



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

October 23, 2017

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

RECEIVED

By Alameda County Environmental Health 5:17 pm, Oct 30, 2017

Re: Semi-Annual Groundwater Monitoring Report-Third Quarter 2017
Commingled Plume #0068
706, 726, and 800 Harrison Street, Oakland, California
Fuel Leak Case No.: RO0000484/RO0000321/RO0000231

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

The information in this report is accurate to the best of my knowledge. This report was prepared by Arcadis, upon whose assistance and advice I have relied.

Sincerely,

James P. Kiernan, P.E.
Project Manager

Attachment: Semi-Annual Groundwater Monitoring Report-Third Quarter 2017 by Arcadis

Arcadis U.S., Inc.
 2300 Clayton Road
 Suite 400
 Concord, California 94520
 Tel 925.274.1110
 Fax 925.274.1103
www.arcadis-us.com

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

Subject:
 Semi-Annual Groundwater Monitoring Report, Third Quarter 2017 Submittal

ENVIRONMENT

Dear Ms. French:

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:

Date:
 October 23, 2017

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

Contact:
 Katherine Brandt

Phone:
 510.596.9675

Email:
Katherine.Brandt@arcadis.com

If you have any questions or comments regarding the contents of this document, please contact Ms. Katherine Brandt of Arcadis at 510.596.9675 or by e-mail at Katherine.Brandt@arcadis.com.

Our ref:
 B0047339.2017

Sincerely,

Arcadis U.S., Inc.



Katherine Brandt, P.G.
Senior Geologist



Ms. Tamami French

October 23, 2017



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 2017
OCTOBER 23, 2017

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

Consulting Company/Contact Person/Phone No.: Arcadis / Katherine Brandt / 510.596.9675
Primary Agency/Contact Person/Regulatory ID No.: Alameda County Department of Environmental Health (ACDEH) / Ms. Tamami French / Case No. RO0000231

WORK PERFORMED DURING THIS REPORTING PERIOD (Second and Third Quarter 2017):

1. Gettler-Ryan, Inc. (G-R) conducted groundwater monitoring and sampling on August 17, 2017. Field data sheets and general procedures are included as **Attachment A**. Eight (8) groundwater monitoring wells (MW-1 through MW-8) associated with Unocal station #0752 located at 800 Harrison Street were gauged and sampled, six (6) wells (MW-1 through MW-5 and MW-7) associated with 706 Harrison Street (GIN) were gauged and sampled, and eight (8) wells (MW-1 through MW-6, EW-1, MPE-1) associated with 726 Harrison Street (YEE) were gauged and sampled during this monitoring event. Air sparge well AS-1 on 726 Harrison was neither gauged nor sampled during this monitoring event. Well MP-1 on 726 Harrison was unable to be gauged or sampled due to a parked car that blocked off access. Well MW-6 associated with 706 Harrison was paved over and was also not gauged or sampled during this monitoring event.

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 data from TRC are included as **Attachment B**. A copy of the laboratory analytical report and chain-of-custody documentation is included as **Attachment C**.

In August 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.

In accordance with the approved *Remedial Action Plan* (RAP) and *RAP Addendum*, an Air Sparge/Soil Vapor Extraction (AS/SVE) system was installed between June and August 2017 to address the elevated concentrations at 706 and 726 Harrison Street. Startup of the system is tentatively planned for October 2017.

WORK PROPOSED FOR THE NEXT REPORTING PERIOD (Fourth Quarter 2017 and First Quarter 2018):

1. Perform groundwater monitoring and related reporting.
2. System Startup

Current Phase of Project:

Groundwater Monitoring/ Remediation

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

Bulk Soil Removed to Date:

Approximately 550 cubic yards

Bulk Soil Removed this Quarter:

None

UNION OIL OF CALIFORNIA
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD QUARTER 2017
OCTOBER 23, 2017

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

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 startup of the AS/SVE system)

Permits for Discharge (No.):

None

Approximate Depth to Groundwater (at Unocal 0752 and 726 Harrison Street):

17.23 (Unocal 0752 MW-6) – 25.97 (726 Harrison MW-6) feet below top of casing

Measured X Estimated

Approximate Groundwater Elevation (at Unocal 0752 and 726 Harrison Street):

8.56 (726 Harrison MW-6) – 18.14 (Unocal 0752 MW-1) feet relative to mean sea level

Measured X Estimated

Approximate Depth to Groundwater (at 706 Harrison Street):

15.80 (MW-5) – 17.77 (MW-4) feet below top of casing

Measured X Estimated

Approximate Groundwater Elevation (at 706 Harrison Street):

12.10 (MW-1) – 13.43 (MW-4) feet relative to mean sea level

Measured X Estimated

Groundwater Gradient (at Unocal 0752 Harrison Street):

0.010 ft/ft (Magnitude) South (Direction)

Groundwater Gradient (at 726 Harrison Street):

0.010 ft/ft (Magnitude) South (Direction)

Groundwater Gradient (at 706 Harrison Street):

0.016 ft/ft (Magnitude) South (Direction)

UNION OIL OF CALIFORNIA
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD QUARTER 2017
OCTOBER 23, 2017

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

DISCUSSION:

Groundwater conditions during the current event generally remained relatively consistent with previous events. All constituents of concern remained non-detect in MW-4 and MW-8 at 800 Harrison Street, MW-2 at 726 Harrison Street, and MW-3, MW-5, and MW-7 at 706 Harrison Street.

706 Harrison Street:

The maximum dissolved concentrations of TPPH (44,000 micrograms per liter [$\mu\text{g/L}$]), benzene (1,400 $\mu\text{g/L}$), toluene (2,700 $\mu\text{g/L}$), ethylbenzene (1,800 $\mu\text{g/L}$), total xylenes (8,200 $\mu\text{g/L}$), and MTBE (2,600 $\mu\text{g/L}$) were detected in the sample collected from MW-2. The TPPH and benzene concentrations in MW-1 significantly increased from the previous event with the benzene a historical maximum. Conversely, the current toluene, xylenes, and MTBE concentrations in MW-4 were the lowest to date.

726 Harrison Street:

The maximum dissolved concentrations of TPPH (14,000 $\mu\text{g/L}$), benzene (2,500 $\mu\text{g/L}$), toluene (460 $\mu\text{g/L}$), ethylbenzene (500 $\mu\text{g/L}$), total xylenes (1,200 $\mu\text{g/L}$) and MTBE (3,800 $\mu\text{g/L}$) were detected in the sample collected from MW-5. The TPPH concentrations in MW-1, MW-4, and MW-5, and the benzene and MTBE concentrations in MW-1, significantly increased from the previous event. Historical maximums of select constituents were also detected in wells MPE-1, MW-4, and MW-5. Conversely, the current benzene concentration in EW-1 and the current MTBE concentration in MW-6 were historical lows.

800 Harrison Street:

The maximum dissolved concentration of TPPH (1,700 $\mu\text{g/L}$) was detected in well MW-3. The maximum concentrations of benzene (130 $\mu\text{g/L}$) and MTBE (38 $\mu\text{g/L}$) were detected in well MW-2. The maximum concentrations of toluene (3 $\mu\text{g/L}$), ethylbenzene (1.7 $\mu\text{g/L}$), and total xylenes (5.7 $\mu\text{g/L}$) were detected in the sample collected from MW-5.

Groundwater elevations at the site for 726 and 800 Harrison Street vary by approximately 9 feet, due to a low groundwater elevation at MW-6 on 726 Harrison Street. Well MW-6 at 726 Harrison Street was not used in calculating the hydraulic gradient as it is located in a lower water bearing zone. The groundwater elevations at the remaining wells at 800 and 726 Harrison Street create a gentle hydraulic gradient of 0.010 foot per foot (ft/ft) in a south direction. Groundwater elevations at the wells at 706 Harrison Street create a relatively gentle hydraulic gradient of 0.016 ft/ft in a south direction.

CONCLUSIONS AND RECOMMENDATIONS:

The concentrations of constituents of concern (COCs) detected during the current event at 706, 726, and 800 Harrison Street were generally consistent with previous results. However, significant increases in TPPH, benzene, and/or MTBE concentrations were observed in a few of the wells at 706 and 726 Harrison, and appear related to the abnormally high water table during the previous event. The highest concentrations remain at the 706 and 726 properties. Arcadis recommends continued semi-annual monitoring to further evaluate groundwater quality and concentration trends. In accordance with the approved RAP and RAP Addendum, the AS/SVE system to address the residual impacts has been installed and is planned to begin operation in October 2017.

UNION OIL OF CALIFORNIA
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD QUARTER 2017
OCTOBER 23, 2017

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

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

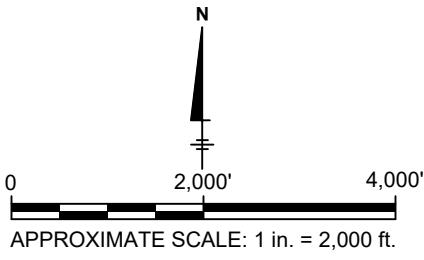
Attachment B: Historical Groundwater Results from TRC

Attachment C: Laboratory Report and Chain-of-Custody Documentation

Figures



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

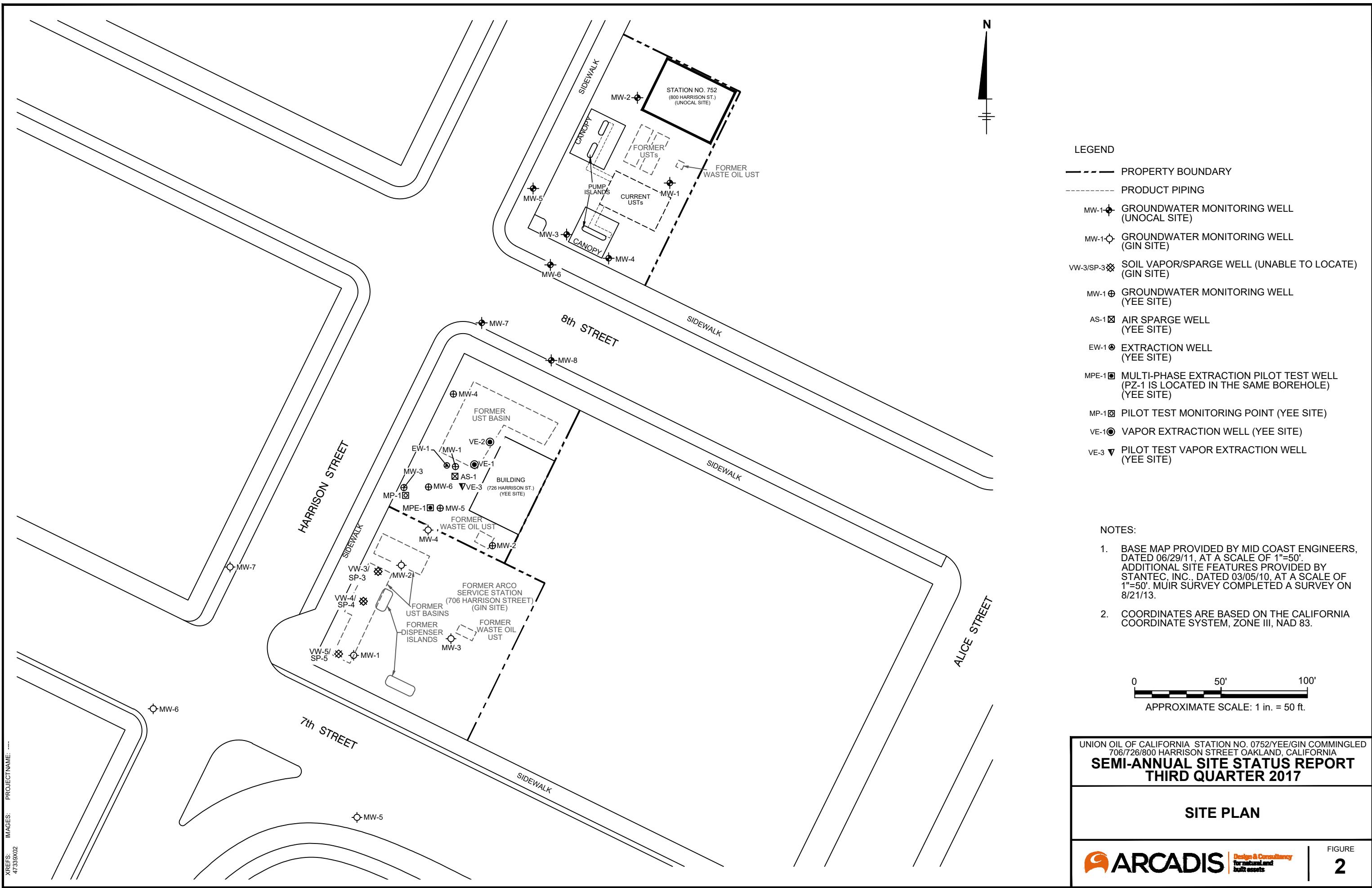


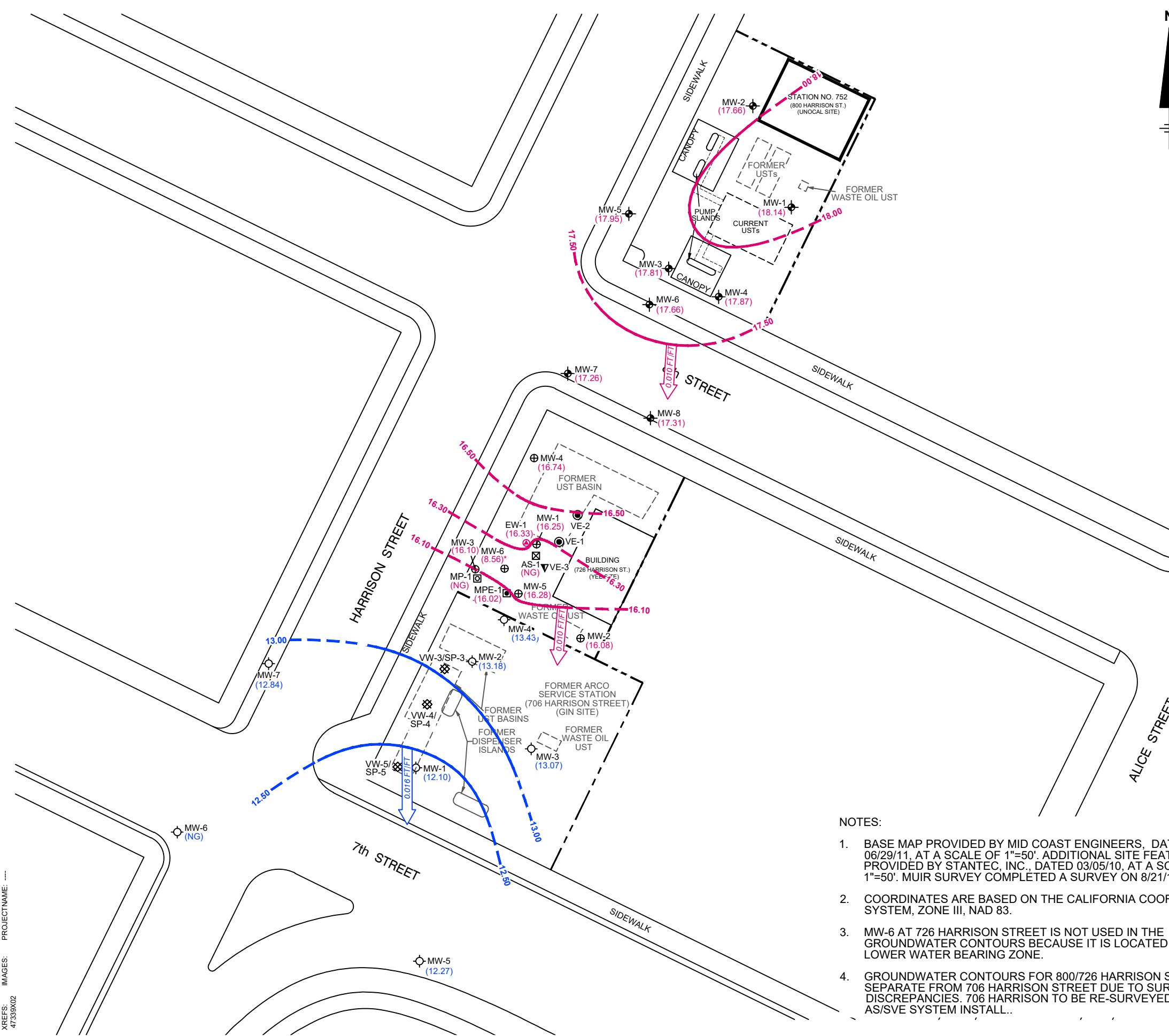
XREFS: PROJECTNAME: ---
IMAGES: 351646\1.PDF
Oakland West 2012.jpg



UNION OIL OF CALIFORNIA STATION NO. 0752/YEE/GIN COMMINGLED
706/726/800 HARRISON STREET OAKLAND, CALIFORNIA
SEMI-ANNUAL SITE STATUS REPORT
THIRD QUARTER 2017

SITE LOCATION MAP



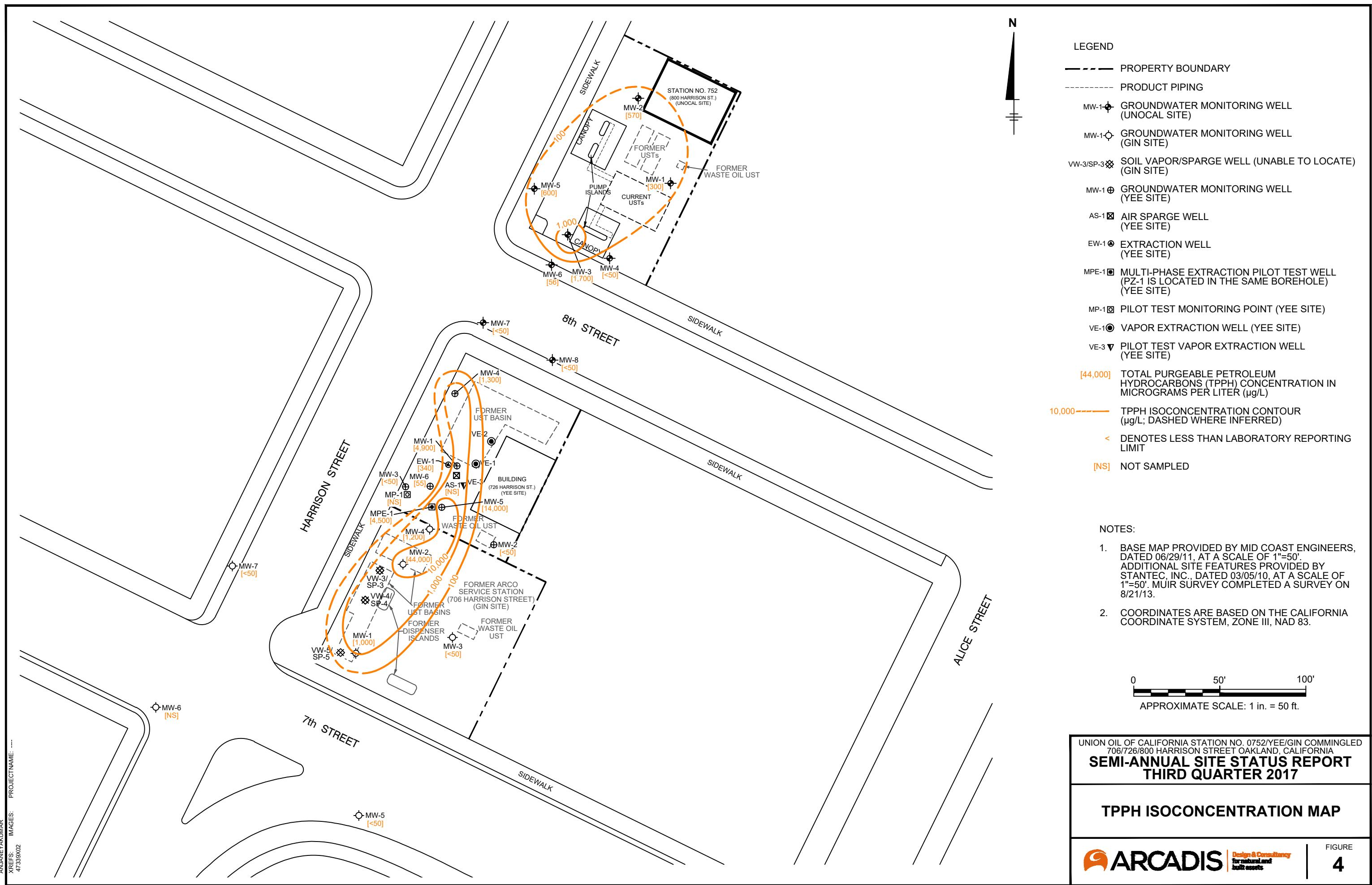


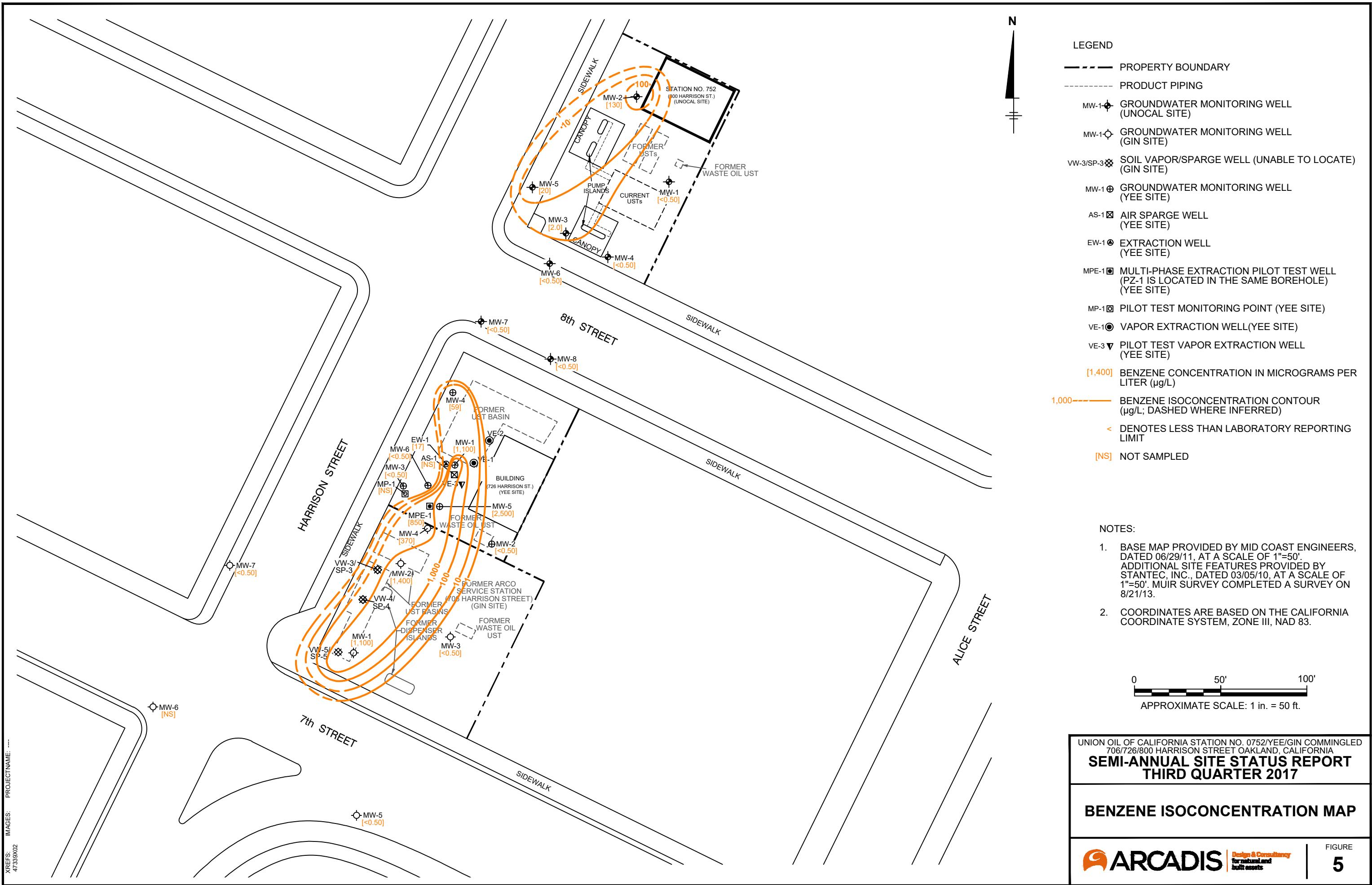
UNION OIL OF CALIFORNIA STATION NO. 0752/YEE/GIN COMMINGLED
706/726/800 HARRISON STREET OAKLAND, CALIFORNIA
SEMI-ANNUAL SITE STATUS REPORT
THIRD QUARTER 2017

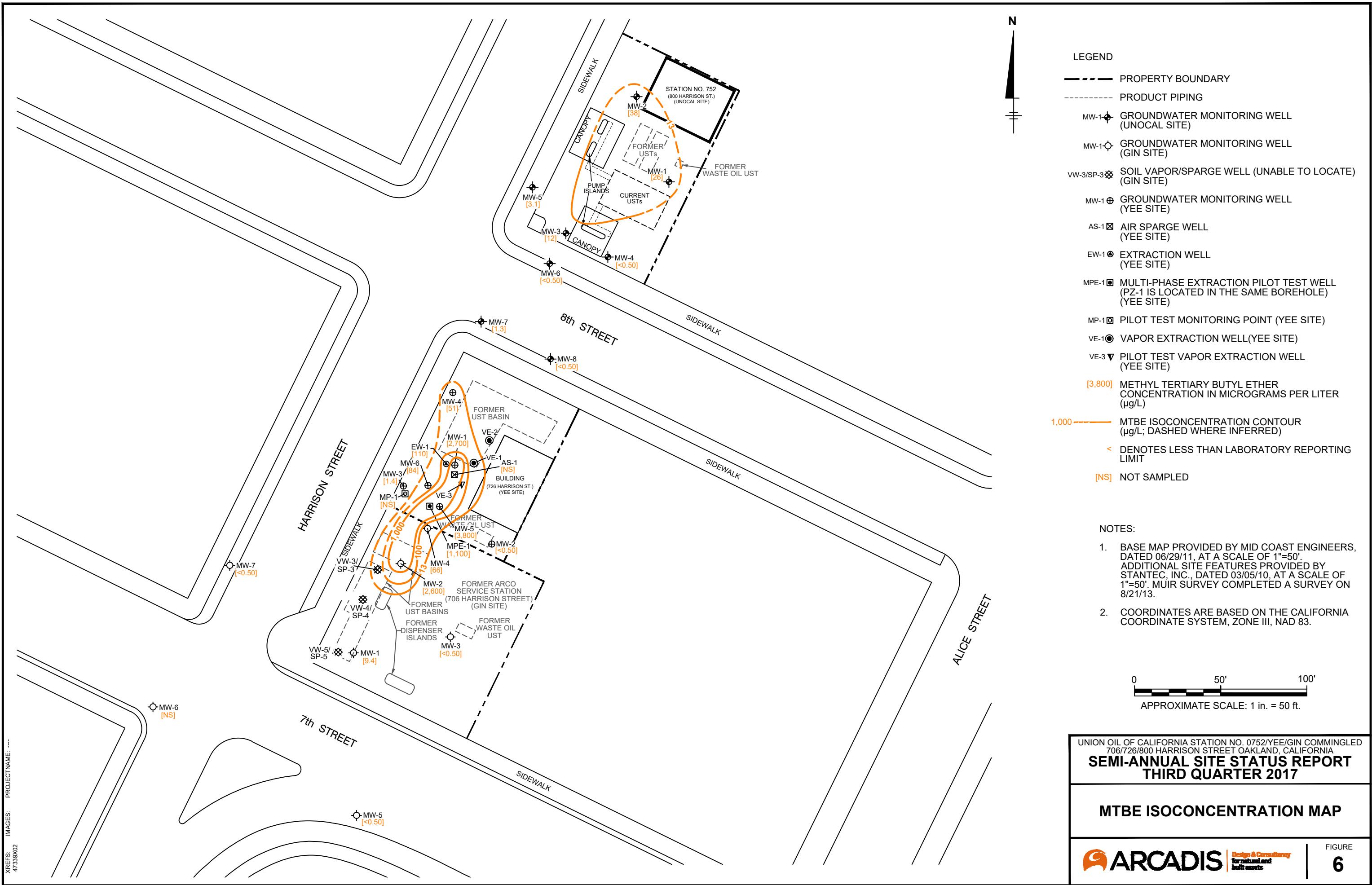
GROUNDWATER ELEVATION CONTOUR MAP

FIGURE 3

ARCADIS | Design & Consultancy for natural and built assets







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)	LPH DTW (feet btoc)	GW Thickness (feet)	Previous Elevation (feet AMSL)	Change in Quarter GWE (feet AMSL)	TPPH (8260B-GC/MS)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	EDB	EDC	Ethanol	Comments
800 Harrison Street																
MW-1	8/17/2017	37.22	19.08	0.00	18.14	19.77	-1.63	300	<0.50	<0.50	<0.50	<1.0	26	--	--	--
MW-2	8/17/2017	37.44	19.78	0.00	17.66	19.92	-2.26	570	130	0.79	1.3	1.1	38	--	--	--
MW-3	8/17/2017	35.88	18.07	0.00	17.81	19.81	-2.00	1,700	2.0	0.61	1.1	1.4	12	--	--	--
MW-4	8/17/2017	35.42	17.55	0.00	17.87	19.89	-2.02	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--
MW-5	8/17/2017	35.68	17.73	0.00	17.95	18.74	-0.79	600	20	3	1.7	5.7	3.1	--	--	--
MW-6	8/17/2017	34.89	17.23	0.00	17.66	19.79	-2.13	56	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--
MW-7	8/17/2017	34.92	17.66	0.00	17.26	18.99	-1.73	<50	<0.50	<0.50	<0.50	<1.0	1.3	--	--	--
MW-8	8/17/2017	34.73	17.42	0.00	17.31	19.39	-2.08	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--
706 Harrison Street																
MW-1	8/17/2017	29.17	17.07	0.00	12.10	15.22	-3.12	1,000	1,100	31	39	66	9.4	--	--	--
MW-2	8/17/2017	30.53	17.35	0.00	13.18	16.16	-2.98	44,000	1,400	2,700	1,800	8,200	2,600	--	--	A01, Sheen present in Water
MW-3	8/17/2017	29.79	16.72	0.00	13.07	16.20	-3.13	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--
MW-4	8/17/2017	31.20	17.77	0.00	13.43	--	--	1,200	370	7.1	24	18	66	--	--	A01
MW-5	8/17/2017	28.07	15.80	0.00	12.27	15.54	-3.27	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--
MW-6	8/17/2017	29.13	--	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
MW-7	8/17/2017	29.70	16.86	0.00	12.84	15.46	-2.62	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--
726 Harrison Street																
AS-1	8/17/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
EW-1	8/17/2017	34.37	18.04	0.00	16.33	18.99	-2.66	340	17	<1.0	<1.0	2.1	110	--	--	A01
MP-1	8/17/2017	34.16	--	--	18.69	--	--	--	--	--	--	--	--	--	--	Unable to access, Parked over
MPE-1	8/17/2017	34.36	18.34	0.00	16.02	18.78	-2.76	4,500	850	98	160	200	1,100	--	--	A01
MW-1	8/17/2017	34.45	18.20	0.00	16.25	18.97	-2.72	4,900	1,100	27	60	82	2,700	--	--	A01
MW-2	8/17/2017	34.91	18.83	0.00	16.08	18.96	-2.88	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--
MW-3	8/17/2017	34.12	18.02	0.00	16.10	18.79	-2.69	<50	<0.50	<0.50	<0.50	<1.0	1.4	--	--	--
MW-4	8/17/2017	35.05	18.31	0.00	16.74	19.05	-2.31	1,300	59	4.6	1.5	8.8	51	--	--	A01
MW-5	8/17/2017	34.76	18.48	0.00	16.28	19.06	-2.78	14,000	2,500	460	500	1,200	3,800	--	--	A01
MW-6	8/17/2017	34.53	25.97	0.00	8.56	10.76	-2.20	55	<0.50	<0.50	<0.50	<1.0	84	--	--	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 NAV29 to NAV88. The 706 Harrison Street data was not converted due to discrepancies 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 a "gasoline" pattern, TPPH is entirely due to MTBE

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 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

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 (feet AMSL)	Elevation (feet AMSL)	DTW (feet btoc)	LPH (feet)	GW Thickness (feet)	Previous Elevation (feet AMSL)	Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8260B-GC/MS)	Benzene	Toluene	Ethylbenzene	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	<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	<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	<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	<0.50	<1.0	<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	<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	<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	<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	<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	<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	<0.50	<1.0	2.2	--	--	--		
MW-1	2/17/2017	37.22	17.45	0.00	19.77	16.84	2.93	710	<0.50	0.9	<0.50	0.9	<1.0	3.0	70.0	--	--	--	
MW-1	8/17/2017	37.22	19.08	0.00	18.14	19.77	-1.63	300	<0.50	<0.50	<0.50	<0.50	<1.0	26	--	--	--		
MW-2	2/7/2012	34.74	19.77	0.00	14.97	15.42	-0.45	<50	<0.50	<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	<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	<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	<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	<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	<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	<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	<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	<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	<0.50	<1.0	1.3	--	--	--		
MW-2	2/17/2017	37.44	17.52	0.00	19.92	17.34	2.58	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--		
MW-2	8/17/2017	37.44	19.78	0.00	17.66	19.92	-2.26	570	130	0.79	1.3	1.1	38	--	--	--	A01		
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	<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	<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	<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	<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	<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	--	--	--	A01		
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	--	--	--	Sheen present in Water		
MW-3	2/17/2017	35.88	16.07	0.00	19.81	16.60	3.21	1,500	4.6	0.67	0.93	1	25	--	--	--			
MW-3	8/17/2017	35.88	18.07	0.00	17.81	19.81	-2.00	1,700	2.0	0.61	1.1	1.4	12	--	--	--			
MW-4	2/7/2012	32.72	18.38	0.00	14.34	14.87	-0.53	<50	<0.50	<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	<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	<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	<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	<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	<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	<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	<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	<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	<0.50	<1.0	<0.50	--	--	--		
MW-4	2/17/2017	35.42	15.53	0.00	19.89	16.65	3.24	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--		
MW-4	8/17/2017	35.42	17.55	0.00	17.87	19.89	-2.02	<50	<0.50	<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	<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	<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	<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	<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	<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-5	2/17/2017	35.68	16.94	0.00	18.74	16.71	2.03	<50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--		
MW-5	8/17/2017	35.68	17.73	0.00	17.95	18.74	-0.79	600	20	3									

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 AMSL)	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	Ethylbenzene	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	
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	--	--	--	
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-7	2/17/2017	34.92	15.93	0.00	18.99	16.14	2.85	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-7	8/17/2017	34.92	17.66	0.00	17.26	18.99	-1.73	<50	<0.50	<0.50	<0.50	<1.0	1.3	--	--	--	
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	--	--	--	
MW-8	2/17/2017	34.73	15.34	0.00	19.39	16.18	3.21	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-8	8/17/2017	34.73	17.42	0.00	17.31	19.39	-2.08	<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	--	
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	
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	
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	--	--	--	
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-1	2/17/2017	29.17	13.95	0.00	15.22	11.27	3.95	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-1	8/17/2017	29.17	17.07	0.00	12.10	15.22	-3.12	1,000	1,100	31	39	66	9.4	--	--	--	
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	--	
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	
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	
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	
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	
MW-2	8/14/2014	30.53	18.70	0.00	11.83	--	--	31,000	1,200	1,800	1,000	4,300	2,400	--	--	--	
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	--	--	--	
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	--	--	--	
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	--	--	--	
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	3,600	--	--	--	A01	
MW-2	2/17/2017	30.53	14.37	0.00	16.16	12.31	3.85	22,000	910	1,400	1,100	4,100	1,900	--	--	--	
MW-2	8/17/2017	30.53	17.35	0.00	13.18	16.16	-2.98	44,000	1,400	2,700	1,800	8,200	2,600	--	--	A01, Sheen present in Water	
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	--	
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	--	--	<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-3	2/17/2017	29.79	13.59	0.00	16.20	12.15	4.05	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--	
MW-3	8/17/2017	29.79	16.72	0.00	13.07	16.20	-3.13	<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	--	
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	
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	
MW-4	8/14/2014	31.20	19.17	0.00	12.03	10.52	--	3,200	210	47	72	100	480	--	--	--	
MW-4	2/17/2015	31.20	--	--	--	12.03	--	--	--	--	--	--	--	--	--	Parked Car	
MW-4	8/6/2015	31.20	19.11	0.00	12												

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 AMSL)	LPH DTW (feet btoc)	GW Thickness (feet)	Previous Quarter GW Elevation (feet AMSL)	Change in Elevation (feet)	TPPH (8260B-GC/MS)	Benzene	Ethylbenzene	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	1.6	190	<0.50	<0.50	--
MW-5	8/9/2012	28.07	15.22	0.00	12.85	11.62	1.23	<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	<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	<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	<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	<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	<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	<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	<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	<1.0	<0.50	--	--	--
MW-5	2/17/2017	28.07	12.53	0.00	15.54	11.47	4.07	<50	<0.50	<0.50	<1.0	<0.50	--	--	--
MW-5	8/17/2017	28.07	15.80	0.00	12.27	15.54	-3.27	<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	<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	<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	<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	<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	<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	<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	<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-6	2/17/2017	29.13	--	--	--	--	--	--	--	--	--	--	--	--	Paved over
MW-6	8/17/2017	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	<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	<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	<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	<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	<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	<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	<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	<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	<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	<1.0	<0.50	--	--	--
MW-7	2/17/2017	29.70	14.24	0.00	15.46	12.04	3.42	<50	<0.50	<0.50	<1.0	<0.50	--	--	--
MW-7	8/17/2017	29.70	16.86	0.00	12.84	15.46	-2.62	<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-3	2/17/2017	--	--	--	*--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-3	8/17/2017	--	--	--	*--	--	--	--	--	--	--	--	--	--	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-4	2/17/2017	--	--	--	*--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-4	8/17/2017	--	--	--	*--	--	--	--	--	--	--	--	--	--	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
SP-5	2/17/2017	--	--	--	*--	--	--	--	--	--	--	--	--	--	Unable to Locate
SP-5	8/17/2017	--	--	--	*--	--	--	--	--	--	--	--	--	--	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 (feet AMSL)	Elevation (feet btoc)	LPH (feet)	GW Thickness (feet)	Previous Elevation (feet AMSL)	Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8260B-GC/MS)	Benzene	Toluene	Ethylbenzene	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	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
AS-1	2/17/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
AS-1	8/17/2017	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
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	
EW-1	2/17/2017	34.37	15.38	0.00	18.99	15.32	3.67	530	24	1.2	1.2	2.6	64	--	--	--		
EW-1	8/17/2017	34.37	18.04	0.00	16.33	18.99	-2.66	340	17	<1.0	<1.0	2.1	110	--	--	--	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	
MP-1	2/17/2017	34.16	15.47	0.00	18.69	15.06	3.63	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--		
MP-1	8/17/2017	34.16	--	--	18.69	--	--	--	--	--	--	--	--	--	--	--	Unable to access, Parked over	
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	2,400	--	--	--	A01	
MPE-1	2/17/2017	34.36	15.58	0.00	18.78	15.04	3.74	1,900	620	18	88	66	1,600	--	--	--	A01	
MPE-1	8/17/2017	34.36	18.34	0.00	16.02	18.78	-2.76	4,500	850	98	160	200	1100	--	--	--	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	1,200	23	110	110	2,900	--	--	--	A01	
MW-1	2/17/2017	34.45	15.48	0.00	18.97	15.25	3.72	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--		
MW-1	8/17/2017	34.45	18.20	0.00	16.25	18.97	-2.72	4,900	1100	27	60	82	2,700	--	--	--	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	--	--	--		
MW-2	2/17/2017	34.91	15.95	0.00	18.96	15.07	3.89	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--		
MW-2	8/17/2017	34.91	18.83	0.00	16.08	18.96	-2.88	<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 (feet AMSL)	Elevation (feet btoc)	LPH (feet)	GW Thickness (feet)	Previous Elevation (feet AMSL)	Quarter GWE (feet AMSL)	Change in Elevation (feet)	TPPH (8260B-GC/MS)	Benzene	Toluene	Ethylbenzene	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-3	2/17/2017	34.12	15.33	0.00	18.79	15.10	3.69	<50	<0.50	<0.50	<0.50	<1.0	<0.50	--	--	--		
MW-3	8/17/2017	34.12	18.02	0.00	16.10	18.79	-2.69	<50	<0.50	<0.50	<0.50	<1.0	1.4	--	--	--		
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-4	2/17/2017	35.05	16.00	0.00	19.05	15.65	3.40	110	<0.50	<0.50	<0.50	<1.0	28	--	--	--		
MW-4	8/17/2017	35.05	18.31	0.00	16.74	19.05	-2.31	1,300	59	4.6	1.5	8.8	51	--	--	--	A01	
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	19.98	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-5	2/17/2017	34.76	15.70	0.00	19.06	15.28	3.78	3,500	1,200	150	140	270	1,200	--	--	--	A01	
MW-5	8/17/2017	34.76	18.48	0.00	16.28	19.06	-2.78	14,000	2,500	460	500	1200	3,800	--	--	--	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	
MW-6	2/17/2017	34.53	23.77	0.00	10.76	7.95	2.81	<50	<0.50	<0.50	<0.50	<1.0	100	--	--	--	A01	
MW-6	8/17/2017	34.53	25.97	0.00	8.56	10.76	-2.20	55	<0.50	<0.50	<0.50	<1.0	84	--	--	--	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 discrepancies 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)
µg/L	micrograms per liter (approx. equivalent to parts per billion, ppb)
**	Survey completed 8/21/2013
8260B	EPA Method 8260B for Volatile Organic Compounds
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 CaCO ₃	Nitrate as NO ₃	Nitrite as NO ₂	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 CaCO ₃	Nitrate as NO ₃	Nitrite as NO ₂	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 CaCO ₃	Nitrate as NO ₃	Nitrite as NO ₂	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

CaCO ₃	calcium carbonate
NO ₃	nitrate
NO ₂	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.

Attachment A

Field Data Sheets and General Procedures



GETTLER - RYAN INC.



TRANSMITTAL

August 24, 2017
G-R #17155647

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

FROM: Deanna L. Harding
Project Manager
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 17, 2017

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

WELL CONDITION STATUS SHEET

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

Job #: **17155647**
Event Date: **8/17/17**
Sampler: **AW**

DRUMS PRESENT ONSITE? Y / N

ARE DRUMS PROPERLY LABELED? Y / N

LOCATION OF DRUMS:

Comments Arco property fenced & Arcadis is installing vapor system. A-mw-1
will be inside new compound & may be covered going forward

WELL CONDITION STATUS SHEET

**Client/
Facility #:**

Chevron #351646 / 0752

Site Address: 800 Harrison Street

City: **Oakland, CA**

Job #: 17155647

Event Date: 8-17-17

Sampler: M

DRUMS PRESENT ONSITE? Y / N

#.

ARE DRUMS PROPERLY LABELED? X / N

LOCATION OF DRUMS.

Comments

WELL CONDITION STATUS SHEET

**Client/
Facility #:**

Chevron #351646 / 0752

Site Address: **800 Harrison Street**

City: **Oakland, CA**

Job #: 17155647

Event Date:

8-17-17

Sampler:

DRUMS PRESENT ONSITE? Y / N

#

ARE DRUMS PROPERLY LABELED? Y / N

LOCATION OF DRUMS: *N/A*

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
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 17155647
 Event Date: 8. 17. 17 (inclusive)
 Sampler: FT

Well ID: MW-1
 Well Diameter: 1 1/2 in.
 Total Depth: 33.42 ft.
 Depth to Water: 19.08 ft.
14.34 xVF .17 = 2.43

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

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.94

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): 0505
 Sample Time/Date: 0530 18. 17. 17
 Approx. Flow Rate: / gpm.
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 20.15

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <u>10</u> / mS μmhos/cm)	Temperature <u>20</u> / F	D.O. (mg/L)	ORP (mV)	TURBIDITY (NTU)
<u>0510</u>	<u>2.5</u>	<u>6.98</u>	<u>395</u>	<u>20.6</u>	<u>PRE: 1.8</u>	<u>PRE: 95</u>	<u>PRE: 102</u>
<u>0515</u>	<u>5.0</u>	<u>7.01</u>	<u>404</u>	<u>20.4</u>			
<u>0521</u>	<u>7.0</u>	<u>7.05</u>	<u>412</u>	<u>20.1</u>	<u>POST: 1.7</u>	<u>POST: 107</u>	<u>POST: 132</u>

LABORATORY INFORMATION

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

COMMENTS: Enviro is "on"

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
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 17155647
 Event Date: 8.17.17 (inclusive)
 Sampler: FF

Well ID: MW-2
 Well Diameter: 1 1/2" 4 / 6 in.
 Total Depth: 30.72 ft.
 Depth to Water: 19.78 ft.
10.94 xVF .7 = 1.85

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

Check if water column is less than 0.50 ft.
 x3 case volume = Estimated Purge Volume: 6.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.96

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:	Itr
Amt Removed from Well:	Itr
Water Removed:	Itr

Start Time (purge): 0430
 Sample Time/Date: 0450 18.17.17
 Approx. Flow Rate: / gpm.
 Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 20.2

Weather Conditions:
 Water Color: CLEAR Odor: Y / NO
 Sediment Description: none

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (mS / μhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (NTU)
<u>0434</u>	<u>2.0</u>	<u>7.21</u>	<u>674</u>	<u>19.8</u>	<u>PRE: 1.9</u>	<u>PRE: 75</u>	<u>PRE: 85</u>
<u>0438</u>	<u>40</u>	<u>7.23</u>	<u>681</u>	<u>19.6</u>			
<u>0442</u>	<u>60</u>	<u>7.25</u>	<u>689</u>	<u>19.5</u>	<u>POST: 1.8</u>	<u>POST: 88</u>	<u>POST: 97</u>

LABORATORY INFORMATION

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

COMMENTS: Universal 8" (2 SE)

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8. 17. 17** (inclusive)
 Sampler: **FT**

Well ID: **MW-3**
 Well Diameter: **110/416** in.
 Total Depth: **30.45** ft.
 Depth to Water: **18.07** ft.

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

Check if water column is less than 0.50 ft.
 $12.38 \times VF .17 = 2.10$ x3 case volume = Estimated Purge Volume: **6.0** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.54**

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:	Itr
Amt Removed from Well:	Itr
Water Removed:	Itr

Start Time (purge): **0730**
 Sample Time/Date: **0750 / 8.17.17**
 Approx. Flow Rate: _____ gpm.
 Did well de-water? **ND** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **19.15**

Weather Conditions: **CLOUDY**
 Water Color: **LT-BRN.** Odor: **Ø/N** **STEWY**
 Sediment Description: **CLAY** **S-SILTY**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity µS /mS µhos/cm)	Temperature (° / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (NTU)
0734	2.0	7.65	568	20.9	PRE: 1.5	PRE: -85	PRE: 145
0738	4.0	7.67	577	20.6			
0742	6.0	7.69	586	20.4	POST: 1.3	POST: -97	POST: 161

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: **EMCO 12"**

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8.17.17** (inclusive)
 Sampler: **FT**

Well ID: **MW-4**
 Well Diameter: **1 1/2" / 4 1/2" in.**
 Total Depth: **32.00 ft.**
 Depth to Water: **17.55 ft.**
14.45 xVF **.17** = **2.45**

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 than 0.50 ft.
x3 case volume = Estimated Purge Volume: 7.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.44**

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): **0620**
 Sample Time/Date: **0640 / 8.17.17**
 Approx. Flow Rate: **/** gpm.
 Did well de-water? **No** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **19.02**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (15 mS μhos/cm)	Temperature (10 / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (NTU)
0625	2.5	7.63	340	20.4	PRE: 2.2	PRE: 115	PRE: 174
0630	5.0	7.65	351	20.2			
0634	7.0	7.67	360	20.0	POST: 2.4	POST: 128	POST: 191

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: **Enviro n" on**

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8.17.17** (inclusive)
 Sampler: **FT**

Well ID **MW-5**Well Diameter **1 1/2" / 4 1/2" in.**Total Depth **31.53 ft.**Depth to Water **17.23 ft.**Depth to Water **13.80**xVF **.17**= **2.34**

Check if water column is less than 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

x3 case volume = Estimated Purge Volume: **7.0** gal.Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.49****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): **0545**Sample Time/Date: **0605 / 8.17.17**Approx. Flow Rate: **/** gpm.Did well de-water? **No** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **18.91**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity HS mS μmhos/cm)	Temperature (°C / °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0550	2.5	7.15	455	20.7	PRE: 1.7	PRE: -45	PRE: 135
0555	2.0	7.18	463	20.5			
0559	7.0	7.21	472	20.2	POST: 1.5	POST: -58	POST: 149

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: **Enviro 12"owl**

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
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 17155647
 Event Date: 8.17.17 (inclusive)
 Sampler: FT

Well ID: MW-6
 Well Diameter: 110/416 in.
 Total Depth: 30.82 ft.
 Depth to Water: 17.23 ft.
13.59 xVF .17 = 2.31

Date Monitored: 8.17.17

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

Check if water column is less than 0.50 ft.
 $x3 \text{ case volume} = \text{Estimated Purge Volume: } 7.0 \text{ gal.}$

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.94

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:	litr
Amt Removed from Well:	litr
Water Removed:	litr

Start Time (purge): 0655
 Sample Time/Date: 0717 / 8.17.17
 Approx. Flow Rate: 1 gpm.
 Did well de-water? No If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 19.56

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (0.01 mS μmhos/cm)	Temperature (0 / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (mots)
<u>0700</u>	<u>2.5</u>	<u>7.58</u>	<u>325</u>	<u>21.2</u>	<u>PRE: 2.3</u>	<u>PRE: 125</u>	<u>PRE: 202</u>
<u>0705</u>	<u>5.0</u>	<u>7.60</u>	<u>333</u>	<u>20.9</u>			
<u>0709</u>	<u>7.0</u>	<u>7.63</u>	<u>341</u>	<u>20.7</u>	<u>POST: 2.1</u>	<u>POST: 137</u>	<u>POST: 285</u>

LABORATORY INFORMATION

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

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8.17.17** (inclusive)
 Sampler: **FT**

Well ID: **MW-7**
 Well Diameter: **1 1/2 / 4 / 6** in.
 Total Depth: **31.31** ft.
 Depth to Water: **17.66** ft.
13.65 xVF **.17** = **2.32**

Date Monitored: **8.17.17**

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 than 0.50 ft.
 $x3 \text{ case volume} = \text{Estimated Purge Volume: } 7.0 \text{ gal.}$

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.39**

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): **0840**
 Sample Time/Date: **0900 / 8.17.17**
 Approx. Flow Rate: **/** gpm.
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **18.56**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity µS / mS µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY NTU
0845	2.5	7.72	300	20.9	PRE: 2.2	PRE: 110	PRE: 175.
0850	5.0	7.75	310	20.7			
0854	7.0	7.77	318	20.5	POST: 1.9	POST: 121	POST: 198

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: **Enviro n/a (BTEX, ISF)**

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8-17-17** (inclusive)
 Sampler: **FT**

Well ID: **MW-8**
 Well Diameter: **11 1/4 / 6 in.**
 Total Depth: **28.35 ft.**
 Depth to Water: **17.42 ft.**
10.93 xVF **.17** = **1.85**

Date Monitored: **8-17-17**

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 than 0.50 ft.
 $x3 \text{ case volume} = \text{Estimated Purge Volume: } 6.0 \text{ gal.}$

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **19.60**

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): **0805**
 Sample Time/Date: **0825 / 8-17-17**
 Approx. Flow Rate: **— gpm.**
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **18-86**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity 1.00 mS μmhos/cm)	Temperature (0 / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY (NTU)
0809	2.0	7.61	395	21.0	PRE: 1.9	PRE: 112	PRE: 185
0813	4.0	7.63	402	20.8			
0817	6.0	7.66	410	20.5	POST: 1.8	POST: 127	POST: 212

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:

Branford - Kilmer 8" (3SF)

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8-17-17** (inclusive)
 Sampler: **MC**

Well ID: **A-MW-1**
 Well Diameter: **11 1/2" 4 1/2 in.**
 Total Depth: **24.39 ft.**
 Depth to Water: **17.07 ft.**
7.32

Date Monitored: **8-17-17**

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

Check if water column is less than 0.50 ft.
 $xVF \quad .17 = 1.2$ x3 case volume = Estimated Purge Volume: **3.6 gal.**

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **18.53**

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:	Itr
Amt Removed from Well:	Itr
Water Removed:	Itr

Start Time (purge): **0630** Weather Conditions: **Cloudy**
 Sample Time/Date: **0700 / 8-17-17** Water Color: **Brown** Odor: **Y/N** **light**
 Approx. Flow Rate: **gpm.** Sediment Description: **light**
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal DTW @ Sampling: **17.89**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (NS mS μmhos/cm)	Temperature (0 / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0635	1.5	7.21	416	18.9	PRE: 2.1	PRE: -32	PRE: 56
0640	3	7.27	423	18.5			
0644	4	7.30	427	18.5	POST: 1.7	POST: -42	POST: 67

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: *** See note on Well condition sheet.**

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
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 17155647
 Event Date: 8-17-17 (inclusive)
 Sampler: M

Well ID A-MW-2Date Monitored: 8-17-17Well Diameter 11 1/4 16 in.

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

Total Depth 24.86 ft.Depth to Water 7.35 ft. Check if water column is less than 0.50 ft.Depth to Water 7.51 xVF .17 = 1.2 x3 case volume = Estimated Purge Volume: 3.6 gal.Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 18.85**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): 0715Weather Conditions: CloudySample Time/Date: 0745 8-17-17Water Color: Brown Odor: Oil N StrongApprox. Flow Rate: 10 gpm.Sediment Description: LightDid well de-water? NOIf yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 17.86

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μS / mS $\mu\text{mhos}/\text{cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0710</u>	<u>1.5</u>	<u>7.07</u>	<u>625</u>	<u>18.5</u>	<u>1.1</u>	<u>PRE: -102</u>	<u>PRE: 102</u>
<u>0725</u>	<u>3</u>	<u>7.14</u>	<u>636</u>	<u>18.2</u>			
<u>0729</u>	<u>4</u>	<u>7.16</u>	<u>632</u>	<u>18.1</u>	<u>1.7</u>	<u>POST: -111</u>	<u>POST: 91</u>

LABORATORY INFORMATION

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

COMMENTS: SHINEEN VISIBLE & DURING PURGING / SAMPLING.

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8-17-17** (inclusive)
 Sampler: **BW**

Well ID: **A-Mw-3**

Well Diameter: **11 1/4 / 6 in.**

Total Depth: **25.91 ft.**

Depth to Water: **16.72 ft.**

9.19 xVF **.17** = **1.56**

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **18.55**

Date Monitored: **8-17-17**

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

Check if water column is less than 0.50 ft.

x3 case volume = Estimated Purge Volume: **5.0 gal.**

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **18.55**

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): **0715**

Sample Time/Date: **0740 / 8-17-17**

Approx. Flow Rate: **— gpm.**

Did well de-water? **✓** If yes, Time: **—** Volume: **— gal.** DTW @ Sampling: **18.06**

Weather Conditions:

Water Color: **Cloudy** Odor: Y **/** N

Sediment Description: **Cloudy**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity 1000 / mS μmhos/cm)	Temperature (10 / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0720	1.5	7.54	402	19.6	PRE: 1.1	PRE: 155	PRE: 274
0725	3.0	7.57	420	19.7			
0730	5.0	7.61	429	19.7	POST: 1.3	POST:	POST: 302

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
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 17155647
 Event Date: 8-17-17 (inclusive)
 Sampler: AW

Well ID A-MW-4Date Monitored: 8-17-17Well Diameter 1 1/2" 4/6 in.

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

Total Depth 28.18 ft.Depth to Water 17.77 ft. Check if water column is less then 0.50 ft.10.41 xVF .17 = 1.76 x3 case volume = Estimated Purge Volume: 5.5 gal.Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 19.85

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): 0750

Weather Conditions:

Sample Time/Date: 0815 / 8-17-17Water Color: Clear Odor: Y NApprox. Flow Rate: — gpm.Sediment Description: ClearDid well de-water? N If yes, Time: — Volume: — gal. DTW @ Sampling: 19.40

Time (2400 hr.)	Volume (gal.)	pH	Conductivity <u>195</u> mS μmhos/cm)	Temperature <u>70</u> F	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0755</u>	<u>2.0</u>	<u>7.90</u>	<u>342</u>	<u>19.4</u>	<u>1.1</u>	<u>92</u>	<u>99</u>
<u>0800</u>	<u>4.0</u>	<u>7.84</u>	<u>355</u>	<u>19.5</u>			
<u>0805</u>	<u>5.5</u>	<u>7.80</u>	<u>366</u>	<u>19.5</u>	<u>1.2</u>	<u>110</u>	<u>122</u>

LABORATORY INFORMATION

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

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8-17-17** (inclusive)
 Sampler: **mlc**

Well ID: **A-MW-S**

Date Monitored: **8-17-17**

Well Diameter: **1101416** in.

Total Depth: **28.17** ft.

Depth to Water: **15.80** ft.

Depth to Water: **12.37** ft.

xVF **.17** = **2.1** x3 case volume = Estimated Purge Volume: **6.3** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **18.27**

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): **0455**

Weather Conditions:

Sample Time/Date: **0525 / 8-17-17**

Water Color: **Cloudy**

Cloudy

Odor: Y / **N**

Approx. Flow Rate: _____ gpm.

Sediment Description: **none**

Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **17.02**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μS / mS $\mu\text{mhos}/\text{cm}^2$)	Temperature ($^\circ\text{C}$ / $^\circ\text{F}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0501	2	7.22	393	18.2	PRE: 2.4	PRE: 27	PRE: 49
0507	4	7.31	402	17.9			
0514	6.5	7.27	411	17.8	POST: 2.6	POST: 11	POST: 63

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
A-MW-S	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**
Site Address: **800 Harrison Street**
City: **Oakland, CA**

Job Number: 17155647
Event Date: 8-17-17 (inclusive)
Sampler: mc

Well ID	A-Mw-6	
Well Diameter	11 1/2 in.	
Total Depth	25.93	ft.
Depth to Water	5 ft.	

Date Monitored: 8/17/11

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

Check if water column is less than 0.50 ft.

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

- Purge Equipment:
- Disposable Bailer
- Stainless Steel Bails
- 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:

~~Sediment Description:~~

Did well de-water?

If yes, Time:

gal. DTW @ Sampling:

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μs / mS $\mu\text{mhos}/\text{cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY
_____	_____	_____	_____	_____	PRE:	PRE:	PRE:
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	POST:	POST:	POST:

LABORATORY INFORMATION

COMMENTS-

UTL-PAVED OVER

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8-17-17** (inclusive)
 Sampler: **eric**

Well ID: **A-MW-7**
 Well Diameter: **1101416 in.**
 Total Depth: **27.42 ft.**
 Depth to Water: **16.86 ft.**

Date Monitored: **8-17-17**

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

Check if water column is less than 0.50 ft.
 $10.76 \text{ xVF } 17 = 1.8$ x3 case volume = Estimated Purge Volume: **5.4 gal.**

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **19.01**

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): **0540** Weather Conditions: **Cloudy**
 Sample Time/Date: **06/10/18-17-17** Water Color: **Cloudy** Odor: **Y/N**
 Approx. Flow Rate: **-** gpm. Sediment Description: **none**
 Did well de-water? **no** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **17.62**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity $\mu\text{S}/\text{mS}$ $\mu\text{mhos}/\text{cm}$	Temperature (°F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0546	2	6.89	623	18.8	PRE: 0.7	PRE: -19	PRE: 41
0552	4	6.96	631	18.5			
0557	5.5	7.02	637	18.3	POST: 1.1	POST: -26	POST: 56

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
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 17155647
 Event Date: 8/17/17 (inclusive)
 Sampler: AW

Well ID SP-3
 Well Diameter 1 1/4 1/2 in.
 Total Depth _____ ft.
 Depth to Water _____ ft.

Date Monitored: 8/17/17 —

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

Check if water column is less than 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 (μ s / mS μ hos/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**
Site Address: **800 Harrison Street**
City: **Oakland, CA**

Job Number: **17155647**
Event Date: **8/17/17**
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)	$\frac{3}{4}'' = 0.02$	$1'' = 0.04$	$2'' = 0.17$	$3'' = 0.38$
	$4'' = 0.66$	$5'' = 1.02$	$6'' = 1.50$	$12'' = 5.80$

Check if water column is less than 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:

Sampling Equipment:

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

- 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: Y / N

Approx. Flow Rate: _____ gpm

~~Water Color~~ _____ Sulfur Titrations _____ Sediment Description:

Did well de-water?

If yes, Time: _____ Volume: _____ gal RTW @ Sampling:

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μS / mS $\mu\text{mhos}/\text{cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY
_____	_____	_____	_____	_____	PRE:	PRE:	PRE:
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	POST:	POST:	POST:

LABORATORY INFORMATION

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**
Site Address: **800 Harrison Street**
City: **Oakland, CA**

Job Number: **17155647**
Event Date: **8/17/17**
Sampler: **BW**

Well ID	SP-5
Well Diameter	12 1/2 in.
Total Depth	_____ ft.
Depth to Water	_____ ft.

Date Monitored:

Volume Factor (VF)	$\frac{3}{4}" = 0.02$	$1" = 0.04$	$2" = 0.17$	$3" = 0.38$
	$4" = 0.66$	$5" = 1.02$	$6" = 1.50$	$12" = 5.80$

Check if water column is less than 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:

Sampling Equipment:

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

- 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 $\mu\text{hos}/\text{cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY
_____	_____	_____	_____	_____	PRE:	PRE:	PRE:
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	POST:	POST:	POST:

LABORATORY INFORMATION

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8-17-17** (inclusive)
 Sampler: **ML**

Well ID: **S-MW-1**
 Well Diameter: **1 1/2 / 4 / 6 in.**
 Total Depth: **28.04 ft.**
 Depth to Water: **18.20 ft.**
9.84 x VF **.17** = **1.6e**

Date Monitored: **8-17-17**

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

Check if water column is less than 0.50 ft.
x Case Volume = Estimated Purge Volume: **4.8** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.16e**

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): **0800**
 Sample Time/Date: **0830 / 8-17-17**
 Approx. Flow Rate: **-** gpm.
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **19.02**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μS / mS $\mu\text{mhos/cm}$)	Temperature ($^{\circ}\text{F}$ / $^{\circ}\text{C}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0805	1.5	7.31	534	19.2	PRE: 1.7	PRE: -76	PRE: 102
0810	3	7.38	542	18.8			
0816	5	7.42	547	18.4	POST: 1.4	POST: -91	POST: 104

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
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 17155647
 Event Date: 8-17-17 (inclusive)
 Sampler: pw

Well ID: S-WW-2
 Well Diameter: 11 1/4 / 6 in.
 Total Depth: 28.00 ft.
 Depth to Water: 18.83 ft.
9.17 xVF .17 = 1.55

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

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.66

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:	litr
Amt Removed from Well:	litr
Water Removed:	litr

Start Time (purge): 0405
 Sample Time/Date: 0430 / 8-17-17
 Approx. Flow Rate: 1 gpm.
 Did well de-water? N If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 20.21

Weather Conditions: Dark
 Water Color: Clear Odor: O/N
 Sediment Description: Clear

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (<u>mS</u> / <u>µmhos/cm</u>)	Temperature (<u>°F</u> / <u>°C</u>)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>040</u>	<u>1.5</u>	<u>7.50</u>	<u>331</u>	<u>18.8</u>	<u>PRE: 1.2</u>	<u>PRE: 24</u>	<u>PRE: 68</u>
<u>0415</u>	<u>1.5</u>	<u>7.49</u>	<u>349</u>	<u>19.0</u>			
<u>0420</u>	<u>5.0</u>	<u>7.48</u>	<u>360</u>	<u>19.1</u>	<u>POST: 1.1</u>	<u>POST: 49</u>	<u>POST: 77</u>

LABORATORY INFORMATION

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

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8/17/17** (inclusive)
 Sampler: **AW**

Well ID: **S-mw-3**

Date Monitored: **8-17-17**

Well Diameter: **11 1/2" 4 1/2 in.**

Total Depth: **26.83 ft.**

Depth to Water: **18.02 ft.**

8.81 xVF **• 17** = **1.49**

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **19.18**

Sampling Equipment:

Disposable Bailer **✓**

Stainless Steel Bailer _____

Stack Pump _____

Peristaltic Pump _____

QED Bladder Pump _____

Other: _____



GETTLER-RYAN INC.

**WELL MONITORING/SAMPLING
FIELD DATA SHEET**

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

Job Number: **17155647**
 Event Date: **8-17-17** (inclusive)
 Sampler: **ML**

Well ID: **S-MW-4**
 Well Diameter: **11 1/4 / 6** in.
 Total Depth: **29.40** ft.
 Depth to Water: **18.31** ft.

Date Monitored: **8-17-17**

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 than 0.50 ft.

$$\frac{11.09}{xVF} \cdot .17 = 1.8$$
 x3 case volume = Estimated Purge Volume: **5.4** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.52**

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:	Itr
Amt Removed from Well:	Itr
Water Removed:	Itr

Start Time (purge): **0410**
 Sample Time/Date: **0440 / 8-17-17**
 Approx. Flow Rate: **-** gpm.
 Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **19.11**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity ($\mu\text{s}/\text{m}$) $\mu\text{hos/cm}$)	Temperature ($^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0416	2	7.20	702	19.3	PRE: 1.4	PRE: -26	PRE: 96
0422	9	7.24	711	18.9			
0427	5.5	7.27	710	18.7	POST: 1.1	POST: -42	POST: 102

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
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 17155647
 Event Date: 8-17-17 (inclusive)
 Sampler: pw

Well ID: S-MWS
 Well Diameter: 1 1/2" 4 / 6 in.
 Total Depth: 29.41 ft.
 Depth to Water: 18.48 ft.
10.93 xVF .17 = 1.85 x3 case volume = Estimated Purge Volume: 5.5 gal.

Date Monitored: 8-17-17

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

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 20.66

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): 0440
 Sample Time/Date: 0505 / 8-17-17
 Approx. Flow Rate: - gpm.
 Did well de-water? ✓ If yes, Time: - Volume: - gal. DTW @ Sampling: 20.41

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (PS / mS µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0445</u>	<u>2.0</u>	<u>7.09</u>	<u>101.6</u>	<u>19.4</u>	<u>1.0</u>	<u>114</u>	<u>68</u>
<u>0450</u>	<u>4.0</u>	<u>7.12</u>	<u>102.2</u>	<u>19.5</u>			
<u>0455</u>	<u>5.5</u>	<u>7.14</u>	<u>103.0</u>	<u>19.5</u>	<u>0.9</u>	<u>99</u>	<u>136</u>

LABORATORY INFORMATION

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

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
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 17155647
 Event Date: 8-17-17 (inclusive)
 Sampler: AW

Well ID S-Mw-6

Date Monitored: 8-17-17

Well Diameter 1 1/2" 4 1/2" in.

Total Depth 49.26 ft.

Depth to Water 25.97 ft.

23.29 xVF .17 = 3.95

Check if water column is less than 0.50 ft.
 x3 case volume = Estimated Purge Volume: 12.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 30.62

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): 0555

Weather Conditions:

Sample Time/Date: 0625 / 8-17-17

Water Color: Cloudy Odor: Dark

Approx. Flow Rate: 1.0 gpm.

Sediment Description: Cloudy

Did well de-water? / If yes, Time: _____ Volume: _____ gal. DTW@ Sampling: 29.55

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (10 mS μmhos/cm)	Temperature (10 F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0559</u>	<u>4.0</u>	<u>8.31</u>	<u>286</u>	<u>19.7</u>	<u>PRE: 1.2</u>	<u>PRE: 144</u>	<u>PRE: 102</u>
<u>0603</u>	<u>8.0</u>	<u>8.27</u>	<u>304</u>	<u>19.8</u>	<u>POST: 1.3</u>	<u>POST: 156</u>	<u>POST: 116</u>
<u>0607</u>	<u>12.0</u>	<u>8.24</u>	<u>334</u>	<u>19.8</u>			

LABORATORY INFORMATION

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

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**
 Site Address: **800 Harrison Street**
 City: **Oakland, CA**

Job Number: **17155647**
 Event Date: **8-17-17** (inclusive)
 Sampler: **M**

Well ID: **S-EW-1**

Well Diameter: **11 1/4 1/2 in.**

Total Depth: **28.68 ft.**

Depth to Water: **18.04 ft.**

Date Monitored: **8-17-17**

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

Depth to Water: **18.04** ft. Check if water column is less than 0.50 ft.
10.61 xVF **1.5** = **15.9** x3 case volume = Estimated Purge Volume: **410.5** gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: **20.16**

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): **0845**

Weather Conditions:

Sample Time/Date: **0920 18-17-17**

Approx. Flow Rate: **2** gpm.

Water Color: **Cloudy**

Cloudy

Did well de-water? **NO** If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: **19.11**

Odor: **0** N **light**

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μS / mS μmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
0853	16	6.81	345	19.0	PRE: 2.0	PRE: -21	PRE: 69
0901	32	6.92	386	18.5			
0906	42	6.97	352	18.2	POST: 2.2	POST: -10	POST: 77

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
 Site Address: 800 Harrison Street
 City: Oakland, CA

Job Number: 17155647
 Event Date: 8/17/17 (inclusive)
 Sampler: gsw

Well ID: MPE-1
 Well Diameter: 1 1/2 (4) 6 in.
 Total Depth: 32.10 ft.
 Depth to Water: 18.34 ft.
13.76 xVF .66 = 9.08

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

Check if water column is less than 0.50 ft.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 21.09 x3 case volume = Estimated Purge Volume: 27.5 gal.

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:	litr
Amt Removed from Well:	litr
Water Removed:	litr

Start Time (purge): 0635
 Sample Time/Date: 0705 / 8-17-17
 Approx. Flow Rate: 1-2 gpm.
 Did well de-water? ~ If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 20.00

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (<u>582</u> mS μmhos/cm)	Temperature (<u>19.5</u> °F)	D.O. (mg/L)	ORP (mV)	TURBIDITY
<u>0640</u>	<u>9.0</u>	<u>7.26</u>	<u>582</u>	<u>19.5</u>	<u>1.1</u>	<u>151</u>	<u>55</u>
<u>0645</u>	<u>18.0</u>	<u>7.20</u>	<u>604</u>	<u>19.6</u>			
<u>0650</u>	<u>27.5</u>	<u>7.24</u>	<u>616</u>	<u>19.6</u>	<u>1.2</u>	<u>169</u>	<u>80</u>

LABORATORY INFORMATION

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

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**
Site Address: **800 Harrison Street**
City: **Oakland, CA**

Job Number: 17155647
Event Date: 8/17/17 (inclusive)
Sampler: mlc

Well ID	MP-1
Well Diameter	12 1/2 in.
Total Depth	28.95 ft.
Depth to Water	- ft.

Date Monitored: /

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

Check if water column is less than 0.50 ft.

xVF = x3 case volume = Estimated Purge Volume:

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 RTW @ Sampling:

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (μS / mS $\mu\text{mhos}/\text{cm}$)	Temperature ($^{\circ}\text{C}$ / $^{\circ}\text{F}$)	D.O. (mg/L)	ORP (mV)	TURBIDITY
					PRE:	PRE:	PRE:
					POST:	POST:	POST:

LABORATORY INFORMATION

COMMENTS: VTA - PARKED OVER

Add/Replaced Gasket: _____

Add/Replaced Bolt:

Add/Replaced Lock:

Add/Replaced Plug:

• 351646, Oakland MP-1 08-17-17



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: AKRDIS				ANALYSES REQUIRED				Turnaround Time (TAT): Standard <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 72 Hours <input type="checkbox"/>	
Site Global ID: 70000101486				Consultant Contact: TAMMYA ROGERS									
Site Address: 560 HARRISON ST. OAKLAND CA				Consultant Phone No.: 408-777-7013									
Union Oil PM: JAMES KENNAN				Sampling Company: Tethra Ryan									
Union Oil PM Phone No.: 925-842-3220				Sampled By (PRINT): ALEX WONG									
Charge Code: NWRTB- 0 3516460-LAB				Sampler Signature:									
				BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911									
SAMPLE ID				Sample Time		# of Containers						Notes / Comments	
Field Point Name	Matrix	Depth	Date (yymmdd)					TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/ Toluene by EPA 8260B	EPA 8260B Full List with OXYS	TPH1(4260B)	
A	W-S-A		170817	—		2		X				X	
A-mw-1	W-S-A			0700		3							
A-mw-2	W-S-A			0745									
A-mw-3	W-S-A			0740									
A-mw-4	W-S-A			0815									
A-mw-5	W-S-A			0825									
A-mw-7	W-S-A			0610									
S-mw-1	W-S-A			0830									
S-mw-2	W-S-A			0430									
S-mw-3	W-S-A			0540									
S-mw-4	W-S-A			0440									
S-mw-5	W-S-A			0505									
Relinquished By	Company	Date / Time:		Relinquished By	Company	Date / Time :		Relinquished By	Company	Date / Time:			
RFINC 170817 / 1215													
Received By	Company	Date / Time:		Received By	Company	Date / Time :		Received By	Company	Date / Time:			
HongBoyan BC Lab 5-17-17 1215													

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: <u>0752</u> Site Global ID: <u>TCC00101486</u> Site Address: <u>500 HARRISON ST.</u> <u>OAKLAND CA</u> Union Oil PM: <u>JAMES KIERNAN</u> Union Oil PM Phone No.: <u>510-542-3770</u>				Union Oil Consultant: <u>PARADIS</u> Consultant Contact: <u>TAMERA ROGERS</u> Consultant Phone No.: <u>408-797-2013</u> Sampling Company: <u>GETT101 - Ryan</u> Sampled By (PRINT): <u>Alex Wory</u> Sampler Signature: 		ANALYSES REQUIRED <input checked="" type="checkbox"/> TPH - Diesel by EPA 3015 <input type="checkbox"/> TPH - G by GC/MS <input checked="" type="checkbox"/> BTEX/MTBE/Gasoline by EPA 8260B <input type="checkbox"/> Ethanol by EPA 8260B <input type="checkbox"/> EPA 8260B Full List with OXYS <input checked="" type="checkbox"/> TPH (8-10B)						
Charge Code: NWRTB-0 <u>351646</u> -0-LAB <i>This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.</i>												
SAMPLE ID				Sample Time	# of Containers	Notes / Comments						
Field Point Name	Matrix	Depth	Date (yymmdd)									
S-Ww-6	W-S-A		170817	0625	5							
S-Ew-1	W-S-A			0020								
WPE-1	W-S-A			0705								
	W-S-A											
MW-1	W-S-A			0530								
MW-2	W-S-A			0450								
MW-3	W-S-A			0750								
MW-4	W-S-A			0640								
MW-5	W-S-A			0605								
MW-6	W-S-A			0717								
MW-7	W-S-A			0900								
MW-8	W-S-A			0825								
Relinquished By	Company	Date / Time:		Relinquished By	Company	Date / Time :		Relinquished By	Company	Date / Time:		
<u>GRINC</u> 170817 /1215												
Received By	Company	Date / Time:		Received By	Company	Date / Time :		Received By	Company	Date / Time:		
<u>Amy Began BC/AB 8-17-17 1215</u>												

Attachment B

Historical Groundwater Results from TRC

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 ($\mu\text{g/l}$)	TPH-G (GC/MS) ($\mu\text{g/l}$)	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethyl-benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE (8021B) ($\mu\text{g/l}$)	MTBE (8260B) ($\mu\text{g/l}$)	Comments
MW-1														
6/5/1991	34.94	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
9/30/1991	34.94	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
12/30/1991	34.94	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
4/2/1992	34.94	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
6/30/1992	34.94	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	--
9/15/1992	34.94	--	--	--	--	76	--	1.0	ND	ND	ND	--	--	--
12/21/1992	34.94	21.17	0.00	13.77	--	95	--	0.69	ND	ND	1.0	--	--	--
4/28/1993	34.94	--	--	--	--	920	--	3.1	2.3	1.2	9.7	--	--	--
7/23/1993	34.94	20.13	0.00	14.81	--	ND	--	0.5	0.66	ND	ND	--	--	--
10/5/1993	34.69	20.30	0.00	14.39	-0.42	92	--	1.5	ND	ND	0.72	--	--	--
1/3/1994	34.69	20.52	0.00	14.17	-0.22	ND	--	ND	ND	ND	ND	--	--	--
4/2/1994	34.69	20.16	0.00	14.53	0.36	ND	--	ND	ND	ND	ND	--	--	--
7/5/1994	34.69	19.27	0.00	15.42	0.89	250	--	4.8	13	1.2	7.3	--	--	--
10/6/1994	34.69	20.87	0.00	13.82	-1.60	540	--	1.4	ND	0.66	11	--	--	--
1/2/1995	34.69	19.67	0.00	15.02	1.20	140	--	ND	ND	ND	ND	--	--	--
4/3/1995	34.69	17.61	0.00	17.08	2.06	580	--	3.6	0.8	ND	4.0	--	--	--
7/14/1995	34.69	18.58	0.00	16.11	-0.97	260	--	2.1	ND	ND	1.2	--	--	--
10/10/1995	34.69	19.60	0.00	15.09	-1.02	220	--	2.0	ND	25	5.6	29	--	--
1/3/1996	34.69	19.69	0.00	15.00	-0.09	190	--	2.4	ND	0.71	1.2	--	--	--
4/10/1996	34.69	17.65	0.00	17.04	2.04	540	--	8.9	1.7	1.5	7.4	50	--	--
7/9/1996	34.69	18.52	0.00	16.17	-0.87	490	--	3.0	1.4	1.3	2.5	150	--	--
1/24/1997	34.69	17.72	0.00	16.97	0.80	760	--	27	0.89	5.2	10	510	--	--
7/23/1997	34.69	19.42	0.00	15.27	-1.70	ND	--	ND	ND	ND	ND	550	--	--
1/26/1998	34.69	17.46	0.00	17.23	1.96	1800	--	ND	ND	ND	ND	4800	--	--
7/3/1998	34.69	18.61	0.00	16.08	-1.15	ND	--	ND	ND	ND	ND	1800	--	--
1/14/1999	34.69	18.92	0.00	15.77	-0.31	83	--	ND	ND	ND	ND	230	--	--
7/15/1999	34.69	17.84	0.00	16.85	1.08	110	--	ND	ND	ND	1.0	290	--	--
1/7/2000	34.69	19.13	0.00	15.56	-1.29	ND	--	ND	ND	ND	ND	260	--	--
7/19/2000	34.69	20.27	0.00	14.42	-1.14	ND	--	ND	ND	ND	ND	648	--	--
1/2/2001	34.69	20.04	0.00	14.65	0.23	ND	--	ND	ND	ND	ND	119	--	--
5/23/2001	34.69	18.27	0.00	16.42	1.77	84	--	ND	ND	ND	ND	760	--	--
7/30/2001	34.69	18.56	0.00	16.13	-0.29	<50	--	<0.50	<0.50	<0.50	<0.50	350	--	--
10/15/2001	34.69	18.72	0.00	15.97	-0.16	96	--	<0.50	<0.50	<0.50	<0.50	160	--	--

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	Water Elevation (feet)									
1/14/2002	34.69	16.78	0.00	17.91	1.94	450	--	<2.5	<2.5	<2.5	3.3	4100	--	
4/15/2002	34.69	17.35	0.00	17.34	-0.57	<1000	--	<10	<10	<10	<10	10000	--	
7/15/2002	34.69	17.63	0.00	17.06	-0.28	2100	--	<10	<10	<10	<20	--	2100	
1/18/2003	34.69	17.04	0.00	17.65	0.59	<25000	--	<250	<250	<250	<500	--	29000	
7/11/2003	34.69	17.91	0.00	16.78	-0.87	4000	--	<25	<25	<25	<50	--	6300	
2/4/2004	34.69	17.98	0.00	16.71	-0.07	--	8000	<50	<50	<50	<100	--	8500	
8/11/2004	34.69	17.84	0.00	16.85	0.14	--	1100	<10	<10	<10	<20	--	1500	
3/31/2005	34.69	15.71	0.00	18.98	2.13	--	<2000	<0.50	<0.50	0.54	2.2	--	4900	
9/30/2005	34.69	17.65	0.00	17.04	-1.94	--	190	<0.50	<0.50	<0.50	<1.0	--	160	
3/27/2006	34.69	15.03	0.00	19.66	2.62	--	760	<0.50	<0.50	<0.50	<1.0	--	1000	
9/27/2006	34.69	18.45	0.00	16.24	-3.42	--	170	<0.50	<0.50	<0.50	0.61	--	73	
3/27/2007	34.69	18.84	0.00	15.85	-0.39	--	120	<0.50	<0.50	<0.50	<0.50	--	99	
9/28/2007	34.69	19.73	0.00	14.96	-0.89	--	68	<0.50	<0.50	<0.50	<0.50	--	15	
3/26/2008	34.69	19.32	0.00	15.37	0.41	--	200	<0.50	<0.50	<0.50	1.0	--	47	
7/28/2008	34.69	20.15	0.00	14.54	-0.83	--	<50	<0.50	<0.50	<0.50	<1.0	--	8.7	
1/26/2009	34.69	20.74	0.00	13.95	-0.59	--	<50	<0.50	<0.50	<0.50	<1.0	--	5.2	
8/3/2009	34.72	20.10	0.00	14.62	0.67	--	76	<0.50	<0.50	<0.50	<1.0	--	12	
1/25/2010	34.72	19.78	0.00	14.94	0.32	--	<50	<0.50	<0.50	<0.50	<1.0	--	14	
8/3/2010	34.72	19.47	0.00	15.25	0.31	--	210	<0.50	<0.50	<0.50	<1.0	--	37	
2/17/2011	34.72	19.50	0.00	15.22	-0.03	--	150	<0.50	<0.50	<0.50	<1.0	--	17	
8/3/2011	34.72	18.96	0.00	15.76	0.54	--	230	<0.50	<0.50	<0.50	<1.0	--	44	
MW-2														
6/5/1991	34.97	--	--	--	--	49	--	ND	ND	ND	ND	--	--	
9/30/1991	34.97	--	--	--	--	130	--	18	0.53	14	9.6	--	--	
12/30/1991	34.97	--	--	--	--	91	--	16	0.89	11	1.9	--	--	
4/2/1992	34.97	--	--	--	--	88	--	12	0.32	6.3	7.2	--	--	
6/30/1992	34.97	--	--	--	--	76	--	9.3	0.76	4.8	6.9	--	--	
9/15/1992	34.97	--	--	--	--	1300	--	91	5.7	80	110	--	--	
12/21/1992	34.97	20.85	0.00	14.12	--	960	--	97	3.2	74	96	--	--	
4/28/1993	34.97	--	--	--	--	1300	--	76	1.9	130	87	--	--	
7/23/1993	34.97	19.81	0.00	15.16	--	66	--	1.8	ND	2.5	2.0	--	--	
10/5/1993	34.72	19.95	0.00	14.77	-0.39	120	--	12	ND	2.1	12	--	--	
1/3/1994	34.72	20.21	0.00	14.51	-0.26	260	--	25	ND	5.5	26	--	--	
4/2/1994	34.72	19.88	0.00	14.84	0.33	ND	--	0.65	ND	ND	0.99	--	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	TPH-G 8015 (µg/l)									
7/5/1994	34.72	19.07	0.00	15.65	0.81	160	--	16	ND	0.73	10	--	--	--
10/6/1994	34.72	20.55	0.00	14.17	-1.48	170	--	15	ND	1.4	11	--	--	--
1/2/1995	34.72	19.25	0.00	15.47	1.30	190	--	27	ND	0.95	11	--	--	--
4/3/1995	34.72	17.49	0.00	17.23	1.76	2400	--	65	6.6	19	63	--	--	--
7/14/1995	34.72	18.30	0.00	16.42	-0.81	750	--	270	ND	ND	13	--	--	--
10/10/1995	34.72	19.25	0.00	15.47	-0.95	50	--	1.6	ND	ND	ND	200	--	--
1/3/1996	34.72	19.40	0.00	15.32	-0.15	ND	--	ND	ND	ND	ND	--	--	--
4/10/1996	34.72	17.35	0.00	17.37	2.05	300	--	42	ND	2.4	9	620	--	--
7/9/1996	34.72	18.22	0.00	16.50	-0.87	760	--	230	ND	1.3	2.4	1500	--	--
1/24/1997	34.72	17.59	0.00	17.13	0.63	2900	--	400	350	190	720	1300	--	--
7/23/1997	34.72	19.13	0.00	15.59	-1.54	ND	--	ND	ND	ND	ND	65	--	--
1/26/1998	34.72	17.12	0.00	17.60	2.01	ND	--	ND	ND	ND	0.58	13	--	--
7/3/1998	34.72	18.20	0.00	16.52	-1.08	140	--	26	ND	0.95	5.0	330	--	--
1/14/1999	34.72	18.56	0.00	16.16	-0.36	ND	--	0.54	ND	ND	ND	350	--	--
7/15/1999	34.72	17.39	0.00	17.33	1.17	ND	--	0.88	ND	ND	ND	39	--	--
1/7/2000	34.72	18.78	0.00	15.94	-1.39	ND	--	ND	ND	ND	ND	24	--	--
7/19/2000	34.72	19.68	0.00	15.04	-0.90	ND	--	1.45	ND	ND	ND	117	--	--
1/2/2001	34.72	19.73	0.00	14.99	-0.05	ND	--	ND	ND	ND	ND	11.4	--	--
5/23/2001	34.72	18.16	0.00	16.56	1.57	ND	--	ND	ND	ND	ND	33	--	--
7/30/2001	34.72	18.34	0.00	16.38	-0.18	<50	--	<0.50	<0.50	<0.50	<0.50	67	--	--
10/15/2001	34.72	18.52	0.00	16.20	-0.18	<50	--	<0.50	<0.50	<0.50	<0.50	31	--	--
1/14/2002	34.72	16.72	0.00	18.00	1.80	<50	--	<0.50	<0.50	<0.50	0.56	11	--	--
4/15/2002	34.72	17.26	0.00	17.46	-0.54	<50	--	<0.50	<0.50	<0.50	<0.50	110	--	--
7/15/2002	34.72	17.46	0.00	17.26	-0.20	270	--	21	<0.50	3.8	4.0	--	73	--
1/18/2003	34.72	16.93	0.00	17.79	0.53	<50	--	<0.50	<0.50	<0.50	<1.0	--	22	--
7/11/2003	34.72	17.68	0.00	17.04	-0.75	130	--	3.0	<0.50	<0.50	<1.0	--	89	--
2/4/2004	34.72	17.36	0.00	17.36	0.32	--	61	2.9	<0.50	<0.50	<1.0	--	22	--
8/11/2004	34.72	17.61	0.00	17.11	-0.25	--	140	<0.50	0.60	<0.50	<1.0	--	94	--
3/31/2005	34.72	15.56	0.00	19.16	2.05	--	<50	<0.50	<0.50	<0.50	<1.0	--	14	--
9/30/2005	34.72	17.31	0.00	17.41	-1.75	--	<50	<0.50	<0.50	<0.50	<1.0	--	9.1	--
3/27/2006	34.72	14.91	0.00	19.81	2.40	--	<50	<0.50	<0.50	<0.50	<1.0	--	2.7	--
9/27/2006	34.72	18.15	0.00	16.57	-3.24	--	<50	<0.50	<0.50	<0.50	<0.50	--	7.7	--
3/27/2007	34.72	18.57	0.00	16.15	-0.42	--	<50	<0.50	<0.50	<0.50	<0.50	--	1.4	--
9/28/2007	34.72	18.38	0.00	16.34	0.19	--	<50	<0.50	<0.50	<0.50	<0.50	--	<0.50	--

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/26/2008	34.72	19.06	0.00	15.66	-0.68	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
7/28/2008	34.72	19.90	0.00	14.82	-0.84	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
1/26/2009	34.72	20.50	0.00	14.22	-0.60	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
8/3/2009	34.74	19.92	0.00	14.82	0.60	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
1/25/2010	34.74	19.70	0.00	15.04	0.22	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
8/3/2010	34.74	19.26	0.00	15.48	0.44	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
2/17/2011	34.74	19.32	0.00	15.42	-0.06	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50	
8/3/2011	34.74	18.74	0.00	16.00	0.58	--	77	6.7	<0.50	<0.50	<1.0	--	14	
MW-3														
6/5/1991	33.39	--	--	--	--	5800	--	1200	40	140	97	--	--	
9/30/1991	33.39	--	--	--	--	6800	--	1400	130	290	240	--	--	
12/30/1991	33.39	--	--	--	--	7200	--	2100	690	410	550	--	--	
4/2/1992	33.39	--	--	--	--	8000	--	1400	200	300	310	--	--	
6/30/1992	33.39	--	--	--	--	8900	--	1900	210	430	550	--	--	
9/15/1992	33.39	--	--	--	--	10000	--	1900	330	400	580	--	--	
12/21/1992	33.39	20.02	0.00	13.37	--	8500	--	1500	150	310	330	--	--	
4/28/1993	33.39	--	--	--	--	2600	--	220	7.6	41	27	--	--	
7/23/1993	33.39	19.00	0.00	14.39	--	4400	--	660	26	160	82	--	--	
10/5/1993	33.14	19.20	0.00	13.94	-0.45	9200	--	720	88	140	140	--	--	
1/3/1994	33.14	19.40	0.00	13.74	-0.20	4900	--	830	100	170	150	--	--	
4/2/1994	33.14	19.01	0.00	14.13	0.39	6000	--	800	30	140	110	--	--	
7/5/1994	33.14	18.14	0.00	15.00	0.87	25000	--	ND	ND	ND	ND	--	--	
10/6/1994	33.14	19.73	0.00	13.41	-1.59	49000	--	1300	200	280	300	--	--	
1/2/1995	33.14	18.36	0.00	14.78	1.37	480	--	1.6	ND	1.4	ND	--	--	
4/3/1995	33.14	16.38	0.00	16.76	1.98	8100	--	65	ND	ND	ND	--	--	
7/14/1995	33.14	17.49	0.00	15.65	-1.11	ND	--	1300	ND	ND	ND	--	--	
10/10/1995	33.14	18.50	0.00	14.64	-1.01	3100	--	1400	36	50	53	190000	--	
1/3/1996	33.14	18.54	0.00	14.60	-0.04	ND	--	2300	110	150	140	--	--	
7/9/1996	33.14	17.43	0.00	15.71	1.11	ND	--	2000	ND	150	160	140000	--	
1/24/1997	33.14	16.57	0.00	16.57	0.86	540	--	8.0	ND	11	9.9	45	--	
7/23/1997	33.14	18.38	0.00	14.76	-1.81	7400	--	1900	180	140	340	45000	--	
1/26/1998	33.14	16.22	0.00	16.92	2.16	250	--	2.2	1.9	0.87	1.9	4.0	--	
7/3/1998	33.14	17.46	--	15.68	-1.24	230	--	1.8	2.5	1.5	3.4	6.3	--	
1/14/1999	33.14	17.73	--	15.41	-0.27	400	--	8.2	2.7	0.90	5.9	140	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	Water Elevation (feet)									
7/15/1999	33.14	16.58	--	16.56	1.15	290	--	3.3	3.6	1.7	2.5	13	--	
1/7/2000	33.14	17.84	--	15.30	-1.26	ND	--	890	91	100	480	20000	--	
7/19/2000	33.14	18.92	--	14.22	-1.08	354	--	3.87	2.61	0.646	ND	13.7	--	
1/2/2001	33.14	19.07	--	14.07	-0.15	464	--	ND	3.69	3.91	ND	21.1	--	
5/23/2001	33.14	17.12	--	16.02	1.95	420	--	7.6	3.1	3.0	5.1	1900	--	
7/30/2001	33.14	17.38	--	15.76	-0.26	290	--	4.6	4.1	<0.50	3.4	23	--	
10/15/2001	33.14	17.61	--	15.53	-0.23	400	--	<0.50	<0.50	<0.50	<0.50	13	--	
1/14/2002	33.14	15.53	--	17.61	2.08	130	--	0.50	0.61	1.1	<0.50	9.9	--	
4/15/2002	33.14	16.12	--	17.02	-0.59	280	--	9.9	1.6	3.3	6.8	1400	--	
7/15/2002	33.14	16.48	--	16.66	-0.36	64	--	<0.50	<0.50	<0.50	<1.0	33	--	
1/18/2003	33.14	15.81	--	17.33	0.67	420	--	0.54	<0.50	<0.50	<1.0	130	--	
7/11/2003	33.14	16.74	--	16.40	-0.93	--	300	2.3	<0.50	<0.50	<1.0	--	31	
2/4/2004	33.14	16.15	0.00	16.99	0.59	--	130	7.9	<0.50	<0.50	<1.0	--	63	
8/11/2004	33.14	16.64	0.00	16.50	-0.49	--	<20000	<200	<200	<200	<400	--	20000	
3/31/2005	33.14	14.53	0.00	18.61	2.11	--	<20000	330	<200	<200	<400	--	78000	
9/30/2005	33.14	16.55	0.00	16.59	-2.02	--	12000	360	40	<25	50	--	20000	
3/27/2006	33.14	13.66	0.00	19.48	2.89	--	10000	150	<25	53	99	--	15000	
9/27/2006	33.14	17.40	0.00	15.74	-3.74	--	<12000	<120	<120	<120	<120	--	12000	
3/27/2007	33.14	17.55	0.00	15.59	-0.15	--	8700	180	<12	60	57	--	8900	
9/28/2007	33.14	18.59	0.00	14.55	-1.04	--	9000	55	<50	<50	<50	--	11000	
3/26/2008	33.14	18.19	0.00	14.95	0.40	--	450	13	1.3	0.84	1.4	--	7200	
7/28/2008	33.14	19.00	0.00	14.14	-0.81	--	8300	<50	<50	<50	<100	--	13000	
1/26/2009	33.14	19.54	0.00	13.60	-0.54	--	8800	27	<12	<12	<25	--	13000	
8/3/2009	33.18	18.90	0.00	14.28	0.68	--	9300	56	<50	<50	<100	--	8000	
1/25/2010	33.18	18.54	0.00	14.64	0.36	--	4900	79	7.3	5.4	13	--	8100	
8/3/2010	33.18	18.35	0.00	14.83	0.19	--	2500	30	<12	<12	<25	--	4600	
2/17/2011	33.18	18.30	0.00	14.88	0.05	--	3800	11	<5.0	<5.0	<10	--	4700	
8/3/2011	33.18	17.87	0.00	15.31	0.43	--	2,600	9.7	0.8	3.1	1.4	--	2,000	
MW-4														
10/19/1992	--	--	--	--	--	480	--	0.51	2.1	2.8	6.8	--	--	
12/21/1992	33.12	19.73	--	13.39	--	220	--	ND	ND	0.97	0.74	--	--	
4/28/1993	33.12	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
7/23/1993	33.12	18.72	--	14.40	--	85	--	ND	ND	ND	ND	--	--	
10/5/1993	32.71	18.74	--	13.97	-0.43	130	--	ND	ND	ND	ND	--	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)									
1/3/1994	32.71	18.93	--	13.78	-0.19	210	--	ND	ND	0.76	1.6	--	--	--
4/2/1994	32.71	18.53	--	14.18	0.40	89	--	ND	ND	ND	ND	--	--	--
7/5/1994	32.71	17.67	--	15.04	0.86	190	--	ND	ND	ND	ND	--	--	--
10/6/1994	32.71	19.25	--	13.46	-1.58	170	--	0.85	ND	ND	0.74	--	--	--
1/2/1995	32.71	17.75	--	14.96	1.50	ND	--	ND	ND	ND	ND	--	--	--
4/3/1995	32.71	15.87	--	16.84	1.88	98	--	ND	ND	ND	ND	--	--	--
7/14/1995	32.71	17.01	--	15.70	-1.14	ND	--	ND	ND	ND	ND	--	--	--
10/10/1995	32.71	18.03	--	14.68	-1.02	ND	--	ND	ND	ND	ND	120	--	--
1/3/1996	32.71	18.05	--	14.66	-0.02	ND	--	ND	ND	ND	ND	--	--	--
4/10/1996	32.71	16.00	--	16.71	2.05	ND	--	ND	ND	ND	ND	240	--	--
7/9/1996	32.71	16.96	--	15.75	-0.96	ND	--	ND	ND	ND	ND	480	--	--
1/24/1997	32.71	16.04	0.00	16.67	0.92	ND	--	ND	ND	ND	ND	270	--	--
7/23/1997	32.71	17.87	0.00	14.84	-1.83	ND	--	ND	ND	ND	ND	460	--	--
1/26/1998	32.71	16.05	--	16.66	1.82	ND	--	ND	ND	ND	ND	17	--	--
7/3/1998	32.71	16.95	--	15.76	-0.90	ND	--	ND	ND	ND	ND	3.8	--	--
1/14/1999	32.71	17.34	--	15.37	-0.39	ND	--	ND	ND	ND	ND	4600	--	--
7/15/1999	32.71	16.36	--	16.35	0.98	ND	--	ND	ND	ND	ND	ND	--	--
1/7/2000	32.71	17.81	--	14.90	-1.45	ND	--	ND	ND	ND	ND	450	--	--
7/19/2000	32.71	18.94	--	13.77	-1.13	ND	--	ND	ND	ND	ND	ND	--	--
1/2/2001	32.71	18.85	--	13.86	0.09	ND	--	ND	ND	ND	ND	ND	--	--
5/23/2001	32.71	16.82	--	15.89	2.03	ND	--	ND	ND	ND	ND	ND	--	--
7/30/2001	32.71	16.88	--	15.83	-0.06	<50	--	<0.50	<0.50	<0.50	<0.50	4.9	--	--
10/15/2001	32.71	17.08	--	15.63	-0.20	<50	--	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
1/14/2002	32.71	14.97	--	17.74	2.11	<50	--	<0.50	<0.50	<0.50	<0.50	30	--	--
4/15/2002	32.71	15.48	--	17.23	-0.51	<50	--	<0.50	<0.50	<0.50	<0.50	180	--	--
7/15/2002	32.71	15.90	--	16.81	-0.42	<50	--	<0.50	<0.50	<0.50	<1.0	50	--	--
1/18/2003	32.71	15.39	--	17.32	0.51	<50	--	<0.50	<0.50	<0.50	<1.0	<2.0	--	--
7/11/2003	32.71	16.17	--	16.54	-0.78	--	200	<0.50	<0.50	<0.50	<1.0	--	52	--
2/4/2004	32.71	16.12	0.00	16.59	0.05	--	1300	<10	<10	<10	<20	--	1700	--
8/11/2004	32.71	16.16	0.00	16.55	-0.04	--	<5000	<50	<50	<50	<100	--	6400	--
3/31/2005	32.71	14.15	0.00	18.56	2.01	--	<1300	<0.50	<0.50	<0.50	<1.0	--	1600	--
9/30/2005	32.71	16.91	0.00	15.80	-2.76	--	900	<0.50	<0.50	<0.50	<1.0	--	3800	--
3/27/2006	32.71	13.94	0.00	18.77	2.97	--	870	<0.50	<0.50	<0.50	<1.0	--	2000	--
9/27/2006	32.71	16.91	0.00	15.80	-2.97	--	<1000	<10	<10	<10	<10	--	1600	--

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/27/2007	32.71	17.15	0.00	15.56	-0.24	--	1500	<2.5	<2.5	<2.5	<2.5	--	1700	
9/28/2007	32.71	18.13	0.00	14.58	-0.98	--	590	<5.0	<5.0	<5.0	<5.0	--	1400	
3/26/2008	32.71	17.66	0.00	15.05	0.47	--	390	<0.50	<0.50	<0.50	<1.0	--	1400	
7/28/2008	32.71	18.34	0.00	14.37	-0.68	--	480	<1.0	<1.0	<1.0	<2.0	--	950	
1/26/2009	32.71	18.80	0.00	13.91	-0.46	--	500	<0.50	<0.50	<0.50	<1.0	--	830	
8/3/2009	32.72	18.43	0.00	14.29	0.38	--	640	<5.0	6.6	<5.0	<10	--	570	
1/25/2010	32.72	18.02	0.00	14.70	0.41	--	190	<0.50	<0.50	<0.50	<1.0	--	400	
8/3/2010	32.72	17.83	0.00	14.89	0.19	--	58	<0.50	<0.50	<0.50	<1.0	--	110	
2/17/2011	32.72	17.85	0.00	14.87	-0.02	--	<50	<0.50	<0.50	<0.50	<1.0	--	12	
8/3/2011	32.72	17.36	0.00	15.36	0.49	--	<50	<0.50	<0.50	<0.50	<1.0	--	12	
MW-5														
10/19/1992	--	--	--	--	--	2700	--	61	5.0	100	61	--	--	
12/21/1992	33.25	19.75	--	13.50	--	1700	--	51	4.7	83	34	--	--	
4/28/1993	33.25	--	--	--	--	6700	--	200	190	250	430	--	--	
7/23/1993	33.25	18.74	--	14.51	--	2000	--	122	8.0	68	47	--	--	
10/5/1993	32.95	18.83	--	14.12	-0.39	1700	--	70	6.2	54	40	--	--	
1/3/1994	32.95	19.05	--	13.90	-0.22	1500	--	44	ND	42	46	--	--	
4/2/1994	32.95	18.68	--	14.27	0.37	1800	--	46	5.1	38	35	--	--	
7/5/1994	32.95	17.90	--	15.05	0.78	2200	--	97	8.4	37	36	--	--	
10/6/1994	32.95	19.37	--	13.58	-1.47	1600	--	79	5.7	28	22	--	--	
1/2/1995	32.95	17.92	--	15.03	1.45	1700	--	50	8.6	30	28	--	--	
4/3/1995	32.95	16.15	--	16.80	1.77	5400	--	190	240	170	420	--	--	
7/14/1995	32.95	17.18	--	15.77	-1.03	3800	--	210	100	130	190	--	--	
10/10/1995	32.95	18.15	--	14.80	-0.97	1300	--	92	14	15	39	1100	--	
1/3/1996	32.95	18.20	--	14.75	-0.05	630	--	53	4.4	8.3	13	--	--	
4/10/1996	32.95	16.05	--	16.90	2.15	500	--	25	18	7.0	20	640	--	
7/9/1996	32.95	17.11	--	15.84	-1.06	1000	--	44	20	10	34	150	--	
1/24/1997	32.95	16.36	0.00	16.59	0.75	4000	--	190	400	160	430	600	--	
7/23/1997	32.95	18.08	0.00	14.87	-1.72	1700	--	200	23	18	45	2500	--	
1/26/1998	32.95	16.27	--	16.68	1.81	ND	--	ND	ND	ND	ND	ND	--	
7/3/1998	32.95	17.27	--	15.68	-1.00	ND	--	ND	ND	ND	ND	ND	--	
1/14/1999	32.95	17.55	--	15.40	-0.28	330	--	61	4.1	2.2	2.9	560	--	
7/15/1999	32.95	16.41	--	16.54	1.14	1100	--	170	ND	ND	27	660	--	
1/7/2000	32.95	17.85	--	15.10	-1.44	1000	--	180	6.3	ND	14	430	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)										
7/19/2000	32.95	18.87	--	14.08	-1.02	2980	--	289	57.3	65.3	43.4	976	--	--	
1/2/2001	32.95	18.47	--	14.48	0.40	1150	--	87.2	17.8	7.97	9.32	368	--	--	
5/23/2001	32.95	17.38	--	15.57	1.09	840	--	42	10	13	7.1	130	--	--	
7/30/2001	32.95	17.12	--	15.83	0.26	1900	--	82	24	6.9	13	370	--	--	
10/15/2001	32.95	17.33	--	15.62	-0.21	26000	--	390	230	58	1300	<500	--	--	
1/14/2002	32.95	15.33	--	17.62	2.00	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--	--	
4/15/2002	32.95	15.89	--	17.06	-0.56	310	--	20	6.7	11	7.7	77	--	--	
7/15/2002	32.95	16.21	--	16.74	-0.32	1500	--	40	22	60	28	170	--	--	
1/18/2003	32.95	15.68	--	17.27	0.53	<50	--	0.75	<0.50	<0.50	<1.0	81	--	--	
7/11/2003	32.95	16.29	--	16.66	-0.61	--	<50	<0.50	<0.50	<0.50	<1.0	--	3.6	--	
2/4/2004	32.95	16.08	0.00	16.87	0.21	--	82	16	1.6	0.65	<1.0	--	16	--	
8/11/2004	32.95	16.38	0.00	16.57	-0.30	--	900	81	14	2.8	11	--	120	--	
3/31/2005	32.95	14.30	0.00	18.65	2.08	--	5000	160	84	65	72	--	140	--	
9/30/2005	32.95	16.19	0.00	16.76	-1.89	--	1200	26	5.8	2.4	9.2	--	38	--	
3/27/2006	32.95	13.90	0.00	19.05	2.29	--	1100	13	12	4.7	16	--	8.8	--	
9/27/2006	32.95	17.06	0.00	15.89	-3.16	--	1300	20	11	2.3	15	--	21	--	
3/27/2007	32.95	17.43	0.00	15.52	-0.37	--	960	15	7.8	2.2	11	--	14	--	
9/28/2007	32.95	18.25	0.00	14.70	-0.82	--	1300	13	6.0	2.3	15	--	8.4	--	
3/26/2008	32.95	17.82	0.00	15.13	0.43	--	1200	7.6	3.3	1.8	11	--	2.7	--	
7/28/2008	32.95	18.70	0.00	14.25	-0.88	--	2000	12	4.9	3.2	17	--	<0.50	--	
1/26/2009	32.95	19.25	0.00	13.70	-0.55	--	1400	7.4	3.3	2.5	11	--	3.3	--	
8/3/2009	32.98	18.62	0.00	14.36	0.66	--	1500	17	9.0	3.5	22	--	7.3	--	
1/25/2010	32.98	18.34	0.00	14.64	0.28	--	1600	7.6	3.6	2.4	15	--	1.7	--	
8/3/2010	32.98	18.07	0.00	14.91	0.27	--	2200	32	32	10	48	--	10	--	
2/17/2011	32.98	18.05	0.00	14.93	0.02	--	1800	33	7.4	<0.50	11	--	15	--	
8/3/2011	32.98	17.57	0.00	15.41	0.48	--	2,500	58	23	12	34	--	40	--	
MW-6															
10/19/1992	--	--	--	--	--	3900	--	420	12	60	28	--	--	--	
12/21/1992	32.42	19.17	--	13.25	--	2300	--	370	11	39	15	--	--	--	
4/28/1993	32.42	--	--	--	--	1200	--	54	1.5	11	5.3	--	--	--	
7/23/1993	32.42	18.17	--	14.25	--	580	--	19	0.99	3.4	2.7	--	--	--	
10/5/1993	32.16	18.35	--	13.81	-0.44	1400	--	34	ND	5.3	7.3	--	--	--	
1/3/1994	32.16	18.54	--	13.62	-0.19	1400	--	57	ND	8.5	11	--	--	--	
4/2/1994	32.16	18.15	--	14.01	0.39	5300	--	ND	ND	ND	ND	--	--	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	Water Elevation (feet)									
7/5/1994	32.16	17.25	--	14.91	0.90	ND	--	ND	ND	ND	ND	--	--	--
10/6/1994	32.16	18.85	--	13.31	-1.60	11000	--	ND	ND	ND	ND	--	--	--
1/2/1995	32.16	17.51	--	14.65	1.34	550	--	18	0.92	2.0	1.8	--	--	--
4/3/1995	32.16	15.48	--	16.68	2.03	6600	--	ND	ND	ND	ND	--	--	--
7/14/1995	32.16	16.63	--	15.53	-1.15	ND	--	ND	ND	ND	ND	--	--	--
10/10/1995	32.16	17.68	--	14.48	-1.05	ND	--	81	ND	ND	ND	75000	--	--
1/3/1996	32.16	17.66	--	14.50	0.02	70	--	9.9	0.58	ND	0.81	--	--	--
4/10/1996	32.16	15.56	--	16.60	2.10	300	--	258	4.7	0.94	2.7	53000	--	--
7/9/1996	32.16	16.59	--	15.57	-1.03	1800	--	410	ND	12	ND	76000	--	--
1/24/1997	32.16	15.69	0.00	16.47	0.90	ND	--	0.80	ND	ND	ND	390	--	--
7/23/1997	32.16	17.53	0.00	14.63	-1.84	5700	--	1100	240	240	700	16000	--	--
1/26/1998	32.16	15.44	--	16.72	2.09	ND	--	ND	ND	ND	ND	ND	--	--
7/3/1998	32.16	16.58	--	15.58	-1.14	ND	--	ND	ND	ND	ND	ND	--	--
1/14/1999	32.16	17.02	--	15.14	-0.44	ND	--	ND	ND	ND	ND	14	--	--
7/15/1999	32.16	15.95	--	16.21	1.07	ND	--	ND	ND	ND	ND	2.8	--	--
1/7/2000	32.16	16.96	--	15.20	-1.01	78	--	24	ND	0.66	17	280	--	--
7/19/2000	32.16	18.04	--	14.12	-1.08	ND	--	ND	1.32	ND	0.974	ND	--	--
1/2/2001	32.16	18.10	--	14.06	-0.06	ND	--	ND	ND	ND	ND	ND	--	--
5/23/2001	32.16	16.42	--	15.74	1.68	ND	--	ND	ND	ND	ND	ND	--	--
7/30/2001	32.16	16.49	--	15.67	-0.07	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
10/15/2001	32.16	16.67	--	15.49	-0.18	<50	--	<0.50	0.62	<0.50	<0.50	<5.0	--	--
1/14/2002	32.16	14.60	--	17.56	2.07	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
4/15/2002	32.16	15.07	--	17.09	-0.47	<50	--	<0.50	<0.50	<0.50	0.73	<5.0	--	--
7/15/2002	32.16	15.56	--	16.60	-0.49	<50	--	<0.50	<0.50	<0.50	<1.0	<0.50	--	--
1/18/2003	32.16	15.80	--	16.36	-0.24	<50	--	<0.50	<0.50	<0.50	<1.0	<2.0	--	--
7/11/2003	32.16	15.74	--	16.42	0.06	--	<50	<0.50	<0.50	<0.50	<1.0	--	<2.0	--
2/4/2004	32.16	15.49	0.00	16.67	0.25	--	<50	2.6	<0.50	<0.50	<1.0	--	2.4	--
8/11/2004	32.16	15.81	0.00	16.35	-0.32	--	7900	95	<50	<50	<100	--	9100	--
3/31/2005	32.16	13.70	0.00	18.46	2.11	--	<5000	2.5	<0.50	<0.50	<1.0	--	7600	--
9/30/2005	32.16	15.48	0.00	16.68	-1.78	--	4300	140	37	28	41	--	5800	--
3/27/2006	32.16	13.02	0.00	19.14	2.46	--	7200	34	0.66	0.96	18	--	9900	--
9/27/2006	32.16	16.56	0.00	15.60	-3.54	--	1800	<12	<12	<12	<12	--	3300	--
3/27/2007	32.16	16.73	0.00	15.43	-0.17	--	1600	2.8	<2.5	<2.5	<2.5	--	1800	--
9/28/2007	32.16	17.75	0.00	14.41	-1.02	--	830	<5.0	<5.0	<5.0	<5.0	--	1600	--

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
3/26/2008	32.16	17.31	0.00	14.85	0.44	--	940	45	5.9	2.0	5.3	--	1300	
7/28/2008	32.16	18.50	0.00	13.66	-1.19	--	500	<1.0	<1.0	<1.0	<2.0	--	750	
1/26/2009	32.16	18.46	0.00	13.70	0.04	--	570	<0.50	<0.50	<0.50	<1.0	--	500	
8/3/2009	32.19	18.01	0.00	14.18	0.48	--	800	<5.0	<5.0	<5.0	<10	--	690	
1/25/2010	32.19	17.64	0.00	14.55	0.37	--	410	4.8	0.63	<0.50	1.4	--	390	
8/3/2010	32.19	17.48	0.00	14.71	0.16	--	480	2.0	<0.50	<0.50	<1.0	--	520	
2/17/2011	32.19	17.48	0.00	14.71	0.00	--	290	<0.50	<0.50	<0.50	<1.0	--	130	
8/3/2011	32.19	17.02	0.00	15.17	0.46	--	330	<0.50	<0.50	<0.50	<1.0	--	89	
MW-7														
10/19/1992	--	--	--	--	--	--	--	--	--	--	--	--	--	
4/28/1993	32.49	--	--	--	--	110	--	2.8	1.3	1.4	1.7	--	--	
7/23/1993	32.49	18.60	--	13.89	--	790	--	23	3.3	28	5.4	--	--	
10/5/1993	32.20	18.76	--	13.44	-0.45	360	--	10	1.2	0.91	0.99	--	--	
1/3/1994	32.20	18.91	--	13.29	-0.15	ND	--	0.93	ND	0.75	1.9	--	--	
4/2/1994	32.20	18.50	--	13.70	0.41	360	--	2.0	ND	ND	0.8	--	--	
7/5/1994	32.20	17.52	--	14.68	0.98	ND	--	ND	ND	ND	ND	--	--	
10/6/1994	32.20	19.25	--	12.95	-1.73	340	--	5.6	0.85	ND	1.2	--	--	
1/2/1995	32.20	17.67	--	14.53	1.58	ND	--	ND	ND	ND	ND	--	--	
4/3/1995	32.20	15.81	--	16.39	1.86	570	--	24	ND	3.4	5.8	--	--	
7/14/1995	32.20	17.05	--	15.15	-1.24	ND	--	14	ND	ND	ND	--	--	
10/10/1995	32.20	18.08	--	14.12	-1.03	740	--	170	ND	ND	ND	13000	--	
1/3/1996	32.20	18.02	--	14.18	0.06	360	--	16	1.3	2.7	1.4	--	--	
4/10/1996	32.20	15.81	--	16.39	2.21	120	--	4.1	1.5	ND	0.88	3200	--	
7/9/1996	32.20	16.99	--	15.21	-1.18	ND	--	ND	ND	ND	ND	3400	--	
1/24/1997	32.20	16.08	0.00	16.12	0.91	ND	--	16	ND	ND	ND	6600	--	
7/23/1997	32.20	17.99	0.00	14.21	-1.91	ND	--	16	ND	ND	0.62	10000	--	
1/26/1998	32.20	15.56	--	16.64	2.43	ND	--	ND	ND	ND	0.56	ND	--	
7/3/1998	32.20	17.04	--	15.16	-1.48	ND	--	ND	ND	ND	ND	ND	--	
1/14/1999	32.20	--	--	--	--	--	--	--	--	--	--	--	--	essible-parke
7/15/1999	32.20	15.72	--	16.48	--	ND	--	ND	ND	ND	ND	290	--	
1/7/2000	32.20	16.80	--	15.40	-1.08	ND	--	7.7	ND	ND	4.4	98	--	
7/19/2000	32.20	17.88	--	14.32	-1.08	ND	--	ND	1.27	ND	0.979	ND	--	
1/2/2001	32.20	17.97	--	14.23	-0.09	ND	--	ND	ND	ND	ND	ND	--	
5/23/2001	32.20	16.81	--	15.39	1.16	ND	--	ND	ND	ND	ND	ND	--	

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		Change in Elevation (feet)	TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Water Elevation (feet)	Change in Elevation (feet)										
7/30/2001	32.20	16.79	--	15.41	0.02	<50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--	
10/15/2001	32.20	16.98	--	15.22	-0.19	<50	--	<0.50	0.58	<0.50	<0.50	<0.50	<5.0	--	
1/14/2002	32.20	14.85	--	17.35	2.13	<50	--	<0.50	<0.50	<0.50	<0.50	<0.50	<2.5	--	
4/15/2002	32.20	15.29	--	16.91	-0.44	<50	--	<0.50	<0.50	<0.50	<0.50	0.70	<5.0	--	
7/15/2002	32.20	15.92	--	16.28	-0.63	<50	--	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50	--	
1/18/2003	32.20	15.11	--	17.09	0.81	<50	--	<0.50	<0.50	<0.50	<0.50	<1.0	<2.0	--	
7/11/2003	32.20	15.89	--	16.31	-0.78	--	<50	<0.50	<0.50	<0.50	<0.50	<1.0	--	19	
2/4/2004	32.20	15.90	0.00	16.30	-0.01	--	<50	3.6	<0.50	<0.50	<0.50	<1.0	--	3.2	
8/11/2004	32.20	16.12	0.00	16.08	-0.22	--	<5000	120	<50	<50	<100	--	5100		
3/31/2005	32.20	13.99	0.00	18.21	2.13	--	<5000	190	<50	<50	<100	--	8400		
9/30/2005	32.20	15.93	0.00	16.27	-1.94	--	<50	<0.50	<0.50	<0.50	<1.0	--	<0.50		
3/27/2006	32.20	13.40	0.00	18.80	2.53	--	2500	160	10	11	26	--	5600		
9/27/2006	32.20	16.96	0.00	15.24	-3.56	--	2800	180	<12	15	44	--	4200		
3/27/2007	32.20	17.30	0.00	14.90	-0.34	--	920	66	2.9	3.4	4.5	--	970		
9/28/2007	32.20	18.10	0.00	14.10	-0.80	--	4000	440	15	17	59	--	3300		
3/26/2008	32.20	17.64	0.00	14.56	0.46	--	390	39	3.3	0.85	7.5	--	96		
7/28/2008	32.20	18.50	0.00	13.70	-0.86	--	64	3.3	<0.50	<0.50	<1.0	--	8.7		
1/26/2009	32.20	18.90	0.00	13.30	-0.40	--	80	7.9	0.58	<0.50	<1.0	--	10		
8/3/2009	32.22	18.29	0.00	13.93	0.63	--	2100	220	14	10	31	--	750		
1/25/2010	32.22	17.49	0.00	14.73	0.80	--	490	25	3.5	0.54	6.9	--	16		
8/3/2010	32.22	17.84	0.00	14.38	-0.35	--	240	45	1.8	1.2	1.7	--	290		
2/17/2011	32.22	17.83	0.00	14.39	0.01	--	370	53	2.0	<0.50	2.1	--	12		
8/3/2011	32.22	17.42	0.00	14.80	0.41	--	390	20	1.8	<0.50	1.6	--	27		
MW-8															
4/28/1993	32.33	--	--	--	--	450	--	18	1.8	1.8	1.4	--	--		
7/23/1993	32.33	18.45	--	13.88	--	260	--	5.1	ND	0.6	ND	--	--		
10/5/1993	32.00	18.57	--	13.43	-0.45	120	--	1.7	ND	ND	ND	--	--		
1/3/1994	32.00	18.73	--	13.27	-0.16	ND	--	ND	ND	ND	ND	51	--		
4/2/1994	32.00	18.30	--	13.70	0.43	150	--	1.2	ND	ND	ND	--	--		
7/5/1994	32.00	17.41	--	14.59	0.89	730	--	17	ND	1.6	ND	--	--		
10/6/1994	32.00	18.98	--	13.02	-1.57	140	--	ND	ND	ND	ND	--	--		
1/2/1995	32.00	17.58	--	14.42	1.40	440	--	18	0.72	2.0	1.8	--	--		
4/3/1995	32.00	15.54	--	16.46	2.04	960	--	11	ND	ND	ND	--	--		
7/14/1995	32.00	16.81	--	15.19	-1.27	280	--	4.2	2.6	1.1	3.3	--	--		

Table 2
HISTORICAL GROUNDWATER RESULTS

August 3, 2011
76 Station 0752

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)		TPH-G 8015 (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
				Change in Elevation (feet)	Water Elevation (feet)									
10/10/1995	32.00	17.85	--	14.15	-1.04	110	--	1.3	0.62	0.67	ND	170	--	--
1/3/1996	32.00	17.82	--	14.18	0.03	63	--	ND	0.51	ND	1.8	--	--	--
4/10/1996	32.00	15.70	--	16.30	2.12	ND	--	1.1	0.61	ND	ND	60	--	--
7/9/1996	32.00	16.78	--	15.22	-1.08	72	--	1.0	ND	ND	ND	140	--	--
1/24/1997	32.00	15.79	0.00	16.21	0.99	ND	--	ND	ND	ND	ND	76	--	--
7/23/1997	32.00	17.69	0.00	14.31	-1.90	ND	--	ND	ND	ND	ND	270	--	--
1/26/1998	32.00	15.50	--	16.50	2.19	ND	--	ND	ND	ND	0.76	2.9	--	--
7/3/1998	32.00	16.80	--	15.20	-1.30	ND	--	ND	ND	ND	ND	ND	--	--
1/14/1999	32.00	17.13	--	14.87	-0.33	ND	--	ND	ND	ND	ND	11	--	--
7/15/1999	32.00	15.85	--	16.15	1.28	ND	--	ND	ND	ND	ND	ND	--	--
1/7/2000	32.00	16.94	--	15.06	-1.09	ND	--	ND	ND	ND	ND	11	--	--
7/19/2000	32.00	18.06	--	13.94	-1.12	ND	--	ND	2.99	0.521	ND	ND	--	--
1/2/2001	32.00	18.12	--	13.88	-0.06	ND	--	ND	ND	ND	ND	ND	--	--
5/23/2001	32.00	16.96	--	15.04	1.16	ND	--	ND	ND	ND	ND	ND	--	--
7/30/2001	32.00	16.52	--	15.48	0.44	<50	--	<0.50	<0.50	<0.50	<0.50	2.7	--	--
10/15/2001	32.00	16.72	--	15.28	-0.20	<50	--	<0.50	0.65	<0.50	<0.50	<5.0	--	--
1/14/2002	32.00	14.53	--	17.47	2.19	<50	--	<0.50	<0.50	<0.50	<0.50	<2.5	--	--
4/15/2002	32.00	14.96	--	17.04	-0.43	<50	--	<0.50	<0.50	<0.50	<0.50	<5.0	--	--
7/15/2002	32.00	15.60	--	16.40	-0.64	<50	--	<0.50	<0.50	<0.50	<1.0	11	--	--
1/18/2003	32.00	14.78	--	17.22	0.82	<50	--	<0.50	<0.50	<0.50	<1.0	<2.0	--	--
2/4/2004	32.00	15.65	0.00	16.35	-0.87	--	52	2.3	<0.50	<0.50	<1.0	--	2.4	
8/11/2004	32.00	15.86	0.00	16.14	-0.21	--	350	<2.5	<2.5	<2.5	<5.0	--	310	
3/31/2005	32.00	13.73	0.00	18.27	2.13	--	<2000	<0.50	<0.50	<0.50	<1.0	--	2100	
9/30/2005	32.00	15.94	0.00	16.06	-2.21	--	1200	<0.50	0.50	<0.50	<1.0	--	6900	
3/27/2006	32.00	13.13	0.00	18.87	2.81	--	460	<0.50	<0.50	<0.50	<1.0	--	820	
9/27/2006	32.00	16.75	0.00	15.25	-3.62	--	520	<5.0	<5.0	<5.0	8.2	--	870	
3/27/2007	32.00	16.87	0.00	15.13	-0.12	--	1400	<0.50	<0.50	<0.50	<0.50	--	3600	
9/28/2007	32.00	17.91	0.00	14.09	-1.04	--	280	<2.5	<2.5	<2.5	<2.5	--	670	
3/26/2008	32.00	17.45	0.00	14.55	0.46	--	110	<0.50	<0.50	<0.50	<1.0	--	210	
7/28/2008	32.00	18.50	0.00	13.50	-1.05	--	<50	<0.50	<0.50	<0.50	<1.0	--	11	
1/26/2009	32.00	18.65	0.00	13.35	-0.15	--	<50	<0.50	<0.50	<0.50	<1.0	--	22	
8/3/2009	32.03	18.11	0.00	13.92	0.57	--	67	<0.50	<0.50	<0.50	<1.0	--	64	
1/25/2010	32.03	17.67	0.00	14.36	0.44	--	<50	<0.50	<0.50	<0.50	<1.0	--	10	
8/3/2010	32.03	17.58	0.00	14.45	0.09	--	<50	<0.50	<0.50	<0.50	<1.0	--	10	

Table 2
HISTORICAL GROUNDWATER RESULTS

**August 3, 2011
76 Station 0752**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-Water Elevation (feet)	Change in Elevation (feet)	TPH-G 8015 ($\mu\text{g/l}$)	TPH-G (GC/MS) ($\mu\text{g/l}$)	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethyl-benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE (8021B) ($\mu\text{g/l}$)	MTBE (8260B) ($\mu\text{g/l}$)	Comments
2/17/2011	32.03	17.53	0.00	14.50	0.05	--	<50	<0.50	<0.50	<0.50	<1.0	--	2.5	
8/3/2011	32.03	17.18	0.00	14.85	0.35	--	<50	<0.50	<0.50	<0.50	<1.0	--	1.6	

Attachment C

Laboratory Reports and Chain-of-Custody Documentation



Date of Report: 08/24/2017

Tamera Rogers

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

Client Project: 351646

BCL Project: 0752

BCL Work Order: 1723165

Invoice ID: B277299

Enclosed are the results of analyses for samples received by the laboratory on 8/17/2017. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Molly Meyers
Client Service Rep

Stuart Butram
Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	9

Sample Results

1723165-01 - QA-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	17
1723165-02 - A-MW-1-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	18
1723165-03 - A-MW-2-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	19
1723165-04 - A-MW-3-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	20
1723165-05 - A-MW-4-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	21
1723165-06 - A-MW-5-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	22
1723165-07 - A-MW-7-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	23
1723165-08 - S-MW-1-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	24
1723165-09 - S-MW-2-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	25
1723165-10 - S-MW-3-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	26
1723165-11 - S-MW-4-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	27
1723165-12 - S-MW-5-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	28
1723165-13 - S-MW-6-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	29
1723165-14 - S-EW-1-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	30
1723165-15 - MPE-1-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	31
1723165-16 - MW-1-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	32
1723165-17 - MW-2-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	33
1723165-18 - MW-3-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	34
1723165-19 - MW-4-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	35
1723165-20 - MW-5-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	36
1723165-21 - MW-6-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	37
1723165-22 - MW-7-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	38
1723165-23 - MW-8-W-170817	
Volatile Organic Analysis (EPA Method 8260B).....	39

Quality Control Reports

Volatile Organic Analysis (EPA Method 8260B)

Method Blank Analysis.....	40
Laboratory Control Sample.....	41

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Table of Contents

Precision and Accuracy.....	42
Notes	
Notes and Definitions.....	43



N

卷之三

ARCADES
Union Oil Consultant:

1

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

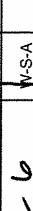
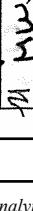
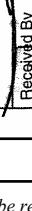
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

Chain of Custody and Cooler Receipt Form for 1723165 Page 2 of 5

17-23165

CHAIN OF CUSTODY FORM

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

Union Oil Site ID:		0752		ARCA015		COC 2 of 2	
Site Global ID:	706001486	Union Oil Consultant:	TOMBER ROGERS	ANALYSES REQUIRED		Turnaround Time (TAT):	
Site Address:	800 HARRISON ST. OAKLAND CA	Consultant Contact:	408 -797-2013			Standard <input checked="" type="checkbox"/>	24 Hours <input type="checkbox"/>
Union Oil P.M.:	JAMES KERMAN	Consultant Phone No.:	408 -797-2013			48 Hours <input type="checkbox"/>	72 Hours <input type="checkbox"/>
Union Oil P.M. Phone No.:	9125 - 842-3220	Cooling Company:	Geffler Ryan	Special Instructions			
Charge Code: NWRTB-0	351 646-0 LAB	Sampled By (PRINT):	Alex Many				
		Sampler Signature:					
		BC Laboratories, Inc.					
		Project Manager: Molly Meyers					
		4100 Atlas Court, Bakersfield, CA 93308					
		Phone No. 661-327-4911					
SAMPLE ID							
Field Point Name	Matrix	Date (yymmdd)	Depth	Sample Time	# of Containers	Notes / Comments	
13 SW-6	V-SA	170817		0625	3	 TPH (8260B)	
14 SW-1	V-SA			0920		 EPA 8260B Full List with OYS	
15 MPE-1	V-SA			0705		 Ethanol by EPA 8260B	
16 MW-1	V-SA			0530		 BTX/MTBE/ by EPA 8260B	
17 MW-2	V-SA			0450		 TPH - G by GC/MS	
18 MW-3	V-SA			0750		 TPH - Diesel by EPA 8015	
19 MW-4	V-SA			0640		 EPA 8260B Full List with OYS	
20 MW-5	V-SA			0605		 TPH - G by GC/MS	
21 MW-6	V-SA			0717		 TPH - Diesel by EPA 8015	
22 MW-7	V-SA			0900		 TPH - Diesel by EPA 8015	
23 MW-8	V-SA			0825		 TPH - Diesel by EPA 8015	
Received By	Company	Date / Time:	Relinquished By	Company	Date / Time:	Relinquished By	Company
	GRINC	170817 / 1215		BCLABS	8-17-17 1830		BCLABS
Received By	Company	Date / Time:	Received By	Company	Date / Time:	Received By	Company
	BC LABS	8-17-17 1215		BCLABS	8-17-17 19:00		BCLABS

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Chain of Custody and Cooler Receipt Form for 1723165 Page 3 of 5

BC LABORATORIES INC.		COOLER RECEIPT FORM						Page	Of <u>3</u>		
Submission #: <u>1723165</u>											
SHIPPING INFORMATION Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/> <u>W</u> / S			
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals <input type="checkbox"/> Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>											
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Date/Time <u>8/17/17 22:15</u>					
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.95</u> Container: <u>V005</u> Thermometer ID: <u>208</u> Temperature: (A) <u>0.0</u> °C / (C) <u>0.3</u> °C				Analyst Init <u>KMR</u>					
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	<u>AB</u>										
40ml VOA VIAL		<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>		
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:	<u>M</u> Date/Time: <u>8/18/15</u>										
Rev 21 05/23/2016											

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Chain of Custody and Cooler Receipt Form for 1723165 Page 4 of 5

BC LABORATORIES INC.		COOLER RECEIPT FORM		Page 2 Of 3						
Submission #: 1723165										
SHIPPING INFORMATION			SHIPPING CONTAINER		FREE LIQUID					
Fed Ex <input type="checkbox"/>	UPS <input type="checkbox"/>	Ontrac <input type="checkbox"/>	Hand Delivery <input type="checkbox"/>	Ice Chest <input checked="" type="checkbox"/>	None <input type="checkbox"/> Box <input type="checkbox"/>					
BC Lab Field Service <input checked="" type="checkbox"/>			Other <input type="checkbox"/> (Specify) _____		Other <input type="checkbox"/> (Specify) _____					
					YES <input type="checkbox"/> NO <input type="checkbox"/> (W) / S					
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments:										
Custody Seals	Ice Chest <input type="checkbox"/> Contact? Yes <input type="checkbox"/> No <input type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments:							
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: 0.05	Container: VOA	Thermometer ID: 208	Date/Time 3/17/17 22:05						
	Temperature: (A) 0.02 °C / (C) 0.3 °C			Analyst Init. JENK						
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	ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC	
40ml VOA VIAL	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										
1oz / 16oz / 32oz AMBER										
1oz / 16oz / 32oz JAR										
OIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
EDLAR BAG										
TERROUS IRON										
INCORE										
MART KIT										
UMMA CANISTER										
Comments: _____										
Sample Numbering Completed By: _____	Date/Time: 3/18/17 14:15									
Rev 21 05/23/2016										

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



Chain of Custody and Cooler Receipt Form for 1723165 Page 5 of 5

BC LABORATORIES INC.		COOLER RECEIPT FORM				Page <u>7</u> Of <u>3</u>				
Submission #: <u>1723165</u>										
SHIPPING INFORMATION Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> <u>W / S</u>				
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.95</u> Container: <u>VOAS</u> Thermometer ID: <u>203</u> Temperature: (A) <u>0.1</u> °C / (C) <u>0.3</u> °C		Date/Time <u>8/17/17 2245</u> Analyst Init <u>KME</u>						
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	21	22	23	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	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>							
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:	<u>M</u> Date/Time: <u>8/18/15</u>									
Rev 21 05/23/2016										

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1723165-01	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: QA-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 00:00 Sample Depth: --- Lab Matrix: Water Sample Type: Blank Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): QA Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-02	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-1-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 07:00 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-03	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-2-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 07:45 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1723165-04	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-3-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 07:40 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-05	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-4-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 08:15 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-06	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-5-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 05:25 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1723165-07	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: A-MW-7-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 06:10 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): A-MW-7 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-08	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-1-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 08:30 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-09	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-2-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 04:30 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1723165-10	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-3-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 05:40 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-11	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-4-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 04:40 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-12	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-5-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 05:05 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1723165-13	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-MW-6-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 06:25 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-MW-6 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1723165-14	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: S-EW-1-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 09:20 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): S-EW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1723165-15	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MPE-1-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 07:05 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MPE-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1723165-16	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-1-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 05:30 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-17	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-2-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 04:50 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-18	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-3-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 07:50 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1723165-19	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-4-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 06:40 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-20	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-5-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 06:05 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-21	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-6-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 07:17 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-6 Matrix: W Sample QC Type (SACode): CS Cooler ID:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1723165-22	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-7-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 09:00 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-7 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1723165-23	COC Number: --- Project Number: 0752 Sampling Location: --- Sampling Point: MW-8-W-170817 Sampled By: GRD	Receive Date: 08/17/2017 22:45 Sampling Date: 08/17/2017 08:25 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: T0600101486 Location ID (FieldPoint): MW-8 Matrix: W Sample QC Type (SACode): CS Cooler ID:

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-01	Client Sample Name:	0752, QA-W-170817, 8/17/2017 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)	106	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	80.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/18/17	08/21/17 14:53	JPT	MS-V13	1	B[H1951]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-02	Client Sample Name: 0752, A-MW-1-W-170817, 8/17/2017 7:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	1100	ug/L	12		EPA-8260B	ND	A01	1
Ethylbenzene	39	ug/L	2.5		EPA-8260B	ND	A01	2
Methyl t-butyl ether	9.4	ug/L	2.5		EPA-8260B	ND	A01	2
Toluene	31	ug/L	2.5		EPA-8260B	ND	A01	2
Total Xylenes	66	ug/L	5.0		EPA-8260B	ND	A01	2
Total Purgeable Petroleum Hydrocarbons	1000	ug/L	50		Luft-GC/MS	ND	A01	3
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	115	%	75 - 125 (LCL - UCL)		EPA-8260B			2
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-8260B			3
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			3
4-Bromofluorobenzene (Surrogate)	82.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	95.3	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			3

Run #	Method	Prep Date	Run Date/Time			Dilution	QC Batch ID	
			Date	Time	Analyst			
1	EPA-8260B	08/18/17	08/22/17	10:58	JPT	MS-V13	25	B[H]1951
2	EPA-8260B	08/18/17	08/22/17	04:31	JPT	MS-V13	5	B[H]1951
3	EPA-8260B	08/18/17	08/22/17	13:24	JPT	MS-V13	1	B[H]1951

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-03	Client Sample Name: 0752, A-MW-2-W-170817, 8/17/2017 7:45:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	1400	ug/L	25		EPA-8260B	ND	A01	1
Ethylbenzene	1800	ug/L	25		EPA-8260B	ND	A01	1
Methyl t-butyl ether	2600	ug/L	25		EPA-8260B	ND	A01	1
Toluene	2700	ug/L	25		EPA-8260B	ND	A01	1
Total Xylenes	8200	ug/L	50		EPA-8260B	ND	A01	1
Total Purgeable Petroleum Hydrocarbons	44000	ug/L	2500		Luft-GC/MS	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	100	%	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	08/18/17	08/22/17 06:08	JPT	MS-V13	50	B[H1951]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-04	Client Sample Name: 0752, A-MW-3-W-170817, 8/17/2017 7:40:00AM						
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)	110	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	87.9	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/18/17	08/21/17 15:18	JPT	MS-V13	1	B[H1951]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-05	Client Sample Name: 0752, A-MW-4-W-170817, 8/17/2017 8:15:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	370	ug/L	5.0		EPA-8260B	ND	A01	1
Ethylbenzene	24	ug/L	2.5		EPA-8260B	ND	A01	2
Methyl t-butyl ether	66	ug/L	2.5		EPA-8260B	ND	A01	2
Toluene	7.1	ug/L	2.5		EPA-8260B	ND	A01	2
Total Xylenes	18	ug/L	5.0		EPA-8260B	ND	A01	2
Total Purgeable Petroleum Hydrocarbons	1200	ug/L	250		Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	94.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	95.6	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/18/17	08/22/17 02:05	JPT	MS-V13	10	B[H]1951
2	EPA-8260B	08/18/17	08/22/17 12:35	JPT	MS-V13	5	B[H]1951

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-06	Client Sample Name: 0752, A-MW-5-W-170817, 8/17/2017 5:25:00AM						
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)	110	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	81.1	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/18/17	08/21/17 15:42	JPT	MS-V13	1	B[H1951]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-07	Client Sample Name: 0752, A-MW-7-W-170817, 8/17/2017 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)	110	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	86.7	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/18/17	08/21/17 16:06	JPT	MS-V13	1	B[H1951]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-08	Client Sample Name: 0752, S-MW-1-W-170817, 8/17/2017 8:30:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	1100	ug/L	25		EPA-8260B	ND	A01	1
Ethylbenzene	60	ug/L	2.5		EPA-8260B	ND	A01	2
Methyl t-butyl ether	2700	ug/L	25		EPA-8260B	ND	A01	1
Toluene	27	ug/L	2.5		EPA-8260B	ND	A01	2
Total Xylenes	82	ug/L	5.0		EPA-8260B	ND	A01	2
Total Purgeable Petroleum Hydrocarbons	4900	ug/L	250		Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	81.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 11:47	JPT	MS-V13	50	B[H]1978
2	EPA-8260B	08/21/17	08/22/17 04:55	JPT	MS-V13	5	B[H]1978

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-09	Client Sample Name:	0752, S-MW-2-W-170817, 8/17/2017 4:30:00AM					
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)	110	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	80.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/21/17 16:30	JPT	MS-V13	1	B[H]1978

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-10	Client Sample Name: 0752, S-MW-3-W-170817, 8/17/2017 5:40:00AM						
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	1.4	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)	112	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	86.5	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/21/17 16:55	JPT	MS-V13	1	B[H]1978

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-11	Client Sample Name: 0752, S-MW-4-W-170817, 8/17/2017 4:40:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	59	ug/L	2.5		EPA-8260B	ND	A01	1
Ethylbenzene	1.5	ug/L	0.50		EPA-8260B	ND		2
Methyl t-butyl ether	51	ug/L	0.50		EPA-8260B	ND		2
Toluene	4.6	ug/L	0.50		EPA-8260B	ND		2
Total Xylenes	8.8	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)	105	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	98.2	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	106	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	111	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	92.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	107	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 10:34	JPT	MS-V13	5	B[H]1978
2	EPA-8260B	08/21/17	08/22/17 01:16	JPT	MS-V13	1	B[H]1978

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-12	Client Sample Name: 0752, S-MW-5-W-170817, 8/17/2017 5:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	2500	ug/L	50	EPA-8260B	ND	A01		1
Ethylbenzene	500	ug/L	5.0	EPA-8260B	ND	A01		2
Methyl t-butyl ether	3800	ug/L	50	EPA-8260B	ND	A01		1
Toluene	460	ug/L	5.0	EPA-8260B	ND	A01		2
Total Xylenes	1200	ug/L	10	EPA-8260B	ND	A01		2
Total Purgeable Petroleum Hydrocarbons	14000	ug/L	500	Luft-GC/MS	ND	A01		2
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)	EPA-8260B				1
1,2-Dichloroethane-d4 (Surrogate)	115	%	75 - 125 (LCL - UCL)	EPA-8260B				2
Toluene-d8 (Surrogate)	99.9	%	80 - 120 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)	EPA-8260B				2
4-Bromofluorobenzene (Surrogate)	90.7	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	110	%	80 - 120 (LCL - UCL)	EPA-8260B				2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 12:11	JPT	MS-V13	100	B[H]1978
2	EPA-8260B	08/21/17	08/22/17 05:44	JPT	MS-V13	10	B[H]1978

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-13	Client Sample Name: 0752, S-MW-6-W-170817, 8/17/2017 6:25:00AM						
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	84	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	55	ug/L	50	Luft-GC/MS	ND	A90		1
1,2-Dichloroethane-d4 (Surrogate)	116	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	86.9	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 02:29	JPT	MS-V13	1	B[H1978]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-14	Client Sample Name: 0752, S-EW-1-W-170817, 8/17/2017 9:20:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	17	ug/L	1.0		EPA-8260B	ND	A01	1
Ethylbenzene	ND	ug/L	1.0		EPA-8260B	ND	A01	1
Methyl t-butyl ether	110	ug/L	1.0		EPA-8260B	ND	A01	1
Toluene	ND	ug/L	1.0		EPA-8260B	ND	A01	1
Total Xylenes	2.1	ug/L	2.0		EPA-8260B	ND	A01	1
Total Purgeable Petroleum Hydrocarbons	340	ug/L	100		Luft-GC/MS	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	95.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 04:07	JPT	MS-V13	2	B[H1978]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-15	Client Sample Name: 0752, MPE-1-W-170817, 8/17/2017 7:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	850	ug/L	25		EPA-8260B	ND	A01	1
Ethylbenzene	160	ug/L	2.5		EPA-8260B	ND	A01	2
Methyl t-butyl ether	1100	ug/L	25		EPA-8260B	ND	A01	1
Toluene	98	ug/L	2.5		EPA-8260B	ND	A01	2
Total Xylenes	200	ug/L	5.0		EPA-8260B	ND	A01	2
Total Purgeable Petroleum Hydrocarbons	4500	ug/L	250		Luft-GC/MS	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	84.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	107	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 11:23	JPT	MS-V13	50	B[H]1978
2	EPA-8260B	08/21/17	08/22/17 05:20	JPT	MS-V13	5	B[H]1978

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-16	Client Sample Name: 0752, MW-1-W-170817, 8/17/2017 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	26	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	300	ug/L	50	Luft-GC/MS	ND			1
1,2-Dichloroethane-d4 (Surrogate)	116	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	105	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	98.0	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/21/17 17:19	JPT	MS-V13	1	B[H1978]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-17	Client Sample Name: 0752, MW-2-W-170817, 8/17/2017 4:50:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	130	ug/L	2.5		EPA-8260B	ND	A01	1
Ethylbenzene	1.3	ug/L	0.50		EPA-8260B	ND		2
Methyl t-butyl ether	38	ug/L	0.50		EPA-8260B	ND		2
Toluene	0.79	ug/L	0.50		EPA-8260B	ND		2
Total Xylenes	1.1	ug/L	1.0		EPA-8260B	ND		2
Total Purgeable Petroleum Hydrocarbons	570	ug/L	50		Luft-GC/MS	ND		2
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	93.5	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	93.0	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 10:10	JPT	MS-V13	5	B[H]1978
2	EPA-8260B	08/21/17	08/21/17 17:43	JPT	MS-V13	1	B[H]1978

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-18	Client Sample Name: 0752, MW-3-W-170817, 8/17/2017 7:50:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	2.0	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	1.1	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	12	ug/L	0.50		EPA-8260B	ND		1
Toluene	0.61	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	1.4	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	1700	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	124	%	80 - 120 (LCL - UCL)		EPA-8260B	S09		1
4-Bromofluorobenzene (Surrogate)	111	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 03:18	JPT	MS-V13	1	B[H1978]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-19	Client Sample Name: 0752, MW-4-W-170817, 8/17/2017 6:40:00AM						
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)	116	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	89.6	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/21/17 23:39	JPT	MS-V13	1	B[H]1978

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-20	Client Sample Name: 0752, MW-5-W-170817, 8/17/2017 6:05:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	20	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	1.7	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	3.1	ug/L	0.50		EPA-8260B	ND		1
Toluene	3.0	ug/L	0.50		EPA-8260B	ND		1
Total Xylenes	5.7	ug/L	1.0		EPA-8260B	ND		1
Total Purgeable Petroleum Hydrocarbons	600	ug/L	50		Luft-GC/MS	ND		1
1,2-Dichloroethane-d4 (Surrogate)	93.8	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	109	%	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	08/21/17	08/22/17 09:46	JPT	MS-V13	1	B[H1978]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-21	Client Sample Name: 0752, MW-6-W-170817, 8/17/2017 7:17:00AM						
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	56	ug/L	50	Luft-GC/MS	ND			1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	106	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	88.7	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 00:03	JPT	MS-V13	1	B[H1978]

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-22	Client Sample Name: 0752, MW-7-W-170817, 8/17/2017 9:00:00AM						
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	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)	118	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	87.7	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 00:52	JPT	MS-V13	1	B[H]1978

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1723165-23	Client Sample Name: 0752, MW-8-W-170817, 8/17/2017 8:25:00AM						
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)	112	%	75 - 125 (LCL - UCL)	EPA-8260B				1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)	EPA-8260B				1
4-Bromofluorobenzene (Surrogate)	84.5	%	80 - 120 (LCL - UCL)	EPA-8260B				1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/21/17	08/22/17 00:28	JPT	MS-V13	1	B[H]1978

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
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: B[H1951]						
Benzene	B[H1951-BLK1]	ND	ug/L	0.50		
Ethylbenzene	B[H1951-BLK1]	ND	ug/L	0.50		
Methyl t-butyl ether	B[H1951-BLK1]	ND	ug/L	0.50		
Toluene	B[H1951-BLK1]	ND	ug/L	0.50		
Total Xylenes	B[H1951-BLK1]	ND	ug/L	1.0		
Total Purgeable Petroleum Hydrocarbons	B[H1951-BLK1]	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	B[H1951-BLK1]	107	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B[H1951-BLK1]	102	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	B[H1951-BLK1]	82.1	%	80 - 120 (LCL - UCL)		
QC Batch ID: B[H1978]						
Benzene	B[H1978-BLK1]	ND	ug/L	0.50		
Ethylbenzene	B[H1978-BLK1]	ND	ug/L	0.50		
Methyl t-butyl ether	B[H1978-BLK1]	ND	ug/L	0.50		
Toluene	B[H1978-BLK1]	ND	ug/L	0.50		
Total Xylenes	B[H1978-BLK1]	ND	ug/L	1.0		
Total Purgeable Petroleum Hydrocarbons	B[H1978-BLK1]	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	B[H1978-BLK1]	106	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B[H1978-BLK1]	99.5	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	B[H1978-BLK1]	84.6	%	80 - 120 (LCL - UCL)		

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
QC Batch ID: B[H1951]									
Benzene	B[H1951-BS1]	LCS	25.880	25.000	ug/L	104		70 - 130	
Toluene	B[H1951-BS1]	LCS	27.340	25.000	ug/L	109		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	B[H1951-BS1]	LCS	9.9900	10.000	ug/L	99.9		75 - 125	
Toluene-d8 (Surrogate)	B[H1951-BS1]	LCS	10.430	10.000	ug/L	104		80 - 120	
4-Bromofluorobenzene (Surrogate)	B[H1951-BS1]	LCS	10.290	10.000	ug/L	103		80 - 120	
QC Batch ID: B[H1978]									
Benzene	B[H1978-BS1]	LCS	25.500	25.000	ug/L	102		70 - 130	
Toluene	B[H1978-BS1]	LCS	26.380	25.000	ug/L	106		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	B[H1978-BS1]	LCS	10.580	10.000	ug/L	106		75 - 125	
Toluene-d8 (Surrogate)	B[H1978-BS1]	LCS	10.520	10.000	ug/L	105		80 - 120	
4-Bromofluorobenzene (Surrogate)	B[H1978-BS1]	LCS	10.240	10.000	ug/L	102		80 - 120	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
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	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
QC Batch ID: B[H1951]		Used client sample: N								
Benzene	MS	1722383-06	ND	25.420	25.000	ug/L		102	20	70 - 130
	MSD	1722383-06	ND	20.360	25.000	ug/L	22.1	81.4		Q02
Toluene	MS	1722383-06	ND	25.510	25.000	ug/L		102	20	70 - 130
	MSD	1722383-06	ND	20.960	25.000	ug/L	19.6	83.8		70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1722383-06	ND	10.670	10.000	ug/L		107	20	75 - 125
	MSD	1722383-06	ND	9.8600	10.000	ug/L	7.9	98.6		75 - 125
Toluene-d8 (Surrogate)	MS	1722383-06	ND	10.090	10.000	ug/L		101	20	80 - 120
	MSD	1722383-06	ND	10.240	10.000	ug/L	1.5	102		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1722383-06	ND	10.250	10.000	ug/L		102	20	80 - 120
	MSD	1722383-06	ND	10.070	10.000	ug/L	1.8	101		80 - 120
QC Batch ID: B[H1978]		Used client sample: N								
Benzene	MS	1722106-41	ND	24.310	25.000	ug/L		97.2	20	70 - 130
	MSD	1722106-41	ND	24.800	25.000	ug/L	2.0	99.2		70 - 130
Toluene	MS	1722106-41	ND	25.200	25.000	ug/L		101	20	70 - 130
	MSD	1722106-41	ND	25.910	25.000	ug/L	2.8	104		70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1722106-41	ND	10.060	10.000	ug/L		101	20	75 - 125
	MSD	1722106-41	ND	10.100	10.000	ug/L	0.4	101		75 - 125
Toluene-d8 (Surrogate)	MS	1722106-41	ND	10.370	10.000	ug/L		104	20	80 - 120
	MSD	1722106-41	ND	10.450	10.000	ug/L	0.8	104		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1722106-41	ND	10.650	10.000	ug/L		106	20	80 - 120
	MSD	1722106-41	ND	9.5900	10.000	ug/L	10.5	95.9		80 - 120

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.



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

Reported: 08/24/2017 20:34
Project: 0752
Project Number: 351646
Project Manager: Tamera Rogers

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.
Q02	Matrix spike precision is not within the control limits.
S09	The surrogate recovery on the sample for this compound was not within the control limits.