.com> wrote:

> Good Morning,
>
> The 8260B data has been re-evaluated for full list VOCs and found out that PCE was out of range for samples W-12-MW1 and W-13-MW2. There was no dilution analysis available for these two samples to report. The samples were already past the holding time. Do you still want us to analyze the expired samples? Please advise.

Return to Contents

Thank you.

Best regards,
Cecile de Guia
Project Manager
Eurofins Calscience Inc.

From: Azat Magdanov (Petaluma) [mailto:azat.magdanov@cardno.com]
Sent: Thursday, November 13, 2014 11:35 AM
To: Cecile L de Guia
Cc: David R. Daniels; Christine Capwell
Subject: RE: HVOCs at 2735 (79374)

Thanks, Cecile.
It Was our fault. I'll correct COC and send to you.

Azat R. Magdanov
SR. STAFF SCIENTIST
MONITORING AND SAMPLING MANAGER
CARDNO ERI

Phone (+1) 707-766-2000 Fax (+1) 707-789-0414 Mobile (+1) 707-304-2306
Address 601 North McDowell Blvd., Petaluma, CA 94954-2312 USA
Email azat.magdanov@cardno.com Web www.cardno.com www.cardnoeri.com

---

From: Cecile L de Guia [mailto:CecileLdeGuia@eurofinsUS.com]
Sent: Thursday, November 13, 2014 11:33 AM
To: Azat Magdanov (Petaluma)
Cc: David R. Daniels; Christine Capwell; Greg Gurss
Subject: RE: HVOCs at 2735 (79374)

Azat,
The COC for WO# 14-10-2375 that reference the above site only asked for BTEX+Oxygenates + 1,2-DCA and EDB. I will send back the lab data for them to re-evaluate for full list VOCs.
I will revise the report as soon as they tell me that it is okay to report all the VOCs.
Thank you.

Best regards,
Cecile de Guia
Project Manager
Eurofins Calscience Inc.

From: Azat Magdanov (Petaluma) [mailto:azat.magdanov@cardno.com]
Sent: Thursday, November 13, 2014 11:27 AM
To: Cecile L de Guia
Cc: David R. Daniels; Christine Capwell; Greg Gurss
Subject: FW: HVOCs at 2735 (79374)

Hi, Cecile,

Please advise, couldn't we find HVOC data from 8260 run on last 79374.

Best regards,

Return to Contents

Azat R. Magdanov
SR. STAFF SCIENTIST
MONITORING AND SAMPLING MANAGER
CARDNO ERI

Phone (+1) 707-766-2000 Fax (+1) 707-789-0414 Mobile (+1) 707-304-2306
Address 601 North McDowell Blvd., Petaluma, CA 94954-2312 USA
Email azat.magdanov@cardno.com Web www.cardno.com www.cardnoeri.com

From: David R. Daniels
Sent: Thursday, November 13, 2014 11:23 AM
To: Christine Capwell
Cc: Greg Gurss; Azat Magdanov (Petaluma); Melanie Trumbo
Subject: Re: HVOCs at 2735 (79374)

Most likely a mistake. We can have the lab add the data hopefully. They should be able to pull it from the 8260 run with any luck.

Sent from my mobile device

On Nov 13, 2014, at 11:20 AM, Christine Capwell <christine.capwell@cardno.com> wrote:

> Hi All,
>
> In the attached letter, the County asked the following: "… please also include analysis for HVOCs on a one time basis. The appropriateness of additional HVOC sampling is requested to be evaluated thereafter." In our September response to comments (see attached), we stated that the plan was to sample for HVOCs in the fourth quarter; however, the data came in (see attached) and it looks like we didn't sample for HVOCs. Did something change?
>
> Thanks!
>
> Christine Capwell
> SENIOR TECHNICAL EDITOR
> CARDNO ERI
>
> <image001.gif>
>
> Phone (+1) 707-766-2000 Fax (+1) 707-789-0414 Direct (+1) 707-766-2055
> Address 601 North McDowell Blvd., Petaluma, CA 94954-2312 USA
> Email christine.capwell@cardno.com Web www.cardno.com www.cardnoeri.com
>
>

<2014-07-07 ACEH.pdf>

<14-10-2375.pdf>

<79374 Response and Req for Extension, 09-05-14.pdf>

Return to Comments

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

ExxonMobil

14-10-2375

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:** Greg Gurss
ExxonMobil Project Mgr: Jennifer Sedlachek | **Project Name:** 02 2735 C
Consultant Project Mgr: Greg Gurss | **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): Darin Einhell | **Site City, State, Zip:** Albany, California
Sampler Signature: | **Oversight Agency:** Alameda County Environmental Health Department

	Sample ID	Field Point Name	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative: 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	HVOCs by 8260B			RUSH TAT (Pre-Schedule)	5-day TAT	Standard 10-day TAT	Due Date of Report
1	QCBB	QCBB	10-28-14	1245	2						2v														X		H	O	L	D							
2	W-12-MW1	MW1		1015	8						6v						2A		X							X	X	X	X	X	X					X	
3	W-13-MW2	MW2		1130	8						6v						2A		X							X	X	X	X	X	X					X	
4	W-14-MW3	MW3		1215	7						6v						1A		X							X	X	X	X	X	X					X	
5	W-19-MW3A	MW3A		1300	7						6v						1A		X							X	X	X	X	X	X					X	
6	W-10-MW4	MW4		1230	8						6v						2A		X							X	X	X	X	X	X					X	
7	W-12-MW5	MW5		1005	8						6v						2A		X							X	X	X	X	X	X					X	
8	W-17-MW6	MW6		945	8						6v						2A		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
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

Relinquished by:		Date	Time	Received by:	Date	Time
Darin Einhell		10/29/14	1035	Tom O'Malley ECI	10/29/14	1035
Tom O'Malley TO GSO		10/29/14	1730	Received by (Lab personnel): ECI	10/30/14	1030

Return to Contents

Sandy Tat

From: David R. Daniels <david.daniels@cardno.com>
Sent: Friday, October 31, 2014 7:58 AM
To: Sandy Tat
Subject: RE: ExxonMobil 79374/022735C (14-10-2375)

Sandy,

After reviewing the field notes, the COC is correct. The sample time should be 12:30 for (W-10-MW4)(cel# 6).

David R. Daniels, PG 8737
PROJECT GEOLOGIST
CARDNO ERI

Phone (+1) 707-766-2000 Fax (+1) 707-789-0414 Direct (+1) 707-766-2024 Mobile (+1) 707-338-6997
Address 601 North McDowell Blvd., Petaluma, CA 94954-2312 USA
Email david.daniels@cardno.com Web www.cardno.com www.cardnoeri.com

From: Sandy Tat [mailto:SandyTat@eurofinsUS.com]
Sent: Thursday, October 30, 2014 5:28 PM
To: David R. Daniels
Subject: ExxonMobil 79374/022735C (14-10-2375)
Importance: High

Hi David,

Please verify the sampling time for sample (W-10-MW4)(cel# 6), because it was labeled as 12:15 on the label. Therefore, which sampling time should we follow? Please advise.

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

Return to Contents

Eurofins Calscience, Inc.

7440 Lincoln Way
Garden Grove, CA 92841

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

ExxonMobil

14-10-2375

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:** Greg Gurss
ExxonMobil Project Mgr: Jennifer Sedlachek | **Project Name:** 02 2735 C
Consultant Project Mgr: Greg Gurss | **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): Darin Einhell | **Site City, State, Zip:** Albany, California
Sampler Signature: Darin Einhell | **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	10-28-14	1245	2						2v													X		H	O	L	D							
2	W- 12 -MW1	MW1		1015	8						6v						2A		X						X	X	X	X	X						X	
3	W- 13 -MW2	MW2		1130	8						6v						2A		X						X	X	X	X	X						X	
4	W- 14 -MW3	MW3		1215	7						6v						1A		X						X	X	X	X	X						X	
5	W- 14 -MW3A	MW3A		1200	7						6v						1A		X						X	X	X	X	X						X	
6	W- 10 -MW4	MW4		1230	8						6v						2A		X						X	X	X	X	X						X	
7	W- 12 -MW5	MW5		1005	8						6v						2A		X						X	X	X	X	X						X	
8	W- 17 -MW6	MW6		945	8						6v						2A		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

Relinquished by:		Date	Time	Received by:	Date	Time
Darin Einhell		10/29/14	1035	Tom O'Malley ECI	10/29/14	1035
Relinquished by:		Date	Time	Received by (Lab personnel):	Date	Time
Tom O'Malley TOGSO		10/29/14	1730	J Neely ECI	10/30/14	1030

Return to Contents

2375

GSO

WebShip >>>>>

800-322-5555 www.gso.com

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

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

COD:
$0.00

Reference:
CARDNO ERI

Delivery Instructions:

Signature Type:
SIGNATURE REQUIRED

Tracking #: 526007002

NPS

ORC

A

GARDEN GROVE

D92845A

30271654

Print Date : 10/29/14 13:13 PM

Package 1 of 1

Return to Contents

eurofins | Calscience

WORK ORDER #: 14-10-2375

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Cardno ERI

DATE: 10/30/14

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

Temperature 2.7 °C - 0.2 °C (CF) = 2.5 °C ☑ Blank ☐ Sample

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

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

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

Ambient Temperature: ☐ Air ☐ Filter Checked by: 836

CUSTODY SEALS INTACT:

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

☐ Sample ☐ _____ ☐ No (Not Intact) ☑ Not Present Checked by: 920

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☐	☑	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Aqueous samples received within 15-minute holding time			
☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen	☐	☐	☑
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☑	☐	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve (_____) ☐EnCores® ☐TerraCores® ☐_____

Aqueous: ☐VOA ☑VOAh (6) ☐VOA**na**$_2$ ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na**$_2$ ☐1AGB**s** ☐500AGB ☑500AGJ (2) ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☐1PB ☐1PB**na** ☐500PB ☐250PB ☐250PB**n** ☐125PB ☐125PB**znna** ☐100PJ ☐100PJ**na**$_2$ ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Canister **Other:** ☐_____ **Trip Blank Lot#:**_____ Labeled/Checked by: 920

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelope Reviewed by: JTK

Preservative: **h:** HCL **n:** HNO_3 **na**$_2$:$Na_2S_2O_3$ **na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **u:** Ultra-pure **znna:** $ZnAc_2$+NaOH **f:** Filtered Scanned by: JTK

Return to Contents

eurofins | Calscience

WORK ORDER #: 14-10-2373

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

- ☐ **Sample(s) NOT RECEIVED but listed on COC**
- ☐ **Sample(s) received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s) used** – list test
- ☐ **Improper preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☑ **Sample label(s) do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☑ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Container(s)**
  - ☐ **Analysis**
- ☐ **Sample container(s) compromised** – Note in comments
  - ☐ **Water present in sample container**
  - ☐ **Broken**
- ☐ **Sample container(s) not labeled**
- ☐ **Air sample container(s) compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (Not transferred - duplicate bag submitted)**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

Comments:

(-6) Collection time per label is 12:15

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Cont. received	Analysis

Comments: _____

*Transferred at Client's request.

Initial / Date: 920 10/30/14

Return to Contents