James P. Kiernan, P.E.
Project Manager

Chevron Environmental Management Company
6001 Bollinger Canyon Road
Room C2102
San Ramon, CA 94583
Tel (925) 842-3220
jkiernan@chevron.com

November 7, 2016

Alameda County Health Care Services Agency
Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: Second Half 2016 Semi-Annual Groundwater Monitoring Report
Commingled Plume #0068
706, 726, and 800 Harrison Street, Oakland, California
Fuel Leak Case No.: RO0000484/RO0000321/RO0000231

I have reviewed the attached report dated November 7, 2016.

I agree with the conclusions and recommendations presented in the referenced report. The information in this report is accurate to the best of my knowledge and all local Agency/Regional Board guidelines have been followed. This report was prepared by Arcadis U.S., Inc., upon whose assistance and advice I have relied.

This letter is submitted pursuant to the requirements of California Water Code Section 13257(b)(1) and the regulating implementation entitled Appendix A pertaining thereto.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Sincerely,

James P. Kiernan, P.E.
Project Manager

Attachment: Second Half 2016 Semi-Annual Groundwater Monitoring Report by Arcadis

ARCADIS Design & Consultancy for natural and built assets

Arcadis U.S., Inc.
2999 Oak Road
Suite 300
Walnut Creek
California 94596
Tel 925.274.1100
Fax 925.274.1103
www.arcadis-us.com

Ms. Kit Soo
Alameda County Department of Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

ENVIRONMENT

Subject:
Second Half 2016 Semi-Annual Groundwater Monitoring Report Submittal

Dear Ms. Soo:

Date:
November 7, 2016

On behalf of Chevron Environmental Management Company's (EMC's) affiliate, Union Oil Company of California ("Union Oil"), Arcadis U.S., Inc. (Arcadis) is submitting the enclosed Semi-Annual Groundwater Monitoring Report for the following facility:

Contact:
Tamera Rogers

Phone:
408.797.2013

Email:
Tamera.Rogers@arcadis.com

Facility No.	**Case No.**	**Location**
0752/YEE/GIN Comingled Plume	RO0000231	706/726/800 Harrison St Oakland, California

Our ref:
B0047339.2016

If you have any questions or comments regarding the contents of this document, please contact Ms. Tamera Rogers of Arcadis at 408.797.2013 or by e-mail at Tamera.Rogers@arcadis.com.

Sincerely,

Arcadis U.S., Inc.

Tamera Rogers
Project Manager

Katherine Brandt, P.G.
Senior Geologist

Copies:
Ms. Cherie McCaulou, CRWQCB – San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612 (Geotracker)
Mr. James Kiernan, EMC (electronic copy only)

Mr. Muhammad Usman and Mr. Mahmood M. Ali, Property Owners - 800 Harrison Street, Oakland, California

Mr. Peter Yee and Mr. Kin Chan, 726 Harrison Street Property Owners

Mr. Bo Gin, 726 Harrison Street Property Owner – 342 Lester Avenue, Oakland, California 94606

UNION OIL OF CALIFORNIA
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD QUARTER 2016
November 7, 2016

Facility No.: 0752/Yee/Gin Comingled Plume Address: 706/726/800 Harrison Street, Oakland, California

Consulting Company/Contact Person/Phone No.: Arcadis / Tamera Rogers / 408.797.2013

Primary Agency/Contact Person/Regulatory ID No.: Alameda County Environmental Health (ACEH) / Ms. Kit Soo / Case No. RO0000231

WORK PERFORMED DURING THIS REPORTING PERIOD (Third and Fourth Quarter – 2016):

1. Gettler-Ryan, Inc. (G-R) conducted groundwater monitoring and sampling on August 19, 2016. Field data sheets and general procedures are included as **Attachment A**. Eight (8) groundwater monitoring wells associated with the former Unocal station no. 0752 located at 800 Harrison Street, five (5) wells associated with 706 Harrison Street (GIN), and nine (9) wells associated with 726 Harrison Street (YEE) were gauged and sampled during this monitoring event. Air sparge well AS-1 was neither gauged nor sampled during this monitoring event. Wells MW-4 and MW-6 on 706 Harrison Street were neither gauged nor sampled due to a parked car that blocked off access to MW-4 and well MW-6 being paved over.

   Groundwater samples were analyzed for total purgeable petroleum hydrocarbons (TPPH) by Environmental Protection Agency (EPA) Method 8260B-GC/MS; benzene, toluene, ethylbenzene, and total xylenes (BTEX, collectively), and methyl tert-butyl ether (MTBE) by EPA Method 8260B.

   The site location map, site plan, and the groundwater elevation contour map are presented on **Figures 1** through **3**, respectively. Concentration maps for TPPH, benzene, and MTBE are on **Figures 4** through **6**, respectively. Current groundwater gauging and analytical results are summarized in **Table 1**, historical groundwater gauging and analytical results are summarized in **Table 2**, and historical groundwater results from TRC are included as **Attachment B**. A copy of the laboratory analytical report and chain-of-custody documentation is included as **Attachment C.**

   On August 21, 2013, Muir Consulting, Inc. (Muir) completed a survey of all the well locations for 726 Harrison Street. The updated survey elevations are presented in **Tables 1** and **2**. A survey discrepancy prevented the conversion of the elevations for 706 Harrison Street. Therefore, the elevations for 706 Harrison remained the same for this quarter's groundwater contouring and are presented on the groundwater contour map separately.

   Arcadis and EMC met with the new ACEH caseworker on August 30, 2016 to review the site history and status. In accordance with the approved Remedial Action Plan (RAP) and RAP Addendum, installation of an Air Sparge/Soil Vapor Extraction (AS/SVE) system is planned to address the elevated concentrations at 706 and 726 Harrison Street. Negotiations continue with the property owner at 706 Harrison Street for installation of the system. The wells on the three sites will be resurveyed following system installation.

WORK PROPOSED FOR THE NEXT REPORTING PERIOD (First and Second Quarter – 2017):

1. Perform groundwater monitoring and related reporting.
2. Begin installation of an AS/SVE system upon completing site access negotiations with the property owner at 706 Harrison Street.

Current Phase of Project:	Groundwater Monitoring/ Remedial Action Implementation
Site Use:	Active 76 branded service station/parking lots (YEE/GIN)
Frequency of Sampling:	Groundwater – Semi-Annually
Frequency of Monitoring:	Groundwater – Semi-Annually
Are Separate-Phase Hydrocarbons (SPH) Present On-Site:	No
Cumulative SPH Recovered to Date:	None
SPH Recovered This Quarter:	None

UNION OIL OF CALIFORNIA
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD QUARTER 2016
November 7, 2016

Facility No.: 0752/Yee/Gin Comingled Plume Address: 706/726/800 Harrison Street, Oakland, California

Bulk Soil Removed to Date:	Approximately 550 cubic yards
Bulk Soil Removed this Quarter:	None
Water Wells or Surface Waters within a 2000' Radius and Their Respective Directions:	There are no surface bodies of water within a 2000' radius of the site. San Francisco Bay is located approximately 3000' southwest of the site.
Groundwater Use Designation:	Potential Drinking Water Source – Santa Clara Valley – East Bay Plain
Current Remediation Techniques:	None (planned AS/SVE)
Permits for Discharge (No.):	None
Approximate Depth to Groundwater (at Unocal 0752 and 726 Harrison Street):	18.42 (Unocal 0752 MW-6) – 26.58 (726 Harrison Street MW-6) feet below top of casing Measured X Estimated
Approximate Groundwater Elevation (at Unocal 0752 and 726 Harrison Street):	7.95 (726 Harrison Street MW-6) – 17.34 (Unocal 0752 MW-2) feet relative to mean sea level
Approximate Depth to Groundwater (at 706 Harrison Street):	Measured X Estimated 16.60 (MW-5) – 18.22 (MW-2) feet below top of casing
Approximate Groundwater Elevation (at 706 Harrison Street):	Measured X Estimated 11.27 (MW-1) – 12.31 (MW-2) feet relative to mean sea level Measured X Estimated

Groundwater Gradient (at Unocal 0752 and 726 Harrison Street):	0.006 ft/ft	(Magnitude)	Southwest	(Direction)
Groundwater Gradient (at 706 Harrison Street):	0.005 ft/ft	(Magnitude)	Southwest	(Direction)

UNION OIL OF CALIFORNIA
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD QUARTER 2016
November 7, 2016

Facility No.: 0752/Yee/Gin Comingled Plume Address: 706/726/800 Harrison Street, Oakland, California

DISCUSSION:

Groundwater conditions during the third quarter 2016 remained relatively consistent with previous quarters.

706 Harrison Street:

The maximum dissolved concentrations of TPPH (47,000 micrograms per liter [µg/L]), benzene (1,400 µg/L), toluene (3,100 µg/L), ethylbenzene (1,500 µg/L), total xylenes (8,700 µg/L), and MTBE (3,600 µg/L) were detected in the sample collected from MW-2. The current TPPH concentration in MW-2 was the highest to date in this well.

726 Harrison Street:

The maximum dissolved concentrations of TPPH (13,000 µg/L), benzene (2,100 µg/L), toluene (200 µg/L), ethylbenzene (350 µg/L), total xylenes (640 µg/L) and MTBE (4,500 µg/L) were detected in the sample collected from MW-5. The TPPH and BTEX concentrations in MPE-1 were the highest in this well to date. Conversely, the current MTBE concentration in MW-6 was the lowest to date.

800 Harrison Street:

The maximum dissolved concentrations of TPPH (1,300 µg/L), ethylbenzene (2.1 µg/L), and MTBE (46 µg/L) were detected in the sample collected from MW-3. The maximum dissolved concentration of benzene (16 µg/L) was detected in the sample collected from MW-7. The maximum dissolved concentrations of toluene (2.2 µg/L) and total xylenes (5.4 µg/L) were detected in the sample collected from MW-5. The current MTBE concentration in MW-3 was the lowest to date in this well.

Groundwater elevations at the site for 726 and 800 Harrison Street vary by approximately nine feet, due to a low groundwater elevation at MW-6. The groundwater elevation at MW-6 was not used in calculating the hydraulic gradient as it is located in a lower water bearing zone. The remaining wells create a relatively gentle hydraulic gradient of 0.006 foot per foot (ft/ft) in the southwest direction. The groundwater elevation at MW-1 was not used for contouring at 706 Harrison Street. Groundwater elevations at the remaining wells at 706 Harrison Street create a relatively gentle hydraulic gradient of 0.005 ft/ft in the southwest direction.

CONCLUSIONS AND RECOMMENDATIONS:

TPPH, BTEX, and MTBE concentrations at 726 and 706 Harrison Street generally increased from the first quarter 2016 monitoring event. However, the current concentrations were within the historical ranges with the exception of TPPH and BTEX in MPE-1 at 726 Harrison and TPPH in MW-2 at 706 Harrison which were historical highs, and MTBE in MW-6 at 726 Harrison which was a historical low. The current concentrations at 800 Harrison Street were similar to those during the first quarter 2016 sampling event; however, the current MTBE concentration in MW-3 was the lowest to date in this well. Arcadis recommends continued semi-annual monitoring to further evaluate groundwater quality and concentration trends. In accordance with the approved RAP and RAP Addendum, installation of an AS/SVE system is planned to address the elevated concentrations at 706 and 726 Harrison Street. Negotiations continue with the property owner at 706 Harrison Street for installation of the system.

UNION OIL OF CALIFORNIA
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD QUARTER 2016
November 7, 2016

Facility No.: 0752/Yee/Gin Comingled Plume Address: 706/726/800 Harrison Street, Oakland, California

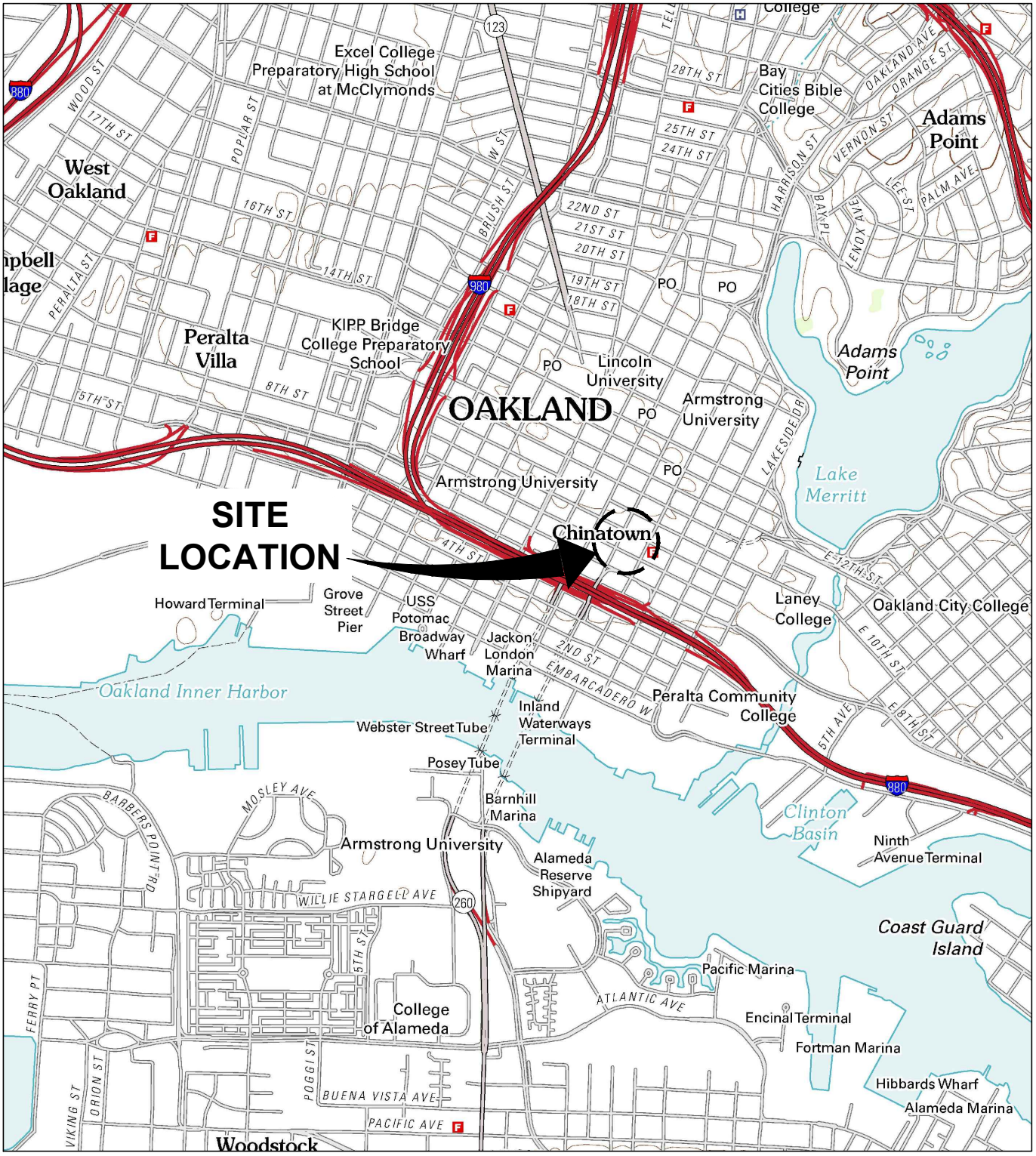
ATTACHMENTS:

Figure 1: Site Location Map
Figure 2: Site Plan
Figure 3: Groundwater Elevation Contour Map
Figure 4: TPPH Isoconcentration Map
Figure 5: Benzene Isoconcentration Map
Figure 6: MTBE Isoconcentration Map

Table 1: Current Groundwater Gauging and Analytical Results
Table 1A: Additional Groundwater Analytical Results-MNA Parameters
Table 1B: Additional Groundwater Analytical Results-Metals
Table 2: Historical Groundwater Gauging and Analytical Results
Table 2A: Historical Additional Groundwater Analytical Results – MNA Parameters
Table 2B: Historical Additional Groundwater Analytical Results – Metals

Attachment A: Field Data Sheets and General Procedures
Attachment B: Historical Groundwater Results from TRC
Attachment C: Laboratory Report and Chain-of-Custody Documentation

Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., OAKLAND WEST, CALIFORNIA, 2012.

0 2000' 4000'

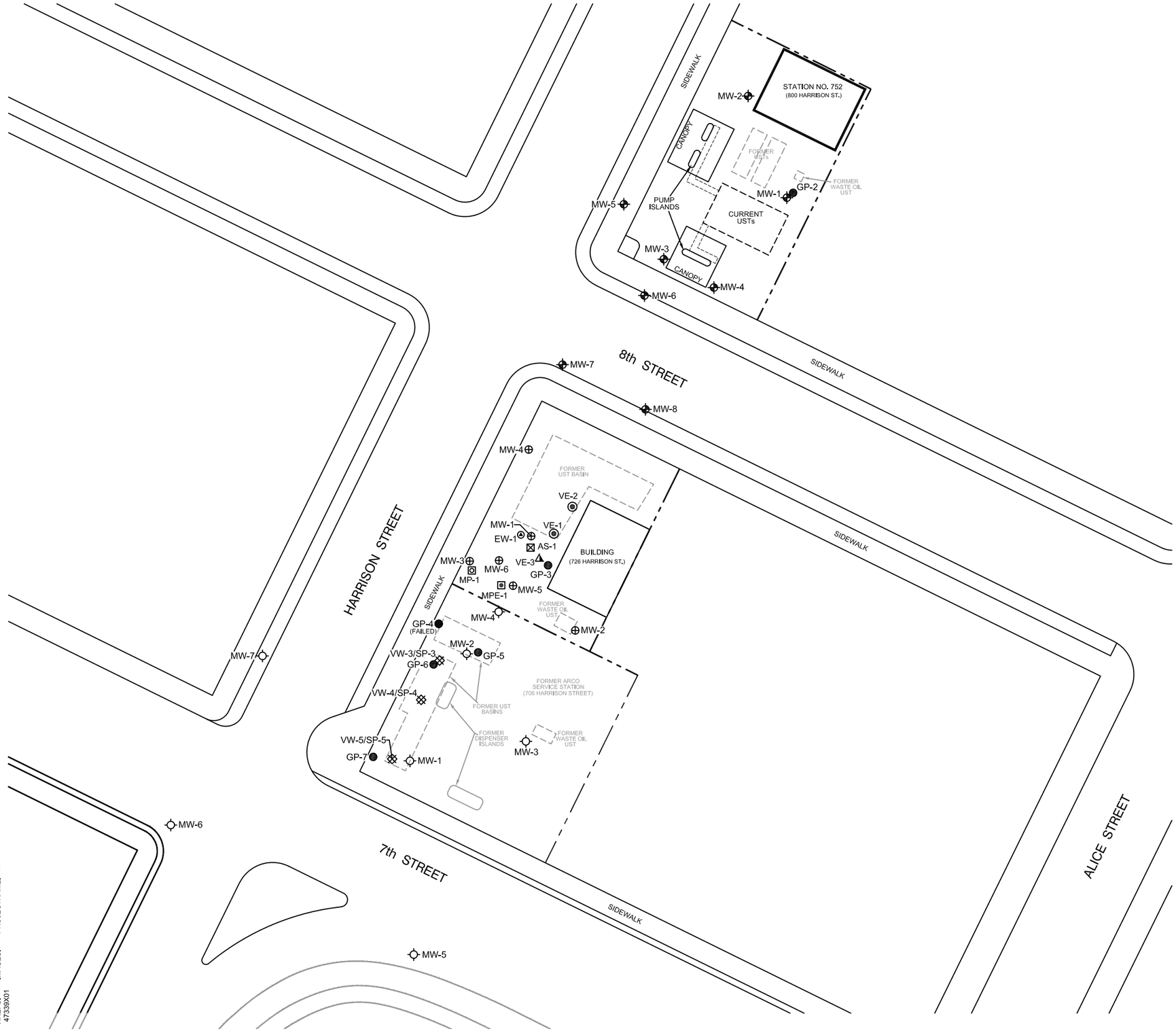
Approximate Scale: 1 in. = 2000 ft.

UNION OIL OF CALIFORNIA
STATION NO. 0752/YEE/GIN COMMINGLED
706/726/800 HARRISON STREET
OAKLAND, CALIFORNIA

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 1



LEGEND

- PROPERTY BOUNDARY
- PRODUCT PIPING
- MW-1 GROUNDWATER MONITORING WELL (UNOCAL)
- MW-1 GROUNDWATER MONITORING WELL (GIN)
- VW-3/SP-3 SOIL VAPOR/SPARGE WELL (UNABLE TO LOCATE) (GIN)
- MW-1 GROUNDWATER MONITORING WELL (YEE)
- AS-1 AIR SPARGE WELL (YEE)
- EW-1 EXTRACTION WELL (YEE)
- GP-2 GEOPROBE™ (JUNE 2011)
- MPE-1 MULTI-PHASE EXTRACTION PILOT TEST WELL (PZ-1 IS LOCATED IN THE SAME BOREHOLE)
- MP-1 PILOT TEST MONITORING POINT
- VE-1 VAPOR EXTRACTION WELL
- VE-3 PILOT TEST VAPOR EXTRACTION WELL

NOTE:

1. BASE MAP PROVIDED BY MID COAST ENGINEERS, DATED 06/29/11, AT A SCALE OF 1"=50'. ADDITIONAL SITE FEATURES PROVIDED BY STANTEC, INC., DATED 03/05/10, AT A SCALE OF 1"=50'.
2. COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83.

0 50' 100'

GRAPHIC SCALE

UNION OIL OF CALIFORNIA
STATION NO. 0752/YEE/GIN COMMINGLED
706/726/800 HARRISON STREET
OAKLAND, CALIFORNIA

SITE PLAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

CITY: SAN RAFAEL, CA (PETALUMA) DIV/GROUP: ENVCAD DB: J. HARRIS, M. HOEFER, J. HARRIS
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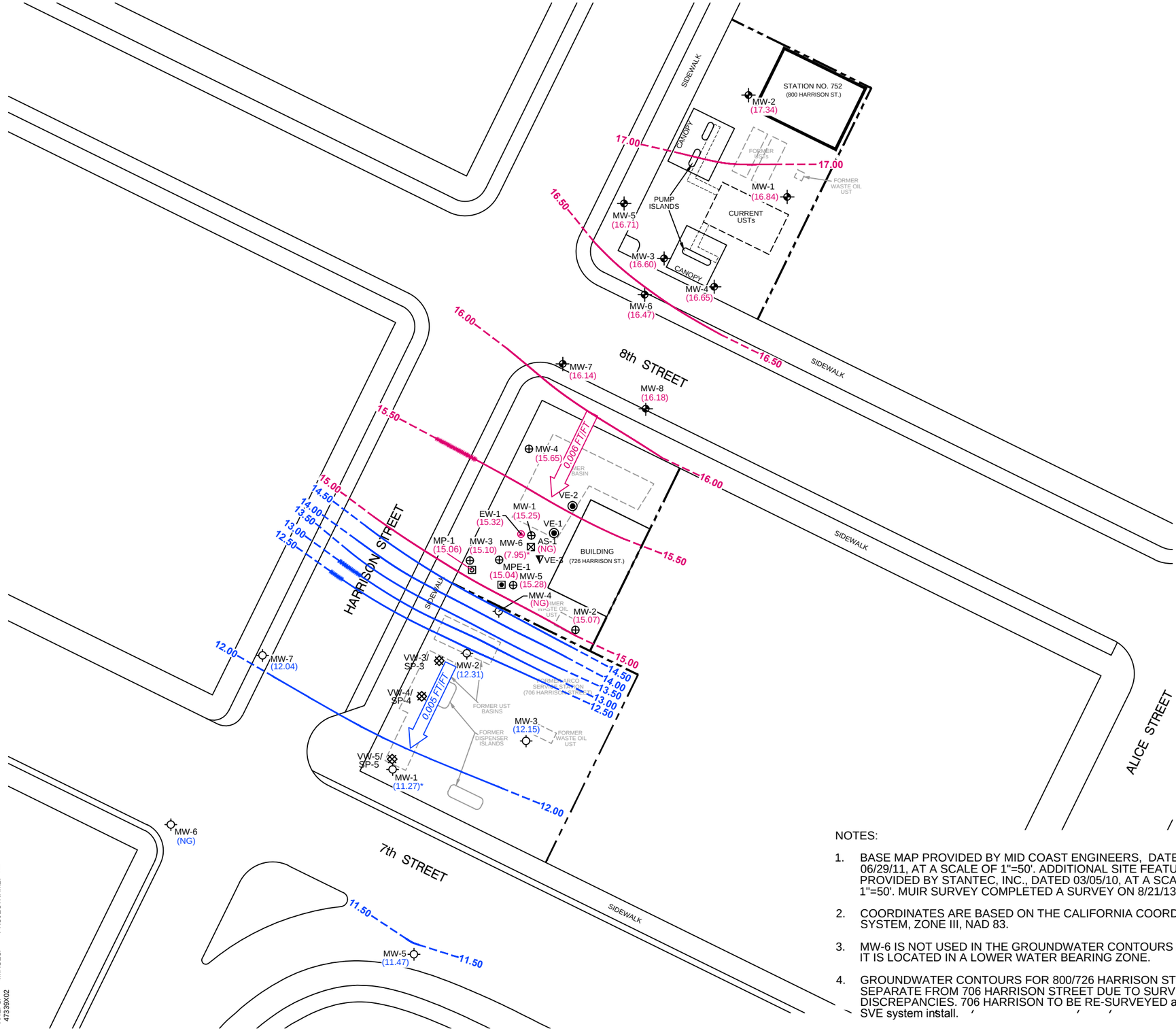

LEGEND

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- PRODUCT PIPING
- MW-1 GROUNDWATER MONITORING WELL (UNOCAL SITE)
- MW-1 GROUNDWATER MONITORING WELL (YEE SITE)
- EW-1 EXTRACTION WELL (YEE SITE)
- MW-1 GROUNDWATER MONITORING WELL (GIN SITE)
- VW-3/SP-3 SOIL VAPOR/SPARGE WELL (UNABLE TO LOCATE) (GIN SITE)
- MPE-1 MULTI-PHASE EXTRACTION PILOT TEST WELL (PZ-1 IS LOCATED IN THE SAME BOREHOLE) (YEE SITE)
- MP-1 PILOT TEST MONITORING POINT (YEE SITE)
- VE-1 VAPOR EXTRACTION WELL (YEE SITE)
- VE-3 PILOT TEST VAPOR EXTRACTION WELL (YEE SITE)
- AS-1 AIR SPARGE WELL (YEE SITE)
- (17.34) GROUNDWATER ELEVATION CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL (FT MSL) (UNOCAL AND YEE SITE)
- (12.31) GROUNDWATER ELEVATION CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL (FT MSL) (GIN SITE)
- 17.00 GROUNDWATER ELEVATION CONTOUR (FT MSL; DASHED WHERE INFERRED) (UNOCAL AND YEE SITE)
- 12.00 GROUNDWATER ELEVATION CONTOUR (FT MSL; DASHED WHERE INFERRED) (GIN SITE)
- 0.006 FT/FT APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT (FOOT PER FOOT) (UNOCAL AND YEE SITE)
- 0.005 FT/FT APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT (FOOT PER FOOT) (GIN SITE)
- (NG) NOT GAUGED
- (NG) NOT GAUGED
- * * NOT USED IN GROUNDWATER CONTOURING AND GRADIENT CALCULATION

0 50' 100'

GRAPHIC SCALE

NOTES:

1. BASE MAP PROVIDED BY MID COAST ENGINEERS, DATED 06/29/11, AT A SCALE OF 1"=50'. ADDITIONAL SITE FEATURES PROVIDED BY STANTEC, INC., DATED 03/05/10, AT A SCALE OF 1"=50'. MUIR SURVEY COMPLETED A SURVEY ON 8/21/13.
2. COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83.
3. MW-6 IS NOT USED IN THE GROUNDWATER CONTOURS BECAUSE IT IS LOCATED IN A LOWER WATER BEARING ZONE.
4. GROUNDWATER CONTOURS FOR 800/726 HARRISON STREET SEPARATE FROM 706 HARRISON STREET DUE TO SURVEYING DISCREPANCIES. 706 HARRISON TO BE RE-SURVEYED after AS/SVE system install.

UNION OIL OF CALIFORNIA STATION NO. 0752/YEE/GIN COMMINGLED
706/726/800 HARRISON STREET OAKLAND, CALIFORNIA

SEMI-ANNUAL SITE STATUS REPORT THIRD QUARTER 2016

GROUNDWATER ELEVATION CONTOUR MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

CITY: SAN RAFAEL, CA (PETALUMA) DIV/GROUP: ENVCAD DB: J. HARRIS, R. HUBATCH, J. HARRIS
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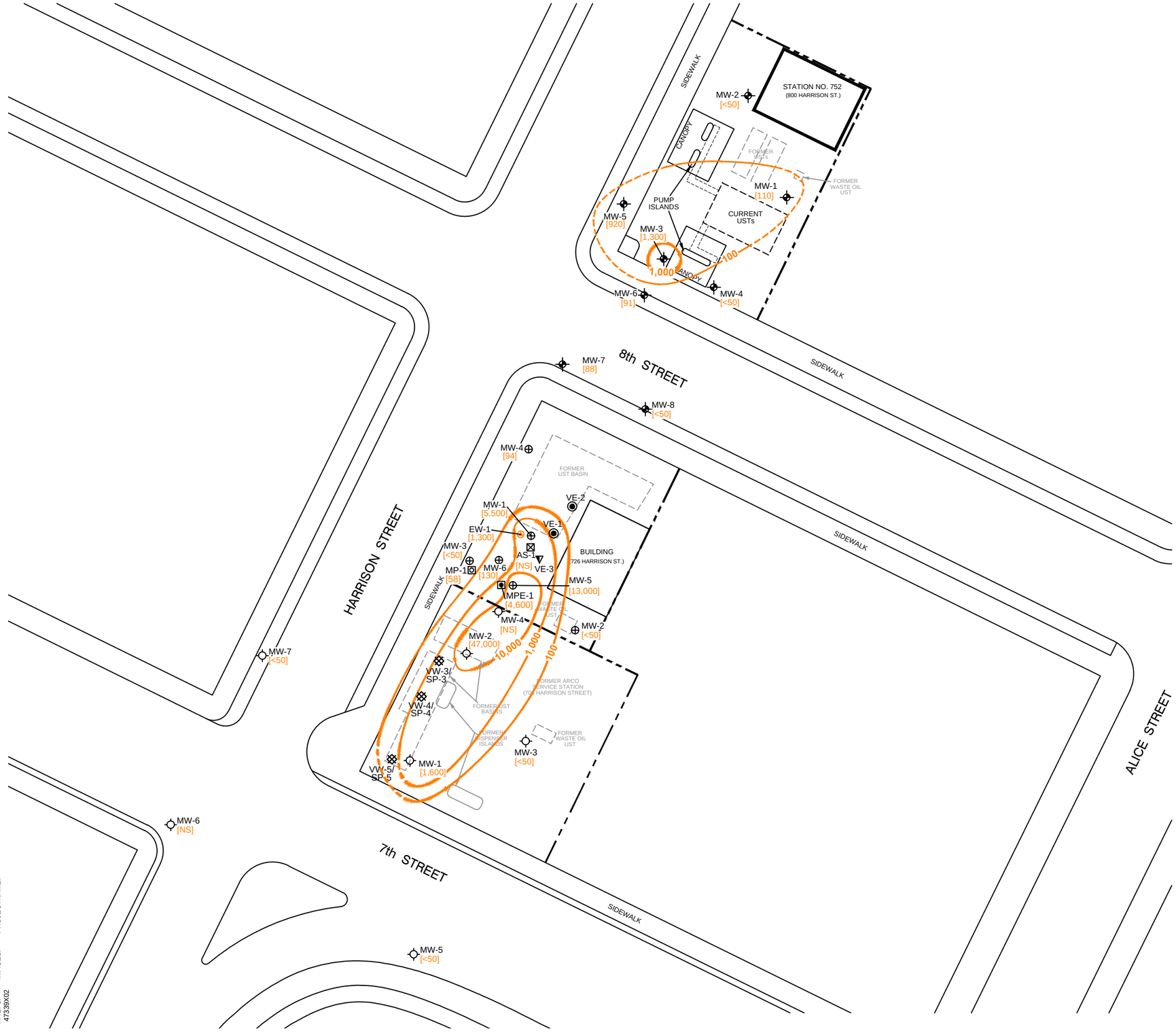

LEGEND

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- MW-1 GROUNDWATER MONITORING WELL (YEE SITE)
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- MW-1 GROUNDWATER MONITORING WELL (GIN SITE)
- VW-3/SP-3 SOIL VAPOR/SPARGE WELL (UNABLE TO LOCATE) (GIN SITE)
- MPE-1 MULTI-PHASE EXTRACTION PILOT TEST WELL (PZ-1 IS LOCATED IN THE SAME BOREHOLE) (YEE SITE)
- MP-1 PILOT TEST MONITORING POINT (YEE SITE)
- VE-1 VAPOR EXTRACTION WELL (YEE SITE)
- VE-3 PILOT TEST VAPOR EXTRACTION WELL (YEE SITE)
- AS-1 AIR SPARGE WELL (YEE SITE)
- [1,300] TOTAL PURGEABLE PETROLEUM HYDROCARBONS (TPPH) CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- 100 TPPH ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
- < DENOTES LESS THAN LABORATORY REPORTING LIMIT
- [NS] NOT SAMPLED

NOTES:

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3. MW-6 IS NOT USED IN THE GROUNDWATER CONTOURS BECAUSE IT IS LOCATED IN A LOWER WATER BEARING ZONE.

0 50' 100'

GRAPHIC SCALE

UNION OIL OF CALIFORNIA STATION NO. 0752/YEE/GIN COMMINGLED
706/726/800 HARRISON STREET OAKLAND, CALIFORNIA

SEMI-ANNUAL SITE STATUS REPORT THIRD QUARTER 2016

TPPH ISOCONCENTRATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

CITY: SAN RAFAEL, CA (PETALUMA) DIV/GROUP: ENVCAD DB: J. HARRIS, R. HUBATCH, J. HARRIS
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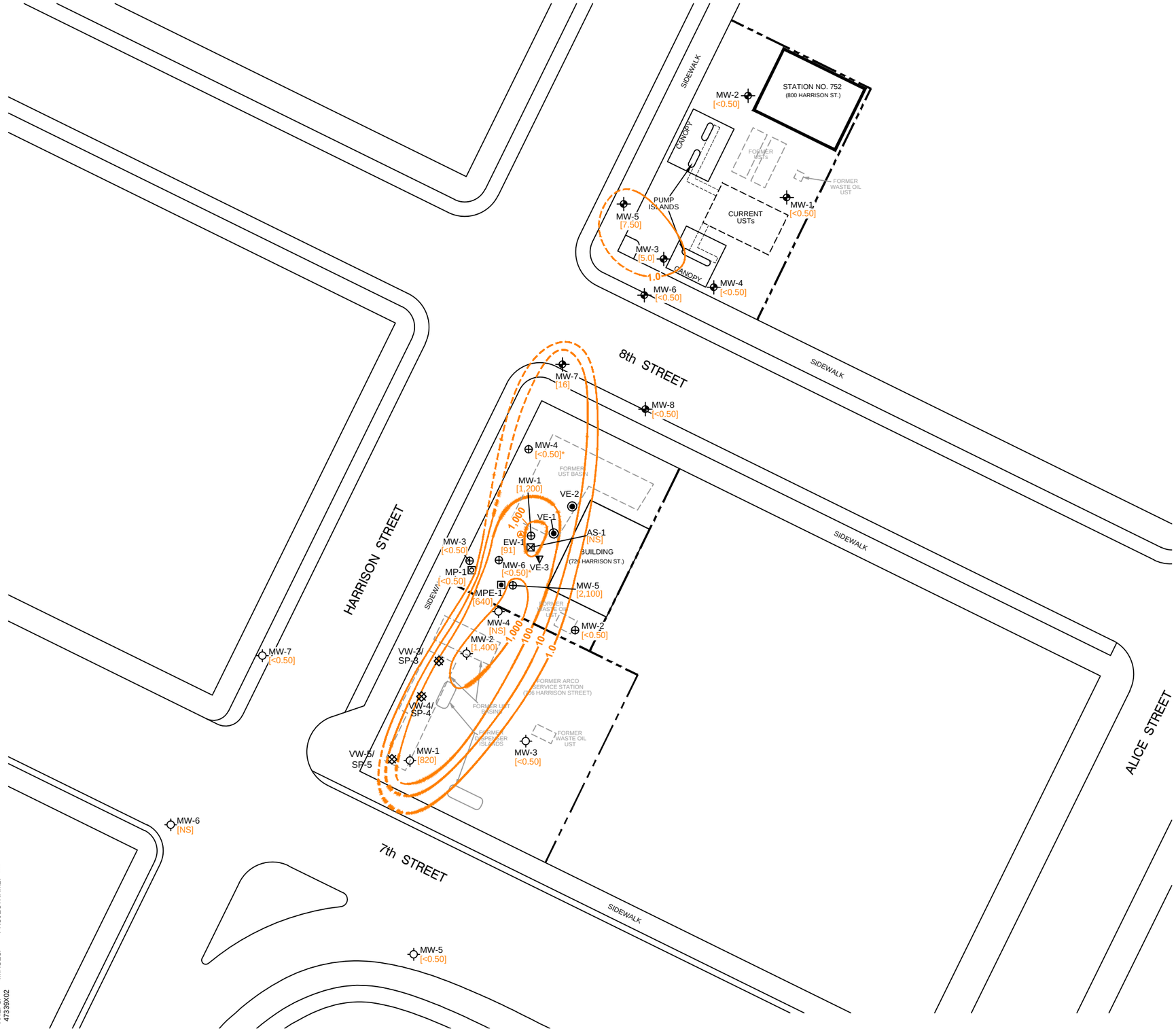

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- VE-1 VAPOR EXTRACTION WELL (YEE SITE)
- VE-3 PILOT TEST VAPOR EXTRACTION WELL (YEE SITE)
- AS-1 AIR SPARGE WELL (YEE SITE)
- [820] BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- 100 BENZENE ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
- < DENOTES LESS THAN LABORATORY REPORTING LIMIT
- [NS] NOT SAMPLED
- * WELL NOT USED IN CONCENTRATION CONTOURING

NOTES:

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0 50' 100'

GRAPHIC SCALE

UNION OIL OF CALIFORNIA STATION NO. 0752/YEE/GIN COMMINGLED
706/726/800 HARRISON STREET OAKLAND, CALIFORNIA

SEMI-ANNUAL SITE STATUS REPORT THIRD QUARTER 2016

BENZENE ISOCONCENTRATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 5

CITY: SAN RAFAEL, CA (PETALUMA) DIV/GROUP: ENVCAD DB: J. HARRIS, R. HUBATCH, J. HARRIS
\\hc-ukr-bl-fs-10\BL_Proj\Environment - Arcadis\ARCADIS USVA PROJECTS\3. CHEVRON\Chevron 35164\62SA 2016\E-Drawings\47339\C02.dwg LAYOUT: 5 SAVED: 10/21/2016 12:30 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 10/21/2016 3:55
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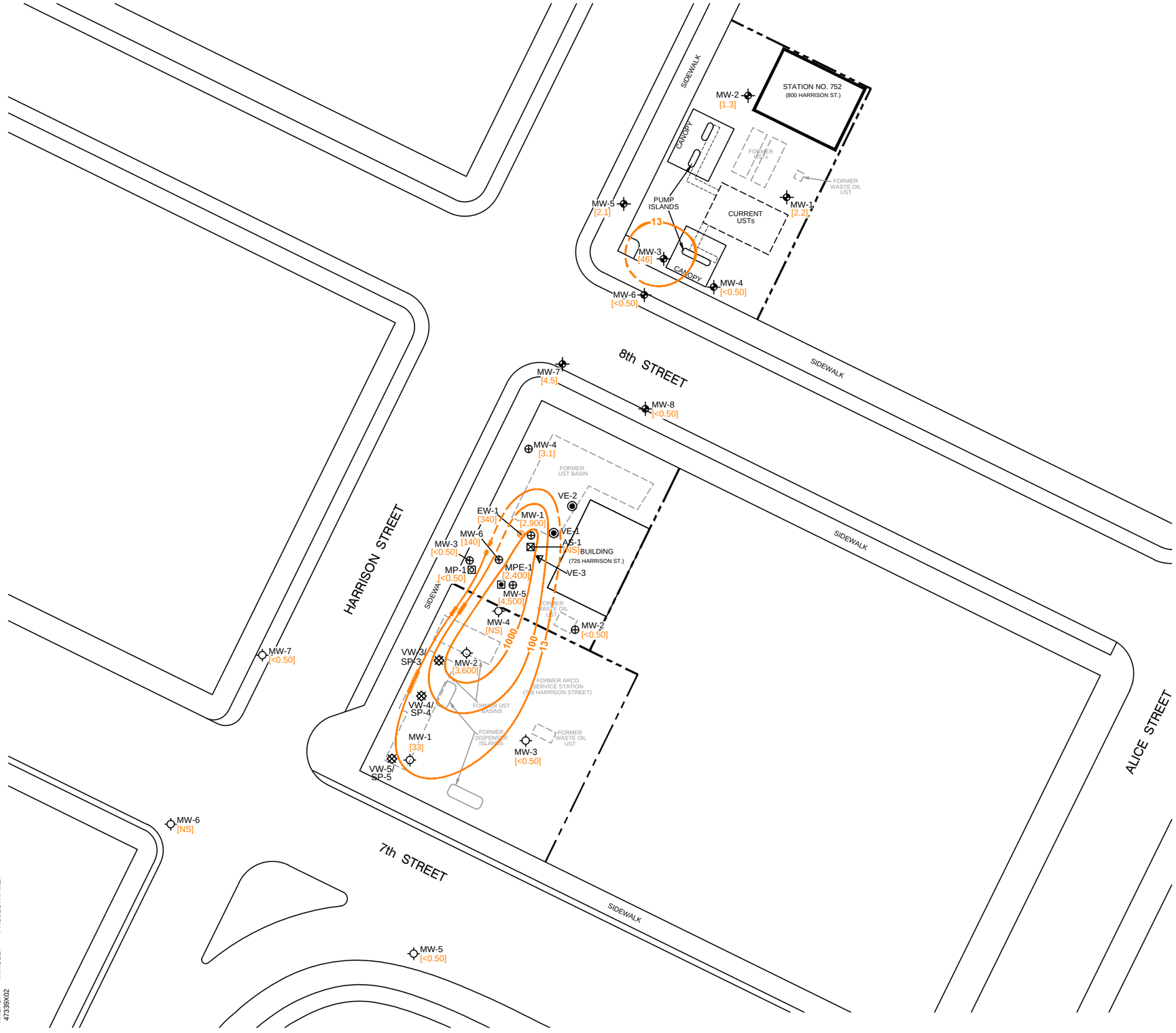

LEGEND

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- MW-1 GROUNDWATER MONITORING WELL (YEE SITE)
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- MW-1 GROUNDWATER MONITORING WELL (GIN SITE)
- VW-3/SP-3 SOIL VAPOR/SPARGE WELL (UNABLE TO LOCATE) (GIN SITE)
- MPE-1 MULTI-PHASE EXTRACTION PILOT TEST WELL (PZ-1 IS LOCATED IN THE SAME BOREHOLE) (YEE SITE)
- MP-1 PILOT TEST MONITORING POINT (YEE SITE)
- VE-1 VAPOR EXTRACTION WELL (YEE SITE)
- VE-3 PILOT TEST VAPOR EXTRACTION WELL (YEE SITE)
- AS-1 AIR SPARGE WELL (YEE SITE)
- [46] METHYL TERTIARY BUTYL ETHER CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- 500 MTBE ISOCONCENTRATION CONTOUR (µg/L; DASHED WHERE INFERRED)
- < DENOTES LESS THAN LABORATORY REPORTING LIMIT
- [NS] NOT SAMPLED

NOTES:

1. BASE MAP PROVIDED BY MID COAST ENGINEERS, DATED 06/29/11, AT A SCALE OF 1"=50'. ADDITIONAL SITE FEATURES PROVIDED BY STANTEC, INC., DATED 03/05/10, AT A SCALE OF 1"=50'. MUIR SURVEY COMPLETED A SURVEY ON 8/21/13.
2. COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 83.
3. MW-6 IS NOT USED IN THE GROUNDWATER CONTOURS BECAUSE IT IS LOCATED IN A LOWER WATER BEARING ZONE.

0 50' 100'

GRAPHIC SCALE

UNION OIL OF CALIFORNIA STATION NO. 0752/YEE/GIN COMMINGLED
706/726/800 HARRISON STREET OAKLAND, CALIFORNIA

SEMI-ANNUAL SITE STATUS REPORT THIRD QUARTER 2016

MTBE ISOCONCENTRATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE 6

CITY: SAN RAFAEL, CA (PETALUMA) DIV/GROUP: ENVCAD DB: J. HARRIS, R. HUBATCH, J. HARRIS
\\lc-ukr-tl-fs-10\BL_Proj\Environment - Arcadis\ARCADIS USVA PROJECTS\3. CHEVRON\Chevron 35164925A 2016\E-Drawings\47339C03.dwg LAYOUT: 6 SAVED: 10/21/2016 12:33 PM ACADVER: 19.1S (LMS TECH) PAGESETUP: SETUP1 PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 10/21/2016 3:55
PM BY: SUCHITH RUSHIKESH
XREFS: IMAGES: PROJECTNAME: ---
47339X02

Tables

Table 1
Current Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8260B-GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
800 Harrison Street																	
MW-1	8/19/2016	37.22	20.38	0.00	16.84	17.04	-0.20	110	<0.50	<0.50	<0.50	<1.0	2.2	--	--	--	
MW-2	8/19/2016	37.44	20.10	0.00	17.34	17.45	-0.11	<50	<0.50	<0.50	<0.50	<1.0	1.3	--	--	--	
MW-3	8/19/2016	35.88	19.28	0.00	16.60	16.91	-0.31	1,300	5.0	1.3	2.1	2.4	46	--	--	--	A01
MW-4	8/19/2016	35.42	18.77	0.00	16.65	16.89	-0.24	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-5	8/19/2016	35.68	18.97	0.00	16.71	16.91	-0.20	920	7.5	2.2	1.1	5.4	2.1	--	--	--	
MW-6	8/19/2016	34.89	18.42	0.00	16.47	16.75	-0.28	91	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-7	8/19/2016	34.92	18.78	0.00	16.14	16.47	-0.33	88	16	0.66	<0.50	<1.0	4.5	--	--	--	
MW-8	8/19/2016	34.73	18.55	0.00	16.18	16.55	-0.37	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
706 Harrison Street																	
MW-1	8/19/2016	29.17	17.90	0.00	11.27	11.80	-0.53	1,600	820	30	12	95	33	--	--	--	A01
MW-2	8/19/2016	30.53	18.22	0.00	12.31	12.84	-0.53	47,000	1,400	3,100	1,500	8,700	3,600	--	--	--	A01
MW-3	8/19/2016	29.79	17.64	0.00	12.15	12.79	-0.64	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-4	8/19/2016	31.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to access, Parked over
MW-5	8/19/2016	28.07	16.60	0.00	11.47	12.15	-0.68	<50	<.0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-6	8/19/2016	29.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate
MW-7	8/19/2016	29.70	17.66	0.00	12.04	12.43	-0.39	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
726 Harrison Street																	
AS-1	8/19/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-1	8/19/2016	34.37	19.05	0.00	15.32	15.77	-0.45	1,300	91	3.6	33	20	340	--	--	--	A01
MP-1	8/19/2016	34.16	19.10	--	15.06	--	–	58	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MPE-1	8/19/2016	34.36	19.32	0.00	15.04	15.53	-0.49	4,600	640	38	110	100	2,400	--	--	--	A01, Z1
MW-1	8/19/2016	34.45	19.20	0.00	15.25	15.62	-0.37	5,500	1,200	23	110	110	2,900	--	--	--	A01
MW-2	8/19/2016	34.91	19.84	0.00	15.07	15.62	-0.55	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-3	8/19/2016	34.12	19.02	0.00	15.10	15.53	-0.43	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-4	8/19/2016	35.05	19.40	0.00	15.65	16.22	-0.57	94	<0.50	<0.50	<0.50	<1.0	3.1	--	--	--	
MW-5	8/19/2016	34.76	19.48	0.00	15.28	15.78	-0.50	13,000	2,100	200	350	640	4,500	--	--	--	A01
MW-6	8/19/2016	34.53	26.58	0.00	7.95	8.84	-0.89	130	<0.50	<0.50	<0.50	<1.0	140	--	--	--	A01,A90

Table 1
Current Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Notes

Analytical results given in micrograms per liter.

Muir Consulting, Inc. completed a survey of 726 Harrison well locations on August 21, 2013. Elevation data for 800 Harrison Street was converted by using the National Geodetic Survey (NGS) online conversion calculator NAV29 to NAV88. The 706 Harrison Street data was not converted due to discrepencies with the data.

EPA Method 8260B for Volatile Organic Compounds.

Standard Abbreviations

--	not analyzed, measured, or collected
<	not detected at or above laboratory detection limit
TOC	top of casing (surveyed reference elevation)
AMSL	above mean sealevel
DTW	depth to water
btoc	below top of casing
LPH	liquid-phase hydrocarbons
GW	groundwater
GWE	groundwater elevation
GC/MS	gas chromatography–mass spectrometry for TPPH
A01	PQL's and MDL's are raised due to sample dilution
A90	TPPH does not exhibit "gasoline" pattern, TPPH is entirely due to MTBE
Z1	10ul of antifoamer added to voa

Analytes

TPPH	total purgeable petroleum hydrocarbons (C6-C12)
MTBE	methyl tertiary butyl ether
EDB	1,2-dibromoethane
EDC	1,2-dichloroethane (same as ethylene dichloride)

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8260B-GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
800 Harrison Street																	
MW-1	2/7/2012	34.72	20.00	0.00	14.72	15.22	-0.50	97	<0.50	<0.50	<0.50	<1.0	8.6	<0.50	<0.50	--	
MW-1	8/9/2012	34.72	19.14	0.00	15.58	14.72	0.86	140	<0.50	<0.50	<0.50	<1.0	18	<0.50	<0.50	<250	
MW-1	2/27/2013	34.72	19.41	0.00	15.31	15.58	-0.27	50	<0.50	<0.50	<0.50	<1.0	6.7	<0.50	<0.50	<250	
MW-1	8/15/2013	37.22	20.20	0.00	17.02	15.31	1.71	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-1	2/6/2014	37.22	21.09	0.00	16.13	17.02	-0.89	<50	<0.50	<0.50	<0.50	<1.0	1.6	<0.50	<0.50	<250	
MW-1	8/14/2014	37.22	20.98	0.00	16.24	16.13	0.11	<50	<0.50	<0.50	<0.50	<1.0	2	--	--	--	
MW-1	2/17/2015	37.22	20.03	0.00	17.19	16.24	0.95	110	<0.50	<0.50	<0.50	<1.0	5.0	--	--	--	
MW-1	8/6/2015	37.22	20.83	0.00	16.39	17.19	-0.80	67	<0.50	<0.50	<0.50	<1.0	1.1	--	--	--	
MW-1	2/11/2016	37.22	20.18	0.00	17.04	16.39	0.65	150	<0.50	<0.50	<0.50	<1.0	1.1	--	--	--	
MW-1	8/19/2016	37.22	20.38	0.00	16.84	17.04	-0.20	110	<0.50	<0.50	<0.50	<1.0	2.2	--	--	--	
MW-2	2/7/2012	34.74	19.77	0.00	14.97	15.42	-0.45	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	
MW-2	8/9/2012	34.74	18.89	0.00	15.85	14.97	0.88	<50	<0.50	<0.50	<0.50	<1.0	4.7	<0.50	<0.50	<250	
MW-2	2/27/2013	34.74	19.16	0.00	15.58	15.85	-0.27	<50	<0.50	<0.50	<0.50	<1.0	9.6	<0.50	<0.50	<250	
MW-2	8/15/2013	37.44	19.99	0.00	17.45	15.58	1.87	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-2	2/6/2014	37.44	20.82	0.00	16.62	17.45	-0.83	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-2	8/14/2014	37.44	20.68	0.00	16.76	16.62	0.14	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-2	2/17/2015	37.44	19.79	0.00	17.65	16.76	0.89	57	<0.50	<0.50	<0.50	<1.0	1.4	--	--	--	
MW-2	8/6/2015	37.44	20.54	0.00	16.90	17.65	-0.75	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-2	2/11/2016	37.44	19.99	0.00	17.45	16.90	0.55	93	<0.50	<0.50	<0.50	<1.0	1.2	--	--	--	
MW-2	8/19/2016	37.44	20.10	0.00	17.34	17.45	-0.11	<50	<0.50	<0.50	<0.50	<1.0	1.3	--	--	--	
MW-3	2/7/2012	33.18	18.88	0.00	14.30	14.88	-0.58	1,800	6.7	<1.0	1.9	<2.0	1,600	<0.50	<0.50	--	A01
MW-3	8/9/2012	33.18	18.02	0.00	15.16	14.30	0.86	1,400	1.8	<0.50	1.5	<1.0	370	<0.50	<0.50	<250	A01
MW-3	2/27/2013	33.18	18.36	0.00	14.82	15.16	-0.34	1,600	4.4	0.69	2.8	<1.0	820	<0.50	<0.50	<250	A01
MW-3	8/15/2013	35.88	19.17	0.00	16.71	14.82	1.89	410	4.0	<0.50	1.4	<1.0	340	<0.50	<0.50	<250	A01
MW-3	2/6/2014	35.88	19.96	0.00	15.92	16.71	-0.79	1,300	7.9	0.87	1.7	5.2	760	<0.50	<0.50	<250	A01
MW-3	8/14/2014	35.88	19.30	0.00	16.58	15.92	0.66	1,800	9.8	1.5	2.3	3.7	490	--	--	--	A01
MW-3	2/17/2015	35.88	18.88	0.00	17.00	16.58	0.42	1,900	6.7	2.2	2.2	3.2	60	--	--	--	A01, S09
MW-3	8/6/2015	35.88	19.73	0.00	16.15	17.00	-0.85	2,100	7.6	1.8	3.5	4.2	130	--	--	--	A01, S09
MW-3	2/11/2016	35.88	18.97	0.00	16.91	16.15	0.76	2,500	9.3	1.9	3.1	3.7	54	--	--	--	
MW-3	8/19/2016	35.88	19.28	0.00	16.60	16.91	-0.31	1,300	5.0	1.3	2.1	2.4	46	--	--	--	A01
MW-4	2/7/2012	32.72	18.38	0.00	14.34	14.87	-0.53	<50	<0.50	<0.50	<0.50	<1.0	1.5	<0.50	<0.50	--	
MW-4	8/9/2012	32.72	17.55	0.00	15.17	14.34	0.83	<50	<0.50	<0.50	<0.50	<1.0	1.3	<0.50	<0.50	<250	
MW-4	2/27/2013	32.72	17.83	0.00	14.89	15.17	-0.28	<50	<0.50	<0.50	<0.50	<1.0	1.1	<0.50	<0.50	<250	
MW-4	8/15/2013	35.42	18.70	0.00	16.72	14.89	1.83	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-4	2/6/2014	35.42	19.48	0.00	15.94	16.72	-0.78	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-4	8/14/2014	35.42	19.33	0.00	16.09	15.94	0.15	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-4	2/17/2015	35.42	18.40	0.00	17.02	16.09	0.93	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-4	8/6/2015	35.42	19.24	0.00	16.18	17.02	-0.84	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-4	2/11/2016	35.42	18.53	0.00	16.89	16.18	0.71	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-4	8/19/2016	35.42	18.77	0.00	16.65	16.89	-0.24	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-5	2/7/2012	32.98	18.59	0.00	14.39	14.93	-0.54	1,600	58	11	3.0	25	10	<0.50	<0.50	--	A01
MW-5	8/9/2012	32.98	17.73	0.00	15.25	14.39	0.86	1,900	81	18	10	22	19	<0.50	<0.50	<250	A01
MW-5	2/27/2013	32.98	17.98	0.00	15.00	15.25	-0.25	1,300	58	11	2.4	13	8.0	<0.50	<0.50	<250	
MW-5	8/15/2013	35.68	18.88	0.00	16.80	15.00	1.80	50	24	6.1	2.0	9.2	6.7	<0.50	<0.50	<250	
MW-5	2/6/2014	35.68	19.63	0.00	16.05	16.80	-0.75	1,400	13	7.4	2.3	13	1.8	<0.50	<0.50	<250	
MW-5	8/14/2014	35.68	19.48	0.00	16.20	16.05	0.15	1,300	7.2	5.8	2.2	10	1.0	--	--	--	A01
MW-5	2/17/2015	35.68	18.58	0.00	17.10	16.20	0.90	1,200	4.6	4.3	2.4	8.0	<0.50	--	--	--	
MW-5	8/6/2015	35.68	19.38	0.00	16.30	17.10	-0.80	890	4.6	3.2	1.2	5.5	1.7	--	--	--	
MW-5	2/11/2016	35.68	18.77	0.00	16.91	16.30	0.61	810	1.0	2.1	0.8	2.6	<0.50	--	--	--	
MW-5	8/19/2016	35.68	18.97	0.00	16.71	16.91	-0.20	920	7.5	2.2	1.1	5.4	2.1	--	--	--	
MW-6	2/7/2012	32.19	18.02	0.00	14.17	14.71	-0.54	450	<0.50	<0.50	<0.50	<1.0	29	<0.50	<0.50	--	
MW-6	8/9/2012	32.19	17.17	0.00	15.02	14.17	0.85	180	<0.50	<0.50	<0.50	<1.0	10	<0.50	<0.50	<250	
MW-6	2/27/2013	32.19	17.48	0.00	14.71	15.02	-0.31	77	<0.50	<0.50	<0.50	<1.0	2.4	<0.50	<0.50	<250	
MW-6	8/15/2013	34.89	18.35	0.00	16.54	14.71	1.83	<50	<0.50	<0.50	<0.50	<1.0	0.82	<0.50	<0.50	<250	
MW-6	2/6/2014	34.89	19.10	0.00	15.79	16.54	-0.75	150	<0.50	<0.50	<0.50	<1.0	0.81	<0.50	<0.50	<250	
MW-6	8/14/2014	34.89	18.93	0.00	15.96	15.79	0.17	150	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-6	2/17/2015	34.89	18.03	0.00	16.86	15.96	0.90	65	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-6	8/6/2015	34.89	18.85	0.00	16.04	16.86	-0.82	180	<0.50	<0.50	<0.50	<1.0	1.4	--	--	--	
MW-6	2/11/2016	34.89	18.14	0.00	16.75	16.04	0.71	240	<0.50	<0.50	<0.50	<1.0	0.7	--	--	--	
MW-6	8/19/2016	34.89	18.42	0.00	16.47	16.75	-0.28	91	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8260B-GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
MW-7	2/7/2012	32.22	18.40	0.00	13.82	14.39	-0.57	310	25	2	<0.50	3.2	9.0	<0.50	<0.50	--	
MW-7	8/9/2012	32.22	17.53	0.00	14.69	13.82	0.87	280	11	1.2	<0.50	<1.0	24	<0.50	<0.50	<250	
MW-7	2/27/2013	32.22	17.85	0.00	14.37	14.69	-0.32	<50	<0.50	<0.50	<0.50	<1.0	3.8	<0.50	<0.50	<250	
MW-7	8/15/2013	34.92	18.70	0.00	16.22	14.37	1.85	95	11	1.3	<0.50	<1.0	5.0	<0.50	<0.50	<250	
MW-7	2/6/2014	34.92	19.45	0.00	15.47	16.22	-0.75	790	66	10	2.5	17	47	<0.50	<0.50	<250	A01
MW-7	8/14/2014	34.92	19.27	0.00	15.65	15.47	0.18	580	96	5.6	2.5	13	12	--	--	--	A01
MW-7	2/17/2015	34.92	18.25	0.00	16.67	15.65	1.02	350	36	2.8	2.1	1.2	10	--	--	--	
MW-7	8/6/2015	34.92	19.16	0.00	15.76	16.67	-0.91	330	31	2.8	0.72	3.6	14	--	--	--	
MW-7	2/11/2016	34.92	18.45	0.00	16.47	15.76	0.71	320	10	1.2	0.6	2.4	6	--	--	--	
MW-7	8/19/2016	34.92	18.78	0.00	16.14	16.47	-0.33	88	16	0.7	<0.50	<1.0	4.5	--	--	--	
MW-8	2/7/2012	32.03	18.15	0.00	13.88	14.50	-0.62	<50	<0.50	<0.50	<0.50	<1.0	0.75	<0.50	<0.50	--	
MW-8	8/9/2012	32.03	17.29	0.00	14.74	13.88	0.86	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-8	2/27/2013	32.03	17.58	0.00	14.45	14.74	-0.29	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-8	8/15/2013	34.73	18.46	0.00	16.27	14.45	1.82	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-8	2/6/2014	34.73	19.24	0.00	15.49	16.27	-0.78	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-8	8/14/2014	34.73	19.06	0.00	15.67	15.49	0.18	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-8	2/17/2015	34.73	18.04	0.00	16.69	15.67	1.02	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-8	8/6/2015	34.73	18.96	0.00	15.77	16.69	-0.92	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-8	2/11/2016	34.73	18.18	0.00	16.55	15.77	0.78	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-8	8/19/2016	34.73	18.55	0.00	16.18	16.55	-0.37	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
706 Harrison Street																	
MW-1	2/7/2012	29.17	17.33	0.00	11.84	15.22	-3.38	8,900	1,000	260	230	610	420	<0.50	<0.50	--	A01
MW-1	8/9/2012	29.17	16.58	0.00	12.59	11.84	0.75	2,200	850	110	42	120	84	<5.0	<5.0	<2,500	A01
MW-1	2/27/2013	29.17	17.03	0.00	12.14	12.59	-0.45	--	--	--	--	--	--	--	--	--	Parked Car
MW-1	8/15/2013	29.17	17.89	0.00	11.28	12.14	-0.86	5,800	840	100	93	160	790	<5.0	<5.0	<2,500	A01
MW-1	2/6/2014	29.17	--	0.00	--	--	--	--	--	--	--	--	--	--	--	--	Parked Car
MW-1	8/14/2014	29.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Accident
MW-1	2/17/2015	29.17	17.30	0.00	11.87	--	--	550	260	3.7	7.0	4.1	15	--	--	--	A01
MW-1	8/6/2015	29.17	--	0.00	--	11.87	--	--	--	--	--	--	--	--	--	--	Parked Car
MW-1	2/11/2016	29.17	17.37	0.00	11.80	--	--	250	86	3.6	5.6	8.8	9	--	--	--	
MW-1	8/19/2016	29.17	17.90	0.00	11.27	11.80	-0.53	1,600	820	30	12	95	33	--	--	--	
MW-2	2/7/2012	30.53	17.90	0.00	12.63	15.42	-2.79	36,000	1,100	3,600	990	4,200	1,600	<5.0	<5.0	--	A01
MW-2	8/9/2012	30.53	16.90	0.00	13.63	12.63	1.00	5,100	810	1,800	440	1,900	4,100	<50	<50	<25,000	A01
MW-2	2/27/2013	30.53	17.36	0.00	13.17	13.63	-0.46	45,000	1,700	2,500	1,200	4,900	2,700	<50	1.0	<250	A01
MW-2	8/15/2013	30.53	18.20	0.00	12.33	13.17	-0.84	1,500	1,200	5,600	820	4,400	1,700	<5.0	<5.0	<2,500	A01
MW-2	2/6/2014	30.53	20.20	0.00	10.33	12.33	-2.00	5,200	1,400	5,200	1,300	5,000	3,000	<0.50	<0.50	<250	A01
MW-2	8/14/2014	30.53	18.70	0.00	11.83	10.33	1.50	31,000	1,200	1,800	1,000	4,300	2,400	--	--	--	A01
MW-2	2/17/2015	30.53	17.66	0.00	12.87	11.83	1.04	28,000	1,200	4,600	1,300	5,600	1,900	--	--	--	A01
MW-2	8/6/2015	30.53	18.65	0.00	11.88	12.87	-0.99	37,000	1,900	6,700	1,900	8,700	3,800	--	--	--	A01
MW-2	2/11/2016	30.53	17.69	0.00	12.84	11.88	0.96	42,000	680	2,400	550	2,200	1,600	--	--	--	A01
MW-2	8/19/2016	30.53	18.22	0.00	12.31	12.84	-0.53	47,000	1,400	3,100	1,500	8,700	3,600	--	--	--	A01
MW-3	2/7/2012	29.79	17.23	0.00	12.56	14.88	-2.32	<50	<0.50	<0.50	<0.50	<1.0	110	<0.50	<0.50	--	A01
MW-3	8/9/2012	29.79	16.32	0.00	13.47	12.56	0.91	<50	<0.50	<0.50	<0.50	<1.0	0.80	<0.50	<0.50	<250	
MW-3	2/27/2013	29.79	16.75	0.00	13.04	13.47	-0.43	<50	<0.50	<0.50	<0.50	<1.0	1.2	<0.50	<0.50	<250	
MW-3	8/15/2013	29.79	17.60	0.00	12.19	13.04	-0.85	86	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-3	2/6/2014	29.79	18.36	0.00	11.43	12.19	-0.76	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-3	8/14/2014	29.79	18.07	0.00	11.72	11.43	0.29	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-3	2/17/2015	29.79	17.00	0.00	12.79	11.72	1.07	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-3	8/6/2015	29.79	18.03	0.00	11.76	12.79	-1.03	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-3	2/11/2016	29.79	17.00	0.00	12.79	11.76	1.03	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-3	8/19/2016	29.79	17.64	0.00	12.15	12.79	-0.64	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-4	2/7/2012	31.20	18.43	0.00	12.77	14.87	-2.10	1,800	140	15	21	32	430	<0.50	<0.50	--	A01
MW-4	8/9/2012	31.20	--	--	--	12.77	--	--	--	--	--	--	--	--	--	--	Parked Car
MW-4	2/27/2013	31.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Parked Car
MW-4	8/15/2013	31.20	18.70	0.00	12.50	--	--	1,100	620	38	62	67	1,200	<2.5	<2.5	<1,200	A01
MW-4	2/6/2014	31.20	20.68	0.00	10.52	12.50	--	620	850	29	54	62	600	<0.50	<0.50	<250	A01
MW-4	8/14/2014	31.20	19.17	0.00	12.03	10.52	--	3,200	210	47	72	100	480	--	--	--	A01
MW-4	2/17/2015	31.20	--	--	--	12.03	--	--	--	--	--	--	--	--	--	--	Parked Car
MW-4	8/6/2015	31.20	19.11	0.00	12.09	--	--	4,800	1900	94	67	110	1,200	--	--	--	A01,S09
MW-4	2/11/2016	31.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Parked Car
MW-4	8/19/2016	31.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Parked Car

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8260B-GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
MW-5	2/7/2012	28.07	16.45	0.00	11.62	14.93	-3.31	<50	<0.50	<0.50	<0.50	1.6	190	<0.50	<0.50	--	A01
MW-5	8/9/2012	28.07	15.22	0.00	12.85	11.62	1.23	<50	<0.50	<0.50	<0.50	<1.0	13	<0.50	<0.50	<250	
MW-5	2/27/2013	28.07	15.68	0.00	12.39	12.85	-0.46	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-5	8/15/2013	28.07	16.55	0.00	11.52	12.39	-0.87	<50	<0.50	<0.50	<0.50	<1.0	0.72	<0.50	<0.50	<250	
MW-5	2/6/2014	28.07	17.37	0.00	10.70	11.52	-0.82	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-5	8/14/2014	28.07	17.01	0.00	11.06	10.70	0.36	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-5	2/17/2015	28.07	15.97	0.00	12.10	11.06	1.04	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-5	8/6/2015	28.07	17.10	0.00	10.97	12.10	-1.13	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-5	2/11/2016	28.07	15.92	0.00	12.15	10.97	1.18	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-5	8/19/2016	28.07	16.60	0.00	11.47	12.15	-0.68	<50	<.0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-6	2/7/2012	29.13	17.51	0.00	11.62	14.71	-3.09	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	
MW-6	8/9/2012	29.13	16.41	0.00	12.72	11.62	1.10	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-6	2/27/2013	29.13	16.93	0.00	12.20	12.72	-0.52	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-6	8/15/2013	29.13	17.78	0.00	11.35	12.20	-0.85	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-6	2/6/2014	29.13	18.48	0.00	10.65	11.35	-0.70	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-6	8/14/2014	29.13	18.24	0.00	10.89	10.65	0.24	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	S05
MW-6	2/17/2015	29.13	17.22	0.00	11.91	10.89	1.02	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-6	8/6/2015	29.13	--	--	--	11.91	--	--	--	--	--	--	--	--	--	--	Paved Over
MW-6	2/11/2016	29.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Paved Over
MW-6	8/19/2016	29.13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
MW-7	2/7/2012	29.70	17.40	0.00	12.30	14.39	-2.09	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	
MW-7	8/9/2012	29.70	16.38	0.00	13.32	12.30	1.02	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-7	2/27/2013	29.70	16.83	0.00	12.87	13.32	-0.45	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-7	8/15/2013	29.70	17.67	0.00	12.03	12.87	-0.84	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-7	2/6/2014	29.70	18.42	0.00	11.28	12.03	-0.75	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-7	8/14/2014	29.70	18.15	0.00	11.55	11.28	0.27	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-7	2/17/2015	29.70	17.16	0.00	12.54	11.55	0.99	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-7	8/6/2015	29.70	18.11	0.00	11.59	12.54	-0.95	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-7	2/11/2016	29.70	17.27	0.00	12.43	11.59	0.84	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-7	8/19/2016	29.70	17.66	0.00	12.04	12.43	-0.39	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
SP-3	2/27/2013	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-3	8/14/2014	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-3	2/17/2015	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-3	8/6/2015	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-3	2/11/2016	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-3	8/19/2016	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	2/27/2013	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	8/14/2014	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	2/17/2015	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	8/6/2015	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	2/11/2016	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	8/19/2016	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	2/27/2013	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	8/14/2014	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	2/17/2015	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	8/6/2015	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	2/11/2016	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	8/19/2016	*--	--	--	*--	--	--	--	--	--	--	--	--	--	--	--	Unable to Locate

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8260B-GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
726 Harrison Street																	
AS-1	8/15/2013	34.50	18.17	0.00	16.33	--	--	--	--	--	--	--	--	--	--	--	
AS-1	8/14/2014	34.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
AS-1	2/17/2015	34.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
AS-1	8/6/2015	34.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
AS-1	2/11/2016	34.50	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
AS-1	8/19/2016	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
EW-1	2/27/2013	*--	18.17	0.00	*--	--	--	960	180	6.0	3.6	12	170	<0.50	<0.50	<250	A01
EW-1	8/15/2013	34.37	18.98	0.00	15.39	--	--	290	67	1.7	1.3	3.3	57	<0.50	<0.50	<250	
EW-1	2/6/2014	34.37	19.69	0.00	14.68	15.39	-0.71	640	68	1.2	7.9	7.0	180	<0.50	<0.50	<250	A01
EW-1	8/14/2014	34.37	19.48	0.00	14.89	14.68	0.21	8,000	63	7.5	83	57.0	340	--	--	--	A01
EW-1	2/17/2015	34.37	18.45	0.00	15.92	14.89	1.03	1,200	27	3.3	5.0	5.2	180	--	--	--	A01
EW-1	8/6/2015	34.37	19.45	0.00	14.92	15.92	-1.00	1,900	180	8.2	58.0	41.0	590	--	--	--	A01
EW-1	2/11/2016	34.37	18.60	0.00	15.77	14.92	0.85	890	19	1.2	1.8	1.8	160	--	--	--	
EW-1	8/19/2016	34.37	19.05	0.00	15.32	15.77	-0.45	1,300	91	3.6	33.0	20.0	340	--	--	--	A01
MP-1	8/15/2013	34.16	19.03	0.00	15.13	--	--	<50	<0.50	<0.50	<0.50	<1.0	2.4	<0.50	<0.50	<250	
MP-1	2/6/2014	34.16	21.07	0.00	13.09	15.13	-2.04	<50	<0.50	<0.50	<0.50	<1.0	1.8	<0.50	<0.50	<250	
MP-1	8/14/2014	34.16	19.56	0.00	14.60	13.09	1.51	93	<0.50	<0.50	<0.50	<1.0	1.6	--	--	--	
MP-1	2/17/2015	34.16	--	--	--	14.60	--	--	--	--	--	--	--	--	--	--	Parked Car
MP-1	8/6/2015	34.16	19.49	0.00	14.67	--	--	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MP-1	2/11/2016	34.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MP-1	8/19/2016	34.16	19.10	--	15.06	--	–	58	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	Parked Car
MPE-1	8/15/2013	34.36	19.24	0.00	15.12	--	--	820	110	23	17	45	610	<0.50	<0.50	<250	A01
MPE-1	2/6/2014	34.36	20.00	0.00	14.36	15.12	-0.76	460	93	24	13	29	410	<0.50	<0.50	<250	A01
MPE-1	8/14/2014	34.36	19.78	0.00	14.58	14.36	0.22	150	24	1.7	3.2	5.5	470	--	--	--	A01
MPE-1	2/17/2015	34.36	18.70	0.00	15.66	14.58	1.08	4,400	540	30	87	89	3,400	--	--	--	A01
MPE-1	8/6/2015	34.36	19.72	0.00	14.64	15.66	-1.02	2,100	400	30	51	37	2,600	--	--	--	A01
MPE-1	2/11/2016	34.36	18.83	0.00	15.53	14.64	0.89	1,600	180	14	21	24	320	--	--	--	A01
MPE-1	8/19/2016	34.36	19.32	0.00	15.04	15.53	-0.49	4,600	640	38	110	100	2400	--	--	--	A01
MW-1	2/7/2012	31.98	18.77	0.00	13.21	15.22	-2.01	370	46	1.7	4.2	4.5	3,800	<0.50	<0.50	--	A01
MW-1	8/9/2012	31.98	17.82	0.00	14.16	13.21	0.95	6,600	760	27	58	60	6,700	<0.50	<0.50	--	A01
MW-1	2/27/2013	31.98	18.21	0.00	13.77	14.16	-0.39	3,000	480	26	52	56	2,600	<0.50	<0.50	<250	A01
MW-1	8/15/2013	34.45	19.03	0.00	15.42	13.77	1.65	7,200	820	50	65	99	7,300	<5.0	<5.0	<2,500	A01
MW-1	2/6/2014	34.45	19.87	0.00	14.58	15.42	-0.84	2,600	1,800	86	400	250	10,000	<0.50	<0.50	<250	A01
MW-1	8/14/2014	34.45	19.67	0.00	14.78	14.58	0.20	9,100	1,700	53	340	320	7,600	--	--	--	A01
MW-1	2/17/2015	34.45	17.84	0.00	16.61	14.78	1.83	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-1	8/6/2015	34.45	19.63	0.00	14.82	16.61	-1.79	14,000	2,600	100	370	340	6,600	--	--	--	
MW-1	2/11/2016	34.45	18.83	0.00	15.62	14.82	0.80	2,800	510	20	68	72	1,400	--	--	--	A01
MW-1	8/19/2016	34.45	19.20	0.00	15.25	15.62	-0.37	5,500	1200	23	110	110	2,900	--	--	--	A01
MW-2	2/7/2012	32.44	19.52	0.00	12.92	15.42	-2.50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	
MW-2	8/9/2012	32.44	18.55	0.00	13.89	12.92	0.97	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	--	
MW-2	2/27/2013	32.44	18.95	0.00	13.49	13.89	-0.40	<50	<0.50	<0.50	<0.50	<1.0	1.7	<0.50	<0.50	<250	
MW-2	8/15/2013	34.91	19.77	0.00	15.14	13.49	1.65	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-2	2/6/2014	34.91	21.20	0.00	13.71	15.14	-1.43	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-2	8/14/2014	34.91	20.28	0.00	14.63	13.71	0.92	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-2	2/17/2015	34.91	19.15	0.00	15.76	14.63	1.13	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-2	8/6/2015	34.91	20.23	0.00	14.68	15.76	-1.08	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-2	2/11/2016	34.91	19.29	0.00	15.62	14.68	0.94	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-2	8/19/2016	34.91	19.84	0.00	15.07	15.62	-0.55	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	TOC Elevation (feet	DTW (feet btoc)	LPH Thickness (feet)	GW Elevation (feet AMSL)	Previous Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8260B-GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
MW-3	2/7/2012	31.64	18.71	0.00	12.93	14.88	-1.95	25	<0.50	<0.50	<0.50	<1.0	2.1	<0.50	<0.50	--	J
MW-3	8/9/2012	31.64	17.74	0.00	13.90	12.93	0.97	39	<0.50	<0.50	<0.50	<1.0	9.2	<0.50	<0.50	--	J
MW-3	2/27/2013	31.64	18.12	0.00	13.52	13.90	-0.38	<50	<0.50	<0.50	<0.50	<1.0	2.8	<0.50	<0.50	<250	
MW-3	8/15/2013	34.12	18.95	0.00	15.17	13.52	1.65	<50	<0.50	<0.50	<0.50	<1.0	1.1	<0.50	<0.50	<250	
MW-3	2/6/2014	34.12	19.70	0.00	14.42	15.17	-0.75	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<0.50	<0.50	<250	
MW-3	8/14/2014	34.12	19.48	0.00	14.64	14.42	0.22	<50	<0.50	<0.50	<0.50	<1.0	<0.05	--	--	--	
MW-3	2/17/2015	34.12	18.46	0.00	15.66	14.64	1.02	<50	<0.50	<0.50	<0.50	<1.0	1.3	--	--	--	
MW-3	8/6/2015	34.12	19.41	0.00	14.71	15.66	-0.95	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-3	2/11/2016	34.12	18.59	0.00	15.53	14.71	0.82	<50	<0.50	<0.50	<0.50	<1.0	0.7	--	--	--	
MW-3	8/19/2016	34.12	19.02	0.00	15.10	15.53	-0.43	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-4	2/7/2012	32.56	19.09	0.00	13.47	14.87	-1.40	210	<0.50	<0.50	<0.50	<1.0	17	<0.50	<0.50	--	
MW-4	8/9/2012	32.56	18.16	0.00	14.40	13.47	0.93	280	2	<0.50	<0.50	<1.0	21	<0.50	<0.50	--	
MW-4	2/27/2013	32.56	18.50	0.00	14.06	14.40	-0.34	170	1.8	<0.50	<0.50	<1.0	22	<0.50	<0.50	<250	
MW-4	8/15/2013	35.05	19.34	0.00	15.71	14.06	1.65	98	<0.50	<0.50	<0.50	<1.0	25	<0.50	<0.50	<250	
MW-4	2/6/2014	35.05	20.09	0.00	14.96	15.71	-0.75	<50	<0.50	<0.50	<0.50	<1.0	9.4	<0.50	<0.50	<250	
MW-4	8/14/2014	35.05	19.90	0.00	15.15	14.96	0.19	160	0.7	<0.50	<0.50	<1.0	9.4	--	--	--	
MW-4	2/17/2015	35.05	18.85	0.00	16.20	15.15	1.05	180	<0.50	<0.50	<0.50	<1.0	12	--	--	--	
MW-4	8/6/2015	35.05	19.81	0.00	15.24	16.20	-0.96	210	<0.50	<0.50	<0.50	<1.0	12	--	--	--	
MW-4	2/11/2016	35.05	18.83	0.00	16.22	12.09	4.13	170	0.59	<0.50	<0.50	<1.0	3	--	--	--	
MW-4	8/19/2016	35.05	19.40	0.00	15.65	16.22	-0.57	94	<0.50	<0.50	<0.50	<1.0	3	--	--	--	
MW-5	2/7/2012	32.06	19.16	0.00	12.90	14.93	-2.03	19,000	890	410	360	990	17,000	<6.2	<6.2	--	A01
MW-5	8/9/2012	32.06	18.24	0.00	13.82	12.90	0.92	16,000	1,400	580	470	960	16,000	<5.0	<5.0	--	A01
MW-5	2/27/2013	32.06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	Parked Car
MW-5	8/15/2013	34.76	19.40	0.00	15.36	--	--	8,000	1,900	590	390	1,100	20,000	<0.50	<0.50	<250	A01
MW-5	2/6/2014	34.76	21.45	0.00	13.31	15.36	-2.05	3,400	1,900	150	240	220	7,600	<0.50	<0.50	<250	A01
MW-5	8/14/2014	34.76	19.92	0.00	14.84	13.31	1.53	2,100	720	150	260	370	7,300	--	--	--	A01
MW-5	2/17/2015	34.76	18.92	0.00	15.84	14.84	1.00	16,000	1,600	360	390	950	5,300	--	--	--	A01
MW-5	8/6/2015	34.76	19.87	0.00	14.89	15.84	-0.95	9,500	2,700	380	500	900	3,800	--	--	--	A01
MW-5	2/11/2016	34.76	18.98	0.00	15.78	14.89	0.89	4,300	820	83	130	180	1,400	--	--	--	A01
MW-5	8/19/2016	34.76	19.48	0.00	15.28	15.78	-0.50	13,000	2,100	200	350	640	4,500	--	--	--	A01
MW-6	2/7/2012	32.04	26.53	0.00	5.51	14.71	-9.20	410	<0.50	<0.50	<0.50	<1.0	970	<0.50	0.79	--	A01
MW-6	8/9/2012	32.04	28.27	0.00	3.77	5.51	-1.74	830	<0.50	<0.50	<0.50	<1.0	970	<0.50	1.2	--	A01
MW-6	2/27/2013	32.04	26.48	0.00	5.56	3.77	1.79	<50	<0.50	<0.50	<0.50	<1.0	970	<0.50	0.70	<250	A01
MW-6	8/15/2013	34.53	28.85	0.00	5.68	5.56	0.12	58	<0.50	<0.50	<0.50	<1.0	1,000	<0.50	0.79	<250	A01
MW-6	2/6/2014	34.53	27.50	0.00	7.03	5.68	1.35	<50	<0.50	<0.50	<0.50	<1.0	1,100	<0.50	<0.50	<250	A01
MW-6	8/14/2014	34.53	27.92	0.00	6.61	7.03	-0.42	<50	<0.50	<0.50	<0.50	<1.0	900	--	--	--	A01
MW-6	2/17/2015	34.53	25.64	0.00	8.89	6.61	2.28	490	<0.50	<0.50	<0.50	<1.0	850	--	--	--	A01, A90
MW-6	8/6/2015	34.53	26.80	0.00	7.73	8.89	-1.16	340	<0.50	<0.50	<0.50	<1.0	300	--	--	--	A01
MW-6	2/11/2016	34.53	25.69	0.00	8.84	7.73	1.11	160	<0.50	<0.50	<0.50	<1.0	160	--	--	--	A01, A90
MW-6	8/19/2016	34.53	26.58	0.00	7.95	8.84	-0.89	130	<0.50	<0.50	<0.50	<1.0	140	--	--	--	A01, A90

Table 2
Historical Groundwater Gauging and Analytical Results
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Notes

Analytical results given in micrograms per liter.

Muir Consulting, Inc. completed a survey of 726 Harrison well locations on August 21, 2013. Elevation data for 800 Harrison Street was converted by using the National Geodetic Survey (NGS) online calculator located from NAV29 to NAV88. The 706 Harrison Street data was not converted due to discrepencies with the data.

EPA Method 8260B for Volatile Organic Compounds.

Standard Abbreviations

--	not analyzed, measured, or collected
*--	not surveyed
<	not detected at or above laboratory detection limit
AMSL	above mean sealevel
btoc	below top of casing
DTW	depth to water
GC/MS	gas chromatography–mass spectrometry for TPPH
GW	groundwater
GWE	groundwater elevation
J	estimated value
LPH	liquid-phase hydrocarbons
TOC	top of casing (surveyed reference elevation)
A01	PQL's and MDL's are raised due to sample dilution
A90	TPPH does not exhibit a "gasoline" pattern, TPPH is entirely due to MTBE
S05	the sample holding time was exceeded
S09	the surrogate recovery on the sample was not within the control limits

Analytes

TPPH	total purgeable petroleum hydrocarbons
MTBE	methyl tertiary butyl ether
EDB	1,2-dibromoethane
EDC	1,2-dichloroethane (same as ethylene dichloride)

Table 2A
Historical Additional Groundwater Analytical Results - MNA Parameters
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Methane	Alkalinity as CaCO3	Nitrate as NO3	Nitrite as NO2	Sulfate	Non-Volatile Organic Carbon	Comments
800 Harrison Street								
MW-1	8/9/2012	0.026	69	1.9	<0.17	10	1.6	
MW-1	2/27/2013	0.0019	56	1.2	<0.17	9.0	0.87	
MW-1	8/15/2013	<0.0010	45	1.9	<0.17	12	0.75	
MW-1	2/6/2014	0.010	34	1.6	<0.17	7.9	1.1	
MW-1	8/14/2014	0.0035	37	2.0	<0.17	9.4	--	
MW-2	8/9/2012	0.076	190	19	0.38	130	1.4	
MW-2	2/27/2013	0.055	320	16	0.24	160	2.1	
MW-2	8/15/2013	<0.0010	68	10	<0.17	60	0.88	
MW-2	2/6/2014	0.014	110	6.4	<0.17	110	0.70	
MW-2	8/14/2014	0.0060	120	1.0	<0.17	79	--	
MW-3	8/9/2012	6.3	290	<0.44	<0.17	3.5	2.9	A01, S01
MW-3	2/27/2013	4.4	390	<0.44	<0.17	4.5	4	A01
MW-3	8/15/2013	1.6	230	<0.44	<0.17	11	3.7	A01
MW-3	2/6/2014	8.7	420	<0.44	<0.17	4.6	5.1	
MW-3	8/14/2014	17	450	0.55	<0.17	2.2	--	A01
MW-4	8/9/2012	0.031	98	4.3	<0.17	22	0.90	
MW-4	2/27/2013	0.0023	130	9.7	<0.17	25	0.89	
MW-4	8/15/2013	0.0017	68	2.2	<0.17	14	1.2	
MW-4	2/6/2014	0.0053	81	3.1	<0.17	17	1.3	
MW-4	8/14/2014	0.0016	84	4.4	<0.17	24	--	
MW-5	8/9/2012	2.9	140	<0.44	<0.17	2.5	1.7	A01
MW-5	2/27/2013	1.9	200	<0.44	<0.17	24	2.1	A01
MW-5	8/15/2013	0.0040	150	<0.44	<0.17	7.4	2.9	
MW-5	2/6/2014	3.3	190	<0.44	<0.17	<1.0	2.4	
MW-5	8/14/2014	0.79	170	<0.44	<0.17	<1.0	--	A01
MW-6	8/9/2012	0.18	130	<0.44	<0.17	16	1.0	A01
MW-6	2/27/2013	0.19	99	0.45	<0.17	13	0.75	
MW-6	8/15/2013	<0.0010	110	0.71	<0.17	13	2.0	
MW-6	2/6/2014	1.8	170	<0.44	<0.17	26	2.9	
MW-6	8/14/2014	<0.0010	140	<0.44	<0.17	25	--	
MW-7	8/9/2012	0.43	180	<0.44	<0.17	17	2.7	A01
MW-7	2/27/2013	0.13	140	<0.44	<0.17	38	1.1	
MW-7	8/15/2013	<0.0010	100	<0.44	<0.17	17	2.1	
MW-7	2/6/2014	1.3	74	<0.44	<0.17	4.3	1.8	
MW-7	8/14/2014	0.44	73	<0.44	<0.17	4.3	--	A01
MW-8	8/9/2012	0.0041	130	1.3	<0.17	37	1.6	
MW-8	2/27/2013	0.0027	190	<0.44	<0.17	49	2.7	
MW-8	8/15/2013	<0.0010	98	1.0	<0.17	17	1.9	
MW-8	2/6/2014	0.0035	180	<0.44	<0.17	20	1.5	
MW-8	8/14/2014	0.0059	200	<0.44	<0.17	28	--	

Table 2A
Historical Additional Groundwater Analytical Results - MNA Parameters
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Methane	Alkalinity as CaCO3	Nitrate as NO3	Nitrite as NO2	Sulfate	Non-Volatile Organic Carbon	Comments
706 Harrison Street								
MW-1	8/9/2012	0.28	250	<0.44	<0.17	51	7.3	A01
MW-1	2/27/2013	--	--	--	--	--	--	Parked Car
MW-1	8/15/2013	0.32	430	<0.44	<0.17	34	12	A01
MW-1	2/6/2014	--	--	--	--	--	--	Parked Car
MW-1	8/14/2014	--	--	--	--	--	--	Car Accident
MW-2	8/9/2012	6.8	500	<0.44	<0.17	<1.0	15	A01, S01
MW-2	2/27/2013	4.9	530	<0.44	<0.17	4.1	16	A01, A10
MW-2	8/15/2013	3.3	520	<0.44	<0.17	<1.0	24	A01
MW-2	2/6/2014	6.5	490	<0.44	<0.17	<1.0	20	A01
MW-2	8/14/2014	18.0	520	<0.44	<0.17	<1.0	--	A01
MW-3	8/9/2012	<0.0010	130	43	<0.17	61	1.4	
MW-3	2/27/2013	0.0029	130	39	<0.17	52	1.1	
MW-3	8/15/2013	0.0036	120	34	<0.17	44	1.4	
MW-3	2/6/2014	0.0072	110	33	<0.17	37	1.7	
MW-3	8/14/2014	0.0018	110	38	<0.17	42	--	
MW-4	8/9/2012	--	--	--	--	--	--	Parked Car
MW-4	2/27/2013	--	--	--	--	--	--	Parked Car
MW-4	8/15/2013	0.45	510	<0.44	<0.17	4.0	15	A01
MW-4	2/6/2014	2.1	440	<0.44	<0.17	9.8	12	A01
MW-4	8/14/2014	1.6	480	<0.44	<0.17	3.8	--	
MW-5	8/9/2012	<0.0010	150	19	<0.17	49	2.0	
MW-5	2/27/2013	0.0026	150	17	<0.17	46	2.1	
MW-5	8/15/2013	0.0010	150	19	<0.17	51	2.6	
MW-5	2/6/2014	0.0023	160	15	<0.17	51	2.8	
MW-5	8/14/2014	0.0010	160	16	<0.17	55	--	
MW-6	8/9/2012	0.0082	140	<0.44	<0.17	27	1.9	
MW-6	2/27/2013	0.0019	190	<0.44	<0.17	60	2.4	
MW-6	8/15/2013	<0.0010	180	<0.44	<0.17	62	3.4	
MW-6	2/6/2014	0.0017	150	<0.44	<0.17	38	2.7	
MW-6	8/14/2014	<0.0010	150	<0.44	<0.17	36	--	
MW-7	8/9/2012	0.0045	230	<0.44	<0.17	49	3.0	
MW-7	2/27/2013	0.0012	260	<0.44	<0.17	56	3.4	
MW-7	8/15/2013	<0.0010	250	<0.44	<0.17	58	4.4	
MW-7	2/6/2014	0.030	220	<0.44	<0.17	38	3.6	
MW-7	8/14/2014	0.023	230	<0.44	<0.17	48	--	
SP-3	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-3	8/14/2014	--	--	--	--	--	--	Unable to Locate
SP-4	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-4	8/14/2014	--	--	--	--	--	--	Unable to Locate
SP-5	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-5	8/14/2014	--	--	--	--	--	--	Unable to Locate

Table 2A
Historical Additional Groundwater Analytical Results - MNA Parameters
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Methane	Alkalinity as CaCO3	Nitrate as NO3	Nitrite as NO2	Sulfate	Non-Volatile Organic Carbon	Comments
726 Harrison Street								
AS-1	8/15/2013	--	--	--	--	--	--	
AS-1	8/14/2014	--	--	--	--	--	--	
EW-1	2/27/2013	0.91	210	0.5	<0.17	10	3.2	A01
EW-1	8/15/2013	<0.0010	150	1.1	<0.17	13	2.5	
EW-1	2/6/2014	1.2 A01	230	<0.44	<0.17	12	5.0	
EW-1	8/14/2014	0.57	220	<0.44	<0.17	2.8	--	A01
MP-1	8/15/2013	0.51	230	<0.44	<0.17	14	6.4	
MP-1	8/14/2014	--	--	--	--	--	--	
MPE-1	8/15/2013	<0.0010	82	66	<0.17	27	1.1	
MPE-1	8/14/2014	--	--	--	--	--	--	
MW-1	8/9/2012	--	--	--	--	--	--	
MW-1	2/27/2013	0.51	230	<0.44	<0.17	14	6.4	
MW-1	8/15/2013	1.7	430	<0.44	<0.17	<1.0	29	A01
MW-1	2/6/2014	6.3	370	<0.44	<0.17	<1.0	33	A01
MW-1	8/14/2014	2.0	380	<0.44	<0.17	<1.0	--	A01
MW-2	8/9/2012	--	--	--	--	--	--	
MW-2	2/27/2013	<0.0010	82	66	<0.17	27	1.1	
MW-2	8/15/2013	0.0021	97	62	<0.17	32	2.6	
MW-2	2/6/2014	0.0058	150	38	<0.17	38	1.9	
MW-2	8/14/2014	0.0016	130	47	<0.17	41	--	
MW-3	8/9/2012	--	--	--	--	--	--	
MW-3	2/27/2013	0.0012	160	<0.44	<0.17	22	2.0	
MW-3	8/15/2013	<0.0010	160	<0.44	<0.17	19	1.9	
MW-3	2/6/2014	0.0062	140	<0.44	<0.17	18	1.7	
MW-3	8/14/2014	<0.0010	140	<0.44	<0.17	13	--	
MW-4	8/9/2012	--	--	--	--	--	--	
MW-4	2/27/2013	0.32	400	<0.44	<0.17	13	4.8	
MW-4	8/15/2013	<0.0010	290	<0.44	<0.17	15	3.9	
MW-4	2/6/2014	2.4	310	<0.44	<0.17	17	4.0	
MW-4	8/14/2014	0.21	300	<0.44	<0.17	17	--	A01
MW-5	8/9/2012	--	--	--	--	--	--	
MW-5	2/27/2013	--	--	--	--	--	--	Parked Car
MW-5	8/15/2013	2.2	670	<0.44	<0.17	<1.0	28	A01
MW-5	2/6/2014	11	430	<0.44	<0.17	<1.0	11	A01
MW-5	8/14/2014	1.7	440	<0.44	<0.17	<1.0	--	A01
MW-6	8/9/2012	--	--	--	--	--	--	
MW-6	2/27/2013	0.0033	170	6.2	<0.17	25	0.70	
MW-6	8/15/2013	0.0051	180	6.3	<0.17	26	7.4	A01
MW-6	2/6/2014	0.0019	170	3.9	<0.17	24	0.91	
MW-6	8/14/2014	0.0015	170	4.3	<0.17	26	--	

Table 2A
Historical Additional Groundwater Analytical Results - MNA Parameters
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Notes

Analytical results given in milligrams per liter.

Standard Abbreviations

--	not analyzed, measured, or collected
<	not detected at or above laboratory detection limit
A01	PQL's and MDL's are raised due to sample dilution
A10	PQL's and MDL's were raised due to matrix interference
S01	sample result is not within the quantitation range of the method

Analytes

CaCO3	calcium carbonate
NO3	nitrate
NO2	nitrogen dioxide
EDC	1,2-dichloroethane (same as ethylene dichloride)
PQL	practical quantitation limit
MDL	method detection limit

Table 2B
Historical Additional Groundwater Analytical Results - Metals
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Dissolved Cadmium	Dissolved Chromium	Dissolved Iron	Dissolved Lead	Dissolved Nickel	Dissolved Zinc	Comments
800 Harrison Street								
MW-1	2/7/2012	<10	<10	--	<50	<10	<10	
MW-1	8/9/2012	<10	<10	<50	<50	<10	<10	
MW-1	2/27/2013	<10	<10	<50	<50	<10	<10	
MW-1	8/15/2013	<10	<10	52	<50	<10	<10	
MW-1	2/6/2014	<10	<10	56	<50	<10	14	
MW-1	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-2	2/7/2012	--	--	--	--	--	--	
MW-2	8/9/2012	--	--	2,200	--	--	--	
MW-2	2/27/2013	--	--	56	--	--	--	
MW-2	8/15/2013	--	--	<50	--	--	--	
MW-2	2/6/2014	--	--	<50	--	--	--	
MW-2	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-3	2/7/2012	--	--	--	--	--	--	
MW-3	8/9/2012	--	--	5,700	--	--	--	
MW-3	2/27/2013	--	--	8,400	--	--	--	
MW-3	8/15/2013	--	--	4,200	--	--	--	
MW-3	2/6/2014	--	--	2,600	--	--	--	
MW-3	8/14/2014	<10	<10	810	<50	<10	<10	
MW-4	2/7/2012	--	--	--	--	--	--	
MW-4	8/9/2012	--	--	<50	--	--	--	
MW-4	2/27/2013	--	--	<50	--	--	--	
MW-4	8/15/2013	--	--	61	--	--	--	
MW-4	2/6/2014	--	--	480	--	--	--	
MW-4	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-5	2/7/2012	--	--	--	--	--	--	
MW-5	8/9/2012	--	--	860	--	--	--	
MW-5	2/27/2013	--	--	860	--	--	--	
MW-5	8/15/2013	--	--	580	--	--	--	
MW-5	2/6/2014	--	--	410	--	--	--	
MW-5	8/14/2014	<10	<10	160	<50	<10	<10	
MW-6	2/7/2012	--	--	--	--	--	--	
MW-6	8/9/2012	--	--	160	--	--	--	
MW-6	2/27/2013	--	--	<50	--	--	--	
MW-6	8/15/2013	--	--	100	--	--	--	
MW-6	2/6/2014	--	--	110	--	--	--	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	

Table 2B
Historical Additional Groundwater Analytical Results - Metals
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Dissolved Cadmium	Dissolved Chromium	Dissolved Iron	Dissolved Lead	Dissolved Nickel	Dissolved Zinc	Comments
MW-7	2/7/2012	--	--	--	--	--	--	
MW-7	8/9/2012	--	--	670	--	--	--	
MW-7	2/27/2013	--	--	1,000	--	--	--	
MW-7	8/15/2013	--	--	260	--	--	--	
MW-7	2/6/2014	--	--	480	--	--	--	
MW-7	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-8	2/7/2012	--	--	--	--	--	--	
MW-8	8/9/2012	--	--	680	--	--	--	
MW-8	2/27/2013	--	--	1,400	--	--	--	
MW-8	8/15/2013	--	--	71	--	--	--	
MW-8	2/6/2014	--	--	130	--	--	--	
MW-8	8/14/2014	<10	<10	<50	<50	<10	<10	
706 Harrison Street								
MW-1	8/9/2012	--	--	830	--	--	--	
MW-1	2/27/2013	--	--	--	--	--	--	Parked Car
MW-1	8/15/2013	--	--	3,100	--	--	--	
MW-1	2/6/2014	--	--	--	--	--	--	Parked Car
MW-1	8/14/2014	--	--	--	--	--	--	
MW-2	8/9/2012	--	--	6,900	--	--	--	
MW-2	2/27/2013	--	--	9,500	--	--	--	
MW-2	8/15/2013	--	--	7,800	--	--	--	
MW-2	2/6/2014	--	--	4,600	--	--	--	
MW-2	8/14/2014	<10	<10	3,600	<50	<10	<10	
MW-3	8/9/2012	--	--	<50	--	--	--	
MW-3	2/27/2013	--	--	<50	--	--	--	
MW-3	8/15/2013	--	--	<50	--	--	--	
MW-3	2/6/2014	--	--	<50	--	--	--	
MW-3	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-4	8/9/2012	--	--	--	--	--	--	
MW-4	2/27/2013	--	--	--	--	--	--	Parked Car
MW-4	8/15/2013	--	--	3,300	--	--	--	
MW-4	2/6/2014	--	--	340	--	--	--	
MW-4	8/14/2014	<10	<10	180	<50	<10	<10	
MW-5	8/9/2012	--	--	<50	--	--	--	
MW-5	2/27/2013	--	--	<50	--	--	--	
MW-5	8/15/2013	--	--	<50	--	--	--	
MW-5	2/6/2014	--	--	<50	--	--	--	
MW-5	8/14/2014	<10	<10	<50	<50	<10	<10	

Table 2B
Historical Additional Groundwater Analytical Results - Metals
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Dissolved Cadmium	Dissolved Chromium	Dissolved Iron	Dissolved Lead	Dissolved Nickel	Dissolved Zinc	Comments
MW-6	8/9/2012	--	--	<50	--	--	--	
MW-6	2/27/2013	--	--	94	--	--	--	
MW-6	8/15/2013	--	--	120	--	--	--	
MW-6	2/6/2014	--	--	75	--	--	--	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-7	8/9/2012	--	--	860	--	--	--	
MW-7	2/27/2013	--	--	2,600	--	--	--	
MW-7	8/15/2013	--	--	340	--	--	--	
MW-7	2/6/2014	--	--	760	--	--	--	
MW-7	8/14/2014	<10	<10	1,200	<50	<10	<10	
SP-3	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-3	8/14/2014	--	--	--	--	--	--	Unable to Locate
SP-4	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-4	8/14/2014	--	--	--	--	--	--	Unable to Locate
SP-5	2/27/2013	--	--	--	--	--	--	Unable to Locate
SP-5	8/14/2014	--	--	--	--	--	--	Unable to Locate
726 Harrison Street								
AS-1	8/15/2013	--	--	--	--	--	--	
AS-1	8/14/2014	--	--	--	--	--	--	
EW-1	2/27/2013	--	--	3,100	--	--	--	
EW-1	8/15/2013	--	--	1,300	--	--	--	
EW-1	2/6/2014	--	--	1,700	--	--	--	
EW-1	8/14/2014	<10	<10	2,600	<50	<10	<10	
MP-1	8/15/2013	--	--	3,500	--	--	--	
MP-1	8/14/2014	<10	<10	--	<50	<10	<10	
MPE-1	8/15/2013	--	--	<50	--	--	--	
MPE-1	8/14/2014	<10	<10	--	<50	<10	<10	
MW-1	8/9/2012	--	--	--	--	--	--	
MW-1	2/27/2013	--	--	2,000	--	--	--	
MW-1	8/15/2013	--	--	3,500	--	--	--	
MW-1	2/6/2014	--	--	950	--	--	--	
MW-1	8/14/2014	<10	<10	1,900	<50	<10	<10	

Table 2B
Historical Additional Groundwater Analytical Results - Metals
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Dissolved Cadmium	Dissolved Chromium	Dissolved Iron	Dissolved Lead	Dissolved Nickel	Dissolved Zinc	Comments
MW-2	8/9/2012	--	--	--	--	--	--	
MW-2	2/27/2013	--	--	<50	--	--	--	
MW-2	8/15/2013	--	--	<50	--	--	--	
MW-2	2/6/2014	--	--	<50	--	--	--	
MW-2	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-3	8/9/2012	--	--	--	--	--	--	
MW-3	2/27/2013	--	--	<50	--	--	--	
MW-3	8/15/2013	--	--	110	--	--	--	
MW-3	2/6/2014	--	--	<50	--	--	--	
MW-3	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-4	8/9/2012	--	--	--	--	--	--	
MW-4	2/27/2013	--	--	4,300	--	--	--	
MW-4	8/15/2013	--	--	1,300	--	--	--	
MW-4	2/6/2014	--	--	<50	--	--	--	
MW-4	8/14/2014	<10	<10	380	<50	<10	<10	
MW-5	8/9/2012	--	--	--	--	--	--	
MW-5	2/27/2013	--	--	--	--	--	--	Parked Car
MW-5	8/15/2013	--	--	7,300	--	--	--	
MW-5	2/6/2014	--	--	4,200	--	--	--	
MW-5	8/14/2014	<10	<10	1,200	<50	<10	<10	
MW-6	8/9/2012	--	--	--	--	--	--	
MW-6	2/27/2013	--	--	<50	--	--	--	
MW-6	8/15/2013	--	--	<50	--	--	--	
MW-6	2/6/2014	--	--	<50	--	--	--	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	

Notes

Analytical results given in micrograms per liter.

ARCADIS Design & Consultancy for natural and built assets

Attachment A

Field Data Sheets and General Procedures

GETTLER-RYAN INC.

TRANSMITTAL

Revised: October 19, 2016
August 26, 2016
G-R #385647

TO: Ms. Tamera Rogers
Arcadis
6296 San Ignacio Ave, Suite C & D
San Jose, CA 95119

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6805 Sierra Court, Suite G
Dublin, California 94568

RE: Chevron Facility
#351646/0752
800 Harrison Street
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Second Semi-Annual Event of August 19, 2016**

COMMENTS:

Pursuant to your request, we are providing you with copies of the above referenced data for your use.

Please provide us the updated historical data prior to the next monitoring and sampling event for our field use.

Please feel free to contact me if you have any comments/questions.

trans/351646 0752

WELL CONDITION STATUS SHEET

Client/
Facility #: Chevron #351646 / 0752
Site Address: 800 Harrison Street
City: Oakland, CA

Job #: 385647
Event Date: 8-19-16
Sampler: AW

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/N
A-MW1	OK	→	→	2S	OK	→	→	A	N	Morrison / 8"/2	N
A-MW-3	OK	→	→	3S	OK	→	→			BL/8"/3	
A-MW-2	OK	→	→	3S	OK	→	→			Brainard / 8"/3	
MP-1	OK	→				→	→			Tenco / 12"/2	
MPE-1	OK	→				→	→			↓	
SMW-5	OK	→	?	2S	OK	→	→			Morrison / 12"/2	
S-MW-2	OK	→	→	2S	OK	→	→		Y	Morrison / 8"/2	
A-MW-4	→	→	→	UTA	→	→	→			→	
SP-3	→	→	→	UTL	→	→	→			→	
SP-4	→	→	→	UTL	→	→	→			→	
SP-5	→	→	→	UTL	→	→	→			→	

Comments

WELL CONDITION STATUS SHEET

Client/
Facility #: Chevron #351646 / 0752
Site Address: 800 Harrison Street
City: Oakland, CA

Job #: 385647
Event Date: 8/19/16
Sampler: JH

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/# of Bolts	Pictures Taken Y/N
A-MW-6								N	N	UTL / P/O	N
A-MW-5	OK	N/A			OK					CHristy	
A-MW-7	OK	N/A			OK					8" Morrison	
S-MW-4	OK									12"	
S-MW-6	OK										
S-EW-1	OK									8"	
S-MW-3	OK		R	2xS	OK						Y

Comments

WELL CONDITION STATUS SHEET

Client/ Facility #: Chevron #351646 / 0752
Site Address: 800 Harrison Street
City: Oakland, CA

Job #: 385647
Event Date: 8.19.16
Sampler: FT

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/(N)	REPLACE CAP Y/(N)	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/(N)
MW-1	OK	→	→	→	→	→	→	↓	↓	EMCO / 12" / 2	
MW-2	OK	→	→	S2	OK	→	→			UNIVERSAL [redacted] / 8" / 2	
MW-3	OK	→	→	→	→	→	→			EMCO / 12" / 2	
MW-4	OK	→	→	→	→	→	→			" " "	
MW-5	OK	→	→	→	→	→	→			" " "	
MW-6	OK	→	→	S3	OK	→	→			BOART L / 8" / 3	
MW-7	OK	→	→	B=1	OK	→	→			EMCO / 12" / 2	
MW-8	OK	→	→	S3	OK	→	→			BRADFORD KILMAN / 8" / 3	

Comments

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. (GR) field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. All work is performed in accordance with the GR Health & Safety Plan and all client-specific programs. The scope of work and type of analysis to be performed is determined prior to commencing field work.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells. Total well depths are measured annually.

After water levels are collected and prior to sampling, if purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, peristaltic or Grundfos), or disposable bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging (additional parameters such as dissolved oxygen, oxidation reduction potential, turbidity may also be measured, depending on specific scope of work.). Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards, as directed by the scope of work. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Chevron Environmental Management Company, the purge water and decontamination water generated during sampling activities is transported by Clean Harbors Environmental Services to Seaport Environmental located in Redwood City, California.

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 Job Number: 385647
Site Address: 800 Harrison Street Event Date: 8.19.16 (inclusive)
City: Oakland, CA Sampler: FT

Well ID MW-1 Date Monitored: 8.19.16
Well Diameter 1 / (2) / 4 / 6 in.
Total Depth 33.44 ft.
Depth to Water 20.38 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

13.06 xVF .17 = 2.22 x3 case volume = Estimated Purge Volume: 7.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 22.99

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0705 Weather Conditions: FOG
Sample Time/Date: 0729 / 8.19.16 Water Color: LT. BRN. Odor: Y / (N)
Approx. Flow Rate: ✓ gpm. Sediment Description: S. SILTY
Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 20.93

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) / mS µmhos/cm)	Temperature (C) / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0710	2.5	6.55	114	19.9	PRE: 1.7	PRE: -18	PRE: 195
0715	5.0	6.58	122	19.5			
0719	7.0	6.61	131	19.3			
					POST: 1.6	POST: -28	POST: 217

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS:

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Lock: Add/Replaced Plug:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8.19.16 (inclusive)
City: Oakland, CA | Sampler: FT

Well ID: MW-2 | Date Monitored: 8.19.16
Well Diameter: 1 / (2) / 4 / 6 in.
Total Depth: 30.73 ft.
Depth to Water: 20.10 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

10.63 xVF .17 = 1.80 x3 case volume = Estimated Purge Volume: 5.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 23.27

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0628 | Weather Conditions: FOG
Sample Time/Date: 0648 / 8.19.16 | Water Color: CLEAR Odor: Y / (N)
Approx. Flow Rate: ~ gpm. | Sediment Description: NONE
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 20.92

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0631	1.5	6.70	200	20.0	PRE: 2.1	PRE: -51	PRE: 70
0634	3.0	6.73	210	19.8			
0638	5.0	6.75	218	19.5			
					POST: 1.9	POST: -64	POST: 79

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8.19.16 (inclusive)
City: Oakland, CA | Sampler: FT

Well ID: MW-3
Well Diameter: 1 / (2) / 4 / 6 in.
Total Depth: 30.45 ft.
Depth to Water: 19.28 ft.
Date Monitored: 8.19.16

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

11.17 xVF .17 = 1.89 x3 case volume = Estimated Purge Volume: 6.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.51

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0935 | Weather Conditions: FOG
Sample Time/Date: 0958 / 8.19.16 | Water Color: LT. GRY. | Odor: (Y) / N | STRONG
Approx. Flow Rate: ~ gpm. | Sediment Description: S. SILTY
Did well de-water? NO | If yes, Time: _____ | Volume: _____ gal. | DTW @ Sampling: 20.10

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0939	2.0	6.68	420	19.9	PRE: 1.5	PRE: -65	PRE: 206
0943	4.0	6.71	431	19.6			
0947	6.0	6.73	439	19.3			
					POST: 1.3	POST: -77	POST: 238

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8.19.16 (inclusive)
City: Oakland, CA | Sampler: FT

Well ID: MW-4 | Date Monitored: 8.19.16
Well Diameter: 1 (2) 4 6 in.
Total Depth: 32.01 ft.
Depth to Water: 18.77 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

13.24 xVF .17 = 2.25 x3 case volume = Estimated Purge Volume: 7.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.41

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0823 | Weather Conditions: FOG
Sample Time/Date: 0847 / 8.19.16 | Water Color: BRN. | Odor: Y / (N)
Approx. Flow Rate: ✓ gpm. | Sediment Description: S. SILTY
Did well de-water? NO | If yes, Time: _____ | Volume: _____ gal. | DTW @ Sampling: 19.05

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0828	2.5	6.78	284	20.5	PRE: 1.9	PRE: 16	PRE: 241
0833	5.0	6.81	290	20.1			
0837	7.0	6.84	298	19.9			
					POST: 1.8	POST: 28	POST: 263

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-4	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8.19.16 (inclusive)
City: Oakland, CA | Sampler: FT

Well ID: MW-5
Well Diameter: 1 / (2) / 4 / 6 in.
Total Depth: 31.55 ft.
Depth to Water: 18.97 ft.
Date Monitored: 8.19.16

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

12.58 xVF .17 = 2.13 x3 case volume = Estimated Purge Volume: 6.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.48

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0900 | Weather Conditions: FOG
Sample Time/Date: 0922 / 8.19.16 | Water Color: LT. GRAY Odor: (Y) / N STRONG
Approx. Flow Rate: ✓ gpm. | Sediment Description: S. SILTY
Did well de-water? NO | If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 19.40

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0904	2.0	6.69	408	20.5	PRE: 1.6	PRE: -58	PRE: 195
0908	4.0	6.71	418	20.2			
0912	6.0	6.74	426	19.8			
					POST: 1.5	POST: -67	POST: 215

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8.19.16 (inclusive)
City: Oakland, CA | Sampler: FT

Well ID: MW-6 | Date Monitored: 8.19.16
Well Diameter: 1 / (2) / 4 / 6 in.
Total Depth: 30.84 ft.
Depth to Water: 18.42 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

12.42 xVF .17 = 2.11 x3 case volume = Estimated Purge Volume: 6.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.90

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0745 | Weather Conditions: FOG
Sample Time/Date: 0809 / 8.19.16 | Water Color: BRN. | Odor: Y / (N)
Approx. Flow Rate: ✓ gpm. | Sediment Description: S. SILTY
Did well de-water? NO | If yes, Time: | Volume: gal. | DTW @ Sampling: 19.01

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0749	2.0	6.73	178	20.8	PRE: 2.2	PRE: -17	PRE: 225
0753	4.0	6.76	184	20.4			
0757	6.0	6.78	192	20.1			
					POST: 1.9	POST: -28	POST: 242

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-6	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS:

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8.19.16 (inclusive)
City: Oakland, CA | Sampler: FT

Well ID: MW-7
Well Diameter: 1 / (2) / 4 / 6 in.
Total Depth: 31.35 ft.
Depth to Water: 18.78 ft.
Date Monitored: 8.19.16

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

12.57 xVF .17 = 2.13 x3 case volume = Estimated Purge Volume: 6.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.29

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0545 | Weather Conditions: FOG
Sample Time/Date: 0608 / 8.19.16 | Water Color: BRN. | Odor: Y / (N)
Approx. Flow Rate: ✓ gpm. | Sediment Description: S. SILTY
Did well de-water? NO | If yes, Time: _____ | Volume: _____ gal. | DTW @ Sampling: 18.95

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) / mS µmhos/cm)	Temperature (C) / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0549	2.0	6.61	248	19.9	PRE: 1.9	PRE: -21	PRE: 181
0553	4.0	6.63	254	19.7			
0557	6.0	6.67	260	19.5			
					POST: 1.8	POST: -31	POST: 193

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8.19.16 (inclusive)
City: Oakland, CA | Sampler: FT

Well ID: MW-8 | Date Monitored: 8-19-16
Well Diameter: 1/2/4/6 in.
Total Depth: 26.33 ft.
Depth to Water: 18.55 ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

7.78 xVF .17 = 1.32 x3 case volume = Estimated Purge Volume: 4.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.10

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0510 | Weather Conditions: FOG
Sample Time/Date: 0530 / 8.19.16 | Water Color: LT. BRN. Odor: Y / N
Approx. Flow Rate: — gpm. | Sediment Description: S. SILTY
Did well de-water? NO If yes, Time: ____ Volume: ____ gal. DTW @ Sampling: 19.15

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0513	1.5	6.64	256	20.7	PRE: 1.8	PRE: -46	PRE: 175
0516	3.0	6.67	262	20.5			
0519	4.0	6.69	269	20.4			
					POST: 1.7	POST: -53	POST: 188

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS:

Add/Replaced Gasket: ____ Add/Replaced Bolt: ____ Add/Replaced Lock: ____ Add/Replaced Plug: ____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: **Chevron #351646 / 0752** Job Number: **385647**
Site Address: **800 Harrison Street** Event Date: 8/19/16 (inclusive)
City: **Oakland, CA** Sampler: AW

Well ID A-MW-1 Date Monitored: 8-19-16
Well Diameter 1/2/4/6 in.
Total Depth 24.40 ft.
Depth to Water 17.90 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

6.50 xVF .17 = 1.10 x3 case volume = Estimated Purge Volume: 35 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.20

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0500 Weather Conditions: Dark
Sample Time/Date: 0525 / 8-19-16 Water Color: Cloudy Odor: Y / (N)
Approx. Flow Rate: — gpm. Sediment Description: — Cloudy
Did well de-water? N If yes, Time: — Volume: — gal. DTW @ Sampling: 18.78

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0505	1.5	7.44	435	18.7	PRE: 1.2	PRE: 70	PRE: 304
0510	2.5	7.49	470	18.9			
0515	3.5	7.52	488	19.1			
					POST: 1.4	POST: 89	POST: 330

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
A-MW-1	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS:

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8-19-16 (inclusive)
City: Oakland, CA | Sampler: AW

Well ID: A-MW-2 | Date Monitored: 8-19-16
Well Diameter: 1 (2) 3 4 6 in.
Total Depth: 24.86 ft.
Depth to Water: 8.22 ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

6.64 xVF .17 = 1.12 x3 case volume = Estimated Purge Volume: 3.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.54

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0615 | Weather Conditions: Cloudy
Sample Time/Date: 0640 / 8-19-16 | Water Color: Cloudy | Odor: (Y) N / Moderate
Approx. Flow Rate: — gpm. | Sediment Description: Cloudy
Did well de-water? N | If yes, Time: — | Volume: — gal. | DTW @ Sampling: 19.22

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS umhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0620	1.5	7.01	466	20.0	PRE: 1.0	PRE: 27	PRE: 278
0625	2.5	7.06	504	20.3			
0630	3.5	7.11	533	20.4			
					POST: 1.2	POST: 44	POST: 299

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
A-MW-2	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: **Chevron #351646 / 0752** Job Number: **385647**
Site Address: **800 Harrison Street** Event Date: 8-19-16 (inclusive)
City: **Oakland, CA** Sampler: AW

Well ID A-MW-3 Date Monitored: 8/19/16
Well Diameter 1 (2) 3 4 6 in.
Total Depth 27.27 ft.
Depth to Water 17.64 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

9.63 xVF .17 = 1.63 x3 case volume = Estimated Purge Volume: 5.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.56

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0535 Weather Conditions: Dark
Sample Time/Date: 0605 / 8/19/16 Water Color: Cloudy Odor: Y (N)
Approx. Flow Rate: — gpm. Sediment Description: Cloudy
Did well de-water? N If yes, Time: — Volume: — gal. DTW @ Sampling: 18.85

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0540	2.0	7.73	234	19.7	PRE: 1.3	PRE: 15	PRE: 299
0545	4.0	7.69	259	19.8			
0550	5.0	7.66	275	19.9			
					POST: 1.3	POST: 44	POST: 316

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
A-MW-3	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS:

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 Job Number: 385647
Site Address: 800 Harrison Street Event Date: 8-19-16 (inclusive)
City: Oakland, CA Sampler: AW

Well ID A-MW-4 Date Monitored:
Well Diameter 1 / 2 / 4 / 6 in.
Total Depth ft.
Depth to Water ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

_____ xVF _____ = _____ x3 case volume = Estimated Purge Volume: _____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: _____

Purge Equipment:
Disposable Bailer _____
Stainless Steel Bailer _____
Stack Pump _____
Peristaltic Pump _____
QED Bladder Pump _____
Other: _____

Sampling Equipment:
Disposable Bailer _____
Pressure Bailer _____
Metal Filters _____
Peristaltic Pump _____
QED Bladder Pump _____
Other: _____

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): _____ Weather Conditions: _____
Sample Time/Date: _____ / _____ Water Color: _____ Odor: Y / N _____
Approx. Flow Rate: _____ gpm. Sediment Description: _____
Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
					PRE:	PRE:	PRE:
					POST:	POST:	POST:

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: Unable to access, Parked over, unable to locate owner of Vehicle.

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8/15/16 (inclusive)
City: Oakland, CA | Sampler: JH

Well ID: A-MW-5 | Date Monitored: 8/15/16
Well Diameter: 1 (2) 4 / 6 in.
Total Depth: 28.16 ft.
Depth to Water: 16.60 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

11.56 xVF .17 = 1.96 x3 case volume = Estimated Purge Volume: 5.89 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 18.91

Purge Equipment:

Disposable Bailer	X
Stainless Steel Bailer	
Stack Pump	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	X
Pressure Bailer	
Metal Filters	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0500 | Weather Conditions: DARK
Sample Time/Date: 0530 / 8/15/16 | Water Color: Cloudy | Odor: Y / (N)
Approx. Flow Rate: — gpm. | Sediment Description: Light
Did well de-water? No | If yes, Time: _____ | Volume: _____ gal. | DTW @ Sampling: 17.84

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (NTU)
0505	2	7.38	570	18.9	PRE: 1.5	PRE: 77	PRE: 43.1
0510	4	7.31	543	18.7			
0515	6	7.24	536	18.6			
					POST: 1.2	POST: 63	POST: 71.2

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
A-MW5	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 Job Number: 385647
Site Address: 800 Harrison Street Event Date: 8/16/16 (inclusive)
City: Oakland, CA Sampler: JH

Well ID A-MW-6 Date Monitored: 8/19/16
Well Diameter 1/2/4/6 in.
Total Depth _ ft.
Depth to Water — ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

— xVF _____ = _____ x3 case volume = Estimated Purge Volume: _____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: —

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer
Pressure Bailer
Metal Filters
Peristaltic Pump
QED Bladder Pump
Other:

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): _____ Weather Conditions: _____
Sample Time/Date: _____ / _____ Water Color: _____ Odor: Y / N _____
Approx. Flow Rate: _____ gpm. Sediment Description: _____
Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
					PRE:	PRE:	PRE:
					POST:	POST:	POST:

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: CTL P/O

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8/19/16 (inclusive)
City: Oakland, CA | Sampler: JH

Well ID: A-MW-7 | Date Monitored: 8/19/16
Well Diameter: 1 2 4 6 in.
Total Depth: 27.60 ft.
Depth to Water: 17.66 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

9.94 xVF .17 = 1.68 x3 case volume = Estimated Purge Volume: 5.06 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.64

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	X	Disposable Bailer	X
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0540 | Weather Conditions: DARK
Sample Time/Date: 0610 / 8/19/16 | Water Color: Clear | Odor: Y / N
Approx. Flow Rate: — gpm. | Sediment Description: None
Did well de-water? No | If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 18.40

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0544	1.5	7.11	528	18.7	PRE: 1.3	PRE: 34	PRE: 39.1
0548	3.0	7.03	505	18.6			
0552	5.0	6.87	489	18.5			
					POST: 1.0	POST: 60	POST: 60.5

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
A-MW-7	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: **Chevron #351646 / 0752** Job Number: **385647**

Site Address: **800 Harrison Street** Event Date: 8-19-16 (inclusive)

City: **Oakland, CA** Sampler: BW

Well ID SP-3

Well Diameter 1 / 2 / 4 / 6 in.

Total Depth ft.

Depth to Water ft.

Date Monitored: —

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

_____ xVF _____ = _____ x3 case volume = Estimated Purge Volume: _____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: _____

Purge Equipment:

Disposable Bailer	
Stainless Steel Bailer	
Stack Pump	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	
Pressure Bailer	
Metal Filters	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): _____ Weather Conditions: _____

Sample Time/Date: _____ / _____ Water Color: _____ Odor: **Y / N** _____

Approx. Flow Rate: _____ gpm. Sediment Description: _____

Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
					PRE:	PRE:	PRE:
					POST:	POST:	POST:

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: Unable to locate

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: **Chevron #351646 / 0752** Job Number: **385647**

Site Address: **800 Harrison Street** Event Date: 8-19-16 (inclusive)

City: **Oakland, CA** Sampler: AW

Well ID SP-4

Well Diameter 1 / 2 / 4 / 6 in.

Total Depth ft.

Depth to Water ft.

Date Monitored: —

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

_____ xVF _____ = _____ x3 case volume = Estimated Purge Volume: _____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: _____

Purge Equipment:

Disposable Bailer	
Stainless Steel Bailer	
Stack Pump	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	
Pressure Bailer	
Metal Filters	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): _____ Weather Conditions: _____

Sample Time/Date: _____ / _____ Water Color: _____ Odor: Y / N _____

Approx. Flow Rate: _____ gpm. Sediment Description: _____

Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
					PRE:	PRE:	PRE:
					POST:	POST:	POST:

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: Unable to locate

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 Job Number: 385647
Site Address: 800 Harrison Street Event Date: 8-19-16 (inclusive)
City: Oakland, CA Sampler: AW

Well ID SP-5 Date Monitored: —
Well Diameter 1 / 2 / 4 / 6 in.
Total Depth ft.
Depth to Water ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

_____ xVF _____ = _____ x3 case volume = Estimated Purge Volume: _____ gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: _____

Purge Equipment:
Disposable Bailer _____
Stainless Steel Bailer _____
Stack Pump _____
Peristaltic Pump _____
QED Bladder Pump _____
Other: _____

Sampling Equipment:
Disposable Bailer _____
Pressure Bailer _____
Metal Filters _____
Peristaltic Pump _____
QED Bladder Pump _____
Other: _____

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): _____ Weather Conditions: _____
Sample Time/Date: _____ / _____ Water Color: _____ Odor: Y / N _____
Approx. Flow Rate: _____ gpm. Sediment Description: _____
Did well de-water? _____ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
					PRE:	PRE:	PRE:
					POST:	POST:	POST:

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
	x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: Unable to locate

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8/15/16 (inclusive)
City: Oakland, CA | Sampler: JH

Well ID: S-MW-1 | Date Monitored: 8/15/16
Well Diameter: 1/2/4/6 in.
Total Depth: 27.36 ft.
Depth to Water: 19.20 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

8.16 xVF .17 = 1.38 x3 case volume = Estimated Purge Volume: 4.16 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.83

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	X	Disposable Bailer	X
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0655 | Weather Conditions: Cloudy
Sample Time/Date: 0725 / 8/15/16 | Water Color: Clear Odor: Y / N
Approx. Flow Rate: — gpm. | Sediment Description: None
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: _____

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0659	1.5	7.60	436	18.5	PRE: 1.0	PRE: 39	PRE: 48.5
0703	3.0	7.49	451	18.4			
0708	4.0	7.35	473	18.2			
					POST: 1.3	POST: 55	POST: 61.7

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-MW-1	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: **Chevron #351646 / 0752** Job Number: **385647**
Site Address: **800 Harrison Street** Event Date: 8-19-16 (inclusive)
City: **Oakland, CA** Sampler: AW

Well ID S-MW-2 Date Monitored: 8-19-16
Well Diameter 1 (2) 4 6 in.
Total Depth 28.00 ft.
Depth to Water 19.84 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

8.16 xVF .17 = 1.38 x3 case volume = Estimated Purge Volume: 4.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.47

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0845 Weather Conditions: Cloudy
Sample Time/Date: 0910 / 8-19-16 Water Color: Cloudy Odor: Y / (N)
Approx. Flow Rate: — gpm. Sediment Description: Cloudy
Did well de-water? N If yes, Time: — Volume: — gal. DTW @ Sampling: 21.06

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS/mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0850	1.5	7.27	222	19.1	PRE: 1.0	PRE: -29	PRE: 282
0855	3.0	7.35	255	19.3			
0900	4.5	7.39	280	19.4			
					POST: 1.3	POST: -47	POST: 314

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-MW-2	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS:

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8/15/16 (inclusive)
City: Oakland, CA | Sampler: JH

Well ID: S-MW-3
Well Diameter: 1/2/4/6 in.
Total Depth: 26.82 ft.
Depth to Water: 19.02 ft.
Date Monitored: 8/15/16

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

7.80 xVF .17 = 1.32 x3 case volume = Estimated Purge Volume: 3.97 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.58

Purge Equipment:

Disposable Bailer	X
Stainless Steel Bailer	
Stack Pump	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	X
Pressure Bailer	
Metal Filters	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0815 | Weather Conditions: Cloudy
Sample Time/Date: 0845 / 8/15/16 | Water Color: Clear | Odor: (Y) N | Light
Approx. Flow Rate: — gpm. | Sediment Description: None
Did well de-water? No | If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 20.36

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0818	1	7.12	328	18.7	PRE: 1.3	PRE: -22	PRE: 63.5
0821	2.5	7.04	321	18.6			
0825	4.0	7.01	316	18.5			
					POST: 1.7	POST: -14	POST: 82.2

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-MW-3	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 Job Number: 385647
Site Address: 800 Harrison Street Event Date: 8/19/16 (inclusive)
City: Oakland, CA Sampler: JH

Well ID S-MW-4 Date Monitored: 8/19/16
Well Diameter 1/0/4/6 in.
Total Depth 29.30 ft.
Depth to Water 19.40 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

9.90 xVF .17 = 1.68 x3 case volume = Estimated Purge Volume: 5.04 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.38

Purge Equipment:

Disposable Bailer	X
Stainless Steel Bailer	
Stack Pump	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	X
Pressure Bailer	
Metal Filters	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0620 Weather Conditions: Foggy
Sample Time/Date: 0645 / 8/19/16 Water Color: Clear Odor: Y / (N)
Approx. Flow Rate: — gpm. Sediment Description: None
Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 20.61

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) / mS umhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0624	1.5	6.65	431	18.7	PRE: .8	PRE: 28	PRE: 40.5
0628	3.0	6.61	458	18.6			
0632	4.5	6.39	470	18.5			
					POST: 1.1	POST: 52	POST: 61.7

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-MW-4	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS:

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Lock: Add/Replaced Plug:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8-19-16 (inclusive)
City: Oakland, CA | Sampler: BW

Well ID: S-MW-5 | Date Monitored: 8-19-16
Well Diameter: 1 (2) 4 / 6 in.
Total Depth: 28.86 ft.
Depth to Water: 19.48 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

9.38 xVF .17 = 1.59 x3 case volume = Estimated Purge Volume: 5.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.35

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0810 | Weather Conditions: Cloudy
Sample Time/Date: 0835 / 8-19-16 | Water Color: Clear | Odor: (Y) / N / Slight
Approx. Flow Rate: — gpm. | Sediment Description: Clear
Did well de-water? N | If yes, Time: — | Volume: — gal. | DTW @ Sampling: 20.79

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0815	2.0	6.87	576	19.1	PRE: 1.1	PRE: -7	PRE: 243
0820	4.0	6.94	552	19.3			
0825	5.0	7.00	577	19.5			
					POST: 1.3	POST: -18	POST: 279

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-MW-5	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 Job Number: 385647
Site Address: 800 Harrison Street Event Date: 8/19/16 (inclusive)
City: Oakland, CA Sampler: JH

Well ID S-MW-6 Date Monitored: 8/19/16
Well Diameter 1 2 4 6 in.
Total Depth 49.30 ft.
Depth to Water 26.58 ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

22.72 xVF .17 = 3.86 x3 case volume = Estimated Purge Volume: 11.58 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 31.12

Purge Equipment:
Disposable Bailer
Stainless Steel Bailer
Stack Pump X
Peristaltic Pump
QED Bladder Pump
Other:

Sampling Equipment:
Disposable Bailer X
Pressure Bailer
Metal Filters
Peristaltic Pump
QED Bladder Pump
Other:

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0855 Weather Conditions: Cloudy
Sample Time/Date: 0920 / 8/19/16 Water Color: Clear Odor: Y / N
Approx. Flow Rate: 2 gpm. Sediment Description: None
Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 28.70

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0857	4	7.62	432	18.6	PRE: 1.7	PRE: -53	PRE: 30.6
0859	8	7.28	420	18.5			
0901	12	7.15	423	18.4			
					POST: 1.9	POST: -39	POST: 59.7

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-MW-6	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS:

Add/Replaced Gasket: Add/Replaced Bolt: Add/Replaced Lock: Add/Replaced Plug:

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8/19/16 (inclusive)
City: Oakland, CA | Sampler: JH

Well ID: S-EW-1 | Date Monitored: 8/19/16
Well Diameter: 1/2/4/(6) in.
Total Depth: 28.66 ft.
Depth to Water: 19.05 ft. ☐ Check if water column is less then 0.50 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

9.61 xVF 1.50 = 14.41 x3 case volume = Estimated Purge Volume: 43.24 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.97

Purge Equipment:		Sampling Equipment:	
Disposable Bailer		Disposable Bailer	X
Stainless Steel Bailer		Pressure Bailer	
Stack Pump	X	Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: _____ ft
Visual Confirmation/Description: _____
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ ltr
Amt Removed from Well: _____ ltr
Water Removed: _____ ltr

Start Time (purge): 0735 | Weather Conditions: Cloudy
Sample Time/Date: 0805 / 8/19/16 | Water Color: Clear Odor: (Y)/N Lt. Hyd
Approx. Flow Rate: 2-3 gpm. | Sediment Description: None
Did well de-water? No If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 20.77

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature ((C) F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0740	15	7.45	643	18.9	PRE: 1.2	PRE: 45	PRE: 39.6
0745	30	7.31	658	18.8			
0750	44	7.26	671	18.8			
					POST: 1.5	POST: 73	POST: 68.2

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
S-EW-1	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS: _____

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 Job Number: 385647
Site Address: 800 Harrison Street Event Date: 8-19-16 (inclusive)
City: Oakland, CA Sampler: AW

Well ID MPE-1 Date Monitored: 8-19-16
Well Diameter 1 / 2 / 4 / 6 in.
Total Depth 32.10 ft.
Depth to Water 19.32 ft.

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

12.78 xVF .66 = 8.43 x3 case volume = Estimated Purge Volume: 25.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.87

Purge Equipment:

Disposable Bailer	
Stainless Steel Bailer	
Stack Pump	✓
Peristaltic Pump	
QED Bladder Pump	
Other:	

Sampling Equipment:

Disposable Bailer	✓
Pressure Bailer	
Metal Filters	
Peristaltic Pump	
QED Bladder Pump	
Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:

Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0730 Weather Conditions: Cloudy
Sample Time/Date: 0800 / 8-19-16 Water Color: Cloudy Odor: Y / N
Approx. Flow Rate: 1-2 gpm. Sediment Description: Cloudy
Did well de-water? N If yes, Time: — Volume: — gal. DTW @ Sampling: 21.44

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0735	8.5	7.07	304	19.0	PRE: 1.4	PRE: -14	PRE: 214
0740	17.0	7.12	328	19.1			
0745	25.5	7.16	344	19.3			
					POST: 1.3	POST: -22	POST: 299

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MPE-1	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS:

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351646 / 0752 | Job Number: 385647
Site Address: 800 Harrison Street | Event Date: 8-19-16 (inclusive)
City: Oakland, CA | Sampler: AW

Well ID MP-1
Well Diameter 1/2/4/6 in.
Total Depth 30.00 ft.
Depth to Water 19.10 ft.
Date Monitored: 8-19-16

Volume Factor (VF)	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

☐ Check if water column is less then 0.50 ft.

10.90 xVF .04 = 0.43 x3 case volume = Estimated Purge Volume: 1.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.28

Purge Equipment:		Sampling Equipment:	
Disposable Bailer	✓	Disposable Bailer	✓
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0650 | Weather Conditions: Dawn
Sample Time/Date: 0720 / 8-19-16 | Water Color: Cloudy | Odor: (Y) N moderate
Approx. Flow Rate: — gpm. | Sediment Description: Cloudy
Did well de-water? N | If yes, Time: — | Volume: — gal. | DTW @ Sampling: 20.77

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) mS µmhos/cm)	Temperature (C) / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0656	0.5	7.06	330	18.9	PRE: 1.1	PRE: -12	PRE: 359
0702	1.0	7.11	356	19.2			
0710	1.5	7.14	378	19.3			
					POST: 1.3	POST: -28	POST: 411

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MP-1	3 x voa vial	YES	HCL	BC LABS	TPPH(8260)/BTEX+MTBE(8260)

COMMENTS:

Add/Replaced Gasket: _____ Add/Replaced Bolt: _____ Add/Replaced Lock: _____ Add/Replaced Plug: _____

CHAIN OF CUSTODY FORM

Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

COC 1 of 2

Union Oil Site ID: 0752	Union Oil Consultant: Arcadis
Site Global ID: TC6001014406	Consultant Contact: Tamara Rogers
Site Address: 900 Harrison St. Oakland CA	Consultant Phone No.: 408-794-3013
Union Oil PM: James Kiernan	Sampling Company: Gettler Ryan Inc.
Union Oil PM Phone No.: 925-790-3955	Sampled By (PRINT): Alex Wong
Charge Code: NWRTB-0 351646 -0- LAB	Sampler Signature:

This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.

BC Laboratories, Inc.
Project Manager: Molly Meyers
4100 Atlas Court, Bakersfield, CA 93308
Phone No. 661-327-4911

ANALYSES REQUIRED

Turnaround Time (TAT): Standard ☒ 24 Hours ☐ 48 Hours ☐ 72 Hours ☐

Special Instructions

SAMPLE ID						TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	TPH(g&o)/BTEX + MTBE (8260)						Notes / Comments
Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time	# of Containers												
QA	W-S-A		160819	—	2						X						
MW-1	W-S-A			0729	3						X						
MW-2	W-S-A			0648													
MW-3	W-S-A			0958													
MW-4	W-S-A			0847													
MW-5	W-S-A			0922													
MW-6	W-S-A			0808													
MW-7	W-S-A			0608													
MW-8	W-S-A			0530													
A-MW-1	W-S-A			0525													
A-MW-2	W-S-A			0640													
A-MW-3	W-S-A			0605													

Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time:
	GRINC	160819 / 1100	GR office		160819 / 1100			
Received By	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time:**
			Hang Bogan	BC Lab	8-19-16 1400			

CHAIN OF CUSTODY FORM

Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

COC 2 of 2

Union Oil Site ID: 0752	Union Oil Consultant: Arcadis
Site Global ID: T0600101486	Consultant Contact: Tamara Rogers
Site Address: 200 Harrison St. Oakland CA	Consultant Phone No.: 408 - 737 - 2013
Union Oil PM: James Kiernan	Sampling Company: Gettler Ryan Inc.
Union Oil PM Phone No.: 925 - 790 - 7655	Sampled By (PRINT): Alex Wong
Charge Code: NWRTB- 0 351646 -0- LAB	Sampler Signature:

This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.

BC Laboratories, Inc.
Project Manager: Molly Meyers
4100 Atlas Court, Bakersfield, CA 93308
Phone No. 661-327-4911

Turnaround Time (TAT): Standard ☒ 24 Hours ☐ 48 Hours ☐ 72 Hours ☐

Special Instructions

SAMPLE ID						ANALYSES REQUIRED											
Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time	# of Containers	TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	TPH (8260) / BTEX + MTBE (8260)						Notes / Comments
A-MW-5	W-S-A		160819	0530	3						X						
A-MW-7	W-S-A			0610													
S-MW-1	W-S-A			0725													
S-MW-2	W-S-A			0910													
S-MW-3	W-S-A			0845													
S-MW-4	W-S-A			0645													
S-MW-5	W-S-A			0835													
S-MW-6	W-S-A			0920													
S-EW-1	W-S-A			0805													
MPE-1	W-S-A			0800													
MP-1	W-S-A			0720													
	W-S-A																

Relinquished By	Company	Date / Time:
[signature]	GRInc	160819 / 1100
Relinquished By	Company	Date / Time:
GRO Office		160819 / 1100
Relinquished By	Company	Date / Time:

Received By	Company	Date / Time:
[illegible]		
Received By	Company	Date / Time:
Amy Rogan	BC Lab	8-19-16 1400
Received By	Company	Date / Time:

Attachment B

Historical Groundwater Results from TRC

Table 1A
Additional Groundwater Analytical Results - MNA Parameters
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Methane	Alkalinity as CaCO3	Nitrate as NO3	Nitrite as NO2	Sulfate	Comments
800 Harrison Street							
MW-1	8/14/2014	0.0035	37	2.0	<0.17	9.4	
MW-2	8/14/2014	0.0060	120	1.0	<0.17	79	
MW-3	8/14/2014	17	450	0.55	<0.17	2.2	
MW-4	8/14/2014	0.0016	84	4.4	<0.17	24	
MW-5	8/14/2014	0.79	170	<0.44	<0.17	<1.0	
MW-6	8/14/2014	<0.0010	140	<0.44	<0.17	25	
MW-7	8/14/2014	0.44	73	<0.44	<0.17	4.3	
MW-8	8/14/2014	0.0059	200	<0.44	<0.17	28	
706 Harrison Street							
MW-1	8/14/2014	--	--	--	--	--	Car Accident
MW-2	8/14/2014	18.0	520	<0.44	<0.17	<1.0	
MW-3	8/14/2014	0.0018	110	38	<0.17	42	
MW-4	8/14/2014	1.6	480	<0.44	<0.17	3.8	
MW-5	8/14/2014	0.0010	160	16	<0.17	55	
MW-6	8/14/2014	<0.0010	150	<0.44	<0.17	36	
MW-7	8/14/2014	0.023	230	<0.44	<0.17	48	
726 Harrison Street							
AS-1	8/14/2014	--	--	--	--	--	
EW-1	8/14/2014	0.57	220	<0.44	<0.17	2.8	
MW-1	8/14/2014	2.0	380	<0.44	<0.17	<1.0	
MW-2	8/14/2014	0.0016	130	47	<0.17	41	
MW-3	8/14/2014	<0.0010	140	<0.44	<0.17	13	
MW-4	8/14/2014	0.21	300	<0.44	<0.17	17	
MW-5	8/14/2014	1.7	440	<0.44	<0.17	<1.0	
MW-6	8/14/2014	0.0015	170	4.3	<0.17	26	

Notes

Analytical results given in milligrams per liter.

Standard Abbreviations

--	not analyzed, measured, or collected
<	not detected at or above laboratory detection limit

Analytes

CaCO3	calcium carbonate
NO3	nitrate
NO2	nitrogen dioxide

Table 1B
Additional Groundwater Analytical Results - Metals
76 Station 0752/YEE/GIN Comingled Plume
706/726/800 Harrison Street Oakland, California

Well ID	Date Sampled	Dissolved Cadmium	Dissolved Chromium	Dissolved Iron	Dissolved Lead	Dissolved Nickel	Dissolved Zinc	Comments
800 Harrison Street								
MW-1	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-2	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-3	8/14/2014	<10	<10	810	<50	<10	<10	
MW-4	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-5	8/14/2014	<10	<10	160	<50	<10	<10	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-7	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-8	8/14/2014	<10	<10	<50	<50	<10	<10	
706 Harrison Street								
MW-1	8/14/2014	--	--	--	--	--	--	Car Accident
MW-2	8/14/2014	<10	<10	3,600	<50	<10	<10	
MW-3	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-4	8/14/2014	<10	<10	180	<50	<10	<10	
MW-5	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-7	8/14/2014	<10	<10	1,200	<50	<10	<10	
726 Harrison Street								
AS-1	8/14/2014	--	--	--	--	--	--	
EW-1	8/14/2014	<10	<10	2,600	<50	<10	<10	
MW-1	8/14/2014	<10	<10	1,900	<50	<10	<10	
MW-2	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-3	8/14/2014	<10	<10	<50	<50	<10	<10	
MW-4	8/14/2014	<10	<10	380	<50	<10	<10	
MW-5	8/14/2014	<10	<10	1,200	<50	<10	<10	
MW-6	8/14/2014	<10	<10	<50	<50	<10	<10	

Notes

Analytical results given in micrograms per liter.

Standard Abbreviations

-- not analyzed, measured, or collected
< not detected at or above laboratory detection limit

Attachment C

Laboratory Reports and Chain-of-Custody Documentation

Date of Report: 09/01/2016

Tamera Rogers

Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Client Project:	351646
BCL Project:	0752
BCL Work Order:	1623184
Invoice ID:	B245102

Enclosed are the results of analyses for samples received by the laboratory on 8/19/2016. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Molly Meyers

Contact Person: Molly Meyers
Client Service Rep

Authorized Signature

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CHAIN OF CUSTODY FORM

Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

16-23184 COC 1 of 2

Union Oil Site ID: 0752	Union Oil Consultant: Arcadis		
Site Global ID: T0600101486	Consultant Contact: Tamera Rogers		
Site Address: 800 Harrison St. Oakland CA	Consultant Phone No.: 408-797-2013		
Union Oil PM: James Kiernan	Sampling Company: Gettler Ryan Inc.		
Union Oil PM Phone No.: 925-790-3955	Sampled By (PRINT): Alex Wong		
Charge Code: NWRTB-0 351646 -0- LAB	Sampler Signature:		
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.	BC Laboratories, Inc. **Project Manager: Molly Meyers** 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911		

ANALYSES REQUIRED

Turnaround Time (TAT): Standard ☒ 24 Hours ☐ 48 Hours ☐ 72 Hours ☐

Special Instructions

SAMPLE ID						TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	TPPH (8260) / BTEX + MTBE (8260)					Notes / Comments
Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time	# of Containers											
QA	W-S-A	-1	160819	—	2						X					
MW-1	W-S-A	-2		0729	3						X					
MW-2	W-S-A	-3		0648												
MW-3	W-S-A	-4		0958												
MW-4	W-S-A	-5		0847												
MW-5	W-S-A	-6		0922												
MW-6	W-S-A	-7		0808												
MW-7	W-S-A	-8		0608												
MW-8	W-S-A	-9		0530												
A-MW-1	W-S-A	-10		0525												
A-MW-2	W-S-A	-11		0640												
A-MW-3	W-S-A	-12	↓	0605	↓						↓					

Relinquished By	Company	Date / Time:	Received By	Company	Date / Time:	Relinquished By	Company	Date / Time:
	GRINC	160819 / 1100	GR office		160819 / 1100	Hang Bogan	BCLab	8-19-16 1700
~~Received By~~ RELINQUISHED:	Company	Date / Time:	Received By	Company	Date / Time:	Received By	Company	Date / Time:
	GRINC	08-19-16 1400	Hang Bogan	BCLab	8-19-16 1400		BCLDB	8/19/16 17:40

REL- 8/19/16 2100 REC: Adam R. Lang 8-19-16 2100

DISTRIBUTION: WHITE CANARY CHERRY

CHAIN OF CUSTODY FORM

16-23184

Union Oil Company of California ■ 6101 Bollinger Canyon Road ■ San Ramon, CA 94583

COC 2 of 2

Union Oil Site ID:	0752
Site Global ID:	T0600101486
Site Address:	800 Harrison St. Oakland CA
Union Oil PM:	James Kiernan
Union Oil PM Phone No.:	925-790-3955
Charge Code: NWRTB- 0	351 646 0- LAB

This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.

Union Oil Consultant:	Arcadis
Consultant Contact:	Tamara Rogers
Consultant Phone No.:	408-797-2013
Sampling Company:	Gettler Ryan Inc.
Sampled By (PRINT):	Alex Wong
Sampler Signature:	

BC Laboratories, Inc.
Project Manager: Molly Meyers
4100 Atlas Court, Bakersfield, CA 93308
Phone No. 661-327-4911

ANALYSES REQUIRED

Turnaround Time (TAT): Standard ☒ 24 Hours ☐ 48 Hours ☐ 72 Hours ☐

Special Instructions

SAMPLE ID						TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/OXYS by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS	TPH (8260)/BTEX+MTBE (8260)						
Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time	# of Containers												Notes / Comments
A-MW-5	W-S-A	13	160819	0530	3						X						
A-MW-7	W-S-A	14		0610													
S-MW-1	W-S-A	15		0725													
S-MW-2	W-S-A	16		0910													
S-MW-3	W-S-A	17		0845													
S-MW-4	W-S-A	18		0645													
S-MW-5	W-S-A	19		0835													
S-MW-6	W-S-A	20		0920													
S-EW-1	W-S-A	21		0805													
MPE-1	W-S-A	22		0800													
MP-1	W-S-A	23		0720													
	W-S-A																

Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time :	Relinquished By	Company	Date / Time:
	GRSINC	160819 / 1100	~~Relinquished By~~ RECEIVED MWC GRO fice		160819 / 1100	Gary Bogen	BCLab	8-19-16 / 1700
Received By ~~RELINQUISHED~~	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time :**	**Received By**	**Company**	**Date / Time:**
	GRINC	08-19-16 1400	Gary Bogen	BCLab	8-19-16 1400		BCLDB	8/19/16 17:40

REL. 8/19/16 2100 REC: Adam R. Loy 8.19.16 2100

Chain of Custody and Cooler Receipt Form for 1623184 Page 3 of 5

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 Of 3

Submission #: 16-23184

SHIPPING INFORMATION	SHIPPING CONTAINER	FREE LIQUID
Fed Ex ☐ UPS ☑ Ontrac ☐ Hand Delivery ☐	Ice Chest ☑ None ☐ Box ☐	YES ☐ NO ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Other ☐ (Specify)_____	W / S

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 208 Date/Time 8.19 2115

Temperature: (A) 4.2 °C / (C) 4.6 °C Analyst Init ARL

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK 094 096	A B									
40ml VOA VIAL		A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C	A B C
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:

Sample Numbering Completed By: JDL Date/Time: 8.22.16 1357

A = Actual / C = Corrected

Rev 21 05/23/2016

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Chain of Custody and Cooler Receipt Form for 1623184 Page 4 of 5

BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 Of 3

Submission #: 16-23184

SHIPPING INFORMATION
Fed Ex ☐ UPS ☐ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)_____

FREE LIQUID
YES ☐ NO ☐
W / S

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 208

Temperature: (A) 4.2 °C / (C) 4.6 °C

Date/Time 8-19 2115

Analyst Init ARL

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	~~10~~
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL 0916	ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:_____

Sample Numbering Completed By: JDL Date/Time: 8-22-16 1357

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Chain of Custody and Cooler Receipt Form for 1623184 Page 5 of 5

BC LABORATORIES INC. COOLER RECEIPT FORM Page 3 Of 3

Submission #: 16-23184

SHIPPING INFORMATION
Fed Ex ☐ UPS ☑ Ontrac ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)

SHIPPING CONTAINER
Ice Chest ☑ None ☐ Box ☐
Other ☐ (Specify)

FREE LIQUID
YES ☐ NO ☐
W / S

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 208

Temperature: (A) 4.2 °C / (C) 4.6 °C

Date/Time 8-19 2115

Analyst Init ARL

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr^{+6}										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	096	ABC	ABC	ABC						
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:
Sample Numbering Completed By: JDL Date/Time: 8-22-16 1357

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Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 09/01/2016 17:19
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1623184-01	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 00:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	QA-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Trip Blank
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): QA			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1623184-02	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 07:29
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-1-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): MW-1			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1623184-03	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 06:48
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-2-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): MW-2			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			

Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 09/01/2016 17:19
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1623184-04	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 09:58
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-3-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): MW-3			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1623184-05	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 08:47
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-4-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): MW-4			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1623184-06	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 09:22
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-5-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): MW-5			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			

Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 09/01/2016 17:19
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1623184-07	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 08:08
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-6-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): MW-6			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1623184-08	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 06:08
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-7-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): MW-7			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1623184-09	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 05:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-8-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): MW-8			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			

Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 09/01/2016 17:19
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1623184-10	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 05:25
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	A-MW-1-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): A-MW-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1623184-11	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 06:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	A-MW-2-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): A-MW-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1623184-12	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 06:05
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	A-MW-3-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): A-MW-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Arcadis
6296 San Ignacio Ave, Suite C&D
San Jose, CA 95119

Reported: 09/01/2016 17:19
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1623184-13	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 05:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	A-MW-5-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): A-MW-5	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1623184-14	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 06:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	A-MW-7-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): A-MW-7	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1623184-15	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 07:25
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	S-MW-1-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): S-MW-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1623184-16	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 09:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	S-MW-2-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): S-MW-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1623184-17	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 08:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	S-MW-3-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): S-MW-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1623184-18	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 06:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	S-MW-4-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): S-MW-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1623184-19	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 08:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	S-MW-5-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): S-MW-5	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1623184-20	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 09:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	S-MW-6-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): S-MW-6	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1623184-21	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 08:05
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	S-EW-1-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: T0600101486	
			Location ID (FieldPoint): S-EW-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1623184-22	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 08:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MPE-1-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): MPE-1			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1623184-23	**COC Number:**	---	**Receive Date:**	08/19/2016 21:00
	Project Number:	0752	**Sampling Date:**	08/19/2016 07:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MP-1-W-160819	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600101486			
	Location ID (FieldPoint): MP-1			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-01 | **Client Sample Name:** 0752, QA-W-160819, 8/19/2016 12:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	82.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	81.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 16:24	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-02 | **Client Sample Name:** 0752, MW-1-W-160819, 8/19/2016 7:29:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	**2.2**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	**110**	**ug/L**	**50**		**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	81.7	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	80.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	107	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 16:42	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-03 | **Client Sample Name:** 0752, MW-2-W-160819, 8/19/2016 6:48:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	**1.3**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	84.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	82.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 17:00	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-04 | **Client Sample Name:** 0752, MW-3-W-160819, 8/19/2016 9:58:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**5.0**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Ethylbenzene	**2.1**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Methyl t-butyl ether	**46**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Toluene	**1.3**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Total Xylenes	**2.4**	**ug/L**	**1.0**		**EPA-8260B**	ND		1
Total Purgeable Petroleum Hydrocarbons	**1300**	**ug/L**	**250**		**Luft-GC/MS**	ND	**A01**	2
1,2-Dichloroethane-d4 (Surrogate)	115	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	85.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	96.3	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	124	%	80 - 120 (LCL - UCL)		EPA-8260B		S09	1
4-Bromofluorobenzene (Surrogate)	95.4	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/29/16	08/30/16 04:34	IO1	MS-V12	1	BZH2237
2	EPA-8260B	08/30/16	08/30/16 18:22	IO1	MS-V12	5	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-05 | **Client Sample Name:** 0752, MW-4-W-160819, 8/19/2016 8:47:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	84.8	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	84.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	109	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 17:17	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-06 | **Client Sample Name:** 0752, MW-5-W-160819, 8/19/2016 9:22:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**7.5**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Ethylbenzene	**1.1**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Methyl t-butyl ether	**2.1**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Toluene	**2.2**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Total Xylenes	**5.4**	**ug/L**	**1.0**		**EPA-8260B**	ND		1
Total Purgeable Petroleum Hydrocarbons	**920**	**ug/L**	**50**		**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	80.7	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	87.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	84.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 21:08	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-07 | **Client Sample Name:** 0752, MW-6-W-160819, 8/19/2016 8:08:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	**91**	**ug/L**	**50**		**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	78.8	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	80.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 17:35	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-08 | **Client Sample Name:** 0752, MW-7-W-160819, 8/19/2016 6:08:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**16**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	**4.5**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Toluene	**0.66**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	**88**	**ug/L**	**50**		**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	88.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	84.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 20:32	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-09 | **Client Sample Name:** 0752, MW-8-W-160819, 8/19/2016 5:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	86.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	76.3	%	80 - 120 (LCL - UCL)		EPA-8260B		S09	1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 17:53	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-10 | **Client Sample Name:** 0752, A-MW-1-W-160819, 8/19/2016 5:25:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**820**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	1
Ethylbenzene	**12**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**33**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	1
Toluene	**30**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	1
Total Xylenes	**95**	**ug/L**	**10**		**EPA-8260B**	ND	**A01**	1
Total Purgeable Petroleum Hydrocarbons	**1600**	**ug/L**	**500**		**Luft-GC/MS**	ND	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	84.1	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	81.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	109	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 22:19	IO1	MS-V12	10	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-11 | **Client Sample Name:** 0752, A-MW-2-W-160819, 8/19/2016 6:40:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**1400**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Ethylbenzene	**1500**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**3600**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Toluene	**3100**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Total Xylenes	**8700**	**ug/L**	**100**		**EPA-8260B**	ND	**A01**	1
Total Purgeable Petroleum Hydrocarbons	**47000**	**ug/L**	**5000**		**Luft-GC/MS**	ND	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	85.5	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	82.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	109	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 22:54	IO1	MS-V12	100	BZH2237

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Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-12 | **Client Sample Name:** 0752, A-MW-3-W-160819, 8/19/2016 6:05:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	80.6	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	80.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 18:11	IO1	MS-V12	1	BZH2237

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Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-13 | **Client Sample Name:** 0752, A-MW-5-W-160819, 8/19/2016 5:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	83.3	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	84.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	107	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 18:28	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-14 | **Client Sample Name:** 0752, A-MW-7-W-160819, 8/19/2016 6:10:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	90.9	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	84.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	105	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 18:46	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-15 | **Client Sample Name:** 0752, S-MW-1-W-160819, 8/19/2016 7:25:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**1200**	**ug/L**	**25**		**EPA-8260B**	ND	**A01**	1
Ethylbenzene	**110**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	2
Methyl t-butyl ether	**2900**	**ug/L**	**25**		**EPA-8260B**	ND	**A01**	1
Toluene	**23**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	2
Total Xylenes	**110**	**ug/L**	**10**		**EPA-8260B**	ND	**A01**	2
Total Purgeable Petroleum Hydrocarbons	**5500**	**ug/L**	**500**		**Luft-GC/MS**	ND	**A01**	2
1,2-Dichloroethane-d4 (Surrogate)	99.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	86.6	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	82.0	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	108	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/30/16 06:37	IO1	MS-V12	50	BZH2237
2	EPA-8260B	08/26/16	08/26/16 22:01	IO1	MS-V12	10	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-16 | **Client Sample Name:** 0752, S-MW-2-W-160819, 8/19/2016 9:10:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	78.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	83.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	107	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 19:04	IO1	MS-V12	1	BZH2237

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-17 | **Client Sample Name:** 0752, S-MW-3-W-160819, 8/19/2016 8:45:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	78.9	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	82.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	113	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 19:21	IO1	MS-V12	1	BZH2523

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-18 | **Client Sample Name:** 0752, S-MW-4-W-160819, 8/19/2016 6:45:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	**3.1**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	**94**	**ug/L**	**50**		**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	88.9	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	85.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 19:39	IO1	MS-V12	1	BZH2523

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-19 | **Client Sample Name:** 0752, S-MW-5-W-160819, 8/19/2016 8:35:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**2100**	**ug/L**	**25**		**EPA-8260B**	ND	**A01**	1
Ethylbenzene	**350**	**ug/L**	**25**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**4500**	**ug/L**	**25**		**EPA-8260B**	ND	**A01**	1
Toluene	**200**	**ug/L**	**25**		**EPA-8260B**	ND	**A01**	1
Total Xylenes	**640**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Total Purgeable Petroleum Hydrocarbons	**13000**	**ug/L**	**2500**		**Luft-GC/MS**	ND	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	86.7	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	80.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	109	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 22:37	IO1	MS-V12	50	BZH2523

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Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-20 | **Client Sample Name:** 0752, S-MW-6-W-160819, 8/19/2016 9:20:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	**140**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	**130**	**ug/L**	**50**		**Luft-GC/MS**	ND	**A90**	1
1,2-Dichloroethane-d4 (Surrogate)	90.4	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	95.9	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	82.7	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	93.7	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	108	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	94.3	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 19:57	IO1	MS-V12	1	BZH2523
2	EPA-8260B	08/26/16	08/30/16 06:02	IO1	MS-V12	5	BZH2523

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-21 | **Client Sample Name:** 0752, S-EW-1-W-160819, 8/19/2016 8:05:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**91**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	1
Ethylbenzene	**33**	**ug/L**	**0.50**		**EPA-8260B**	ND		2
Methyl t-butyl ether	**340**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	1
Toluene	**3.6**	**ug/L**	**0.50**		**EPA-8260B**	ND		2
Total Xylenes	**20**	**ug/L**	**1.0**		**EPA-8260B**	ND		2
Total Purgeable Petroleum Hydrocarbons	**1300**	**ug/L**	**50**		**Luft-GC/MS**	ND		2
1,2-Dichloroethane-d4 (Surrogate)	87.3	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	89.3	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	81.2	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	92.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	90.1	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/30/16 05:44	IO1	MS-V12	5	BZH2523
2	EPA-8260B	08/26/16	08/26/16 20:51	IO1	MS-V12	1	BZH2523

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-22 | **Client Sample Name:** 0752, MPE-1-W-160819, 8/19/2016 8:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**640**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	1
Ethylbenzene	**110**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**2400**	**ug/L**	**25**		**EPA-8260B**	ND	**A01,Z1**	2
Toluene	**38**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	1
Total Xylenes	**100**	**ug/L**	**10**		**EPA-8260B**	ND	**A01**	1
Total Purgeable Petroleum Hydrocarbons	**4600**	**ug/L**	**500**		**Luft-GC/MS**	ND	**A01**	1
1,2-Dichloroethane-d4 (Surrogate)	87.6	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	98.3	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	81.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	81.0	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	109	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 21:26	IO1	MS-V12	10	BZH2523
2	EPA-8260B	08/26/16	08/30/16 06:20	IO1	MS-V12	50	BZH2523

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1623184-23 | **Client Sample Name:** 0752, MP-1-W-160819, 8/19/2016 7:20:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Toluene	ND	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	ND	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	**58**	**ug/L**	**50**		**Luft-GC/MS**	ND		1
1,2-Dichloroethane-d4 (Surrogate)	88.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	83.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	105	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/26/16	08/26/16 20:15	IO1	MS-V12	1	BZH2523

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Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BZH2237						
Benzene	BZH2237-BLK1	ND	ug/L	0.50		
Ethylbenzene	BZH2237-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BZH2237-BLK1	ND	ug/L	0.50		
Toluene	BZH2237-BLK1	ND	ug/L	0.50		
Total Xylenes	BZH2237-BLK1	ND	ug/L	1.0		
Total Purgeable Petroleum Hydrocarbons	BZH2237-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	**BZH2237-BLK1**	**81.6**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BZH2237-BLK1**	**82.2**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BZH2237-BLK1**	**104**	%	**80 - 120 (LCL - UCL)**		
QC Batch ID: BZH2523						
Benzene	BZH2523-BLK1	ND	ug/L	0.50		
Ethylbenzene	BZH2523-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BZH2523-BLK1	ND	ug/L	0.50		
Toluene	BZH2523-BLK1	ND	ug/L	0.50		
Total Xylenes	BZH2523-BLK1	ND	ug/L	1.0		
Total Purgeable Petroleum Hydrocarbons	BZH2523-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	**BZH2523-BLK1**	**86.2**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**BZH2523-BLK1**	**83.8**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**BZH2523-BLK1**	**106**	%	**80 - 120 (LCL - UCL)**		

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Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BZH2237										
Benzene	BZH2237-BS1	LCS	32.320	25.000	ug/L	129		70 - 130		
Toluene	BZH2237-BS1	LCS	25.510	25.000	ug/L	102		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BZH2237-BS1	LCS	9.3700	10.000	ug/L	93.7		75 - 125		
Toluene-d8 (Surrogate)	BZH2237-BS1	LCS	8.7000	10.000	ug/L	87.0		80 - 120		
4-Bromofluorobenzene (Surrogate)	BZH2237-BS1	LCS	10.510	10.000	ug/L	105		80 - 120		
QC Batch ID: BZH2523										
Benzene	BZH2523-BS1	LCS	28.090	25.000	ug/L	112		70 - 130		
Toluene	BZH2523-BS1	LCS	21.760	25.000	ug/L	87.0		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BZH2523-BS1	LCS	9.0800	10.000	ug/L	90.8		75 - 125		
Toluene-d8 (Surrogate)	BZH2523-BS1	LCS	8.4600	10.000	ug/L	84.6		80 - 120		
4-Bromofluorobenzene (Surrogate)	BZH2523-BS1	LCS	10.530	10.000	ug/L	105		80 - 120		

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Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BZH2237	Used client sample: N										
Benzene	MS	1621392-55	ND	31.130	25.000	ug/L		125		70 - 130	
	MSD	1621392-55	ND	28.250	25.000	ug/L	9.7	113	20	70 - 130	
Toluene	MS	1621392-55	ND	25.320	25.000	ug/L		101		70 - 130	
	MSD	1621392-55	ND	23.580	25.000	ug/L	7.1	94.3	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1621392-55	ND	8.2700	10.000	ug/L		82.7		75 - 125	
	MSD	1621392-55	ND	8.8100	10.000	ug/L	6.3	88.1		75 - 125	
Toluene-d8 (Surrogate)	MS	1621392-55	ND	8.7200	10.000	ug/L		87.2		80 - 120	
	MSD	1621392-55	ND	8.6700	10.000	ug/L	0.6	86.7		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1621392-55	ND	10.490	10.000	ug/L		105		80 - 120	
	MSD	1621392-55	ND	9.6900	10.000	ug/L	7.9	96.9		80 - 120	
QC Batch ID: BZH2523	Used client sample: N										
Benzene	MS	1621392-80	ND	31.810	25.000	ug/L		127		70 - 130	
	MSD	1621392-80	ND	31.480	25.000	ug/L	1.0	126	20	70 - 130	
Toluene	MS	1621392-80	ND	23.280	25.000	ug/L		93.1		70 - 130	
	MSD	1621392-80	ND	22.710	25.000	ug/L	2.5	90.8	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1621392-80	ND	9.2400	10.000	ug/L		92.4		75 - 125	
	MSD	1621392-80	ND	9.1000	10.000	ug/L	1.5	91.0		75 - 125	
Toluene-d8 (Surrogate)	MS	1621392-80	ND	8.2900	10.000	ug/L		82.9		80 - 120	
	MSD	1621392-80	ND	8.0800	10.000	ug/L	2.6	80.8		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1621392-80	ND	10.270	10.000	ug/L		103		80 - 120	
	MSD	1621392-80	ND	10.490	10.000	ug/L	2.1	105		80 - 120	

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Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A90	TPPH does not exhibit a "gasoline" pattern. TPPH is entirely due to MTBE.
S09	The surrogate recovery on the sample for this compound was not within the control limits.
Z1	10ul of antifoamer added to voa