James P. Kiernan, P.E.
Project Manager

Chevron Environmental Management Company
6001 Bollinger Canyon Road
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November 10, 2017

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

Re: 76 Station No. 1156 (351645)
Semi-Annual Status Report-Third Quarter 2017
4276 MacArthur Boulevard, Oakland, California
Fuel Leak Case No.: RO0000409

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 Status Report-Third Quarter 2017* by Arcadis

Arcadis U.S., Inc.
1100 Olive Way
Suite 800
Seattle
WA 98101
Tel 206-726-4720
Fax 206-325-8218
www.arcadis-us.com

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

Subject:
Semi-Annual Status Report, Third Quarter 2017

ENVIRONMENT

Dear Mr. Schultz,

Date:
November 9, 2017

On behalf of Chevron Environmental Management Company's (CEMC's) affiliate, Union Oil Company of California (Union Oil), Arcadis has prepared the attached *Semi-Annual Status Report, Third Quarter 2017* for the following facility:

76 Station No.	**Case No.**	**Location**
1156	RO0000409	4276 MacArthur Blvd. Oakland, CA

If you have any questions, please do not hesitate to contact me.

Sincerely,

Arcadis U.S., Inc.

Contact:
Samuel Miles

Phone:
206.726.4720

Email:
Samuel.Miles@arcadis.com

Our ref:
GMR35135.1645

Samuel Miles
Project Manager

Copies:
Geotracker Database
Mr. James Kiernan, CEMC (electronic)
Mr. Rajan Goswamy (Property owner) (electronic)
Mr. Ed Ralston, Phillips 66 (electronic)

ARCADIS Design & Consultancy for natural and built assets

SEMI-ANNUAL STATUS REPORT
Third Quarter 2017
November 9, 2017

Facility No:	76 Station No. 1156	Address:	4276 MacArthur Blvd., Oakland, CA

Arcadis Contact Person / Phone No.:	Samuel Miles / (206) 726-4720
Arcadis Project No.:	GMR35135.1645
Primary Agency/Regulatory ID No.:	Alameda County Environmental Health / Robert Schultz / Case No. RO0000409

WORK CONDUCTED THIS PERIOD [Second and Third Quarter 2017]:

1. Prepared the May 11, 2017 *Additional Site investigation Work Plan*.
2. Conducted semi-annual groundwater monitoring activities on July 25, 2017.
3. Prepared the *Semi-Annual Status Report, Third Quarter 2017*.

WORK PROPOSED NEXT PERIOD [Fourth Quarter 2017 and First Quarter 2018]:

1. Conduct semi-annual groundwater monitoring activities.
2. Prepare the *Semi-Annual Status Report, First Quarter 2018*.
3. Implement additional investigation at the site in accordance with the May 11, 2017 *Additional Site Investigation Work Plan*, and the ACDEH approval letter dated October 19, 2017. The additional offsite investigation work will be conducted once an executed access agreement is obtained from the adjacent property owner.
4. Submit a *Remedial Action Plan* to address residual shallow soil impacts and facilitate the station expansion project.

Current Phase of Project:	Monitoring/Remedial Development	
Frequency of Monitoring / Sampling:	Semi-annual	
Are Phase Separate Hydrocarbons (PSH) Present On-site:	No	
Cumulative PSH Recovered to Date:	None	(gallons)
Approximate Depth to Groundwater:	0.85 to 8.84	(feet below top of casing)

Approximate Groundwater Elevation:	165.06 to 173.00	(feet above mean sea level)
Groundwater Flow Direction	West-Southwest	
Groundwater Gradient	0.083	(feet per foot)
Current Remediation Techniques:	None	
Permits for Discharge:	None	
Summary of Unusual Activity:	None	
Agency Directive Requirements:	ACDEH Directive (October 19, 2017): Address comments to the May 11, 2017 *Additional Site Investigation Work Plan*, prepared by Arcadis, and conduct the work. Prepare an *Additional Investigation Report* to summarize the results of the investigation by January 19, 2018 Submit a *Remedial Action Plan* by March 23, 2018.	

DISCUSSION

Gettler-Ryan, Inc. (G-R) conducted semi-annual groundwater monitoring activities on July 25, 2017. Field data sheets and general procedures are included as Attachment A. Eighteen (18) monitoring wells were gauged and twelve (12) monitoring wells were purged and sampled by G-R representatives.

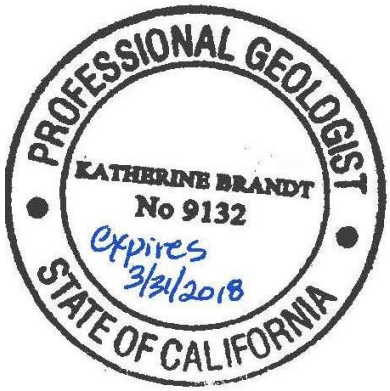
Groundwater samples were submitted to BC Laboratories, Inc. of Bakersfield, California under standard chain-of-custody protocols. Gauging and analytical data obtained by G-R for this event are summarized in Tables 1 and 2. Historical gauging and analytical data for the site are summarized in Table 3, Table 4 and Attachment B. The site location and layout are presented on Figures 1 and 2, respectively; the groundwater elevation contours for the site on July 25, 2017 are presented on Figure 3. Concentrations for total petroleum hydrocarbons as gasoline (TPH-g), total petroleum hydrocarbons as diesel (TPH-d), benzene, toluene, ethylbenzene, total xylenes (BTEX), and methyl tert-butyl ether (MTBE) are presented on Figure 4. A copy of the laboratory analytical report and chain-of-custody documentation is included as Attachment C.

The calculated direction of groundwater flow (west-southwest) was consistent with previous monitoring events. Groundwater samples collected during the July 27, 2017 event were were analyzed for MNA parameters including methane, nitrate, sulfate, ferrous iron, and dissolved manganese, to evaluate if natural attenuation by anaerobic biodegradation is occurring beneath the site. Based on the analytical results for MNA parameters, depleted concentrations of nitrate and sulfate (electron donors for anaerobic reduction) were observed for wells with hydrocarbon impacts (MW-3B, MW-9A, MW-10A, MW-10B, MW-10S, MW-11A, MW-11B, MW-11S). Additionally, ferrous iron and dissolved manganese concentrations (by-products of anaerobic reduction), and Methan (product of anaerobic degradation) are generally elevated in these impacted wells. The groundwater analytical results were also generally consistent with previous events. TPH-g, TPH-d, BTEX, and MTBE were generally detected in all the wells sampled. Toluene, ethylbenzene, and xylenes were not detected in monitoring well MW-10S. TBA was detected in all the wells sampled except MW-11S and MW-3B. The highest concentrations of petroleum hydrocarbons generally continue to be present in wells MW-11A and MW-11B in the far southwest corner of the site adjacent to the existing USTs. However, elevated concentrations also remain in wells MW-9A, MW-10A, and MW-10B on the northwest side of the site. Elevated concentrations were also detected in recently installed wells MW-12 and PZ-1 through PZ-3 also located this area. The detected concentrations were generally within historical ranges; however, the current concentrations of select constituents of concern (COCs) in several of the wells were the highest to date. Conversely, the current TPH-g concentration in MW-10A, the current benzene concentration in MW-10S, and the current MTBE concentration in MW-11A, were the lowest to date in these wells.

Arcadis recommends continued semi-annual monitoring activities to further evaluate groundwater quality and concentration trends. Upon completion of the additional site soil investigation a discussion of appropriate remedial action will be held between all applicable parties and a focused *Remedial Action Plan* prepared and submitted.

LIMITATIONS

This report was prepared in accordance with the scope of work outlined in Arcadis' contract and with generally accepted professional engineering and environmental consulting practices existing at the time this report was prepared and applicable to the location of the site. It was prepared for the exclusive use of Chevron Environmental Management Company's affiliate, Union Oil Company of California ("Union Oil"), for the express purpose stated above. Any re-use of this report for a different purpose or by others not identified above shall be at the user's sole risk without liability to Arcadis. To the extent that this report is based on information provided to Arcadis by third parties, Arcadis may have made efforts to verify this third party information, but Arcadis cannot guarantee the completeness or accuracy of this information. The opinions expressed and data collected are based on the conditions of the site existing at the time of the field investigation. No other warranties, expressed or implied are made by Arcadis.



Katherine Brandt

Date: November 9, 2017

Katherine Brandt, P.G.
Principal Geologist

Date: November 9, 2017

Samuel Miles
Project Manager

ATTACHMENTS:

Table 1	Current Groundwater Gauging and Analytical Results
Table 2	Current Groundwater Analytical Results – Monitored Natural Attenuation
Table 3	Historical Groundwater Gauging and Analytical Results – July 2016 to Current
Table 4	Historical Groundwater Analytical Results – Monitored Natural Attenuation Parameters
Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Groundwater Elevation Contour Map, July 25, 2017
Figure 4	TPH-d, TPH-g, BTEX, and MTBE Concentration Map, July 25, 2017
Attachment A	Field Data Sheets and General Procedures
Attachment B	Historical Groundwater Gauging and Analytical Data
Attachment C	Laboratory Report and Chain-of-Custody Documentation

TABLES

Table 1. Current Groundwater Gauging and Analytical Results
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard, Oakland, California

Well ID	Date Sampled	TOC Elevation (feet MSL)	DTW (feet bTOC)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)	Previous Quarter GWE (feet MSL)	Change in Elevation (feet)	TPH-d (µg/L)	TPH-g (µg/L)	TPH-O&G (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	Comments
MW-1B	7/25/2017	174.06	6.75	0.00	167.31	168.85	-1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-2B	7/25/2017	173.55	6.81	0.00	166.74	169.60	-2.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-3B	7/25/2017	177.77	6.23	0.00	171.54	174.63	-3.09	**490**	**3,900**	--	**200**	**100**	**480**	**160**	**11**	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	A01, A52
MW-4B	7/25/2017	179.07	6.07	0.00	173.00	176.19	-3.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-5	7/25/2017	169.18	0.85	0.00	168.33	168.28	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-7	7/25/2017	172.11	7.05	0.00	165.06	166.33	-1.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9A	7/25/2017	173.01	5.31	0.00	167.70	165.04	2.66	**1,200**	**5,600**	--	**2,400**	**28**	**84**	**21**	**150**	**2,100**	<2.5	<2.5	<2.5	<2.5	**80**	<1,200	A01, A52
MW-9B	7/25/2017	172.78	5.52	0.00	167.26	168.85	-1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-10A	7/25/2017	174.48	7.03	0.00	167.45	168.32	-0.87	**1,300**	**16,000**	--	**6,000**	**490**	**990**	**1,800**	**650**	**3,500**	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01, A52
MW-10B	7/25/2017	174.62	7.29	0.00	167.33	168.94	-1.61	**340**	**4,000**	--	**920**	**37**	**140**	**250**	**67**	**430**	<2.5	<2.5	<2.5	<2.5	**27**	<1,200	A01, A52
MW-10S	7/25/2017	175.57	5.32	0.00	170.25	170.39	-0.14	**160**	**230**	<5,000	**1.3**	<0.50	<0.50	<1.0	**6.6**	**56**	<0.50	<0.50	<0.50	<0.50	<0.50	<250	A52
MW-11A	7/25/2017	175.37	4.96	0.00	170.41	171.94	-1.53	**1,600**	**48,000**	--	**6,900**	**5,300**	**2,300**	**11,000**	**1,600**	**3,300**	<25	<25	<25	<25	<25	<12,000	A01, A52
MW-11B	7/25/2017	174.65	4.18	0.00	170.47	167.18	3.29	**1,400**	**33,000**	--	**8,500**	**1,600**	**1,600**	**3,800**	**1,100**	**5,400**	<12	<12	<12	<12	<12	<6,200	A01, A52
MW-11S	7/25/2017	176.09	5.88	0.00	170.21	174.02	-3.81	**320**	**1,400**	<5,000	**950**	**99**	**120**	**210**	**73**	<250	<12	<12	<12	<12	<12	<6,200	A01, A52
MW-12	7/25/2017	--	8.37	0.00	--	--	--	--	**25,000**	--	**8,000**	**220**	**1,200**	**1,500**	**240**	**750**	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01
PZ-1	7/25/2017	--	8.84	0.00	--	--	--	--	**23,000**	--	**6,800**	**290**	**3,200**	**5,300**	**68**	**290**	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	A01
PZ-2	7/25/2017	--	7.46	0.00	--	--	--	--	**15,000**	--	**5,200**	**380**	**1,500**	**2,600**	**880**	**1,200**	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	A01
PZ-3	7/25/2017	--	5.92	0.00	--	--	--	--	**7,400**	--	**1,800**	**12**	**350**	**36**	**280**	**630**	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	A01

Standard Abbreviations

--	not analyzed, measured, or collected
<	not detected at or above laboratory detection limit
TOC	top of casing (surveyed reference elevation)
MSL	relative to mean sea level
DTW	depth to water
bTOC	below top of casing
SPH	separate phase hydrocarbons
µg/l	micrograms per liter (approx. equivalent to parts per billion, ppb)
<	denotes less than laboratory reporting limit

Analytes

TPH-d SGT	total petroleum hydrocarbons as diesel range organics (C12-C24) Silica Gel Treated
TPH-d	total petroleum hydrocarbons as diesel range organics (C12-C24)
TPH-g	total petroleum hydrocarbons as gasoline range organics (C6-C12)
TPH-O&G	total petroleum hydrocarbons as oil and grease range organics
MTBE	methyl tertiary butyl ether
TBA	tertiary butyl alcohol
TAME	tertiary amyl methyl ether
DIPE	di-isopropyl ether
ETBE	ethyl tertiary butyl ether
EDB	ethylene dibromide (same as 1,2-dibromoethane)
1,2-DCA	1,2-dichloroethane (same ethylene dichloride)

Notes

A01	Practical quantitation limit and method detection limit for TPH-d are raised due to sample dilution
A52	Chromatogram not typical of diesel

Calculated groundwater elevation = TOC - Depth to Water + 0.75*(Measured SPH Thickness); assuming a specific gravity of 0.75 for SPH
BOLD Concentration detected above laboratory practical quantitation limit
TOC elevations not established for MW-12, PZ1, PZ-2, or PZ-3

Table 2. Current Groundwater Analytical Results - Monitored Natural Attenuation
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard, Oakland, California

Well ID	Date Sampled	Ferrous Iron (µg/L)	Dissolved Manganese (µg/L)	Methane (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Comments
MW-3B	07/25/2017	**6,300**	**3,100**	**0.86**	<0.44	<1.0	A01, A07
MW-9A	07/25/2017	**3,600**	**890**	**0.98**	<0.44	<1.0	A01
MW-10A	07/25/2017	**4,300**	**890**	**0.81**	<0.44	<1.0	A01
MW-10B	07/25/2017	**8,300**	**4,200**	**1.2**	<0.44	<1.0	A01, A07
MW-10S	07/25/2017	**6,000**	**1,600**	**1.8**	<0.44	**20**	A01, A07
MW-11A	07/25/2017	**5,200**	**3,300**	**2.1**	<0.44	<1.0	A01, A07
MW-11B	07/25/2017	**5,600**	**1,500**	**0.30**	<0.44	<1.0	A07
MW-11S	07/25/2017	**7,600**	**1,100**	**0.71**	<0.44	<1.0	A01, A07

Standard Abbreviations

--	not analyzed, measured, or collected
<	not detected at or above laboratory detection limit
mg/L	milligrams per liter (approx. equivalent to parts per million, ppm)
µg/L	micrograms per liter (approx. equivalent to parts per billion, ppb)
BOLD	Concentration detected above laboratory practical quantitation limit

Notes

A01	Detection and quantitation limits are raised due to sample dilution
A07	Detection and quantitation limit's were raised due to sample dilution caused by high analyte concentration or matrix interference

Table 3. Historical Groundwater Gauging and Analytical Results - July 2016 to Current
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard, Oakland, California

Well ID	Date Sampled	TOC Elevation (feet MSL)	DTW (feet bTOC)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)	Previous Quarter GWE (feet MSL)	Change in Elevation (feet)	TPH-d SGT (µg/L)	TPH-d (µg/L)	TPH-g (µg/L)	TPH-O&G (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	Comments
MW-1B	7/20/2016	174.06	7.03	0.00	167.03	168.20	-1.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1/12/2017	174.06	5.21	0.00	168.85	167.03	1.82	<40	--	<50	NA	<0.30	<0.30	<0.30	<0.60	**2.4**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
	7/25/2017	174.06	6.75	0.00	167.31	168.85	-1.54	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-2B	7/20/2016	173.55	7.49	0.00	166.06	168.64	-2.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1/12/2017	173.55	3.95	0.00	169.60	166.06	3.54	<40	--	<50	NA	<0.30	<0.30	<0.30	<0.60	**5.6**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
	7/25/2017	173.55	6.81	0.00	166.74	169.60	-2.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-3B	7/20/2016	177.77	6.88	0.00	170.89	172.59	-1.70	**2,100**	--	**3,900**	--	**220**	**120**	**660**	**190**	**13**	<100	<5.0	<0.50	<0.50	<0.50	<0.50	<2,500	
	1/12/2017	177.77	3.14	0.00	174.63	170.89	3.74	**1,200**	--	**7,800**	NA	**230**	**200**	**560**	**590**	**9.2**	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01, A07, A52
	7/25/2017	177.77	6.23	0.00	171.54	174.63	-3.09	--	**490**	**3,900**	NA	**200**	**100**	**480**	**160**	**11**	<50	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	A01, A52
MW-4B	7/20/2016	179.07	6.90	0.00	172.17	173.93	-1.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1/12/2017	179.07	2.88	0.00	176.19	172.17	4.02	<40	--	<50	NA	<0.30	<0.30	<0.30	<0.60	**1.7**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
	7/25/2017	179.07	6.07	0.00	173.00	176.19	-3.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-5	7/20/2016	169.18	3.36	0.00	165.82	167.76	-1.94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1/12/2017	169.18	0.90	0.00	168.28	165.82	2.46	<40	--	<50	NA	<0.30	<0.30	<0.30	<0.60	**4.3**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
	7/25/2017	169.18	0.85	0.00	168.33	168.28	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-7	7/20/2016	172.11	7.32	0.00	164.79	165.63	-0.84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1/12/2017	172.11	5.78	0.00	166.33	164.79	1.54	<40	--	<50	NA	<0.30	<0.30	<0.30	<0.60	**2.1**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
	7/25/2017	172.11	7.05	0.00	165.06	166.33	-1.27	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-9A	7/20/2016	173.01	10.04	0.00	162.97	164.54	-1.57	**560**	--	**5,600**	--	**1,800**	**20**	**64**	**22**	**57**	**1,900**	<5.0	<5.0	<5.0	<5.0	**58**	<2,500	
	1/12/2017	173.01	7.97	0.00	165.04	162.97	2.07	**660**	--	**9,600**	NA	**1,700**	**22**	**81**	**27**	**84**	**2,100**	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01, A07, A52
	7/25/2017	173.01	5.31	0.00	167.70	165.04	2.66	--	**1,200**	**5,600**	NA	**2,400**	**28**	**84**	**21**	**150**	**2,100**	<2.5	<2.5	<2.5	<2.5	**80**	<1,200	A01, A52
MW-9B	7/20/2016	172.78	5.81	0.00	166.97	168.06	-1.09	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	1/12/2017	172.78	3.93	0.00	168.85	166.97	1.88	<40	--	<50	NA	<0.30	<0.30	<0.30	<0.60	**9.0**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
	7/25/2017	172.78	5.52	0.00	167.26	168.85	-1.59	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
MW-10A	7/20/2016	174.48	7.69	0.00	168.67	165.85	2.82	**3,700**	--	**22,000**	--	**11,000**	**180**	**960**	**900**	**400**	<100	<0.50	<0.50	<0.50	<0.50	**180**	<2,500	
	1/12/2017	174.48	6.16	0.00	168.32	168.67	-0.35	**2,200**	--	**30,000**	NA	**4,400**	**230**	**1,000**	**1,300**	**410**	**2,300**	<10	<10	<10	<10	<10	<5,000	A01, A07, A52
	7/25/2017	174.48	7.03	0.00	167.45	168.32	-0.87	--	**1,300**	**16,000**	NA	**6,000**	**490**	**990**	**1,800**	**650**	**3,500**	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01, A52
MW-10B	7/20/2016	174.62	7.59	0.00	166.93	168.19	-1.26	**1,000**	--	**8,000**	--	**2,200**	**81**	**410**	**430**	**92**	**730**	<0.50	<0.50	<0.50	<0.50	**58**	<2,500	
	1/12/2017	174.62	5.68	0.00	168.94	166.93	2.01	**1,100**	--	**7,500**	NA	**1,600**	**69**	**270**	**480**	**75**	<100	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01, A07, A52
	7/25/2017	174.62	7.29	0.00	167.33	168.94	-1.61	--	**340**	**4,000**	NA	**920**	**37**	**140**	**250**	**67**	**430**	<2.5	<2.5	<2.5	<2.5	**27**	<1,200	A01, A52
MW-10S	7/20/2016	175.57	5.21	0.00	167.98	169.44	-1.46	**48**	--	**100**	<5,000	**10**	**0.35**	**22**	<0.60	**8.2**	**91**	**1.8**	<5.0	<5.0	<5.0	<5.0	<250	
	1/12/2017	175.57	5.18	0.00	170.39	167.98	2.41	**40**	--	**170**	<5.0	**14**	<0.30	**23**	<0.60	**5.1**	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	A52
	7/25/2017	175.57	5.32	0.00	170.25	170.39	-0.14	--	**160**	**230**	<5.0	**1.3**	<0.50	<0.50	<1.0	**6.6**	**56**	<0.50	<0.50	<0.50	<0.50	<0.50	<250	A52
MW-11A	7/20/2016	175.37	7.10	0.00	170.16	171.09	-0.93	**10,000**	--	**49,000**	--	**8,500**	**3,100**	**1,300**	**7,300**	**2,100**	**3,000**	<25	<25	<25	<25	<25	<12,000	
	1/12/2017	175.37	3.43	0.00	171.94	170.16	1.78	**10,000**	--	**64,000**	NA	**4,900**	**2,900**	**1,600**	**11,000**	**1,800**	**3,300**	<25	<25	<25	<25	<25	<12,000	A01, A07, A52
	7/25/2017	175.37	4.96	0.00	170.41	171.94	-1.53	--	**1,600**	**48,000**	NA	**6,900**	**5,300**	**2,300**	**11,000**	**1,600**	**3,300**	<25	<25	<25	<25	<25	<12,000	A01, A52
MW-11B	7/20/2016	174.65	5.75	0.00	168.90	166.94	1.96	**3,700**	--	**29,000**	--	**9,500**	**1,300**	**1,000**	**2,100**	**1,800**	**4,400**	<25	<25	<25	<25	<25	<12,000	
	1/12/2017	174.65	7.47	0.00	167.18	168.90	-1.72	**2,100**	--	**30,000**	NA	**6,000**	**700**	**740**	**1,600**	**1,400**	**4,600**	<25	<25	<25	<25	<25	<12,000	A01, A52
	7/25/2017	174.65	4.18	0.00	170.47	167.18	3.29	--	**1,400**	**33,000**	NA	**8,500**	**1,600**	**1,600**	**3,800**	**1,100**	**5,400**	<12	<12	<12	<12	<12	<6,200	A01, A52
MW-11S	7/20/2016	176.09	5.75	0.00	170.34	172.86	-2.52	**460**	--	**1,700**	--	<5,000	**280**	**7.7**	**83**	**81**	**74**	<10	<0.50	<0.50	<0.50	<0.50	<250	
	1/12/2017	176.09	2.07	0.00	174.02	170.34	3.68	<40	--	<50	<5.0	<0.30	<0.30	<0.30	<0.60	<0.50	<10	<0.50	<0.50	<0.50	<0.50	<0.50	<250	
	7/25/2017	176.09	5.88	0.00	170.21	174.02	-3.81	--	**320**	**1,400**	<5.0	**950**	**99**	**120**	**210**	**73**	<250	<12	<12	<12	<12	<12	<6,200	A01, A52
MW-12	7/25/2017	--	8.37	0.00	--	--	--	--	--	**25,000**	NA	**8,000**	**220**	**1,200**	**1,500**	**240**	**750**	<5.0	<5.0	<5.0	<5.0	<5.0	<2,500	A01
PZ-1	7/25/2017	--	8.84	0.00	--	--	--	--	--	**23,000**	NA	**6,800**	**290**	**3,200**	**5,300**	**68**	**290**	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	A01
PZ-2	7/25/2017	--	7.46	0.00	--	--	--	--	--	**15,000**	NA	**5,200**	**380**	**1,500**	**2,600**	**880**	**1,200**	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	A01

Table 3. Historical Groundwater Gauging and Analytical Results - July 2016 to Current
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard, Oakland, California

Well ID	Date Sampled	TOC Elevation (feet MSL)	DTW (feet bTOC)	SPH Thickness (feet)	Groundwater Elevation (feet MSL)	Previous Quarter GWE (feet MSL)	Change in Elevation (feet)	TPH-d SGT (µg/L)	TPH-d (µg/L)	TPH-g (µg/L)	TPH-O&G (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	TBA (µg/L)	TAME (µg/L)	DIPE (µg/L)	ETBE (µg/L)	EDB (µg/L)	1,2-DCA (µg/L)	Ethanol (µg/L)	Comments
PZ-3	7/25/2017	--	5.92	0.00	--	--	--	--	--	**7,400**	NA	**1,800**	**12**	**350**	**36**	**280**	**630**	<2.5	<2.5	<2.5	<2.5	<2.5	<1,200	A01

Standard Abbreviations

--	not analyzed, measured, or collected
<	not detected at or above laboratory detection limit
TOC	top of casing (surveyed reference elevation)
MSL	relative to mean sea level
DTW	depth to water
bTOC	below top of casing
SPH	separate phase hydrocarbons
µg/l	micrograms per liter (approx. equivalent to parts per billion, ppb)
NA	not available/not applicable

Analytes

TPH-d SGT	total petroleum hydrocarbons as diesel range organics (C12-C24) Silica Gel Treated
TPH-g	total petroleum hydrocarbons as gasoline range organics (C6-C12)
TPH-O&G	total petroleum hydrocarbons as oil and grease range organics
MTBE	methyl tertiary butyl ether
TBA	tertiary butyl alcohol
TAME	tertiary amyl methyl ether
DIPE	di-isopropyl ether
ETBE	ethyl tertiary butyl ether
EDB	ethylene dibromide (same as 1,2-dibromoethane)
1,2-DCA	1,2-dichloroethane (same ethylene dichloride)

Notes

A01	Practical quantitation limit and method detection limit for TPH-d are raised due to sample dilution
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrixinterference.
A52	Chromatogram not typical of diesel

Calculated groundwater elevation = TOC - Depth to Water + 0.75*(Measured SPH Thickness); assuming a specific gravity of 0.75 for SPH

BOLD Concentration detected above laboratory practical quantitation limit

Table 4. Historical Groundwater Analytical Results - Monitored Natural Attenuation Parameters - July 2016 to Current

76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard, Oakland, California

Well ID	Date Sampled	Ferrous Iron (µg/L)	Dissolved Manganese (µg/L)	Methane (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	Comments
MW-3B	7/20/2016	**7,300**	**3,600**	**4.80**	<0.44	<1.0	A01, A07
	1/12/2017	**3,500**	**3,300**	**3.80**	<0.44	<1.0	A01, A07
	07/25/2017	**6,300**	**3,100**	**0.86**	<0.44	<1.0	A01, A07
MW-9A	7/20/2016	**11,000**	**880**	**0.79**	<0.88	<2.0	A01, A07
	1/12/2017	**11,000**	**920**	**0.38**	<0.44	<1.0	A01, A07
	07/25/2017	**3,600**	**890**	**0.98**	<0.44	<1.0	A01
MW-10A	7/20/2016	**5,600**	**950**	**0.62**	<0.44	<1.0	A01, A07
	1/12/2017	**4,800**	**950**	**0.70**	<0.44	<1.0	A01, A07
	07/25/2017	**4,300**	**890**	**0.81**	<0.44	<1.0	A01
MW-10B	7/20/2016	**32,000**	**4,700**	**0.38**	<0.44	<1.0	A01, A07
	1/12/2017	**8,000**	**4,000**	**0.20**	<0.44	<1.0	A01, A07
	07/25/2017	**8,300**	**4,200**	**1.2**	<0.44	<1.0	A01, A07
MW-10S	7/20/2016	**4,500**	**800**	**0.4400**	<0.44	**34**	A01
	1/12/2017	**880**	**1,900**	**0.0012**	<0.44	**26**	
	07/25/2017	**6,000**	**1,600**	**1.8**	<0.44	**20**	A01, A07
MW-11A	7/20/2016	**12,000**	**3,500**	**2.30**	<0.44	<1.0	A01, A07
	1/12/2017	**4,400**	**3,200**	**0.32**	<0.44	<1.0	A01, A07
	07/25/2017	**5,200**	**3,300**	**2.1**	<0.44	<1.0	A01, A07
MW-11B	7/20/2016	**20,000**	**1,400**	**0.46**	<0.44	<1.0	A01, A07
	1/12/2017	**9,100**	**1,500**	**0.37**	<0.44	<1.0	A01
	07/25/2017	**5,600**	**1,500**	**0.30**	<0.44	<1.0	A07
MW-11S	7/20/2016	**13,000**	**1,400.0**	**0.48**	<0.44	<1.0	A01, A07
	1/12/2017	**130**	**5.3**	<0.001	**1**	**19**	
	07/25/2017	**7,600**	**1,100**	**0.71**	<0.44	<1.0	A01, A07

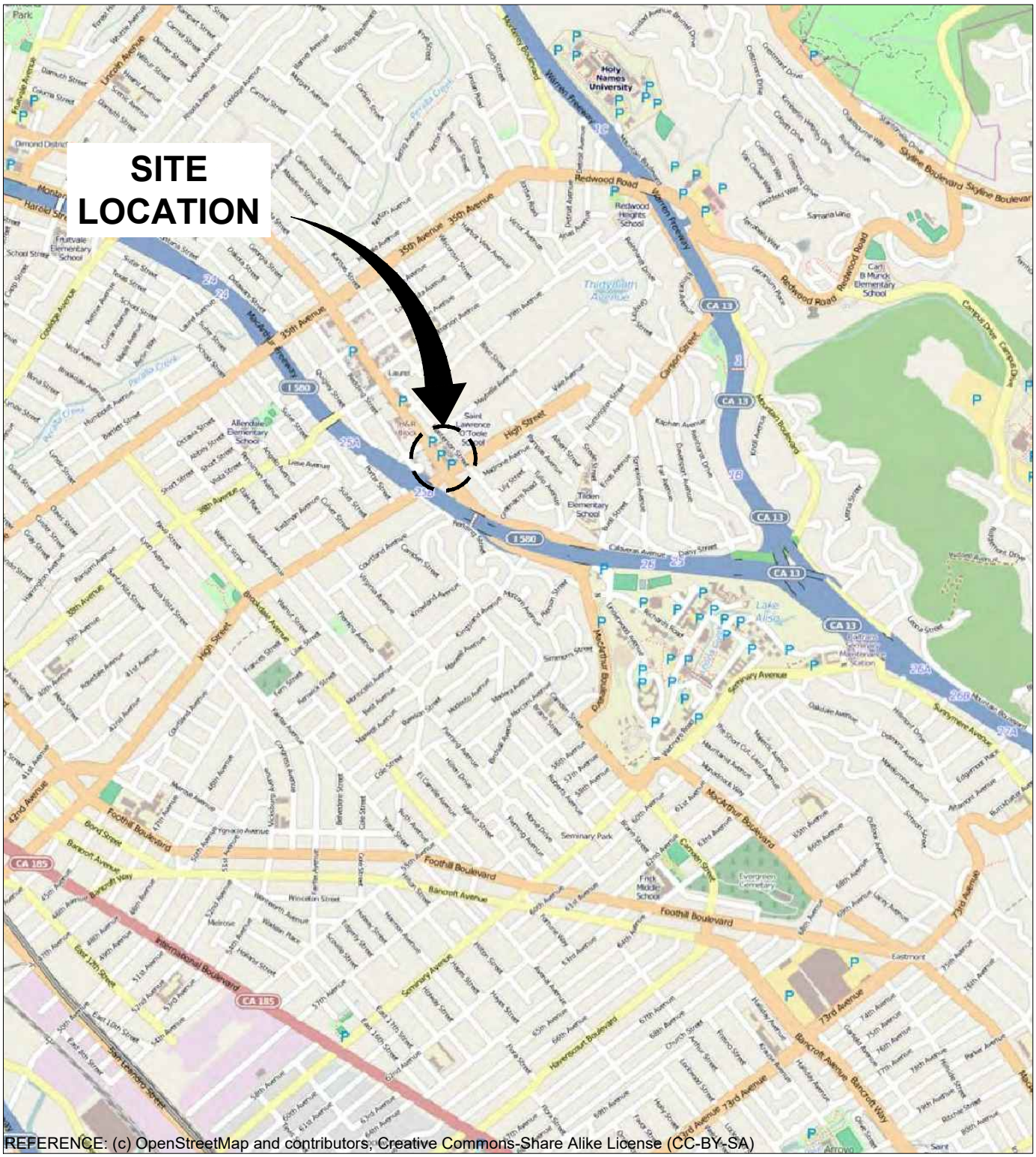
Standard Abbreviations

mg/L	milligrams per liter (approx. equivalent to parts per million, ppm)
µg/L	micrograms per liter (approx. equivalent to parts per billion, ppb)
BOLD	Concentration detected above laboratory practical quantitation limit

Notes

A01	Detection and quantitation limits are raised due to sample dilution
A07	Detection and quantitation limit's were raised due to sample dilution caused by high analyte concentration or matrix interference

FIGURES



N

0 2,000' 4,000'

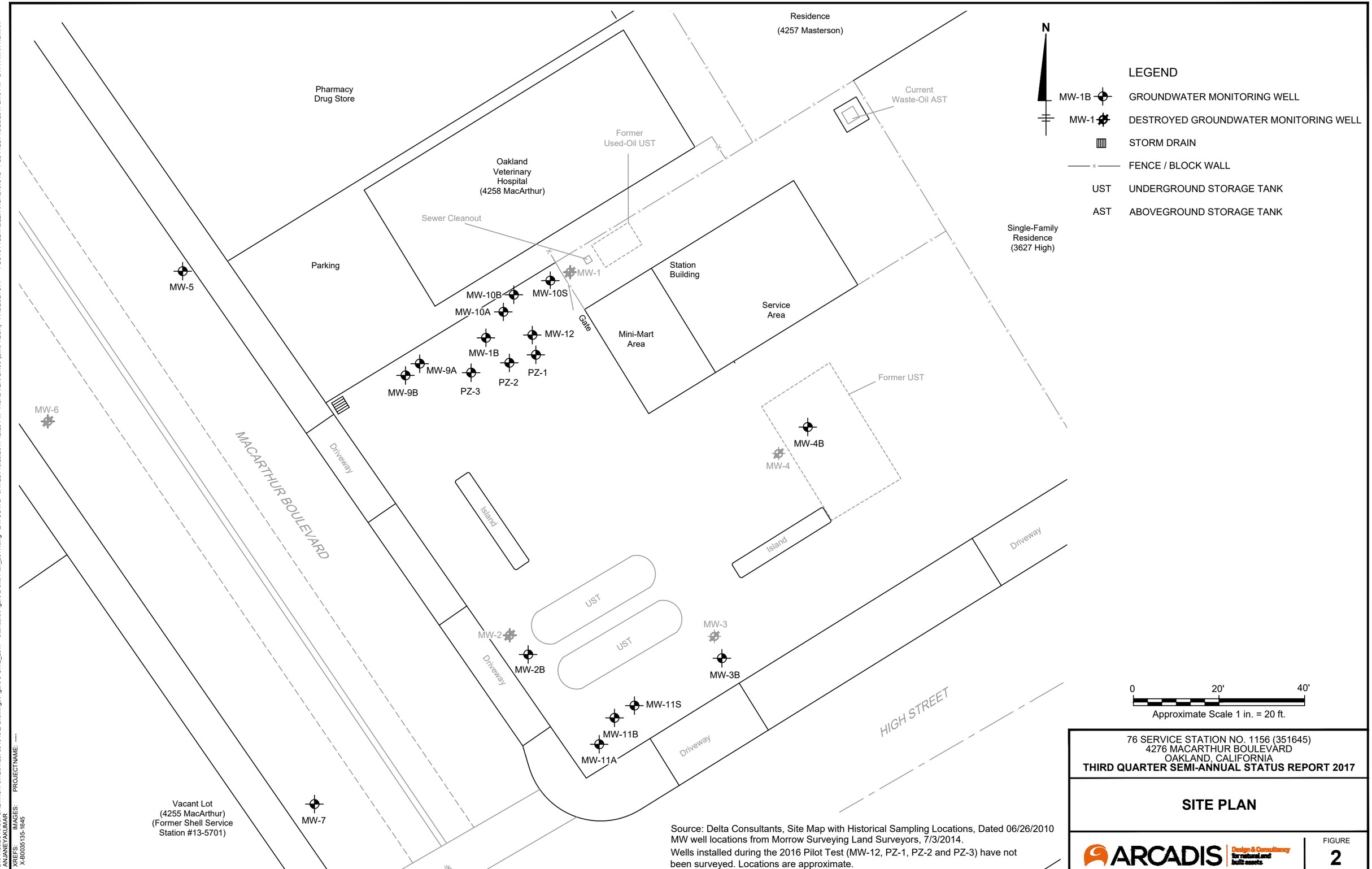
Approximate Scale: 1 in. = 2,000 ft.

76 SERVICE STATION NO. 1156 (351645)
4276 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA
THIRD QUARTER SEMI-ANNUAL STATUS REPORT 2017

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1



Source: Delta Consultants, Site Map with Historical Sampling Locations, Dated 06/26/2010
MW well locations from Morrow Surveying Land Surveyors, 7/3/2014.
Wells installed during the 2016 Pilot Test (MW-12, PZ-1, PZ-2 and PZ-3) have not been surveyed. Locations are approximate.

76 SERVICE STATION NO. 1156 (351645)
4276 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA
THIRD QUARTER SEMI-ANNUAL STATUS REPORT 2017

SITE PLAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2

CITY:EMERYVILLE, CA DIV/GROUP:ENVCAD DB:A.REYES
D:\PROJECTS\00_CHEVRON SITES\125. 351645\E-Drawings\Figure 3-GWE_2017 - Standard\Figure 2-Site Plan_2017.dwg LAYOUT: 2 SAVED: 10/25/2017 2:48 PM BY: PAVAN KUMAR
ANJANEYAKUMAR 10/25/2017 12:25 PM ACADVER: 21.0S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ARCADIS.CTB PLOTTED: 10/25/2017 2:48 PM BY: PAVAN KUMAR
XREFS: IMAGES: PROJECTNAME: ----
X-B0035135-1645

Pharmacy
Drug Store

Oakland
Veterinary
Hospital
(4258 MacArthur)

Former
Used-Oil UST

Current
Waste-Oil AST

Sewer Cleanout

Parking

Station
Building

Service
Area

Mini-Mart
Area

Gate

MW-5
(168.33)*

MW-10S
(170.25)*

MW-1

MW-10B
(167.33)*

MW-10A
(167.45)*

MW-1B
(167.31)

MW-12
(NE)

PZ-1
(NE)

PZ-2
(NE)

MW-9A
(167.70)*

MW-9B
(167.26)*

PZ-3
(NE)

168

170

172

Former UST

MW-4B
(173.00)

MW-4

MW-6

MACARTHUR BOULEVARD

Driveway

0.083 ft/ft

Island

Island

Driveway

UST

UST

MW-2

MW-3

MW-2B
(166.74)

MW-3B
(171.54)

Driveway

MW-11B
(170.47)*

MW-11S
(170.21)*

MW-11A
(170.41)*

168

170

172

HIGH STREET

Driveway

Vacant Lot
(4255 MacArthur)
(Former Shell Service
Station #13-5701)

MW-7
(165.06)*

Crosswalk

N

LEGEND

MW-1B	GROUNDWATER MONITORING WELL
MW-1	DESTROYED GROUNDWATER MONITORING WELL
	STORM DRAIN
	FENCE / BLOCK WALL
(173)	GROUNDWATER ELEVATION (FEET ABOVE MEAN SEA LEVEL)
172	GROUNDWATER ELEVATION CONTOUR; DASHED WHERE INFERRED (FEET ABOVE MEAN SEA LEVEL)
*	NOT USED FOR CONTOURING, WELL SCREEN INTERVAL NOT STANDARD
UST	UNDERGROUND STORAGE TANK
AST	ABOVEGROUND STORAGE TANK
	APPROXIMATE DIRECTION OF GROUNDWATER FLOW
0.083 ft/ft	APPROXIMATE HYDRAULIC GRADIENT (FEET/FOOT)
(NE)	GROUNDWATER ELEVATION NOT ESTABLISHED

0 20' 40'

Approximate Scale 1 in. = 20 ft.

Source: Delta Consultants, Site Map with Historical Sampling Locations, Dated 06/26/2010
MW well locations from Morrow Surveying Land Surveyors, 7/3/2014.
Wells installed during the 2016 Pilot Test (MW-12, PZ-1, PZ-2 and PZ-3) have not been surveyed. Locations are approximate.

76 SERVICE STATION NO. 1156 (351645)
4276 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA
THIRD QUARTER SEMI-ANNUAL STATUS REPORT 2017

GROUNDWATER ELEVATION CONTOUR MAP JULY 25, 2017

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3

MW-10A	
DATE	7/25/2017
TPH-d	**1,300**
TPH-g	**16,000**
B	**6,000**
T	**490**
E	**990**
X	**1,800**
MTBE	**650**

MW-10B	
DATE	7/25/2017
TPH-d	**340**
TPH-g	**4,000**
B	**920**
T	**37**
E	**140**
X	**250**
MTBE	**67**

MW-10S	
DATE	7/25/2017
TPH-d	**160**
TPH-g	**230**
B	**1.3**
T	<0.50
E	<0.50
X	<1.0
MTBE	**6.6**

MW-12	
DATE	7/25/2017
TPH-d	NA
TPH-g	**25,000**
B	**8,000**
T	**220**
E	**1,200**
X	**1,500**
MTBE	**240**

PZ-1	
DATE	7/25/2017
TPH-d	NA
TPH-g	**23,000**
B	**6,800**
T	**290**
E	**3,200**
X	**5,300**
MTBE	**68**

MW-9A	
DATE	7/25/2017
TPH-d	**1,200**
TPH-g	**5,600**
B	**2,400**
T	**28**
E	**84**
X	**21**
MTBE	**150**

PZ-3	
DATE	7/25/2017
TPH-d	NA
TPH-g	**7,400**
B	**1,800**
T	**12**
E	**350**
X	**36**
MTBE	**280**

PZ-2	
DATE	7/25/2017
TPH-d	NA
TPH-g	**15,000**
B	**5,200**
T	**380**
E	**1,500**
X	**2,600**
MTBE	**880**

MW-11B	
DATE	7/25/2017
TPH-d	**1,400**
TPH-g	**33,000**
B	**8,500**
T	**1,600**
E	**1,600**
X	**3,800**
MTBE	**1,100**

MW-11A	
DATE	7/25/2017
TPH-d	**1,600**
TPH-g	**48,000**
B	**6,900**
T	**5,300**
E	**2,300**
X	**11,000**
MTBE	**1,600**

MW-3B	
DATE	7/25/2017
TPH-d	**490**
TPH-g	**3,900**
B	**200**
T	**100**
E	**480**
X	**160**
MTBE	**11**

MW-11S	
DATE	7/25/2017
TPH-d	**320**
TPH-g	**1,400**
B	**950**
T	**99**
E	**120**
X	**210**
MTBE	**73**

Residence
(4257 Masterson)

Current
Waste-Oil AST

Former
Used-Oil UST

Oakland
Veterinary
Hospital
(4258 MacArthur)

Sewer Cleanout

Parking

Service
Area

Mini-Mart
Area

Gate

Former UST

MW-1
MW-10S
MW-10B
MW-10A
MW-12
MW-1B
(NS)
PZ-1
PZ-2
PZ-3
MW-9A
MW-9B
(NS)
MW-5
(NS)
MW-6
MW-4
MW-4B
(NS)
MW-3
MW-3B
MW-2
MW-2B
(NS)
MW-11S
MW-11B
MW-11A
MW-7
(NS)

MACARTHUR BOULEVARD

HIGH STREET

Driveway

UST

Vacant Lot
(4255 MacArthur)
(Former Shell Service
Station #13-5701)

N

LEGEND

MW-1B	GROUNDWATER MONITORING WELL
MW-1	DESTROYED GROUNDWATER MONITORING WELL
	STORM DRAIN
x	FENCE / BLOCK WALL
UST	UNDERGROUND STORAGE TANK
AST	ABOVEGROUND STORAGE TANK
<0.50	NOT DETECTED AT OR ABOVE THE STATED LIMIT
BOLD	CONCENTRATION DETECTED ABOVE LABORATORY PRACTICAL QUANTITATION LIMIT
(NS)	NOT SAMPLED
(NA)	NOT AVAILABLE

LOCATION IDENTIFICATION	
TPH-d	TOTAL PETROLEUM HYDROCARBONS AS DIESEL RANGE ORGANICS (µg/L)
TPH-g	TOTAL PETROLEUM HYDROCARBONS AS GASOLINE RANGE ORGANICS (µg/L)
B	BENZENE (µg/L)
T	TOLUENE (µg/L)
E	ETHYLBENZENE (µg/L)
X	TOTAL XYLENES (µg/L)
MTBE	METHYL TERTIARY BUTYL ETHER (µg/L)

0 20' 40'

Approximate Scale 1 in. = 20 ft.

Source: Delta Consultants, Site Map with Historical Sampling Locations, Dated 06/26/2010
MW well locations from Morrow Surveying Land Surveyors, 7/3/2014.
Wells installed during the 2016 Pilot Test (MW-12, PZ-1, PZ-2 and PZ-3) have not been surveyed. Locations are approximate.

76 SERVICE STATION NO. 1156 (351645)
4276 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA
THIRD QUARTER SEMI-ANNUAL STATUS REPORT 2017

TPH-d, TPH-g, BTEX, AND MTBE CONCENTRATION MAP JULY 25, 2017

ARCADIS Design & Consultancy for natural and built assets

FIGURE **4**

ATTACHMENT A

Field Data Sheets and General Procedures

GETTLER-RYAN INC.

TRANSMITTAL

August 1, 2017
G-R #17155646

TO: Mr. Samuel Miles
Arcadis
1100 Olive Way, Suite 800
Seattle, WA 98101

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

RE: Chevron Facility
#351645/1156
4276 Mac Arthur Boulevard
Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DESCRIPTION
VIA PDF	Groundwater Monitoring and Sampling Data Package **Second Semi Annual Event of July 25, 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/351645/1156

WELL CONDITION STATUS SHEET

Client/
Facility #: **Chevron #351645 / 1156**
Site Address: **4276 Macarthur Blvd.**
City: **Oakland, CA**

Job #: **385646**
Event Date: 7/25/17
Sampler: G.M.

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y/N	REPLACE CAP Y/N	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y/N
MW-1B	OK	OK	OK	OK	OK	OK	OK	NO	NO	EMCO/12/2	
MW-2B										8	
MW-9A											
MW-9B											
MW-10A										12	
MW-10B										CIRCULAR SPLATS/18/6	
MW-10S										EMCO/8/2	
MW-12											
PZ-1											
PZ-2											
PZ-3											

Comments

WELL CONDITION STATUS SHEET

Client/ Facility #: **Chevron #351645 / 1156**
Site Address: **4276 Macarthur Blvd.**
City: **Oakland, CA**

Job #: **385646**
Event Date: 7.25.17
Sampler: FT

WELL ID	Vault Frame Condition	Gasket/ O-Ring (M) Missing (R) Replaced	Bolts (M) Missing (R) Replaced	Bolt Flanges B=Broken S=Stripped R=Retaped	Apron Condition C=Cracked B=Broken G=Gone	Grout Seal (Deficient) Inches from TOC	Casing (Condition prevents tight cap seal)	REPLACE LOCK Y (N)	REPLACE CAP Y (N)	WELL VAULT Manufacture/Size/ # of Bolts	Pictures Taken Y (N)
MW-3B	OK	→					→			Emco | 12" | 2	
MW-4B	OK	→					→			" " "	
MW-5	OK	→		S 2	OK	→	→			Boats L | 8" | 3	
MW-7	OK	→		S 2	OK	→	→			Emco | 12" | 2	
MW-11A	OK	→					→			Emco | 8" | 2	
MW-11B	OK	→					→			" " "	
MW-11S	OK	→				→	TO CLOSE TO GRADE	↓	↓	Emco | 12" | 2	

Comments

STANDARD OPERATING PROCEDURE
GROUNDWATER SAMPLING

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

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

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

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

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

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

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID MW-1B Date Monitored: 7/25/17
Well Diameter 2 in.
Total Depth 24.90 ft.
Depth to Water 6.75 ft.

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

☐ Check if water column is less then 0.50 ft.

18.15 xVF ____ = ____ x3 case volume = Estimated Purge Volume: ____ gal.

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

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

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS: M/O

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID MW-2B Date Monitored: 7/25/17
Well Diameter 2 in.
Total Depth 24.88 ft.
Depth to Water 6.81 ft.

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

☐ Check if water column is less then 0.50 ft.

18.07 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		Disposable Bailer	
Stainless Steel Bailer		Pressure Bailer	
Stack Pump		Metal Filters	
Peristaltic Pump		Peristaltic Pump	
QED Bladder Pump		QED Bladder Pump	
Other:		Other:	

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description:

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS: M10

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7.25.17 (inclusive)
City: Oakland, CA Sampler: FT

Well ID MW-3B Date Monitored: 7.25.17
Well Diameter 2 in.
Total Depth 24.92 ft.
Depth to Water 6.23 ft.

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

☐ Check if water column is less then 0.50 ft.

18.69 xVF .17 = 3.17 x3 case volume = Estimated Purge Volume: 10.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.96

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

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

Start Time (purge): 0745 Weather Conditions: SUNNY
Sample Time/Date: 0930 / 7.25.17 Water Color: CLEAR Odor: Ⓨ / N MODERATE
Approx. Flow Rate: ✓ gpm. Sediment Description: NONE
Did well de-water? No If yes, Time: Volume: gal. DTW @ Sampling: 9.86

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
PRE: 0745	----------	PRE: 6.97	PRE: 618	PRE: 22.0	PRE: 1.7	PRE: -55
0752	3.5	7.02	627	20.2	1.6	-60
0759	7.0	7.07	635	20.0	1.6	-63
0806	10.0	7.11	642	19.7	1.5	-69

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3B	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	2 x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	1 x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	2 x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	1 x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS: SLOW RECOVERY

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7.25.17 (inclusive)
City: Oakland, CA Sampler: ET

Well ID MW-4B Date Monitored: 7.25.17
Well Diameter 2 in.
Total Depth 24.80 ft.
Depth to Water 6.07 ft.

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

☐ Check if water column is less then 0.50 ft.

18.73 xVF ___ = ___ x3 case volume = Estimated Purge Volume: ___ gal.

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

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

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS: M/O

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: **Chevron #351645 / 1156** Job Number: **17155646**

Site Address: **4276 Macarthur Blvd.** Event Date: 7.25.17 (inclusive)

City: **Oakland, CA** Sampler: FT

Well ID **MW-5** Date Monitored: 7-25-17

Well Diameter 2 in.

Total Depth 25.30 ft.

Depth to Water .85 ft.

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

☐ Check if water column is less then 0.50 ft.

24.45 xVF ___ = ___ x3 case volume = Estimated Purge Volume: ___ gal.

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

Purge Equipment:

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

Sampling Equipment:

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

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

Start Time (purge): ___ Weather Conditions: ___

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS: M10

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7.25.17 (inclusive)
City: Oakland, CA Sampler: FT

Well ID MW-7 Date Monitored: 7.25.17
Well Diameter 2 in.
Total Depth 23.96 ft.
Depth to Water 7.05 ft.

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

☐ Check if water column is less then 0.50 ft.

16.91 xVF ___ = ___ x3 case volume = Estimated Purge Volume: ___ gal.

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

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

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

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

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS: M/O

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID MW-9A Date Monitored: 9/25/17
Well Diameter 2 in.
Total Depth 15.10 ft.
Depth to Water 5.31 ft.

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

☐ Check if water column is less then 0.50 ft.

9.79 xVF 0.17 = 1.66 x3 case volume = Estimated Purge Volume: 5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 7.26

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

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 ft
Visual Confirmation/Description:
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ltr
Amt Removed from Well: ltr
Water Removed: ltr

Start Time (purge): 0735 Weather Conditions: SUNNY
Sample Time/Date: 0820/7/25/17 Water Color: CLOUDY Odor: (Y) N SLIGHT
Approx. Flow Rate: - gpm. Sediment Description: SILT
Did well de-water? NO If yes, Time: - Volume: - gal. DTW @ Sampling: 6.77

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / (mS) µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
PRE: 0734	----------	PRE: 7.66	PRE: 1.91	PRE: 23.9	PRE: 0.69	PRE: -51
0740	2	7.62	1.85	22.3	0.81	-44
0744	3.5	7.60	1.87	22.4	0.84	-43
0748	5	7.59	1.86	22.3	0.85	-42

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9A	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	2 x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	1 x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	2 x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	1 x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

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 #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID MW-9B Date Monitored: 7/25/17
Well Diameter 2 in.
Total Depth 20.17 ft.
Depth to Water 5.52 ft.

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

☐ Check if water column is less then 0.50 ft.

14.65 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: 0 ft
Visual Confirmation/Description: ___
Skimmer / Absorbant Sock (circle one)
Amt Removed from Skimmer: ___ ltr
Amt Removed from Well: ___ ltr
Water Removed: ___ ltr

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

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

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS: M/O

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID MW-10A Date Monitored: 7/25/17
Well Diameter 2 in.
Total Depth 14.51 ft.
Depth to Water 7.03 ft.

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

☐ Check if water column is less then 0.50 ft.

7.48 xVF 0.17 = 1.27 x3 case volume = Estimated Purge Volume: 4 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.52

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

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: Ø 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): 0930 Weather Conditions: SUNNY
Sample Time/Date: 1008/7/25/17 Water Color: CLEAR/ Odor: (Y) N MODERATE
Approx. Flow Rate: - gpm. Sediment Description: SILT
Did well de-water? NO If yes, Time: - Volume: - gal. DTW @ Sampling: 8.16

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS/(mS) µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
PRE: 0929	----------	PRE: 7.71	PRE: 1.70	PRE: 23.1	PRE: 0.70	PRE: -111
0934	1.5	7.64	1.64	21.6	0.89	-101
0938	3	7.63	1.62	21.4	0.95	-99
0942	4	7.61	1.61	21.3	0.98	-98

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10A	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	2 x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	1 x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	2 x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	1 x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

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 #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID MW-10B Date Monitored: 7/25/17
Well Diameter 2 in.
Total Depth 19.25 ft.
Depth to Water 7.29 ft. ☐ Check if water column is less then 0.50 ft.

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

11.96 xVF 0.17 = 2.03 x3 case volume = Estimated Purge Volume: 6.5 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.68

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: Ø 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): 0835 Weather Conditions: SUNNY
Sample Time/Date: 0917/ 7/25/17 Water Color: CLOUDY Odor (Y) N MODERATE
Approx. Flow Rate: — gpm. Sediment Description: SLT
Did well de-water? No If yes, Time: — Volume: — gal. DTW @ Sampling: 9.45

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS) µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
PRE: 0834	----------	PRE: 8.11	PRE: 1.29	PRE: 21.1	PRE: 1.01	PRE: -127
0840	2.25	7.95	1.20	20.4	1.39	-116
0845	4.5	7.93	1.19	20.4	1.40	-114
0850	6.5	7.92	1.18	20.3	1.40	-111

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10B	4 x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	2 x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	1 x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	2 x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	1 x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

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 #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID MW-10S Date Monitored: 7/25/17
Well Diameter 4 in.
Total Depth 10.34 ft.
Depth to Water 5.32 ft.

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

☐ Check if water column is less then 0.50 ft.

5.02 xVF 0.66 = 3.31 x3 case volume = Estimated Purge Volume: 10 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.32

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

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: Ø 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): 0645 Weather Conditions: SUNNY
Sample Time/Date: 1100 / 7/25/17 Water Color: CLOUDY Odor: (Y) N MODERATE
Approx. Flow Rate: 1 gpm. Sediment Description: SILT
Did well de-water? YES If yes, Time: 0654 Volume: 4 gal. DTW @ Sampling: 5.66

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
PRE:	----------	PRE: 7.72	PRE: 1.44	PRE: 22.9	PRE: 1.14	PRE: -95
0648	3	7.66	1.39	21.1	1.51	-81

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10S	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	2 x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	1 x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	1 x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	2 x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	1 x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

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 #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7.25.17 (inclusive)
City: Oakland, CA Sampler: FT

Well ID MW-11A Date Monitored: 7.25.17
Well Diameter 2 in.
Total Depth 15.00 ft.
Depth to Water 4.96 ft.

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

☐ Check if water column is less then 0.50 ft.

10.04 xVF .17 = 1.70 x3 case volume = Estimated Purge Volume: 5.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.96

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

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

Start Time (purge): 0852 Weather Conditions: SUNNY
Sample Time/Date: 1015 / 7.25.17 Water Color: CLEAR Odor: Ⓨ / N STRONG
Approx. Flow Rate: ✓ gpm. Sediment Description: NONE
Did well de-water? NO If yes, Time: _____ Volume: _____ gal. DTW @ Sampling: 6.89

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
PRE: 0852	----------	PRE: 8.36	PRE: 708	PRE: 23.2	PRE: .90	PRE: -97
0855	1.5	8.44	745	21.9	.80	-102
0858	3.0	8.47	753	21.6	.80	-110
0902	5.0	8.57	761	21.3	.70	-117

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-11	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	2 x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	1 x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	2 x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	1 x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS: SLOW RECOVERY

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7.25.17 (inclusive)
City: Oakland, CA Sampler: FT

Well ID MW- 11B Date Monitored: 7.25.17
Well Diameter 2 in.
Total Depth 20.19 ft.
Depth to Water 4.18 ft. ☐ Check if water column is less then 0.50 ft.

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

16.01 xVF .17 = 2.72 x3 case volume = Estimated Purge Volume: 8.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 7.38

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

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

Start Time (purge): 0821 Weather Conditions: SUNNY
Sample Time/Date: 0945 7.25.17 Water Color: CLEAR Odor: Ⓨ / N STRONG
Approx. Flow Rate: ~ gpm. Sediment Description: NONE
Did well de-water? NO If yes, Time: Volume: gal. DTW @ Sampling: 7.30

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS µmhos/cm)	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
PRE: 0821	----------	PRE: 7.88	PRE: 843	PRE: 23.2	PRE: 1.3	PRE: -88
0826	2.5	7.95	846	21.9	1.2	-92
0831	5.0	8.01	854	21.7	1.1	-97
0837	8.0	8.07	862	21.4	1.1	-101

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-11B	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	2 x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	1 x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	2 x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	1 x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS: SLOW RECOVERY

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility#: Chevron #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7.25.17 (inclusive)
City: Oakland, CA Sampler: FT

Well ID MW-11S Date Monitored: 7-25-17
Well Diameter 4 in.
Total Depth 10.16 ft.
Depth to Water 5.88 ft.

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

☐ Check if water column is less then 0.50 ft.

4.28 xVF .66 = 2.82 x3 case volume = Estimated Purge Volume: 8.0 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 6.73

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

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

Start Time (purge): 0715 Weather Conditions: SUNNY
Sample Time/Date: 0915 / 7.25.17 Water Color: CLEAR Odor: (Y) / N STRONG
Approx. Flow Rate: — gpm. Sediment Description: NONE
Did well de-water? No If yes, Time: Volume: gal. DTW @ Sampling: 6.45

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS) mS µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
PRE: 0715	----------	PRE: 7.26	PRE: 722	PRE: 22.9	PRE: 1.5	PRE: -76
0720	2.5	7.32	730	21.5	1.4	-81
0725	5.0	7.36	739	21.2	1.4	-85
0731	8.0	7.39	747	20.9	1.3	-91

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-11S	6 x voa vial	YES	HCL	BC LABS	TPH-GRO(8015)/BTEX(8021)MTBE(8260)/8 OXYS(8260)
	2 x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	1 x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	1 x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	2 x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	1 x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS: SLOW RECOVERY

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility#: Chevron #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID MW-12 Date Monitored: 7/25/17
Well Diameter 4 in.
Total Depth 22.75 ft.
Depth to Water 8.37 ft.

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

☐ Check if water column is less then 0.50 ft.

14.38 xVF 0.66 = 9.49 x3 case volume = Estimated Purge Volume: 29 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.24

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: Ø 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): 0315 Weather Conditions: COLD
Sample Time/Date: 0630 / 7/25/17 Water Color: CLEAR Odor (Y) N STRONG
Approx. Flow Rate: 3 gpm. Sediment Description: NONE
Did well de-water? YES If yes, Time: 0328 Volume: 16 gal. DTW @ Sampling: 8.61

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / mS) µmhos/cm	Temperature (C / F)	D.O. (mg/L)	ORP (mV)
PRE: 0314	----------	PRE: 7.62	PRE: 1.27	PRE: 20.1	PRE: 2.79	PRE: 10
0319	10	7.68	1.29	20.6	2.42	14

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-12	3 x voa vial	YES	HCL	BC LABS	TPH-GRO(~~8015~~)/BTEX(8021)MTBE(8260)/~~8 OXYS(8260~~)
	x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

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 #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID P2 [redacted]-1 Date Monitored: 7/25/17
Well Diameter 2 in.
Total Depth 20.23 ft.
Depth to Water 8.84 ft.

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

☐ Check if water column is less then 0.50 ft.

11.39 xVF 0.17 = 1.93 x3 case volume = Estimated Purge Volume: 6 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.11

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

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 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): 0345 Weather Conditions: Cloudy
Sample Time/Date: 0420/7/25/17 Water Color: Clear Odor: (Y) N STRONG
Approx. Flow Rate: — gpm. Sediment Description: NONE
Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 10.12

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / (mS) µmhos/cm)	Temperature (C) F	D.O. (mg/L)	ORP (mV)
PRE: 0344	----------	PRE: 7.59	PRE: 1.17	PRE: 23.1	PRE: 0.89	PRE: -64
0348	2	7.47	1.12	22.4	1.09	-51
0351	4	7.46	1.12	22.1	1.11	-50
0355	6	7.44	1.11	21.9	1.14	-49

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
P2 [redacted]-1	3 x voa vial	YES	HCL	BC LABS	TPH-GRO~~(8015)~~/BTEX(8021)MTBE(8260)~~/8 OXYS(8260)~~
	x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

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 #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID P2 [redacted]-2 Date Monitored: 7/25/17
Well Diameter 2 in.
Total Depth 18.70 ft.
Depth to Water 7.46 ft.

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

☐ Check if water column is less then 0.50 ft.

11.24 xVF 0.17 = 1.91 x3 case volume = Estimated Purge Volume: 6 gal.

Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.70

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

Time Started: _____ (2400 hrs)
Time Completed: _____ (2400 hrs)
Depth to Product: _____ ft
Depth to Water: _____ ft
Hydrocarbon Thickness: Ø 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): 0435 Weather Conditions: CLOUDY
Sample Time/Date: 0515 7/25/17 Water Color: CLOUDY Odor (Y) N STRONG
Approx. Flow Rate: — gpm. Sediment Description: SILT
Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 8.69

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS (mS) µmhos/cm)	Temperature (C F)	D.O. (mg/L)	ORP (mV)
PRE: 0434	----------	PRE: 7.54	PRE: 1.49	PRE: 22.4	PRE: 0.59	PRE: -50
0439	2	7.49	1.40	22.1	0.70	-45
0444	4	7.47	1.39	22.0	0.71	-44
0448	6	7.46	1.38	21.9	0.72	-43

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
P2 ~~MW~~-2	3 x voa vial	YES	HCL	BC LABS	TPH-GRO(~~8015~~)/BTEX(8021)MTBE(~~8~~260)/~~8-OXYS(8260)~~
	x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

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 #351645 / 1156 Job Number: 17155646
Site Address: 4276 Macarthur Blvd. Event Date: 7/25/17 (inclusive)
City: Oakland, CA Sampler: GM

Well ID PZ [redacted]3
Well Diameter 2 in.
Total Depth 17.81 ft.
Depth to Water 5.92 ft.
11.89 xVF 0.17 = 2.02 x3 case volume = Estimated Purge Volume: 6.5 gal.
Depth to Water w/ 80% Recharge [(Height of Water Column x 0.20) + DTW]: 8.29

Date Monitored: 7/25/17

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 then 0.50 ft.

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

Time Started: (2400 hrs)
Time Completed: (2400 hrs)
Depth to Product: ft
Depth to Water: ft
Hydrocarbon Thickness: 0 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): 0530 Weather Conditions: CLOUDY
Sample Time/Date: 0610 / 7/25/17 Water Color: CLOUDY Odor: (Y) N MODERATE
Approx. Flow Rate: - gpm. Sediment Description: SILT
Did well de-water? NO If yes, Time: — Volume: — gal. DTW @ Sampling: 7.92

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (µS / ~~mS~~ µmhos/cm)	Temperature (°C / F)	D.O. (mg/L)	ORP (mV)
PRE: 0529	----------	PRE: 7.77	PRE: 1.45	PRE: 21.9	PRE: 6.49	PRE: -54
0535	2.25	7.62	1.39	22.6	0.53	-41
0540	4.5	7.60	1.36	22.5	0.54	-40
0545	6.5	7.58	1.35	22.4	0.55	-39

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
PZ [redacted]-3	3 x voa vial	YES	HCL	BC LABS	TPH-GRO~~(8015)~~/BTEX(8021)MTBE(8260)/~~8 OXYS(8260)~~
	x 1 liter ambers	YES	NP	BC LABS	TPH-DRO w/sgc(8015M)
	x 1 liter ambers	YES	HCL	BC LABS	OIL & GREASE(1664)
	x 250ml poly	YES	HCL	BC LABS	FERROUS IRON(SM20 3500 Fe B)
	x voa vial	YES	NP	BC LABS	METHANE(RSK-175)
	x 500ml poly	YES	NP	BC LABS	NITRATE/SULFATE(EPA 300.0)/ DISSOLVED MANGANESE(200.7)

COMMENTS:

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

CHAIN OF CUSTODY FORM

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

COC 1 of 2

Union Oil Site ID: [redacted] 1156	Union Oil Consultant: ARCADIS
Site Global ID: T0600102279	Consultant Contact: SAMUEL MILES
Site Address: 4276 MACARTHUR BLVD OAKLAND CA	Consultant Phone No.: (206) 726 4720
	Sampling Company: Fettig & Ryan Inc
Union Oil PM: JAMES P KIERNAN	Sampled By (PRINT): GILBERT MEDINA
Union Oil PM Phone No.: (925) 842 3220	Sampler Signature:
Charge Code: NWRTB- 0 351645 -0- LAB	**BC Laboratories, Inc.** **Project Manager: Molly Meyers** 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911

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

ANALYSES REQUIRED

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

Special Instructions: LAB TO FILTER DISSOLVED MANGANESE SAMPLES

SAMPLE ID

Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time	# of Containers	TPH - Diesel by EPA 8015 M	TPH - G by [redacted] (8015M)	BTEX/MTBE/OXYS by EPA 8260B	[redacted] BTEX MTBE (8260B)	EPA 8260B Full List with OXYS	Ferrous Iron (SM20 3500 Fe B)	Methane (RSK-175)	Nitrate Sulfate (EPA 300.0)	Dissolved Manganese (6010)	Oil & Grease (1664)		Notes / Comments
~~QA~~	~~W-S-A~~		~~170725~~		~~2~~		~~X~~		~~X~~								7/31 DW: amend
MW-3B	W-S-A		↓	0930	12	X	↓	X			X	X	X	X			COC-removed
MW-9A	W-S-A		↓	0820	↓	↓	↓	↓			↓	↓	↓	↓			QA
MW-10A	W-S-A		↓	1008	↓	↓	↓	↓			↓	↓	↓	↓			
MW-10B	W-S-A		↓	0917	↓	↓	↓	↓			↓	↓	↓	↓			
MW-10S	W-S-A		↓	1100	13	↓	↓	↓			↓	↓	↓	↓	X		
MW-11A	W-S-A		↓	1015	12	↓	↓	↓			↓	↓	↓	↓			
MW-11B	W-S-A		↓	0945	↓	↓	↓	↓			↓	↓	↓	↓			
MW-11S	W-S-A		↓	0915	13	↓	↓	↓			↓	↓	↓	↓	X		amended
[redacted]	W-S-A																COC
	W-S-A																
	W-S-A																7/31/17

Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time :	Relinquished By	Company	Date / Time:
[signature]	[signature]	7/25/17 1330						
Received By	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time :**	**Received By**	**Company**	**Date / Time:**
Grey Bogan	BC Lab	7-25-17 1330						

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: 1156	Union Oil Consultant: ARCADIS
Site Global ID: T0600102279	Consultant Contact: SAMUEL MILES
Site Address: 4276 MACARTHUR BLVD OAKLAND, CA	Consultant Phone No.: (706) 726-4720
	Sampling Company: CATLIN RYAN INC
Union Oil PM: JAMES P. KIERNAN	Sampled By (PRINT): CALVERT MEDINA
Union Oil PM Phone No.: (925) 842-3220	Sampler Signature:
Charge Code: NWRTB- 0 351645 -0- LAB	BC Laboratories, Inc.
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.	Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911

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

Special Instructions

SAMPLE ID						ANALYSES REQUIRED										
Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time	# of Containers	TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/TAME/DIPE/ETBE/EDB/EDC by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS						Notes / Comments
MW 12	W-S-A		170725	0630	3		X	X								
PZ-1	W-S-A			0420												
PZ-2	W-S-A			0515												
PZ-3	W-S-A			0610												
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															

Relinquished By	Company	Date / Time:
	GRINC	7/25 1330
Relinquished By	Company	Date / Time :
Relinquished By	Company	Date / Time:

Received By	Company	Date / Time:
J Davy Bagon	BCLab	7-25-17 1330
Received By	Company	Date / Time :
Received By	Company	Date / Time:

ATTACHMENT B

Historical Groundwater Gauging and Analytical Data

Table 1
Well Construction Details
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	WELL INSTALLATION DATE	CASING DIAMETER (in.)	BORING DEPTH (ft. bgs)	SCREEN INTERVAL (ft. bgs)	SCREEN SIZE (in.)	FILTER PACK (ft. bgs)	BENTONITE SEAL (ft. bgs)	GROUT INTERVAL (ft. bgs)
MW-1*	7/16/1999	2	26.5	5-25	0.01	4-26.5	3-4	0-3
MW-1B	8/17/2010	2	25	20-25	0.02	19-25	18-19	0.5-18
MW-2*	7/16/1999	2	26.5	5-25	0.01	4-26.5	3-4	0-3
MW-2B	8/16/2010	2	25	20-25	0.02	19-25	18-19	0.5-18
MW-3*	7/16/1999	2	31.5	5-25	0.01	4-27	3-4; 27-31.5	0-3
MW-3B	8/16/2010	2	25	20-25	0.02	19-25	18-19	0.5-18
MW-4*	7/16/1999	2	26.5	5-25	0.01	4-26.5	3-4	0-3
MW-4B	8/13/2010	2	25	20-25	0.02	19-25	18-19	0.5-18
MW-5	8/29/2001	2	25	5-25	0.02	4-25	3-4	0.5-3
MW-6	8/29/2001	2	25	5-25	0.02	4-25	3-4	0.5-3
MW-7	8/29/2001	2	25	5-25	0.02	4-25	3-4	0.5-3
MW-8	10/30/2007	2	25	15-25	0.01	13-25	11-13	1-11
MW-9A	3/18/2013	2	15	10-15	0.02	8-15	1.5-8	1-1.5
MW-9B	3/18/2013	2	20	15-20	0.02	13-20	1.5-13	1-1.5
MW-10A	3/18/2013	2	15	10-15	0.02	8-15	1.5-8	1-1.5
MW-10B	3/18/2013	2	20	15-20	0.02	13-20	1.5-13	1-1.5
MW-10S	6/12/2014	4	10	6.5-10	0.02	3.5-10	1-3.5	n/a
MW-11A	3/19/2013	2	15	10-15	0.02	8-15	1.5-8	1-1.5
MW-11B	3/19/2013	2	20	15-20	0.02	13-20	1.5-13	1-1.5
MW-11S	6/11/2014	4	10	6.5-10	0.02	3.5-10	1-3.5	n/a

Notes:
* = Destroyed and replaced with "B" well in 2010
ft. bgs = Feet below ground surface
ID = Identification
in. = Inches
n/a = Not available

Table 5
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	OIL AND GREASE (µg/L)	TPH-DRO W/SGC (µg/L)	TPH-GRO (µg/L)	TPH-GRO (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
MW-1	7/20/1999	174.86	7.50	0	167.36	--	16,000	120,000	--	11,000	27,000	3,300	18,000	
	9/28/1999	174.86	8.75	0	166.11	--	2,410	6,020	--	1,030	1,040	68.5	412	
	1/7/2000	174.86	9.05	0.02	165.82	--	7,870	72,700	--	7,410	13,900	2,070	9,620	GWE corrected
	3/31/2000	174.86	7.18	0	167.68	--	3,600	92,000	--	10,000	23,000	3,200	14,000	
	7/14/2000	174.86	7.68	0	167.18	--	8,580	108,000	--	8,250	18,700	3,750	17,800	
	10/3/2000	174.86	7.99	0	166.87	--	9,260	96,000	--	8,760	20,000	3,350	15,600	
	1/3/2001	174.86	9.18	0	165.68	--	11,000	37,000	--	5,800	13,000	1,700	8,100	
	4/4/2001	174.86	8.05	0	166.81	--	14,000	86,900	--	7,780	18,500	2,470	11,800	
	7/17/2001	174.86	7.01	0	167.85	--	2,200	79,000	--	5,600	11,000	2,800	12,000	
	10/3/2001	177.54	7.89	0	169.65	--	--	99,000	--	8,200	18,000	3,000	16,000	
	10/5/2001	177.54	7.91	0	169.63	--	13,000	--	--	--	--	--	--	
	1/28/2002	177.54	5.98	0	171.56	--	4,400	110,000	--	8,900	19,000	2,600	12,000	
	4/25/2002	177.54	6.19	0	171.35	--	9,000	93,000	--	8,100	18,000	3,000	15,000	
	7/18/2002	177.54	6.99	0	170.55	--	9,200	69,000	--	5,400	10,000	2,100	10,000	
	10/7/2002	177.54	7.73	0	169.81	--	3,400	82,000	--	9,200	20,000	2,600	13,000	
	1/6/2003	177.54	5.48	0	172.06	--	5,100	82,000	--	6,500	18,000	2,700	11,000	
	4/7/2003	177.54	6.30	0	171.24	--	2,800	74,000	--	7,000	15,000	2,400	11,000	
	7/7/2003	177.54	6.47	0	171.07	--	7,000	60,000	--	6,400	11,000	2,600	11,000	
	10/9/2003	177.54	7.85	0	169.69	--	4,300	91,000	81,000	8,100	17,000	3,200	14,000	Sampled for TPH-GRO by 8015M on 11/14/2003
	1/14/2004	177.54	6.69	0	170.85	--	6,200	98,000	--	8,000	21,000	2,600	15,000	
	4/28/2004	177.54	6.43	0	171.11	--	--	93,000	--	9,000	20,000	1,300	10,000	
	7/12/2004	177.54	7.44	0	170.10	--	270	57,000	--	6,900	7,200	1,600	580	
	10/25/2004	177.54	7.54	0	170.00	--	5,100	66,000	--	7,300	19,000	2,700	14,000	
	1/17/2005	177.54	5.79	0	171.75	--	6,400	86,000	--	8,600	21,000	3,200	15,000	
	4/6/2005	177.54	4.93	0	172.61	--	2,800	85,000	--	8,400	20,000	3,200	16,000	
	7/8/2005	177.54	5.35	0	172.19	--	6,400	69,000	--	7,100	17,000	2,700	14,000	
	10/7/2005	177.54	5.96	0	171.58	--	5,500	68,000	--	5,900	8,300	1,800	8,300	
	1/27/2006	177.54	5.08	0	172.46	--	9,000	94,000	--	7,400	19,000	3,700	14,000	
	4/28/2006	177.54	4.85	0	172.69	--	9,200	74,000	--	6,400	13,000	2,300	10,000	
	7/28/2006	177.54	5.32	0	172.22	--	5,100	74,000	--	6,600	12,000	3,100	13,000	
	10/27/2006	177.54	6.13	0	171.41	--	4,600	100,000	--	8,300	20,000	3,600	16,000	
	1/10/2007	177.54	5.47	0	172.07	--	12,000	84,000	--	7,100	15,000	2,600	13,000	
	4/13/2007	177.54	5.60	0	171.94	--	8,400	27,000	--	5,600	840	2,300	3,200	
	7/19/2007	177.54	5.69	0	171.85	--	10,000	83,000	--	6,000	15,000	2,600	13,000	
	10/8/2007	177.54	--	--	--	--	--	--	--	--	--	--	--	Gate locked; no key available
	1/9/2008	177.54	5.15	0	172.39	--	12,000	40,000	--	6,000	4,800	2,600	5,100	Gauged on 1/18/2008
	4/4/2008	177.54	5.25	0	172.29	--	15,000	71,000	--	6,800	12,000	3,300	13,000	
	7/3/2008	177.54	6.00	0	171.54	--	9,300	92,000	--	7,000	16,000	3,500	15,000	
	10/3/2008	177.54	7.16	0	170.38	--	4,400	69,000	--	7,200	18,000	3,500	14,000	
	1/22/2009	177.54	6.61	0	170.93	--	8,000	45,000	--	410	720	2,400	9,600	
	4/13/2009	177.54	5.11	0	172.43	--	4,800	5,400	--	300	640	300	940	
	7/23/2009	177.54	6.04	0	171.50	--	2,800	85,000	--	5,800	15,000	3,500	13,000	
	2/1/2010	177.54	4.86	0	172.68	ND<5,000	3,900	74,000	--	7,000	11,000	3,100	10,000	
	8/2/2010	177.54	5.68	0	171.86	ND<5,000	3,900	71,000	--	7,000	11,000	3,300	10,000	
	8/24/2010	DESTROYED												
MW-1B	11/1/2010	174.05	7.15	0	166.90	ND<5,000	ND<50	99	--	3.0	0.30	ND<0.30	ND<0.60	
	1/31/2011	174.05	6.62	0	167.43	ND<5,000	ND<50	170	--	6.7	0.64	0.33	ND<0.60	
	4/26/2011	174.05	6.14	0	167.91	ND<5,000	ND<50	220	--	7.3	0.55	0.32	0.69	
	7/25/2011	174.05	6.69	0	167.36	ND<5,000	ND<40	140	--	7.8	0.35	ND<0.30	ND<0.60	
	10/7/2011	174.06	6.86	0	167.20	ND<5,000	ND<40	120	--	5.7	ND<0.30	ND<0.30	ND<0.60	
	1/23/2012	174.06	6.96	0	167.10	ND<5,000	ND<40	89	--	3.6	ND<0.30	ND<0.30	ND<0.60	

Table 5
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	OIL AND GREASE (µg/L)	TPH-DRO W/SGC (µg/L)	TPH-GRO (µg/L)	TPH-GRO (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	4/6/2012	174.06	5.89	0	168.17	ND<5,000	ND<40	110	--	4.5	ND<0.30	ND<0.30	ND<0.60	
	7/24/2012	174.06	6.98	0	167.08	ND<5,000	ND<40	130	--	6.2	ND<0.30	ND<0.30	ND<0.60	
	2/8/2013	174.06	6.65	0	167.41	ND<5,000	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/10/2013	174.06	7.11	0	166.95	ND<5,000	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	0.61	
	1/16/2014	174.06	7.73	0	166.33	ND<5,000	ND<40	ND<50	--	1.0	ND<0.30	ND<0.30	ND<0.60	
	7/22/2014	174.06	7.18	0	166.88	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/27/2015	174.06	6.63	0	167.43	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/21/2015	174.06	7.64	0	166.42	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/20/2016	**174.06**	**5.86**	**0**	**168.20**	**--**	**ND<40**	**ND<50**	**--**	**ND<0.30**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-2	7/20/1999	173.01	5.40	--	167.61	--	--	ND	--	ND	ND	ND	ND	
	9/28/1999	173.01	5.60	0	167.41	--	--	1,390	--	124	ND	62.9	43.1	
	1/7/2000	173.01	5.92	0	167.09	--	--	1,450	--	99	ND	23.8	16	
	3/31/2000	173.01	5.23	0	167.78	--	--	ND	--	42	ND	ND	ND	
	7/14/2000	173.01	5.52	0	167.49	--	--	ND	--	44.7	ND	ND	ND	
	10/3/2000	173.01	6.04	0	166.97	--	--	ND	--	56.7	ND	ND	ND	
	1/3/2001	173.01	6.42	0	166.59	--	--	ND	--	ND	ND	ND	ND	
	4/4/2001	173.01	6.14	0	166.87	--	--	ND	--	ND	ND	ND	ND	
	7/17/2001	173.01	5.30	0	167.71	--	--	ND	--	ND	ND	ND	ND	
	10/3/2001	173.50	7.38	0	166.12	--	--	ND<250	--	2.7	ND<2.5	ND<2.5	ND<2.5	
	1/28/2002	173.50	5.68	0	167.82	--	--	ND<250	--	2.5	4.4	2.8	7.4	
	4/25/2002	173.50	5.82	0	167.68	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	7/18/2002	173.50	6.90	0	166.60	--	--	ND<500	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	10/7/2002	173.50	7.54	0	165.96	--	--	4,300	--	ND<10	27	21	75	
	1/6/2003	173.50	6.79	0	166.71	--	--	5,900	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	4/7/2003	173.50	6.49	0	167.01	--	--	1,500	--	ND<10	14	11	38	
	7/7/2003	173.50	6.72	0	166.78	--	--	ND<2,500	--	ND<25	ND<25	ND<25	ND<25	
	10/9/2003	173.50	7.16	0	166.34	--	--	3,500	ND<5,000	ND<50	ND<50	ND<50	ND<100	Sampled for TPH-GRO by 8015M on 11/14/2003
	1/14/2004	173.50	5.53	0	167.97	--	--	3,200	--	ND<25	ND<25	ND<25	ND<25	
	4/28/2004	173.50	5.21	0	168.29	--	--	22,000	--	ND<3	9.2	ND<3	ND<6	
	7/12/2004	173.50	5.83	0	167.67	--	--	1,700	--	3.8	18	2.6	16	
	10/25/2004	173.50	6.89	0	166.61	--	--	3,400	--	ND<25	ND<25	ND<25	ND<25	
	1/17/2005	173.50	5.70	0	167.80	--	--	1,700	--	ND<10	ND<10	ND<10	ND<10	
	4/6/2005	173.50	4.50	0	169.00	--	--	3,000	--	ND<20	ND<20	ND<20	ND<20	
	7/8/2005	173.50	4.69	0	168.81	--	--	ND<2,000	--	ND<20	ND<20	ND<20	ND<20	
	10/7/2005	173.50	4.61	0	168.89	--	--	7,500	--	6.7	6.6	ND<3.0	ND<6.0	
	1/27/2006	173.50	4.10	0	169.40	--	--	2,500	--	1.0	2.6	ND<0.30	ND<0.60	
	4/28/2006	173.50	3.75	0	169.75	--	--	3,100	--	9.4	3.6	0.94	3.4	
	7/28/2006	173.50	4.34	0	169.16	--	--	3,000	--	2.0	ND<1.5	ND<1.5	ND<3.0	
	10/27/2006	173.50	5.62	0	167.88	--	--	1,800	--	1.5	ND<1.5	ND<1.5	ND<3.0	
	1/10/2007	173.50	4.02	0	169.48	--	--	2,100	--	1.1	ND<0.60	ND<0.60	ND<1.2	
	4/13/2007	173.50	4.03	0	169.47	--	--	3,300	--	12	1.6	0.46	1.1	
	7/19/2007	173.50	4.41	0	169.09	--	--	2,500	--	21	0.64	5.1	1.5	
	10/8/2007	173.50	4.93	0	168.57	--	--	3,400	--	38	1.6	13	2.1	
	1/9/2008	173.50	3.03	0	170.47	--	--	1,700	--	6.2	2.5	0.61	0.91	Gauged on 1/18/2008
	4/4/2008	173.50	3.52	0	169.98	--	--	1,400	--	15	2.1	0.76	ND<0.60	
	7/3/2008	173.50	4.70	0	168.80	--	--	1,100	--	14	1.1	2.0	1.2	
	10/3/2008	173.50	5.57	0	167.93	--	ND<50	740	--	14	ND<0.30	4.5	6.9	
	1/22/2009	173.50	5.03	0	168.47	--	ND<50	640	--	4.6	ND<0.30	ND<0.30	ND<0.60	
	4/13/2009	173.50	3.73	0	169.77	--	ND<50	940	--	7.1	ND<0.30	ND<0.30	ND<0.60	
	7/23/2009	173.50	4.39	0	169.11	--	230	700	--	12	6.0	5.4	13	
	2/1/2010	173.50	4.33	0	169.17	--	140	860	--	17	13	0.83	2.4	

Table 5
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	OIL AND GREASE (µg/L)	TPH-DRO W/SGC (µg/L)	TPH-GRO (µg/L)	TPH-GRO (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	8/2/2010	173.50	5.16	0	168.34	--	210	1,200	--	9.5	32	1.4	2.4	
	8/24/2010	DESTROYED												
MW-2B	11/1/2010	173.55	11.27	0	162.28	--	57	550	--	7.8	2.7	2.1	0.99	
	1/31/2011	173.55	7.79	0	165.76	--	ND<50	420	--	1.7	0.47	0.59	ND<0.60	
	4/26/2011	173.55	9.09	0	164.46	--	ND<50	390	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/25/2011	173.55	3.91	0	169.64	--	ND<40	210	--	1.7	ND<0.30	ND<0.30	ND<0.60	
	10/7/2011	173.55	4.50	0	169.05	--	52	110	--	1.0	ND<0.30	ND<0.30	ND<0.60	
	1/23/2012	173.55	6.96	0	166.59	--	ND<40	110	--	0.73	ND<0.30	ND<0.30	ND<0.60	
	4/6/2012	173.55	5.67	0	167.88	--	ND<40	120	--	0.36	ND<0.30	ND<0.30	ND<0.60	
	7/24/2012	173.55	5.33	0	168.22	--	ND<40	73	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	2/8/2013	173.55	4.58	0	168.97	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/10/2013	173.55	7.06	0	166.49	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/16/2014	173.55	5.58	0	167.97	ND<5,000	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/22/2014	173.55	6.18	0	167.37	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/27/2015	173.55	4.98	0	168.57	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/21/2015	173.55	10.35	0	163.20	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/20/2016	**173.55**	**4.91**	**0**	**168.64**	**--**	**ND<40**	**ND<50**	**--**	**ND<0.30**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-3	7/20/1999	178.44	8.50	--	169.94	--	--	1,000	--	76	52	79	76	
	9/28/1999	178.44	8.31	0	170.13	--	--	1,860	--	174	95.4	71.8	135	
	1/7/2000	178.44	8.56	0	169.88	--	--	28,400	--	2,450	3,090	1,560	3,910	
	3/31/2000	178.44	8.42	0	170.02	--	--	26,000	--	1,300	2,900	2,600	3,500	
	7/14/2000	178.44	8.61	0	169.83	--	--	24,500	--	1,850	2,630	2,750	3,900	
	10/3/2000	178.44	9.14	0	169.30	--	--	22,000	--	1,910	2,020	2,400	2,680	
	1/3/2001	178.44	9.06	0	169.38	--	--	14,000	--	1,600	1,100	2,300	1,400	
	4/4/2001	178.44	8.98	0	169.46	--	--	19,600	--	1,150	1,470	2,100	1,820	
	7/17/2001	178.44	7.46	0	170.98	--	--	26,000	--	1,500	2,100	2,100	3,400	
	10/3/2001	178.13	9.81	0	168.32	--	--	22,000	--	830	1,900	1,700	3,000	
	1/28/2002	178.13	7.39	0	170.74	--	--	30,000	--	880	2,600	1,800	4,300	
	4/25/2002	178.13	7.86	0	170.27	--	--	18,000	--	500	2,000	1,300	3,800	
	7/18/2002	178.13	8.83	0	169.30	--	--	37,000	--	1,800	3,800	2,200	8,000	
	10/7/2002	178.13	9.71	0	168.42	--	--	26,000	--	600	2,000	1,800	6,400	
	1/6/2003	178.13	7.40	0	170.73	--	--	27,000	--	800	2,100	2,000	6,400	
	4/7/2003	178.13	8.17	0	169.96	--	--	28,000	--	660	2,200	1,900	6,300	
	7/7/2003	178.13	8.35	0	169.78	--	--	33,000	--	1,200	2,500	2,700	8,300	
	10/9/2003	178.13	9.39	0	168.74	--	--	3,800	6,000	120	260	390	1,200	Sampled for TPH-GRO by 8015M on 11/14/2003
	1/14/2004	178.13	6.86	0	171.27	--	--	5,100	--	120	240	310	720	
	4/28/2004	178.13	6.63	0	171.50	--	--	7,300	--	250	440	580	1300	
	7/12/2004	178.13	7.41	0	170.72	--	--	5,500	--	350	310	120	350	
	10/25/2004	178.13	8.81	0	169.32	--	--	3,300	--	96	140	270	490	
	1/17/2005	178.13	6.37	0	171.76	--	--	3,400	--	150	270	360	750	
	4/6/2005	178.13	4.69	0	173.44	--	--	14,000	--	420	1,300	1,000	3,100	
	7/8/2005	178.13	5.23	0	172.90	--	--	5,000	--	180	290	500	800	
	10/7/2005	178.13	6.35	0	171.78	--	--	6,800	--	270	120	ND<0.30	210	
	1/27/2006	178.13	5.24	0	172.89	--	--	3,200	--	120	140	270	460	
	4/28/2006	178.13	5.01	0	173.12	--	--	4,500	--	130	250	380	670	
	7/28/2006	178.13	6.21	0	171.92	--	--	4,700	--	160	240	510	730	
	10/27/2006	178.13	6.93	0	171.20	--	--	3,700	--	150	160	460	530	
	1/10/2007	178.13	5.93	0	172.20	--	--	4,800	--	180	160	550	600	
	4/13/2007	178.13	6.10	0	172.03	--	--	5,100	--	180	240	550	710	
	7/19/2007	178.13	6.51	0	171.62	--	--	2,000	--	110	64	220	190	

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Historical Groundwater Monitoring Data and Analytical Results
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	OIL AND GREASE (µg/L)	TPH-DRO W/SGC (µg/L)	TPH-GRO (µg/L)	TPH-GRO (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	10/8/2007	178.13	7.05	0	171.08	--	--	2,100	--	72	65	180	290	
	1/9/2008	178.13	3.65	0	174.48	--	--	4,200	--	200	160	510	580	Gauged on 1/18/2008
	4/4/2008	178.13	5.69	0	172.44	--	--	7,500	--	270	390	810	1,200	
	7/3/2008	178.13	7.28	0	170.85	--	--	2,300	--	99	66	210	220	
	10/3/2008	178.13	8.40	0	169.73	--	1,200	12,000	--	740	620	1,500	2,700	
	1/22/2009	178.13	7.68	0	170.45	--	270	2,000	--	120	79	290	290	
	4/13/2009	178.13	6.28	0	171.85	--	150	3,600	--	110	150	180	510	
	7/23/2009	178.13	7.20	0	170.93	--	310	3,400	--	180	150	360	650	
	2/1/2010	178.13	5.29	0	172.84	--	390	6,500	--	180	92	300	250	
	8/2/2010	178.13	6.83	0	171.30	--	540	8,600	--	140	110	320	1,000	
	8/24/2010	DESTROYED												
MW-3B	11/1/2010	177.77	6.82	0	170.95	--	58	990	--	31	32	47	50	
	1/31/2011	177.77	5.30	0	172.47	--	65	2,800	--	32	20	39	47	
	4/26/2011	177.77	4.64	0	173.13	--	93	2,800	--	36	55	80	82	
	7/25/2011	177.77	5.53	0	172.24	--	100	1,700	--	28	33	80	73	
	10/7/2011	177.77	6.08	0	171.69	--	81	1,700	--	32	20	88	47	
	1/23/2012	177.77	6.90	0	170.87	--	120	1,800	--	39	17	75	20	
	4/6/2012	177.77	4.23	0	173.54	--	ND<40	1,200	--	36	25	80	41	
	7/24/2012	177.77	6.42	0	171.35	--	190	1,500	--	66	10	76	39	
	2/8/2013	177.77	5.60	0	172.17	--	ND<40	4,400	--	170	93	450	150	
	7/10/2013	177.77	6.71	0	171.06	--	350	2,800	--	190	60	530	82	
	1/16/2014	177.77	7.63	0	170.14	5,300	40	3,800	--	190	71	380	210	
	7/22/2014	177.77	6.89	0	170.88	--	370	8,600	--	190	120	670	190	
	1/27/2015	177.77	5.00	0	172.77	--	94	6,400	--	240	84	480	140	
	7/21/2015	177.77	7.28	0	170.49	--	280	4,200	--	210	100	570	220	
	1/20/2016	**177.77**	**5.18**	**0**	**172.59**	**--**	**240**	**4,700**	**--**	**160**	**52**	**230**	**80**	
MW-4	7/20/1999	179.10	7.40	--	171.70	--	--	69	--	2.7	0.77	ND	7.1	
	9/28/1999	179.10	7.19	0	171.91	--	--	4,050	--	1,250	72	51.3	133	
	1/7/2000	179.10	8.98	0	170.12	--	--	7,010	--	2,260	167	271	276	
	3/31/2000	179.10	7.26	0	171.84	--	--	5,500	--	1,800	230	330	400	
	7/14/2000	179.10	7.67	0	171.43	--	--	7,940	--	2,810	332	450	247	
	10/3/2000	179.10	8.12	0	170.98	--	--	11,400	--	3,110	437	519	816	
	1/3/2001	179.10	9.10	0	170.00	--	--	8,600	--	2,500	340	480	960	
	4/4/2001	179.10	8.63	0	170.47	--	--	9,950	--	2,380	126	416	725	
	7/17/2001	179.10	6.49	0	172.61	--	--	10,000	--	2,300	110	410	800	
	10/3/2001	178.96	7.01	0	171.95	--	--	7,800	--	2,100	85	380	390	
	1/28/2002	178.96	6.21	0	172.75	--	--	12,000	--	2,100	130	350	670	
	4/25/2002	178.96	5.49	0	173.47	--	--	3,300	--	1,300	42	270	250	
	7/18/2002	178.96	8.28	0	170.68	--	--	4,800	--	1,300	71	290	220	
	10/7/2002	178.96	7.49	0	171.47	--	--	5,100	--	1,400	110	330	380	
	1/6/2003	178.96	6.36	0	172.60	--	--	5,600	--	1,100	57	260	320	
	4/7/2003	178.96	6.24	0	172.72	--	--	5,100	--	1,100	55	190	370	
	7/7/2003	178.96	6.43	0	172.53	--	--	3,000	--	920	28	170	330	
	10/9/2003	178.96	7.97	0	170.99	--	--	530	700	100	2.2	5.4	14	Sampled for TPH-GRO by 8015M on 11/14/2003
	1/14/2004	178.96	6.30	0	172.66	--	--	530	--	88	4.1	9.9	11	
	4/28/2004	178.96	5.68	0	173.28	--	--	1,200	--	200	5.3	21	13	
	7/12/2004	178.96	6.48	0	172.48	--	--	3,600	--	1,000	14	260	72	
	10/25/2004	178.96	6.85	0	172.11	--	--	490	--	34	ND<2.5	ND<2.5	ND<2.5	
	1/17/2005	178.96	4.56	0	174.40	--	--	620	--	100	2.6	15	8.0	
	4/6/2005	178.96	2.90	0	176.06	--	--	630	--	81	9.6	16	41	

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Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	OIL AND GREASE (µg/L)	TPH-DRO W/SGC (µg/L)	TPH-GRO (µg/L)	TPH-GRO (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	7/8/2005	178.96	3.74	0	175.22	--	--	980	--	170	24	44	140	
	10/7/2005	178.96	4.24	0	174.72	--	--	4,900	--	1,100	11	110	110	
	1/27/2006	178.96	3.65	0	175.31	--	--	2,800	--	580	20	130	230	
	4/28/2006	178.96	3.94	0	175.02	--	--	710	--	110	2.4	21	22	
	7/28/2006	178.96	4.63	0	174.33	--	--	550	--	120	2.1	12	19	
	10/27/2006	178.96	5.19	0	173.77	--	--	260	--	37	2.0	1.9	6.7	
	1/10/2007	178.96	4.82	0	174.14	--	--	270	--	29	0.72	1.8	2.7	
	4/13/2007	178.96	4.25	0	174.71	--	--	390	--	53	1.2	3.1	4.1	
	7/19/2007	178.96	5.35	0	173.61	--	--	210	--	8.0	1.0	1.4	4.5	
	10/8/2007	178.96	5.48	0	173.48	--	--	290	--	17	2.3	3.8	14	
	1/9/2008	178.96	3.40	0	175.56	--	--	770	--	190	5.9	21	40	Gauged on 1/18/2008
	4/4/2008	178.96	4.20	0	174.76	--	--	180	--	11	2.0	0.67	2.9	
	7/3/2008	178.96	5.89	0	173.07	--	--	140	--	4.5	1.3	ND<0.30	ND<0.60	
	10/3/2008	178.96	7.34	0	171.62	--	96	430	--	29	3.4	9.6	20	
	1/22/2009	178.96	6.75	0	172.21	--	ND<50	190	--	25	1.7	0.87	1.5	
	4/13/2009	178.96	4.74	0	174.22	--	110	290	--	17	2.1	4.4	12	
	7/23/2009	178.96	6.01	0	172.95	--	85	360	--	33	2.3	5.4	18	
	2/1/2010	178.96	6.42	0	172.54	--	80	490	--	35	3.1	2.7	5.5	
	8/2/2010	178.96	5.92	0	173.04	--	120	470	--	17	3.4	2.5	12	
	8/24/2010	DESTROYED												
MW-4B	11/1/2010	179.07	7.20	0	171.87	--	ND<50	230	--	ND<0.30	2.1	1.3	43	
	1/31/2011	179.07	4.49	0	174.58	--	ND<50	68	--	ND<0.30	ND<0.30	ND<0.30	2.0	
	4/26/2011	179.07	4.32	0	174.75	--	ND<50	52	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/25/2011	179.07	5.52	0	173.55	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/7/2011	179.07	6.04	0	173.03	--	ND<40	ND<50	--	ND<0.30	0.46	ND<0.30	ND<0.60	
	1/23/2012	179.07	6.58	0	172.49	--	ND<40	ND<50	--	ND<0.30	0.36	0.87	ND<0.60	
	4/6/2012	179.07	4.41	0	174.66	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/24/2012	179.07	6.20	0	172.87	--	ND<40	75	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	2/8/2013	179.07	5.37	0	173.70	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/10/2013	179.07	6.52	0	172.55	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/16/2014	179.07	7.55	0	171.52	ND<5,000	ND<40	ND<50	--	0.32	ND<0.30	ND<0.30	ND<0.60	
	7/22/2014	179.07	6.80	0	172.27	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/27/2015	179.07	5.83	0	173.24	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/21/2015	179.07	7.26	0	171.81	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/20/2016	**179.07**	**5.14**	**0**	**173.93**	**--**	**ND<40**	**ND<50**	**--**	**ND<0.30**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-5	10/3/2001	169.18	2.81	0	166.37	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	1/28/2002	169.18	1.88	0	167.30	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	4/25/2002	169.18	1.99	0	167.19	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	7/18/2002	169.18	2.49	0	166.69	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	10/7/2002	169.18	2.80	0	166.38	--	--	140	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	1/6/2003	169.18	1.86	0	167.32	--	ND<50	120	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	4/7/2003	169.18	2.15	0	167.03	--	--	220	--	0.53	ND<0.50	ND<0.50	ND<0.50	
	7/7/2003	169.18	2.26	0	166.92	--	--	120	--	ND<1.2	ND<1.2	ND<1.2	ND<1.2	
	10/9/2003	169.18	2.72	0	166.46	--	--	560	210	ND<1.0	ND<1.0	ND<1.0	ND<2.0	Sampled for TPH-GRO by 8015M on 11/14/2003
	1/14/2004	169.18	2.00	0	167.18	--	--	560	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5	
	4/28/2004	169.18	2.01	0	167.17	--	--	760	--	ND<0.3	1.8	ND<0.3	ND<0.6	
	7/12/2004	169.18	2.56	0	166.62	--	--	96	--	1.8	3.3	0.54	3.6	
	10/25/2004	169.18	2.43	0	166.75	--	--	1,100	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	1/17/2005	169.18	1.49	0	167.69	--	--	720	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	4/6/2005	169.18	0.95	0	168.23	--	--	830	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	

Table 5
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	OIL AND GREASE (µg/L)	TPH-DRO W/SGC (µg/L)	TPH-GRO (µg/L)	TPH-GRO (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	7/8/2005	169.18	1.49	0	167.69	--	--	ND<500	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	
	10/7/2005	169.18	1.92	0	167.26	--	--	540	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/27/2006	169.18	2.03	0	167.15	--	--	490	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/28/2006	169.18	1.02	0	168.16	--	--	430	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/28/2006	169.18	1.57	0	167.61	--	--	480	--	0.34	ND<0.30	ND<0.30	ND<0.60	
	10/27/2006	169.18	2.20	0	166.98	--	--	420	--	0.34	ND<0.30	ND<0.30	ND<0.60	
	1/10/2007	169.18	1.57	0	167.61	--	--	390	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/13/2007	169.18	1.89	0	167.29	--	--	170	--	3.8	5.9	1.5	3.8	
	7/19/2007	169.18	1.92	0	167.26	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/8/2007	169.18	2.28	0	166.90	--	--	200	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/9/2008	169.18	1.09	0	168.09	--	--	150	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	Gauged on 1/18/2008
	4/4/2008	169.18	1.72	0	167.46	--	--	210	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/3/2008	169.18	2.27	0	166.91	--	--	260	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/3/2008	169.18	2.80	0	166.38	--	60	200	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/22/2009	169.18	2.45	0	166.73	--	ND<50	130	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/13/2009	169.18	1.81	0	167.37	--	ND<50	190	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/23/2009	169.18	2.33	0	166.85	--	ND<50	210	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	2/1/2010	169.18	1.32	0	167.86	--	ND<50	170	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	8/2/2010	169.18	2.20	0	166.98	--	ND<50	64	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	11/1/2010	169.18	3.92	0	165.26	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	1/31/2011	169.18	1.63	0	167.55	--	ND<50	160	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/26/2011	169.18	1.32	0	167.86	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	7/25/2011	169.18	1.79	0	167.39	--	ND<40	140	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/7/2011	169.18	2.18	0	167.00	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	1/23/2012	169.18	1.98	0	167.20	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/6/2012	169.18	1.18	0	168.00	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	7/24/2012	169.18	1.90	0	167.28	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	2/8/2013	169.18	1.88	0	167.30	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/10/2013	169.18	2.32	0	166.86	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/16/2014	169.18	2.82	0	166.36	ND<5,000	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/22/2014	169.18	3.13	0	166.05	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/27/2015	169.18	1.96	`	167.22	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/21/2015	169.18	2.58	0	166.60	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/20/2016	**169.18**	**1.42**	**0**	**167.76**	**--**	**ND<40**	**ND<50**	**--**	**ND<0.30**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-6	10/3/2001	169.04	2.87	0	166.17	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	1/28/2002	169.04	1.82	0	167.22	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	4/25/2002	169.04	2.01	0	167.03	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	7/18/2002	169.04	2.44	0	166.60	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	10/7/2002	169.04	2.72	0	166.32	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	1/6/2003	169.04	1.90	0	167.14	--	--	ND<50	--	0.62	1.2	1.2	3.5	
	4/7/2003	169.04	2.02	0	167.02	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	7/7/2003	169.04	2.21	0	166.83	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	10/9/2003	169.04	2.71	0	166.33	--	--	ND<50	ND<50	0.95	3.0	1.4	5.5	Sampled for TPH-GRO by 8015M on 11/14/2003
	1/14/2004	169.04	2.00	0	167.04	--	--	ND<50	--	ND<0.50	0.57	ND<0.50	0.64	
	4/28/2004	169.04	2.18	0	166.86	--	--	ND<50	--	0.39	0.78	ND<0.3	ND<0.6	
	7/12/2004	169.04	2.69	0	166.35	--	--	ND<50	--	ND<0.3	ND<0.3	ND<0.3	ND<0.6	
	10/25/2004	169.04	2.46	0	166.58	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	1/17/2005	169.04	1.54	0	167.50	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	4/6/2005	169.04	1.15	0	167.89	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
	7/8/2005	169.04	1.05	0	167.99	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	

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Historical Groundwater Monitoring Data and Analytical Results
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	OIL AND GREASE (µg/L)	TPH-DRO W/SGC (µg/L)	TPH-GRO (µg/L)	TPH-GRO (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	10/7/2005	169.04	1.90	0	167.14	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/27/2006	169.04	1.32	0	167.72	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/28/2006	169.04	0.00	0	169.04	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/28/2006	169.04	1.68	0	167.36	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/27/2006	169.04	1.98	0	167.06	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/10/2007	169.04	1.60	0	167.44	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/13/2007	169.04	2.01	0	167.03	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/19/2007	169.04	1.96	0	167.08	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/8/2007	169.04	2.35	0	166.69	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/9/2008	169.04	1.10	0	167.94	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	Gauged on 1/18/2008
	4/4/2008	169.04	1.60	0	167.44	--	--	ND<50	--	ND<0.30	0.40	ND<0.30	0.71	
	7/3/2008	169.04	2.19	0	166.85	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/3/2008	169.04	2.78	0	166.26	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/22/2009	169.04	2.35	0	166.69	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/13/2009	169.04	1.81	0	167.23	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/23/2009	169.04	--	--	--	--	--	--	--	--	--	--	--	Paved over
	2/1/2010	169.04	--	--	--	--	--	--	--	--	--	--	--	Paved over
	8/2/2010	169.04	--	--	--	--	--	--	--	--	--	--	--	Paved over
	8/24/2010	DESTROYED												
MW-7	10/3/2001	171.64	7.62	0	164.02	--	--	10,000	--	210	ND<50	ND<50	800	
	1/28/2002	171.64	7.21	0	164.43	--	--	ND<1,000	--	ND<10	ND<10	ND<10	ND<10	
	4/25/2002	171.64	7.25	0	164.39	--	--	ND<5,000	--	660	ND<50	ND<50	ND<50	
	7/18/2002	171.64	8.12	0	163.52	--	--	ND<5,000	--	130	ND<50	ND<50	ND<50	
	10/7/2002	171.64	7.71	0	163.93	--	--	18,000	--	ND<50	ND<50	ND<50	ND<50	
	1/6/2003	171.64	7.63	0	164.01	--	ND<50	410	--	0.61	1.0	0.89	2.9	
	4/7/2003	171.64	7.58	0	164.06	--	--	13,000	--	ND<20	ND<20	ND<20	ND<20	
	7/7/2003	171.64	7.56	0	164.08	--	--	990	--	8.2	ND<0.50	1.2	ND<0.50	
	10/9/2003	171.64	7.72	0	163.92	--	--	6,800	ND<13,000	ND<130	ND<130	ND<130	ND<250	Sampled for TPH-GRO by 8015M on 11/14/2003
	1/14/2004	171.64	6.97	0	164.67	--	--	19,000	--	ND<100	ND<100	ND<100	ND<100	
	4/28/2004	171.64	8.70	0	162.94	--	--	19,000	--	ND<3	ND<3	ND<3	ND<6	
	7/12/2004	171.64	9.44	0	162.20	--	--	12,000	--	28	14	330	200	
	10/25/2004	171.64	7.23	0	164.41	--	--	28,000	--	ND<250	ND<250	ND<250	ND<250	
	1/17/2005	171.64	6.30	0	165.34	--	--	15,000	--	ND<100	ND<100	ND<100	ND<100	
	4/6/2005	171.64	5.96	0	165.68	--	--	13,000	--	ND<100	ND<100	ND<100	ND<100	
	7/8/2005	171.64	6.45	0	165.19	--	--	ND<10,000	--	ND<100	ND<100	ND<100	ND<100	
	10/7/2005	171.64	6.78	0	164.86	--	--	13,000	--	ND<3.0	ND<3.0	ND<3.0	ND<6.0	
	1/27/2006	171.64	5.82	0	165.82	--	--	8,200	--	0.64	1.6	ND<0.30	ND<0.60	
	4/28/2006	171.64	5.57	0	166.07	--	--	6,900	--	0.88	1.5	0.34	1.0	
	7/28/2006	171.64	6.67	0	164.97	--	--	5,400	--	5.2	ND<3.0	ND<3.0	ND<6.0	
	10/27/2006	171.64	6.93	0	164.71	--	--	4,500	--	ND<1.5	ND<1.5	ND<1.5	ND<3.0	
	1/10/2007	171.64	6.41	0	165.23	--	12,000	4,000	--	ND<1.2	ND<1.2	ND<1.2	ND<2.4	
	4/13/2007	171.64	--	--	--	--	--	--	--	--	--	--	--	Paved over
	7/19/2007	171.64	7.10	0	164.54	--	--	2,700	--	0.57	ND<0.30	ND<0.30	ND<0.60	
	10/8/2007	171.64	7.42	0	164.22	--	--	1,600	--	0.47	0.49	ND<0.30	ND<0.60	
	1/9/2008	171.64	5.98	0	165.66	--	--	1,500	--	0.45	0.49	ND<0.30	ND<0.60	Gauged on 1/18/2008
	4/4/2008	171.64	6.80	0	164.84	--	--	1,800	--	0.72	0.58	ND<0.30	ND<0.60	
	7/3/2008	171.64	7.31	0	164.33	--	--	1,600	--	0.45	ND<0.30	ND<0.30	ND<0.60	
	10/3/2008	171.64	7.79	0	163.85	--	ND<50	1,300	--	0.53	0.59	ND<0.30	ND<0.60	
	1/22/2009	171.64	7.26	0	164.38	--	ND<50	890	--	0.43	0.49	ND<0.30	ND<0.60	
	4/13/2009	171.64	6.83	0	164.81	--	ND<50	1,100	--	0.46	0.30	ND<0.30	ND<0.60	
	7/23/2009	171.64	7.32	0	164.32	--	ND<50	920	--	ND<0.30	0.73	ND<0.30	ND<0.60	

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WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	OIL AND GREASE (µg/L)	TPH-DRO W/SGC (µg/L)	TPH-GRO (µg/L)	TPH-GRO (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	2/1/2010	171.64	6.21	0	165.43	--	53	1,000	--	5.6	4.0	1.2	2.0	
	8/2/2010	171.64	7.08	0	164.56	--	ND<50	880	--	ND<0.30	0.62	ND<0.30	ND<0.60	
	11/1/2010	172.11	6.97	0	165.14	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	1/31/2011	172.11	6.58	0	165.53	--	ND<50	730	--	0.31	0.59	ND<0.30	ND<0.60	
	4/26/2011	172.11	5.21	0	166.90	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	7/25/2011	172.11	6.89	0	165.22	--	ND<40	610	--	2.5	ND<0.30	ND<0.30	ND<0.60	
	10/7/2011	172.11	7.15	0	164.96	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	1/23/2012	172.11	6.92	0	165.19	--	ND<40	300	--	ND<0.30	0.55	ND<0.30	ND<0.60	
	4/6/2012	172.11	6.01	0	166.10	--	--	--	--	--	--	--	--	Sampled Q1 and Q3 only
	7/24/2012	172.11	7.25	0	164.86	--	ND<40	270	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	2/8/2013	172.11	6.90	0	165.21	--	ND<40	240	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/10/2013	172.11	7.36	0	164.75	--	ND<40	340	--	0.75	ND<0.30	0.46	0.69	
	1/16/2014	172.11	7.86	0	164.25	ND<5,000	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/22/2014	172.11	7.40	0	164.71	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/27/2015	172.11	6.93	0	165.18	--	ND<40	150	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/21/2015	172.11	7.48	0	164.63	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/20/2016	**172.11**	**6.48**	**0**	**165.63**	**--**	**ND<40**	**130**	**--**	**ND<0.30**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-8	1/18/2008	167.97	0.43	0	167.54	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/4/2008	167.97	0.55	0	167.42	--	--	ND<50	--	0.76	1.6	0.72	2.3	
	7/3/2008	167.97	0.91	0	167.06	--	--	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	10/3/2008	167.97	1.71	0	166.26	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/22/2009	167.97	1.59	0	166.38	--	64	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	4/13/2009	167.97	0.08	0	167.89	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/23/2009	167.97	1.10	0	166.87	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	2/1/2010	167.97	0.65	0	167.32	--	ND<50	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	8/2/2010	167.97	--	--	--	--	--	--	--	--	--	--	--	Paved over
	8/24/2010	DESTROYED												
MW-9A	7/10/2013	173.01	5.88	0	167.13	--	220	4,600	--	1,100	14	220	140	
	1/16/2014	173.01	6.24	0	166.77	ND<5,000	200	4,600	--	820	ND<6.0	180	ND<12	
	7/22/2014	173.01	8.65	0	164.36	--	250	6,400	--	1,100	12	380	12	
	1/27/2015	173.01	8.24	0	164.77	--	250	7,900	--	2,500	16	340	23	
	7/21/2015	173.01	5.87	0	167.14	--	170	7,100	--	2,700	22	190	23	
	1/20/2016	**173.01**	**8.47**	**0**	**164.54**	**--**	**360**	**7,700**	**--**	**2,400**	**17**	**53**	**14**	
MW-9B	7/10/2013	172.78	5.87	0	166.91	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	1/16/2014	172.78	6.57	0	166.21	ND<5,000	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/22/2014	172.78	5.94	0	166.84	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/27/2015	172.78	5.38	0	167.40	--	ND<40	ND<50	--	ND<0.30	ND<0.30	ND<0.30	ND<0.60	
	7/21/2015	172.78	6.01	0	166.77	--	--	--	--	--	--	--	--	Sampled Q1 only
	1/20/2016	**172.78**	**4.72**	**0**	**168.06**	**--**	**ND<40**	**ND<50**	**--**	**ND<0.30**	**ND<0.30**	**ND<0.30**	**ND<0.60**	
MW-10A	7/10/2013	174.48	7.15	0	167.33	--	1,300	23,000	--	6,600	76	750	1,900	
	1/16/2014	174.48	9.41	0	165.07	ND<5,000	710	25,000	--	6,600	120	850	830	
	7/22/2014	174.48	10.61	0	163.87	--	800	27,000	--	6,300	120	900	1,000	
	1/27/2015	174.48	10.82	0	163.66	--	800	28,000	--	9,800	190	1,200	1,200	
	7/21/2015	174.48	7.32	0	167.16	--	530	22,000	--	15,000	190	1,000	960	
	1/20/2016	**174.48**	**8.63**	**0**	**165.85**	**--**	**990**	**30,000**	**--**	**9,100**	**200**	**960**	**1,000**	
MW-10B	7/10/2013	174.62	7.65	0	166.97	--	170	4,100	--	1,100	34	130	140	

Table 5
Historical Groundwater Monitoring Data and Analytical Results
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE SAMPLED	TOC* (ft)	DTW (ft)	LNAPL THICKNESS (ft)	GWE* (ft)	OIL AND GREASE (µg/L)	TPH-DRO W/SGC (µg/L)	TPH-GRO (µg/L)	TPH-GRO (GC/MS) (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	COMMENTS
	1/16/2014	174.62	8.33	0	166.29	ND<5,000	360	5,500	--	1,200	69	190	160	
	7/22/2014	174.62	7.76	0	166.86	--	120	2,400	--	570	19	68	54	
	1/27/2015	174.62	7.18	0	167.44	--	250	7,500	--	2,000	80	290	290	
	7/21/2015	174.62	7.58	0	167.04	--	46	2,600	--	780	27	100	130	
	1/20/2016	**174.62**	**6.43**	**0**	**168.19**	**--**	**300**	**7,800**	**--**	**1,600**	**60**	**240**	**270**	
MW-10S	7/22/2014	175.57	10.02	0	165.55	--	--	--	--	--	--	--	--	Insufficient water to sample
	1/27/2015	175.57	7.82	0	167.75	ND<5,000	ND<40	110	--	3.1	ND<0.30	1.8	ND<0.60	
	7/21/2015	175.57	5.92	0	169.65	ND<5,000	ND<40	ND<50	--	1.6	ND<0.30	6.2	ND<0.60	
	1/20/2016	**175.57**	**6.13**	**0**	**169.44**	**ND<5,000.0**	**ND<40**	**200**	**--**	**5.6**	**ND<0.30**	**15**	**ND<0.60**	
MW-11A	7/10/2013	175.37	6.02	0	169.35	--	730	45,000	--	8,600	5,900	940	7,600	
	1/16/2014	175.37	6.08	0	169.29	ND<5,000	480	45,000	--	7,000	4,000	660	6,300	
	7/22/2014	175.37	6.22	0	169.15	--	1,600	49,000	--	6,600	3,300	1,100	7,100	
	1/27/2015	175.37	4.61	0	170.76	--	500	73,000	--	10,000	6,500	1,600	11,000	
	7/21/2015	175.37	5.39	0	169.98	--	700	56,000	--	11,000	6,900	1,800	12,000	
	1/20/2016	**175.37**	**4.28**	**0**	**171.09**	**--**	**930**	**68,000**	**--**	**10,000**	**5,500**	**1,500**	**11,000**	
MW-11B	7/10/2013	174.65	5.07	0	169.58	--	ND<40	3,800	--	1,300	52	41	300	
	1/16/2014	174.65	5.97	0	168.68	ND<5,000	120	19,000	--	5,700	240	330	470	
	7/22/2014	174.65	5.35	0	169.30	--	260	12,000	--	3,400	64	210	59	
	1/27/2015	174.65	5.78	0	168.87	--	170	17,000	--	4,200	190	310	330	
	7/21/2015	174.65	5.37	0	169.28	--	430	23,000	--	10,000	770	960	1,200	
	1/20/2016	**174.65**	**7.71**	**0**	**166.94**	**--**	**780**	**35,000**	**--**	**9,400**	**1,600**	**880**	**2,300**	
MW-11S	7/22/2014	176.09	6.05	0	170.04	ND<5,000	2,400	40,000	--	4,200	3,000	690	7,100	
	1/27/2015	176.09	4.69	0	171.40	ND<5,000	210	3,300	--	230	16	64	100	
	7/21/2015	176.09	6.13	0	169.96	ND<5,000	280	5,100	--	670	18	420	240	
	1/20/2016	**176.09**	**3.23**	**0**	**172.86**	**--**	**ND<40**	**270**	**--**	**2.6**	**0.47**	**1.4**	**0.86**	

NOTES:
* TOC and GWE are in feet above mean sea level
µg/L = Micrograms per liter
-- = Not available/not sampled
B = Benzene
DTW = Depth to water below TOC
E = Ethylbenzene
ft = Feet
GC/MS = Analyzed by gas chromatography/mass spectrometery method
GWE = Groundwater elevation
ID = Identification
LNAPL = Light non-aqueous phase liquid
ND<# = Analyte not detected at or above indicated practical quantitation limit
Q1 = 1st quarter
T = Toluene
TOC = Top of casing
TPH-DRO W/SGC = Total petroleum hydrocarbons-diesel range organics with silica gel cleanup
TPH-GRO = Total petroleum hydrocarbons-gasoline range organics
X = Total xylenes

Table 6
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
MW-1	7/20/1999	ND	--	--	--	--	--	--	--	--	--	--
	9/28/1999	321	333	ND	--	--	--	--	--	ND	ND	ND
	1/7/2000	ND	--	--	--	--	--	--	--	--	--	--
	3/31/2000	ND	--	--	--	--	--	--	--	--	--	--
	7/14/2000	ND	--	--	--	--	--	--	--	--	--	--
	10/3/2000	ND	--	--	--	--	--	--	--	--	--	--
	1/3/2001	2,200	--	--	--	--	--	--	--	--	--	--
	4/4/2001	ND	481	ND	--	ND	ND	--	ND	ND	ND	ND
	7/17/2001	ND	230	ND	--	ND	ND	--	ND	ND	ND	ND
	10/3/2001	ND<2,500	--	--	--	--	--	--	--	--	--	--
	10/5/2001	--	--	--	--	--	--	--	--	--	--	--
	1/28/2002	3,000	440	--	--	--	--	--	--	--	--	--
	4/25/2002	810	670	--	--	--	--	--	--	--	--	--
	7/18/2002	ND<500	620	ND<100	--	ND<2,500,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	10/7/2002	1,300	760	ND<10,000	--	ND<50,000,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	1/6/2003	ND<1,000	790	ND<20,000	--	ND<100,000,000	ND<400	--	ND<400	ND<400	ND<400	ND<400
	4/7/2003	1,000	800	ND<10,000	--	ND<50,000,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	7/7/2003	600	530	ND<25,000	ND<120,000	--	ND<500	--	ND<500	ND<500	ND<500	ND<500
	10/9/2003	--	660	ND<2,0000	--	ND<100,000	ND<400	--	ND<400	ND<400	ND<400	ND<400
	1/14/2004	ND<1,300	ND<800	ND<40,000	--	ND<200,000	ND<800	--	ND<800	ND<800	ND<800	ND<800
	4/28/2004	1,400	560	800	--	ND<1,000	ND<50	--	ND<50	ND<1	ND<1	ND<1
	7/12/2004	490	440	1,100	--	ND<20,000	ND<10	--	ND<10	ND<20	ND<20	ND<20
	10/25/2004	ND<1,300	330	ND<2,000	--	ND<20,000	ND<200	--	ND<200	ND<400	ND<200	ND<200
	1/17/2005	ND<1,300	570	3,100	--	ND<20,000	ND<200	--	ND<200	ND<400	ND<200	ND<200
	4/6/2005	ND<1,300	580	1,500	--	ND<10,000	ND<100	--	ND<100	ND<100	ND<100	ND<100
	7/8/2005	ND<1,300	290	ND<1,300	--	ND<13,000	ND<130	--	3.8	ND<130	ND<130	ND<130
	10/7/2005	330	250	680	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/27/2006	450	360	ND<500	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	4/28/2006	460	280	ND<500	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	7/28/2006	330	220	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/27/2006	280	250	ND<2,500	--	ND<62,000	ND<120	--	ND<120	ND<120	ND<120	ND<120
	1/10/2007	350	260	ND<1,000	--	ND<25,000	ND<50	--	ND<50	ND<50	ND<50	ND<50

Table 6
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	4/13/2007	270	220	730	--	ND<250	ND<0.50	--	0.68	ND<0.50	ND<0.50	ND<0.50
	7/19/2007	1,000	200	ND<1,000	--	ND<25,000	ND<50	--	ND<50	ND<50	ND<50	ND<50
	10/8/2007	--	--	--	--	--	--	--	--	--	--	--
	1/9/2008	840	170	ND<250	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	4/4/2008	--	160	770	--	ND<5,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	7/3/2008	--	110	ND<250	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	10/3/2008	--	180	ND<200	--	ND<5,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	1/22/2009	--	160	ND<500	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	4/13/2009	--	150	280	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	7/23/2009	--	140	ND<2,000	--	ND<50,000	ND<100	--	ND<100	ND<100	ND<100	ND<100
	2/1/2010	--	ND<50	--	--	--	--	--	--	--	--	--
	8/2/2010	--	ND<10	--	--	--	ND<10	ND<10	ND<10	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-1B	11/1/2010	--	30	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/31/2011	--	46	28	--	ND<250	ND<0.50	--	0.76	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	44	33	--	ND<250	ND<0.50	--	0.82	ND<0.50	ND<0.50	ND<0.50
	7/25/2011	--	47	28	--	ND<250	ND<0.50	--	0.75	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	41	30	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/23/2012	--	32	23	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	55	18	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/24/2012	--	46	27	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	2/8/2013	--	28	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/10/2013	--	12	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/16/2014	--	42	ND<10	ND<250	--	ND<0.50	--	1.3	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	--	--	--	--	--	--	--	--	--	--
	1/27/2015	--	0.96	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	--	--	--	--	--	--	--	--	--	--
	1/20/2016	**--**	**14**	**ND<10**	**ND<250**	**--**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-2	7/20/1999	4,500	11,000	--	--	--	--	--	--	--	--	--
	9/28/1999	5,280	6,150	ND	--	--	--	--	--	ND	ND	ND

Table 6
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	1/7/2000	33,100	--	--	--	--	--	--	--	--	--	--
	3/31/2000	17,000	--	--	--	--	--	--	--	--	--	--
	7/14/2000	66,500	--	--	--	--	--	--	--	--	--	--
	10/3/2000	57,500	--	--	--	--	--	--	--	--	--	--
	1/3/2001	49,000	--	--	--	--	--	--	--	--	--	--
	4/4/2001	38,700	37,800	ND	--	ND	ND	--	ND	ND	ND	ND
	7/17/2001	65,000	56,000	ND	--	ND	ND	--	ND	ND	ND	ND
	10/3/2001	14,000	18,000	--	--	--	--	--	--	--	--	--
	1/28/2002	11,000	10,000	--	--	--	--	--	--	--	--	--
	4/25/2002	8,400	8,100	--	--	--	--	--	--	--	--	--
	7/18/2002	4,300	8,800	ND<1,000	--	ND<25,000,000	ND<100	--	ND<100	ND<100	ND<100	ND<100
	10/7/2002	7,100	5,900	ND<20,000	--	ND<100,000,000	ND<400	--	ND<400	ND<400	ND<400	ND<400
	1/6/2003	31,000	35,000	ND<50,000	--	ND<250,000,000	ND<1,000	--	ND<1,000	ND<1,000	ND<1,000	ND<1,000
	4/7/2003	2,000	1,500	ND<2,000	--	ND<10,000,000	ND<40	--	ND<40	ND<40	ND<40	ND<40
	7/7/2003	5,500	8,300	ND<5,000	--	ND<25,000,000	ND<100	--	ND<100	ND<100	ND<100	ND<100
	10/9/2003	--	8,500	ND<10,000	--	ND<50,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	1/14/2004	2,600	3,200	ND<2,500	--	ND<13,000	ND<50	--	ND<50	ND<50	ND<50	ND<50
	4/28/2004	35,000	22,000	13,000	--	ND<1,000	ND<0.5	--	ND<0.5	ND<1	ND<1	11
	7/12/2004	3,000	3,000	110	--	ND<4,000	ND<3	--	ND<3	ND<5	ND<5	ND<5
	10/25/2004	1,800	1,600	1,100	--	ND<1,300	ND<13	--	ND<13	ND<25	ND<13	ND<13
	1/17/2005	1,600	1,500	1,200	--	ND<1,300	ND<13	--	ND<13	ND<25	ND<13	ND<13
	4/6/2005	2,500	3,200	2,800	--	ND<2,500	ND<25	--	ND<25	ND<25	ND<25	ND<25
	7/8/2005	2,900	3,100	4,300	--	ND<2,500	ND<25	--	ND<25	ND<25	ND<25	ND<25
	10/7/2005	5,900	5,200	8,700	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	1/27/2006	2,600	2,800	5,200	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	4/28/2006	3,700	3,600	6,700	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	1.6
	7/28/2006	3,000	2,900	5,100	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	10/27/2006	1,600	1,300	6,600	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	1/10/2007	2,300	2,000	6,000	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	4/13/2007	3,600	3,200	7,400	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	7/19/2007	2,000	2,000	6,200	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	10/8/2007	5,000	4,000	20,000	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 6
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	1/9/2008	2,100	2,200	9,900	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/4/2008	--	2,100	5,800	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	7/3/2008	--	1,400	8,300	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/3/2008	--	750	5,900	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	1/22/2009	--	850	7,400	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2009	--	990	5,500	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	7/23/2009	--	390	5,000	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	2/1/2010	--	290	--	--	--	--	--	--	--	--	--
	8/2/2010	--	140	--	--	--	ND<1.0	ND<1.0	ND<1.0	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-2B	11/1/2010	--	250	2,000	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/31/2011	--	310	1,300	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	240	770	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/25/2011	--	170	1,100	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	100	840	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/23/2012	--	95	370	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	140	310	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/24/2012	--	53	270	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	2/8/2013	--	1.2	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/10/2013	--	0.86	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/16/2014	--	9.6	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	--	--	--	--	--	--	--	--	--	--
	1/27/2015	--	3.9	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	--	--	--	--	--	--	--	--	--	--
	1/20/2016	**--**	**3.8**	**ND<10**	**ND<250**	**--**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-3	7/20/1999	330	--	--	--	--	--	--	--	--	--	--
	9/28/1999	443	288	ND	--	--	--	--	--	ND	ND	8.80
	1/7/2000	1,940	--	--	--	--	--	--	--	--	--	--
	3/31/2000	2,800	--	--	--	--	--	--	--	--	--	--
	7/14/2000	548	--	--	--	--	--	--	--	--	--	--

Table 6
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	10/3/2000	965	--	--	--	--	--	--	--	--	--	--
	1/3/2001	3,300	--	--	--	--	--	--	--	--	--	--
	4/4/2001	1,050	450	ND	--	ND	ND	--	ND	ND	ND	ND
	7/17/2001	ND	350	ND	--	ND	ND	--	ND	ND	ND	ND
	10/3/2001	ND<1000	--	--	--	--	--	--	--	--	--	--
	1/28/2002	3,200	210	--	--	--	--	--	--	--	--	--
	4/25/2002	500	260	--	--	--	--	--	--	--	--	--
	7/18/2002	ND<250	270	ND<50	--	ND<1,200,000	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	10/7/2002	ND<120	ND<200	ND<10,000	--	ND<50,000,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	1/6/2003	440	110	ND<4,000	--	23,000,000	ND<80	--	ND<80	ND<80	ND<80	ND<80
	4/7/2003	440	100	ND<4,000	--	ND<20,000,000	ND<80	--	ND<80	ND<80	ND<80	ND<80
	7/7/2003	280	100	ND<2,000	--	ND<10,000,000	ND<40	--	ND<40	ND<40	ND<40	ND<40
	10/9/2003	--	190	ND<1,000	--	ND<5,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	1/14/2004	190	230	ND<1,000	--	ND<5,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	4/28/2004	740	240	ND<12	--	ND<1,000	ND<3	--	ND<3	ND<1	ND<1	ND<1
	7/12/2004	180	100	350	--	ND<20,000	ND<10	--	ND<10	ND<20	ND<20	ND<20
	10/25/2004	94	260	39	--	ND<250	ND<2.5	--	ND<2.5	ND<5.0	ND<2.5	ND<2.5
	1/17/2005	55	200	120	--	ND<250	ND<2.5	--	ND<2.5	ND<5.0	ND<2.5	ND<2.5
	4/6/2005	ND<250	200	150	--	ND<1,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	7/8/2005	ND<250	150	64	--	ND<250	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	10/7/2005	260	180	ND<200	--	ND<5,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	1/27/2006	280	250	ND<10	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	4/28/2006	230	180	190	--	ND<250	ND<0.50	--	0.63	ND<0.50	ND<0.50	ND<0.50
	7/28/2006	250	150	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/27/2006	250	140	ND<10	--	ND<250	ND<0.50	--	1.3	ND<0.50	ND<0.50	ND<0.50
	1/10/2007	230	150	66	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	4/13/2007	230	160	ND<10	--	ND<250	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	7/19/2007	190	180	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/8/2007	180	120	ND<20	--	ND<500	ND<1.0	--	1.1	ND<1.0	ND<1.0	ND<1.0
	1/9/2008	290	120	ND<20	--	ND<500	ND<1.0	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	4/4/2008	--	120	ND<50	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	7/3/2008	--	190	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 6
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	10/3/2008	--	71	ND<100	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/22/2009	--	130	ND<20	--	ND<500	ND<1.0	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	4/13/2009	--	120	ND<10	--	ND<250	ND<0.50	--	1.0	ND<0.50	ND<0.50	ND<0.50
	7/23/2009	--	120	ND<100	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	2/1/2010	--	97	--	--	--	--	--	--	--	--	--
	8/2/2010	--	89	--	--	--	ND<0.50	--	ND<0.50	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-3B	11/1/2010	--	46	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/31/2011	--	73	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	52	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/25/2011	--	62	47	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	61	64	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/23/2012	--	56	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	68	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/24/2012	--	54	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	2/8/2013	--	20	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/10/2013	--	14	ND<100	ND<2,500	--	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/16/2014	--	13	ND<10	ND<250	--	ND<5.0	--	1.2	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	8.8	ND<20	ND<500	--	ND<1.0	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	1/27/2015	--	14	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	15
	7/21/2015	--	23	ND<100	ND<2,500	--	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/20/2016	**--**	**8.9**	**ND<10**	**ND<250**	**--**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-4	7/20/1999	100	--	--	--	--	--	--	--	--	--	--
	9/28/1999	416	459	ND	--	--	--	--	--	ND	ND	ND
	1/7/2000	764	--	--	--	--	--	--	--	--	--	--
	3/31/2000	1,000	--	--	--	--	--	--	--	--	--	--
	7/14/2000	1,530	--	--	--	--	--	--	--	--	--	--
	10/3/2000	1,040	--	--	--	--	--	--	--	--	--	--
	1/3/2001	850	--	--	--	--	--	--	--	--	--	--
	4/4/2001	1,140	819	ND	--	ND	ND	--	ND	ND	ND	ND

Table 6
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76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	7/17/2001	1,200	900	ND	--	ND	ND	--	ND	ND	ND	ND
	10/3/2001	580	820	--	--	--	--	--	--	--	--	--
	1/28/2002	1,100	500	--	--	--	--	--	--	--	--	--
	4/25/2002	680	600	--	--	--	--	--	--	--	--	--
	7/18/2002	530	760	ND<100	--	ND<2,500,000	ND<10	--	49	ND<10	ND<10	ND<10
	10/7/2002	650	540	ND<10,000	--	ND<50,000,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	1/6/2003	370	520	ND<1,000	--	ND<5,000,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	4/7/2003	550	420	ND<1,000	--	ND<5,000,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	7/7/2003	480	450	ND<1,000	--	ND<5,000,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	10/9/2003	--	270	ND<200	--	ND<1,000	ND<4.0	--	ND<4.0	ND<4.0	ND<4.0	ND<4.0
	1/14/2004	150	180	ND<200	--	ND<1,000	ND<4.0	--	6.5	ND<4.0	ND<4.0	ND<4.0
	4/28/2004	490	310	150	--	ND<1,000	ND<0.5	--	ND<0.5	ND<1	ND<1	ND<1
	7/12/2004	710	470	210	--	ND<4,000	ND<3	--	14	ND<5	ND<5	ND<5
	10/25/2004	200	170	38	--	ND<100	ND<1.0	--	2.0	ND<2.0	ND<1.0	ND<1.0
	1/17/2005	240	200	110	--	ND<100	ND<1.0	--	3.6	ND<2.0	ND<1.0	ND<1.0
	4/6/2005	ND<25	26	ND<25	--	73,000	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	7/8/2005	ND<25	64	29	--	ND<50	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	10/7/2005	370	310	210	--	ND<250	ND<0.50	--	26	ND<0.50	ND<0.50	ND<0.50
	1/27/2006	320	240	280	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	4/28/2006	140	140	130	--	ND<250	ND<0.50	--	0.97	ND<0.50	ND<0.50	ND<0.50
	7/28/2006	170	150	64	--	ND<250	ND<0.50	--	5.8	ND<0.50	ND<0.50	ND<0.50
	10/27/2006	130	130	54	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	1/10/2007	160	150	33	--	310	ND<0.50	--	1.9	ND<0.50	ND<0.50	ND<0.50
	4/13/2007	210	160	82	--	ND<250	ND<0.50	--	0.77	ND<0.50	ND<0.50	ND<0.50
	7/19/2007	120	130	13	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/8/2007	160	150	ND<20	--	ND<500	ND<1.0	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	1/9/2008	210	220	ND<20	--	ND<500	ND<1.0	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0
	4/4/2008	--	110	27	--	ND<250	ND<0.50	--	1.0	ND<0.50	ND<0.50	ND<0.50
	7/3/2008	--	100	27	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	10/3/2008	--	100	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/22/2009	--	96	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2009	--	88	39	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50

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4276 MacArthur Boulevard
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WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	7/23/2009	--	92	42	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	2/1/2010	--	51	--	--	--	--	--	--	--	--	--
	8/2/2010	--	48	--	--	--	ND<0.50	ND<1.0	1.4	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-4B	11/1/2010	--	20	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/31/2011	--	30	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	26	25	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/25/2011	--	28	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	25	25	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/23/2012	--	17	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	21	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/24/2012	--	24	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	2/8/2013	--	2.8	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/10/2013	--	0.64	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/16/2014	--	2.3	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	--	--	--	--	--	--	--	--	--	--
	1/27/2015	--	2.1	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/21/2015	--	--	--	--	--	--	--	--	--	--	--
	1/20/2016	**--**	**1.7**	**ND<10**	**ND<250**	**--**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-5	10/3/2001	1,800	2,100	--	--	--	--	--	--	--	--	--
	1/28/2002	650	550	--	--	--	--	--	--	--	--	--
	4/25/2002	2,200	2,400	--	--	--	--	--	--	--	--	--
	7/18/2002	530	690	ND<20	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	10/7/2002	300	330	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	1/6/2003	410	350	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	4/7/2003	450	420	ND<500	--	ND<2,500,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	7/7/2003	220	200	ND<200	--	ND<1,000,000	ND<4.0	--	ND<4.0	ND<4.0	ND<4.0	ND<4.0
	10/9/2003	--	290	ND<200	--	ND<1,000	ND<4.0	--	ND<4.0	ND<4.0	ND<4.0	ND<4.0
	1/14/2004	670	760	ND<2,000	--	ND<10,000	ND<40	--	ND<40	ND<40	ND<40	ND<40
	4/28/2004	1,200	790	ND<12	--	ND<1,000	ND<0.5	--	1.8	ND<1	ND<1	ND<1

Table 6
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	7/12/2004	2.8	ND<0.5	ND<12	--	ND<800	ND<0.5	--	0.76	ND<1	ND<1	ND<1
	10/25/2004	780	1,100	ND<500	--	ND<5,000	ND<50	--	ND<50	ND<100	ND<50	ND<50
	1/17/2005	530	550	100	--	ND<250	ND<2.5	--	ND<2.5	ND<5.0	ND<2.5	ND<2.5
	4/6/2005	600	760	7.6	--	ND<50	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	7/8/2005	570	630	180	--	ND<500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	10/7/2005	530	490	ND<10	--	ND<250	ND<0.50	--	1.0	ND<0.50	ND<0.50	ND<0.50
	1/27/2006	580	610	1,000	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	4/28/2006	590	520	130	--	ND<250	ND<0.50	--	0.95	ND<0.50	ND<0.50	ND<0.50
	7/28/2006	440	420	ND<100	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	10/27/2006	460	390	43	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	1/10/2007	430	420	28	--	ND<250	ND<0.50	--	1.7	ND<0.50	ND<0.50	ND<0.50
	4/13/2007	160	120	ND<10	--	ND<250	ND<0.50	--	0.84	ND<0.50	ND<0.50	ND<0.50
	7/19/2007	19	23	ND<10	--	ND<250	ND<0.50	--	ND<5.0	ND<0.50	ND<0.50	ND<0.50
	10/8/2007	310	280	ND<10	--	ND<250	ND<0.50	--	1.3	ND<0.50	ND<0.50	ND<0.50
	1/9/2008	170	170	ND<10	--	ND<250	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	4/4/2008	--	260	ND<10	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	7/3/2008	--	360	ND<10	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	10/3/2008	--	240	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/22/2009	--	170	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2009	--	190	ND<10	--	ND<250	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	7/23/2009	--	210	ND<10	--	ND<250	ND<0.50	--	1.8	ND<0.50	ND<0.50	ND<0.50
	2/1/2010	--	120	--	--	--	--	--	--	--	--	--
	8/2/2010	--	42	--	--	--	ND<0.50	--	ND<0.50	--	--	--
	11/1/2010	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	130	ND<10	--	ND<250	ND<0.50	--	1.6	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	130	ND<10	--	ND<250	ND<0.50	--	1.6	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	52	22	--	ND<250	ND<0.50	--	0.92	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	--	81	20	--	ND<250	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	2/8/2013	--	21	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 6
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76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	7/10/2013	--	4.7	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/16/2014	--	39	ND<10	ND<250	--	ND<0.50	--	0.67	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	--	--	--	--	--	--	--	--	--	--
	1/27/2015	--	2.9	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/21/2015	--	--	--	--	--	--	--	--	--	--	--
	1/20/2016	**--**	**2.2**	**ND<10**	**ND<250**	**--**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-6	10/3/2001	200	270	--	--	--	--	--	--	--	--	--
	1/28/2002	ND<2.5	--	--	--	--	--	--	--	--	--	--
	4/25/2002	ND<2.5	--	--	--	--	--	--	--	--	--	--
	7/18/2002	ND<2.5	ND<2.0	ND<20	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	10/7/2002	ND<2.5	ND<2.0	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	1/6/2003	ND<2.0	ND<2.0	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	4/7/2003	46	46	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	7/7/2003	ND<2.0	ND<2.0	ND<100	--	ND<500,000	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	10/9/2003	--	ND<2.0	ND<100	--	ND<500	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	1/14/2004	ND<5.0	ND<2.0	ND<100	--	ND<500	ND<2.0	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0
	4/28/2004	ND<1	ND<0.5	ND<12	--	ND<1,000	ND<0.5	--	ND<0.5	ND<1	ND<1	ND<1
	7/12/2004	6.4	ND<0.5	ND<12	--	ND<800	ND<0.5	--	ND<0.5	ND<1	ND<1	ND<1
	10/25/2004	ND<5.0	0.57	ND<5.0	--	ND<50	ND<0.50	--	ND<0.50	ND<1.0	ND<0.50	ND<0.50
	1/17/2005	ND<5.0	ND<0.50	ND<5.0	--	ND<50	ND<0.50	--	ND<0.50	ND<1.0	ND<0.50	ND<0.50
	4/6/2005	ND<5.0	ND<0.50	ND<5.0	--	ND<50	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/8/2005	ND<5.0	ND<0.50	ND<5.0	--	ND<50	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/7/2005	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/27/2006	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/28/2006	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/28/2006	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/27/2006	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/10/2007	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2007	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/19/2007	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/8/2007	ND<1.0	0.80	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 6
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4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	1/9/2008	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/4/2008	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/3/2008	--	1.4	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	10/3/2008	--	1.8	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/22/2009	--	1.2	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2009	--	0.72	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/23/2009	--	--	--	--	--	--	--	--	--	--	--
	2/1/2010	--	--	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-7	10/3/2001	35,000	40,000	--	--	--	--	--	--	--	--	--
	1/28/2002	42,000	38,000	--	--	--	--	--	--	--	--	--
	4/25/2002	42,000	45,000	--	--	--	--	--	--	--	--	--
	7/18/2002	51,000	53,000	33,000	--	ND<5,000,000	ND<20	--	ND<20	ND<20	ND<20	ND<20
	10/7/2002	33,000	38,000	26,000	--	ND<100,000,000	ND<400	--	ND<400	ND<400	ND<400	ND<400
	1/6/2003	3,900	3,100	ND<10,000	--	ND<50,000,000	ND<200	--	ND<200	ND<200	ND<200	ND<200
	4/7/2003	32,000	28,000	ND<40,000	--	ND<200,000,000	ND<800	--	ND<800	ND<800	ND<800	ND<800
	7/7/2003	36,000	45,000	27,000	--	ND<100,000,000	ND<400	--	ND<400	ND<400	ND<400	ND<400
	10/9/2003	--	20,000	ND<25,000	--	ND<130,000	ND<500	--	ND<500	ND<500	ND<500	ND<500
	1/14/2004	20,000	25,000	ND<40,000	--	ND<200,000	ND<800	--	ND<800	ND<800	ND<800	ND<800
	4/28/2004	30,000	21,000	9,200	--	ND<1,000	ND<0.5	--	6.8	ND<1	ND<1	12
	7/12/2004	12,000	11,000	4,600	--	ND<8,000	ND<5	--	5.1	ND<10	ND<10	ND<10
	10/25/2004	13,000	14,000	3,900	--	ND<5,000	ND<50	--	ND<50	ND<100	ND<50	ND<50
	1/17/2005	17,000	16,000	4,200	--	ND<5,000	ND<50	--	ND<50	ND<100	ND<50	ND<50
	4/6/2005	14,000	17,000	4,200	--	ND<10,000	ND<0.50	--	6.4	ND<0.50	ND<0.50	9.3
	7/8/2005	8,600	11,000	4,300	--	ND<5,000	ND<50	--	ND<50	ND<50	ND<50	ND<50
	10/7/2005	9,400	9,800	1,100	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	1/27/2006	9,900	7,900	1,600	--	ND<25,000	ND<50	--	ND<50	ND<50	ND<50	ND<50
	4/28/2006	9,600	11,000	2,900	--	ND<250	ND<0.50	--	3.4	ND<0.50	ND<0.50	6.3
	7/28/2006	5,000	5,300	1,300	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	10/27/2006	4,700	3,700	1,700	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0

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Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	1/10/2007	4,400	4,400	1,300	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	4/13/2007	--	--	--	--	--	--	--	--	--	--	--
	7/19/2007	2,700	3,300	ND<100	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	10/8/2007	2,500	2,200	ND<500	--	ND<12,000	ND<25	--	ND<25	ND<25	ND<25	ND<25
	1/9/2008	1,900	1,900	2,700	--	ND<250	ND<0.50	--	1.2	ND<0.50	ND<0.50	1.1
	4/4/2008	--	2,700	1,400	--	ND<6,200	ND<12	--	ND<12	ND<12	ND<12	ND<12
	7/3/2008	--	2,300	940	--	ND<250	ND<0.50	--	2.2	ND<0.50	ND<0.50	1.2
	10/3/2008	--	1,800	540	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	1/22/2009	--	1,300	370	--	ND<1,200	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	4/13/2009	--	1,200	420	--	ND<5,000	ND<10	--	ND<10	ND<10	ND<10	ND<10
	7/23/2009	--	900	370	--	ND<2,500	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	2/1/2010	--	720	--	--	--	--	--	--	--	--	--
	8/2/2010	--	770	--	--	--	ND<0.50	--	1.9	--	--	--
	11/1/2010	--	--	--	--	--	--	--	--	--	--	--
	1/31/2011	--	600	160	--	ND<250	ND<0.50	--	1.3	ND<0.50	ND<0.50	ND<0.50
	4/26/2011	--	--	--	--	--	--	--	--	--	--	--
	7/25/2011	--	620	220	--	ND<250	ND<0.50	--	1.6	ND<0.50	ND<0.50	ND<0.50
	10/7/2011	--	--	--	--	--	--	--	--	--	--	--
	1/23/2012	--	390	190	--	ND<250	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	4/6/2012	--	--	--	--	--	--	--	--	--	--	--
	7/24/2012	--	300	160	--	ND<250	ND<0.50	--	1.5	ND<0.50	ND<0.50	ND<0.50
	2/8/2013	--	610	ND<50	ND<1,200	--	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	7/10/2013	--	450	44	ND<250	--	ND<0.50	--	1.2	ND<0.50	ND<0.50	ND<0.50
	1/16/2014	--	310	ND<10	ND<250	--	ND<0.50	--	1.4	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	--	--	--	--	--	--	--	--	--	--
	1/27/2015	--	180	ND<10	ND<250	--	ND<0.50	--	0.80	ND<0.50	ND<0.50	ND<0.50
	7/21/2015	--	--	--	--	--	--	--	--	--	--	--
	1/20/2016	**--**	**120**	**ND<10**	**ND<250**	**--**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-8	1/18/2008	ND<1.0	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/4/2008	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/3/2008	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50

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WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	10/3/2008	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/22/2009	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	4/13/2009	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/23/2009	--	ND<0.50	ND<10	--	ND<250	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	2/1/2010	--	ND<0.50	--	--	--	--	--	--	--	--	--
	8/2/2010	--	--	--	--	--	--	--	--	--	--	--
	8/24/2010	--	--	--	--	--	--	--	--	--	--	--
MW-9A	7/10/2013	--	4.4	1,700	ND<250	--	ND<0.50	--	16	ND<0.50	ND<0.50	ND<0.50
	1/16/2014	--	ND<0.50	2,800	ND<250	--	ND<0.50	--	25	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	4.1	2,600	ND<1,200	--	ND<2.5	--	18	ND<2.5	ND<2.5	ND<2.5
	1/27/2015	--	3.9	1,100	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	58
	7/21/2015	--	ND<5.0	ND<100	ND<2,500	--	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/20/2016	**--**	**16**	**1,300**	**ND<250**	**--**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-9B	7/10/2013	--	18	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/16/2014	--	56	ND<10	ND<250	--	ND<0.50	--	1.7	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	--	--	--	--	--	--	--	--	--	--
	1/27/2015	--	9.8	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/21/2015	--	--	--	--	--	--	--	--	--	--	--
	1/20/2016	**--**	**4.1**	**ND<10**	**ND<250**	**--**	**ND<0.50**	**--**	**1.1**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-10A	7/10/2013	--	310	1,500	ND<2,500	--	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/16/2014	--	420	1,800	ND<2,500	--	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	7/22/2014	--	360	ND<100	ND<2,500	--	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/27/2015	--	340	1,500	ND<2,500	--	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	50
	7/21/2015	--	420	ND<100	ND<2,500	--	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/20/2016	**--**	**320**	**ND<50**	**ND<1,200**	**--**	**ND<2.5**	**--**	**ND<2.5**	**ND<2.5**	**ND<2.5**	**ND<2.5**
MW-10B	7/10/2013	--	110	370	ND<250	--	ND<0.50	--	3.5	ND<0.50	ND<0.50	ND<0.50
	1/16/2014	--	100	630	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/22/2014	--	89	ND<50	ND<1,200	--	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5

Table 6
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)
	1/27/2015	--	59	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/21/2015	--	96	ND<100	ND<2,500	--	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/20/2016	**--**	**51**	**ND<10**	**ND<250**	**--**	**ND<0.50**	**--**	**36**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-10S	7/22/2014	--	--	--	--	--	--	--	--	--	--	--
	1/27/2015	--	3.9	180	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	2.5
	7/21/2015	--	10	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	1/20/2016	**--**	**4.4**	**ND<10**	**ND<250**	**--**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**
MW-11A	7/10/2013	--	3,600	4,900	ND<6,200	--	ND<12	--	ND<12	ND<12	ND<12	ND<12
	1/16/2014	--	3,600	4,000	ND<6,200	--	ND<12	--	ND<12	ND<12	ND<12	ND<12
	7/22/2014	--	2,800	ND<250	ND<6,200	--	ND<12	--	ND<12	ND<12	ND<12	ND<12
	1/27/2015	--	2,200	3,600	ND<6,200	--	ND<12	--	ND<12	ND<12	ND<12	90
	7/21/2015	--	2,600	ND<500	ND<12,000	--	ND<25	--	ND<25	ND<25	ND<25	ND<25
	1/20/2016	**--**	**2,400**	**ND<500**	**ND<12,000**	**--**	**ND<25**	**--**	**ND<25**	**ND<25**	**ND<25**	**ND<25**
MW-11B	7/10/2013	--	490	1,500	ND<1,200	--	ND<2.5	--	57	ND<2.5	ND<2.5	ND<2.5
	1/16/2014	--	2,100	5,200	ND<1,200	--	ND<2.5	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5
	7/22/2014	--	1,400	5,500	ND<5,000	--	ND<10	--	ND<10	ND<10	ND<10	ND<10
	1/27/2015	--	1,200	3,000	ND<1,200	--	ND<2.5	--	110	ND<2.5	ND<2.5	46
	7/21/2015	--	1,900	ND<500	ND<12,000	--	ND<25	--	ND<25	ND<25	ND<25	ND<25
	1/20/2016	**--**	**1,900**	**ND<250**	**ND<6,200**	**--**	**ND<12**	**--**	**ND<12**	**ND<12**	**ND<12**	**ND<12**
MW-11S	7/22/2014	--	1,300	4,800	ND<6,200	--	ND<12	--	ND<12	ND<12	ND<12	ND<12
	1/27/2015	--	29	ND<10	ND<250	--	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	1.2
	7/21/2015	--	190	ND<100	ND<2,500	--	ND<5.0	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0
	1/20/2016	**--**	**2.5**	**ND<10**	**ND<250**	**--**	**ND<0.50**	**--**	**ND<0.50**	**ND<0.50**	**ND<0.50**	**ND<0.50**

Table 6
Historical Groundwater Analytical Results - Oxygenate Compounds
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	MTBE 8021B (µg/L)	MTBE 8260B (µg/L)	TBA (µg/L)	ETHANOL 8260B (µg/L)	ETHANOL 8015B (µg/L)	EDB (µg/L)	EDB 504 (µg/L)	EDC (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)

NOTES:

8021B = Analyzed by Environmental Protection Agency (EPA) Method 8021B
8260B = Analyzed by EPA Method 8260B
8015B = Analyzed by EPA Method 8015B
504 = Analyzed by EPA Method 504
µg/L = Micrograms per liter
-- = Not sampled
DIPE = Diisopropyl ether
EDB = 1,2-dibromoethane
EDC = 1,2-dichloroethane
ETBE = Ethyl t-butyl ether
ID = Identification
MTBE = Methyl t-butyl ether
ND = Not detected
ND<# = Analyte not detected at or above indicated practical quantitation limit
TAME = t-amyl methyl ether
TBA = t-butyl alcohol

Table 7
Historical Groundwater Analytical Results - Monitored Natural Attenuation Parameters
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	METHANE (mg/L)	NITRATE AS NO3 (mg/L)	SULFATE (mg/L)	IRON (II) SPECIES (µg/L)	DISSOLVED MANGANESE (µg/L)
MW-1B	1/16/2014	0.013	7.2	19	ND<100	120
MW-2B	1/16/2014	0.0021	ND<0.44	7.9	ND<100	260
MW-3B	1/16/2014	12	ND<0.44	1.0	5,200	3,300
	7/22/2014	13	ND<0.44	1.8	5,900	3,300
	1/27/2015	11	ND<0.44	1.8	1,600	3,700
	7/21/2015	4.3	ND<0.44	ND<1.0	2,600	8.5
	1/20/2016	**3.0**	**ND<0.44**	**4.9**	**1,400**	**3,200**
MW-4B	1/16/2014	0.0079	12	28	ND<100	70
MW-5	1/16/2014	0.0027	4.5	27	ND<100	5.2
MW-7	1/16/2014	0.081	ND<0.44	4.1	2,200	300
MW-9A	1/16/2014	2.5	ND<0.88	8.6	2,400	1,500
	7/22/2014	1.9	ND<0.88	ND<2.0	6,800	1,600
	1/27/2015	1.7	14	ND<1.0	6,200	1,400
	7/21/2015	0.91	ND<0.44	ND<1.0	6,000	1,300
	1/20/2016	**1.3**	**ND<0.44**	**ND<1.0**	**21,000**	**1,000**
MW-9B	1/16/2014	0.0017	4.7	18	ND<100	630
MW-10A	1/16/2014	1.7	ND<0.44	ND<1.0	5,800	1,100
	7/22/2014	2.8	ND<0.44	ND<1.0	7,200	1,200
	1/27/2015	2.0	--	--	--	--
	7/21/2015	1.0	ND<0.44	ND<1.0	5,500	1,200
	1/20/2016	**1.2**	**ND<0.44**	**ND<1.0**	**5,100**	**1,000**
MW-10B	1/16/2014	0.63	ND<0.44	ND<1.0	7,300	5,400
	7/22/2014	0.064	ND<0.44	ND<1.0	4,200	5,000
	1/27/2015	0.67	ND<0.44	ND<1.0	6,400	5,000
	7/21/2015	0.20	ND<0.44	ND<1.0	5,300	1,100
	1/20/2016	**0.86**	**ND<0.44**	**ND<1.0**	**7,800**	**5,100**
MW-10S	1/27/2015	0.25	ND<0.44	72	700	1,200
	7/21/2015	0.50	ND<0.44	51	2,400	1,600
	1/20/2016	**0.0018**	**ND<0.44**	**33**	**200**	**1,400**
MW-11A	1/16/2014	2.3	ND<0.44	ND<1.0	7,900	3,700
	7/22/2014	4.6	ND<0.44	ND<1.0	6,100	4,600
	1/27/2015	3.9	ND<0.44	ND<1.0	7,000	4,100
	7/21/2015	2.7	ND<0.44	ND<1.0	8,400	1,500
	1/20/2016	**5.2**	**ND<0.44**	**ND<1.0**	**5,500**	**3,400**

Table 7
Historical Groundwater Analytical Results - Monitored Natural Attenuation Parameters
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	METHANE (mg/L)	NITRATE AS NO3 (mg/L)	SULFATE (mg/L)	IRON (II) SPECIES (µg/L)	DISSOLVED MANGANESE (µg/L)
MW-11B	1/16/2014	0.31	ND<0.44	5.2	6,600	1,100
	7/22/2014	0.48	ND<0.44	ND<1.0	2,700	1,600
	1/27/2015	0.68	ND<0.44	ND<1.0	8,800	1,500
	7/21/2015	0.48	ND<0.44	ND<1.0	3,100	1,800
	1/20/2016	**1.5**	**ND<0.44**	**ND<1.0**	**5,500**	**1,400**
MW-11S	7/22/2014	0.50	ND<0.44	30	1,900	1,800
	1/27/2015	0.30	ND<0.44	22	690	1,200
	7/21/2015	0.65	ND<0.44	ND<1.0	5,200	1,700
	1/20/2016	**0.0014**	**ND<0.44**	**28**	**440**	**330**

NOTES:

µg/L = Micrograms per liter

-- = Not sampled

ID = Identification

mg/L = Milligrams per liter

ND<# = Analyte not detected at or above indicated practical quantitation limit

Table 8a
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acenaph-thylene (µg/L)	Bromo-dichloro-methane (µg/L)	Bromo-form (µg/L)	Bromo-methane (µg/L)	Carbon Tetra-chloride (µg/L)	Chloro-benzene (µg/L)	Chloro-ethane (µg/L)	Chloroform (µg/L)	Chloro-methane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dichloro-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)
MW-1	7/20/1999	--	--	--	--	--	12	--	--	--	--	3.9	--
	3/31/2000	--	--	--	--	--	--	--	--	--	--	6.2	--
	4/4/2001	--	--	--	--	--	5.6	--	--	--	--	4.6	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	18	--
	7/18/2002	--	--	--	--	--	5.9	1.1	--	--	--	5.8	--
	7/7/2003	--	--	--	--	--	ND<120	--	--	--	--	--	--
	7/12/2004	ND<2	ND<10	ND<10	ND<20	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<2	ND<2
	7/8/2005	--	ND<0.50	ND<2.0	ND<1.0	ND<0.50	12	1.0	ND<0.50	ND<1.0	ND<0.50	9.0	ND<0.50
	7/28/2006	--	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
	7/19/2007	--	ND<50	ND<50	ND<100	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50
	7/3/2008	--	ND<12	ND<12	ND<25	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12
MW-7	1/6/2003	--	--	--	--	--	ND<50	--	--	--	--	--	--

NOTES:

µg/L = Micrograms per liter

-- = Not sampled

ID = Identification

ND<# = Analyte not detected at or above indicated practical quantitation limit

Table 8b
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,4-Dichloro-benzene (µg/L)	Dichloro-difluoro-methane (µg/L)	1,1-Dichloro-ethane (µg/L)	1,1-Dichloro-ethene (µg/L)	cis-1,2-Dichloro-ethene (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	trans-1,3-Dichloro-propene (µg/L)	Hexa-chloro-butadiene (µg/L)	Methylene chloride (µg/L)	Naph-thalene (µg/L)
MW-1	7/20/1999	--	--	2.0	--	3.6	--	0.92	--	--	--	--	600
	9/28/1999	--	--	--	--	--	--	--	--	--	--	--	534
	1/7/2000	--	--	--	--	--	--	--	--	--	--	--	1,050
	3/31/2000	--	--	--	--	--	--	--	--	--	--	--	140
	7/14/2000	--	--	--	--	--	--	--	--	--	--	--	690
	10/3/2000	--	--	--	--	--	--	--	--	--	--	--	361
	1/3/2001	--	--	--	--	--	--	--	--	--	--	--	400
	4/4/2001	--	--	--	--	3.4	--	--	--	--	--	--	490
	7/17/2001	--	--	--	--	--	--	--	--	--	--	--	740
	7/18/2002	1.3	--	--	--	1.3	--	--	--	--	--	--	910
	7/7/2003	--	--	--	--	ND<120	--	--	--	--	--	--	850
	7/12/2004	ND<2	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<2	ND<20	450
	7/8/2005	1.2	ND<1.0	1.3	ND<0.50	3.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<20	ND<5.0	250
	7/28/2006	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.5	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<1.0	--
	7/19/2007	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	ND<50	--	ND<100	--
	7/3/2008	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	ND<12	--	ND<25	--
MW-5	1/6/2003	--	--	--	--	ND<0.50	--	--	--	--	--	--	ND<10
MW-7	1/6/2003	--	--	--	--	ND<50	--	--	--	--	--	--	ND<10

NOTES:
µg/L = Micrograms per liter
-- = Not sampled
ID = Identification
ND<# = Analyte not detected at or above indicated practical quantitation limit

Table 8c
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	n-Propyl-benzene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	Tetrachloro-ethene (PCE) (µg/L)	Trichloro-trifluoro-ethane (µg/L)	1,2,4-Trichloro-benzene (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1,2-Trichloro-ethane (µg/L)	Trichloro-ethene (TCE) (µg/L)	Trichloro-fluoro-methane (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	Vinyl chloride (µg/L)
MW-1	9/28/1999	--	--	--	--	--	--	--	--	--	1240	318	--
	1/7/2000	371	--	--	--	--	--	--	--	--	2210	597	--
	7/14/2000	--	--	334	--	--	--	--	--	--	--	--	--
	7/18/2002	--	--	ND<0.60	--	--	--	--	--	--	--	--	--
	7/7/2003	--	--	ND<120	--	--	--	--	--	--	--	--	--
	7/12/2004	--	ND<10	ND<10	ND<10	ND<2	ND<10	ND<10	ND<10	ND<10	--	--	ND<10
	7/8/2005	--	ND<0.50	ND<0.50	ND<0.50	ND<20	ND<0.50	ND<0.50	0.73	ND<1.0	--	--	ND<0.50
	7/28/2006	--	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	ND<0.50
	7/19/2007	--	ND<50	ND<50	ND<50	--	ND<50	ND<50	ND<50	ND<50	--	--	ND<50
	7/3/2008	--	ND<12	ND<12	ND<12	--	ND<12	ND<12	ND<12	ND<12	--	--	ND<12
MW-5	1/6/2003	--	--	ND<0.50	--	--	--	--	--	--	--	--	--
MW-7	1/6/2003	--	--	ND<50	--	--	--	--	--	--	--	--	--

NOTES:
µg/L = Micrograms per liter
-- = Not sampled
ID = Identification
ND<# = Analyte not detected at or above indicated practical quantitation limit

Table 8d
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Acena-phthene (µg/L)	Acena-phthylene (svoc) (µg/L)	Anthra-cene (µg/L)	Benzo[a]-anthracene (µg/L)	Benzo[a]-pyrene (µg/L)	Benzo[b]-fluor-anthene (µg/L)	Benzo-[g,h,I]-perylene (µg/L)	Benzo[k]-fluor-anthene (µg/L)	Benzoic Acid (µg/L)	Benzyl Alcohol (µg/L)	Bis(2-chloro-ethoxy) methane (µg/L)	Bis(2-chloro-ethyl) ether (µg/L)
MW-1	7/12/2004	ND<2	--	ND<2	ND<2	ND<2	ND<2	ND<2	ND<2	--	--	--	--
	7/28/2006	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<50	ND<10	ND<10	ND<10
	7/19/2007	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<11	ND<2.2	ND<2.2	ND<2.2
	7/3/2008	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<100	ND<20	ND<20	ND<20

NOTES:

µg/L = Micrograms per liter

-- = Not sampled

ID = Identification

ND<# = Analyte not detected at or above indicated practical quantitation limit

svoc = Semi-volatile organic compound

Table 8e
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Bis(2-chloro-isopropyl)-ether (µg/L)	Bis(2-ethyl-hexyl) phthalate (µg/L)	4-Bromo-pheny phe-nyl ether (µg/L)	Butyl-benzyl phthalate (µg/L)	4-Chloro-3-methyl-phenol (µg/L)	4-Chloro-aniline (µg/L)	2-Chloro-naphtha-lene (µg/L)	2-Chloro-phenol (µg/L)	4-Chloro-phenyl phenyl ether (µg/L)	Chrysene (µg/L)	Dibenzo-[a,h]-anthracene (µg/L)	Dibenzo-furan (µg/L)
MW-1	3/31/2000	--	10	--	--	--	--	--	--	--	--	--	--
	10/3/2000	--	51.6	--	--	--	--	--	--	--	--	--	--
	4/4/2001	--	55	--	--	--	--	--	--	--	--	--	--
	7/17/2001	--	400	--	--	--	--	--	--	--	--	--	--
	7/18/2002	--	120	--	--	--	--	--	--	--	--	--	--
	7/7/2003	--	70	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	ND<5	--	--	--	--	--	--	--	ND<2	ND<3	--
	7/28/2006	ND<10	33	ND<10	ND<10	ND<25	ND<10	ND<10	ND<10	ND<10	ND<10	ND<15	ND<10
	7/19/2007	ND<2.2	ND<4.4	ND<2.2	ND<2.2	ND<5.5	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<3.3	ND<2.2
	7/3/2008	ND<20	ND<40	ND<20	ND<20	ND<50	ND<20	ND<20	ND<20	ND<20	ND<20	ND<30	ND<20
MW-5	1/6/2003	--	ND<5.0	--	--	--	--	--	--	--	--	--	--
MW-7	1/6/2003	--	ND<5.0	--	--	--	--	--	--	--	--	--	--

NOTES:
µg/L = Micrograms per liter
-- = Not sampled
ID = Identification
ND<# = Analyte not detected at or above indicated practical quantitation limit

Table 8f
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	1,2-Dichloro-benzene (svoc) (µg/L)	1,3-Dichloro-benzene (svoc) (µg/L)	1,4-Dichloro-benzene (svoc) (µg/L)	3,3-Dichloro-benzidine (µg/L)	2,4-Dichloro-phenol (µg/L)	Diethyl phthalate (µg/L)	2,4-Dimethyl-phenol (µg/L)	Dimethyl phthalate (µg/L)	Di-n-butyl phthalate (µg/L)	2,4-Dinitro-phenol (µg/L)	2,4-Dinitro-toluene (µg/L)	2,6-Dinitro-toluene (µg/L)
MW-1	7/28/2006	ND<10	ND<10	ND<10	ND<50	ND<10	ND<10	ND<10	ND<10	ND<10	ND<50	ND<10	ND<10
	7/19/2007	ND<2.2	ND<2.2	ND<2.2	ND<11	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<11	ND<2.2	ND<2.2
	7/3/2008	ND<20	ND<20	ND<20	ND<100	ND<20	ND<20	ND<20	ND<20	ND<20	ND<100	ND<20	ND<20

NOTES:

µg/L = Micrograms per liter

-- = Not sampled

ID = Identification

ND<# = Analyte not detected at or above indicated practical quantitation limit

svoc = Semi-volatile organic compound

Table 8g
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Di-n-octyl phthalate (µg/L)	Fluoran-thene (µg/L)	Fluorene (µg/L)	Hexa-chloro-benzene (µg/L)	Hexachloro-butadiene (svoc) (µg/L)	Hexachloro cyclopenta-diene (µg/L)	Hexachloro -ethane (µg/L)	Indeno-[1,2,3-c,d] pyrene (µg/L)	Isophorone (µg/L)	2-Methyl-4,6-dinitro-phenol (µg/L)	2-Methyl-naphtha-lene (µg/L)	2-Methyl-phenol (µg/L)
MW-1	7/20/1999	--	--	--	--	--	--	--	--	--	--	240	--
	9/28/1999	--	--	--	--	--	--	--	--	--	--	87.4	26.4
	1/7/2000	--	--	--	--	--	--	--	--	--	--	315	--
	3/31/2000	--	--	--	--	--	--	--	--	--	--	73	31
	7/14/2000	--	--	--	--	--	--	--	--	--	--	300	--
	10/3/2000	--	--	--	--	--	--	--	--	--	--	98.1	--
	1/3/2001	--	--	--	--	--	--	--	--	--	--	180	--
	4/4/2001	--	--	--	--	--	--	--	--	--	--	78	--
	7/17/2001	--	--	--	--	--	--	--	--	--	--	290	47
	7/18/2002	--	--	--	--	--	--	--	--	--	--	420	13
	7/7/2003	--	--	--	--	--	--	--	--	--	--	260	ND<5.0
	7/12/2004	--	ND<2	ND<2	--	--	--	--	ND<2	--	--	--	--
	7/28/2006	ND<10	ND<10	ND<10	ND<10	ND<5.0	ND<10	ND<10	ND<10	ND<10	--	280	ND<10
	7/19/2007	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<1.1	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<11	230	29
	7/3/2008	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<20	ND<100	270	ND<20
MW-5	1/6/2003	--	--	--	--	--	--	--	--	--	--	ND<5.0	ND<5.0
MW-7	1/6/2003	--	--	--	--	--	--	--	--	--	--	ND<5.0	ND<5.0

NOTES:

µg/L = Micrograms per liter

-- = Not sampled

ID = Identification

ND<# = Analyte not detected at or above indicated practical quantitation limit

svoc = Semi-volatile organic compound

Table 8h
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	4-Methyl-phenol (µg/L)	Naphtha-lene (svoc) (µg/L)	2-Nitro-aniline (µg/L)	3-Nitro-aniline (µg/L)	4-Nitro-aniline (µg/L)	Nitro-benzene (µg/L)	2-Nitro-phenol (µg/L)	4-Nitro-phenol (µg/L)	N-nitrosodi-n-propyl-amine (µg/L)	N-Nitro-sodiphenyl-amine (µg/L)	Penta-chloro-phenol (µg/L)	Phen-anthrene (µg/L)
MW-1	7/20/1999	27	--	--	--	--	--	--	--	--	--	--	--
	9/28/1999	35.6	--	--	--	--	--	--	--	--	--	--	--
	3/31/2000	18	--	--	--	--	--	--	--	--	--	--	--
	10/3/2000	28.9	--	--	--	--	--	--	--	--	--	--	--
	7/17/2001	25	--	--	--	--	--	--	--	--	--	--	--
	7/18/2002	25	--	--	--	--	--	--	--	--	--	--	--
	7/7/2003	22	--	--	--	--	--	--	--	--	--	--	--
	7/12/2004	--	--	--	--	--	--	--	--	--	--	--	ND<2
	7/28/2006	--	660	ND<10	ND<10	ND<25	ND<10	ND<10	ND<10	ND<10	ND<10	ND<50	ND<10
	7/19/2007	--	770	ND<2.2	ND<2.2	ND<5.5	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<2.2	ND<11	ND<2.2
	7/3/2008	--	750	ND<20	ND<20	ND<50	ND<20	ND<20	ND<20	ND<20	ND<20	ND<100	ND<20
MW-5	1/6/2003	ND<5.0	--	--	--	--	--	--	--	--	--	--	--
MW-7	1/6/2003	ND<5.0	--	--	--	--	--	--	--	--	--	--	--

NOTES:

µg/L = Micrograms per liter

-- = Not sampled

ID = Identification

ND<# = Analyte not detected at or above indicated practical quantitation limit

svoc = Semi-volatile organic compound

Table 8i
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Phenol (µg/L)	Pyrene (µg/L)	1,2,4-Trichloro-benzene (µg/L)	2,4,6-Trichloro-phenol (µg/L)	2,4,5-Trichloro-phenol (µg/L)	Carbon (organic, total) (µg/L)	Chromium VI (µg/L)	Chromium (total) (µg/L)	Iron Ferrous (µg/L)	Manganese (dissolved) (µg/L)	Manganese (total) (µg/L)	Molyb-denum (total) (µg/L)
MW-1	7/12/2004	--	ND<2	--	--	--	--	--	--	--	--	--	--
	7/28/2006	ND<10	ND<10	ND<10	ND<25	ND<25	--	--	--	--	--	--	--
	7/19/2007	ND<2.2	ND<2.2	ND<2.2	ND<5.5	ND<5.5	--	--	--	--	--	--	--
	7/3/2008	ND<20	ND<20	ND<20	ND<50	ND<50	--	--	--	--	--	--	--
	4/13/2009	--	--	--	--	--	26	ND<2.0	ND<3.0	280	160	200	8.6
MW-2	4/13/2009	--	--	--	--	--	4.4	ND<2.0	9.3	740	110	230	1.1
MW-3	4/13/2009	--	--	--	--	--	3.0	ND<2.0	14	1,800	2,800	2,500	4.7
MW-4	4/13/2009	--	--	--	--	--	1.9	ND<2.0	8.1	1,500	2,000	3,500	7.2
MW-5	4/13/2009	--	--	--	--	--	1.4	ND<2.0	19	ND<500	1.4	650	1.2
MW-6	4/13/2009	--	--	--	--	--	1.4	ND<2.0	32	ND<500	14	530	2.6
MW-7	4/13/2009	--	--	--	--	--	2.3	ND<2.0	100	3,200	960	2,300	1.1
MW-8	4/13/2009	--	--	--	--	--	0.48	ND<2.0	3.3	130	ND<1.0	47	1.2

NOTES:
µg/L = Micrograms per liter
-- = Not sampled
ID = Identification
ND<# = Analyte not detected at or above indicated practical quantitation limit

Table 8j
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	Molyb-denum (dissolved) (µg/L)	Selenium (total) (µg/L)	Selenium (dissolved) (µg/L)	Vanadium (total) (µg/L)	Vanadium (dissolved) (µg/L)	Bromate (µg/L)	Bromide (µg/L)	Chloride (µg/L)	Nitrogen as Nitrate (µg/L)	Sulfate (µg/L)	Alkalinity (total) (µg/L)	Specific Con-ductance (µg/L)
MW-1	4/13/2009	7.5	ND<2.0	ND<2.0	ND<3.0	ND<3.0	ND<25	0.77	23	ND<0.44	ND<1.0	390	750
MW-2	4/13/2009	ND<1.0	ND<2.0	ND<2.0	31	12	ND<25	0.40	25	0.85	14	350	688
MW-3	4/13/2009	3.7	ND<2.0	ND<2.0	22	ND<3.0	ND<25	0.41	30	2.9	16	360	681
MW-4	4/13/2009	6.4	ND<2.0	ND<2.0	13	3.4	ND<25	0.40	37	4.4	23	320	704
MW-5	4/13/2009	1.5	ND<2.0	ND<2.0	59	6.1	ND<25	0.71	68	5.7	26	350	860
MW-6	4/13/2009	2.9	ND<2.0	ND<2.0	80	5.2	ND<25	0.58	72	8.9	37	280	754
MW-7	4/13/2009	1.3	ND<2.0	ND<2.0	190	5.6	ND<25	0.50	37	ND<0.44	9.3	430	848
MW-8	4/13/2009	1.2	ND<2.0	ND<2.0	12	4.5	ND<25	ND<0.10	81	19	40	210	690

NOTES:
µg/L = Micrograms per liter
-- = Not sampled
ID = Identification
ND<# = Analyte not detected at or above indicated practical quantitation limit

Table 8k
Historical Groundwater Analytical Results - Additional Analytes
76 Service Station No. 1156 (351645)
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	PRE-PURGE DO (mg/L)	POST-PURGE DO (mg/L)	PRE-PURGE ORP (mV)	POST-PURGE ORP (mV)
MW-1	4/13/2009	0.75	--	-102	--
	7/23/2009	2.47	--	-23	--
	2/1/2010	1.18	0.81	-98	-108
	8/2/2010	0.72	0.59	-82	-97
MW-1B	11/1/2010	2.80	0.93	121	111
	1/31/2011	2.57	1.32	152	159
	4/26/2011	3.05	1.90	173	182
	1/23/2012	1.63	0.67	84	80
	7/24/2012	1.36	0.70	74	95
	2/8/2013	1.8	1.7	52	61
	7/10/2013	2.0	1.8	55	58
	1/16/2014	3.3	1.2	158	99
	1/27/2015	2.5	2.0	139	111
	1/20/2016	**2.2**	**1.8**	**125**	**140**
MW-2	4/13/2009	0.65	0.49	-27	-15
	7/23/2009	2.57	7.09	56	14
	2/1/2010	2.13	1.51	3	-14
	8/2/2010	0.97	0.62	-7	-12
MW-2B	11/1/2010	1.30	1.06	113	115
	1/31/2011	1.25	0.89	159	159
	4/26/2011	4.27	2.42	173	180
	1/23/2012	0.98	--	108	--
	7/24/2012	0.67	1.10	69	67
	2/8/2013	1.9	1.7	79	86
	7/10/2013	1.7	1.5	54	60
	1/16/2014	2.2	1.8	75	90
	1/27/2015	1.9	1.7	128	119
	1/20/2016	**1.9**	**1.6**	**70**	**86**
MW-3	4/13/2009	0.64	0.38	-89	-82
	7/23/2009	5.14	6.14	-22	-56
	2/1/2010	2.12	0.79	-63	-89
	8/2/2010	0.81	0.62	-77	-59
MW-3B	11/1/2010	1.89	0.60	125	117
	1/31/2011	0.88	0.66	161	100
	4/26/2011	1.44	0.92	169	115
	1/23/2012	0.83	0.31	84	-9
	7/24/2012	0.64	0.49	-14	-53
	2/8/2013	1.4	1.2	-36	-47
	7/10/2013	1.7	1.4	-29	-32

ATTACHMENT C

Laboratory Report and Chain-of-Custody Documentation

Date of Report: 08/08/2017

Tamera Rogers

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

Client Project:	351645
BCL Project:	1156
BCL Work Order:	1720416
Invoice ID:	B275442

Enclosed are the results of analyses for samples received by the laboratory on 7/25/2017. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Molly Meyers

Contact Person: Molly Meyers
Client Service Rep

Stuart Buttram
Technical Director

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CHAIN OF CUSTODY FORM

17-20416

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

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Union Oil Site ID: [redacted] 11566	Union Oil Consultant: ARCADIS
Site Global ID: T0600102279	Consultant Contact: SAMUEL MILES
Site Address: 4276 MACARTHUR BLVD OAKLAND, CA	Consultant Phone No.: (206) 726 4720
Union Oil PM: JAMES P. KIERNAN	Sampling Company: GETTLER-RYAN INC
Union Oil PM Phone No.: (925) 842 3220	Sampled By (PRINT): GILBERT MEDINA
Charge Code: NWRTB-0351645-0-LAB	Sampler Signature:
This is a LEGAL document. ALL fields must be filled out CORRECTLY and COMPLETELY.	BC Laboratories, Inc. Project Manager: Molly Meyers 4100 Atlas Court, Bakersfield, CA 93308 Phone No. 661-327-4911

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

Special Instructions: LAB TO FILTER DISSOLVED MANGANESE SAMPLES

	SAMPLE ID					ANALYSES REQUIRED											
	Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time	# of Containers	TPH - Diesel by EPA 8015M	TPH - G by [redacted] (8015M)	BTEX/MTBE/OXYS by EPA 8260B	[redacted] BTEX/MTBE (8260B)	EPA 8260B Full List with OXYS	FERROUS IRON (SM20 3500 Fe B)	METHANE (RSK-175)	NITRATE SULFATE (EPA 300.0)	DISSOLVED MANGANESE (200.7)	OIL & GREASE (1664)	Notes / Comments
1	QA	W-S-A		170725	—	2		X		4							
2	MW-3B	W-S-A			0930	12	X	X	X			X	X	X	X		
3	MW-9A	W-S-A			0820												
4	MW-10A	W-S-A			1008												
5	MW-10B	W-S-A			0917												
6	MW-10S	W-S-A			1100	13										X	
7	MW-11A	W-S-A			1015	12											
8	MW-11B	W-S-A			0945												
9	MW-11S	W-S-A			0915												
	[redacted]	W-S-A															
		W-S-A															
		W-S-A															

Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time:
[signature]	GTL INC	7/25/17 1330	[signature]	BCLab	7-25-17 1830	[signature]	BCLDB	7/25/17 2220
Received By	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time:**
[signature]	BCLab	7-25-17 1330	[signature]	BCLDB	7/25/17 18:30	[signature]	BCLAB	7/25 2220

CHAIN OF CUSTODY FORM

17-20416

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

COC 2 of 2

Union Oil Site ID: 1156	Union Oil Consultant: ARCADIS
Site Global ID: T0600102279	Consultant Contact: SAMUEL MILES
Site Address: 4276 MACARTHUR BLVD OAKLAND, CA	Consultant Phone No.: (206) 726-4720
Union Oil PM: JAMES P. KLERNAN	Sampling Company: GETTLER-RYAN INC
Union Oil PM Phone No.: (925) 842-3220	Sampled By (PRINT): GILBERT MEDINA
Charge Code: NWRTB- 0 351645 -0- LAB	Sampler Signature:

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

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

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

Special Instructions

SAMPLE ID						ANALYSES REQUIRED									
Field Point Name	Matrix	Depth	Date (yymmdd)	Sample Time	# of Containers	TPH - Diesel by EPA 8015	TPH - G by GC/MS	BTEX/MTBE/TAME/DIPE/ETBE/EDB by EPA 8260B	Ethanol by EPA 8260B	EPA 8260B Full List with OXYS						Notes / Comments
10 MW-12	W-S-A		170725	0630	3		X	X								
11 PZ-1	W-S-A			0420												
12 PZ-2	W-S-A			0515												
13 PZ-3	W-S-A			0610												
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															
	W-S-A															

JKR SUMMA RECEIVED

Relinquished By	Company	Date / Time:	Relinquished By	Company	Date / Time :	Relinquished By	Company	Date / Time:
	GRINC	7/25/17 1330	Jhony Bogan	BCLAB	7-25-17 1830		BCLABS	7/25/17
Received By	**Company**	**Date / Time:**	**Received By**	**Company**	**Date / Time :**	**Received By**	**Company**	**Date / Time:**
Jhony Bogan	BCLAB	7-25-17 1370		BCLAB	7/25/17 18:30			

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1720416 Page 3 of 5

BC LABORATORIES INC. — COOLER RECEIPT FORM — Page 1 Of 3

Submission #: 17-20416

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

SHIPPING CONTAINER
Ice Chest ☒ None ☐ Box ☐
Other ☐ (Specify)________

FREE LIQUID
YES ☐ NO ☐
(W) / S

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

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

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

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: PE Thermometer ID: 208 Date/Time 7/25 2220

Temperature: (A) 0.2 °C / (C) 0.5 °C Analyst Init GSP

SAMPLE CONTAINERS	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / (16oz) PE UNPRES		I	I	I	I			I		
2oz Cr+6										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL 096		A→F	A→F	A→F	A→F	A→F	A→F	A→F	A→F	~~AB~~
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504 087		GH	GH	GH	GH	GH	GH	GH	GH	
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			JK	JK	JK					
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON			L	L	L					
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: 1 not received.
Sample Numbering Completed By: GSP Date/Time: 7/26 0015
A = Actual / C = Corrected

Rev 21 05/23/2016
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Chain of Custody and Cooler Receipt Form for 1720416 Page 4 of 5

BC LABORATORIES INC. — COOLER RECEIPT FORM — Page 2 Of 5

Submission #: 17-20416

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

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

FREE LIQUID
YES ☐ NO ☐
W / S

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

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

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

COC Received ☒ YES ☐ NO

Emissivity: 0.95 Container: PE Thermometer ID: 208 Date/Time 7/25 2220

Temperature: (A) 0.2 °C / (C) 0.5 °C Analyst Init GSP

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

Comments:_____
Sample Numbering Completed By: GM Date/Time: 7/26 0015
A = Actual / C = Corrected

Rev 21 05/23/2016
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Chain of Custody and Cooler Receipt Form for 1720416 Page 5 of 5

BC LABORATORIES INC. — COOLER RECEIPT FORM — Page 5 Of 7

Submission #: 17-20416

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

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

Custody Seals: Ice Chest ☐ (Intact? Yes ☐ No ☐) Containers ☐ (Intact? Yes ☐ No ☐) None ☒ Comments:

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

COC Received ☒ YES ☐ NO

Emissivity: 0.98 Container: Amber Thermometer ID: 208 Date/Time 1/25 2220

Temperature: (A) 0.3 °C / (C) 0.6 °C Analyst Init GSP

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES		I	I		I					
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										
QT EPA 1664		J			J					
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	JK	JKL	JK	JK	JKL					
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON	L	M	L	L	M					
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments:

Sample Numbering Completed By: _____ Date/Time: 1/26/2015

A = Actual / C = Corrected

Rev 21 05/23/2016

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

Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1720416-01	**COC Number:**	---	**Receive Date:** 07/25/2017 22:20
	Project Number:	1156	**Sampling Date:** 07/25/2017 00:00
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	QA	**Lab Matrix:** Water
	Sampled By:	GRD	**Sample Type:** Water
			Delivery Work Order:
			Global ID: T0600102279
			Location ID (FieldPoint): QA
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1720416-02	**COC Number:**	---	**Receive Date:** 07/25/2017 22:20
	Project Number:	1156	**Sampling Date:** 07/25/2017 09:30
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-3B	**Lab Matrix:** Water
	Sampled By:	GRD	**Sample Type:** Water
			Metal Analysis: 2-Lab Filtered and Acidified past 15 minute holding time
			Delivery Work Order:
			Global ID: T0600102279
			Location ID (FieldPoint): MW-3B
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1720416-03	**COC Number:**	---	**Receive Date:** 07/25/2017 22:20
	Project Number:	1156	**Sampling Date:** 07/25/2017 08:20
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-9A	**Lab Matrix:** Water
	Sampled By:	GRD	**Sample Type:** Water
			Metal Analysis: 2-Lab Filtered and Acidified past 15 minute holding time
			Delivery Work Order:
			Global ID: T0600102279
			Location ID (FieldPoint): MW-9A
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:

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San Jose, CA 95119

Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1720416-04	**COC Number:**	---	**Receive Date:** 07/25/2017 22:20
	Project Number:	1156	**Sampling Date:** 07/25/2017 10:08
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-10A	**Lab Matrix:** Water
	Sampled By:	GRD	**Sample Type:** Water
	Metal Analysis: 2-Lab Filtered and Acidified past 15 minute holding time Delivery Work Order: Global ID: T0600102279 Location ID (FieldPoint): MW-10A Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1720416-05	**COC Number:**	---	**Receive Date:** 07/25/2017 22:20
	Project Number:	1156	**Sampling Date:** 07/25/2017 09:17
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-10B	**Lab Matrix:** Water
	Sampled By:	GRD	**Sample Type:** Water
	Metal Analysis: 2-Lab Filtered and Acidified past 15 minute holding time Delivery Work Order: Global ID: T0600102279 Location ID (FieldPoint): MW-10B Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1720416-06	**COC Number:**	---	**Receive Date:** 07/25/2017 22:20
	Project Number:	1156	**Sampling Date:** 07/25/2017 11:00
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-10S	**Lab Matrix:** Water
	Sampled By:	GRD	**Sample Type:** Water
	Metal Analysis: 2-Lab Filtered and Acidified past 15 minute holding time Delivery Work Order: Global ID: T0600102279 Location ID (FieldPoint): MW-10S Matrix: W Sample QC Type (SACode): CS Cooler ID:		

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1720416-07	**COC Number:**	---	**Receive Date:** 07/25/2017 22:20
	Project Number:	1156	**Sampling Date:** 07/25/2017 10:15
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-11A	**Lab Matrix:** Water
	Sampled By:	GRD	**Sample Type:** Water
			Metal Analysis: 2-Lab Filtered and Acidified past 15 minute holding time
			Delivery Work Order:
			Global ID: T0600102279
			Location ID (FieldPoint): MW-11A
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1720416-08	**COC Number:**	---	**Receive Date:** 07/25/2017 22:20
	Project Number:	1156	**Sampling Date:** 07/25/2017 09:45
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-11B	**Lab Matrix:** Water
	Sampled By:	GRD	**Sample Type:** Water
			Metal Analysis: 2-Lab Filtered and Acidified past 15 minute holding time
			Delivery Work Order:
			Global ID: T0600102279
			Location ID (FieldPoint): MW-11B
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1720416-09	**COC Number:**	---	**Receive Date:** 07/25/2017 22:20
	Project Number:	1156	**Sampling Date:** 07/25/2017 09:15
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-11S	**Lab Matrix:** Water
	Sampled By:	GRD	**Sample Type:** Water
			Metal Analysis: 2-Lab Filtered and Acidified past 15 minute holding time
			Delivery Work Order:
			Global ID: T0600102279
			Location ID (FieldPoint): MW-11S
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:

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San Jose, CA 95119

Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1720416-10	**COC Number:**	---	**Receive Date:**	07/25/2017 22:20
	Project Number:	1156	**Sampling Date:**	07/25/2017 06:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-12	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600102279			
	Location ID (FieldPoint): MW-12			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1720416-11	**COC Number:**	---	**Receive Date:**	07/25/2017 22:20
	Project Number:	1156	**Sampling Date:**	07/25/2017 04:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	PZ-1	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600102279			
	Location ID (FieldPoint): PZ-1			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1720416-12	**COC Number:**	---	**Receive Date:**	07/25/2017 22:20
	Project Number:	1156	**Sampling Date:**	07/25/2017 05:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	PZ-2	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water
	Delivery Work Order:			
	Global ID: T0600102279			
	Location ID (FieldPoint): PZ-2			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1720416-13	**COC Number:**	---	**Receive Date:**	07/25/2017 22:20
	Project Number:	1156	**Sampling Date:**	07/25/2017 06:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	PZ-3	**Lab Matrix:**	Water
	Sampled By:	GRD	**Sample Type:**	Water

Delivery Work Order:
Global ID: T0600102279
Location ID (FieldPoint): PZ-3
Matrix: W
Sample QC Type (SACode): CS
Cooler ID:

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-02 | **Client Sample Name:** 1156, MW-3B, 7/25/2017 9:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**200**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	2.5		EPA-8260B	ND	A01	1
1,2-Dichloroethane	ND	ug/L	2.5		EPA-8260B	ND	A01	1
Ethylbenzene	**480**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**11**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	1
Toluene	**100**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	1
Total Xylenes	**160**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	1
t-Amyl Methyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	1
t-Butyl alcohol	ND	ug/L	50		EPA-8260B	ND	A01	1
Diisopropyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	1
Ethanol	ND	ug/L	1200		EPA-8260B	ND	A01	1
Ethyl t-butyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	98.9	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	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	08/01/17	08/01/17 19:04	AKM	MS-V14	5	B[G2501

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-02 | **Client Sample Name:** 1156, MW-3B, 7/25/2017 9:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**3900**	**ug/L**	**500**		**EPA-8015B**	ND	**A01**	1
a,a,a-Trifluorotoluene (FID Surrogate)	99.6	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/04/17 21:03	TDH	GC-V9	10	B[H0166

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-02 | **Client Sample Name:** 1156, MW-3B, 7/25/2017 9:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organics (C12 - C24)	**490**	**ug/L**	**50**		**EPA-8015B/TPHd**	ND	**A52**	1
Tetracosane (Surrogate)	78.8	%	40 - 140 (LCL - UCL)		EPA-8015B/TPHd			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/TPHd	07/31/17	08/01/17 14:21	RSM	GC-5	0.980	B[H0156

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Gas Testing in Water

BCL Sample ID: 1720416-02 | **Client Sample Name:** 1156, MW-3B, 7/25/2017 9:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	**0.86**	**mg/L**	**0.010**		**RSK-175M**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/01/17	08/01/17 13:08	JH2	GC-V1	10	B[H0013

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San Jose, CA 95119

Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Water Analysis (General Chemistry)

BCL Sample ID: 1720416-02 | **Client Sample Name:** 1156, MW-3B, 7/25/2017 9:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	ND	mg/L	0.44		EPA-300.0	ND		1
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		1
Iron (II) Species	**6300**	**ug/L**	**1000**		**SM-3500-FeD**	ND	**A07**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	07/26/17	07/26/17 14:30	EMW	IC2	1	B[G2265
2	SM-3500-FeD	07/26/17	07/26/17 15:01	RCC	KONE-1	10	B[G1928

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San Jose, CA 95119

Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Metals Analysis

BCL Sample ID: 1720416-02 | **Client Sample Name:** 1156, MW-3B, 7/25/2017 9:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Manganese	**3100**	**ug/L**	**1.0**		**EPA-200.8**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.8	07/26/17	08/01/17 04:42	ARD	PE-EL3	1	B[G2645

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

Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-03 | **Client Sample Name:** 1156, MW-9A, 7/25/2017 8:20:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**2400**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane	**80**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Ethylbenzene	**84**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Methyl t-butyl ether	**150**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Toluene	**28**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Total Xylenes	**21**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	2
t-Amyl Methyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
t-Butyl alcohol	**2100**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	2
Diisopropyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
Ethanol	ND	ug/L	1200		EPA-8260B	ND	A01	2
Ethyl t-butyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	85.7	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	98.1	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	87.1	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/02/17	08/02/17 14:32	JPT	HPCHEM	100	B[H0158
2	EPA-8260B	08/01/17	08/01/17 19:27	AKM	MS-V14	5	B[G2501

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Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-03 | **Client Sample Name:** 1156, MW-9A, 7/25/2017 8:20:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**5600**	**ug/L**	**500**		**EPA-8015B**	ND	**A01**	1
a,a,a-Trifluorotoluene (FID Surrogate)	98.6	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/04/17 21:23	TDH	GC-V9	10	B[H0166

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Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-03 | **Client Sample Name:** 1156, MW-9A, 7/25/2017 8:20:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organics (C12 - C24)	**1200**	**ug/L**	**250**		**EPA-8015B/TPHd**	ND	**A01,A52**	1
Tetracosane (Surrogate)	93.4	%	40 - 140 (LCL - UCL)		EPA-8015B/TPHd			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/TPHd	07/31/17	08/01/17 17:39	RSM	GC-5	4.950	B[H0156

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Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Gas Testing in Water

BCL Sample ID: 1720416-03 | **Client Sample Name:** 1156, MW-9A, 7/25/2017 8:20:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	**0.98**	**mg/L**	**0.010**		**RSK-175M**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/01/17	08/01/17 13:21	JH2	GC-V1	10	B[H0013

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Water Analysis (General Chemistry)

BCL Sample ID: 1720416-03 | **Client Sample Name:** 1156, MW-9A, 7/25/2017 8:20:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	ND	mg/L	0.44		EPA-300.0	ND		1
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		1
Iron (II) Species	**3600**	**ug/L**	**100**		**SM-3500-FeD**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	07/26/17	07/27/17 00:32	OLH	IC2	1	B[G2317
2	SM-3500-FeD	07/26/17	07/26/17 14:50	RCC	KONE-1	1	B[G1928

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Project: 1156
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Metals Analysis

BCL Sample ID: 1720416-03 | **Client Sample Name:** 1156, MW-9A, 7/25/2017 8:20:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Manganese	**890**	**ug/L**	**1.0**		**EPA-200.8**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.8	07/26/17	08/01/17 04:46	ARD	PE-EL3	1	B[G2645

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-04 | **Client Sample Name:** 1156, MW-10A, 7/25/2017 10:08:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**6000**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	5.0		EPA-8260B	ND	A01	2
1,2-Dichloroethane	ND	ug/L	5.0		EPA-8260B	ND	A01	2
Ethylbenzene	**990**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**650**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	2
Toluene	**490**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	2
Total Xylenes	**1800**	**ug/L**	**10**		**EPA-8260B**	ND	**A01**	2
t-Amyl Methyl ether	ND	ug/L	5.0		EPA-8260B	ND	A01	2
t-Butyl alcohol	**3500**	**ug/L**	**100**		**EPA-8260B**	ND	**A01**	2
Diisopropyl ether	ND	ug/L	5.0		EPA-8260B	ND	A01	2
Ethanol	ND	ug/L	2500		EPA-8260B	ND	A01	2
Ethyl t-butyl ether	ND	ug/L	5.0		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	87.1	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	90.7	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	91.2	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/02/17	08/02/17 16:09	JPT	HPCHEM	100	B[H0158
2	EPA-8260B	08/01/17	08/01/17 21:22	AKM	MS-V14	10	B[G2501

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Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-04 | **Client Sample Name:** 1156, MW-10A, 7/25/2017 10:08:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**16000**	**ug/L**	**1000**		**EPA-8015B**	ND	**A01**	1
a,a,a-Trifluorotoluene (FID Surrogate)	99.5	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/04/17 21:43	TDH	GC-V9	20	B[H0166

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Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-04 | **Client Sample Name:** 1156, MW-10A, 7/25/2017 10:08:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organics (C12 - C24)	**1300**	**ug/L**	**250**		**EPA-8015B/TPHd**	ND	**A01,A52**	1
Tetracosane (Surrogate)	70.0	%	40 - 140 (LCL - UCL)		EPA-8015B/TPHd			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/TPHd	07/31/17	08/01/17 17:53	RSM	GC-5	4.850	B[H0156

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Gas Testing in Water

BCL Sample ID: 1720416-04 | **Client Sample Name:** 1156, MW-10A, 7/25/2017 10:08:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	**0.81**	**mg/L**	**0.010**		**RSK-175M**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/01/17	08/01/17 09:48	JH2	GC-V1	10	B[H0013

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Project: 1156
Project Number: 351645
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Water Analysis (General Chemistry)

BCL Sample ID: 1720416-04 | **Client Sample Name:** 1156, MW-10A, 7/25/2017 10:08:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	ND	mg/L	0.44		EPA-300.0	ND		1
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		1
Iron (II) Species	**4300**	**ug/L**	**100**		**SM-3500-FeD**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	07/26/17	07/26/17 18:57	JSW	IC2	1	B[G2265
2	SM-3500-FeD	07/26/17	07/26/17 14:50	RCC	KONE-1	1	B[G1928

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Project: 1156
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Metals Analysis

BCL Sample ID: 1720416-04 | **Client Sample Name:** 1156, MW-10A, 7/25/2017 10:08:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Manganese	**890**	**ug/L**	**1.0**		**EPA-200.8**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.8	07/26/17	08/01/17 04:49	ARD	PE-EL3	1	B[G2645

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-05 | **Client Sample Name:** 1156, MW-10B, 7/25/2017 9:17:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**920**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane	**27**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Ethylbenzene	**140**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Methyl t-butyl ether	**67**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Toluene	**37**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Total Xylenes	**250**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	2
t-Amyl Methyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
t-Butyl alcohol	**430**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	2
Diisopropyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
Ethanol	ND	ug/L	1200		EPA-8260B	ND	A01	2
Ethyl t-butyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	82.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	98.8	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	87.6	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/02/17	08/02/17 16:33	JPT	HPCHEM	100	B[H0158
2	EPA-8260B	08/01/17	08/01/17 19:50	AKM	MS-V14	5	B[G2501

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Project Number: 351645
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-05 | **Client Sample Name:** 1156, MW-10B, 7/25/2017 9:17:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**4000**	**ug/L**	**500**		**EPA-8015B**	ND	**A01**	1
a,a,a-Trifluorotoluene (FID Surrogate)	104	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/04/17 22:04	TDH	GC-V9	10	B[H0166

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Reported: 08/08/2017 10:34
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Project Number: 351645
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Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-05 | **Client Sample Name:** 1156, MW-10B, 7/25/2017 9:17:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organics (C12 - C24)	**340**	**ug/L**	**50**		**EPA-8015B/TPHd**	ND	**A52**	1
Tetracosane (Surrogate)	84.1	%	40 - 140 (LCL - UCL)		EPA-8015B/TPHd			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/TPHd	07/31/17	08/01/17 18:36	RSM	GC-5	0.990	B[H0156

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Gas Testing in Water

BCL Sample ID: 1720416-05 | **Client Sample Name:** 1156, MW-10B, 7/25/2017 9:17:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	**1.2**	**mg/L**	**0.010**		**RSK-175M**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/01/17	08/01/17 09:53	JH2	GC-V1	10	B[H0013

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Water Analysis (General Chemistry)

BCL Sample ID: 1720416-05 | **Client Sample Name:** 1156, MW-10B, 7/25/2017 9:17:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	ND	mg/L	0.44		EPA-300.0	ND		1
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		1
Iron (II) Species	**8300**	**ug/L**	**1000**		**SM-3500-FeD**	ND	**A07**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	07/26/17	07/26/17 16:17	EMW	IC2	1	B[G2265
2	SM-3500-FeD	07/26/17	07/26/17 15:01	RCC	KONE-1	10	B[G1928

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Metals Analysis

BCL Sample ID: 1720416-05 | **Client Sample Name:** 1156, MW-10B, 7/25/2017 9:17:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Manganese	**4200**	**ug/L**	**1.0**		**EPA-200.8**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.8	07/26/17	08/01/17 04:53	ARD	PE-EL3	1	B[G2645

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-06 | **Client Sample Name:** 1156, MW-10S, 7/25/2017 11:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**1.3**	**ug/L**	**0.50**		**EPA-8260B**	ND		1
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260B	ND		1
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260B	ND		1
Ethylbenzene	ND	ug/L	0.50		EPA-8260B	ND		1
Methyl t-butyl ether	**6.6**	**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
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
t-Butyl alcohol	**56**	**ug/L**	**10**		**EPA-8260B**	ND		1
Diisopropyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
Ethanol	ND	ug/L	250		EPA-8260B	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	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	08/01/17	08/01/17 18:42	AKM	MS-V14	1	B[G2501

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-06 | **Client Sample Name:** 1156, MW-10S, 7/25/2017 11:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**230**	**ug/L**	**50**		**EPA-8015B**	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	99.4	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/02/17 17:42	TDH	GC-V9	1	B[H0166

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Reported: 08/08/2017 10:34
Project: 1156
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Project Manager: Tamera Rogers

Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-06 | **Client Sample Name:** 1156, MW-10S, 7/25/2017 11:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organics (C12 - C24)	**160**	**ug/L**	**50**		**EPA-8015B/TPHd**	ND	**A52**	1
Tetracosane (Surrogate)	96.0	%	40 - 140 (LCL - UCL)		EPA-8015B/TPHd			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/TPHd	07/31/17	08/01/17 18:50	RSM	GC-5	0.980	B[H0156

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

EPA Method 1664

BCL Sample ID: 1720416-06 | **Client Sample Name:** 1156, MW-10S, 7/25/2017 11:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/L	5.0		EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	08/01/17	08/01/17 07:00	MAM	MAN-SV	1	B[H0063

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Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Gas Testing in Water

BCL Sample ID: 1720416-06 | **Client Sample Name:** 1156, MW-10S, 7/25/2017 11:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	**1.8**	**mg/L**	**0.010**		**RSK-175M**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/01/17	08/01/17 09:57	JH2	GC-V1	10	B[H0013

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Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Water Analysis (General Chemistry)

BCL Sample ID: 1720416-06 | **Client Sample Name:** 1156, MW-10S, 7/25/2017 11:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	ND	mg/L	0.44		EPA-300.0	ND		1
Sulfate	**20**	**mg/L**	**1.0**		**EPA-300.0**	ND		1
Iron (II) Species	**6000**	**ug/L**	**1000**		**SM-3500-FeD**	ND	**A07**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	07/26/17	07/26/17 19:15	JSW	IC2	1	B[G2265
2	SM-3500-FeD	07/26/17	07/26/17 15:07	RCC	KONE-1	10	B[G1928

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Metals Analysis

BCL Sample ID: 1720416-06 | **Client Sample Name:** 1156, MW-10S, 7/25/2017 11:00:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Manganese	**1600**	**ug/L**	**1.0**		**EPA-200.8**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.8	07/26/17	08/01/17 04:56	ARD	PE-EL3	1	B[G2645

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-07 | **Client Sample Name:** 1156, MW-11A, 7/25/2017 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**6900**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	25		EPA-8260B	ND	A01	2
1,2-Dichloroethane	ND	ug/L	25		EPA-8260B	ND	A01	2
Ethylbenzene	**2300**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**1600**	**ug/L**	**25**		**EPA-8260B**	ND	**A01**	2
Toluene	**5300**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Total Xylenes	**11000**	**ug/L**	**100**		**EPA-8260B**	ND	**A01**	1
t-Amyl Methyl ether	ND	ug/L	25		EPA-8260B	ND	A01	2
t-Butyl alcohol	**3300**	**ug/L**	**500**		**EPA-8260B**	ND	**A01**	2
Diisopropyl ether	ND	ug/L	25		EPA-8260B	ND	A01	2
Ethanol	ND	ug/L	12000		EPA-8260B	ND	A01	2
Ethyl t-butyl ether	ND	ug/L	25		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	83.3	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	90.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/02/17	08/02/17 16:57	JPT	HPCHEM	100	B[H0158
2	EPA-8260B	08/01/17	08/01/17 22:54	AKM	MS-V14	50	B[G2501

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Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-07 | **Client Sample Name:** 1156, MW-11A, 7/25/2017 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**48000**	**ug/L**	**2500**		**EPA-8015B**	ND	**A01**	1
a,a,a-Trifluorotoluene (FID Surrogate)	104	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/04/17 22:24	TDH	GC-V9	50	B[H0166

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Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-07 | **Client Sample Name:** 1156, MW-11A, 7/25/2017 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organics (C12 - C24)	**1600**	**ug/L**	**250**		**EPA-8015B/TPHd**	ND	**A01,A52**	1
Tetracosane (Surrogate)	81.3	%	40 - 140 (LCL - UCL)		EPA-8015B/TPHd			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/TPHd	07/31/17	08/01/17 18:07	RSM	GC-5	4.750	B[H0156

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Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Gas Testing in Water

BCL Sample ID: 1720416-07 | **Client Sample Name:** 1156, MW-11A, 7/25/2017 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	**2.1**	**mg/L**	**0.010**		**RSK-175M**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/01/17	08/01/17 10:48	JH2	GC-V1	10	B[H0013

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Reported: 08/08/2017 10:34
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Project Number: 351645
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Water Analysis (General Chemistry)

BCL Sample ID: 1720416-07 | **Client Sample Name:** 1156, MW-11A, 7/25/2017 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	ND	mg/L	0.44		EPA-300.0	ND		1
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		1
Iron (II) Species	**5200**	**ug/L**	**1000**		**SM-3500-FeD**	ND	**A07**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	07/26/17	07/26/17 17:28	EMW	IC2	1	B[G2265
2	SM-3500-FeD	07/26/17	07/26/17 15:07	RCC	KONE-1	10	B[G1928

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Metals Analysis

BCL Sample ID: 1720416-07 | **Client Sample Name:** 1156, MW-11A, 7/25/2017 10:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Manganese	**3300**	**ug/L**	**1.0**		**EPA-200.8**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.8	07/26/17	08/01/17 05:00	ARD	PE-EL3	1	B[G2645

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-08 | **Client Sample Name:** 1156, MW-11B, 7/25/2017 9:45:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**8500**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	12		EPA-8260B	ND	A01	2
1,2-Dichloroethane	ND	ug/L	12		EPA-8260B	ND	A01	2
Ethylbenzene	**1600**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**1100**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Toluene	**1600**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Total Xylenes	**3800**	**ug/L**	**100**		**EPA-8260B**	ND	**A01**	1
t-Amyl Methyl ether	ND	ug/L	12		EPA-8260B	ND	A01	2
t-Butyl alcohol	**5400**	**ug/L**	**250**		**EPA-8260B**	ND	**A01**	2
Diisopropyl ether	ND	ug/L	12		EPA-8260B	ND	A01	2
Ethanol	ND	ug/L	6200		EPA-8260B	ND	A01	2
Ethyl t-butyl ether	ND	ug/L	12		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	87.3	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	98.4	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	91.6	%	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	08/02/17	08/02/17 17:21	JPT	HPCHEM	100	B[H0158
2	EPA-8260B	08/01/17	08/01/17 22:08	AKM	MS-V14	25	B[G2501

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Reported: 08/08/2017 10:34
Project: 1156
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Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-08 | **Client Sample Name:** 1156, MW-11B, 7/25/2017 9:45:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**33000**	**ug/L**	**2500**		**EPA-8015B**	ND	**A01**	1
a,a,a-Trifluorotoluene (FID Surrogate)	103	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/04/17 22:44	TDH	GC-V9	50	B[H0166

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-08 | **Client Sample Name:** 1156, MW-11B, 7/25/2017 9:45:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organics (C12 - C24)	**1400**	**ug/L**	**100**		**EPA-8015B/TPHd**	ND	**A01,A52**	1
Tetracosane (Surrogate)	95.4	%	40 - 140 (LCL - UCL)		EPA-8015B/TPHd			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/TPHd	07/31/17	08/01/17 18:21	RSM	GC-5	1.920	B[H0156

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Gas Testing in Water

BCL Sample ID: 1720416-08 | **Client Sample Name:** 1156, MW-11B, 7/25/2017 9:45:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	**0.30**	**mg/L**	**0.0010**		**RSK-175M**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/01/17	08/01/17 11:11	JH2	GC-V1	1	B[H0013

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Water Analysis (General Chemistry)

BCL Sample ID: 1720416-08 | **Client Sample Name:** 1156, MW-11B, 7/25/2017 9:45:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	ND	mg/L	0.44		EPA-300.0	ND		1
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		1
Iron (II) Species	**5600**	**ug/L**	**1000**		**SM-3500-FeD**	ND	**A07**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	07/26/17	07/26/17 17:46	JSW	IC2	1	B[G2265
2	SM-3500-FeD	07/26/17	07/26/17 15:07	RCC	KONE-1	10	B[G1928

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Metals Analysis

BCL Sample ID: 1720416-08 | **Client Sample Name:** 1156, MW-11B, 7/25/2017 9:45:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Manganese	**1500**	**ug/L**	**1.0**		**EPA-200.8**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.8	07/26/17	08/01/17 05:03	ARD	PE-EL3	1	B[G2645

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-09 | **Client Sample Name:** 1156, MW-11S, 7/25/2017 9:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**950**	**ug/L**	**12**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	12		EPA-8260B	ND	A01	1
1,2-Dichloroethane	ND	ug/L	12		EPA-8260B	ND	A01	1
Ethylbenzene	**120**	**ug/L**	**12**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**73**	**ug/L**	**12**		**EPA-8260B**	ND	**A01**	1
Toluene	**99**	**ug/L**	**12**		**EPA-8260B**	ND	**A01**	1
Total Xylenes	**210**	**ug/L**	**25**		**EPA-8260B**	ND	**A01**	1
t-Amyl Methyl ether	ND	ug/L	12		EPA-8260B	ND	A01	1
t-Butyl alcohol	ND	ug/L	250		EPA-8260B	ND	A01	1
Diisopropyl ether	ND	ug/L	12		EPA-8260B	ND	A01	1
Ethanol	ND	ug/L	6200		EPA-8260B	ND	A01	1
Ethyl t-butyl ether	ND	ug/L	12		EPA-8260B	ND	A01	1
1,2-Dichloroethane-d4 (Surrogate)	99.2	%	75 - 125 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/01/17	08/01/17 22:31	AKM	MS-V14	25	B[G2501

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-09 | **Client Sample Name:** 1156, MW-11S, 7/25/2017 9:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**1400**	**ug/L**	**50**		**EPA-8015B**	ND		1
a,a,a-Trifluorotoluene (FID Surrogate)	110	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/02/17 18:43	TDH	GC-V9	1	B[H0166

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-09 | **Client Sample Name:** 1156, MW-11S, 7/25/2017 9:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diesel Range Organics (C12 - C24)	**320**	**ug/L**	**50**		**EPA-8015B/TPHd**	ND	**A52**	1
Tetracosane (Surrogate)	93.4	%	40 - 140 (LCL - UCL)		EPA-8015B/TPHd			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B/TPHd	07/31/17	08/01/17 19:46	RSM	GC-5	1	B[H0156

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Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

EPA Method 1664

BCL Sample ID: 1720416-09 | **Client Sample Name:** 1156, MW-11S, 7/25/2017 9:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Oil and Grease	ND	mg/L	5.0		EPA-1664A HEM	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-1664A HEM	08/01/17	08/01/17 07:00	MAM	MAN-SV	1	B[H0063

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Gas Testing in Water

BCL Sample ID: 1720416-09 | **Client Sample Name:** 1156, MW-11S, 7/25/2017 9:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Methane	**0.71**	**mg/L**	**0.010**		**RSK-175M**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	RSK-175M	08/01/17	08/01/17 11:25	JH2	GC-V1	10	B[H0013

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Water Analysis (General Chemistry)

BCL Sample ID: 1720416-09 | **Client Sample Name:** 1156, MW-11S, 7/25/2017 9:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Nitrate as NO3	ND	mg/L	0.44		EPA-300.0	ND		1
Sulfate	ND	mg/L	1.0		EPA-300.0	ND		1
Iron (II) Species	**7600**	**ug/L**	**1000**		**SM-3500-FeD**	ND	**A07**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	07/26/17	07/26/17 18:04	JSW	IC2	1	B[G2265
2	SM-3500-FeD	07/26/17	07/26/17 15:07	RCC	KONE-1	10	B[G1928

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Reported: 08/08/2017 10:34
Project: 1156
Project Number: 351645
Project Manager: Tamera Rogers

Metals Analysis

BCL Sample ID: 1720416-09 | **Client Sample Name:** 1156, MW-11S, 7/25/2017 9:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Dissolved Manganese	**1100**	**ug/L**	**1.0**		**EPA-200.8**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-200.8	07/26/17	08/01/17 05:06	ARD	PE-EL3	1	B[G2645

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Project Manager: Tamera Rogers

Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-10 | **Client Sample Name:** 1156, MW-12, 7/25/2017 6:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**8000**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	5.0		EPA-8260B	ND	A01	2
1,2-Dichloroethane	ND	ug/L	5.0		EPA-8260B	ND	A01	2
Ethylbenzene	**1200**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**240**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	2
Toluene	**220**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	2
Total Xylenes	**1500**	**ug/L**	**100**		**EPA-8260B**	ND	**A01**	1
t-Amyl Methyl ether	ND	ug/L	5.0		EPA-8260B	ND	A01	2
t-Butyl alcohol	**750**	**ug/L**	**100**		**EPA-8260B**	ND	**A01**	2
Diisopropyl ether	ND	ug/L	5.0		EPA-8260B	ND	A01	2
Ethanol	ND	ug/L	2500		EPA-8260B	ND	A01	2
Ethyl t-butyl ether	ND	ug/L	5.0		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	85.4	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	93.6	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	89.9	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/02/17	08/02/17 17:46	JPT	HPCHEM	100	B[H0158
2	EPA-8260B	08/01/17	08/01/17 21:45	AKM	MS-V14	10	B[G2501

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Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-10 | **Client Sample Name:** 1156, MW-12, 7/25/2017 6:30:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**25000**	**ug/L**	**5000**		**EPA-8015B**	ND	**A01**	1
a,a,a-Trifluorotoluene (FID Surrogate)	106	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/04/17 14:42	TDH	GC-V9	100	B[H0166

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-11 | **Client Sample Name:** 1156, PZ-1, 7/25/2017 4:20:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**6800**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane	ND	ug/L	2.5		EPA-8260B	ND	A01	2
Ethylbenzene	**3200**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**68**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Toluene	**290**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Total Xylenes	**5300**	**ug/L**	**100**		**EPA-8260B**	ND	**A01**	1
t-Amyl Methyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
t-Butyl alcohol	**290**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	2
Diisopropyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
Ethanol	ND	ug/L	1200		EPA-8260B	ND	A01	2
Ethyl t-butyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	84.9	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	94.6	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	93.0	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/02/17	08/02/17 14:56	JPT	HPCHEM	100	B[H0158
2	EPA-8260B	08/01/17	08/01/17 20:13	AKM	MS-V14	5	B[G2501

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Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-11 | **Client Sample Name:** 1156, PZ-1, 7/25/2017 4:20:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**23000**	**ug/L**	**5000**		**EPA-8015B**	ND	**A01**	1
a,a,a-Trifluorotoluene (FID Surrogate)	96.2	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/04/17 15:10	TDH	GC-V9	100	B[H0166

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-12 | **Client Sample Name:** 1156, PZ-2, 7/25/2017 5:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**5200**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane	ND	ug/L	2.5		EPA-8260B	ND	A01	2
Ethylbenzene	**1500**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Methyl t-butyl ether	**880**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
Toluene	**380**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Total Xylenes	**2600**	**ug/L**	**100**		**EPA-8260B**	ND	**A01**	1
t-Amyl Methyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
t-Butyl alcohol	**1200**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	2
Diisopropyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
Ethanol	ND	ug/L	1200		EPA-8260B	ND	A01	2
Ethyl t-butyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	85.0	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	95.6	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	90.4	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/02/17	08/02/17 15:20	JPT	HPCHEM	100	B[H0158
2	EPA-8260B	08/01/17	08/01/17 20:36	AKM	MS-V14	5	B[G2501

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Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-12 | **Client Sample Name:** 1156, PZ-2, 7/25/2017 5:15:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**15000**	**ug/L**	**5000**		**EPA-8015B**	ND	**A01**	1
a,a,a-Trifluorotoluene (FID Surrogate)	98.1	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/04/17 15:31	TDH	GC-V9	100	B[H0166

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Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1720416-13 | **Client Sample Name:** 1156, PZ-3, 7/25/2017 6:10:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**1800**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	1
1,2-Dibromoethane	ND	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane	ND	ug/L	2.5		EPA-8260B	ND	A01	2
Ethylbenzene	**350**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Methyl t-butyl ether	**280**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Toluene	**12**	**ug/L**	**2.5**		**EPA-8260B**	ND	**A01**	2
Total Xylenes	**36**	**ug/L**	**5.0**		**EPA-8260B**	ND	**A01**	2
t-Amyl Methyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
t-Butyl alcohol	**630**	**ug/L**	**50**		**EPA-8260B**	ND	**A01**	2
Diisopropyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
Ethanol	ND	ug/L	1200		EPA-8260B	ND	A01	2
Ethyl t-butyl ether	ND	ug/L	2.5		EPA-8260B	ND	A01	2
1,2-Dichloroethane-d4 (Surrogate)	87.6	%	75 - 125 (LCL - UCL)		EPA-8260B			1
1,2-Dichloroethane-d4 (Surrogate)	91.6	%	75 - 125 (LCL - UCL)		EPA-8260B			2
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-8260B			1
Toluene-d8 (Surrogate)	104	%	80 - 120 (LCL - UCL)		EPA-8260B			2
4-Bromofluorobenzene (Surrogate)	88.8	%	80 - 120 (LCL - UCL)		EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	106	%	80 - 120 (LCL - UCL)		EPA-8260B			2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8260B	08/02/17	08/02/17 15:45	JPT	HPCHEM	100	B[H0158
2	EPA-8260B	08/01/17	08/01/17 20:59	AKM	MS-V14	5	B[G2501

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Purgeable Aromatics and Total Petroleum Hydrocarbons

BCL Sample ID: 1720416-13 | **Client Sample Name:** 1156, PZ-3, 7/25/2017 6:10:00AM

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Gasoline Range Organics (C4 - C12)	**7400**	**ug/L**	**5000**		**EPA-8015B**	ND	**A01**	1
a,a,a-Trifluorotoluene (FID Surrogate)	98.1	%	70 - 130 (LCL - UCL)		EPA-8015B			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-8015B	08/02/17	08/04/17 20:43	TDH	GC-V9	100	B[H0166

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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[G2501						
Benzene	B[G2501-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	B[G2501-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	B[G2501-BLK1	ND	ug/L	0.50		
Ethylbenzene	B[G2501-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	B[G2501-BLK1	ND	ug/L	0.50		
Toluene	B[G2501-BLK1	ND	ug/L	0.50		
Total Xylenes	B[G2501-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	B[G2501-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	B[G2501-BLK1	ND	ug/L	10		
Diisopropyl ether	B[G2501-BLK1	ND	ug/L	0.50		
Ethanol	B[G2501-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	B[G2501-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane-d4 (Surrogate)	**B[G2501-BLK1**	**99.1**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**B[G2501-BLK1**	**102**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**B[G2501-BLK1**	**99.7**	%	**80 - 120 (LCL - UCL)**		
QC Batch ID: B[H0158						
Benzene	B[H0158-BLK1	ND	ug/L	0.50		
Ethylbenzene	B[H0158-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	B[H0158-BLK1	ND	ug/L	0.50		
Toluene	B[H0158-BLK1	ND	ug/L	0.50		
Total Xylenes	B[H0158-BLK1	ND	ug/L	1.0		
1,2-Dichloroethane-d4 (Surrogate)	**B[H0158-BLK1**	**88.8**	%	**75 - 125 (LCL - UCL)**		
Toluene-d8 (Surrogate)	**B[H0158-BLK1**	**102**	%	**80 - 120 (LCL - UCL)**		
4-Bromofluorobenzene (Surrogate)	**B[H0158-BLK1**	**86.1**	%	**80 - 120 (LCL - UCL)**		

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Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[G2501										
Benzene	B[G2501-BS1	LCS	27.912	25.000	ug/L	112		70 - 130		
Toluene	B[G2501-BS1	LCS	26.055	25.000	ug/L	104		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B[G2501-BS1	LCS	9.6200	10.000	ug/L	96.2		75 - 125		
Toluene-d8 (Surrogate)	B[G2501-BS1	LCS	10.270	10.000	ug/L	103		80 - 120		
4-Bromofluorobenzene (Surrogate)	B[G2501-BS1	LCS	10.080	10.000	ug/L	101		80 - 120		
QC Batch ID: B[H0158										
Benzene	B[H0158-BS1	LCS	23.420	25.000	ug/L	93.7		70 - 130		
Toluene	B[H0158-BS1	LCS	26.210	25.000	ug/L	105		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B[H0158-BS1	LCS	8.8800	10.000	ug/L	88.8		75 - 125		
Toluene-d8 (Surrogate)	B[H0158-BS1	LCS	10.370	10.000	ug/L	104		80 - 120		
4-Bromofluorobenzene (Surrogate)	B[H0158-BS1	LCS	9.6500	10.000	ug/L	96.5		80 - 120		

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Volatile Organic Analysis (EPA Method 8260B)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[G2501	Used client sample: N										
Benzene	MS	1720705-01	ND	27.723	25.000	ug/L		111		70 - 130	
	MSD	1720705-01	ND	27.750	25.000	ug/L	0.1	111	20	70 - 130	
Toluene	MS	1720705-01	ND	25.538	25.000	ug/L		102		70 - 130	
	MSD	1720705-01	ND	25.403	25.000	ug/L	0.5	102	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1720705-01	ND	9.6900	10.000	ug/L		96.9		75 - 125	
	MSD	1720705-01	ND	10.530	10.000	ug/L	8.3	105		75 - 125	
Toluene-d8 (Surrogate)	MS	1720705-01	ND	10.270	10.000	ug/L		103		80 - 120	
	MSD	1720705-01	ND	10.320	10.000	ug/L	0.5	103		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1720705-01	ND	10.140	10.000	ug/L		101		80 - 120	
	MSD	1720705-01	ND	10.320	10.000	ug/L	1.8	103		80 - 120	
QC Batch ID: B[H0158	Used client sample: N										
Benzene	MS	1720343-01	ND	22.520	25.000	ug/L		90.1		70 - 130	
	MSD	1720343-01	ND	22.460	25.000	ug/L	0.3	89.8	20	70 - 130	
Toluene	MS	1720343-01	ND	25.720	25.000	ug/L		103		70 - 130	
	MSD	1720343-01	ND	25.130	25.000	ug/L	2.3	101	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1720343-01	ND	8.6500	10.000	ug/L		86.5		75 - 125	
	MSD	1720343-01	ND	8.9600	10.000	ug/L	3.5	89.6		75 - 125	
Toluene-d8 (Surrogate)	MS	1720343-01	ND	10.180	10.000	ug/L		102		80 - 120	
	MSD	1720343-01	ND	10.030	10.000	ug/L	1.5	100		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1720343-01	ND	9.4500	10.000	ug/L		94.5		80 - 120	
	MSD	1720343-01	ND	9.6200	10.000	ug/L	1.8	96.2		80 - 120	

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Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[H0166						
Gasoline Range Organics (C4 - C12)	B[H0166-BLK1	ND	ug/L	50		
a,a,a-Trifluorotoluene (FID Surrogate)	**B[H0166-BLK1**	**100**	%	**70 - 130 (LCL - UCL)**		

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Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[H0166										
Gasoline Range Organics (C4 - C12)	B[H0166-BS1	LCS	853.50	1000.0	ug/L	85.4		85 - 115		
a,a,a-Trifluorotoluene (FID Surrogate)	B[H0166-BS1	LCS	41.801	40.000	ug/L	105		70 - 130		

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Purgeable Aromatics and Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[H0166	Used client sample: N										
Gasoline Range Organics (C4 - C12)	MS	1717894-84	ND	858.57	1000.0	ug/L		85.9		70 - 130	
	MSD	1717894-84	ND	854.25	1000.0	ug/L	0.5	85.4	20	70 - 130	
a,a,a-Trifluorotoluene (FID Surrogate)	MS	1717894-84	ND	40.222	40.000	ug/L		101		70 - 130	
	MSD	1717894-84	ND	38.334	40.000	ug/L	4.8	95.8		70 - 130	

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Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[H0156						
Diesel Range Organics (C12 - C24)	B[H0156-BLK1	ND	ug/L	50		
Tetracosane (Surrogate)	**B[H0156-BLK1**	**88.8**	%	**40 - 140 (LCL - UCL)**		

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Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[H0156										
Diesel Range Organics (C12 - C24)	B[H0156-BS1	LCS	368.07	500.00	ug/L	73.6		50 - 120		
Tetracosane (Surrogate)	B[H0156-BS1	LCS	17.667	20.008	ug/L	88.3		40 - 140		

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Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[H0156	Used client sample: N										
Diesel Range Organics (C12 - C24)	MS	**1717894-74**	**ND**	**214.19**	**500.00**	**ug/L**		**42.8**		**50 - 120**	**Q03**
	MSD	**1717894-74**	**ND**	**360.97**	**500.00**	**ug/L**	**51.0**	**72.2**	**30**	**50 - 120**	**Q02**
Tetracosane (Surrogate)	MS	1717894-74	ND	14.420	20.008	ug/L		72.1		40 - 140	
	MSD	1717894-74	ND	17.328	20.008	ug/L	18.3	86.6		40 - 140	

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EPA Method 1664

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[H0063						
Oil and Grease	B[H0063-BLK1	ND	mg/L	5.0		

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EPA Method 1664

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[H0063										
Oil and Grease	B[H0063-BS1	LCS	38.050	40.500	mg/L	94.0		78 - 114		

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EPA Method 1664

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[H0063	Used client sample: N										
Oil and Grease	DUP	1717894-39	ND	ND		mg/L			18		
	MS	1717894-39	ND	38.000	40.500	mg/L		93.8		78 - 114	
	MSD	1717894-39	ND	39.000	40.500	mg/L	2.6	96.3	18	78 - 114	

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Gas Testing in Water

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[H0013						
Methane	B[H0013-BLK1	ND	mg/L	0.0010		

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Gas Testing in Water

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[H0013										
Methane	B[H0013-BS1	LCS	0.010730	0.010843	mg/L	99.0		80 - 120		
	B[H0013-BSD1	LCSD	0.010961	0.010843	mg/L	101	2.1	80 - 120	20	

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Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[G1928						
Iron (II) Species	B[G1928-BLK1	ND	ug/L	100		
QC Batch ID: B[G2265						
Nitrate as NO3	B[G2265-BLK1	ND	mg/L	0.44		
Sulfate	B[G2265-BLK1	ND	mg/L	1.0		
QC Batch ID: B[G2317						
Nitrate as NO3	B[G2317-BLK1	ND	mg/L	0.44		
Sulfate	B[G2317-BLK1	ND	mg/L	1.0		

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Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[G1928										
Iron (II) Species	B[G1928-BS1	LCS	2470.0	2500.0	ug/L	98.8		90 - 110		
QC Batch ID: B[G2265										
Nitrate as NO3	B[G2265-BS1	LCS	22.506	22.134	mg/L	102		90 - 110		
Sulfate	B[G2265-BS1	LCS	101.93	100.00	mg/L	102		90 - 110		
QC Batch ID: B[G2317										
Nitrate as NO3	B[G2317-BS1	LCS	21.736	22.134	mg/L	98.2		90 - 110		
Sulfate	B[G2317-BS1	LCS	97.500	100.00	mg/L	97.5		90 - 110		

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Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[G1928	Used client sample: N										
Iron (II) Species	DUP	1719714-05	ND	ND		ug/L			10		
QC Batch ID: B[G2265	Used client sample: Y - Description: MW-3B, 07/25/2017 09:30										
Nitrate as NO3	DUP	1720416-02	ND	ND		mg/L			10		
	MS	1720416-02	ND	23.677	22.358	mg/L		106		80 - 120	
	MSD	1720416-02	ND	23.847	22.358	mg/L	0.7	107	10	80 - 120	
Sulfate	DUP	1720416-02	0.29600	ND		mg/L			10		
	MS	1720416-02	0.29600	108.21	101.01	mg/L		107		80 - 120	
	MSD	1720416-02	0.29600	108.33	101.01	mg/L	0.1	107	10	80 - 120	
QC Batch ID: B[G2317	Used client sample: N										
Nitrate as NO3	DUP	1720517-01	22.426	22.687		mg/L	1.2		10		
	MS	1720517-01	22.426	46.575	22.358	mg/L		108		80 - 120	
	MSD	1720517-01	22.426	46.387	22.358	mg/L	0.4	107	10	80 - 120	
Sulfate	DUP	1720517-01	5.4650	5.3850		mg/L	1.5		10		
	MS	1720517-01	5.4650	112.55	101.01	mg/L		106		80 - 120	
	MSD	1720517-01	5.4650	113.14	101.01	mg/L	0.5	107	10	80 - 120	

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Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B[G2645						
Dissolved Manganese	B[G2645-BLK1	ND	ug/L	1.0		

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Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: B[G2645										
Dissolved Manganese	B[G2645-BS1	LCS	105.13	100.00	ug/L	105		85 - 115		

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Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: B[G2645	Used client sample: N										
Dissolved Manganese	DUP	1720622-01	699.25	694.29		ug/L	0.7		20		
	MS	1720622-01	699.25	792.84	102.04	ug/L		91.7		70 - 130	
	MSD	1720622-01	699.25	795.37	102.04	ug/L	0.3	94.2	20	70 - 130	

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Notes And Definitions

MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A07	Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
A52	Chromatogram not typical of diesel.
Q02	Matrix spike precision is not within the control limits.
Q03	Matrix spike recovery(s) is(are) not within the control limits.

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Report Type:	**Monitoring Report - Semi-Annually**
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Facility Name:	**UNOCAL #1156**
File Name:	**EDD_BCLabs_1720416_EDF.zip**
Organization Name:	**ARCADIS**
Username:	**ARCADIS76**
IP Address:	**8.39.233.51**
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Report Type:	Monitoring Report - Semi-Annually
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Facility Name:	UNOCAL #1156
File Name:	351645_3Q17_GWMR _V0.pdf
Organization Name:	ARCADIS
Username:	ARCADIS76
IP Address:	8.39.233.24
Submittal Date/Time:	11/14/2017 10:49:09 AM
Confirmation Number:	6375181734