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 5, 2012

Ms. Barbara Jakub, P.G.
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 Ms. Jakub:

Attached for your review and comment is a copy of the letter report entitled ***Groundwater Monitoring Report, Fourth Quarter 2012, and Response to Comments,*** dated December 5, 2012, for the above-referenced site. The report was prepared by Cardno ERI of Petaluma, California, and details activities for 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 2012, and Response to Comments,*** dated December 5, 2012

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

w/o attachment
Ms. Rebekah A. Westrup, Cardno ERI

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December 5, 2012
Cardno ERI 2735C.Q124

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

SUBJECT **Groundwater Monitoring Report, Fourth Quarter 2012 and Response to Comments**
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 2012 groundwater monitoring and sampling activities at the subject site and responded to comments submitted by the Alameda County Health Care Services Agency, Environmental Health Services (ACEH) in electronic correspondence dated October 5, 2012 (Appendix A). 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:		10/19/12
Wells sampled:		MW1 through MW3, MW3A, MW4 through MW6, MW3A
Well gauged		MW1 through MW6, MW3A, SVE1 through SVE3
Presence of NAPL:		Not observed
Laboratory:		Calscience Environmental Laboratories, Inc. Garden Grove, California
Analyses performed:	EPA Method 8015B EPA Method 8260B	TPHd, TPHg, TPHmo BTEX, MTBE, ETBE, TAME, TBA, DIPE, EDB, 1,2-DCA
Waste disposal:		49 gallons purge and decon water delivered to InStrat, Inc., of Rio Vista, California, on 10/26/12

RESULTS

Groundwater Gradient

Based on 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 zone; wells MW1 through MW3 and MW6 have screened intervals that extend below 15 feet bgs and are referred to as the deep zone. Groundwater elevations are presented in Plates 3 and 4.

The groundwater flow direction in the shallow zone was towards the southwest with a hydraulic gradient of approximately 0.05. The groundwater flow in the deep zone was not calculated due to varying well construction of wells MW1 through MW3 and MW6.

Hydrocarbons in Groundwater

Concentrations of TPHd were reported in wells MW3A and MW3 through MW6. Concentrations of TPHg were reported in wells MW2, MW3, MW3A, and MW4 through MW6. Concentrations of TPHmo were reported in wells MW4 and MW5. BTEX constituents were reported in wells MW1, MW3, MW3A, and MW4 through MW6. Concentrations of MTBE, TBA, ETBE, DIPE, TAME, EDB, and 1,2-DCA were not reported in samples collected from the wells. Concentrations of TPHd and TPHg increased in wells MW3 through MW5 and MW3A. The analytical results in the remaining wells are consistent with historical data. Maximum hydrocarbon concentrations were reported west of the former USTs. Isoconcentration maps depicting hydrocarbon concentrations underlying the site are presented in Plates 5 through 7.

RESPONSE TO COMMENTS

In electronic correspondence dated October 5, 2012, the ACEH indicated that before they could approve Cardno ERI's, *Work Plan for Groundwater Monitoring, Air Sparge, and Soil Vapor Extraction Well Installation*, dated August 1, 2012, they required additional information and supporting data for the proposed off-site well locations. The ACEH requested that Cardno ERI re-evaluate groundwater gradient at the site and provide justification of the proposed well locations and isoconcentration maps and cross sections. Cardno ERI prepared the requested items; findings are discussed in the following sections.

Cross Sections

The ACEH requested that Cardno ERI prepare and submit cross sections showing lithology, constituent concentrations, maximum and minimum groundwater elevations, proposed SVE and AS screen intervals, the approximate location of the former tank pit and on-site utility conduits. The requested cross sections are presented in Plates 8 through 12. During generation of the cross sections, it was noted that boring logs for wells along the edges of the site indicated a consistent stratigraphy while wells in the center of the site between boring B4 and well MW3 are comprised of coarse-grained sediments. Additional review of historic reports indicated that the former tank pit had been backfilled with sand. Further review of historic aerial photographs indicated that the locations of the former station building and tank pit appeared to be too far to the east and the locations were adjusted approximately 15 feet to the west.

Evaluation of Groundwater Gradient

The ACEH requested an evaluation of groundwater gradient beneath the site and generation of groundwater contour maps using only wells screened within the same zone. Cardno ERI reviewed boring logs, well construction data, and groundwater elevation data and concluded that wells MW3A, MW4, MW5, and SVE1 through SVE3 are screened no deeper than 15 feet bgs and produce a groundwater gradient consistent with the hydrocarbon distribution. Wells MW1, MW2, MW3, and MW6 have screen intervals extending deeper than 15 feet bgs and do not yield a consistent groundwater gradient. These zones are shown in the cross sections presented in Plates 9 through 12. As requested, Cardno ERI generated a groundwater contour elevation map for the shallow zone. The contour elevation map indicates that the groundwater gradient in the shallow zone is

toward the west and southwest (Plate 3). Groundwater flow in the deep zone was not calculated due to varying well construction.

Justification for Proposed Off-Site Well Locations

The ACEH noted that though previous gradient maps had indicated gradient directions to the north-northeast, south-southeast, and north-northwest; the proposed off-site well locations are to the southwest of the site. As noted in the previous section, the gradient for the shallow zone, screened between 5 and 15 feet bgs, is to the west and southwest towards the proposed wells. Additionally, dissolved-phase constituent distribution maps for TPHg, benzene, and MTBE are presented in Plates 5 through 7, respectively, and indicate that concentrations for the constituents of concern are at or below reporting limits to the east of the former tanks, and increase to the west and southwest toward the proposed off-site wells.

Remediation Well Locations

Based on the additional review of the site data, Cardno ERI proposes to install wells AS2 and SVE4 as shown on the attached plates, not as shown in the work plan.

RECOMMENDATIONS

Cardno ERI recommends continued semi-annual monitoring and sampling of wells MW1 through MW3, MW3A, and MW4 through MW6 and MW3A during second and fourth quarters.

Cardno ERI recommends the installation of off-site groundwater monitoring wells, additional on-site remediation wells, and performing a groundwater extraction test using well SVE3 to evaluate groundwater recharge in the former UST pit and evaluate the appropriate equipment for remediation, as proposed in the *Work Plan for Groundwater Monitoring, Air Sparge, and Soil Vapor Extraction Well Installations*, dated August 1, 2012.

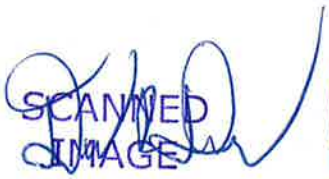
LIMITATIONS

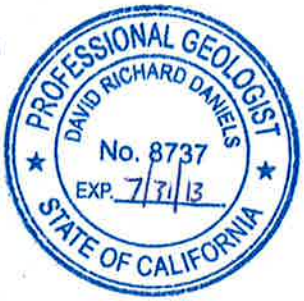
For any documents cited that were not generated by Cardno ERI, the data taken from those documents is used "as is" and is assumed to be accurate. Cardno ERI does not guarantee the accuracy of this data and makes no warranties for the referenced work performed nor the inferences or conclusions stated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

This document was prepared in accordance with generally accepted standards of environmental, geological, and engineering practices 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 Ms. Rebekah A. Westrup, Cardno ERI's project manager for this site, at rebekah.westrup@cardno.com or at (707) 766-2000 with any questions regarding this report.

Sincerely,





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Enclosures:

Acronym List

Plate 1	Site Vicinity Map
Plate 2	Select Analytical Results
Plate 3	Groundwater Elevation Map – Shallow Zone
Plate 4	Groundwater Elevation Map – Deep Zone
Plate 5	Dissolved-Phase Constituent Distribution Map – TPHg
Plate 6	Dissolved-Phase Constituent Distribution Map – Benzene
Plate 7	Dissolved-Phase Constituent Distribution Map – MTBE
Plate 8	Cross-Section Location Map
Plate 9	Cross-Section A-A,' Select Soil Analytical Results
Plate 10	Cross-Section A-A,' Select Groundwater Analytical Results
Plate 11	Cross-Section B-B,' Select Soil Analytical Results
Plate 12	Cross-Section B-B,' Select Groundwater Analytical Results
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 Notes
Appendix C	Laboratory Analytical Report and Chain-of-Custody Record
Appendix D	Waste Disposal Documentation
Appendix E	Correspondence

cc: Ms. Barbara Jakub, Alameda County Health Care Services Agency, Environmental Health Services, 1131 Harbor Bay Parkway, Suite 250, Alameda, California, 94502-6577

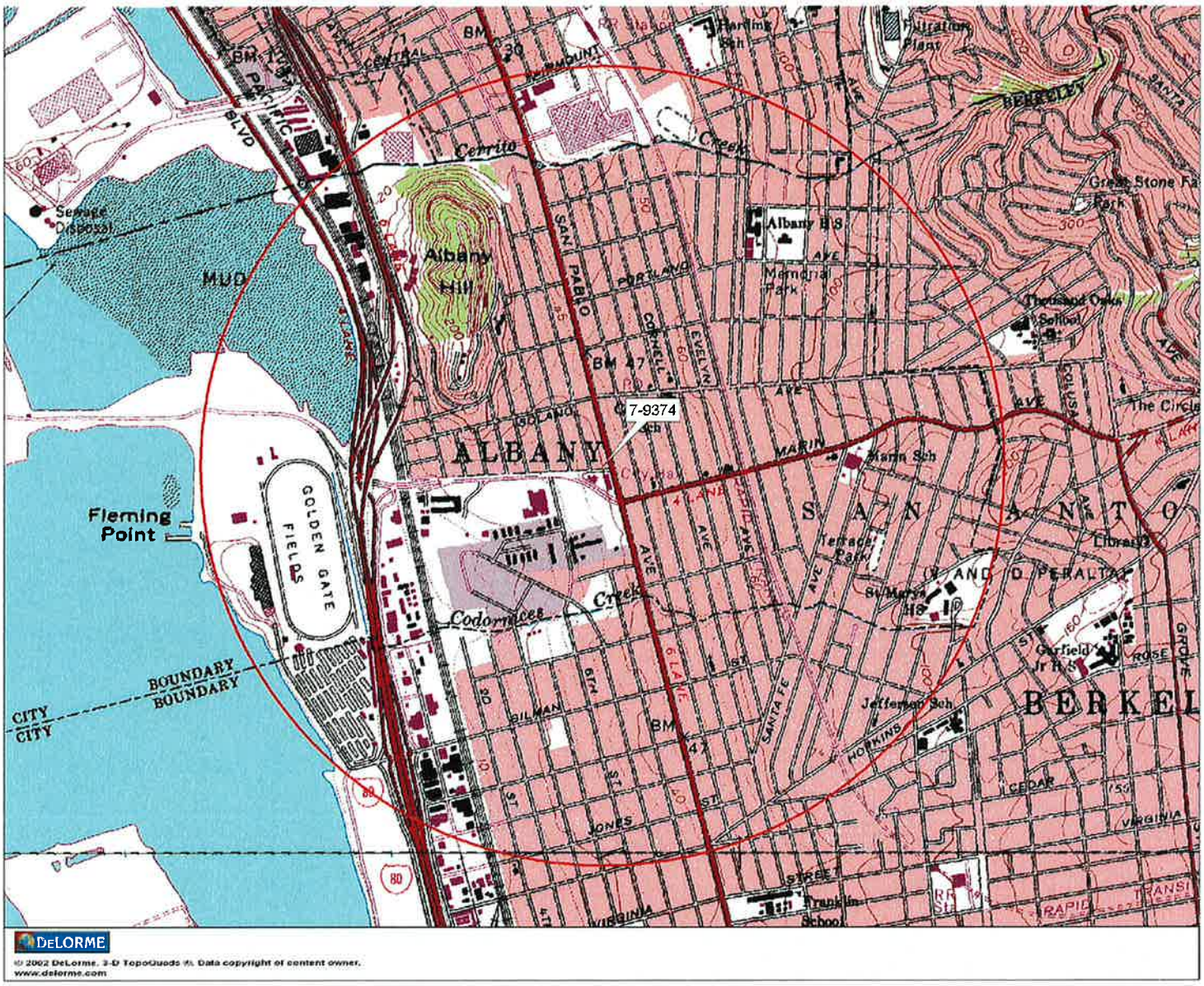
Ms. Muriel T. Blank, Trustee, The Blank Family Trusts, 1164 Solano Avenue, #406, Albany, California, 94706

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

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

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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 19, 2012

Total Petroleum Hydrocarbons as gasoline	
Benzene	
Methyl Tertiary Butyl Ether	
<	Less Than the Stated Laboratory Reporting Limit
ug/L	Micrograms per Liter
a	Sample chromatographic pattern does not match that of the specified standard.
NS	Not Sampled

EXISTING BUILDING

BUILDING OVERHANG

FORMER CANOPY

FORMER SERVICE STATION

FORMER USTs

SAN PABLO AVENUE

DRIVEWAY

EXISTING BUILDING

DRIVEWAY

SIGN

N

MW1 <50 0.51 <0.50

CPT1

HP1A

HP1B

MW6 510a 4.2 <0.50

CPT2

HP2A

HP2B

MW5 15,000 580 <20

SVE2 NS

SVE1 NS

AS1 NS

SVE3 NS

MW2 59a <0.50 <0.50

4,400a 390 <5.0 MW3A

MW3 11,000a 380 <10

MW4 270,000 440 <10

APPROXIMATE SCALE

0 10 20 Feet

FN 2735 12 4QTR QM

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SELECT ANALYTICAL RESULTS
October 19, 2012

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

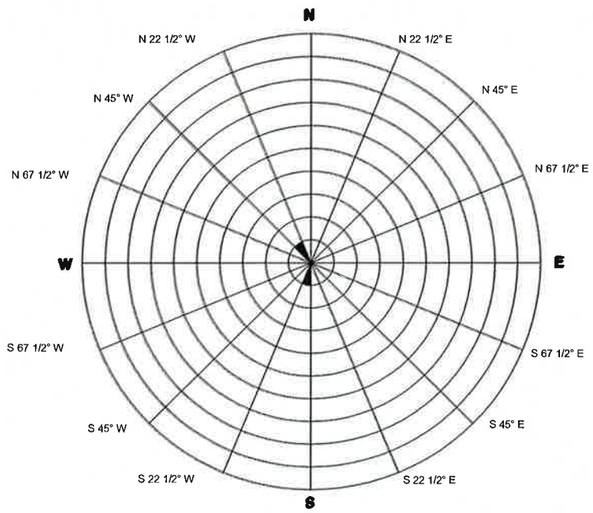
EXPLANATION

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

PROJECT NO. 2735

PLATE 2

L:\EXXONMOBIL\ExxonMobil Projects\022735C (79374) Albany\2735 AutoCad\QM\2012\12 4QTR QM.dwg, mary.jones



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
2 Data Points Shown

GROUNDWATER FLOW DIRECTION ROSE DIAGRAM

EXISTING BUILDING

FORMER CANOPY

BUILDING OVERHANG

FORMER SERVICE STATION

FORMER USTs

SAN PABLO AVENUE

DRIVEWAY

MW1
CPT1
HP1A
HP1B
MW6
CPT2
HP2A
HP2B
MW5
29.74
29.75
30.00
i = 0.05
October 19, 2012
GROUNDWATER FLOW DIRECTION
29.50
29.25
29.00
MW4
28.75
28.66
30.25 SVE2
30.46
SVE1
30.37
AS1
MW3A
30.24
30.25
MW3
SVE3
30.54
30.50
MW2
SIGN

APPROXIMATE SCALE
0 10 20 Feet

FN 2735 12 4QTR QM

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GROUNDWATER ELEVATION MAP - SHALLOW ZONE
October 19, 2012
FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

EXPLANATION

- MW5 — Groundwater Monitoring Well
- 29.74 — Groundwater elevation in feet; datum is mean sea level
- i = Interpreted Hydraulic Gradient
- HP2B — Hydropunch Boring
- CPT2 — Cone Penetration Test Boring
- AS1 — Air Sparge Well
- SVE3 — Soil Vapor Extraction Well
- 30.50 ----- Line of Equal Groundwater Elevation; datum is mean sea level

PROJECT NO. 2735

PLATE 3

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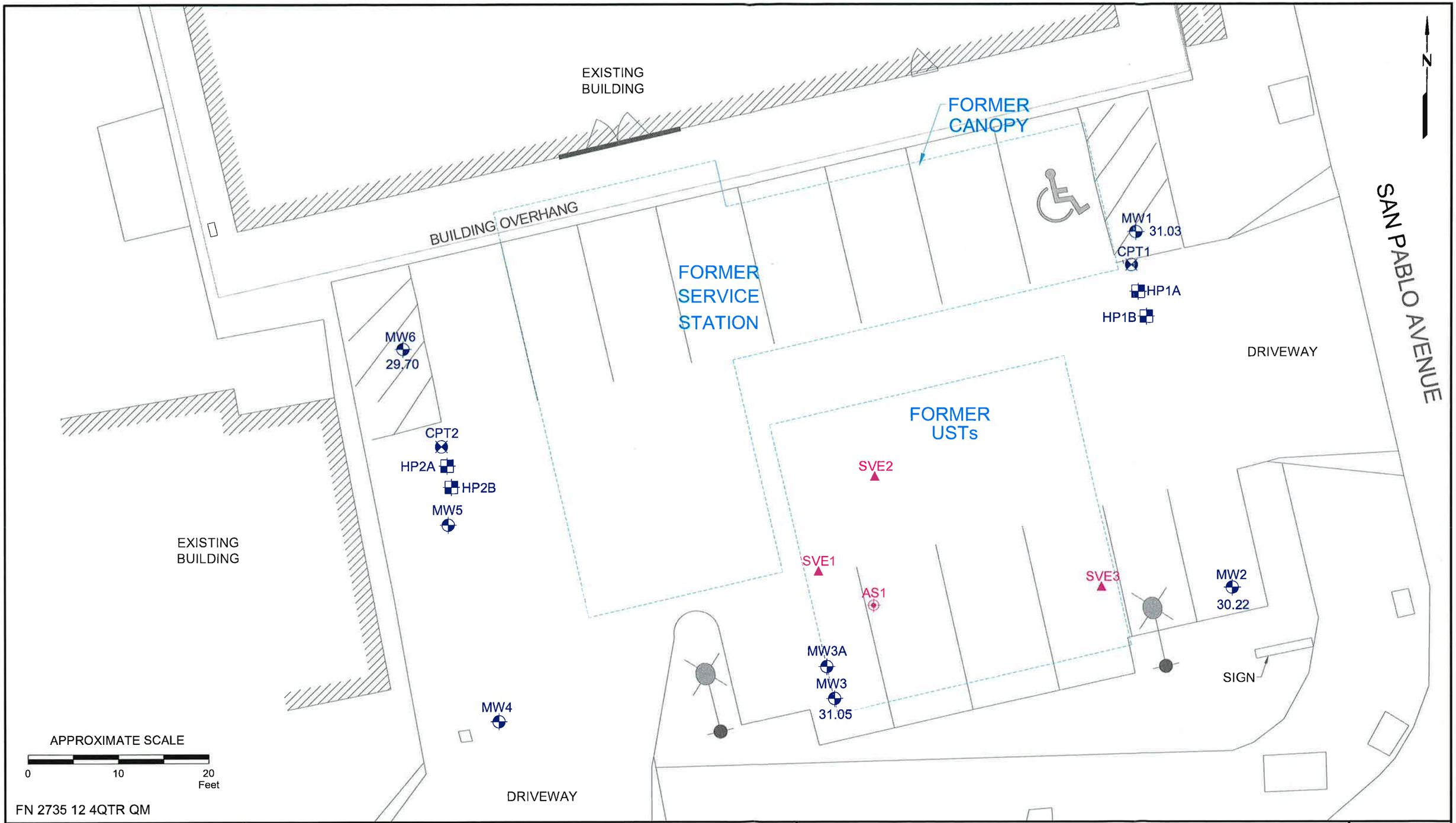

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GROUNDWATER ELEVATION MAP - DEEP ZONE
October 19, 2012
FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

EXPLANATION

MW3 Groundwater Monitoring Well
31.05 Groundwater elevation in feet; datum is mean sea level

NOTE:
Wells not contoured due to varing well construction.

HP2B Hydropunch Boring

CPT2 Cone Penetration Test Boring

AS1 Air Sparge Well

SVE3 Soil Vapor Extraction Well

PROJECT NO.
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PLATE
4

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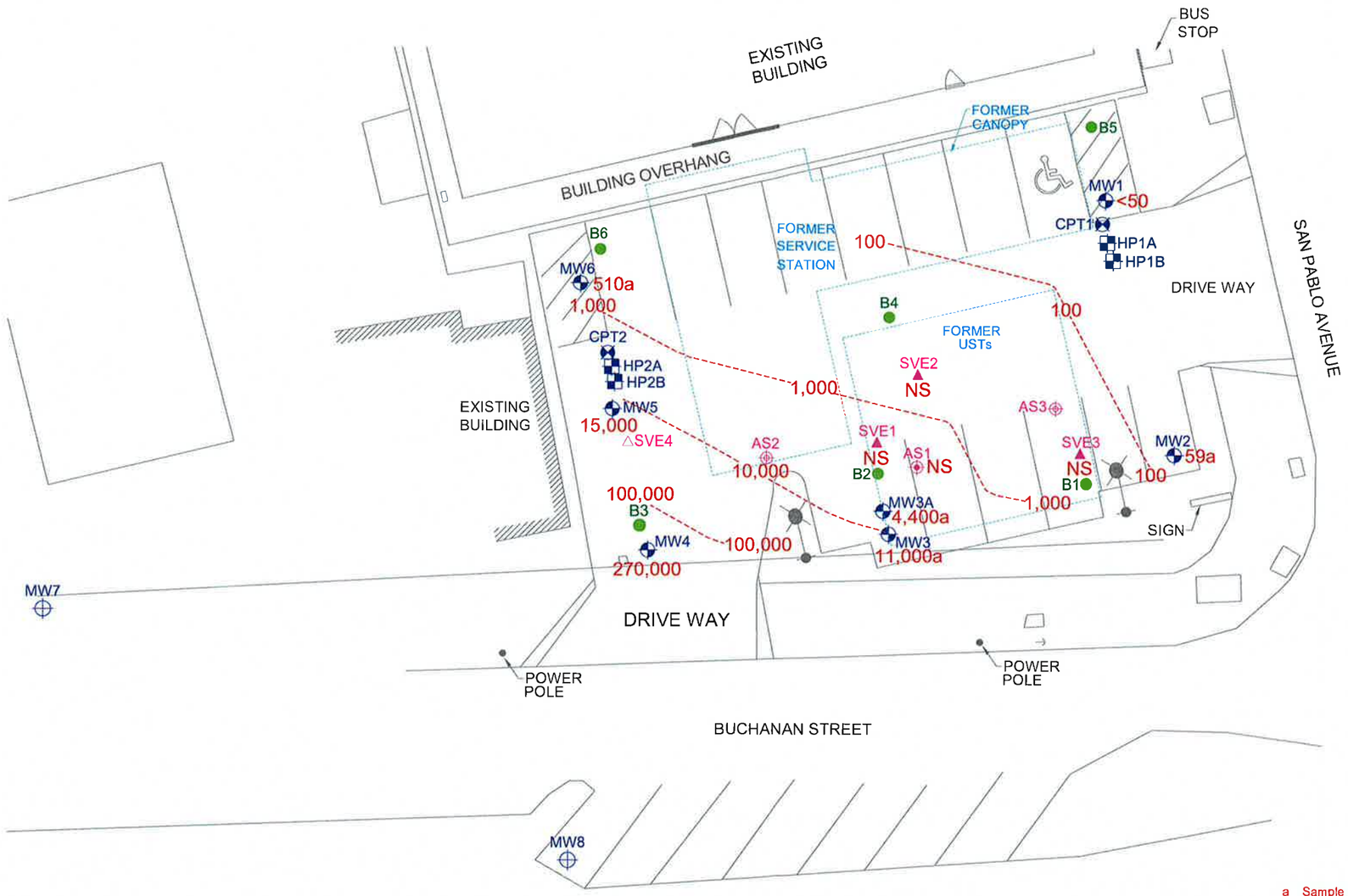

APPROXIMATE SCALE

0 20 40 Feet

a Sample chromatographic pattern does not match that of the specified standard.

NS Not Sampled

(micrograms per Liter [ugL])

100,000 ----- Line of Equal TPHg Concentration (ug/L)

FN 2735 12 4QTR QM-PHASE 2

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DISSOLVED-PHASE CONSTITUENT DISTRIBUTION MAP- TPHg
October 19, 2012
FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

EXPLANATION

MW6 Groundwater Monitoring Well
510a TPHg concentration [ug/L]

B6 Soil Boring

HP2B Hydropunch Boring

CPT2 Cone Penetration Test Boring

MW8 Proposed Groundwater Monitoring Well

AS1 Air Sparge Well

SVE3 Soil Vapor Extraction Well

SVE4 Proposed Soil Vapor Extraction Well

AS3 Proposed Air Sparge Well

PROJECT NO. 2735

PLATE 5

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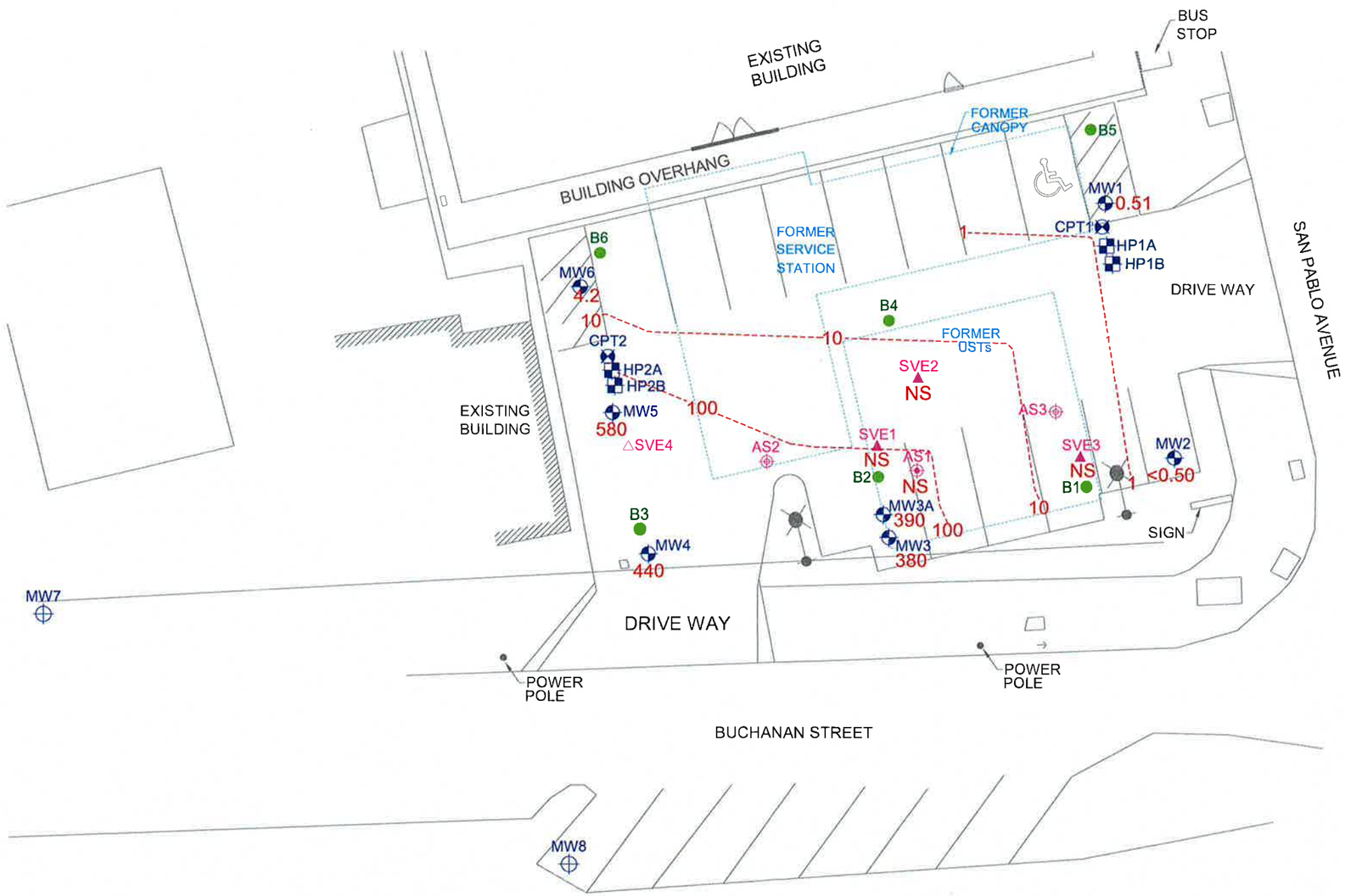

FN 2735 12 4QTR QM-PHASE 2

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DISSOLVED-PHASE CONSTITUENT DISTRIBUTION MAP-BENZENE
October 19, 2012
FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

EXPLANATION

- MW6 — Groundwater Monitoring Well
- 4.2 — Benzene concentration [ug/L]
- B6 — Soil Boring
- HP2B — Hydropunch Boring
- CPT2 — Cone Penetration Test Boring
- MW8 — Proposed Groundwater Monitoring Well
- AS1 — Air Sparge Well
- SVE3 — Soil Vapor Extraction Well
- SVE4 — Proposed Soil Vapor Extraction Well
- AS3 — Proposed Air Sparge Well

PROJECT NO. 2735

PLATE 6

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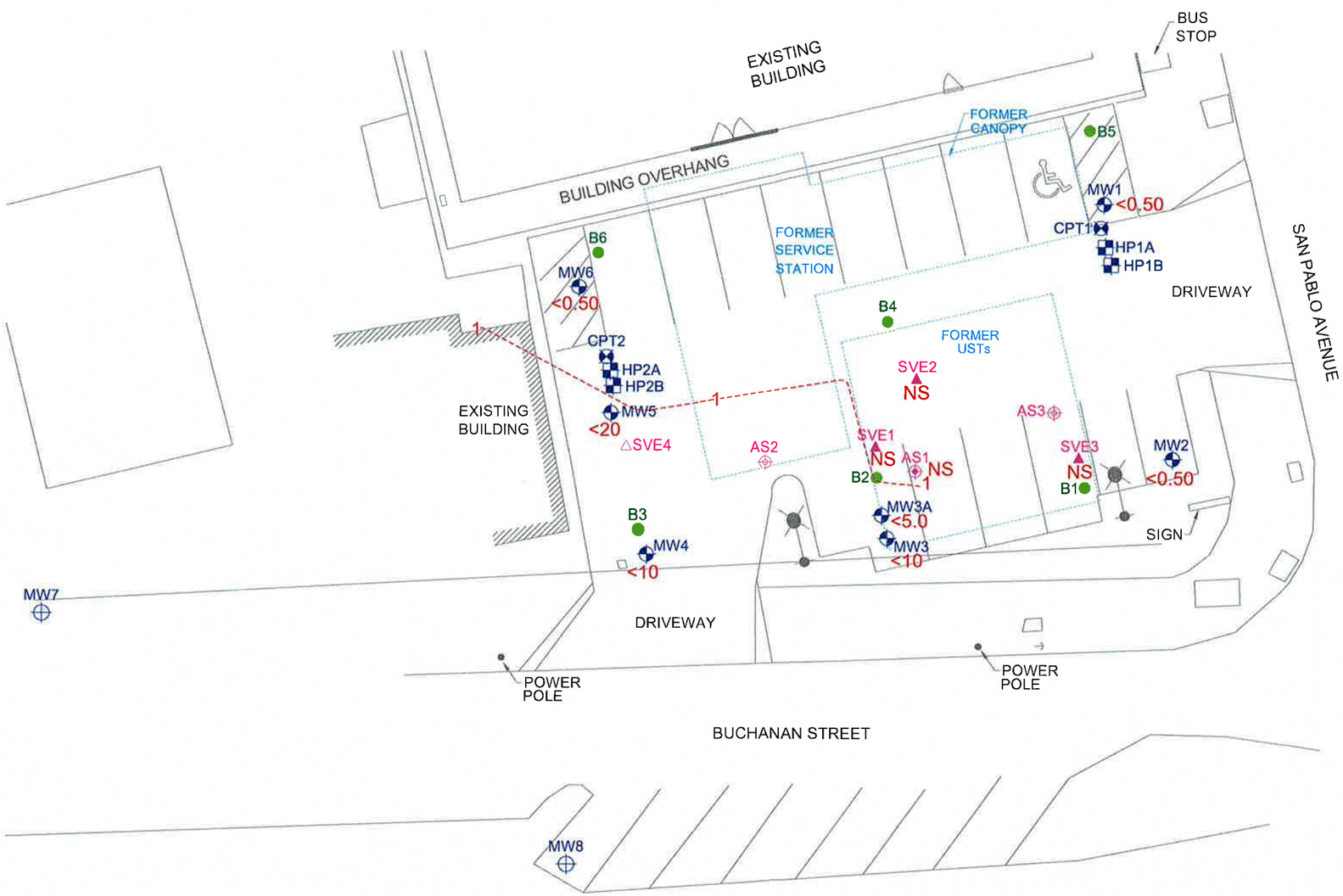

FN 2735 12 4QTR QM-PHASE 2

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DISSOLVED-PHASE CONSTITUENT DISTRIBUTION
MAP-MTBE
October 19, 2012
FORMER EXXON SERVICE STATION 79374
990 San Pablo Avenue
Albany, California

EXPLANATION

- MW6 — Groundwater Monitoring Well
- <0.50 — MTBE concentration [ug/L]
- B6 — Soil Boring
- HP2B — Hydropunch Boring
- CPT2 — Cone Penetration Test Boring
- MW8 — Proposed Groundwater Monitoring Well
- AS1 — Air Sparge Well
- SVE3 — Soil Vapor Extraction Well
- SVE4 — Proposed Soil Vapor Extraction Well
- AS3 — Proposed Air Sparge Well

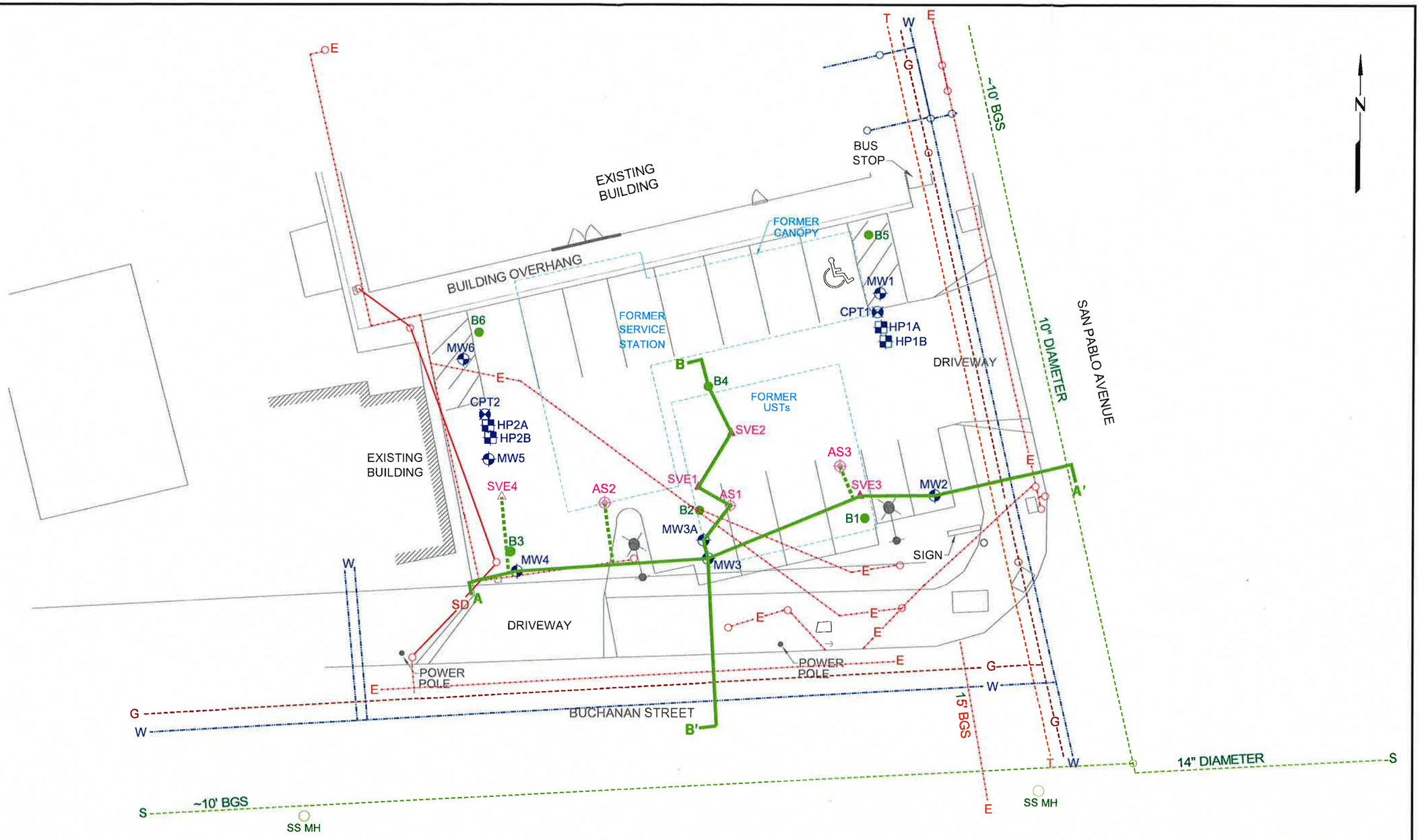
PROJECT NO. 2735

PLATE 7

L:\EXXONMOBIL\ExxonMobil Projects\022735C (79374) Albany\2735 AutoCad\QM\2012\12 4QTR QM-PHASE 2.dwg, mary.jones

UTILITY LEGEND

E ---------- ELECTRICAL
G -------- GAS
S -------- SANITARY SEWER
T -------- TELEPHONE
W---------- WATER
SD ——— STORM DRAIN



APPROXIMATE SCALE

0 20 40 Feet

FN 2735 12 4QTR XS LOC_QM

B B' Cross section location

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CROSS SECTION LOCATION MAP

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

EXPLANATION

- MW6 Groundwater Monitoring Well
- B6 Soil Boring
- HP2B Hydropunch Boring
- CPT2 Cone Penetration Test Boring
- AS1 Air Sparge Well
- SVE3 Soil Vapor Extraction Well
- AS3 Proposed Air Sparge Well
- SVE4 Proposed Soil Vapor Extraction Well

PROJECT NO. 2735

PLATE 8

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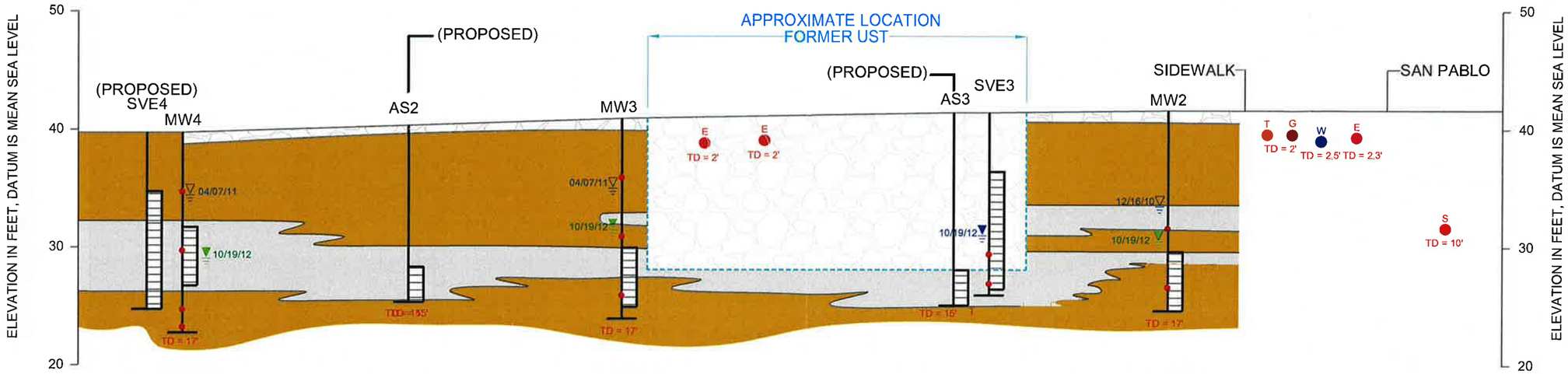
WEST A — EAST A'



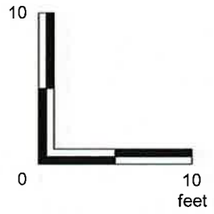
MW4
10/20/10
5 FT.
<50
<0.50
<0.0050
<0.0050
11/05/10
10 FT.
<50
44a
<0.50
<0.50
15 FT.
<50
<0.50
<0.0050
<0.0050
16.5 FT.
<50
<0.50
<0.0050
<0.0050

MW3
10/20/10
5 FT.
<50
<0.50
<0.0050
<0.0050
11/08/10
10.5 FT.
11a
220
<0.50
<0.50
15.5 FT.
<5.0
2.2
<0.0050
<0.0050

SVE3
01/17/12
12.5 FT.
760a
1,900a
<2.5
<2.5
15 FT.
<5.0
<0.50
<0.0050
<0.0050

MW2
11/04/10
10 FT.
<5.0
3.1a
<0.0050
<0.0050
15 FT.
<5.0
<0.50
<0.0050
<0.0050

APPROXIMATE SCALE



No Vertical Exaggeration

FN 2735 12 4QTR XS A-A'_QM

Analyte Concentrations in mg/kg

Sample
Sample Date
Sample Depth
Total Petroleum Hydrocarbons as diesel
Total Petroleum Hydrocarbons as gasoline
Benzene
Methyl Tertiary Butyl Ether

< Less Than the Stated Laboratory Reporting Limit

mg/kg Milligrams per kilogram

a Sample chromatographic pattern does not match that of the specified standard.

Cardno ERI
Shaping the Future

CROSS SECTION A-A', SELECT SOIL ANALYTICAL RESULTS

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

EXPLANATION

- Asphalt/Fill
- Fine-grained sediments
- Coarse-grained sediments
- E Electrical Conduit
- G Gas Line
- S Storm Drain
- T Telephone Conduit
- W Water Line
- Soil Sample Depth
- TD = Total Depth
- Minimum Groundwater Level
- Current And Maximum Groundwater Level
- Current And First Groundwater Level

PROJECT NO. 2735

PLATE 9

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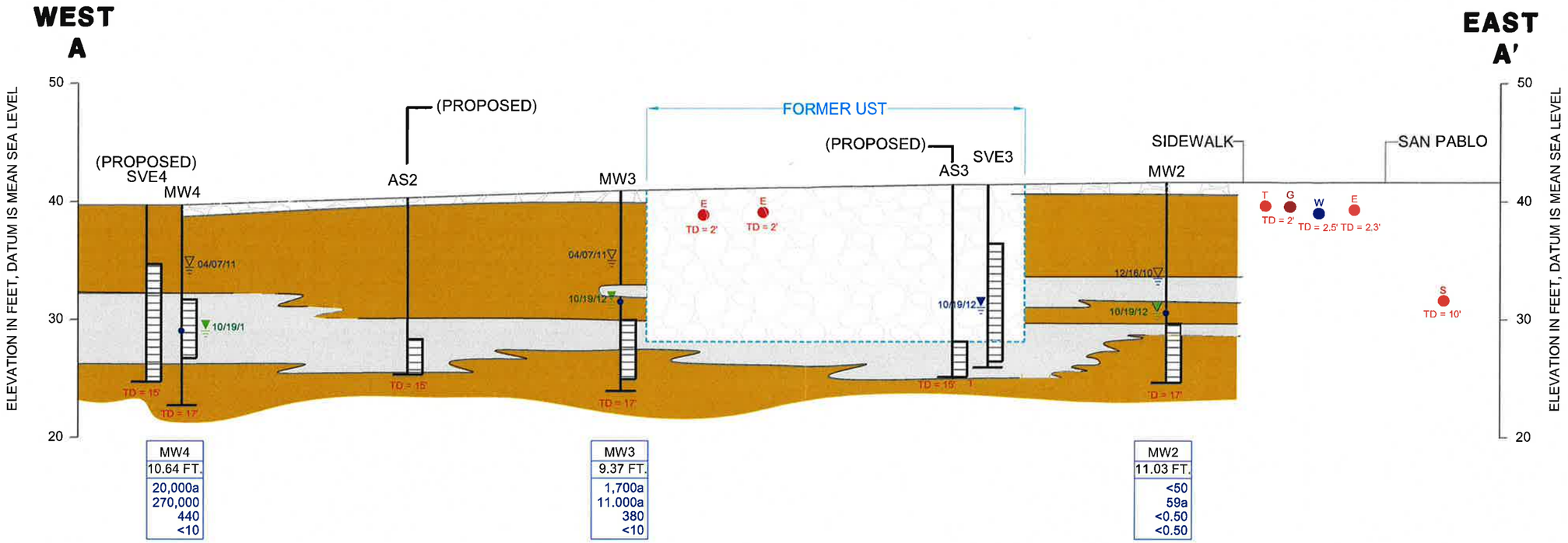
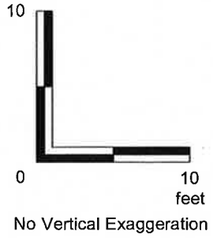


APPROXIMATE SCALE



No Vertical Exaggeration

FN 2735 12 4QTR XS A-A' GW_QM

Analyte Concentrations in ug/L

Sample
Sample Depth
Total Petroleum Hydrocarbons as diesel
Total Petroleum Hydrocarbons as gasoline
Benzene
Methyl Tertiary Butyl Ether

< Less Than the Stated Laboratory Reporting Limit

ug/L Micrograms per Liter

a Sample chromatographic pattern does not match that of the specified standard.

Cardno ERI
Shaping the Future

CROSS SECTION A-A', SELECT GROUNDWATER ANALYTICAL RESULTS

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

EXPLANATION

- Asphalt/Fill
- Fine-grained sediments
- Coarse-grained sediments
- E Electrical Conduit
- G Gas Line
- S Storm Drain
- T Telephone Conduit
- W Water Line
- Groundwater Sample Depth
- TD = Total Depth
- Minimum Groundwater Level
- Current And Maximum Groundwater Level
- Current And First Groundwater Level

PROJECT NO. 2735

PLATE 10

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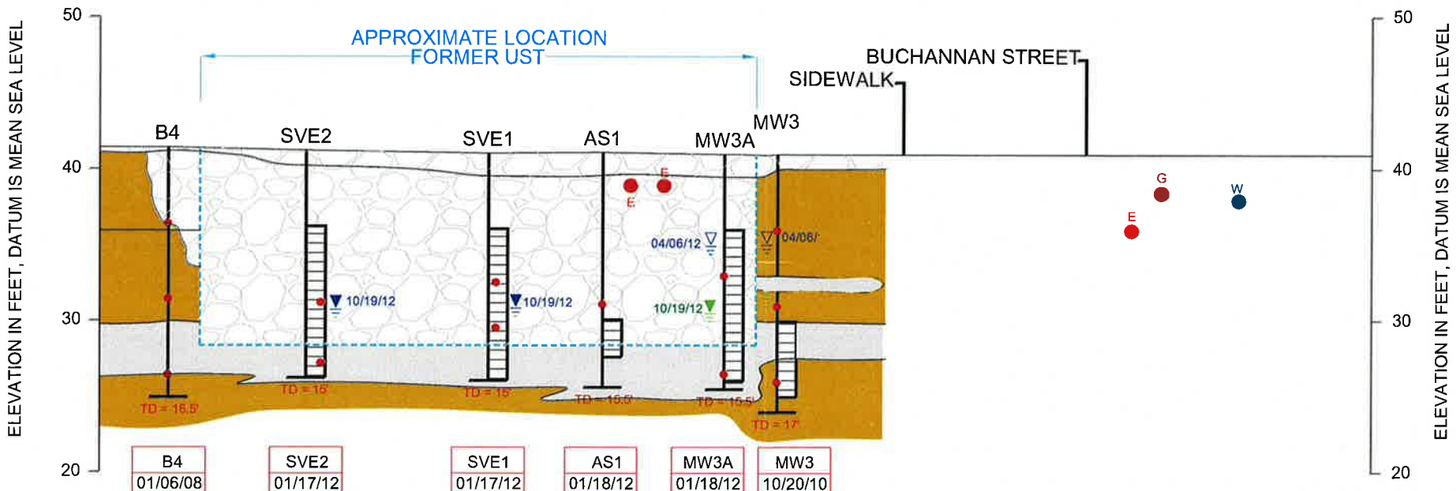
NORTH
B

SOUTH
B'

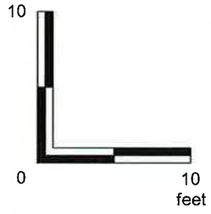


B4	SVE2	SVE1	AS1	MW3A	MW3
01/06/08	01/17/12	01/17/12	01/18/12	01/18/12	10/20/10
5.5 FT.	10 FT.	8.5 FT.	10 FT.	8 FT.	5 FT.
62d	37a	87a	800a	<5.0	<5.0
140e,f	390a	480a	2,900	<0.50	<0.50
<0.005	<0.50	<0.50	<2.5	<0.0050	<0.0050
<0.50	<0.50	<0.50	<2.5	<0.0050	<0.0050
10.5 FT.	14 FT.	11.5 FT.		14.5 FT.	11/08/10
15d	<5.0	<5.0		<5.0	10.5 FT.
140e,f	<0.50	18		<0.50	11a
0.25	<0.0050	<0.50		<0.0050	220
<0.50	<0.0050	<0.0050		<0.0050	<0.50
					<0.50
					15.5 FT.
					<5.0
					2.2
					<0.0050
					<0.0050

Analyte Concentrations in mg/kg

Sample
Sample Date
Sample Depth
Total Petroleum Hydrocarbons as diesel
Total Petroleum Hydrocarbons as gasoline
Benzene
Methyl Tertiary Butyl Ether

APPROXIMATE SCALE



No Vertical Exaggeration

<	Less Than the Stated Laboratory Reporting Limit
mg/kg	Milligrams per kilogram
a	Sample chromatographic pattern does not match that of the specified standard.
d	Gasoline range compounds are significant.
e	Strongly aged gasoline or diesel range compounds are significant.
f	No recognizable pattern.

FN 2735 12 4QTR XS B-B'_QM

Cardno ERI
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CROSS SECTION B-B,'
SELECT SOIL ANALYTICAL RESULTS

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

EXPLANATION

- Asphalt/Fill
- Fine-grained sediments
- Coarse-grained sediments
- E — Electrical Conduit
- G — Gas Line
- W — Water Line
- Soil Sample Depth
- TD = Total Depth
- Minimum Groundwater Level
- Current And Maximum Groundwater Level
- Current And First Groundwater Level

PROJECT NO. 2735

PLATE 11

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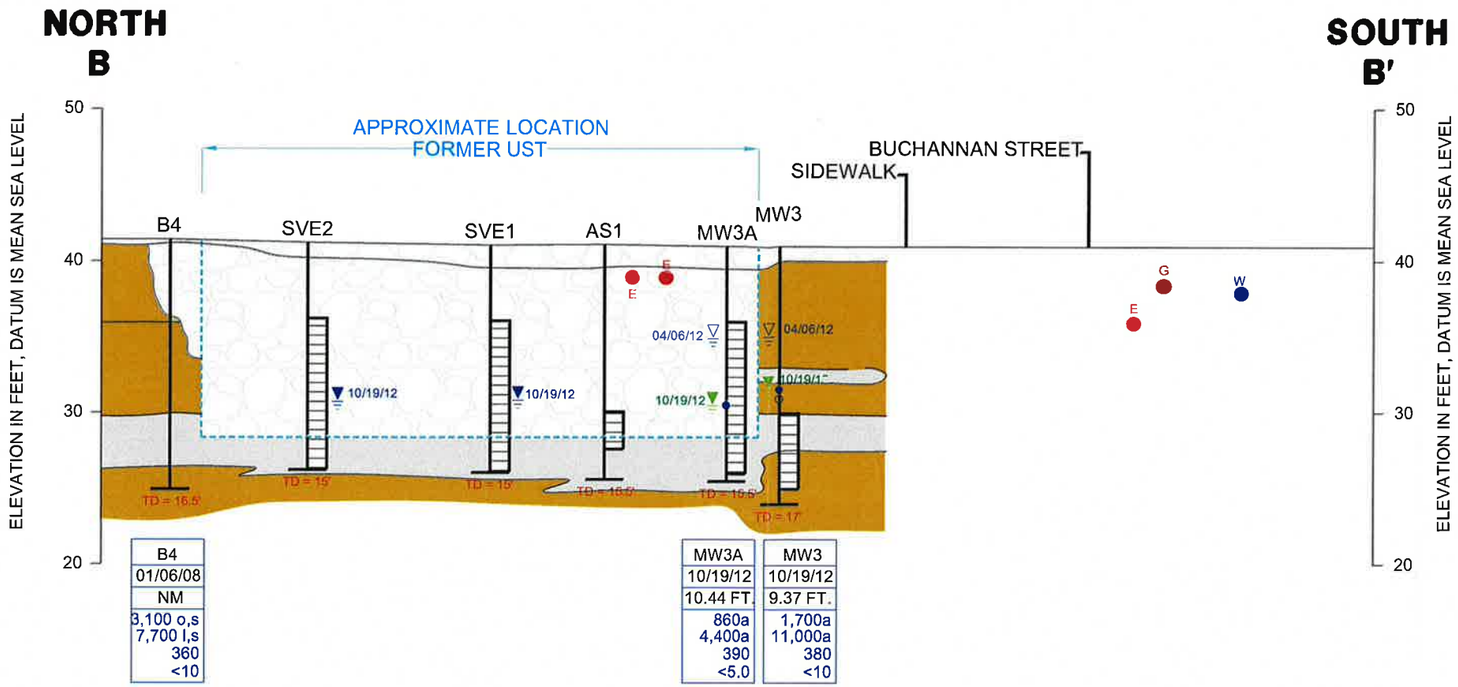

Analyte Concentrations in ug/L

Sample
Sample Date
Sample Depth
Total Petroleum Hydrocarbons as diesel
Total Petroleum Hydrocarbons as gasoline
Benzene
Methyl Tertiary Butyl Ether

< Less Than the Stated Laboratory Reporting Limit

ug/L Micrograms per Liter

a Sample chromatographic pattern does not match that of the specified standard.

l Unmodified or weakly modified gasoline is significant.

o Gasoline range compounds are significant.

s Liquid sample that contains greater than approximately 1 volume % sediment.

APPROXIMATE SCALE

10 0 10 feet

No Vertical Exaggeration

FN 2735 12 4QTR XS B-B'_QM

Cardno ERI
Shaping the Future

CROSS SECTION B-B', SELECT GROUNDWATER ANALYTICAL RESULTS

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

EXPLANATION

- Asphalt/Fill
- Fine-grained sediments
- Coarse-grained sediments
- E Electrical Conduit
- G Gas Line
- W Water Line
- Water Sample
- TD = Total Depth
- Minimum Groundwater Level
- Current And Maximum Groundwater Level
- Current And First Groundwater Level

PROJECT NO. 2735

PLATE 12

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
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**
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**
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**
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**
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

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
MW4	**10/19/12**	**---**	**39.30**	**10.64**	**28.66**	**No**	**---**	**1,400a**	**20,000a**	**270,000**	**<10**	**440**	**88**	**2,100**	**3,800**
MW5	11/11/10	---	Well installed.												
MW5	12/01/10	---	40.38	Well surveyed.											
MW5	12/16/10	---	40.38	7.69	32.69	No	---	<250	1,100a	6,200	<2.5	150	96	270	980
MW5	01/31/11	---	40.38	8.00	32.38	No	---	270	4,600a	15,000	<10	520	310	1,100	2,500
MW5	04/07/11	---	40.38	6.73	33.65	No	---	<250	610a	2,500	<2.5	61	32	180	390
MW5	07/18/11	---	40.38	7.63	32.75	No	---	<250	2,000a	11,000	<2.5	340	160	990	1,800
MW5	10/13/11	---	40.38	9.31	31.07	No	---	660	7,600a	23,000	<20	390	160	1,200	3,100
MW5	04/06/12	---	40.38	6.77	33.61	No	---	<250	880a	6,000a	<5.0	62	17	360	680
MW5	**10/19/12**	**---**	**40.38**	**10.64**	**29.74**	**No**	**---**	**280a**	**2,100a**	**15,000**	**<20**	**580**	**63**	**950**	**1,400**
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**
AS1	01/18/12	---	Well installed.												
AS1	**10/19/12**	**---**	**---**	**10.32**	**---**	**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**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE2	01/17/12	---	Well installed.												
SVE2	02/06/12	---	40.94	Well surveyed.											
SVE2	**10/19/12**	**---**	**40.94**	**10.48**	**30.46**	**No**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
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**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
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

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

Well ID	Sampling Date	Depth (feet)	TOC Elev. (feet)	DTW (feet)	GW Elev. (feet)	NAPL (feet)	O&G (µg/L)	TPHmo (µg/L)	TPHd (µg/L)	TPHg (µg/L)	MTBE (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
B-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

Notes:

TOC	=	Top of well casing elevation; datum is mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is 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 carbons analyzed using EPA Method 8260B.
Add'l SVOCs	=	Additional semi-volatile organic carbons 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	=	Sample 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.

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**	**---**	**---**
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**	**---**	**---**
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**	**---**	**---**
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**	**---**	**---**
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**	**---**	**---**
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	---	---

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)
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**	**---**	**---**
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**	**---**	**---**
AS1	01/18/12	---	Well installed.							
AS1	**10/19/12**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE1	01/17/12	---	Well installed.							
SVE1	**10/19/12**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE2	01/17/12	---	Well installed.							
SVE2	**10/19/12**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
SVE3	01/17/12	---	Well installed.							
SVE3	**10/19/12**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**	**---**
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	---	---

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-60.5-HP2B	10/27/10	60.5	<0.50	<0.50	<0.50	<5.0	<0.50	<0.50	---	---
W-10-SVE1-1	01/31/12	10	<2.0	<2.0	<2.0	62	<2.0	<2.0	---	---
W-10-SVE1-2	01/31/12	10	<1.0	<1.0	<1.0	57	<1.0	<1.0	---	---

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 mean sea level.
DTW	=	Depth to water.
GW Elev.	=	Groundwater elevation; datum is 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 carbons analyzed using EPA Method 8260B.
Add'l SVOCs	=	Additional semi-volatile organic carbons 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	=	Sample 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.

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	41.45	8	17	17	2	Schedule 40 PVC	12-17	0.020	10-17	#3 Sand
MW2	11/04/10	41.25	8	17	17	4	Schedule 40 PVC	12-17	0.020	10-17	#3 Sand
MW3	11/08/10	40.42	8	17	17	4	Schedule 40 PVC	11-16	0.020	9-16	#3 Sand
MW3A	01/18/12	40.68	10	15.5	15.5	4	Schedule 40 PVC	5-15	0.020	4.5-15.5	#2/12 Sand
MW4	11/05/10	39.30	8	17	13	2	Schedule 40 PVC	8-13	0.020	6-13	#3 Sand
MW5	11/05/10	40.38	8	17	14	2	Schedule 40 PVC	9-14	0.020	7-14	#3 Sand
MW6	11/03/10	41.06	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	40.58	10	15.5	15.5	4	Schedule 40 PVC	5-15	0.020	4.5-15.5	#2/12 Sand
SVE2	01/17/12	40.94	10	15	15	4	Schedule 40 PVC	5-15	0.020	4.5-15	#2/12 Sand
SVE3	01/17/12	40.93	10	15	15	4	Schedule 40 PVC	5-15	0.020	4.5-15.5	#2/12 Sand

Notes:
TOC = Top of well casing elevation; datum is mean sea level.
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 NOTES

Daily Field Report

Cardno ERI

Cardno ERI
Shaping the Future

Project ID #: 793741 **Cardno ERI Job #**

Subject: QM **Date:**

Equipment Used: Subpump, Bailer **Sheet:**

Name(s): S. Church

Time Arrived On Site: **Time Departed Site:** **Total Travel**

Onsite 415 H&S 415-430

Open 415-515 Purge 29
DTW 515-545 Decon 20
Purge 658-729 Total 49
Sample

Sampled MW 1, 2, 3, 3A, 4, 5, 6 MW 3 not recovered to 80% after 2 hrs

Offsite 1015

Out-Of-Scope Tasks:

*M/P/S ___ WELLS *M/S ___ WELLS *M/S LOW FLOW ___ WELLS

*MO ___ WELLS *O/P ___ WELLS *POTABLE ___ WELLS

*TOOK TWO AT _____

TOTAL PURGED GALLONS: _____

*___ T/C SET UPS

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	10-19-12	S. Chaack

WELL ID	WELL DIAMETER	ODOR? SHEEN?	TOTAL DEPTH	Pre-Purge DTW	Depth To PRODUCT	PRODUCT THICKNESS	COMMENTS
AS1	1		13,47	10,32			
SVE1	4		15,04	10,21			
SVE2	4		14,98	10,48			
SVE3	4		15,03	10,39			
mw2	4		15,20	11,03			
mw1	2		16,61	10,42			
mw3A	4		15,20	10,44			
mw5	2		13,40	10,64			
mw6	2		19,26	11,36			
mw4	2		13,10	10,64			
mw3	4		14,98	9,37			

GROUNDWATER SAMPLING FIELD LOG

Client Name: Exxon/Mobile
Location: 79374
Field Crew: S. Church

ERI Job #: 2735
Field Cleaning Performed:
Analysis:

Date: 10-16-12 Page 1 of 1

Case Volume = (TD - DTW) x F where F =
0.163 for 2" inside-diameter well casing
0.652 for 4" inside-diamter well casing
1.457 for 6" inside-diamter well casing

Well ID	Time	Case Volume	Purge Volume	Temp	Cond	pH	Post-Purge DTW	80% Recharge	BB	40mil	Amber	DO	ORP	Comments Well Box Condition
mw2	556	2.71	3				11.21	Y		6	2			OK
	558	3	3	22.2	1067	7.16	11		0810					Dry 6gal
	600		6	22.1	1083	7.00								
			9											
mw1	610	1.00	1				10.48	Y		6	2			OK
	611	1	1	22.5	921	7.04	10		0825					Dry 3gal
	612		2	23.0	998	7.09								
			3											
mw3A	633	3.10	4				10.61	Y		6	2			OK
	634	4	4	22.9	1062	6.94	11		0855					Dry 7gal
			8											
			12											
mw5	646	0.44	1				10.89	Y		6	2			OK
		1	1	22.9	1070	6.97	11		0910					Dry 1gal
			2											
			3											
mw6	657	1.28	2				12.90	Y		6	2			OK
	658	2	2	21.8	553	7.11	13		0935					Dry 5gal
	659		4	21.8	597	7.03								
			6											
mw4	716	0.40	1				10.67	Y		6	2			OK
	717	1	1	22.9	968	6.84	11		0950					Dry 2gal
			2											
			3											
mw3	726	5.61	6				13.19	N		6	2			OK
		6	6				13		1010					Dry 5gal
			12											
			18											

WATER SAMPLING SITE STATUS

Date: 10-19-12

Inspected by: S. Church

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

Well ID	Well Head Screws	Rubber Gasket	Well Cap Locking	Lock on Well Cap	Concrete Well Seal	Well Head PVC	Water in Well Vault	Tabs	Well Cover	Fence/Gate Condition	# Drums	Drum Contents	Building Condition	Site Appearance	Comments / Well Covers
	N/R/ok	N/R/ok	N/R/ok	N/R/ok	N/R/ok	N/R/ok	Y / N	N/R/ok	N/R/ok	N/R/ok		s/w/e	g/v/o	N/R/ok	
SVE1	OK	OK	OK	OK	OK	OK	N	OK	OK						
AS1	↓	↓	↓	↓	↓	↓	↓	↓	↓						
SVE2	↓	↓	↓	↓	↓	↓	↓	↓	↓						
SVE3	↓	↓	↓	↓	↓	↓	↓	↓	↓						
MW2	↓	↓	↓	↓	↓	↓	↓	↓	↓						
MW1	↓	↓	↓	↓	↓	↓	Y	↓	↓						
MW3A	↓	↓	↓	↓	↓	↓	N	↓	↓						
MW5	↓	↓	↓	↓	↓	↓	↓	↓	↓						
MW6	↓	↓	↓	↓	↓	↓	↓	↓	↓						
MW4	↓	↓	↓	↓	↓	↓	↓	↓	↓						
MW3	↓	↓	↓	↓	↓	↓	↓	↓	↓						

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).

APPENDIX C

LABORATORY ANALYTICAL REPORT AND CHAIN-OF-CUSTODY RECORD

Calscience Environmental Laboratories, Inc.

CALSCIENCE

WORK ORDER NUMBER: 12-10-1481

The difference is service

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Analytical Report For

Client: Cardno ERI

Client Project Name: ExxonMobil 79374/022735C

Attention: Rebekah Westrup
601 North McDowell Blvd.
Petaluma, CA 94954-2312

Cecile L deGuia

Approved for release on 11/2/2012 by:
Cecile deGuia
Project Manager

ResultLink ▸

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Calscience Environmental Laboratories, Inc.

Contents

Client Project Name: ExxonMobil 79374/022735C
Work Order Number: 12-10-1481

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI		Date Received:	10/20/12
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)

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-MW1	**12-10-1481-2-H**	**10/19/12 08:25**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 21:06**	**121022B07S**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	50	1	SG,U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	129	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW2	**12-10-1481-3-H**	**10/19/12 08:10**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 21:21**	**121022B07S**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	50	1	SG,U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	118	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW3	**12-10-1481-4-H**	**10/19/12 10:10**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 21:36**	**121022B07S**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	1700	50	1	SG,HD	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	102	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW3A	**12-10-1481-5-H**	**10/19/12 08:55**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 21:52**	**121022B07S**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	860	250	5	SG,HD	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	99	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

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Cardno ERI		Date Received:	10/20/12
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW4	**12-10-1481-6-H**	**10/19/12 09:50**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 22:07**	**121022B07S**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	20000	250	5	HD,SG	ug/L

Surrogates:	REC (%)	Control Limits	Qual
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-11-MW5	**12-10-1481-7-H**	**10/19/12 09:10**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 22:22**	**121022B07S**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	2100	50	1	SG,HD	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	103	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW6	**12-10-1481-8-H**	**10/19/12 09:35**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 22:38**	**121022B07S**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	99	50	1	SG,HD	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	103	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-304-132**	**N/A**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 17:31**	**121022B07S**

Parameter	Result	RL	DF	Qual	Units
TPH as Diesel	ND	50	1	U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	111	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Cardno ERI		Date Received:	10/20/12
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)

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-MW1	**12-10-1481-2-H**	**10/19/12 08:25**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 21:06**	**121022B08S**

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	250	1	SG,U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	129	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW2	**12-10-1481-3-H**	**10/19/12 08:10**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 21:21**	**121022B08S**

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	250	1	SG,U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	118	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW3	**12-10-1481-4-H**	**10/19/12 10:10**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 21:36**	**121022B08S**

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	250	1	SG,U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	103	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW3A	**12-10-1481-5-H**	**10/19/12 08:55**	**Aqueous**	**GC 47**	**10/22/12**	**10/26/12 09:53**	**121022B08S**

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	250	1	SG,U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	111	68-140	

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Cardno ERI		Date Received:	10/20/12
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW4	**12-10-1481-6-H**	**10/19/12 09:50**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 22:07**	**121022B08S**

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	1400	1200	5	SG,HD	ug/L

Surrogates:	REC (%)	Control Limits	Qual
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-11-MW5	**12-10-1481-7-H**	**10/19/12 09:10**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 22:22**	**121022B08S**

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	280	250	1	SG,HD	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	103	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW6	**12-10-1481-8-H**	**10/19/12 09:35**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 22:38**	**121022B08S**

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	250	1	SG,U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	103	68-140	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-15-278-116**	**N/A**	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12 17:31**	**121022B08S**

Parameter	Result	RL	DF	Qual	Units
TPH as Motor Oil	ND	250	1	U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
n-Octacosane	111	68-140	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Cardno ERI		Date Received:	10/20/12
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)

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-MW1	**12-10-1481-2-E**	**10/19/12 08:25**	**Aqueous**	**GC 57**	**10/26/12**	**10/26/12 15:35**	**121026B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	50	1	U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	111	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW2	**12-10-1481-3-D**	**10/19/12 08:10**	**Aqueous**	**GC 57**	**10/26/12**	**10/26/12 17:09**	**121026B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	59	50	1	HD	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW3	**12-10-1481-4-D**	**10/19/12 10:10**	**Aqueous**	**GC 57**	**10/26/12**	**10/27/12 02:33**	**121026B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	11000	500	10	HD	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	111	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW3A	**12-10-1481-5-D**	**10/19/12 08:55**	**Aqueous**	**GC 57**	**10/26/12**	**10/27/12 02:02**	**121026B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	4400	250	5	HD	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	90	38-134	

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Cardno ERI		Date Received:	10/20/12
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW4	**12-10-1481-6-F**	**10/19/12 09:50**	**Aqueous**	**GC 24**	**10/30/12**	**10/30/12 17:10**	**121030B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	270000	5000	100		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	117	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW5	**12-10-1481-7-E**	**10/19/12 09:10**	**Aqueous**	**GC 24**	**10/27/12**	**10/28/12 02:42**	**121027B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	15000	500	10		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW6	**12-10-1481-8-D**	**10/19/12 09:35**	**Aqueous**	**GC 57**	**10/26/12**	**10/26/12 17:40**	**121026B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	510	50	1	HD	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	100	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-436-7,972**	**N/A**	**Aqueous**	**GC 57**	**10/26/12**	**10/26/12 13:03**	**121026B01**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	50	1	U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	72	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Cardno ERI		Date Received:	10/20/12
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)

Project: ExxonMobil 79374/022735C

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-436-7,976**	**N/A**	**Aqueous**	**GC 24**	**10/27/12**	**10/27/12 12:50**	**121027B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	50	1	U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	73	38-134	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-436-7,979**	**N/A**	**Aqueous**	**GC 24**	**10/30/12**	**10/30/12 12:39**	**121030B02**

Parameter	Result	RL	DF	Qual	Units
TPH as Gasoline	ND	50	1	U	ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	62	38-134	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 10/20/12
Work Order No: 12-10-1481
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-MW1	**12-10-1481-2-A**	**10/19/12 08:25**	**Aqueous**	**GC/MS L**	**10/24/12**	**10/24/12 17:25**	**121024L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	0.51	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	U
Toluene	2.2	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	U
Ethylbenzene	ND	0.50	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	U
Xylenes (total)	0.65	0.50	1		1,2-Dibromoethane	ND	0.50	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	U	1,2-Dichloroethane	ND	0.50	1	U
Tert-Butyl Alcohol (TBA)	ND	5.0	1	U					

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	91	68-120		Dibromofluoromethane	102	80-127	
1,2-Dichloroethane-d4	103	80-128		Toluene-d8	97	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW2	**12-10-1481-3-A**	**10/19/12 08:10**	**Aqueous**	**GC/MS L**	**10/24/12**	**10/24/12 17:54**	**121024L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1	U	Diisopropyl Ether (DIPE)	ND	0.50	1	U
Toluene	ND	0.50	1	U	Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	U
Ethylbenzene	ND	0.50	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	U
Xylenes (total)	ND	0.50	1	U	1,2-Dibromoethane	ND	0.50	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	U	1,2-Dichloroethane	ND	0.50	1	U
Tert-Butyl Alcohol (TBA)	ND	5.0	1	U					

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	93	68-120		Dibromofluoromethane	106	80-127	
1,2-Dichloroethane-d4	106	80-128		Toluene-d8	98	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-13-MW3	**12-10-1481-4-B**	**10/19/12 10:10**	**Aqueous**	**GC/MS L**	**10/25/12**	**10/25/12 14:42**	**121025L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	380	10	20		Diisopropyl Ether (DIPE)	ND	10	20	U
Toluene	120	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	U
Ethylbenzene	740	10	20		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	U
Xylenes (total)	150	10	20		1,2-Dibromoethane	ND	10	20	U
Methyl-t-Butyl Ether (MTBE)	ND	10	20	U	1,2-Dichloroethane	ND	10	20	U
Tert-Butyl Alcohol (TBA)	ND	100	20	U					

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	96	68-120		Dibromofluoromethane	92	80-127	
1,2-Dichloroethane-d4	88	80-128		Toluene-d8	103	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Analytical Report

Cardno ERI		Date Received:	10/20/12
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		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-11-MW3A	**12-10-1481-5-B**	**10/19/12 08:55**	**Aqueous**	**GC/MS L**	**10/25/12**	**10/25/12 15:10**	**121025L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	390	5.0	10		Diisopropyl Ether (DIPE)	ND	5.0	10	U
Toluene	59	5.0	10		Ethyl-t-Butyl Ether (ETBE)	ND	5.0	10	U
Ethylbenzene	410	10	20		Tert-Amyl-Methyl Ether (TAME)	ND	5.0	10	U
Xylenes (total)	82	5.0	10		1,2-Dibromoethane	ND	5.0	10	U
Methyl-t-Butyl Ether (MTBE)	ND	5.0	10	U	1,2-Dichloroethane	ND	5.0	10	U
Tert-Butyl Alcohol (TBA)	ND	50	10	U					

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	96	68-120		Dibromofluoromethane	94	80-127	
1,2-Dichloroethane-d4	91	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-11-MW4	**12-10-1481-6-A**	**10/19/12 09:50**	**Aqueous**	**GC/MS L**	**10/24/12**	**10/24/12 19:19**	**121024L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	440	10	20		Diisopropyl Ether (DIPE)	ND	10	20	U
Toluene	88	10	20		Ethyl-t-Butyl Ether (ETBE)	ND	10	20	U
Ethylbenzene	2100	40	80		Tert-Amyl-Methyl Ether (TAME)	ND	10	20	U
Xylenes (total)	3800	40	80		1,2-Dibromoethane	ND	10	20	U
Methyl-t-Butyl Ether (MTBE)	ND	10	20	U	1,2-Dichloroethane	ND	10	20	U
Tert-Butyl Alcohol (TBA)	ND	100	20	U					

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	89	68-120		Dibromofluoromethane	84	80-127	
1,2-Dichloroethane-d4	88	80-128		Toluene-d8	104	80-120	

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
W-11-MW5	**12-10-1481-7-B**	**10/19/12 09:10**	**Aqueous**	**GC/MS L**	**10/25/12**	**10/25/12 16:07**	**121025L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	580	20	40		Diisopropyl Ether (DIPE)	ND	20	40	U
Toluene	63	20	40		Ethyl-t-Butyl Ether (ETBE)	ND	20	40	U
Ethylbenzene	950	20	40		Tert-Amyl-Methyl Ether (TAME)	ND	20	40	U
Xylenes (total)	1400	20	40		1,2-Dibromoethane	ND	20	40	U
Methyl-t-Butyl Ether (MTBE)	ND	20	40	U	1,2-Dichloroethane	ND	20	40	U
Tert-Butyl Alcohol (TBA)	ND	200	40	U					

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	96	68-120		Dibromofluoromethane	96	80-127	
1,2-Dichloroethane-d4	95	80-128		Toluene-d8	101	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 10/20/12
Work Order No: 12-10-1481
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-MW6	**12-10-1481-8-A**	**10/19/12 09:35**	**Aqueous**	**GC/MS L**	**10/24/12**	**10/24/12 20:16**	**121024L01**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	4.2	0.50	1		Diisopropyl Ether (DIPE)	ND	0.50	1	U
Toluene	1.6	0.50	1		Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	U
Ethylbenzene	8.0	0.50	1		Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	U
Xylenes (total)	7.0	0.50	1		1,2-Dibromoethane	ND	0.50	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	U	1,2-Dichloroethane	ND	0.50	1	U
Tert-Butyl Alcohol (TBA)	ND	5.0	1	U					

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	94	68-120		Dibromofluoromethane	93	80-127	
1,2-Dichloroethane-d4	88	80-128		Toluene-d8	99	80-120	

Method Blank	099-12-884-947	N/A	Aqueous	GC/MS L	10/24/12	10/24/12 12:10	121024L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1	U	Diisopropyl Ether (DIPE)	ND	0.50	1	U
Toluene	ND	0.50	1	U	Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	U
Ethylbenzene	ND	0.50	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	U
Xylenes (total)	ND	0.50	1	U	1,2-Dibromoethane	ND	0.50	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	U	1,2-Dichloroethane	ND	0.50	1	U
Tert-Butyl Alcohol (TBA)	ND	5.0	1	U					

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	90	68-120		Dibromofluoromethane	109	80-127	
1,2-Dichloroethane-d4	106	80-128		Toluene-d8	97	80-120	

Method Blank	099-12-884-948	N/A	Aqueous	GC/MS L	10/25/12	10/25/12 12:19	121025L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1	U	Diisopropyl Ether (DIPE)	ND	0.50	1	U
Toluene	ND	0.50	1	U	Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	U
Ethylbenzene	ND	0.50	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	U
Xylenes (total)	ND	0.50	1	U	1,2-Dibromoethane	ND	0.50	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	U	1,2-Dichloroethane	ND	0.50	1	U
Tert-Butyl Alcohol (TBA)	ND	5.0	1	U					

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	90	68-120		Dibromofluoromethane	100	80-127	
1,2-Dichloroethane-d4	107	80-128		Toluene-d8	91	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI		Date Received:	10/20/12
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B
		Units:	ug/L
Project: ExxonMobil 79374/022735C			Page 4 of 4

Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**099-12-884-950**	**N/A**	**Aqueous**	**GC/MS L**	**10/25/12**	**10/26/12 00:15**	**121025L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Benzene	ND	0.50	1	U	Diisopropyl Ether (DIPE)	ND	0.50	1	U
Toluene	ND	0.50	1	U	Ethyl-t-Butyl Ether (ETBE)	ND	0.50	1	U
Ethylbenzene	ND	0.50	1	U	Tert-Amyl-Methyl Ether (TAME)	ND	0.50	1	U
Xylenes (total)	ND	0.50	1	U	1,2-Dibromoethane	ND	0.50	1	U
Methyl-t-Butyl Ether (MTBE)	ND	0.50	1	U	1,2-Dichloroethane	ND	0.50	1	U
Tert-Butyl Alcohol (TBA)	ND	5.0	1	U					

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	89	68-120		Dibromofluoromethane	108	80-127	
1,2-Dichloroethane-d4	107	80-128		Toluene-d8	95	80-120	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 10/20/12
Work Order No: 12-10-1481
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
W-10-MW1	**Aqueous**	**GC 57**	**10/26/12**	**10/26/12**	**121026S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	1916	96	1869	93	68-122	2	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 10/20/12
Work Order No: 12-10-1481
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-10-1917-1	**Aqueous**	**GC 24**	**10/27/12**	**10/27/12**	**121027S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	1871	94	1875	94	68-122	0	0-18	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 10/20/12
Work Order No: 12-10-1481
Preparation: EPA 5030C
Method: EPA 8015B (M)

Project ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-10-1825-1	**Aqueous**	**GC 24**	**10/30/12**	**10/30/12**	**121030S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	ND	2000	1438	72	1790	89	68-122	22	0-18	BA

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 10/20/12
Work Order No: 12-10-1481
Preparation: EPA 5030C
Method: EPA 8260B

Project ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-10-1252-1	**Aqueous**	**GC/MS L**	**10/24/12**	**10/24/12**	**121024S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	16.50	10.00	27.73	112	25.63	91	76-124	8	0-20	
Toluene	1.544	10.00	12.29	107	12.04	105	80-120	2	0-20	
Ethylbenzene	ND	10.00	11.21	112	10.89	109	78-126	3	0-20	
Xylenes (total)	0.9525	30.00	33.64	109	33.48	108	70-130	0	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	10.24	102	9.928	99	67-121	3	0-49	
Tert-Butyl Alcohol (TBA)	ND	50.00	68.53	137	46.23	92	36-162	39	0-30	BA
Diisopropyl Ether (DIPE)	ND	10.00	10.88	109	10.27	103	60-138	6	0-45	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	11.12	111	10.70	107	69-123	4	0-30	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	10.79	108	10.49	105	65-120	3	0-20	
1,2-Dibromoethane	ND	10.00	10.60	106	10.51	105	80-120	1	0-20	
1,2-Dichloroethane	ND	10.00	10.55	105	9.717	97	80-120	8	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI		Date Received:	10/20/12
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B

Project ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-10-1479-1	**Aqueous**	**GC/MS L**	**10/25/12**	**10/25/12**	**121025S01**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	10.28	10.00	20.13	99	20.81	105	76-124	3	0-20	
Toluene	ND	10.00	10.47	105	10.91	109	80-120	4	0-20	
Ethylbenzene	1.340	10.00	12.12	108	12.49	111	78-126	3	0-20	
Xylenes (total)	ND	30.00	31.95	107	33.55	112	70-130	5	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.771	98	10.18	102	67-121	4	0-49	
Tert-Butyl Alcohol (TBA)	ND	50.00	68.56	137	45.25	90	36-162	41	0-30	BA
Diisopropyl Ether (DIPE)	ND	10.00	10.14	101	10.57	106	60-138	4	0-45	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	10.46	105	10.75	107	69-123	3	0-30	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	10.26	103	10.97	110	65-120	7	0-20	
1,2-Dibromoethane	ND	10.00	10.24	102	10.72	107	80-120	5	0-20	
1,2-Dichloroethane	ND	10.00	9.836	98	10.20	102	80-120	4	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

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

Date Received: 10/20/12
Work Order No: 12-10-1481
Preparation: EPA 5030C
Method: EPA 8260B

Project ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
12-10-1726-2	**Aqueous**	**GC/MS L**	**10/25/12**	**10/26/12**	**121025S02**

Parameter	SAMPLE CONC	SPIKE ADDED	MS CONC	MS %REC	MSD CONC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	0.7395	10.00	11.19	104	11.02	103	76-124	1	0-20	
Toluene	ND	10.00	10.67	107	10.40	104	80-120	3	0-20	
Ethylbenzene	ND	10.00	10.54	105	10.41	104	78-126	1	0-20	
Xylenes (total)	ND	30.00	32.12	107	31.38	105	70-130	2	0-30	
Methyl-t-Butyl Ether (MTBE)	ND	10.00	9.878	99	9.889	99	67-121	0	0-49	
Tert-Butyl Alcohol (TBA)	ND	50.00	67.92	136	67.53	135	36-162	1	0-30	
Diisopropyl Ether (DIPE)	ND	10.00	10.44	104	10.43	104	60-138	0	0-45	
Ethyl-t-Butyl Ether (ETBE)	ND	10.00	10.71	107	10.67	107	69-123	0	0-30	
Tert-Amyl-Methyl Ether (TAME)	ND	10.00	10.64	106	10.46	105	65-120	2	0-20	
1,2-Dibromoethane	ND	10.00	10.72	107	10.25	102	80-120	5	0-20	
1,2-Dichloroethane	ND	10.00	10.08	101	9.750	97	80-120	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI		Date Received:	N/A
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)

Project: ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-278-116	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12**	**121022B08S**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Motor Oil	2000	1989	99	2050	102	75-117	3	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI		Date Received:	N/A
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 3510C
		Method:	EPA 8015B (M)

Project: ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-15-304-132	**Aqueous**	**GC 47**	**10/22/12**	**10/23/12**	**121022B07S**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Diesel	2000	2161	108	2189	109	75-117	1	0-13	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI		Date Received:	N/A
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)

Project: ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-436-7,972	**Aqueous**	**GC 57**	**10/26/12**	**10/26/12**	**121026B01**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	2000	1777	89	1808	90	78-120	2	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI		Date Received:	N/A
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)

Project: ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-436-7,976	**Aqueous**	**GC 24**	**10/27/12**	**10/27/12**	**121027B02**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	2000	1812	91	1841	92	78-120	2	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI		Date Received:	N/A
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8015B (M)

Project: ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-436-7,979	**Aqueous**	**GC 24**	**10/30/12**	**10/30/12**	**121030B02**

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH as Gasoline	2000	1859	93	1882	94	78-120	1	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI	Date Received: N/A
601 North McDowell Blvd.	Work Order No: 12-10-1481
Petaluma, CA 94954-2312	Preparation: EPA 5030C
	Method: EPA 8260B

Project: ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-884-947	Aqueous	GC/MS L	10/24/12	10/24/12	121024L01

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	10.00	10.47	105	10.70	107	80-120	73-127	2	0-20	
Toluene	10.00	10.67	107	10.65	107	80-120	73-127	0	0-20	
Ethylbenzene	10.00	10.89	109	10.90	109	80-120	73-127	0	0-20	
Xylenes (total)	30.00	33.34	111	32.50	108	75-125	67-133	3	0-25	
Methyl-t-Butyl Ether (MTBE)	10.00	9.819	98	10.16	102	69-123	60-132	3	0-20	
Tert-Butyl Alcohol (TBA)	50.00	49.60	99	50.60	101	63-123	53-133	2	0-20	
Diisopropyl Ether (DIPE)	10.00	11.03	110	11.13	111	59-137	46-150	1	0-37	
Ethyl-t-Butyl Ether (ETBE)	10.00	11.12	111	11.25	113	69-123	60-132	1	0-20	
Tert-Amyl-Methyl Ether (TAME)	10.00	10.61	106	10.49	105	70-120	62-128	1	0-20	
1,2-Dibromoethane	10.00	10.25	103	10.32	103	79-121	72-128	1	0-20	
1,2-Dichloroethane	10.00	9.902	99	10.15	101	80-120	73-127	2	0-20	

Total number of LCS compounds : 11
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI		Date Received:	N/A
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B

Project: ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-884-948	Aqueous	GC/MS L	10/25/12	10/25/12	121025L01

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	10.00	9.511	95	10.33	103	80-120	73-127	8	0-20	
Toluene	10.00	9.342	93	10.29	103	80-120	73-127	10	0-20	
Ethylbenzene	10.00	10.04	100	10.78	108	80-120	73-127	7	0-20	
Xylenes (total)	30.00	30.79	103	33.08	110	75-125	67-133	7	0-25	
Methyl-t-Butyl Ether (MTBE)	10.00	8.802	88	9.926	99	69-123	60-132	12	0-20	
Tert-Butyl Alcohol (TBA)	50.00	49.30	99	49.27	99	63-123	53-133	0	0-20	
Diisopropyl Ether (DIPE)	10.00	9.388	94	10.71	107	59-137	46-150	13	0-37	
Ethyl-t-Butyl Ether (ETBE)	10.00	9.446	94	10.78	108	69-123	60-132	13	0-20	
Tert-Amyl-Methyl Ether (TAME)	10.00	9.616	96	10.37	104	70-120	62-128	8	0-20	
1,2-Dibromoethane	10.00	9.942	99	10.92	109	79-121	72-128	9	0-20	
1,2-Dichloroethane	10.00	9.764	98	10.29	103	80-120	73-127	5	0-20	

Total number of LCS compounds : 11
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

ACCREDITED IN ACCORDANCE WITH nelac

Cardno ERI		Date Received:	N/A
601 North McDowell Blvd.		Work Order No:	12-10-1481
Petaluma, CA 94954-2312		Preparation:	EPA 5030C
		Method:	EPA 8260B

Project: ExxonMobil 79374/022735C

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-12-884-950	Aqueous	GC/MS L	10/25/12	10/25/12	121025L02

Parameter	SPIKE ADDED	LCS CONC	LCS %REC	LCSD CONC	LCSD %REC	%REC CL	ME CL	RPD	RPD CL	Qualifiers
Benzene	10.00	9.775	98	9.621	96	80-120	73-127	2	0-20	
Toluene	10.00	9.861	99	9.761	98	80-120	73-127	1	0-20	
Ethylbenzene	10.00	10.15	102	9.949	99	80-120	73-127	2	0-20	
Xylenes (total)	30.00	31.11	104	30.65	102	75-125	67-133	1	0-25	
Methyl-t-Butyl Ether (MTBE)	10.00	9.311	93	8.939	89	69-123	60-132	4	0-20	
Tert-Butyl Alcohol (TBA)	50.00	49.25	98	47.07	94	63-123	53-133	5	0-20	
Diisopropyl Ether (DIPE)	10.00	9.959	100	9.847	98	59-137	46-150	1	0-37	
Ethyl-t-Butyl Ether (ETBE)	10.00	10.17	102	9.881	99	69-123	60-132	3	0-20	
Tert-Amyl-Methyl Ether (TAME)	10.00	10.04	100	9.670	97	70-120	62-128	4	0-20	
1,2-Dibromoethane	10.00	9.962	100	9.639	96	79-121	72-128	3	0-20	
1,2-Dichloroethane	10.00	9.414	94	9.077	91	80-120	73-127	4	0-20	

Total number of LCS compounds : 11
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 12-10-1481

Qualifier	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 matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
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.
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 a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported without further clarification.
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 and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
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.
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/LCSD Recovery Percentage is within Marginal Exceedance (ME) Control Limit range.
SG	A silica gel cleanup procedure was performed.
SN	See applicable analysis comment.
U	Undetected at detection limit.

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.
MPN - Most Probable Number

Cecile de Guia

From: azat magdanov [azat.magdanov@cardno.com]
Sent: Tuesday, October 23, 2012 9:59 AM
To: Cecile de Guia
Cc: Rebekah Westrup; David R. Daniels; Judy Hutton
Subject: RE: ExxonMobil 79374; 12-10-1481

Hi again, Cecile,

The COC is correct there's mistake in the label. It's W-11-MW2 @ 0810 10/19/2012.

Kind regards,

Azat Magdanov
SENIOR ENVIRONMENTAL TECHNICIAN
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: Rebekah Westrup
Sent: Tuesday, October 23, 2012 9:32 AM
To: David R. Daniels; azat magdanov
Subject: Fwd: ExxonMobil 79374; 12-10-1481

Please correct and cc me when returned to Cecile

Sent from my mobile device

Begin forwarded message:

> **From:** "Cecile de Guia" <cdeguia@calscience.com>
> **To:** "Rebekah Westrup" <rebekah.westrup@cardno.com>, "Judy Hutton" <judy.hutton@cardno.com>
> **Subject: ExxonMobil 79374; 12-10-1481**
>
> Good Morning Rebekah,
>
> Please verify the sample label ID for #3? The label says W-10-MW2 collected on 109/12 @ 0810 and it didn't match the COC.
> Thank you.
>
> Best regards,
> Cecile de Guia
> Project Manager
>
> [cid:image004.jpg@01CDB0FF.DCDE2EF0]
> 7440 Lincoln Way
> Garden Grove, CA 92841-1427
> (714) 895-5494

Calscience Environmental Laboratories, Inc.

7440 Lincoln Way
Garden Grove, CA 92841

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

ExxonMobil 12-10-1481

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:** Rebekah Westrup
ExxonMobil Project Mgr: Jennifer Sedlachek | **Project Name:** 02 2735 C
Consultant Project Mgr: Rebekah Westrup | **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): Steve Church | **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				RUSH TAT (Pre-Schedule	5-day TAT	Standard 10-day TAT	Due Date of Report
1	QCBB	QCBB	10-19-12	1145	2						2v														X		H	O	L	D						
2	W-10-MW1	MW1		825	8						6v						2A		X							X	X	X	X	X						X
3	W-11-MW2	MW2		810	8						6v						2A		X							X	X	X	X	X						X
4	W-13-MW3	MW3		1010	8						6v						2A		X							X	X	X	X	X						X
5	W-11-MW3A	MW3A		855	8						6v						2A		X							X	X	X	X	X						X
6	W-11-MW4	MW4		950	8						6v						2A		X							X	X	X	X	X						X
7	W-11-MW5	MW5		910	8						6v						2A		X							X	X	X	X	X						X
8	W-13-MW6	MW6		935	8						6v						2A		X							X	X	X	X	X						X

Comments/Special Instructions:
PLEASE E-MAIL ALL PDF FILES TO
norcallabs@eri-us.com; ERI-EIMLABS@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
		10/19/12	1250	Tomalley CER	10/19/12	1250
Relinquished by:		Date	Time	Received by (Lab personnel):	Date	Time
Tomalley TO	650	10/19/12	1730	CSL	10/20/12	1000

1481

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 #: 520253750

SDS

ORC

A

GARDEN GROVE

D92841A

5785683

Print Date : 10/19/12 16:45 PM

Package 3 of 3

Send Label To Printer | ☑ Print All | Edit Shipment | Finish

LABEL INSTRUCTIONS:

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

STEP 1 - Use the "Send Label to Printer" button on this page to print the shipping label on a laser or inkjet printer.
STEP 2 - Fold this page in half.
STEP 3 - Securely attach this label to your package, do not cover the barcode.
STEP 4 - Request an on-call pickup for your package, if you do not have scheduled daily pickup service or Drop-off your package at the nearest GSO drop box. Locate nearest GSO dropbox locations using this link.

ADDITIONAL OPTIONS:

Send Label Via Email | Create Return Label

TERMS AND CONDITIONS:

By giving us your shipment to deliver, you agree to all the service terms and conditions described in this section.
Our liability for loss or damage to any package is limited to your actual damages or $100 whichever is less, unless you pay for and declare a higher authorized value. If you declare a higher value and pay the additional charge, our liability will be the lesser of your declared value or the actual value of your loss or damage. In any event, we will not be liable for any damage, whether direct, incidental, special or consequential, in excess of the declared value of a shipment whether or not we had knowledge that such damage might be incurred including but not limited to loss of income or profit. We will not be liable for your acts or omissions, including but not limited to improper or insufficient packaging, securing, marking or addressing. Also, we will not be liable if you or the recipient violates any of the terms of our agreement. We will not be liable for loss, damage or delay caused by events we cannot control, including but not limited to acts of God, perils of the air, weather conditions, act of public enemies, war, strikes, or civil commotion. The highest declared value for our GSO Priority Letter or GSO Priority Package is $500. For other shipments the highest declared value is $10,000 unless your package contains items of "extraordinary value", in which case the highest declared value we allow is $500. Items of "extraordinary value" include, but or not limited to, artwork, jewelry, furs, precious metals, tickets, negotiable instruments and other items with intrinsic value.

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-10-1481

SAMPLE RECEIPT FORM

Cooler 1 of 1

CLIENT: Cardno ERI DATE: 10/20/12

TEMPERATURE: Thermometer ID: SC4 (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.6 °C - 0.3 °C (CF) = 3.3 °C ☑ Blank ☐ Sample

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

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

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

Ambient Temperature: ☐ Air ☐ Filter Initial: YC

CUSTODY SEALS INTACT:

☑ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A Initial: YC

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present Initial: [illegible]

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	☑ DM 10/20/12	☑	☐
Sample container(s) intact and good condition	☑	☐	☐
Proper containers and sufficient volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
pH / Res. Chlorine / Diss. Sulfide / Diss. Oxygen received within 24 hours	☐	☐	☑
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® ☐_____

Water: ☐VOA 6 ☑VOAh ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☐1AGB**na$_2$** ☐1AGB**s**

☐500AGB 2 ☑500AGJ ☐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#:** NA **Labeled/Checked by:** [illegible]

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

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:** [illegible]

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 12-10-1 4 8 1

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

Comments:

- ☐ **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** — 3) labeled as W-10-MW2 10/19/12. @ 0810
  - ☐ **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:** _____

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: WS 10/20/12

APPENDIX D

WASTE DISPOSAL DOCUMENTATION

NON-HAZARDOUS WASTE MANIFEST

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

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. ER12735

2. Page 1 of 1

3. Generator's Name and Mailing Address: EM#79374, 990 SAN PABLO AVE, ALBANY, CA

CARDNO ERI

4. Generator's Phone ( )

5. Transporter 1 Company Name: CARDNO ERI

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

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

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone (707) 374-3834

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. NON-HAZ PURGE WATER	01	POLY	49	GAL
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above: CLEAR, NO ODOR/SOLID

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name | Signature | Date: Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Drew Hazen | Signature | Date: Month 10 Day 26 Year 12

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

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

Printed/Typed Name: MICHAEL WHITEHEAD | Signature | Date: Month 10 Day 26 Year 12

APPENDIX E

CORRESPONDENCE

Rebekah Westrup

From: Jakub, Barbara, Env. Health <barbara.jakub@acgov.org>
Sent: Friday, October 05, 2012 11:41 AM
To: Rebekah Westrup; jennifer.c.sedlachek@exxonmobil.com
Subject: RE: RO 2974 "Work Plan for Groundwater Monitoring, Air Sparge and Soil Vapor Extraction Well Installations"

Dear Ms. Sedlachek,

I have performed a review of the *Work Plan for Groundwater Monitoring, Air Sparge and Soil Vapor Extraction Well Installations* dated August 1, 2012 and *Groundwater Monitoring Report, Second Quarter 2012* dated May 25, 2012 prepared by Cardo ERI. Before this work plan can be approved, I need some clarifications and additional information.

The rose diagram from the groundwater monitoring report indicates that that primary groundwater flow directions have been to the north, NNE, SSE, and NNW . However the proposed groundwater monitoring wells are located to the Southwest. Please provide your justification for these locations or relocate them. Include a contaminant isoconcentration contour map on this proposed location map for contaminants of concern.

Please provide at least two cross-sections, at least one perpendicular and one parallel to the groundwater flow direction, include the lithology and contaminant concentrations, groundwater high and low elevations, proposed SVE and air-sparge screen intervals, the tank pit and any utility conduits that are on-site. Also, if the site surface has a large vertical variation, please use the elevation on the vertical scale.

As I have requested for other sites, please enlarge the site area presented on the site maps (groundwater elevation maps, etc.) so information is easily readable. Please evaluate if the data that is used on the groundwater elevation map is all from the same screened interval. Prepare groundwater contour elevation maps using only wells from the same screened interval. Evaluate if the previous groundwater flow directions presented on the rose diagram are accurate in light of this apparent inclusion of anomalous data. Also include an arrow showing the groundwater flow direction on all future groundwater elevation maps.

Please submit the requested evaluation and cross-sections in a work plan addendum by November 5, 2012.

Regards,

Barbara Jakub, P.G.
Hazardous Materials Specialist
Alameda County Environmental Health
1131 Harbor Bay Pky.
Alameda, CA 94502
Direct: 510-639-1287
Fax: 510-337-9335

PDF copies of case files can be downloaded at:

http://ehgis.acgov.org/dehpublic/dehpublic.jsp

From: Rebekah Westrup [mailto:rebekah.westrup@cardno.com]
Sent: Thursday, October 04, 2012 8:25 AM
To: Jakub, Barbara, Env. Health
Subject: RO 2974 "Work Plan for Groundwater Monitoring, Air Sparge and Soil Vapor Extraction Well Installations"

Barb:

I am just following up on the above referenced Work Plan that we submitted on August 1, 2012. We are eager to move forward with this work, and anticipate that placement of the offsite wells will require additional permitting. We want to try to start that process before the Holidays, but cannot do so until we have your approval for the proposed work. Have you had a chance to review this work plan? Please let me know if you have any questions or concerns. I hope things are going well with you.

Rebekah A. Westrup
SR STAFF GEOLOGIST
CARDNO ERI

Cardno ERI
Shaping the Future

Phone (+1) 707-766-2000 Fax (+1) 707-789-0414 Mobile (+1) 707-338-8555
Address 601 North McDowell Blvd., Petaluma, CA 94954-2312 USA
Email rebekah.westrup@cardno.com Web www.cardno.com www.cardnoeri.com