P&D ENVIRONMENTAL, INC.

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July 2, 2018
Report 0058.R34

Mr. Ted Simas
Mr. Keith Simas
Xtra Oil Company
2307 Pacific Ave.
Alameda, CA 94501

SUBJECT: SEMIANNUAL GROUNDWATER MONITORING AND SAMPLING REPORT (JANUARY THROUGH JUNE 2018)
County Case # RO 191
Xtra Oil Company
1701 Park Street
Alameda, CA

Gentlemen:

P&D Environmental, Inc. (P&D) has prepared this report documenting the semiannual monitoring and sampling of the four historical groundwater monitoring wells (MW-1 through MW-4), the four wells installed in 2011 for proposed site remediation (EW-2, EW-4, EW-5, and OW-2), and the most recently installed ozone sparging well (IW1), which was installed on September 9, 2015. The semiannual monitoring and sampling was performed on June 13 and 14, 2018 for the reporting period of January through June 2018.

A Site Location Map (Figure 1) and Site Plan showing well and monitoring locations at the site (Figure 2) are attached with this report. All work was performed under the direct supervision of a California professional geologist.

BACKGROUND

The site is currently used as a retail gasoline station. In a letter from the Alameda County Department of Environmental Health (ACDEH) dated July 24, 2009 P&D was asked to review historical monitoring and sampling results, determine during which quarters contaminant concentrations were at their highest, and conduct semiannual monitoring and sampling during those quarters (during either the first and third or the second and fourth quarters). Based on our review, semiannual monitoring and sampling events were to be scheduled during the second and fourth quarters starting in 2009. Also at the request of the ACDEH analysis of the groundwater samples was performed for fuel oxygenates including TBA and lead scavengers using EPA Method 8260B. In the second half of 2011 the case was assigned to caseworker Ms. Karel Detterman.

A detailed discussion of the site background, historical monitoring and sampling, and historical investigations is provided in P&D's Remedial Action Work Plan (RAWP) dated October 24,

2007 (document 0058.W2), P&D's Corrective Action Plan (CAP) dated October 11, 2010 (document 0058.W3), and P&D's Site Conceptual Model Report dated October 8, 2010 (document 0058.R10). As an interim step for implementation of the CAP, P&D prepared a Groundwater Extraction Feasibility Work Plan dated April 15, 2011 (document 0058.W4) to verify the feasibility of groundwater extraction at the site with a selected number of wells identified in the RAWP. On May 18 and 19, 2011 P&D oversaw the installation of dual phase extraction wells EW-2, EW-4, and EW-5 and observation well OW-2 at the subject site, in accordance with procedures identified in P&D's October 24, 2007 RAWP and P&D's April 15, 2011 Groundwater Extraction Feasibility Work Plan. P&D subsequently submitted a Chemical Oxidation Injection Feasibility Test Work Plan dated December 19, 2011 (document 0058.W5); an In Situ Chemical Oxidation Feasibility Test Work Plan dated February 7, 2014 (document 0058.W6); and a In Situ Chemical Oxidation Feasibility Test Work Plan Addendum dated June 9, 2014 (document 0058.W6A).

Ozone sparging was initated at well MW-2 beginning August 27, 2014 and operated continuously until mid-day on September 26, 2014. As part of the periodic monitoring that was performed during the pilot test, air samples were collected from the head space of groundwater wells located in the vicinity of well MW-2 on September 5, 2014. Following completion of air sparging on September 26, 2014 post-sparging groundwater monitoring and sample collection was performed on October 2 and 3, 2014. Documentation of the ozone sparging system start up, monitoring, and post-sparging groundwater sampling for a 30 day ozone sparging pilot test is provided in P&D's Ozone Sparging Pilot Test Report dated October 13, 2014 (document 0058.R26).

On November 3, 2014 P&D personnel purged and sampled groundwater well MW-2 at the subject site to evaluate rebound of petroleum hydrocarbon and associated Volatile Organic Compound (VOC) groundwater concentrations and also the presence of dissolved hexavalent chromium in groundwater following completion of the groundwater remediation pilot test. Based on the detected petroleum hydrocarbon concentrations and the absence of dissolved hexavalent chromium, P&D recommended that one additional sparging well be installed at the site next to ASP-4 and that ozone sparging be resumed at wells MW-2, EW-2 and a proposed new well (designated as IW1) located next to ASP-4. Documentation of the sampling and sample results is provided in P&D's Post-Ozone Sparging Pilot Test Rebound Evaluation Report dated November 13, 2014 (document 0058.R27).

In an e-mail dated June 2, 2015 from the ACDEH an ISCO Feasibility Test Work Plan Addendum was requested. In response to the e-mail P&D provided a Well Installation and Ozone Sparging Work Plan dated July 6, 2015 (document 0058.W7) for installation of one additional sparging well at the site adjacent to ASP-4 and recommended that ozone sparging be resumed at wells MW-2, EW-2 and the proposed new well (IW1) located adjacent to ASP-4. Documentation of the installation of ozone sparging well IW1 is provided in P&D's Ozone Injection Well Installation Report dated June 29, 2016 (document 0058.R29).

FIELD ACTIVITIES

Prior to sampling, water levels were measured on June 13, 2018 to the nearest 0.01 foot using an electric water level indicator in monitoring wells MW-1 through MW-4, and in wells EW-2, EW-

4, EW-5, OW-2, and IW-1 for the semiannual well monitoring and sampling event. The water level monitoring data for the wells are summarized in Table 1. Historical monitoring and sampling data obtained by others for the subject site are attached with this report as Appendix A.

After monitoring and prior to sampling, wells MW-1 through MW-4, EW-2, EW-4, EW-5, OW-2, and IW-1 were purged using low flow purge procedures in accordance with U.S. EPA 1996 guidelines. Purging was performed with a peristaltic pump and new or dedicated polyethylene tubing for a minimum of fifteen minutes at each sampling location. None of the wells dewatered during purging, with the exception of well MW-4 which dewatered shortly before the end of purging. New silicone tubing was used in the pump rollers at each well. The bottom of the tubing was set at a depth of approximately three to five feet above the bottom of each well, with the exception of MW-4 where the bottom of the tubing was set near the bottom of the well because the well has historically dewatered during purging. The bottom of the tubing was set at a depth of approximately seven to fourteen feet above the bottom of EW-2, EW-4, EW-5, and OW-2 given the greater average distance between the bottom of the wells and the water levels at those locations.

Purging was performed at a flow rate of approximately 200 to 300 milliliters per minute to minimize turbulence and to minimize the likelihood of sediments in the samples. During purging operations, the field parameters of electrical conductivity, temperature, pH, dissolved oxygen (DO), oxidation/reduction potential (ORP), turbidity, and depth to water were monitored and recorded on a groundwater monitoring/well purging data sheet for each well. The field parameters measure during purging are summarized in Table 2, and copies of the groundwater monitoring/well purging data sheet for each well are attached with this report as Appendix B.

During the June 13 and 14, 2018 monitoring and sampling event petroleum hydrocarbon sheen was detected on the purge water from wells MW-1 and EW-5. In addition, moderate petroleum hydrocarbon odors were detected on the purge water from wells MW-1, MW-4, and EW-5, and slight petroleum hydrocarbon odors were detected on the purge water from wells MW-2, EW-2, OW-2, and IW-1. No petroleum hydrocarbon odors were detected on the purge water from wells MW-3 or EW-4.

Once the wells had been purged for a minimum of fifteen minutes, or dewatered, and the field parameters were observed to have stabilized, water samples were collected directly from the discharge tubing of the pump into 40-milliliter glass Volatile Organic Analysis (VOA) vials containing hydrochloric acid preservative, 40-milliliter Amber glass unpreserved VOA vials, and a 1-liter Amber glass unpreserved bottle that were sealed with Teflon-lined screw caps. The VOA vials were overturned and tapped to ensure that no air bubbles were present. Following sample collection, all sample containers were then labeled and transferred to a cooler with ice, pending transport to the laboratory. Chain of custody documentation accompanied the samples to the laboratory. Records of the field parameters measured during well purging are attached with this report in Appendix B, and also are summarized in Table 2 with historical water quality field parameter data.

HYDROGEOLOGY

The measured depth to water on June 13, 2018 for groundwater monitoring wells MW-1, MW-2, MW-3, and MW-4 was 6.90, 7.87, 6.81, and 6.68 respectively, and the measured depth to groundwater in wells EW-2, EW-4, EW-5, OW-2, and IW-1 was 6.65, 5.50, 5.54, 5.63, and 6.54 feet, respectively. Groundwater level data collected during the monitoring period are presented in Table 1.

Monitoring wells MW-1, MW-2, and MW-3 were installed in 1994, and well MW-4 was installed in 1997. These four wells were surveyed in 1997, however the datum used for the survey is unknown. In June 2011 these four wells were resurveyed relative to the North American Vertical Datum of 1988 (NAVD 88) along with wells EW-2, EW-4, EW-5, and OW-2. All of the calculated groundwater surface elevations in Table 1 beginning in 2011 are relative to the NAVD 88 datum. All of the calculated groundwater surface elevations for wells MW-1 through MW-4 prior to 2011 are relative to the unknown datum, which is presumed to be relative to the North American Geodetic Vertical Datum of 1929 (NGVD 29).

The groundwater flow direction at the site has historically been northeasterly to southeasterly. The historical groundwater surface elevation information for the subject site in conjunction with historical groundwater surface elevation information for the nearby property at 1725 Park Street has historically identified a northeasterly groundwater flow direction at and near the subject site. More detail regarding the site hydrogeology is provided in P&D's Semiannual Monitoring and Sampling (January Through June 2014) and Baseline Groundwater Quality Report (document 0058.R25) dated October 1, 2014.

During the 2014 groundwater ozone sparging pilot test system installation, approximately 2.4 feet of PVC pipe was added to the top of the well pipe at well MW-2. For this reason the elevation of the top of well MW-2 is not presently known to an accuracy of 0.01 feet, and a groundwater surface elevation is not provided in Table 1 for well MW-2. Additionally, the most recently installed ozone injection well IW-1 has not been surveyed. The groundwater surface elevations for all of the other wells are shown in Figure 2, along with groundwater surface contours that are based on the July 27, 2017 groundwater surface elevations. Based on the groundwater surface contours, the groundwater flow direction on July 27, 2017 was southeasterly, consistent with historical calculated groundwater flow directions at the site.

The calculated groundwater flow direction on July 27, 2017 was consistent with the historical northeasterly to southeasterly groundwater flow direction obtained using the groundwater surface elevation information from the nearby 1725 Park Street Exxon/Valero site in conjunction with groundwater surface elevation data from the subject site. The locations of the subject site and the nearby 1725 Park Street Exxon/Valero site are shown in Figure 3. Historical groundwater flow direction information for both sites is shown in rose diagrams in the figure. In addition, the approximate historical northeasterly groundwater flow direction obtained using the groundwater surface elevation information from the 1725 Park Street Exxon/Valero site in conjunction with groundwater surface elevation data from the subject site is shown in Figure 3.

Comparison of the July 27, 2017 well water levels with the most recent well water level measurements from June 13, 2018 shows that the water levels were higher in all of the wells than on July 27, 2017 by amounts ranging from 0.36 to 0.46 feet.

Well MW-4 is located in the landscaping on the north-northeast side of the property along the fence line. Historical changes in water levels in well MW-4 relative to the other wells may have been the result of landscape irrigation water preferentially draining to groundwater in the immediate vicinity of the well MW-4 location.

LABORATORY RESULTS

The groundwater samples collected from all of the wells at the subject site were analyzed at McCampbell Analytical Inc. of Pittsburg, California. All of the samples were analyzed for the following analytes:

- Total Petroleum Hydrocarbons as Diesel (TPH-D) and Total Petroleum Hydrocarbons as Motor Oil (TPH-MO) using EPA Method 3510C in conjunction with EPA Method 8015B.
- Total Petroleum Hydrocarbons as Gasoline (TPH-G) using EPA Method 5030B in conjunction with modified EPA Method 8015B and EPA Method 8021B.
- Volatile Organic Compounds (VOCs) including Methyl tertiary-Butyl Ether (MTBE), and benzene, toluene, ethylbenzene, total xylenes (BTEX), and fuel oxygenates and lead scavengers by EPA Method 5030B in conjunction with EPA Method 8260B.

The laboratory analytical results are summarized in Table 3, and a copy of the laboratory analytical report and chain of custody documentation are attached with this report as Appendix C.

DISCUSSION AND RECOMMENDATIONS

The four historical groundwater monitoring wells at the subject site (MW-1 through MW-4), the four wells related to historically proposed site remediation (EW-2, EW-4, EW-5, and OW-2), and the most recently installed ozone injection well IW-1 were monitored and sampled on June 13 and 14, 2018. Air sparge points ASP-2 through ASP-6 were not monitored or sampled on June 13 and 14, 2018. Monitoring and sampling historically was performed at the subject site in conjunction with the monitoring and sampling event performed by ERI for the Exxon/Valero facility located at 1725 Park Street. However the case for the Exxon/Valero facility located at 1725 Park Street was closed October 25, 2012.

Review of Table 3 shows the following site groundwater quality conditions associated with the June 13 and 14, 2018 well sampling event:

- No analytes were detected in the groundwater sample collected from upgradient well MW-3.
- TPH-D was detected in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-2, and EW-5 at concentrations of 1,200, 1,800, 760, 75, and 310 micrograms per liter (ug/L), respectively.

- TPH-G was detected in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-2, EW-4, and EW-5 at concentrations of 13,000, 1,800, 4,100, 350, 65, and 1,500 ug/L, respectively.
- Benzene was detected in wells MW-1, MW-2, MW-4, EW-2, and EW-5 at concentrations of 2,400, 53, 250, 16, and 130 ug/L, respectively.
- The remaining BTEX compounds were detected at concentrations ranging from 4.5 to 170 ug/L.
- MTBE was detected in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-5, and IW-1 at concentrations of 320, 22, 16.0, 58, and 0.60 ug/L, respectively.
- Tert-Butyl Alcohol (TBA) was detected using EPA Method 8260B in the groundwater samples collected from wells MW-2 and EW-5 at concentrations of 100 and 240 ug/L, respectively.

Review of the laboratory analytical report shows that the laboratory described the detected TPH-D results for the samples from wells MW-1, MW-4, and EW-5 as consisting of gasoline, diesel-range compounds with no recognizable pattern and kerosene/kerosene-range and/or jet fuel range; the sample from well MW-2 as consisting of gasoline, diesel-range compounds with no recognizable pattern, kerosene/kerosene-range and/or jet fuel range, and significant oil range compounds; and the sample from well EW-2 as consisting of diesel-range compounds with no recognizable pattern and kerosene/kerosene-range and/or jet fuel range. The laboratory also described the TPH-G results for the sample from well EW4 as exhibiting one to a few isolated non-target peaks in the chromatogram.

Comparison of the June 13 and 14, 2018 sample results with detected concentrations from the previous sampling event on July 27 and 28, 2017 shows that all analyte concentrations in well MW-3 have remained not detected. Additionally, all petroleum analyte concentrations in wells MW-1, MW-2, MW-4, EW-2, EW-4, EW-5, OW2 and IW-1 remained not detected or decreased, with the following exceptions which all increased:

- MTBE in well MW-1.
- Toluene, ethylbenzene, total xylenes, and sec-Butyl benzene in well MW-2.
- TPH-G, MTBE, Benzene, Toluene, n-Propyl benzene, Isopropylbenzene, and 1,3,5-Trimethylbenzene in well MW-4.
- TBA in well EW-5.
- Naphthalene in well OW-2

The source of the detected halogenated VOCs in wells EW-2 and EW-4 is unknown.

Based on the sample results, P&D recommends that groundwater remediation be resumed to reduce benzene concentrations in groundwater at the site to move the case to closure. P&D also recommends that the semiannual well sampling be continued.

DISTRIBUTION

In addition, a copy of this report will be uploaded to the GeoTracker database.

LIMITATIONS

This report was prepared solely for the use of Xtra Oil Company. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with the site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgment based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between borings and may not necessarily apply to the general site as a whole. If future subsurface or other conditions are revealed which vary from these findings, the newly revealed conditions must be evaluated and may invalidate the findings of this report.

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous materials or hazardous wastes left onsite, in accordance with existing laws and regulations.

This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. P&D is not responsible for the accuracy or completeness of information provided by other individuals or entities, which are used in this report.

This report presents our professional judgment based upon data and findings identified in this report and interpretation of such data based upon our experience and background, and no warranty, either express or implied, is made. The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.

July 2, 2018
Report 0058.R34

Should you have any questions or comments, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental, Inc.

Paul H. King
Professional Geologist #5901
Expires 12/31/19

Attachments:

Table 1 - Summary of Well Water Level Monitoring Data
Table 2 - Summary of Well Water Quality Field Parameters
Table 3 - Summary of Well Groundwater Sample Laboratory Analytical Results

Figure 1 - Site Location Map
Figure 2 - Site Plan Showing Well Locations and Groundwater Surface Elevations
Figure 3 - Site Vicinity Map Showing Groundwater Surface Elevations

Appendix A - Historical Water Level and Water Quality Data for the Subject Site
Appendix B - Groundwater Monitoring/Well Purging Data Sheets
Appendix C - Laboratory Analytical Reports and Chain of Custody Documentation

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TABLES

Table 1
Summary of Well Water Level Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
MW-1	6/13/2018	22.36*	6.90	15.46
	7/27/2017		7.16	15.20
	11/22/2016		7.28	15.08
	6/27/2016		7.20	15.16
	12/10/2015		8.36	14.00
	6/18/2015		7.58	14.78
	11/3/2014		Not monitored	
	10/3/2014		8.14	14.22
	8/21/2014		8.01	14.35
	6/19/2014		7.33	15.03
	11/19/2013		8.06	14.30
	5/16/2013		6.95	15.41
	12/11/2012		6.30	16.06
	6/21/2012		6.66	15.70
	11/28/2011		7.11	15.25
	6/16/2011		6.41	15.95
	5/26/2011		5.86	16.50
	5/24/2011		6.43	15.93
	11/18/2010	19.60**	7.78	11.82
	4/28/2010		6.35	13.25
	12/3/2009		7.84	11.76
	2/25/2009		6.07	13.53
	11/25/2008		7.91	11.69
	8/27/2008		8.03	11.57
	5/28/2008		7.28	12.32
	2/27/2008		6.15	13.45
	11/29/2007		7.82	11.78
	8/29/2007		8.29	11.31
	5/30/2007		7.44	12.16
	3/12/2007		6.34	13.26
	11/6/2006		7.99	11.61

Abbreviations and Notes:

* = Surveyed by Kier & Wright on June 9, 2011.
** = Surveyed by Andreas Deak in April 1997.
*** = Prior to well development.
# = 2.4 feet of PVC casing added to top of well MW-2 for ozone injection.
ft-MSL = feet above mean sea level
ft = feet

Table 1
Summary of Well Water Level Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
MW-2	6/13/2018	Unknown	7.87	Unknown
	7/27/2017		8.16	Unknown
	11/22/2016		8.24	Unknown
	6/27/2016		8.21	Unknown
	12/10/2015		9.23	Unknown
	6/18/2015		8.60	Unknown
	11/3/2014	Not monitored		
	10/3/2014		9.04	16.46
	8/21/2014	23.10*	8.51	16.99
	6/19/2014		7.79	15.31
	11/19/2013		8.35	14.75
	5/16/2013		7.42	15.68
	12/11/2012		6.83	16.27
	6/21/2012		7.18	15.92
	11/28/2011		7.61	15.49
	6/16/2011		6.89	16.21
	5/26/2011		6.90	16.20
	5/24/2011		6.90	16.20
	11/18/2010	20.31**	8.17	12.14
	4/28/2010		6.76	13.55
	12/3/2009		8.23	12.08
	2/25/2009		6.37	13.94
	11/25/2008		8.21	12.10
	8/27/2008		8.40	11.91
	5/28/2008		7.72	12.59
	2/27/2008		6.49	13.82
	11/29/2007		8.15	12.16
	8/29/2007		8.55	11.76
	5/30/2007		7.79	12.52
	3/12/2007		6.82	13.49
	11/6/2006		8.25	12.06
Abbreviations and Notes:				
* = Surveyed by Kier & Wright on June 9, 2011.				
** = Surveyed by Andreas Deak in April 1997.				
*** = Prior to well development.				
ft-MSL = feet above mean sea level				
ft = feet				

Table 1
Summary of Well Water Level Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
MW-3	6/13/2018	23.35*	6.81	16.54
	7/27/2017		7.27	16.08
	11/22/2016		7.25	16.10
	6/27/2016		7.32	16.03
	12/10/2015		8.69	14.66
	6/18/2015		7.82	15.53
	11/3/2014		Not monitored	
	10/3/2014		Not monitored	
	8/20/2014		8.39	14.96
	6/19/2014		7.34	16.01
	11/19/2013		8.06	15.29
	5/16/2013		6.72	16.63
	12/11/2012		6.03	17.32
	6/21/2012		6.42	16.93
	11/28/2011		7.19	16.16
	6/16/2011		6.17	17.18
	5/26/2011		6.19	17.16
	5/24/2011		6.16	17.19
	11/18/2010	20.57**	7.93	12.64
	4/28/2010		6.00	14.57
	12/3/2009		7.83	12.74
	2/25/2009		5.42	15.15
	11/25/2008		7.83	12.74
	8/27/2008		8.23	12.34
	5/28/2008		7.36	13.21
	2/27/2008		5.75	14.82
	11/29/2007		7.88	12.69
	8/29/2007		8.31	12.26
	5/30/2007		7.26	13.31
	3/12/2007		6.03	14.54
	11/6/2006		8.09	12.48

Abbreviations and Notes:

* = Surveyed by Kier & Wright on June 9, 2011.

** = Surveyed by Andreas Deak in April 1997.

*** = Prior to well development.

= 2.4 feet of PVC casing added to top of well MW-2 for ozone injection.

ft-MSL = feet above mean sea level

ft = feet

Table 1
Summary of Well Water Level Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
MW-4	6/13/2018	22.48*	6.68	15.80
	7/27/2017		7.05	15.43
	11/22/2016		7.12	15.36
	6/27/2016		7.09	15.39
	12/10/2015		8.42	14.06
	6/18/2015		7.53	14.95
	11/3/2014		Not monitored	
	10/3/2014		Not monitored	
	8/20/2014		8.03	14.45
	6/19/2014		7.20	15.28
	11/19/2013		8.03	14.45
	5/16/2013		6.77	15.71
	12/11/2012		5.86	16.62
	6/21/2012		6.00	16.48
	11/28/2011		6.62	15.86
	6/16/2011		5.79	16.69
	5/26/2011		6.41	16.07
	5/24/2011		5.82	16.66
	11/18/2010	19.69**	7.69	12.00
	4/28/2010		5.82	13.87
	12/3/2009		7.60	12.09
	2/25/2009		5.32	14.37
	11/25/2008		7.61	12.08
	8/27/2008		7.91	11.78
	5/28/2008		6.97	12.72
	2/27/2008		5.38	14.31
	11/29/2007		7.57	12.12
	8/29/2007		8.07	11.62
	5/30/2007		7.38	12.31
	3/12/2007		5.30	14.39
	11/6/2006		7.60	12.09

Abbreviations and Notes:

* = Surveyed by Kier & Wright on June 9, 2011.

** = Surveyed by Andreas Deak in April 1997.

*** = Prior to well development.

= 2.4 feet of PVC casing added to top of well MW-2 for ozone injection.

ft-MSL = feet above mean sea level

ft = feet

Table 1
Summary of Well Water Level Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
EW-2	6/13/2018	22.13*	6.65	15.48
	7/27/2017		6.91	15.22
	11/22/2016		7.01	15.12
	6/27/2016		6.93	15.20
	12/10/2015		8.00	14.13
	6/18/2015		7.35	14.78
	11/3/2014		Not monitored	
	10/3/2014		7.79	14.34
	8/21/2014		7.71	14.42
	6/19/2014		7.09	15.04
	11/19/2013		7.64	14.49
	5/16/2013		6.70	15.43
	12/11/2012		6.07	16.06
	6/21/2012		6.39	15.74
	11/28/2011		6.75	15.38
	6/16/2011		6.09	16.04
	5/26/2011		6.14	15.99
	5/24/2011***		6.12	16.01
EW-4	6/13/2018	20.95*	5.50	15.45
	7/27/2017		5.75	15.20
	11/22/2016		5.87	15.08
	6/27/2016		5.83	15.12
	12/10/2015		7.00	13.95
	6/18/2015		6.24	14.71
	11/3/2014		Not monitored	
	10/3/2014		6.79	14.16
	8/21/2014		6.67	14.28
	6/19/2014		5.98	14.97
	11/19/2013		6.71	14.24
	5/16/2013		5.49	15.46
	12/11/2012		4.80	16.15
	6/21/2012		5.10	15.85
	11/28/2011		5.51	15.44
	6/16/2011		4.72	16.23
	5/26/2011		4.77	16.18
	5/24/2011***		4.75	16.20
EW-5	6/13/2018	21.20*	5.54	15.66
	7/27/2017		5.85	15.35
	11/22/2016		5.95	15.25
	6/27/2016		5.91	15.29
	12/10/2015		7.15	14.05
	6/18/2015		6.28	14.92
	11/3/2014		Not monitored	
	10/3/2014		6.94	14.26
	8/20/2014		6.77	14.43
	6/19/2014		6.02	15.18
	11/19/2013		6.82	14.38
	5/16/2013		5.61	15.59
	12/11/2012		4.75	16.45
	6/21/2012		4.91	16.29
	11/28/2011		5.49	15.71
	6/16/2011		4.71	16.49
	5/26/2011		4.88	16.32
	5/24/2011***		4.74	16.46

Abbreviations and Notes:

* = Surveyed by Kier & Wright on June 9, 2011.
** = Surveyed by Andreas Deak in April 1997.
*** = Prior to well development.
# = 2.4 feet of PVC casing added to top of well MW-2 for ozone injection.
ft-MSL = feet above mean sea level
ft = feet

Table 1
Summary of Well Water Level Monitoring Data

Well Number	Date Monitored	Top of Casing Elevation (ft-msl.)	Depth to Water (ft)	Water Table Elevation (ft-MSL.)
OW-2	6/13/2018	21.55*	5.63	15.92
	7/27/2017		5.97	15.58
	11/22/2016		6.09	15.46
	6/27/2016		6.04	15.51
	12/10/2015		7.42	14.13
	6/18/2015		6.51	15.04
	11/3/2014	Not monitored		
	10/3/2014	Not monitored		
	8/20/2014		7.08	14.47
	6/19/2014		6.18	15.37
	11/19/2013		7.01	14.54
	5/16/2013		5.69	15.86
	12/11/2012		4.82	16.73
	6/21/2012		5.15	16.40
	11/28/2011		5.80	15.75
	6/16/2011		4.80	16.75
	5/26/2011		4.82	16.73
	5/24/2011***		4.79	16.76
IW-1	6/13/2018	Unknown	6.54	Unknown
	7/27/2017	Unknown	6.86	Unknown
	11/22/2016	Unknown	6.95	Unknown
	6/27/2016	Unknown	6.04	Unknown
	12/10/2015	Unknown	8.07	Unknown
	10/23/2015***	Unknown	7.76	Unknown

Abbreviations and Notes:

* = Surveyed by Kier & Wright on June 9, 2011.

** = Surveyed by Andreas Deak in April 1997.

*** = Prior to well development.

= 2.4 feet of PVC casing added to top of well MW-2 for ozone injection.

ft-MSL = feet above mean sea level

ft = feet

Table 2
Summary of Well Water Quality Field Parameters

Sample ID	Sample Date	D.O. (mg/L)	O.R.P. (mV)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Turbidity (NTU)
MW-1	6/14/2018	0.27	-179.0	6.10	1,182	21.5	3.70
	7/27/2017	0.49	-127.5	6.36	1,090	23.0	0.00
	11/22/2016	0.29	-107.3	6.48	1,096	22.6	0.00
	6/27/2016	0.86	-163.2	6.74	1,047	22.2	0.00
	12/10/2015	0.71	-176.3	6.93	1,143	22.3	0.00
	6/18/2015	0.11	-161.2	6.83	1,000	21.7	1.12
	11/3/2014	Not Monitored					
	10/3/2014	0.08	-157.8	6.65	1,003	23.9	0.00
	8/21/2014	0.46	-157.9	6.75	911	23.3	0.00
	6/19/2014	1.80*	-755.2	6.56	789	21.6	0.00
	11/19/2013	0.88	-103.7	6.79	635	21.6	0.00
	5/16/2013	0.18	-103.6	6.67	983	20.2	0.00
	12/11/2012	0.19	-139.3	6.16	777.0	20.6	2.89
	6/21/2012	0.18	-110.6	6.78	664	21.0	0.00
	11/29/2011	--	--	6.51	702	20.2	--
	5/26/2011	--	--	6.82	678	20.5	0.00
	11/18/2010	--	--	6.69	1,206	22.0	--
	4/28/2010	--	--	6.63	998	19.2	--
	12/3/2009	--	--	6.42	953	21.2	--
	2/25/2009	--	--	6.56	997	17.9	--
	11/25/2008	--	--	6.60	1,143	21.9	--
	8/27/2008	--	--	6.57	980	23.6	--
	5/28/2008	--	--	6.84	903	20.6	--
	2/27/2008	--	--	7.02	1,036	17.0	--
	11/29/2007	--	--	5.73	10,350	14.8	--
	8/29/2007	--	--	6.16	17,410	30.7	--
	5/30/2001	--	--	7.12	>20,000	17.3	--
	3/12/2007	--	--	6.79	177	29.2	--
	11/6/2006	--	--	6.69	66.9	27.2	--
MW-2	6/13/2018	0.24	-150.3	6.33	1,053	21.4	1.75
	7/28/2017	0.57	-122.4	6.31	944	23.5	0.00
	11/22/2016	0.46	-105.1	6.31	977	22.4	0.00
	6/27/2016	0.90	-208.5	6.74	984	22.7	0.00
	12/10/2015	0.83	-187.4	6.76	1,040	21.9	0.10
	6/18/2015	0.17	-176.2	6.76	972	22.2	0.00
	11/3/2014	0.24	-46.1	7.53	1,206	24.6	0.00
	10/3/2014	1.03	-8.5	7.53	758	26.0	0.00
	8/21/2014	0.36	-149.5	6.61	853	24.3	0.00
	6/19/2014	2.13*	-160.9	6.46	791	22.3	0.00
	11/19/2013	0.61	-97.7	6.53	427.3	22.0	0.00
	5/16/2013	0.19	-101.3	6.50	813	20.6	0.00
	12/11/2012	0.18	-120.3	5.90	962	21.1	11.61
	6/21/2012	0.23	-89.2	6.58	644	21.3	14.05
	11/29/2011	--	--	6.24	629	20.6	--
	5/26/2011	--	--	6.47	763	20.2	0.00
	11/18/2010	--	--	6.48	815	22.5	--
	4/28/2010	--	--	6.53	823	19.2	--
	12/3/2009	--	--	6.24	739	21.8	--
	2/25/2009	--	--	6.21	832	18.2	--
	11/25/2008	--	--	6.39	740	21.9	--
	8/27/2008	--	--	6.34	840	23.7	--
	5/28/2008	--	--	6.70	880	20.4	--
	2/27/2008	--	--	6.88	821	17.5	--
	11/29/2007	--	--	5.51	>20,000	16.6	--
	8/29/2007	--	--	6.10	2,270	27.6	--
	5/30/2001	--	--	6.50	>20,000	18.2	--
	3/12/2007	--	--	6.57	228	26.8	--
	11/6/2006	--	--	6.44	7.43	25.7	--

Table 2
Summary of Well Water Quality Field Parameters

Sample ID	Sample Date	D.O. (mg/L)	O.R.P. (mV)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Turbidity (NTU)
MW-3	6/13/2018	0.30	-87.1	5.84	315.0	20.2	47.02
	7/27/2017	0.80	-82.9	5.98	348.8	21.4	0.00
	11/22/2016	0.46	-1.6	6.04	376.9	21.1	0.00
	6/27/2016	1.33	-58.0	6.35	380.2	20.4	0.00
	12/10/2015	1.74	-20.1	6.41	284.4	21.4	9.81
	6/18/2015	0.34	-30.8	6.41	451	19.9	5.60
	11/3/2014	Not Monitored					
	10/3/2014	Not Monitored					
	8/20/2014	0.63	-88.7	6.21	373.8	21.2	0.00
	6/19/2014	2.76*	-23.7	6.10	342.8	20.7	0.00
	11/19/2013	1.09	40.9	6.22	318.3	20.7	0.00
	5/16/2013	1.45	152.8	6.12	792	19.2	0.00
	12/11/2012	1.74	170.4	5.43	753	20.1	0.00
	6/21/2012	2.13	187.1	6.17	187	19.0	0.19
	11/28/2011	--	--	6.61	316	19.5	--
	5/26/2011	--	--	5.30	327	19.2	0.00
	11/18/2010	--	--	5.74	401	21.3	--
	4/28/2010	--	--	6.32	367	18.4	--
	12/3/2009	--	--	5.71	227	20.4	--
	2/25/2009	--	--	5.40	402	17.2	--
	11/25/2008	--	--	5.93	392	20.8	--
	8/27/2008	--	--	5.85	268	21.0	--
	5/28/2008	--	--	6.25	233	18.8	--
	2/27/2008	--	--	6.60	240	16.6	--
	11/29/2007	--	--	5.33	>20,000	21.4	--
	8/29/2007	--	--	5.77	2,210	30.1	--
	5/30/2001	--	--	6.61	>20,000	18.2	--
	3/12/2007	--	--	6.37	209	22.7	--
	11/6/2006	--	--	6.46	5.35	26.3	--
MW-4	6/14/2018	0.62	-96.7	6.41	873	18.5	2.44
	7/27/2017	2.58	-61.2	6.27	692	21.4	0.00
	11/22/2016	0.42	-62.3	6.42	734	18.4	0.00
	6/27/2016	0.52	-157.4	6.82	740	20.8	0.00
	12/10/2015	1.48	-89.4	6.81	662	18.7	0.66
	6/18/2015	0.28	-113.5	6.83	618	19.7	5.64
	11/3/2014	Not Monitored					
	10/3/2014	Not Monitored					
	8/20/2014	0.56	-125.9	6.67	640	21.5	0.00
	6/19/2014	1.77*	-103.1	6.56	523	19.8	0.00
	11/19/2013	1.10	-75.9	6.79	330.7	18.5	0.00
	5/16/2013	0.50	-68.7	6.93	510.2	17.9	0.00
	12/11/2012	0.20	-110.8	6.23	302.2	17.4	10.57
	6/21/2012	0.29	-92.3	6.84	159.5	19.2	0.00
	11/28/2011	--	--	6.70	232	17.1	--
	5/26/2011	--	--	7.10	466	20.7	0.00
	11/18/2010	--	--	6.06	535	18.8	--
	4/28/2010	--	--	6.65	672	16.6	--
	12/3/2009	--	--	6.31	478	18.1	--
	2/25/2009	--	--	6.28	348	15.3	--
	11/25/2008	--	--	6.25	227	18.4	--
	8/27/2008	--	--	6.42	255	21.4	--
	5/28/2008	--	--	6.73	148	17.9	--
	2/27/2008	--	--	7.11	194	14.4	--
	11/29/2007	--	--	5.57	>20,000	13.4	--
	8/29/2007	--	--	6.24	4,490	26.3	--
	5/30/2001	--	--	6.70	>20,000	17.5	--
	3/12/2007	--	--	6.98	46.2	25.2	--
	11/6/2006	--	--	6.56	42.9	27.9	--

Table 2
Summary of Well Water Quality Field Parameters

Sample ID	Sample Date	D.O. (mg/L)	O.R.P. (mV)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Turbidity (NTU)
EW-2	6/13/2018	0.25	-179.3	6.53	935	21.0	3.25
	7/28/2017	0.44	-117.2	6.62	905	22.8	0.00
	11/22/2016	0.31	-89.8	6.55	876	22.1	0.00
	6/27/2016	0.69	-194.3	7.12	906	21.8	0.00
	12/10/2015	0.77	-172.3	6.91	902	21.9	0.00
	6/18/2015	0.17	-133.5	7.28	896	21.3	2.72
	11/3/2014	Not Monitored					
	10/3/2014	0.14	-154.9	6.75	920	23.4	0.00
	8/21/2014	0.35	-131.4	7.03	869	23.1	0.00
	6/19/2014	2.48*	-148.1	7.13	790	21.1	0.00
	11/19/2013	1.16	-114.6	6.71	567	21.4	0.00
	5/16/2013	0.15	-118.3	6.94	908	20.0	0.00
	12/11/2012	0.16	-134.8	6.48	916	20.9	4.76
	6/21/2012	0.15	-134.8	6.97	829	19.9	0.00
	11/29/2011	--	--	6.59	733	20.8	--
	5/26/2011	--	--	6.87	888	19.5	0.00
EW-4	6/14/2018	0.24	-170.8	6.90	719	21.7	1.74
	7/27/2017	0.43	-89.7	6.70	668	23.4	0.00
	11/22/2016	0.29	-66.8	6.81	657	21.7	0.00
	6/27/2016	0.53	-178.5	7.02	646	22.2	0.00
	12/10/2015	0.74	-175.2	6.87	930	22.0	0.91
	6/18/2015	0.15	-137.7	7.16	645	21.9	0.91
	11/3/2014	Not Monitored					
	10/3/2014	0.16	-140.2	6.57	892	22.9	0.00
	8/21/2014	0.45	-169.4	6.70	873	22.7	0.00
	6/19/2014	1.94*	-122.5	6.66	675	21.5	0.00
	11/19/2013	1.06	-97.1	6.67	490.9	21.3	0.00
	5/16/2013	0.18	-107.4	7.23	642	19.9	0.00
	12/11/2012	0.13	-140.3	6.23	624	20.5	2.16
	6/21/2012	0.17	-111.2	6.82	318.8	20.2	0.00
	11/28/2011	--	--	6.48	420	21.0	--
	5/26/2011	--	--	7.15	585	20.3	2.32
EW-5	6/14/2018	0.25	-155.6	6.40	866	19.5	2.35
	7/27/2017	0.57	-119.9	6.35	864	21.5	0.00
	11/22/2016	0.38	-102.6	6.48	790	19.9	0.00
	6/27/2016	0.66	-198.4	6.77	784	20.2	0.00
	12/10/2015	0.77	-172.1	6.89	804	20.4	1.21
	6/18/2015	0.16	-153.9	6.80	787	20.0	0.00
	11/3/2014	Not Monitored					
	10/3/2014	0.17	-152.1	6.66	786	20.6	0.00
	8/20/2014	0.42	-171.9	6.72	786	21.1	0.00
	6/19/2014	2.29*	-142.8	6.58	668	19.4	0.00
	11/19/2013	0.70	-111.6	6.79	442.8	19.7	0.00
	5/16/2013	0.17	-102.9	6.80	485.3	18.5	0.00
	12/11/2012	0.22	-133.5	6.22	321.9	19.1	6.43
	6/21/2012	0.26	-113.0	6.87	236.5	18.4	0.00
	11/28/2011	--	--	6.55	436	19.0	--
	5/26/2011	--	--	6.83	589	18.3	1.75

Table 2
Summary of Well Water Quality Field Parameters

Sample ID	Sample Date	D.O. (mg/L)	O.R.P. (mV)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Turbidity (NTU)
OW-2	6/14/2018	0.32	-93.6	6.33	521.3	18.1	3.00
	7/27/2017	0.65	-88.0	5.81	476.1	21.3	0.00
	11/22/2016	0.56	36.1	6.17	415.5	18.3	0.00
	6/27/2016	0.58	-142.6	6.31	596	19.5	0.00
	12/10/2015	0.75	-143.0	6.99	655	19.2	1.55
	6/18/2015	0.19	-137.0	6.83	661	18.9	6.10
	11/3/2014	Not Monitored					
	10/3/2014	Not Monitored					
	8/20/2014	0.41	-167.8	6.65	588	21.1	0.00
	6/20/2014	2.52*	31.1	6.32	469	18.9	0.00
	11/19/2013	0.72	-90.1	6.84	376.7	18.7	0.00
	5/16/2013	0.16	94.2	6.68	580.9	17.3	0.00
	12/11/2012	0.33	77.4	5.55	480.1	17.9	0.33
	6/21/2012	0.13	-87.0	6.70	609	17.8	0.00
	11/28/2011	--	--	6.80	478	18.2	--
	5/26/2011	--	--	6.56	652	17.5	1.73
IW-1	6/13/2018	0.18	-183.1	7.00	455.2	22.1	83.05
	7/28/2017	0.37	-129.5	7.04	496.7	22.4	0.00
	11/22/2016	0.27	-37.3	6.91	340.1	23.0	0.00
	6/27/2016	0.40	-191.7	7.64	565.0	22.8	0.94
	12/10/2015	1.76	-78.4	9.01	478.4	22.5	14.01

NOTES
D.O. = Dissolved Oxygen.
O.R.P = Oxidation-Reduction Potential.
mg/L = milligrams per Liter.
mV = millivolts.
µS/cm = microsiemens per centimeter.
C° = degrees celsius.
NTU = nephelometric turbidity units.
* = Defective Oxygen Sensor.

Table 3
Summary of Well Groundwater Sample Laboratory Analytical Results

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Fuel Oxygenates & Lead Scavengers	Other VOCs by EPA Method 8260
MW-1	6/14/2018	13,000	1,200 b,e, k	ND<250	320	2,400	ND<100	110	170	All ND	ND
	7/27/2017	15,000	1,400, c	ND<250	300	3,600	ND<100	120	220	ND, except TBA = 660	ND
	11/22/2016	18,000	1,700, c	ND<250	ND<1,200	4,700	73	190	300	ND, except TBA = 900, MTBE = 360	ND, except Benzene = 3,900, Toluene = 59, Ethylbenzene = 130, Total Xylenes = 200, Naphthalene = 61, n-Propyl benzene = 120
	6/27/2016, e	8,900	1,400, c	ND<250	260	1,900	ND<50	120	210	ND, except TBA = 650	ND, except n-Propyl benzene = 60
	12/10/2015	18,000	2,400, c	ND<250	ND<1,000	5,600	110	400	630	ND, except TBA=2,100, MTBE = 580	All ND
	6/18/2015, e	19,000	2,000, c	ND<250	430	4,100	ND<100	280	570	ND, except TBA = 1,100	ND, except Isopropylbenzene = 110, n-Propyl benzene = 130, 1,2,4-Trimethylbenzene = 100
	11/3/2014	Not Sampled.									
	10/3/2014, e	22,000	2,600, c	ND<250	600	4,500	150	620	1,200	ND, except TBA = 880	ND, except Naphthalene = 150, n-Propyl benzene = 160, 1,2,4-Trimethylbenzene = 210
	8/21/2014	Samples only analyzed for Dissolved Hexavalent Chromium									
	6/19/2014	15,000	4,200, b,c	ND<250	--	3,100	230	500	1,300	ND, except MTBE = 350	--
	11/19/2013	25,000	3,300, b,c	ND<250	ND<1,500	5,800	210	630	1,400	ND, except TBA = 1,600 MTBE = 1,000	--
	5/16/2013	18,000	1,800, c	ND<250	ND<800	4,400	320	510	1,100	ND, except TBA = 180 MTBE = 240	--
	12/11/2012	15,000	2,400, c	ND<250	ND<600	3,300	330	410	1,100	ND, except TBA = 190 MTBE = 100	--
	6/21/2012	17,000	2,100, c	ND<250	ND<500	1,800	420	500	1,500	ND, except TBA = 110 MTBE = 49	--
	11/29/2011	18,000	2,600, c	ND<250	ND<600	2,600	410	410	1,200	ND, except TBA = 460, MTBE = 210	--
	5/26/2011	15,000	2,400, b,c	ND<250	ND<500	2,000	430	400	1,300	ND, except TBA = 570, MTBE = 120	--
	11/18/2010	21,000	1,900, b,c	ND<250	1,700	6,300	340	340	860	ND, except TBA = 3,300, MTBE = 1,500	--
	4/28/2010	19,000	2,800, b,c	260, b,c	840	3,400	680	500	1,600	ND, except TBA = 3,200, MTBE = 750	--
	12/3/2009	19,000	1,900, b, c	ND<250	1,500	4,500	670	400	1,300	ND, except TBA = 10,000, MTBE = 1,100	--
	2/25/2009	21,000	2,200, b,c	ND<250	ND<2,500	4,300	750	580	1,700	ND, except TBA = 17,000, MTBE = 1,400	--
	11/25/2008	20,000	2,400, c	ND<250	1,900	5,500	490	530	1,300	ND, except TBA = 16,000, MTBE = 1,600	--
	8/27/2008	46,000	5,200, c	ND<250	1,300	4,600	1,800	2,000	5,200	--	--
	5/28/2008	40,000	6,100, c	290	1,600	4,200	2,600	1,700	5,900	--	--
	2/27/2008	45,000	4,900, c	310	2,600	6,200	3,100	1,300	5,100	--	--
	11/29/2007	27,000	3,100, b,c	ND<250	2,600	4,700	930	770	2,600	--	--
	8/29/2007	26,000	3,900, b,c	470	3,200	5,400	1,400	810	3,000	--	--
	5/30/2007	22,000	3300, c	ND<250	ND<750	400	380	1,100	3,600	--	--
	3/12/2007	38,000	3,500, b,c	300	3,500	5,400	2,900	1,300	5,100	--	--
	11/6/2006	44,000,a	3,400, a,c	360	3,900	5,600	2,300	920	3,000	--	--
MW-2	6/13/2018	1,800	1,800 b,c,j,k	530	22	53	6.3	4.5	7.2	ND, except TBA = 100	ND, except Naphthalene = 6.9, n-butyl benzene = 13, sec-butyl benzene = 5.7, Isopropylbenzene = 32, n-Propyl benzene = 80
	7/28/2017	3,100	3,000, n,c	890, n,c	75	360	ND<10	ND<10	ND<10	ND, except TBA = 150	ND, except Naphthalene = 34, n-butyl benzene = 19, Isopropylbenzene = 35, n-Propyl benzene = 99
	11/22/2016	3,500	2,900, n	1,200, n	ND<12	25	8.2	8.5	5.8	ND, except TBA = 16, MTBE = 3.9	ND, except Benzene = 13, Toluene = 3.1, Ethylbenzene = 6.7, Total Xylenes = 3.5, Naphthalene = 42, n-butyl benzene = 12, sec-butyl benzene = 5.3, Isopropylbenzene = 25, n-Propyl benzene = 69, 1,3,5-Trimethylbenzene = 2.7
	6/27/2016, e	5,300	3,400, c,n	1,700, c,n	25	210	9.6	12	15	ND, except TBA = 140	ND, except Naphthalene = 53, n-butyl benzene = 17, sec-butyl benzene = 7.2, Isopropylbenzene = 35, n-Propyl benzene = 100, 1,3,5-Trimethylbenzene = 6.6
	12/10/2015	1,400	3,300, c,f	1,800, c,f	ND<10	25	4.6	5.8	4.2	ND, except TBA = 16, MTBE = 6.1	All ND
	6/18/2015, e	2,700	3,100, b,c,j	1,600, b,e,j	27	140	ND<5.0	8.6	19	ND, except TBA = 180	ND, except Naphthalene = 13, n-butyl benzene = 6.5, Isopropylbenzene = 12, n-Propyl benzene = 23
	11/3/2014, e	480	2,500, c,f,i	1,300, c,f,i	ND<0.50	1.0	ND<0.50	1.4	0.96	ND, except TBA = 28	ND, except Acetone = 190, MEK = 56, Chloroform = 0.96, MBK = 12, MIBK = 8.8, n-butyl benzene = 3.1, sec-Butyl benzene = 1.2, Isopropylbenzene = 4.0, n-Propyl benzene = 10
	10/3/2014, e	97, g	370, h	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND, except TBA = 42	ND, except Bromomethane = 1.2, Chloroform = 3.2, MIBK = 1.2, MBK = 0.87
	8/21/2014	Samples only analyzed for Dissolved Hexavalent Chromium									
	6/19/2014	4,700	2,700, b,c	350, b,c	--	210	13	18	12	ND, except MTBE = 24	--
	11/19/2013	6,600	3,000, b,c	ND<250	ND<17	160	9.6	36	10	ND	--

Table 3
Summary of Well Groundwater Sample Laboratory Analytical Results

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Fuel Oxygenates & Lead Scavengers	Other VOCs by EPA Method 8260
MW-2 (Continued)	5/16/2013	4,700	2,300, c,e,f	470, c,e,f	ND<180	360	17	31	16	ND, except TBA = 200, MTBE = 62	--
	12/11/2012	3,900	2,700, c,d	590	110	290	15	27	16	ND, except TBA = 190, MTBE = 99	--
	6/21/2012	4,900	1,600, b,c	ND<250	180	560	14	36	12	ND, except TBA = 340, MTBE = 160	--
	11/29/2011	4,900	2,900, c,d	420, c,d	ND<50	400	11	39	7.7	ND, except TBA = 72, MTBE = 29	--
	5/26/2011	6,600	1,900, b,c	ND<250	ND<350	1,000	39	36	97	ND, except TBA = 480, MTBE = 210	--
	11/18/2010	7,700, a	11,000, a,c,d	3,500, a,c,d	ND<35	640	16	74	14	ND, except TBA = 19, MTBE = 22	--
	4/28/2010	9,400, a	23,000, a,c,d	9,100, a,c,d	ND<250	1,200	35	40	29	ND, except TBA = 300, MTBE = 100	--
	12/3/2009	7,700, a	6,900, a, b,c	2,000, a, b, c	ND<250	840	29	34	28	ND, except TBA = 200, MTBE = 61	--
	2/25/2009	7,600, a	21,000, a,c,d	6,200	ND<160	810	18	46	24	ND, except TBA = 38, MTBE = 31, 1,2-DCA = 2.7	--
	11/25/2008	8,700, a	23,000, a,c,d	6,400	14,e	740	15	90	27	ND, except TBA = 11, MTBE = 14	--
	8/27/2008	13,000, a	9,200, a,c,d	2,200	ND<200	990	14	93	19	--	--
	5/28/2008	12,000, a	25,000 a,c,d	7,200	ND<210	2,000	77	77	90	--	--
	2/27/2008	11,000, a	21,000, a,c,d	6,800	ND<150	940	36	ND<10	22	--	--
	11/29/2007	11,000, a	32,000, a,c,d	11,000	ND<50	1,000	28	120	31	--	--
	8/29/2007	8,600, a	6,300, a, b, c	2,600	ND<100	1,300	36	48	48	--	--
	5/30/2007	14,000, a	22,000, a,c,d	5,800	ND<210	2,200	51	100	99	--	--
	3/12/2007	8,500, a	74,000, a, c,d	21,000	ND< 80	1,200	34	140	69	--	--
	11/6/2006	14,000,a	45,000, a,c	11,000	ND<120	1,400	27	200	37	--	--
MW-3	6/13/2018	ND<50	ND<50	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND	ND
	7/27/2017	ND<50	ND<50	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND	ND
	11/22/2016	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<1.5	ND	ND, except 4-Isopropyl toluene = 0.82
	6/27/2016, e	ND<50	ND<50	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND	All ND
	12/10/2015	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND	All ND
	6/18/2015, e	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND	All ND
	11/3/2014	Not Sampled.									
	10/3/2014	Not Sampled.									
	8/20/2014	Samples only analyzed for Dissolved Hexavalent Chromium									
	6/19/2014	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND	--
	11/19/2013	ND<50	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND	--
	5/16/2013	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	12/11/2012	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	6/21/2012	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	11/28/2011	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	5/26/2011	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	11/18/2010	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	4/28/2010	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	12/3/2009	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	2/25/2009	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	11/25/2008	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	8/27/2008	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	5/28/2008	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	2/27/2008	ND<50	ND<50	ND<250	15	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	11/29/2007	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	8/29/2007	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	5/30/2007	ND<50	ND<50	ND< 250	ND< 5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	3/12/2007	ND< 50	ND< 50	ND< 250	ND< 5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
	11/6/2006	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	--	--
MW-4	6/14/2018	4,100	760 b,c,k	ND<250	16	250	14	40	90	All ND	ND, except Naphthalene = 18, Isopropylbenzene = 26, n-Propyl benzene = 58, 1,2,4-Trimethylbenzene = 58, 1,3,5-Trimethylbenzene = 20
	7/27/2017	3,300	890, c	ND<250	4.7	67	6.9	47	190	ND, except TBA = 11	ND, except Naphthalene = 29, n-butyl benzene = 5.9, sec-Butyl benzene = 3.0, Isopropylbenzene = 20, n-Propyl benzene = 47, 1,2,4-Trimethylbenzene = 72, 1,3,5-Trimethylbenzene = 20
	11/22/2016	7,200	1,300, c	ND<250	ND<150	560	13	100	450	ND, except TBA = 74 MTBE = 52	ND, except Benzene = 410, Toluene = 14, Ethylbenzene = 82, Total Xylenes = 330, Naphthalene = 44, n-butyl benzene = 10, Isopropylbenzene = 28, n-Propyl benzene = 67, 1,2,4-Trimethylbenzene = 110, 1,3,5-Trimethylbenzene = 30
	6/27/2016, e	4,400	1,100, c	ND<250	35	300	23	83	210	ND, except TBA = 70	ND, except Naphthalene = 44, n-butyl benzene = 11, sec-butyl benzene = 5.8, Isopropylbenzene = 38, n-Propyl benzene = 95, 1,2,4-Trimethylbenzene = 54, 1,3,5-Trimethylbenzene = 21
	12/10/2015	4,100	1,200, c	ND<250	ND<150	560	6	39	87	ND, except TBA = 92, MTBE = 36	All ND
	6/18/2015	5,400	1,000, c	ND<250	32	340	12	34	120	ND, except TBA = 61	ND, except Naphthalene = 33, n-butyl benzene = 12, Isopropylbenzene = 34, n-Propyl benzene = 88, 1,2,4-Trimethylbenzene = 41, 1,3,5-Trimethylbenzene = 14
	11/3/2014	Not Sampled.									
	10/3/2014	Not Sampled.									
	8/20/2014	Samples only analyzed for Dissolved Hexavalent Chromium									

Table 3
Summary of Well Groundwater Sample Laboratory Analytical Results

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Fuel Oxygenates & Lead Scavengers	Other VOCs by EPA Method 8260
MW-4 (Continued)	6/19/2014	6,000	1,400, c	ND<250	--	940	22	95	200	ND, except MTBE = 70	--
	11/19/2013	9,400	2,100, c	ND<250	ND<150	1,100	24	210	610	ND, except TBA = 82, MTBE = 83	--
	5/16/2013	6,700	1,500, c	ND<250	ND<60	310	42	220	560	ND, except TBA = 43, MTBE = 21	--
	12/11/2012	17,000	2,700, c	ND<250	ND<170	88	120	670	2,100	ND, except TBA = 12	--
	6/21/2012	12,000	2,700, c	ND<250	ND<90	49	83	540	1,700	ND	--
	11/28/2011	6,000	2,200, c	ND<250	ND<50	86	63	350	1,200	ND, except TBA = 11, MTBE = 12	--
	5/26/2011	7,300	2,400, b,c	ND<250	ND<210	230	64	450	1,100	ND, except TBA = 74, MTBE = 80	--
	11/18/2010	5,900	1,100, b,c	ND<250	470	1,100	28	150	390	ND, except TBA = 690, MTBE = 540	--
	4/28/2010	6,300	1,400, c	ND<250	470	480	74	280	750	ND, except TBA = 350, MTBE = 360	--
	12/3/2009	6,300	1,200, c	ND<250	640	1,100	35	120	390	ND, except TBA = 600, MTBE = 390	--
	2/25/2009	11,000	2,200, c	ND<250	ND<300	350	120	490	1,400	ND, except TBA = 160, MTBE = 130	--
	11/25/2008	10,000	1,900, c	ND<250	270	630	130	390	1,500	ND, except TBA = 190, MTBE = 250	--
	8/27/2008	9,300	830, c	ND<250	ND<250	260	85	370	1,300	--	--
	5/28/2008	2,200	1,400, c	ND<250	ND<30	16	38	100	320	--	--
	2/27/2008	8,000	1,900, c	ND<250	ND<50	47	110	270	1,300	--	--
	11/29/2007	12,000	2,800, c	ND<250	ND<180	260	230	580	2,500	--	--
	8/29/2007	12,000, a	560, c	ND<250	660	910	200	750	2,200	--	--
	5/30/2007	43,000	4,500, c	610	3,600	5,800	3,700	1,400	5,400	--	--
	3/12/2007	19,000	3,100, c	ND< 250	370	560	450	1,100	4,400	--	--
	11/6/2006	23,000	4,300,c	850	ND<900	680	250	930	3,100	--	--
EW-2	6/13/2018	350	75, b,k	ND<250	ND<5.0	16	ND<5.0	ND<5.0	ND<5.0	All ND	ND, except PCE = 190, TCE = 320, cis-1,2-DCE = 110, trans-1,2-DCE = 23
	7/28/2017	960	110, c	ND<250	14	150	ND<10	20	ND<10	All ND	ND, except Naphthalene = 15, PCE = 360, TCE = 560, cis-1,2-DCE = 130, trans-1,2-DCE = 34
	11/22/2016	2,000	210, c	ND<250	ND<150	270	8.2	44	ND<15	ND, except MTBE = 11	ND, except Benzene = 220, Ethylbenzene = 36, PCE = 270, TCE = 440, cis-1,2-DCE = 110, trans-1,2-DCE = 25, MIBK = 11, n-Propyl benzene = 17,
	6/27/2016, e	760	87, c	ND<250	ND<10	170	ND<10	ND<10	ND<10	ND	ND, except PCE = 670, TCE =340, cis-1,2-DCE = 41, trans-1,2-DCE = 15
	12/10/2015	3,600	1,100, c	ND<250	ND<120	650	9.2	47	ND<7.5	ND, except TBA = 81, MTBE = 30	All ND
	6/18/2015	510, g	ND<50	ND<250	ND<25	ND<25	ND<25	ND<25	ND<25	ND<25	ND, except PCE = 1,000, TCE = 150
	11/3/2014	Not Sampled.									
	10/3/2014	3,500	540, c	ND<250	31	670	ND<17	21	ND<17	ND	ND, except PCE = 350, TCE = 570, cis-1,2-DCE = 52, Isopropylbenzene = 19, n-Propyl benzene = 60
	8/21/2014	Samples only analyzed for Dissolved Hexavalent Chromium									
	6/19/2014	650, g	ND<50	ND<250	--	47	0.87	1.1	ND<0.50	ND, except TBA = 8.6, MTBE = 6.0	--
	11/19/2013	11,000	1,400, c	ND<250	ND<350	3,300	19	96	76	ND, except TBA = 190, MTBE = 89	--
	5/16/2013	2,000	210, c	ND<250	83	580	4.9	32	7.3	ND, except TBA = 55, MTBE = 63	--
	12/11/2012	2,500	160, c	ND<250	ND<120	470	3.6	31	5.1	ND, except TBA = 74, MTBE = 66	--
	6/21/2012	3,700	280, c	ND< 250	180	960	9.5	20	16	ND, except TBA = 140, MTBE = 120	--
	11/29/2011	4,600	960, c	ND< 250	260	1,600	15	62	38	ND, except TBA = 270, MTBE = 270	--
	5/26/2011	2,700	560, b,c	ND< 250	ND<150	580	7.9	10	80	ND, except TBA = 290, MTBE = 97	--

Table 3
Summary of Well Groundwater Sample Laboratory Analytical Results

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Fuel Oxygenates & Lead Scavengers	Other VOCs by EPA Method 8260
EW-4	6/14/2018	65,g	ND<50	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5	All ND	ND, except PCE = 64, TCE = 17
	7/27/2017	220	ND<50	ND<250	6.4	29	ND<1.0	ND<1.0	ND<1.0	All ND	ND, except PCE = 50, TCE = 54, cis-1,2-DCE = 1.7, trans-1,2-Dichloroethene = 1.2
	11/22/2016	350	ND<50	ND<250	ND<30	67	ND<1.0	4.1	ND<3.0	ND, except TBA = 9.1, MTBE = 7.5	ND, except Benzene = 49, Ethylbenzene = 2.2, PCE = 27, TCE = 26 cis-1,2-DCE = 1.2, Carbon Disulfide = 2.1, Isopropylbenzene = 1.6, n-Propyl benzene = 4.0,
	6/27/2016, e	67	ND<50	ND<250	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND	ND, except PCE = 120, TCE = 19
	12/10/2015	15,000	1,800, c	ND<250	710	4,400	41	250	ND<75	ND, except TBA = 760, MTBE = 480	All ND
	6/18/2015	87, g	ND<50	ND<250	7.7	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND	ND, except PCE = 86, TCE = 11
	11/3/2014	Not Sampled.									
	10/3/2014	15,000	2,300, c	ND<250	360	4,000	ND<100	170	ND<100	ND, except TBA = 450	ND, except Naphthalene = 280, n-Propyl benzene = 200
	8/21/2014	Samples only analyzed for Dissolved Hexavalent Chromium									
	6/19/2014	4,800	940, c	ND<250	--	1,200	12	110	21	ND, except TBA = 290, MTBE = 190	--
	11/19/2013	18,000	3,000, c	ND<250	ND<700	4,200	79	480	120	ND, except TBA = 320, MTBE = 270	--
	5/16/2013	76	ND<50	ND<250	14	4.0	ND<0.5	1.7	ND<0.5	ND, except TBA = 11, MTBE = 13	--
	12/11/2012	340	150, b,c	ND< 250	ND<30	28	1.5	6.9	0.91	ND, except TBA = 26, MTBE = 20	--
	6/21/2012	9,600	2,200, c	ND< 250	ND<75	270	22	340	290	ND, except TBA = 18, MTBE = 6.7	--
	11/28/2011	8,300	2,000, c	ND< 250	ND<150	520	40	510	530	ND, except TBA = 89, MTBE = 16	--
	5/26/2011	2,800	500, b,c	ND< 250	ND<150	99	9.9	20	300	ND, except TBA = 110, MTBE = 83	--
EW-5	6/14/2018	1,500	310, b,c,k	ND<250	58	130	ND<5.0	7.1	ND<5.0	ND, except TBA = 240	ND, except Isopropylbenzene = 14, n-Propyl benzene = 33
	7/27/2017	5,400	1,000, c	ND<250	61	950	32	62	20	ND, except TBA = 210	ND, except Naphthalene = 40, Isopropylbenzene = 55, n-Propyl benzene = 140
	11/22/2016	5,700	1,200, c	ND<250	ND<500	1,400	42	190	68	ND, except TBA = 340, MTBE = 230	ND, except Benzene = 1,000, Toluene = 27, Ethylbenzene = 150, Total Xylenes = 48, Naphthalene = 57, Isopropylbenzene = 39, n-Propyl benzene = 100
	6/27/2016, e	940	200, k,o	ND<250	59	140	ND<2.5	19	3.3	ND, except TBA = 420	ND, except Naphthalene = 4.1, trans-1,3-Dichloropropenc = 3.4, Hexachloroethane = 13, Isopropylbenzene = 9.1, n-Propyl benzene = 22
	12/10/2015	11,000	1,300, c	ND<250	480	2,000	50	430	220	ND, except TBA = 500, MTBE = 340	All ND
	6/18/2015	940	290, c	ND< 250	30	89	ND<5.0	30	ND<5.0	ND, except TBA = 760	ND, except Naphthalene = 5.5, Isopropylbenzene = 12, n-Propyl benzene = 25
	11/3/2014	Not Sampled.									
	10/3/2014	11,000	1,600, c	ND< 250	310	1,800	100	790	700	ND, except TBA = 380	ND, except Naphthalene = 190, n-Propyl benzene = 120, 1,2,4-Trimethylbenzene = 200
	8/20/2014	Samples only analyzed for Dissolved Hexavalent Chromium									
	6/19/2014	16,000	2,200, c	ND< 250	--	1,200	140	950	1,100	ND, except TBA = 310, MTBE = 230	--
	11/19/2013	17,000	2,600, c	ND< 250	ND<800	2,400	110	1,100	1,700	ND, except TBA = 420, MTBE = 330	--
	5/16/2013	19,000	2,500, c	ND< 250	ND<300	1,500	100	1,700	2,100	ND, except TBA = 180, MTBE = 41	--
	12/11/2012	40,000	4,700, c	ND< 250	ND<250	700	1,300	2,500	5,900	ND, except TBA = 180, MTBE = 8.6	--
	6/21/2012	44,000	4,900, c	ND< 250	ND<1,000	710	2,400	2,300	8,800	ND, except TBA = 57, MTBE = 6.5	--
	11/28/2011	48,000	3,500, b,c	ND< 250	ND<400	930	3,400	2,400	9,000	ND, except TBA = 110, MTBE = 48	--
	5/26/2011	35,000	3,600, b,c	ND< 250	ND<450	1,000	2,700	850	11,000	ND, except TBA = 250, MTBE = 86	--
OW-2	6/14/2018	ND<50	ND<50	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	All ND	ND, except Naphthalene = 0.84, Isopropylbenzene = 0.67, n-Propyl benzene = 0.88, 1,2,4-Trimethylbenzene = 0.83
	7/27/2017	ND<50	180, o	ND<250	0.61	ND<0.50	ND<0.50	ND<0.50	ND<0.50	All ND	ND, except sec-Butyl benzene = 0.88, tert-Butyl benzene = 0.95, Isopropylbenzene = 0.98, n-Propyl benzene = 1.3, 1,2,4-Trimethylbenzene = 2.3
	11/22/2016	66	ND<50	ND<250	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<1.5	All ND	All ND

Table 3
Summary of Well Groundwater Sample Laboratory Analytical Results

Well Number	Sample Date	TPH-G	TPH-D	TPH-MO	MTBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Fuel Oxygenates & Lead Scavengers	Other VOCs by EPA Method 8260
OW-2 (Continued)	6/27/2016, e	59, i	ND<50	ND<250	0.64	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND	ND, except Naphthalene = 1.0, Carbon Disulfide = 0.65, tert-Butyl benzene = 0.64, n-Propyl benzene = 0.69
	12/10/2015	1,000	330, c	ND<250	ND<10	2.8	1.6	37	58	ND, except TBA = 20, MTBE = 5.7	All ND
	6/18/2015	260, i	90, k	ND<250	0.76	ND<0.50	ND<0.50	0.70	0.57	ND, except TBA = 2.4	ND, except Carbon Disulfide = 1.2, Isopropyl benzene = 0.77, n-Propyl benzene = 0.76
	11/3/2014	Not Sampled.									
	10/3/2014	Not Sampled.									
	8/20/2014	Samples only analyzed for Dissolved Hexavalent Chromium									
	6/20/2014	200	150, c	ND<250	--	0.62	0.70	6.7	6.8	ND, except TBA = 2.4, MTBE = 1.5	--
	11/19/2013	610	370, c	ND<250	ND<5.0	2.2	1.5	8.8	14	ND, except TBA = 5.1, MTBE = 2.1	--
	5/16/2013	85	ND<100	ND<250	ND<5.0	0.57	0.88	ND<0.5	0.54	ND, except TBA = 7.6, MTBE = 0.99	--
	12/11/2012	61	ND<50	ND<250	ND<5.0	3.2	0.70	0.94	3.5	ND, except TBA = 39, MTBE = 3.1	--
	6/21/2012	4,600	840, c	ND< 250	ND<45	110	46	160	590	ND, except TBA = 60, MTBE = 5.4	--
	11/28/2011	5,300	1,100, b,c	ND< 250	ND<130	350	170	24	790	ND, except TBA = 210, MTBE = 50	--
	5/26/2011	450	430, b,c	ND< 250	ND<5.0	0.87	0.71	ND<0.5	7.7	ND, except TBA = 350, MTBE = 3.6	--
IW-1	6/13/2018	ND<50	ND<50	ND<250	0.60	ND<0.50	ND<0.50	ND<0.50	ND<0.50	All ND	ND
	7/28/2017	ND<50	ND<50	ND<250	1.1	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND, except TBA = 2.0	ND, except 1,2,4-Trimethylbenzene = 0.56
	11/22/2016	120	ND<50	ND<250	ND<5.0	ND<0.50	1.2	ND<0.50	ND<1.5	ND, except TBA = 2.9, MTBE = 1.5	ND, except 1,2,4-Trimethylbenzene = 0.61
	6/27/2016, e	160, i, m	81, k,o	ND<250	2.3	ND<0.5	ND<0.5	1.3	1.5	ND, except TBA = 10	ND, except Naphthalene = 0.76, MEK = 21, n-butyl benzene = 1.4, sec-butyl benzene = 0.51, Isopropylbenzene = 0.52, n-Propyl benzene = 1.7, 1,2,4-Trimethylbenzene = 2.7, 1,3,5-Trimethylbenzene = 1.2
	12/10/2015	2,200	500, c, l	ND<250	ND<15	57	4.3	64	140	ND, except TBA = 53, MTBE = 5.7	All ND

Abbreviations and Notes:

TPH-MO = Total Petroleum Hydrocarbons as Motor Oil
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-G = Total Petroleum Hydrocarbons as Gasoline
MTBE = Methyl tertiary-butyl ether
TBA = tert-Butyl alcohol
1,2-DCA = 1,2-Dichloroethane
PCE = Tetrachloroethene
TCE = Trichloroethene
cis-1,2-DCE = cis-1,2-Dichloroethene
MIBK = Methyl Iso-butyl Ketone (4-Methyl-2-pentanone).
MBK = Methyl Butyl Ketone (2-hexanone).
MEK = Methyl Ethyl Ketone (2-butanone).
ND = Not Detected.
-- = Not Analyzed.
a = Laboratory Note: lighter than water immiscible sheen/ product is present
b = Laboratory Note: diesel range compounds are significant; no recognizable pattern
c = Laboratory Note: gasoline range compounds are significant
d = Laboratory Note: unmodified or weakly modified diesel range compounds are significant
e = Analysis by EPA 8260B. All other results for MTBE and all results for BTEX are by EPA 8021B.
f = Laboratory Note: aged diesel is significant
g = Laboratory Note: one to a few isolated non-target peaks present in the TPH-G chromatogram
h = Laboratory Note: diesel range compounds are significant; no recognizable pattern; and/or kerosene/kerosene range/jet fuel range.
i = Laboratory Note: strongly aged gasoline or diesel range compounds are significant in the TPH-G chromatogram.
j = Laboratory Note: oil range compounds are significant.
k = Laboratory Note: kerosene/kerosene range/ jet fuel range.
l = Laboratory Note: Stoddard solvent/mineral spirit (?)
m = Laboratory Note: No recognizable pattern.
n = Laboratory Note: aged diesel is significant; and/or diesel-range compounds are significant; no recognizable pattern.
o = Laboratory Note: Gasoline range compounds are significant; and/or Stoddard solvent/mineral spirit (?)
Results are in micrograms per liter (µg/L), unless otherwise noted.

FIGURES

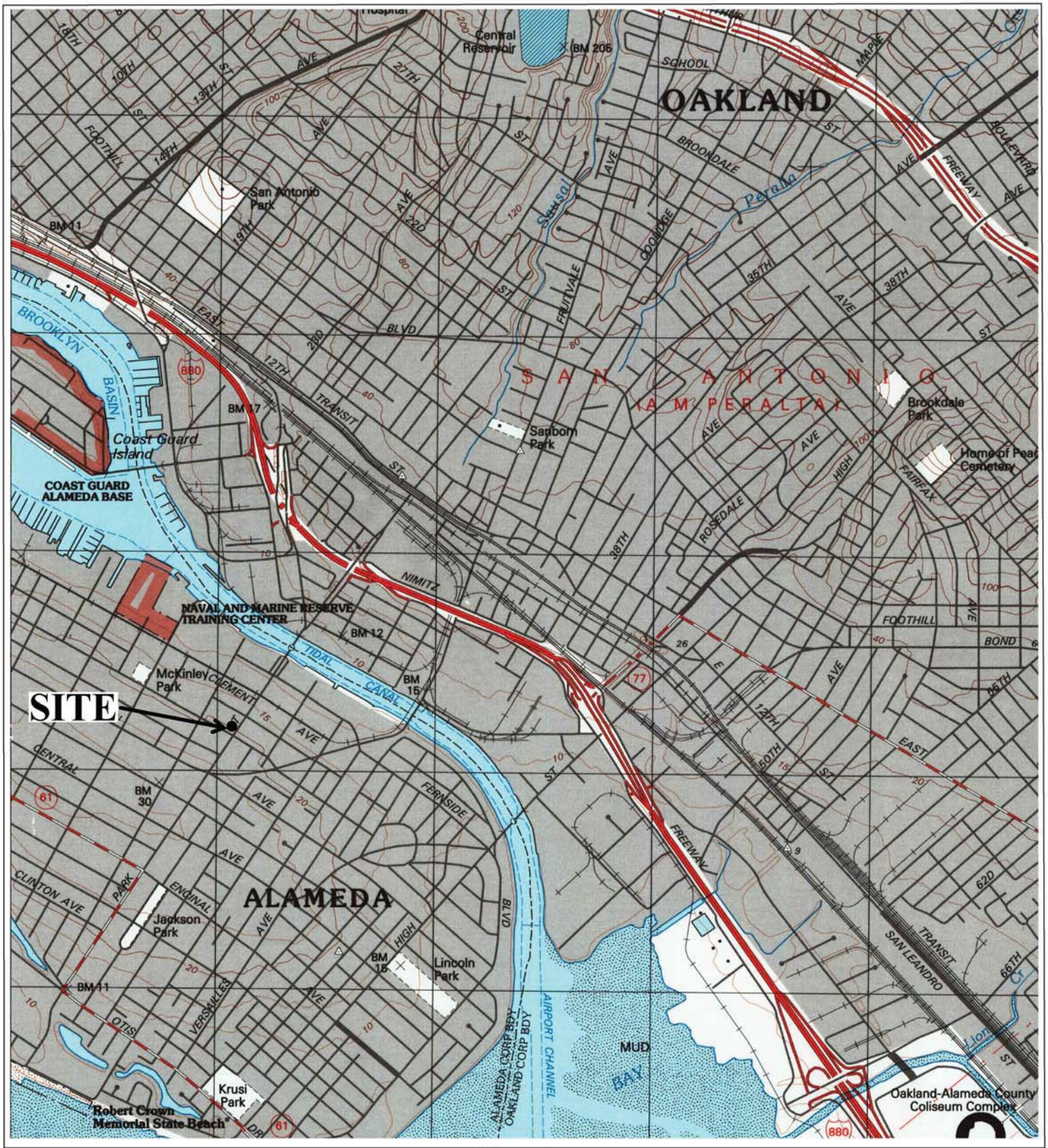

Figure 1
Site Location Map
Xtra Oil Company
1701 Park Street
Alameda, California

Basemap from:
U.S. Geological Survey
Oakland East, California
7.5-Minute Quadrangle, Map edited 1996

P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610

0 1,000 2,000
Approximate Scale in Feet

N

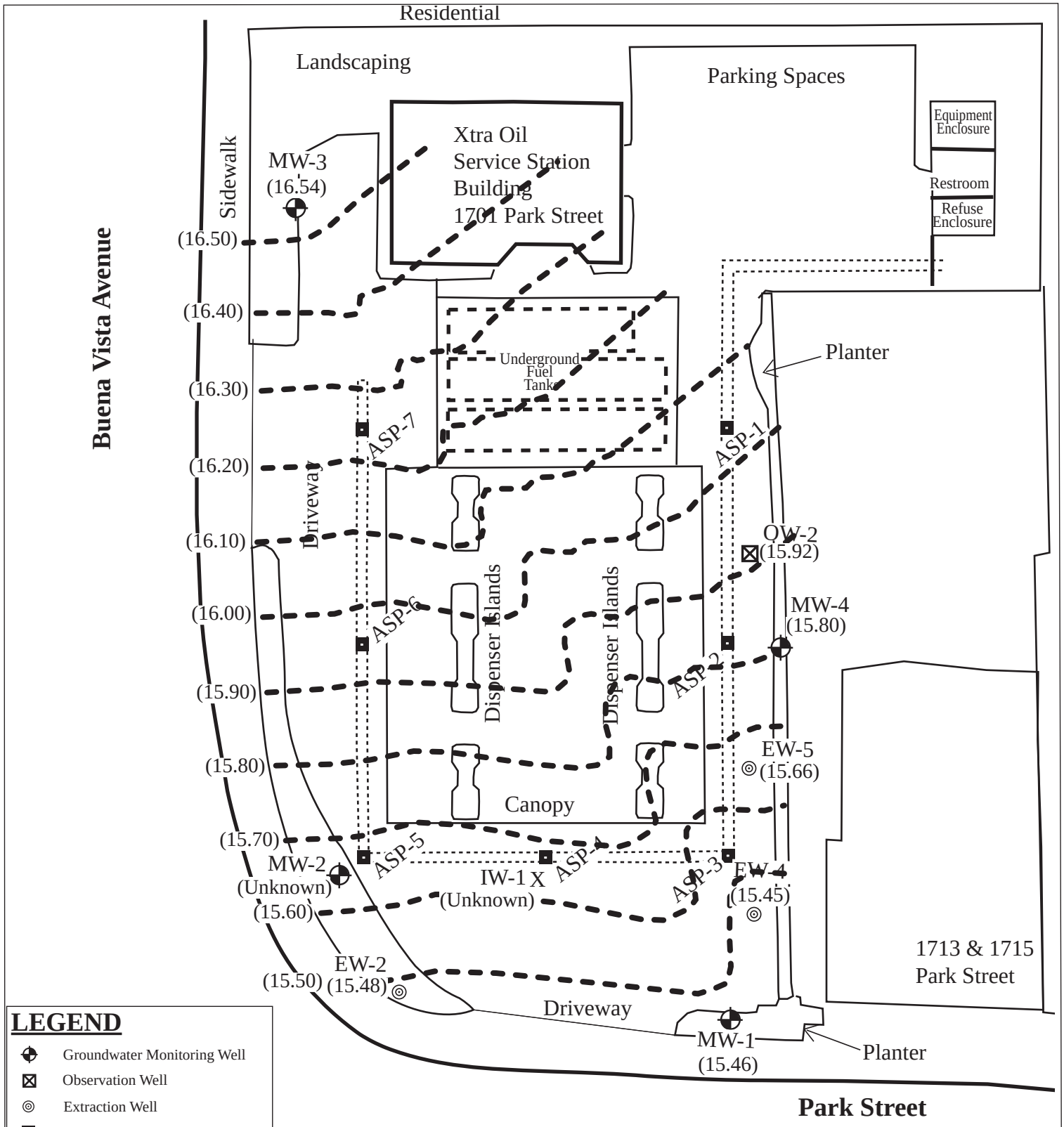

Figure 2
Site Plan Showing Well Locations and Groundwater Surface Elevations
Xtra Oil Company
1701 Park Street
Alameda, California

Basemap from: Alisto Engineering Group September 2005, and Google Earth October 2009

P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610

0 12.5 25
Approximate Scale in Feet

N

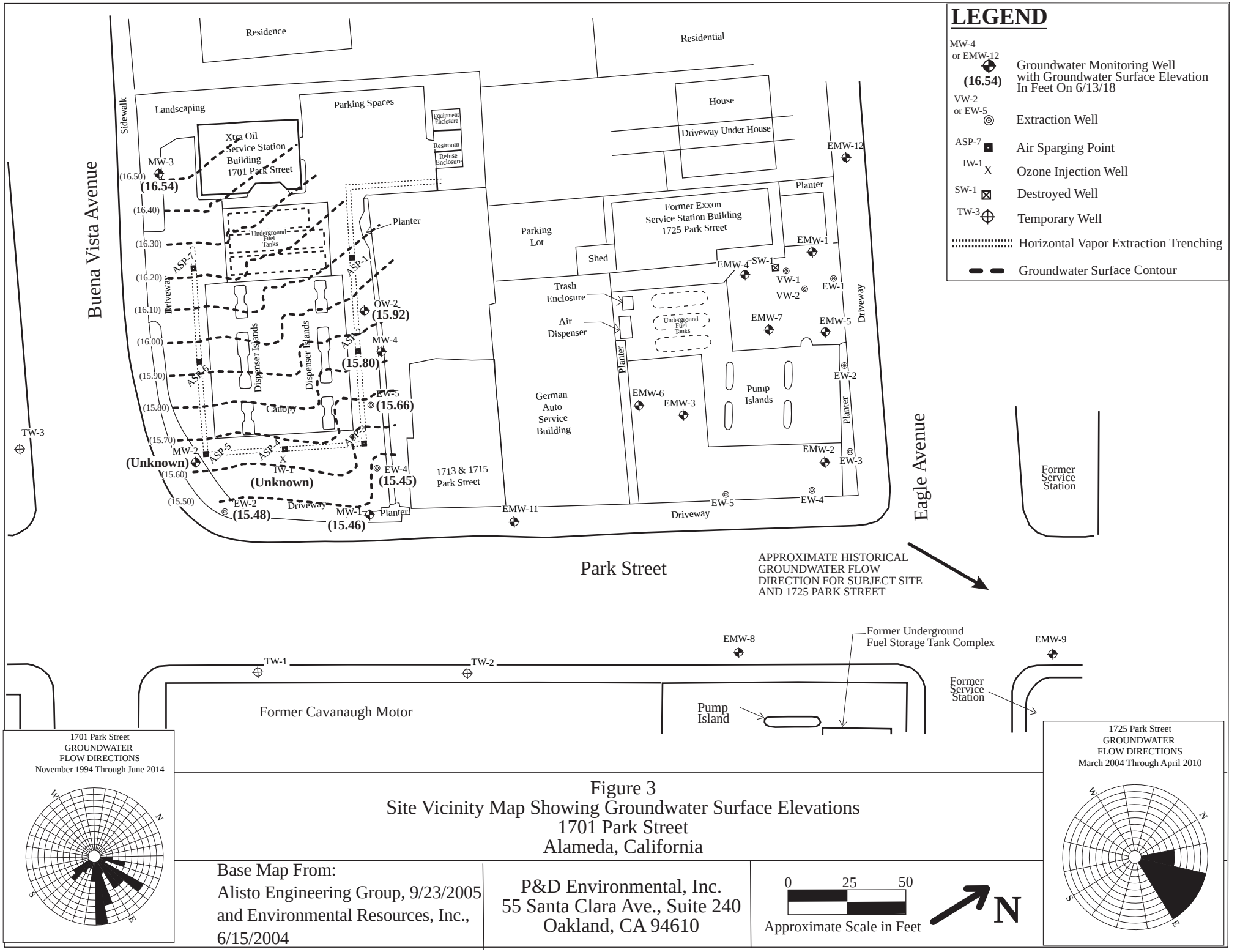

Figure 3
Site Vicinity Map Showing Groundwater Surface Elevations
1701 Park Street
Alameda, California

Base Map From:
Alisto Engineering Group, 9/23/2005
and Environmental Resources, Inc.,
6/15/2004

P&D Environmental, Inc.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610

APPENDIX A

HISTORICAL WATER LEVEL AND WATER QUALITY DATA FOR THE SUBJECT SITE

TABLE 1 - SUMMARY OF GROUNDWATER SAMPLING
XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-210

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	OTHER SVOCs (ug/l)	NAPTHALENE (ug/l)	BENZO-PYRENE (ug/l)	DO (ppm)	LAB
MW-1	11/04/94	19.60	8.6	---	10.96	60000	6400	13000	4900	1300	5500	---	---	---	---	---	MCC
QC-1 (c)	11/04/94	---	---	---	---	54000	---	12000	4500	1200	5200	---	---	---	---	---	MCC
MW-1	01/11/95	19.60	6.10	---	13.50	---	---	---	---	---	---	---	---	---	---	---	---
MW-1	02/24/95	19.60	6.57	---	13.03	56000	4400	13000	7000	1400	5100	---	---	---	---	---	MCC
QC-1 (c)	02/24/95	---	---	---	---	43000	---	8900	4600	970	3300	---	---	---	---	---	MCC
MW-1	05/25/95	19.60	6.54	---	13.06	53000	4700	11000	5700	1200	4000	---	---	---	---	4.3	MCC
QC-1 (c)	05/25/95	---	---	---	---	48000	---	11000	5300	1200	3800	---	---	---	---	---	MCC
MW-1	08/30/95	19.60	8.15	---	11.45	14000	3700	5000	1100	3900	103	---	---	---	---	2.8	MCC
QC-1 (c)	08/30/95	---	---	---	---	57000	---	17000	7000	1500	5200	---	---	---	---	---	MCC
MW-1	11/16/95	19.60	8.79	---	10.81	100000	5900	22000	17000	2100	8500	---	---	---	---	---	MCC
QC-1 (c)	11/16/95	---	---	---	---	95000	---	20000	15000	1800	7800	---	---	---	---	---	MCC
MW-1	03/20/96	19.60	6.45	---	13.15	46000	3300	10000	6200	1100	3200	---	---	---	---	---	MCC
QC-1 (c)	03/20/96	---	---	---	---	42000	---	9800	5800	970	3000	---	---	---	---	---	MCC
MW-1	06/13/96	19.60	7.14	---	12.46	44000	5400	9500	5500	1100	4000	19000	---	---	---	---	MCC
QC-1 (c)	06/13/96	---	---	---	---	48000	---	9300	5600	1000	3800	17000	---	---	---	---	MCC
MW-1	09/23/96	19.60	7.56	---	12.04	76000	14000	14000	11000	1600	7100	17000	---	---	---	6.1	MCC
MW-1	12/19/96	19.60	7.08	---	12.52	46000	---	12000	5500	1200	4100	---	---	---	---	---	MCC
MW-1	05/09/97	19.60	7.39	---	12.21	80000	7500	14000	12000	1700	7600	14000	ND	280	ND<2	2.7	MCC/CHR
MW-1	09/11/97	19.60	7.50	---	12.10	100000	7700	19000	19000	2400	11000	ND<2100	---	---	---	7.2	MCC
MW-1	12/15/97	19.60	7.61	---	11.99	45000	3500	11000	5300	1500	5200	13000	---	---	---	6.8	MCC
QC-1 (c)	12/15/97	---	---	---	---	45000	---	11000	5400	1400	5100	14000	---	---	---	---	MCC
MW-1	03/11/98	19.60	5.35	---	14.25	40000	3600	5900	3900	1300	4900	8700	---	---	---	6	MCC
QC-1 (c)	03/11/98	---	---	---	---	43000	---	7200	5000	1400	5300	14000	---	---	---	---	MCC
MW-1	06/23/98	19.60	6.63	---	12.97	44000	3700	5900	6200	1800	6200	870	---	---	---	6.2	MCC
QC-1 (c)	06/23/98	---	---	---	---	47000	---	6000	6400	1800	6300	1000	---	---	---	---	MCC
MW-1	12/01/98	19.60	6.48	---	13.12	57000	---	7400	12000	2100	8200	7200	---	---	---	2.4	MCC
QC-1 (c)	12/01/98	---	---	---	---	57000	---	6800	11000	1900	7500	8300	---	---	---	---	MCC
MW-1	03/30/99	19.60	5.74	---	13.86	67000	6500	5700	9400	2500	9400	3200	---	---	---	2.1	MCC
QC-1 (c)	03/30/99	---	---	---	---	64000	6400	5500	9000	2400	9100	3100	---	---	---	---	MCC
MW-1	08/16/99	19.60	7.02	---	12.58	63000	---	3800	9100	2800	11000	ND<1700	---	---	---	1.3	MCC
QC-1 (c)	08/16/99	---	---	---	---	64000	---	3700	8800	2800	11000	ND<1400	---	---	---	---	MCC
MW-1	12/31/99	19.60	7.45	---	12.15	62000	5100	2900	9400	2700	11000	ND<100	---	---	---	8.3	MCC
QC-1 (c)	12/31/99	---	---	---	---	67000	4900	2900	9700	2800	12000	ND<100	---	---	---	---	MCC
MW-1	03/31/00	19.60	5.85	---	13.75	48000	490	3200	5500	2000	6700	520	---	---	---	7.9	MCC
QC-1 (c)	03/31/00	---	---	---	---	54000	3300	3500	6000	2300	7300	730	---	---	---	---	MCC
MW-1	07/14/00	19.60	7.00	---	12.60	78000	5700	5600	14000	2300	9500	ND<200	---	---	---	3.2	MCC
QC-1 (c)	07/14/00	---	---	---	---	72000	---	4900	14000	2100	9200	ND<200	---	---	---	---	MCC
MW-1	10/04/00	19.60	7.60	---	12.00	65000	2900	3800	11000	2400	8200	ND<100	---	---	---	1.4	MCC
QC-1 (c)	10/04/00	---	---	---	---	68000	---	3900	13000	2400	9300	ND<100	---	---	---	---	MCC
MW-1	12/21/00	19.60	6.91	---	12.69	74000	2500	3800	17000	3400	15000	ND<200	---	---	---	1.3	MCC
QC-1 (c)	12/21/00	---	---	---	---	69000	---	2700	12000	2400	11000	ND<550	---	---	---	---	MCC
MW-1	04/13/01	19.60	6.06	---	13.54	55000	2400	2900	7800	2400	9400	ND<900	---	---	---	0.8	MCC
QC-1 (c)	04/13/01	---	---	---	---	51000	---	2300	6100	2000	7900	ND<350	---	---	---	---	MCC
MW-1	06/27/01	19.60	6.54	---	13.06	80000	3600	2800	13000	2300	10000	ND<250	---	---	---	1.1	MCC
QC-1 (c)	06/27/01	---	---	---	---	76000	---	3100	13000	2300	10000	ND<250	---	---	---	---	MCC
MW-1	09/20/01	19.60	7.08	---	12.52	74000	6600	1600	7700	2500	10000	ND<200	---	---	---	0.8	MCC
QC-1 (c)	09/20/01	---	---	---	---	67000	---	1600	7800	2600	10000	ND<200	---	---	---	---	MCC
MW-1	12/21/01	19.60	5.71	---	13.89	58000	5500	2100	11000	2400	10000	ND<720	---	---	---	1.4	MCC
QC-1 (c)	12/21/01	---	---	---	---	56000	---	2100	11000	2300	10000	ND<620	---	---	---	---	MCC
MW-1	02/04/02	19.60	5.01	---	14.59	6500	1800	74	100	230	1500	140	---	---	---	4.1	MCC
QC-1 (c)	02/04/02	---	---	---	---	8000	---	90	130	270	1800	ND<500	---	---	---	---	MCC
MW-1	05/07/02	19.60	6.10	---	13.50	41000	7900	1300	5200	1700	6300	ND<1000	---	---	---	4.3	MCC
QC-1 (c)	05/07/02	---	---	---	---	40000	---	1300	5200	1700	6400	ND<500	---	---	---	---	MCC
MW-1	08/22/02	19.60	6.91	---	12.69	42000	4800	1100	6300	1900	7900	ND<500	---	---	---	4.9	MCC
QC-1 (c)	08/22/02	---	---	---	---	40000	---	1000	6100	1800	7500	ND<500	---	---	---	---	MCC
MW-1	11/08/02	19.60	6.46	---	13.14	38000	6800	770	4600	1600	6600	ND<1000	---	---	---	---	MCC
QC-1 (c)	11/08/02	---	---	---	---	49000	---	880	4800	1800	6700	ND<1700	---	---	---	---	MCC
MW-1	02/07/03	19.60	5.80	---	13.80	43000	3700	1600	6100	2100	9700	ND<500	---	---	---	1.1	MCC
MW-1	05/02/03	19.60	5.60	---	14.00	48000	4600	1100	5900	1800	7300	ND<1000	---	---	---	---	MCC
QC-1 (c)	05/02/03	---	---	---	---	---	---	1200	5800	1800	7100	ND<500	---	---	---	---	MCC
MW-1	08/14/03	19.60	6.81	---	12.79	42000	3800	1000	4700	2000	8100	ND<500	---	---	---	1.3	MCC
QC-1 (c)	08/14/03	---	---	---	---	43000	---	1000	4600	2000	7900	ND<500	---	---	---	---	MCC
MW-1	11/14/03	19.60	6.71	---	12.89	40000	3000	610	4900	1900	7600	ND<500	---	---	---	0.8	MCC
MW-1	03/01/04	19.60	5.22	---	14.38	20000	3000	540	2500	720	2900	ND<50	---	---	---	0.01	MCC
MW-1	06/30/04 (e)	19.60	6.38	---	13.22	39000	3000	570	2900	2100	9200	ND<500	---	---	---	---	MCC
QC-1 (c)	06/30/04	---	---	---	---	---	6800	550	3200	2100	9100	ND<500	---	---	---	---	MCC
MW-1	10/26/04	19.60	6.00	---	13.60	35000	4400	510	2900	1600	5700	ND<150	---	---	---	2.7	MCC
QC-1 (c)	10/26/04	---	---	---	---	---	---	450	2700	1600	5500	ND<150	---	---	---	---	MCC
MW-1	03/24/05	19.60	5.04	---	14.56	29000	3300	1300	5500	1200	4900	ND<500	---	---	---	2.7	MCC
QC-1 (c)	03/24/05	---	---	---	---	31000	---	830	3800	1000	4500	ND<210	---	---	---	---	MCC
MW-1	06/14/05	19.60	5.45	---	14.15	23000	4300	1300	2700	810	2700	ND<500	---	---	---	2.9	MCC
QC-1 (c)	06/14/05	---	---	---	---	---	---	1400	3100	810	2900	ND<250	---	---	---	---	MCC
MW-1	09/12/05	19.60	7.89	---	11.71	60000	4600	4900	8200	1900	7300	2300	---	---	---	2.6	MCC
QC-1 (c)	09/12/05	---	---	---	---	58000	---	5000	8500	1900	7300	2200	---	---	---	---	MCC
MW-1	01/04/06 (g)	19.60	6.09	---	13.51	54000	2900	8800	3500	970	3700	5400	---	---	---	---	MCC
QC-1 (c)	01/04/06 (g)	---	---	---	---	46000	---	8500	3500	970	3700	5200	---	---	---	---	MCC
MW-1	04/04/06 (h)	19.60	5.71	<0.01	13.89	31000	2500	6700	2800	980	2800	5400	---	---	---	---	MCC
QC-1 (c)	04/04/06 (h)	---	---	---	---	31000	---	6900	2900	1000	2800	5800	---	---	---	---	MCC
MW-1	06/12/06	19.60	6.66	sheen	12.94	31000	3100	4800	2200	910	2600	3900	---	---	---	---	MCC
QC-1 (c)	06/12/06	---	---	---	---	31000	---	5700	2300	850	2400	4900	---	---	---	---	MCC
MW-1	**09/08/06**	**19.60**	**7.78**	**sheen**	**11.82**	**34000**	**3000**	**7900**	**1800**	**760**	**2300**	**6200**	**---**	**---**	**---**	**---**	**MCC**
QC-1 (c)	**09/08/06**	**---**	**---**	**---**	**---**	**39000**	**---**	**6300**	**1600**	**680**	**2000**	**5200**	**---**	**---**	**---**	**---**	**MCC**

TABLE 1 - SUMMARY OF GROUNDWATER SAMPLING
XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-210

WELL ID	DATE OF MONITORING/ SAMPLING	CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	OTHER SVOCs (ug/l)	NAPTHALENE (ug/l)	BENZO-PYRENE (ug/l)	DO (ppm)	LAB
MW-2	11/04/94	20.31	9.12	0.16	11.31	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	01/11/95	20.31	6.75	—	13.56	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	02/24/95	20.31	7.11	0.18	13.34	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	05/25/95	20.31	7.01	0.01	13.31	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	08/30/95	20.31	8.58	0.12	11.82	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	11/16/95	20.31	9.07	0.01	11.25	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	03/20/96	20.31	6.79	0.01	13.53	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	06/13/96	20.31	7.41	0.01	12.91	—	—	—	—	—	—	—	—	—	—	—	—
MW-2	09/23/96	20.31	7.83	0.01	12.49	30000	19000	4600	180	1500	4100	2600	—	—	—	5.5	MCC
QC-1 (c)	09/23/96	—	—	—	—	33000	—	4700	170	1600	3900	2400	—	—	—	—	MCC
MW-2	12/19/96	20.31	7.37	0.01	12.95	29000	—	1800	240	1400	5400	—	(d)	420	ND<10	—	MCC
QC-1 (c)	12/19/96	—	—	—	—	29000	—	580	210	1300	5100	—	—	—	—	—	MCC
MW-2	05/09/97	20.31	6.11	0.21	14.36	34000	6700000	4600	260	1500	4300	1600	—	—	—	3.7	MCC
MW-2	09/11/97	20.31	7.70	0.03	12.63	44000	1200000	3900	250	2400	7400	ND<610	—	—	—	6.5	MCC
QC-1 (c)	09/11/97	—	—	—	—	47000	1100000	4000	420	2700	8300	920	—	—	—	—	MCC
MW-2	12/15/97	20.31	7.87	0.03	12.46	32000	68000	4600	130	2200	5400	ND<470	—	—	—	6	MCC
MW-2	03/11/98	20.31	5.61	0.18	14.84	44000	3800	5200	220	2000	5000	1100	—	—	—	6.2	MCC
MW-2	06/23/98	20.31	6.74	0.02	13.59	75000	570000	5900	390	3100	8300	8400	—	—	—	6.3	MCC
MW-2	12/01/98	20.31	7.30	—	13.01	36000	—	3800	73	1500	3900	2000	—	—	—	1.9	MCC
MW-2	03/30/99	20.31	6.51	0.13	13.90	23000	23000	5000	100	610	870	21000	—	—	—	1.7	MCC
MW-2	08/16/99	20.31	8.04	0.21	12.43	30000	—	5200	67	1100	1800	6000	—	—	—	2.6	MCC
MW-2	12/31/99	20.31	8.20	0.01	12.12	43000	340000	7600	97	1400	2500	4300	—	—	—	9.0	MCC
MW-2	03/31/00	20.31	6.29	0.01	14.03	26000	200000	4000	58	1100	1500	13000	—	—	—	8.1	MCC
MW-2	07/14/00	20.31	8.02	—	12.29	35000	170000	5000	76	1100	2500	4900	—	—	—	3.9	MCC
MW-2	10/04/00	20.31	8.62	—	11.69	22000	67000	4700	97	1300	1000	1900	—	—	—	1.8	MCC
MW-2	12/21/00	20.31	7.70	—	12.61	23000	16000	7500	65	770	490	8600	—	220	ND<10	0.6	MCC
MW-2	04/13/01	20.31	7.05	—	13.26	25000	21000	6400	79	790	670	8300	—	—	—	1.1	MCC
MW-2	06/27/01	20.31	7.50	—	12.81	34000	10000	5400	100	520	370	6800	—	—	—	0.7	MCC
MW-2	09/20/01	20.31	8.10	—	12.21	28000	64000	4600	78	670	500	2000	—	—	—	0.4	MCC
MW-2	12/21/01	20.31	6.66	—	13.65	30000	18000	3000	52	1700	970	ND<100	—	—	—	0.9	MCC
MW-2	02/04/02	20.31	6.75	—	13.56	17000	35000	3600	ND<50	960	500	1200	—	—	—	1.3	MCC
MW-2	05/07/02	20.31	7.20	—	13.11	16000	59000	3500	43	520	220	3100	—	—	—	1.0	MCC
MW-2	08/22/02	20.31	7.96	—	12.35	15000	60000	2700	30	460	220	700	—	—	—	4.2	MCC
MW-2	11/08/02	20.31	7.69	—	12.62	15000	100000	2100	60	1100	150	ND<250	—	—	—	—	MCC
MW-2	02/07/03	20.31	6.52	—	13.79	11000	—	4400	24	ND<12	77	1900	—	—	—	0.7	MCC
MW-2	05/02/03	20.31	6.40	—	13.91	16000	79000	1800	23	860	210	ND<350	—	—	—	—	MCC
MW-2	08/14/03	20.31	7.77	—	12.54	13000	4300	1600	21	450	80	ND<400	—	—	—	0.9	MCC
MW-2	11/14/03	20.31	7.85	—	12.46	12000	13000	1700	29	600	100	ND<600	—	—	—	0.7	MCC
MW-2	03/01/04	20.31	6.10	—	14.21	17000	43000	3900	100	670	430	1800	—	—	—	0.42	MCC
MW-2	06/30/04 (e)	20.31	7.61	—	12.70	14000	12000	3800	33	390	72	1900	—	—	—	0.42	MCC
MW-2	10/26/04	20.31	7.12	—	13.19	14000	7900	3700	47	300	100	1700	—	—	—	—	MCC
MW-2	03/24/05	20.31	5.78	—	14.53	15000	57000	3000	ND<25	400	58	ND<900	—	—	—	—	MCC
MW-2	06/14/05	20.31	6.92	—	13.39	15000	53000	2100	31	310	49	530	—	—	—	0.8	MCC
MW-2	09/12/05	20.31	8.25	0.01	12.06	10000	11000	2600	30	200	ND<10	660	—	—	—	2.6	MCC
MW-2	01/04/06 (g)	20.31	6.45	<0.01	13.86	7300	14000	1500	18	180	47	ND<250	—	—	—	—	MCC
MW-2	04/04/06 (h)	20.31	6.14	—	14.17	9500	130000	2200	35	170	52	ND<250	—	—	—	—	MCC
MW-2	06/12/06	20.31	7.15	0.01	13.16	10000	29000	2200	46	74	59	460	—	—	—	—	MCC
MW-2	**09/08/06**	**20.31**	**8.22**	**sheen**	**12.09**	**12000**	**7400**	**1800**	**25**	**130**	**38**	ND<300	—	—	—	—	**MCC**
MW-3	11/04/94	20.57	8.92	—	11.65	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	MCC
MW-3	01/11/95	20.57	5.67	—	14.90	—	—	—	—	—	—	—	—	—	—	—	—
MW-3	02/24/95	20.57	6.11	—	14.46	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	MCC
MW-3	05/25/95	20.57	6.24	—	14.33	91	ND<50	28.0	12.0	2.1	6.5	—	—	—	—	4.6	MCC
MW-3	08/30/95	20.57	8.27	—	12.30	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	MCC
MW-3	11/16/95	20.57	8.82	—	11.75	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	MCC
MW-3	03/20/96	20.57	5.44	—	15.13	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	MCC
MW-3	06/13/96	20.57	6.17	—	14.40	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	—	MCC
MW-3	09/23/96	20.57	6.57	—	14.00	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	4.9	MCC
MW-3	12/19/96	20.57	6.59	—	13.98	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	MCC
MW-3	05/09/97	20.57	7.00	—	13.57	ND<50	59	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	3.3	MCC
MW-3	09/11/97	20.57	6.92	—	13.65	ND<50	82	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	7	MCC
MW-3	12/15/97	20.57	7.03	—	13.54	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	6.5	MCC
MW-3	03/11/98	20.57	4.71	—	15.86	ND<50	ND<50	ND<0.5	1.8	0.6	3.1	ND<5.0	—	—	—	6.1	MCC
MW-3	06/23/98	20.57	6.33	—	14.24	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	5.7	MCC
MW-3	12/01/98	20.57	6.74	—	13.83	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	4	MCC
MW-3	03/30/99	20.57	5.68	—	14.89	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	4.6	MCC
MW-3	08/16/99	20.57	7.67	—	12.90	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	2.7	MCC
MW-3	12/31/99	20.57	8.07	—	12.50	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	9.0	MCC
MW-3	03/31/00	20.57	5.59	—	14.98	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	2.8	MCC
MW-3	07/14/00	20.57	7.64	—	12.93	68	ND<50	0.89	1.7	2.1	9.5	ND<5.0	—	—	—	2.1	MCC
MW-3	10/04/00	20.57	8.34	—	12.23	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	2.0	MCC
MW-3	12/21/00	20.57	7.00	—	13.57	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	1.4	MCC
MW-3	04/13/01	20.57	6.38	—	14.19	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	1.3	MCC
MW-3	06/27/01	20.57	7.37	—	13.20	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	1.9	MCC
MW-3	09/20/01	20.57	8.25	—	12.32	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	2.1	MCC
MW-3	12/21/01	20.57	5.72	—	14.85	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	2.9	MCC
MW-3	02/04/02	20.57	5.85	—	14.72	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	4.1	MCC
MW-3	05/07/02	20.57	6.49	—	14.08	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	4.0	MCC
MW-3	08/22/02	20.57	7.93	—	12.64	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	4.6	MCC
MW-3	11/08/02	20.57	7.67	—	12.90	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	—	MCC

TABLE 1 - SUMMARY OF GROUNDWATER SAMPLING
XTRA OIL COMPANY SERVICE STATION
1701 PARK STREET, ALAMEDA, CALIFORNIA

ALISTO PROJECT NO. 10-210

WELL ID	DATE OF MONITORING/ SAMPLING		CASING ELEVATION (a) (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (b) (Feet)	TPH-G (ug/l)	TPH-D (ug/l)	B (ug/l)	T (ug/l)	E (ug/l)	X (ug/l)	MTBE (ug/l)	OTHER SVOCs (ug/l)	NAPTHALENE (ug/l)	BENZO-PYRENE (ug/l)	DO (ppm)	LAB
MW-3	02/07/03		20.57	5.95	---	14.62	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	2.8	MCC
MW-3	05/02/03		20.57	5.75	—	14.82	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	—	---	—	MCC
MW-3	08/14/03		20.57	7.74	—	12.83	ND<50	ND<50	1.6	ND<0.5	0.82	3.2	ND<5.0	—	—	—	2.1	MCC
MW-3	11/14/03		20.57	7.75	—	12.82	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	—	---	0.8	MCC
MW-3	03/01/04		20.57	5.17	—	15.40	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	0.92	MCC
MW-3	06/30/04	(e)	20.57	7.48	—	13.09	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	—	---	0.92	MCC
MW-3	10/26/04		20.57	6.47	—	14.10	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	3.0	MCC
MW-3	03/24/05		20.57	4.70	—	15.87	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	---	—	---	3.0	MCC
MW-3	06/14/05		20.57	5.99	—	14.58	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	2.7	MCC
MW-3	09/12/05		20.57	7.89	—	12.68	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	3.3	MCC
MW-3	01/04/06	(g)	20.57	5.10	—	15.47	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	---	MCC
MW-3	04/04/06	(h)	20.57	4.93	—	15.64	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	—	MCC
MW-3	06/12/06		20.57	6.20	—	14.37	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	—	MCC
MW-3	**09/08/06**		**20.57**	**7.81**	**—**	**12.76**	**ND<50**	**ND<50**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<5.0**	**—**	**—**	**—**	**—**	**MCC**
MW-4	05/09/97		19.69	7.17	---	12.52	31000	15000	540	1300	1000	4500	1900	ND	2.1	ND<2	3.1	MCC/CHR
MW-4	09/11/97		19.69	7.71	—	11.98	40000	6500	2000	3100	1700	7700	3400	—	—	—	6.4	MCC
MW-4	12/15/97		19.69	7.87	—	11.82	14000	2100	910	690	390	2700	1700	—	—	—	6	MCC
MW-4	03/11/98		19.69	3.51	—	16.18	2800	780	68	94	72	430	140	---	—	---	5.5	MCC
MW-4	06/23/98		19.69	5.21	—	14.48	15000	2800	240	630	720	2700	370	---	—	---	5.4	MCC
MW-4	12/01/98		19.69	6.45	—	13.24	21000	—	580	1000	530	3600	1700	—	—	—	4.4	MCC
MW-4	03/30/99		19.69	5.41	—	14.28	41000	3600	3100	3400	1700	6700	5700	—	—	—	4.6	MCC
MW-4	08/16/99		19.69	7.35	—	12.34	24000	---	4600	940	1200	2700	9700	—	—	—	3.4	MCC
MW-4	12/31/99		19.69	7.71	—	11.98	14000	2000	510	630	600	3100	3500	—	—	—	10.1	MCC
MW-4	03/31/00		19.69	5.22	—	14.47	14000	1400	470	480	580	2200	2000	---	—	---	6.8	MCC
MW-4	07/14/00		19.69	7.31	—	12.38	37000	4300	770	1500	1800	7200	1700	—	—	—	3.3	MCC
MW-4	10/04/00		19.69	7.11	—	12.58	47000	3200	870	2000	2600	9800	ND<1500	---	—	---	1.7	MCC
MW-4	12/21/00		19.69	6.86	—	12.83	13000	1800	370	410	460	2300	1500	—	88	ND<10	0.6	MCC
MW-4	04/13/01		19.69	6.02	---	13.67	20000	2800	710	640	620	2900	2300	—	—	—	1.0	MCC
MW-4	06/27/01		19.69	6.72	—	12.97	23000	2100	510	1100	1100	4300	1400	—	—	---	1.0	MCC
MW-4	09/20/01		19.69	7.30	—	12.39	36000	4400	460	1300	1700	6700	1000	—	—	—	2.0	MCC
MW-4	12/21/01		19.69	4.55	---	15.14	11000	5600	130	250	480	2400	ND<320	—	—	—	1.6	MCC
MW-4	02/04/02		19.69	5.82	—	13.87	50000	12000	3000	8100	1900	7600	ND<500	—	—	---	2.0	MCC
MW-4	05/07/02		19.69	6.08	—	13.61	17000	3200	270	820	870	3700	ND<500	—	—	---	2.6	MCC
MW-4	08/22/02		19.69	7.45	—	12.24	26000	3800	720	920	1500	6500	2100	—	—	—	4.6	MCC
MW-4	11/08/02		19.69	6.74	—	12.95	20000	3600	290	630	1200	5100	670	—	—	—	---	MCC
MW-4	02/07/03		19.69	4.86	—	14.83	13000	—	520	1300	ND<25	3600	420	—	—	—	2.1	MCC
QC-1	02/07/03	(c)	---	---	—	—	13000	—	510	1200	83	3100	420	—	—	—	—	MCC
MW-4	05/02/03		19.69	5.45	—	14.24	19000	3600	280	550	810	3600	470	—	—	—	—	MCC
MW-4	08/14/03		19.69	7.20	—	12.49	31000	4100	720	810	1300	6400	1100	—	—	—	1.2	MCC
MW-4	11/14/03		19.69	6.92	—	12.77	18000	3300	400	320	1000	4500	ND<1000	—	—	—	0.7	MCC
QC-1	11/14/03	(c)	—	—	---	—	---	—	440	310	1100	4500	ND<1000	—	—	—	—	MCC
MW-4	03/01/04		19.69	5.10	—	14.59	15000	2500	110	210	580	2700	240	---	—	---	0.61	MCC
QC-1	03/01/04	(c)	—	—	---	—	15000	—	110	220	610	2800	250	—	---	—	---	MCC
MW-4	06/30/04	(e)	19.69	6.70	—	12.99	23000	5800	330	550	1300	5200	ND<900	—	—	—	0.61	MCC
MW-4	10/26/04		19.69	6.05	—	13.64	19000	3800	150	380	950	3800	ND<300	—	—	—	2.0	MCC
MW-4	03/24/05		19.69	4.23	—	15.46	6600	1900	62	29	190	960	ND<120	—	—	—	2.0	MCC
MW-4	06/14/05		19.69	5.58	—	14.11	23000	5600	160	510	1200	4000	ND<500	—	—	---	2.1	MCC
MW-4	09/12/05		19.69	7.84	---	11.85	24000	4000	1400	640	1400	3900	1400	—	---	—	2.2	MCC
MW-4	01/04/06	(g)	19.69	4.65	—	15.04	20000	2800	740	350	930	2900	1100	---	—	---	—	MCC
MW-4	04/04/06	(h)	19.69	4.62	—	15.07	8100	2000	300	64	490	1200	530	—	—	—	---	MCC
MW-4	06/12/06		19.69	6.07	sheen	13.62	24000	4500	270	390	1300	3600	340	---	—	—	—	MCC
MW-4	**09/08/06**	**[i]**	**19.69**	**7.42**	**sheen**	**12.27**	**20000**	**3100**	**1700**	**240**	**930**	**2000**	**1800**	**—**	**—**	**—**	**—**	**MCC**
QC-2	11/04/94	(f)	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	MCC
QC-2	02/24/95	(f)	—	—	—	---	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	---	—	—	MCC
QC-2	05/25/95	(f)	---	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	—	MCC
QC-2	08/30/95	(f)	—	—	---	—	ND<50	---	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	---	—	---	MCC
QC-2	11/16/95	(f)	—	—	---	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	—	---	—	---	MCC
QC-2	03/20/96	(f)	---	—	—	---	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	---	—	—	—	MCC
QC-2	06/13/96	(f)	—	—	---	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	---	—	---	—	---	MCC

ABBREVIATIONS:

TPH-G	Total petroleum hydrocarbons as gasoline using EPA Methods 5030/8015
TPH-D	Total petroleum hydrocarbons as diesel using EPA Methods 3510/8015
B	Benzene using EPA Methods 5030/8020
T	Toluene using EPA Methods 5030/8020
E	Ethylbenzene using EPA Methods 5030/8020
X	Total xylenes using EPA Methods 5030/8020
MTBE	Methyl tert butyl ether using EPA Methods 5030/8020
SVOCs	Semivolatile organic compounds using EPA Method 8270
DO	Dissolved oxygen
ug/l	Micrograms per liter
ppm	Parts per million
—	Not analyzed/applicable/measurable
ND	Not detected above reported detection limit
MCC	McCampbell Analytical, Inc.
CHR	Chromalab, Inc.

NOTES:

(a) Top of casing surveyed relative to mean sea level.
(b) Groundwater elevations expressed in feet above mean sea level, and adjusted assuming a specific gravity of 0.75 for free product.
(c) Blind duplicate.
(d) Other SVOCs detected at concentrations of 200 ug/l 2-methylnapthalene and 14 ug/l phenanthrene.
(e) Wells monitored 6/15/04.
(f) Travel blank.
(g) 4th Quarter 2005 sampling.
(h) 1st Quarter 2006 sampling.
[i] Well recharge was exceedingl slow; not to be used in preparing contours.

APPENDIX B

GROUNDWATER MONITORING/ WELL PURGING DATA SHEETS

P&D Environmental, Inc.
Groundwater Monitoring/Well Purging Data Sheet

Site Name Xtra Oil, 1701 Park St, Alameda
Job Number 0058
TOC to Water (ft.) 6.90 (6/13/18)
Well Depth (ft.) 19.2
Well Diameter 2"
Flow Rate (mL/minute) 300
Start Purge Time 14:25

Well No. MW1
Date 6/14/18
Sheen Yes, moderate
Free Product Thickness 0
Sample Collection Method Peristaltic Pump & Dedicated PE tubing
Personnel Initials LKD

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
14:26	300	7.21	6.02	1218	21.3	1.17	-170.8	6.84
14:29	1,200	7.25	6.13	1216	21.2	0.72	-176.7	2.77
14:32	2,100	7.30	6.14	1214	21.3	0.49	-178.9	2.83
14:35	3,000	7.32	6.14	1210	21.4	0.37	-178.4	3.33
14:38	3,900	7.34	6.11	1210	21.5	0.31	-178.2	2.46
14:41	4,800	7.35	6.10	1182	21.5	0.27	-179.0	3.70

NOTES

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%
D.O. = +/- 10%

PE tubing inlet set at 15.0 ft
MW1 collected at 14:50
Moderate odor, sheen present

P&D Environmental, Inc.
Groundwater Monitoring/Well Purging Data Sheet

Site Name Xtra Oil, 701 Park St, Alameda
Job Number 0058
TOC to Water (ft.) 7.87 (6/13/18)
Well Depth (ft.) 15.8 (w/added coupling)
Well Diameter 2"
Flow Rate (mL/minute) 200
Start Purge Time 10:52

Well No. MW2
Date 6/13/18
Sheen None
Free Product Thickness Ø
Sample Collection Method Peristaltic Pump & New Unused PE tubing
Personnel Initials LKD

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
10:53	200	8.00	6.31	1086	21.4	1.52	-118.8	23.53
10:56	800	8.09	6.27	1085	21.3	0.79	-132.4	4.28
10:59	1,400	8.17	6.28	1073	21.4	0.45	-140.1	17.76
11:02	2,000	8.23	6.30	1068	21.3	0.35	-144.6	2.69
11:05	2,600	8.25	6.31	1058	21.3	0.28	-146.9	3.91
11:08	3,200	8.26	6.33	1053	21.4	0.24	-150.3	1.75

NOTES

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%
D.O. = +/- 10%

PE tubing inlet at 11.0 ft
MW2 collected at 11:18
Slight odor, no sheen

P&D Environmental, Inc.
Groundwater Monitoring/Well Purging Data Sheet

Site Name: Xtra Oil, 1701 Park St, Alameda
Well No.: MW3
Job Number: 0058
Date: 6/13/18
TOC to Water (ft.): 6.81 (6/13/18)
Sheen:
Well Depth (ft.): 19.1
Free Product Thickness: Ø
Well Diameter: 2"
Sample Collection Method: Peristaltic Pump & Dedicated PE tubing
Flow Rate (mL/minute): 300
Start Purge Time: 9:22
Personnel Initials: LKD

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
9:23	300	7.00	5.91	314.6	20.1	1.17	-35.6	70.96
9:26	1,200	7.21	5.85	314.9	20.0	0.74	-58.5	115.3
9:29	2,100	7.39	5.85	315.5	20.1	0.47	-70.2	127.1
9:32	3,000	7.53	5.86	315.1	20.1	0.37	-78.1	98.12
9:35	3,900	7.65	5.86	315.3	20.1	0.32	-83.4	87.23
9:38	4,800	7.74	5.86	315.3	20.1	0.28	-84.0	42.95
9:41	5,700	7.85	5.84	315.0	20.2	0.30	-87.1	47.02

NOTES

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%
D.O. = +/- 10%

PE tubing inlet set at 16 ft.
MW3 collected at 9:50
No odor or sheen - highly turbid

P&D Environmental, Inc.
Groundwater Monitoring/Well Purging Data Sheet

Site Name Xtra Oil, 1701 Park St, Alameda
Well No. MW4
Job Number 0058
Date 6/14/18
TOC to Water (ft.) 6.68 (6/13/18)
Sheen None
Well Depth (ft.) 10.8
Free Product Thickness Ø
Well Diameter 2"
Sample Collection Method Peristaltic Pump & dedicated PE tubing
Flow Rate (mL/minute) 300
Start Purge Time 9:17
Personnel Initials LKD

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
9:18	300	7.80	6.43	884	18.5	1.47	-139.9	3.77
9:21	1,200	8.35	6.40	875	18.5	0.90	-147.4	2.99
9:24	2,100	9.17	6.39	866	18.6	0.53	-150.1	5.36
9:27	3,000	9.78	6.38	869	18.5	0.40	-150.0	5.09
9:30	3,900	10.30	6.39	876	18.4	0.34	-151.7	2.81
9:33	4,800	10.45	6.41	873	18.5	0.62	-96.7	2.44

NOTES

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%
D.O. = +/- 10%

PE tubing inlet set at 10.8 ft
MW4 collected at 9:46
Moderate odor, no sheen
Began to dewater during final reading

P&D Environmental, Inc.
Groundwater Monitoring/Well Purging Data Sheet

Site Name Xtra Oil, 1701 Park St, Alameda
Job Number 0058
TOC to Water (ft.) 6.65 (6/13/18)
Well Depth (ft.) 23.5
Well Diameter 4"
Flow Rate (mL/minute) 300
Start Purge Time 14:27

Well No. EW2
Date 6/13/18
Sheen None
Free Product Thickness 0
Sample Collection Method Peristaltic Pump & New Unused PE Tubing
Personnel Initials LKD

Time	Vol Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
14:28	300	6.79	6.54	972	21.1	0.57	-149.4	3.94
14:31	1,200	6.80	6.61	967	21.1	0.47	-165.3	4.06
14:34	2,100	6.88	6.59	958	21.0	0.40	-170.7	4.60
14:37	3,000	6.94	6.55	947	21.0	0.35	-174.5	4.74
14:40	3,900	6.97	6.55	949	20.9	0.30	-177.3	3.82
14:43	4,800	7.00	6.53	935	21.0	0.25	-179.3	3.25

NOTES

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%
D.O. = +/- 10%

PE tubing inlet set at 10.0ft
EW2 collected at 14:55
Slight odor, no sheen

P&D Environmental, Inc.
Groundwater Monitoring/Well Purging Data Sheet

Site Name Xtra Oil, 1701 Park St, Alameda
Job Number 0058
TOC to Water (ft.) 5.50 (6/13/18)
Well Depth (ft.) 21.8
Well Diameter 4"
Flow Rate (mL/minute) 300
Start Purge Time 13:16

Well No. EW4
Date 6/14/18
Sheen None
Free Product Thickness 0
Sample Collection Method Peristaltic Pump & New Unused PE tubing
Personnel Initials LKD

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
13:17	300	5.51	6.76	719	21.7	0.52	-124.2	7.01
13:20	1,200	5.65	6.77	721	21.7	0.39	-139.1	4.71
13:23	2,100	5.71	6.86	719	21.7	0.33	-154.4	3.00
13:26	3,000	5.77	6.90	718	21.8	0.29	-162.5	7.14
13:29	3,900	5.81	6.90	720	21.6	0.26	-167.8	2.36
13:32	4,800	5.81	6.90	719	21.7	0.24	-170.3	1.74

NOTES

Stability Parameters
p.H. =-+/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%
D.O. = +/- 10%

PE tubing inlet set at 11.5 ft
EW4 collected at 13:39
No odor or sheen

P&D Environmental, Inc.
Groundwater Monitoring/Well Purging Data Sheet

Site Name Xtra Oil, 1701 Park St, Alameda
Job Number 0058
TOC to Water (ft.) 5.54 (6/13/17)
Well Depth (ft.) 23.7
Well Diameter 4"
Flow Rate (mL/minute) 300
Start Purge Time 10:44

Well No. EW5
Date 6/14/18
Sheen Yes, moderate
Free Product Thickness 0
Sample Collection Method Peristaltic Pump & New Unused PE tubing
Personnel Initials LKD

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
10:45	300	5.71	6.34	862	19.4	1.27	-119.1	2.74
10:48	1,200	5.76	6.41	866	19.4	0.96	-135.0	2.30
10:51	2,100	5.79	6.42	866	19.5	0.59	-144.7	2.05
10:54	3,000	5.82	6.42	867	19.5	0.40	-149.7	1.84
10:57	3,900	5.85	6.41	867	19.5	0.30	-152.5	2.60
11:00	4,800	5.88	6.40	866	19.5	0.25	-155.6	2.35

NOTES

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%
D.O. = +/- 10%

PE tubing inlet set at 11.5ft
EW5 collected at 11:09
Moderate odor, sheen present

P&D Environmental, Inc.
Groundwater Monitoring/Well Purging Data Sheet

Site Name Xtra Oil, 1701 Park St, Alameda
Job Number 0058
TOC to Water (ft.) 5.63 (6/13/18)
Well Depth (ft.) 18.5
Well Diameter 4"
Flow Rate (mL/minute) 300
Start Purge Time 8:12

Well No. OW2
Date 6/14/18
Sheen None
Free Product Thickness Ø
Sample Collection Method Peristaltic Pump & New Unused PE Tubing
Personnel Initials LKD

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
8:13	300	5.78	6.20	473.9	18.0	1.31	-37.7	52.13
8:16	1,200	5.80	6.25	466.9	18.1	0.90	-58.0	23.48
8:19	2,100	5.83	6.26	465.5	18.1	0.58	-71.1	8.65
8:22	3,000	5.86	6.26	484.3	18.0	0.44	-81.1	6.69
8:25	3,900	5.91	6.30	506.0	18.1	0.36	-88.8	10.33
8:28	4,800	5.91	6.33	521.3	18.1	0.32	-93.6	3.00

NOTES

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%
D.O. = +/- 10%

PE tubing set at 11.0 ft.
OW2 collected at 8:35
Slight odor, no sheen

P&D Environmental, Inc.
Groundwater Monitoring/Well Purging Data Sheet

Site Name Xtra Oil, 1701 Park St, Alameda
Well No. IW1
Job Number 0058
Date 6/13/18
TOC to Water (ft.) 6.54 (6/13/18)
Sheen None
Well Depth (ft.) 23.1
Free Product Thickness Ø
Well Diameter 2"
Sample Collection Method Peristaltic Pump & Dedicated PE tubing
Flow Rate (mL/minute) 300
Start Purge Time 13:13
Personnel Initials LKD

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity (µS/cm)	Temperature (C°)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
13:14	300	7.71	7.13	319.9	22.5	0.45	-167.4	8.23
13:17	1,200	8.52	7.09	326.1	22.3	0.26	-186.4	9.85
13:20	2,100	9.26	7.42	338.9	22.3	0.20	-202.6	32.48
13:23	3,000	9.60	7.43	419.6	22.1	0.17	-196.6	43.33
13:26	3,900	9.91	7.17	453.4	22.1	0.16	-187.2	94.19
13:29	4,800	10.11	7.00	455.2	22.1	0.18	-183.1	83.05

NOTES

Stability Parameters
p.H. = +/- 0.1
Sp. Conductivity = +/-3%
Turbidity = +/- 10%
D.O. = +/- 10%

PE tubing inlet set at 20.0 ft
Collect IW1 at 13:37
Slight odor, no sheen

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1806808

Report Created for: P & D Environmental

55 Santa Clara Ave, Ste.240
Oakland, CA 94610

Project Contact: Paul King
Project P.O.:
Project: 0058; Xtra Oil Co

Project Received: 06/15/2018

Analytical Report reviewed & approved for release on 06/28/2018 by:

Yen Cao
Project Manager

McCampbell Analytical, Inc.
"When Quality Counts"
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Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: 0058; Xtra Oil Co
WorkOrder: 1806808

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

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Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: 0058; Xtra Oil Co
WorkOrder: 1806808

Analytical Qualifiers

S	Surrogate spike recovery outside accepted recovery limits.
c4	Surrogate recovery outside of the control limits due to coelution with another peak(s) / cluttered chromatogram.
d1	Weakly modified or unmodified gasoline is significant.
d6	One to a few isolated non-target peaks present in the TPH(g) chromatogram.
d17	Reporting limit for MTBE raised due to co-elution with non-target peaks.
e2/e4/e8	Gasoline range compounds are significant.; and/or Diesel range compounds are significant; no recognizable pattern; and/or Pattern resembles kerosene/kerosene range/jet fuel range.
e7	Oil range compounds are significant.
e2/e8	Pattern resembles kerosene/kerosene range/jet fuel range; and/or Diesel range compounds are significant; no recognizable pattern.

Quality Control Qualifiers

F1	MS/MSD recovery and/or RPD is out of acceptance criteria; LCS validates the prep batch.

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	1806808-001B	Water	06/14/2018 14:50	GC38 06261827.D	160510

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	2000	200	06/26/2018 23:49
tert-Amyl methyl ether (TAME)	ND	100	200	06/26/2018 23:49
Benzene	**2400**	100	200	06/26/2018 23:49
Bromobenzene	ND	100	200	06/26/2018 23:49
Bromochloromethane	ND	100	200	06/26/2018 23:49
Bromodichloromethane	ND	100	200	06/26/2018 23:49
Bromoform	ND	100	200	06/26/2018 23:49
Bromomethane	ND	100	200	06/26/2018 23:49
2-Butanone (MEK)	ND	400	200	06/26/2018 23:49
t-Butyl alcohol (TBA)	ND	400	200	06/26/2018 23:49
n-Butyl benzene	ND	100	200	06/26/2018 23:49
sec-Butyl benzene	ND	100	200	06/26/2018 23:49
tert-Butyl benzene	ND	100	200	06/26/2018 23:49
Carbon Disulfide	ND	100	200	06/26/2018 23:49
Carbon Tetrachloride	ND	100	200	06/26/2018 23:49
Chlorobenzene	ND	100	200	06/26/2018 23:49
Chloroethane	ND	100	200	06/26/2018 23:49
Chloroform	ND	100	200	06/26/2018 23:49
Chloromethane	ND	100	200	06/26/2018 23:49
2-Chlorotoluene	ND	100	200	06/26/2018 23:49
4-Chlorotoluene	ND	100	200	06/26/2018 23:49
Dibromochloromethane	ND	100	200	06/26/2018 23:49
1,2-Dibromo-3-chloropropane	ND	40	200	06/26/2018 23:49
1,2-Dibromoethane (EDB)	ND	100	200	06/26/2018 23:49
Dibromomethane	ND	100	200	06/26/2018 23:49
1,2-Dichlorobenzene	ND	100	200	06/26/2018 23:49
1,3-Dichlorobenzene	ND	100	200	06/26/2018 23:49
1,4-Dichlorobenzene	ND	100	200	06/26/2018 23:49
Dichlorodifluoromethane	ND	100	200	06/26/2018 23:49
1,1-Dichloroethane	ND	100	200	06/26/2018 23:49
1,2-Dichloroethane (1,2-DCA)	ND	100	200	06/26/2018 23:49
1,1-Dichloroethene	ND	100	200	06/26/2018 23:49
cis-1,2-Dichloroethene	ND	100	200	06/26/2018 23:49
trans-1,2-Dichloroethene	ND	100	200	06/26/2018 23:49
1,2-Dichloropropane	ND	100	200	06/26/2018 23:49
1,3-Dichloropropane	ND	100	200	06/26/2018 23:49
2,2-Dichloropropane	ND	100	200	06/26/2018 23:49

(Cont.)

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	1806808-001B	Water	06/14/2018 14:50	GC38 06261827.D	160510

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	100	200	06/26/2018 23:49
cis-1,3-Dichloropropene	ND	100	200	06/26/2018 23:49
trans-1,3-Dichloropropene	ND	100	200	06/26/2018 23:49
Diisopropyl ether (DIPE)	ND	100	200	06/26/2018 23:49
Ethylbenzene	**110**	100	200	06/26/2018 23:49
Ethyl tert-butyl ether (ETBE)	ND	100	200	06/26/2018 23:49
Freon 113	ND	100	200	06/26/2018 23:49
Hexachlorobutadiene	ND	100	200	06/26/2018 23:49
Hexachloroethane	ND	100	200	06/26/2018 23:49
2-Hexanone	ND	100	200	06/26/2018 23:49
Isopropylbenzene	ND	100	200	06/26/2018 23:49
4-Isopropyl toluene	ND	100	200	06/26/2018 23:49
Methyl-t-butyl ether (MTBE)	**320**	100	200	06/26/2018 23:49
Methylene chloride	ND	100	200	06/26/2018 23:49
4-Methyl-2-pentanone (MIBK)	ND	100	200	06/26/2018 23:49
Naphthalene	ND	100	200	06/26/2018 23:49
n-Propyl benzene	ND	100	200	06/26/2018 23:49
Styrene	ND	100	200	06/26/2018 23:49
1,1,1,2-Tetrachloroethane	ND	100	200	06/26/2018 23:49
1,1,2,2-Tetrachloroethane	ND	100	200	06/26/2018 23:49
Tetrachloroethene	ND	100	200	06/26/2018 23:49
Toluene	ND	100	200	06/26/2018 23:49
1,2,3-Trichlorobenzene	ND	100	200	06/26/2018 23:49
1,2,4-Trichlorobenzene	ND	100	200	06/26/2018 23:49
1,1,1-Trichloroethane	ND	100	200	06/26/2018 23:49
1,1,2-Trichloroethane	ND	100	200	06/26/2018 23:49
Trichloroethene	ND	100	200	06/26/2018 23:49
Trichlorofluoromethane	ND	100	200	06/26/2018 23:49
1,2,3-Trichloropropane	ND	100	200	06/26/2018 23:49
1,2,4-Trimethylbenzene	ND	100	200	06/26/2018 23:49
1,3,5-Trimethylbenzene	ND	100	200	06/26/2018 23:49
Vinyl Chloride	ND	100	200	06/26/2018 23:49
Xylenes, Total	**170**	100	200	06/26/2018 23:49

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	1806808-001B	Water	06/14/2018 14:50	GC38 06261827.D	160510

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	96	78-134		06/26/2018 23:49
Toluene-d8	105	82-120		06/26/2018 23:49
4-BFB	109	69-131		06/26/2018 23:49

Analyst(s): AK

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	1806808-002B	Water	06/13/2018 11:18	GC38 06261828.D	160510

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	50	5	06/27/2018 00:27
tert-Amyl methyl ether (TAME)	ND	2.5	5	06/27/2018 00:27
Benzene	**53**	2.5	5	06/27/2018 00:27
Bromobenzene	ND	2.5	5	06/27/2018 00:27
Bromochloromethane	ND	2.5	5	06/27/2018 00:27
Bromodichloromethane	ND	2.5	5	06/27/2018 00:27
Bromoform	ND	2.5	5	06/27/2018 00:27
Bromomethane	ND	2.5	5	06/27/2018 00:27
2-Butanone (MEK)	ND	10	5	06/27/2018 00:27
t-Butyl alcohol (TBA)	**100**	10	5	06/27/2018 00:27
n-Butyl benzene	**13**	2.5	5	06/27/2018 00:27
sec-Butyl benzene	**5.7**	2.5	5	06/27/2018 00:27
tert-Butyl benzene	ND	2.5	5	06/27/2018 00:27
Carbon Disulfide	ND	2.5	5	06/27/2018 00:27
Carbon Tetrachloride	ND	2.5	5	06/27/2018 00:27
Chlorobenzene	ND	2.5	5	06/27/2018 00:27
Chloroethane	ND	2.5	5	06/27/2018 00:27
Chloroform	ND	2.5	5	06/27/2018 00:27
Chloromethane	ND	2.5	5	06/27/2018 00:27
2-Chlorotoluene	ND	2.5	5	06/27/2018 00:27
4-Chlorotoluene	ND	2.5	5	06/27/2018 00:27
Dibromochloromethane	ND	2.5	5	06/27/2018 00:27
1,2-Dibromo-3-chloropropane	ND	1.0	5	06/27/2018 00:27
1,2-Dibromoethane (EDB)	ND	2.5	5	06/27/2018 00:27
Dibromomethane	ND	2.5	5	06/27/2018 00:27
1,2-Dichlorobenzene	ND	2.5	5	06/27/2018 00:27
1,3-Dichlorobenzene	ND	2.5	5	06/27/2018 00:27
1,4-Dichlorobenzene	ND	2.5	5	06/27/2018 00:27
Dichlorodifluoromethane	ND	2.5	5	06/27/2018 00:27
1,1-Dichloroethane	ND	2.5	5	06/27/2018 00:27
1,2-Dichloroethane (1,2-DCA)	ND	2.5	5	06/27/2018 00:27
1,1-Dichloroethene	ND	2.5	5	06/27/2018 00:27
cis-1,2-Dichloroethene	ND	2.5	5	06/27/2018 00:27
trans-1,2-Dichloroethene	ND	2.5	5	06/27/2018 00:27
1,2-Dichloropropane	ND	2.5	5	06/27/2018 00:27
1,3-Dichloropropane	ND	2.5	5	06/27/2018 00:27
2,2-Dichloropropane	ND	2.5	5	06/27/2018 00:27

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	1806808-002B	Water	06/13/2018 11:18	GC38 06261828.D	160510

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	2.5	5	06/27/2018 00:27
cis-1,3-Dichloropropene	ND	2.5	5	06/27/2018 00:27
trans-1,3-Dichloropropene	ND	2.5	5	06/27/2018 00:27
Diisopropyl ether (DIPE)	ND	2.5	5	06/27/2018 00:27
Ethylbenzene	**4.5**	2.5	5	06/27/2018 00:27
Ethyl tert-butyl ether (ETBE)	ND	2.5	5	06/27/2018 00:27
Freon 113	ND	2.5	5	06/27/2018 00:27
Hexachlorobutadiene	ND	2.5	5	06/27/2018 00:27
Hexachloroethane	ND	2.5	5	06/27/2018 00:27
2-Hexanone	ND	2.5	5	06/27/2018 00:27
Isopropylbenzene	**32**	2.5	5	06/27/2018 00:27
4-Isopropyl toluene	ND	2.5	5	06/27/2018 00:27
Methyl-t-butyl ether (MTBE)	**22**	2.5	5	06/27/2018 00:27
Methylene chloride	ND	2.5	5	06/27/2018 00:27
4-Methyl-2-pentanone (MIBK)	ND	2.5	5	06/27/2018 00:27
Naphthalene	**6.9**	2.5	5	06/27/2018 00:27
n-Propyl benzene	**80**	2.5	5	06/27/2018 00:27
Styrene	ND	2.5	5	06/27/2018 00:27
1,1,1,2-Tetrachloroethane	ND	2.5	5	06/27/2018 00:27
1,1,2,2-Tetrachloroethane	ND	2.5	5	06/27/2018 00:27
Tetrachloroethene	ND	2.5	5	06/27/2018 00:27
Toluene	**6.3**	2.5	5	06/27/2018 00:27
1,2,3-Trichlorobenzene	ND	2.5	5	06/27/2018 00:27
1,2,4-Trichlorobenzene	ND	2.5	5	06/27/2018 00:27
1,1,1-Trichloroethane	ND	2.5	5	06/27/2018 00:27
1,1,2-Trichloroethane	ND	2.5	5	06/27/2018 00:27
Trichloroethene	ND	2.5	5	06/27/2018 00:27
Trichlorofluoromethane	ND	2.5	5	06/27/2018 00:27
1,2,3-Trichloropropane	ND	2.5	5	06/27/2018 00:27
1,2,4-Trimethylbenzene	ND	2.5	5	06/27/2018 00:27
1,3,5-Trimethylbenzene	ND	2.5	5	06/27/2018 00:27
Vinyl Chloride	ND	2.5	5	06/27/2018 00:27
Xylenes, Total	**7.2**	2.5	5	06/27/2018 00:27

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	**1806808-002B**	**Water**	**06/13/2018 11:18**	**GC38 06261828.D**	**160510**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	101	78-134		06/27/2018 00:27
Toluene-d8	104	82-120		06/27/2018 00:27
4-BFB	111	69-131		06/27/2018 00:27

Analyst(s): AK

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Analytical Report

Client: P & D Environmental
Date Received: 6/15/18 15:45
Date Prepared: 6/26/18-6/27/18
Project: 0058; Xtra Oil Co

WorkOrder: 1806808
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW3	1806808-003B	Water	06/13/2018 09:50	GC38 06261829.D	160510

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/27/2018 01:04
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/27/2018 01:04
Benzene	ND	0.50	1	06/27/2018 01:04
Bromobenzene	ND	0.50	1	06/27/2018 01:04
Bromochloromethane	ND	0.50	1	06/27/2018 01:04
Bromodichloromethane	ND	0.50	1	06/27/2018 01:04
Bromoform	ND	0.50	1	06/27/2018 01:04
Bromomethane	ND	0.50	1	06/27/2018 01:04
2-Butanone (MEK)	ND	2.0	1	06/27/2018 01:04
t-Butyl alcohol (TBA)	ND	2.0	1	06/27/2018 01:04
n-Butyl benzene	ND	0.50	1	06/27/2018 01:04
sec-Butyl benzene	ND	0.50	1	06/27/2018 01:04
tert-Butyl benzene	ND	0.50	1	06/27/2018 01:04
Carbon Disulfide	ND	0.50	1	06/27/2018 01:04
Carbon Tetrachloride	ND	0.50	1	06/27/2018 01:04
Chlorobenzene	ND	0.50	1	06/27/2018 01:04
Chloroethane	ND	0.50	1	06/27/2018 01:04
Chloroform	ND	0.50	1	06/27/2018 01:04
Chloromethane	ND	0.50	1	06/27/2018 01:04
2-Chlorotoluene	ND	0.50	1	06/27/2018 01:04
4-Chlorotoluene	ND	0.50	1	06/27/2018 01:04
Dibromochloromethane	ND	0.50	1	06/27/2018 01:04
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/27/2018 01:04
1,2-Dibromoethane (EDB)	ND	0.50	1	06/27/2018 01:04
Dibromomethane	ND	0.50	1	06/27/2018 01:04
1,2-Dichlorobenzene	ND	0.50	1	06/27/2018 01:04
1,3-Dichlorobenzene	ND	0.50	1	06/27/2018 01:04
1,4-Dichlorobenzene	ND	0.50	1	06/27/2018 01:04
Dichlorodifluoromethane	ND	0.50	1	06/27/2018 01:04
1,1-Dichloroethane	ND	0.50	1	06/27/2018 01:04
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/27/2018 01:04
1,1-Dichloroethene	ND	0.50	1	06/27/2018 01:04
cis-1,2-Dichloroethene	ND	0.50	1	06/27/2018 01:04
trans-1,2-Dichloroethene	ND	0.50	1	06/27/2018 01:04
1,2-Dichloropropane	ND	0.50	1	06/27/2018 01:04
1,3-Dichloropropane	ND	0.50	1	06/27/2018 01:04
2,2-Dichloropropane	ND	0.50	1	06/27/2018 01:04

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW3	1806808-003B	Water	06/13/2018 09:50	GC38 06261829.D	160510

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/27/2018 01:04
cis-1,3-Dichloropropene	ND	0.50	1	06/27/2018 01:04
trans-1,3-Dichloropropene	ND	0.50	1	06/27/2018 01:04
Diisopropyl ether (DIPE)	ND	0.50	1	06/27/2018 01:04
Ethylbenzene	ND	0.50	1	06/27/2018 01:04
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/27/2018 01:04
Freon 113	ND	0.50	1	06/27/2018 01:04
Hexachlorobutadiene	ND	0.50	1	06/27/2018 01:04
Hexachloroethane	ND	0.50	1	06/27/2018 01:04
2-Hexanone	ND	0.50	1	06/27/2018 01:04
Isopropylbenzene	ND	0.50	1	06/27/2018 01:04
4-Isopropyl toluene	ND	0.50	1	06/27/2018 01:04
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/27/2018 01:04
Methylene chloride	ND	0.50	1	06/27/2018 01:04
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/27/2018 01:04
Naphthalene	ND	0.50	1	06/27/2018 01:04
n-Propyl benzene	ND	0.50	1	06/27/2018 01:04
Styrene	ND	0.50	1	06/27/2018 01:04
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/27/2018 01:04
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/27/2018 01:04
Tetrachloroethene	ND	0.50	1	06/27/2018 01:04
Toluene	ND	0.50	1	06/27/2018 01:04
1,2,3-Trichlorobenzene	ND	0.50	1	06/27/2018 01:04
1,2,4-Trichlorobenzene	ND	0.50	1	06/27/2018 01:04
1,1,1-Trichloroethane	ND	0.50	1	06/27/2018 01:04
1,1,2-Trichloroethane	ND	0.50	1	06/27/2018 01:04
Trichloroethene	ND	0.50	1	06/27/2018 01:04
Trichlorofluoromethane	ND	0.50	1	06/27/2018 01:04
1,2,3-Trichloropropane	ND	0.50	1	06/27/2018 01:04
1,2,4-Trimethylbenzene	ND	0.50	1	06/27/2018 01:04
1,3,5-Trimethylbenzene	ND	0.50	1	06/27/2018 01:04
Vinyl Chloride	ND	0.50	1	06/27/2018 01:04
Xylenes, Total	ND	0.50	1	06/27/2018 01:04

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW3	1806808-003B	Water	06/13/2018 09:50	GC38 06261829.D	160510

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	99	78-134		06/27/2018 01:04
Toluene-d8	104	82-120		06/27/2018 01:04
4-BFB	113	69-131		06/27/2018 01:04

Analyst(s): AK

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	1806808-004B	Water	06/14/2018 09:40	GC38 06261830.D	160510

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	250	25	06/27/2018 01:41
tert-Amyl methyl ether (TAME)	ND	12	25	06/27/2018 01:41
Benzene	**250**	12	25	06/27/2018 01:41
Bromobenzene	ND	12	25	06/27/2018 01:41
Bromochloromethane	ND	12	25	06/27/2018 01:41
Bromodichloromethane	ND	12	25	06/27/2018 01:41
Bromoform	ND	12	25	06/27/2018 01:41
Bromomethane	ND	12	25	06/27/2018 01:41
2-Butanone (MEK)	ND	50	25	06/27/2018 01:41
t-Butyl alcohol (TBA)	ND	50	25	06/27/2018 01:41
n-Butyl benzene	ND	12	25	06/27/2018 01:41
sec-Butyl benzene	ND	12	25	06/27/2018 01:41
tert-Butyl benzene	ND	12	25	06/27/2018 01:41
Carbon Disulfide	ND	12	25	06/27/2018 01:41
Carbon Tetrachloride	ND	12	25	06/27/2018 01:41
Chlorobenzene	ND	12	25	06/27/2018 01:41
Chloroethane	ND	12	25	06/27/2018 01:41
Chloroform	ND	12	25	06/27/2018 01:41
Chloromethane	ND	12	25	06/27/2018 01:41
2-Chlorotoluene	ND	12	25	06/27/2018 01:41
4-Chlorotoluene	ND	12	25	06/27/2018 01:41
Dibromochloromethane	ND	12	25	06/27/2018 01:41
1,2-Dibromo-3-chloropropane	ND	5.0	25	06/27/2018 01:41
1,2-Dibromoethane (EDB)	ND	12	25	06/27/2018 01:41
Dibromomethane	ND	12	25	06/27/2018 01:41
1,2-Dichlorobenzene	ND	12	25	06/27/2018 01:41
1,3-Dichlorobenzene	ND	12	25	06/27/2018 01:41
1,4-Dichlorobenzene	ND	12	25	06/27/2018 01:41
Dichlorodifluoromethane	ND	12	25	06/27/2018 01:41
1,1-Dichloroethane	ND	12	25	06/27/2018 01:41
1,2-Dichloroethane (1,2-DCA)	ND	12	25	06/27/2018 01:41
1,1-Dichloroethene	ND	12	25	06/27/2018 01:41
cis-1,2-Dichloroethene	ND	12	25	06/27/2018 01:41
trans-1,2-Dichloroethene	ND	12	25	06/27/2018 01:41
1,2-Dichloropropane	ND	12	25	06/27/2018 01:41
1,3-Dichloropropane	ND	12	25	06/27/2018 01:41
2,2-Dichloropropane	ND	12	25	06/27/2018 01:41

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	1806808-004B	Water	06/14/2018 09:40	GC38 06261830.D	160510

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	12	25	06/27/2018 01:41
cis-1,3-Dichloropropene	ND	12	25	06/27/2018 01:41
trans-1,3-Dichloropropene	ND	12	25	06/27/2018 01:41
Diisopropyl ether (DIPE)	ND	12	25	06/27/2018 01:41
Ethylbenzene	**40**	12	25	06/27/2018 01:41
Ethyl tert-butyl ether (ETBE)	ND	12	25	06/27/2018 01:41
Freon 113	ND	12	25	06/27/2018 01:41
Hexachlorobutadiene	ND	12	25	06/27/2018 01:41
Hexachloroethane	ND	12	25	06/27/2018 01:41
2-Hexanone	ND	12	25	06/27/2018 01:41
Isopropylbenzene	**26**	12	25	06/27/2018 01:41
4-Isopropyl toluene	ND	12	25	06/27/2018 01:41
Methyl-t-butyl ether (MTBE)	**16**	12	25	06/27/2018 01:41
Methylene chloride	ND	12	25	06/27/2018 01:41
4-Methyl-2-pentanone (MIBK)	ND	12	25	06/27/2018 01:41
Naphthalene	**18**	12	25	06/27/2018 01:41
n-Propyl benzene	**58**	12	25	06/27/2018 01:41
Styrene	ND	12	25	06/27/2018 01:41
1,1,1,2-Tetrachloroethane	ND	12	25	06/27/2018 01:41
1,1,2,2-Tetrachloroethane	ND	12	25	06/27/2018 01:41
Tetrachloroethene	ND	12	25	06/27/2018 01:41
Toluene	**14**	12	25	06/27/2018 01:41
1,2,3-Trichlorobenzene	ND	12	25	06/27/2018 01:41
1,2,4-Trichlorobenzene	ND	12	25	06/27/2018 01:41
1,1,1-Trichloroethane	ND	12	25	06/27/2018 01:41
1,1,2-Trichloroethane	ND	12	25	06/27/2018 01:41
Trichloroethene	ND	12	25	06/27/2018 01:41
Trichlorofluoromethane	ND	12	25	06/27/2018 01:41
1,2,3-Trichloropropane	ND	12	25	06/27/2018 01:41
1,2,4-Trimethylbenzene	**58**	12	25	06/27/2018 01:41
1,3,5-Trimethylbenzene	**20**	12	25	06/27/2018 01:41
Vinyl Chloride	ND	12	25	06/27/2018 01:41
Xylenes, Total	**90**	12	25	06/27/2018 01:41

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http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	**1806808-004B**	**Water**	**06/14/2018 09:40**	**GC38 06261830.D**	**160510**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	105	78-134		06/27/2018 01:41
Toluene-d8	105	82-120		06/27/2018 01:41
4-BFB	110	69-131		06/27/2018 01:41

Analyst(s): AK

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW2	1806808-005B	Water	06/13/2018 14:55	GC38 06261831.D	160510

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	100	10	06/27/2018 02:19
tert-Amyl methyl ether (TAME)	ND	5.0	10	06/27/2018 02:19
Benzene	**16**	5.0	10	06/27/2018 02:19
Bromobenzene	ND	5.0	10	06/27/2018 02:19
Bromochloromethane	ND	5.0	10	06/27/2018 02:19
Bromodichloromethane	ND	5.0	10	06/27/2018 02:19
Bromoform	ND	5.0	10	06/27/2018 02:19
Bromomethane	ND	5.0	10	06/27/2018 02:19
2-Butanone (MEK)	ND	20	10	06/27/2018 02:19
t-Butyl alcohol (TBA)	ND	20	10	06/27/2018 02:19
n-Butyl benzene	ND	5.0	10	06/27/2018 02:19
sec-Butyl benzene	ND	5.0	10	06/27/2018 02:19
tert-Butyl benzene	ND	5.0	10	06/27/2018 02:19
Carbon Disulfide	ND	5.0	10	06/27/2018 02:19
Carbon Tetrachloride	ND	5.0	10	06/27/2018 02:19
Chlorobenzene	ND	5.0	10	06/27/2018 02:19
Chloroethane	ND	5.0	10	06/27/2018 02:19
Chloroform	ND	5.0	10	06/27/2018 02:19
Chloromethane	ND	5.0	10	06/27/2018 02:19
2-Chlorotoluene	ND	5.0	10	06/27/2018 02:19
4-Chlorotoluene	ND	5.0	10	06/27/2018 02:19
Dibromochloromethane	ND	5.0	10	06/27/2018 02:19
1,2-Dibromo-3-chloropropane	ND	2.0	10	06/27/2018 02:19
1,2-Dibromoethane (EDB)	ND	5.0	10	06/27/2018 02:19
Dibromomethane	ND	5.0	10	06/27/2018 02:19
1,2-Dichlorobenzene	ND	5.0	10	06/27/2018 02:19
1,3-Dichlorobenzene	ND	5.0	10	06/27/2018 02:19
1,4-Dichlorobenzene	ND	5.0	10	06/27/2018 02:19
Dichlorodifluoromethane	ND	5.0	10	06/27/2018 02:19
1,1-Dichloroethane	ND	5.0	10	06/27/2018 02:19
1,2-Dichloroethane (1,2-DCA)	ND	5.0	10	06/27/2018 02:19
1,1-Dichloroethene	ND	5.0	10	06/27/2018 02:19
cis-1,2-Dichloroethene	**110**	5.0	10	06/27/2018 02:19
trans-1,2-Dichloroethene	**23**	5.0	10	06/27/2018 02:19
1,2-Dichloropropane	ND	5.0	10	06/27/2018 02:19
1,3-Dichloropropane	ND	5.0	10	06/27/2018 02:19
2,2-Dichloropropane	ND	5.0	10	06/27/2018 02:19

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW2	1806808-005B	Water	06/13/2018 14:55	GC38 06261831.D	160510

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	5.0	10	06/27/2018 02:19
cis-1,3-Dichloropropene	ND	5.0	10	06/27/2018 02:19
trans-1,3-Dichloropropene	ND	5.0	10	06/27/2018 02:19
Diisopropyl ether (DIPE)	ND	5.0	10	06/27/2018 02:19
Ethylbenzene	ND	5.0	10	06/27/2018 02:19
Ethyl tert-butyl ether (ETBE)	ND	5.0	10	06/27/2018 02:19
Freon 113	ND	5.0	10	06/27/2018 02:19
Hexachlorobutadiene	ND	5.0	10	06/27/2018 02:19
Hexachloroethane	ND	5.0	10	06/27/2018 02:19
2-Hexanone	ND	5.0	10	06/27/2018 02:19
Isopropylbenzene	ND	5.0	10	06/27/2018 02:19
4-Isopropyl toluene	ND	5.0	10	06/27/2018 02:19
Methyl-t-butyl ether (MTBE)	ND	5.0	10	06/27/2018 02:19
Methylene chloride	ND	5.0	10	06/27/2018 02:19
4-Methyl-2-pentanone (MIBK)	ND	5.0	10	06/27/2018 02:19
Naphthalene	ND	5.0	10	06/27/2018 02:19
n-Propyl benzene	ND	5.0	10	06/27/2018 02:19
Styrene	ND	5.0	10	06/27/2018 02:19
1,1,1,2-Tetrachloroethane	ND	5.0	10	06/27/2018 02:19
1,1,2,2-Tetrachloroethane	ND	5.0	10	06/27/2018 02:19
Tetrachloroethene	**190**	5.0	10	06/27/2018 02:19
Toluene	ND	5.0	10	06/27/2018 02:19
1,2,3-Trichlorobenzene	ND	5.0	10	06/27/2018 02:19
1,2,4-Trichlorobenzene	ND	5.0	10	06/27/2018 02:19
1,1,1-Trichloroethane	ND	5.0	10	06/27/2018 02:19
1,1,2-Trichloroethane	ND	5.0	10	06/27/2018 02:19
Trichloroethene	**320**	5.0	10	06/27/2018 02:19
Trichlorofluoromethane	ND	5.0	10	06/27/2018 02:19
1,2,3-Trichloropropane	ND	5.0	10	06/27/2018 02:19
1,2,4-Trimethylbenzene	ND	5.0	10	06/27/2018 02:19
1,3,5-Trimethylbenzene	ND	5.0	10	06/27/2018 02:19
Vinyl Chloride	ND	5.0	10	06/27/2018 02:19
Xylenes, Total	ND	5.0	10	06/27/2018 02:19

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW2	1806808-005B	Water	06/13/2018 14:55	GC38 06261831.D	160510

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	96	78-134		06/27/2018 02:19
Toluene-d8	104	82-120		06/27/2018 02:19
4-BFB	107	69-131		06/27/2018 02:19

Analyst(s): AK

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	1806808-006B	Water	06/14/2018 13:39	GC38 06271808.D	160510

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	50	5	06/27/2018 12:02
tert-Amyl methyl ether (TAME)	ND	2.5	5	06/27/2018 12:02
Benzene	ND	2.5	5	06/27/2018 12:02
Bromobenzene	ND	2.5	5	06/27/2018 12:02
Bromochloromethane	ND	2.5	5	06/27/2018 12:02
Bromodichloromethane	ND	2.5	5	06/27/2018 12:02
Bromoform	ND	2.5	5	06/27/2018 12:02
Bromomethane	ND	2.5	5	06/27/2018 12:02
2-Butanone (MEK)	ND	10	5	06/27/2018 12:02
t-Butyl alcohol (TBA)	ND	10	5	06/27/2018 12:02
n-Butyl benzene	ND	2.5	5	06/27/2018 12:02
sec-Butyl benzene	ND	2.5	5	06/27/2018 12:02
tert-Butyl benzene	ND	2.5	5	06/27/2018 12:02
Carbon Disulfide	ND	2.5	5	06/27/2018 12:02
Carbon Tetrachloride	ND	2.5	5	06/27/2018 12:02
Chlorobenzene	ND	2.5	5	06/27/2018 12:02
Chloroethane	ND	2.5	5	06/27/2018 12:02
Chloroform	ND	2.5	5	06/27/2018 12:02
Chloromethane	ND	2.5	5	06/27/2018 12:02
2-Chlorotoluene	ND	2.5	5	06/27/2018 12:02
4-Chlorotoluene	ND	2.5	5	06/27/2018 12:02
Dibromochloromethane	ND	2.5	5	06/27/2018 12:02
1,2-Dibromo-3-chloropropane	ND	1.0	5	06/27/2018 12:02
1,2-Dibromoethane (EDB)	ND	2.5	5	06/27/2018 12:02
Dibromomethane	ND	2.5	5	06/27/2018 12:02
1,2-Dichlorobenzene	ND	2.5	5	06/27/2018 12:02
1,3-Dichlorobenzene	ND	2.5	5	06/27/2018 12:02
1,4-Dichlorobenzene	ND	2.5	5	06/27/2018 12:02
Dichlorodifluoromethane	ND	2.5	5	06/27/2018 12:02
1,1-Dichloroethane	ND	2.5	5	06/27/2018 12:02
1,2-Dichloroethane (1,2-DCA)	ND	2.5	5	06/27/2018 12:02
1,1-Dichloroethene	ND	2.5	5	06/27/2018 12:02
cis-1,2-Dichloroethene	ND	2.5	5	06/27/2018 12:02
trans-1,2-Dichloroethene	ND	2.5	5	06/27/2018 12:02
1,2-Dichloropropane	ND	2.5	5	06/27/2018 12:02
1,3-Dichloropropane	ND	2.5	5	06/27/2018 12:02
2,2-Dichloropropane	ND	2.5	5	06/27/2018 12:02

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	1806808-006B	Water	06/14/2018 13:39	GC38 06271808.D	160510

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	2.5	5	06/27/2018 12:02
cis-1,3-Dichloropropene	ND	2.5	5	06/27/2018 12:02
trans-1,3-Dichloropropene	ND	2.5	5	06/27/2018 12:02
Diisopropyl ether (DIPE)	ND	2.5	5	06/27/2018 12:02
Ethylbenzene	ND	2.5	5	06/27/2018 12:02
Ethyl tert-butyl ether (ETBE)	ND	2.5	5	06/27/2018 12:02
Freon 113	ND	2.5	5	06/27/2018 12:02
Hexachlorobutadiene	ND	2.5	5	06/27/2018 12:02
Hexachloroethane	ND	2.5	5	06/27/2018 12:02
2-Hexanone	ND	2.5	5	06/27/2018 12:02
Isopropylbenzene	ND	2.5	5	06/27/2018 12:02
4-Isopropyl toluene	ND	2.5	5	06/27/2018 12:02
Methyl-t-butyl ether (MTBE)	ND	2.5	5	06/27/2018 12:02
Methylene chloride	ND	2.5	5	06/27/2018 12:02
4-Methyl-2-pentanone (MIBK)	ND	2.5	5	06/27/2018 12:02
Naphthalene	ND	2.5	5	06/27/2018 12:02
n-Propyl benzene	ND	2.5	5	06/27/2018 12:02
Styrene	ND	2.5	5	06/27/2018 12:02
1,1,1,2-Tetrachloroethane	ND	2.5	5	06/27/2018 12:02
1,1,2,2-Tetrachloroethane	ND	2.5	5	06/27/2018 12:02
Tetrachloroethene	**64**	2.5	5	06/27/2018 12:02
Toluene	ND	2.5	5	06/27/2018 12:02
1,2,3-Trichlorobenzene	ND	2.5	5	06/27/2018 12:02
1,2,4-Trichlorobenzene	ND	2.5	5	06/27/2018 12:02
1,1,1-Trichloroethane	ND	2.5	5	06/27/2018 12:02
1,1,2-Trichloroethane	ND	2.5	5	06/27/2018 12:02
Trichloroethene	**17**	2.5	5	06/27/2018 12:02
Trichlorofluoromethane	ND	2.5	5	06/27/2018 12:02
1,2,3-Trichloropropane	ND	2.5	5	06/27/2018 12:02
1,2,4-Trimethylbenzene	ND	2.5	5	06/27/2018 12:02
1,3,5-Trimethylbenzene	ND	2.5	5	06/27/2018 12:02
Vinyl Chloride	ND	2.5	5	06/27/2018 12:02
Xylenes, Total	ND	2.5	5	06/27/2018 12:02

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	**1806808-006B**	**Water**	**06/14/2018 13:39**	**GC38 06271808.D**	**160510**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	98	78-134		06/27/2018 12:02
Toluene-d8	104	82-120		06/27/2018 12:02
4-BFB	111	69-131		06/27/2018 12:02

Analyst(s): AK

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	1806808-007B	Water	06/14/2018 11:09	GC38 06261833.D	160510

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	100	10	06/27/2018 03:34
tert-Amyl methyl ether (TAME)	ND	5.0	10	06/27/2018 03:34
Benzene	**130**	5.0	10	06/27/2018 03:34
Bromobenzene	ND	5.0	10	06/27/2018 03:34
Bromochloromethane	ND	5.0	10	06/27/2018 03:34
Bromodichloromethane	ND	5.0	10	06/27/2018 03:34
Bromoform	ND	5.0	10	06/27/2018 03:34
Bromomethane	ND	5.0	10	06/27/2018 03:34
2-Butanone (MEK)	ND	20	10	06/27/2018 03:34
t-Butyl alcohol (TBA)	**240**	20	10	06/27/2018 03:34
n-Butyl benzene	ND	5.0	10	06/27/2018 03:34
sec-Butyl benzene	ND	5.0	10	06/27/2018 03:34
tert-Butyl benzene	ND	5.0	10	06/27/2018 03:34
Carbon Disulfide	ND	5.0	10	06/27/2018 03:34
Carbon Tetrachloride	ND	5.0	10	06/27/2018 03:34
Chlorobenzene	ND	5.0	10	06/27/2018 03:34
Chloroethane	ND	5.0	10	06/27/2018 03:34
Chloroform	ND	5.0	10	06/27/2018 03:34
Chloromethane	ND	5.0	10	06/27/2018 03:34
2-Chlorotoluene	ND	5.0	10	06/27/2018 03:34
4-Chlorotoluene	ND	5.0	10	06/27/2018 03:34
Dibromochloromethane	ND	5.0	10	06/27/2018 03:34
1,2-Dibromo-3-chloropropane	ND	2.0	10	06/27/2018 03:34
1,2-Dibromoethane (EDB)	ND	5.0	10	06/27/2018 03:34
Dibromomethane	ND	5.0	10	06/27/2018 03:34
1,2-Dichlorobenzene	ND	5.0	10	06/27/2018 03:34
1,3-Dichlorobenzene	ND	5.0	10	06/27/2018 03:34
1,4-Dichlorobenzene	ND	5.0	10	06/27/2018 03:34
Dichlorodifluoromethane	ND	5.0	10	06/27/2018 03:34
1,1-Dichloroethane	ND	5.0	10	06/27/2018 03:34
1,2-Dichloroethane (1,2-DCA)	ND	5.0	10	06/27/2018 03:34
1,1-Dichloroethene	ND	5.0	10	06/27/2018 03:34
cis-1,2-Dichloroethene	ND	5.0	10	06/27/2018 03:34
trans-1,2-Dichloroethene	ND	5.0	10	06/27/2018 03:34
1,2-Dichloropropane	ND	5.0	10	06/27/2018 03:34
1,3-Dichloropropane	ND	5.0	10	06/27/2018 03:34
2,2-Dichloropropane	ND	5.0	10	06/27/2018 03:34

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	1806808-007B	Water	06/14/2018 11:09	GC38 06261833.D	160510

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	5.0	10	06/27/2018 03:34
cis-1,3-Dichloropropene	ND	5.0	10	06/27/2018 03:34
trans-1,3-Dichloropropene	ND	5.0	10	06/27/2018 03:34
Diisopropyl ether (DIPE)	ND	5.0	10	06/27/2018 03:34
Ethylbenzene	**7.1**	5.0	10	06/27/2018 03:34
Ethyl tert-butyl ether (ETBE)	ND	5.0	10	06/27/2018 03:34
Freon 113	ND	5.0	10	06/27/2018 03:34
Hexachlorobutadiene	ND	5.0	10	06/27/2018 03:34
Hexachloroethane	ND	5.0	10	06/27/2018 03:34
2-Hexanone	ND	5.0	10	06/27/2018 03:34
Isopropylbenzene	**14**	5.0	10	06/27/2018 03:34
4-Isopropyl toluene	ND	5.0	10	06/27/2018 03:34
Methyl-t-butyl ether (MTBE)	**58**	5.0	10	06/27/2018 03:34
Methylene chloride	ND	5.0	10	06/27/2018 03:34
4-Methyl-2-pentanone (MIBK)	ND	5.0	10	06/27/2018 03:34
Naphthalene	ND	5.0	10	06/27/2018 03:34
n-Propyl benzene	**33**	5.0	10	06/27/2018 03:34
Styrene	ND	5.0	10	06/27/2018 03:34
1,1,1,2-Tetrachloroethane	ND	5.0	10	06/27/2018 03:34
1,1,2,2-Tetrachloroethane	ND	5.0	10	06/27/2018 03:34
Tetrachloroethene	ND	5.0	10	06/27/2018 03:34
Toluene	ND	5.0	10	06/27/2018 03:34
1,2,3-Trichlorobenzene	ND	5.0	10	06/27/2018 03:34
1,2,4-Trichlorobenzene	ND	5.0	10	06/27/2018 03:34
1,1,1-Trichloroethane	ND	5.0	10	06/27/2018 03:34
1,1,2-Trichloroethane	ND	5.0	10	06/27/2018 03:34
Trichloroethene	ND	5.0	10	06/27/2018 03:34
Trichlorofluoromethane	ND	5.0	10	06/27/2018 03:34
1,2,3-Trichloropropane	ND	5.0	10	06/27/2018 03:34
1,2,4-Trimethylbenzene	ND	5.0	10	06/27/2018 03:34
1,3,5-Trimethylbenzene	ND	5.0	10	06/27/2018 03:34
Vinyl Chloride	ND	5.0	10	06/27/2018 03:34
Xylenes, Total	ND	5.0	10	06/27/2018 03:34

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	1806808-007B	Water	06/14/2018 11:09	GC38 06261833.D	160510

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	110	78-134		06/27/2018 03:34
Toluene-d8	104	82-120		06/27/2018 03:34
4-BFB	110	69-131		06/27/2018 03:34

Analyst(s): AK

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	1806808-008B	Water	06/14/2018 08:35	GC38 06261834.D	160510

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/27/2018 04:11
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/27/2018 04:11
Benzene	ND	0.50	1	06/27/2018 04:11
Bromobenzene	ND	0.50	1	06/27/2018 04:11
Bromochloromethane	ND	0.50	1	06/27/2018 04:11
Bromodichloromethane	ND	0.50	1	06/27/2018 04:11
Bromoform	ND	0.50	1	06/27/2018 04:11
Bromomethane	ND	0.50	1	06/27/2018 04:11
2-Butanone (MEK)	ND	2.0	1	06/27/2018 04:11
t-Butyl alcohol (TBA)	ND	2.0	1	06/27/2018 04:11
n-Butyl benzene	ND	0.50	1	06/27/2018 04:11
sec-Butyl benzene	ND	0.50	1	06/27/2018 04:11
tert-Butyl benzene	ND	0.50	1	06/27/2018 04:11
Carbon Disulfide	ND	0.50	1	06/27/2018 04:11
Carbon Tetrachloride	ND	0.50	1	06/27/2018 04:11
Chlorobenzene	ND	0.50	1	06/27/2018 04:11
Chloroethane	ND	0.50	1	06/27/2018 04:11
Chloroform	ND	0.50	1	06/27/2018 04:11
Chloromethane	ND	0.50	1	06/27/2018 04:11
2-Chlorotoluene	ND	0.50	1	06/27/2018 04:11
4-Chlorotoluene	ND	0.50	1	06/27/2018 04:11
Dibromochloromethane	ND	0.50	1	06/27/2018 04:11
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/27/2018 04:11
1,2-Dibromoethane (EDB)	ND	0.50	1	06/27/2018 04:11
Dibromomethane	ND	0.50	1	06/27/2018 04:11
1,2-Dichlorobenzene	ND	0.50	1	06/27/2018 04:11
1,3-Dichlorobenzene	ND	0.50	1	06/27/2018 04:11
1,4-Dichlorobenzene	ND	0.50	1	06/27/2018 04:11
Dichlorodifluoromethane	ND	0.50	1	06/27/2018 04:11
1,1-Dichloroethane	ND	0.50	1	06/27/2018 04:11
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/27/2018 04:11
1,1-Dichloroethene	ND	0.50	1	06/27/2018 04:11
cis-1,2-Dichloroethene	ND	0.50	1	06/27/2018 04:11
trans-1,2-Dichloroethene	ND	0.50	1	06/27/2018 04:11
1,2-Dichloropropane	ND	0.50	1	06/27/2018 04:11
1,3-Dichloropropane	ND	0.50	1	06/27/2018 04:11
2,2-Dichloropropane	ND	0.50	1	06/27/2018 04:11

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	1806808-008B	Water	06/14/2018 08:35	GC38 06261834.D	160510

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/27/2018 04:11
cis-1,3-Dichloropropene	ND	0.50	1	06/27/2018 04:11
trans-1,3-Dichloropropene	ND	0.50	1	06/27/2018 04:11
Diisopropyl ether (DIPE)	ND	0.50	1	06/27/2018 04:11
Ethylbenzene	ND	0.50	1	06/27/2018 04:11
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/27/2018 04:11
Freon 113	ND	0.50	1	06/27/2018 04:11
Hexachlorobutadiene	ND	0.50	1	06/27/2018 04:11
Hexachloroethane	ND	0.50	1	06/27/2018 04:11
2-Hexanone	ND	0.50	1	06/27/2018 04:11
Isopropylbenzene	**0.67**	0.50	1	06/27/2018 04:11
4-Isopropyl toluene	ND	0.50	1	06/27/2018 04:11
Methyl-t-butyl ether (MTBE)	ND	0.50	1	06/27/2018 04:11
Methylene chloride	ND	0.50	1	06/27/2018 04:11
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/27/2018 04:11
Naphthalene	**0.84**	0.50	1	06/27/2018 04:11
n-Propyl benzene	**0.88**	0.50	1	06/27/2018 04:11
Styrene	ND	0.50	1	06/27/2018 04:11
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/27/2018 04:11
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/27/2018 04:11
Tetrachloroethene	ND	0.50	1	06/27/2018 04:11
Toluene	ND	0.50	1	06/27/2018 04:11
1,2,3-Trichlorobenzene	ND	0.50	1	06/27/2018 04:11
1,2,4-Trichlorobenzene	ND	0.50	1	06/27/2018 04:11
1,1,1-Trichloroethane	ND	0.50	1	06/27/2018 04:11
1,1,2-Trichloroethane	ND	0.50	1	06/27/2018 04:11
Trichloroethene	ND	0.50	1	06/27/2018 04:11
Trichlorofluoromethane	ND	0.50	1	06/27/2018 04:11
1,2,3-Trichloropropane	ND	0.50	1	06/27/2018 04:11
1,2,4-Trimethylbenzene	**0.83**	0.50	1	06/27/2018 04:11
1,3,5-Trimethylbenzene	ND	0.50	1	06/27/2018 04:11
Vinyl Chloride	ND	0.50	1	06/27/2018 04:11
Xylenes, Total	ND	0.50	1	06/27/2018 04:11

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	**1806808-008B**	**Water**	**06/14/2018 08:35**	**GC38 06261834.D**	**160510**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	97	78-134		06/27/2018 04:11
Toluene-d8	104	82-120		06/27/2018 04:11
4-BFB	111	69-131		06/27/2018 04:11

Analyst(s): AK

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW1	1806808-009B	Water	06/13/2018 13:37	GC38 06261835.D	160510

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	06/27/2018 04:49
tert-Amyl methyl ether (TAME)	ND	0.50	1	06/27/2018 04:49
Benzene	ND	0.50	1	06/27/2018 04:49
Bromobenzene	ND	0.50	1	06/27/2018 04:49
Bromochloromethane	ND	0.50	1	06/27/2018 04:49
Bromodichloromethane	ND	0.50	1	06/27/2018 04:49
Bromoform	ND	0.50	1	06/27/2018 04:49
Bromomethane	ND	0.50	1	06/27/2018 04:49
2-Butanone (MEK)	ND	2.0	1	06/27/2018 04:49
t-Butyl alcohol (TBA)	ND	2.0	1	06/27/2018 04:49
n-Butyl benzene	ND	0.50	1	06/27/2018 04:49
sec-Butyl benzene	ND	0.50	1	06/27/2018 04:49
tert-Butyl benzene	ND	0.50	1	06/27/2018 04:49
Carbon Disulfide	ND	0.50	1	06/27/2018 04:49
Carbon Tetrachloride	ND	0.50	1	06/27/2018 04:49
Chlorobenzene	ND	0.50	1	06/27/2018 04:49
Chloroethane	ND	0.50	1	06/27/2018 04:49
Chloroform	ND	0.50	1	06/27/2018 04:49
Chloromethane	ND	0.50	1	06/27/2018 04:49
2-Chlorotoluene	ND	0.50	1	06/27/2018 04:49
4-Chlorotoluene	ND	0.50	1	06/27/2018 04:49
Dibromochloromethane	ND	0.50	1	06/27/2018 04:49
1,2-Dibromo-3-chloropropane	ND	0.20	1	06/27/2018 04:49
1,2-Dibromoethane (EDB)	ND	0.50	1	06/27/2018 04:49
Dibromomethane	ND	0.50	1	06/27/2018 04:49
1,2-Dichlorobenzene	ND	0.50	1	06/27/2018 04:49
1,3-Dichlorobenzene	ND	0.50	1	06/27/2018 04:49
1,4-Dichlorobenzene	ND	0.50	1	06/27/2018 04:49
Dichlorodifluoromethane	ND	0.50	1	06/27/2018 04:49
1,1-Dichloroethane	ND	0.50	1	06/27/2018 04:49
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	06/27/2018 04:49
1,1-Dichloroethene	ND	0.50	1	06/27/2018 04:49
cis-1,2-Dichloroethene	ND	0.50	1	06/27/2018 04:49
trans-1,2-Dichloroethene	ND	0.50	1	06/27/2018 04:49
1,2-Dichloropropane	ND	0.50	1	06/27/2018 04:49
1,3-Dichloropropane	ND	0.50	1	06/27/2018 04:49
2,2-Dichloropropane	ND	0.50	1	06/27/2018 04:49

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW1	1806808-009B	Water	06/13/2018 13:37	GC38 06261835.D	160510

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	06/27/2018 04:49
cis-1,3-Dichloropropene	ND	0.50	1	06/27/2018 04:49
trans-1,3-Dichloropropene	ND	0.50	1	06/27/2018 04:49
Diisopropyl ether (DIPE)	ND	0.50	1	06/27/2018 04:49
Ethylbenzene	ND	0.50	1	06/27/2018 04:49
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	06/27/2018 04:49
Freon 113	ND	0.50	1	06/27/2018 04:49
Hexachlorobutadiene	ND	0.50	1	06/27/2018 04:49
Hexachloroethane	ND	0.50	1	06/27/2018 04:49
2-Hexanone	ND	0.50	1	06/27/2018 04:49
Isopropylbenzene	ND	0.50	1	06/27/2018 04:49
4-Isopropyl toluene	ND	0.50	1	06/27/2018 04:49
Methyl-t-butyl ether (MTBE)	**0.60**	0.50	1	06/27/2018 04:49
Methylene chloride	ND	0.50	1	06/27/2018 04:49
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	06/27/2018 04:49
Naphthalene	ND	0.50	1	06/27/2018 04:49
n-Propyl benzene	ND	0.50	1	06/27/2018 04:49
Styrene	ND	0.50	1	06/27/2018 04:49
1,1,1,2-Tetrachloroethane	ND	0.50	1	06/27/2018 04:49
1,1,2,2-Tetrachloroethane	ND	0.50	1	06/27/2018 04:49
Tetrachloroethene	ND	0.50	1	06/27/2018 04:49
Toluene	ND	0.50	1	06/27/2018 04:49
1,2,3-Trichlorobenzene	ND	0.50	1	06/27/2018 04:49
1,2,4-Trichlorobenzene	ND	0.50	1	06/27/2018 04:49
1,1,1-Trichloroethane	ND	0.50	1	06/27/2018 04:49
1,1,2-Trichloroethane	ND	0.50	1	06/27/2018 04:49
Trichloroethene	ND	0.50	1	06/27/2018 04:49
Trichlorofluoromethane	ND	0.50	1	06/27/2018 04:49
1,2,3-Trichloropropane	ND	0.50	1	06/27/2018 04:49
1,2,4-Trimethylbenzene	ND	0.50	1	06/27/2018 04:49
1,3,5-Trimethylbenzene	ND	0.50	1	06/27/2018 04:49
Vinyl Chloride	ND	0.50	1	06/27/2018 04:49
Xylenes, Total	ND	0.50	1	06/27/2018 04:49

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/26/18-6/27/18	**Analytical Method:**	SW8260B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW1	1806808-009B	Water	06/13/2018 13:37	GC38 06261835.D	160510

Analytes	Result	RL	DF	Date Analyzed
Surrogates	**REC (%)**	**Limits**		
Dibromofluoromethane	108	78-134		06/27/2018 04:49
Toluene-d8	104	82-120		06/27/2018 04:49
4-BFB	114	69-131		06/27/2018 04:49

Analyst(s): AK

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/21/18-6/22/18	**Analytical Method:**	SW8021B/8015Bm
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	**1806808-001A**	**Water**	**06/14/2018 14:50**	**GC3 06211821.D**	**160406**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**13,000**	2500	50	06/21/2018 22:52
MTBE	---	500	50	06/21/2018 22:52
Benzene	---	25	50	06/21/2018 22:52
Toluene	---	25	50	06/21/2018 22:52
Ethylbenzene	---	25	50	06/21/2018 22:52
Xylenes	---	25	50	06/21/2018 22:52

Surrogates	REC (%)	Limits	
aaa-TFT	109	90-117	06/21/2018 22:52

Analyst(s): IA Analytical Comments: d1,d17

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	**1806808-002A**	**Water**	**06/13/2018 11:18**	**GC3 06211815.D**	**160406**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**1800**	50	1	06/21/2018 19:43
MTBE	---	50	1	06/21/2018 19:43
Benzene	---	0.50	1	06/21/2018 19:43
Toluene	---	0.50	1	06/21/2018 19:43
Ethylbenzene	---	0.50	1	06/21/2018 19:43
Xylenes	---	0.50	1	06/21/2018 19:43

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	209	S	90-117	06/21/2018 19:43

Analyst(s): IA Analytical Comments: c4,d1,d17

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/21/18-6/22/18	**Analytical Method:**	SW8021B/8015Bm
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW3	**1806808-003A**	**Water**	**06/13/2018 09:50**	**GC3 06211816.D**	**160406**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/21/2018 20:15
MTBE	---	5.0	1	06/21/2018 20:15
Benzene	---	0.50	1	06/21/2018 20:15
Toluene	---	0.50	1	06/21/2018 20:15
Ethylbenzene	---	0.50	1	06/21/2018 20:15
Xylenes	---	0.50	1	06/21/2018 20:15

Surrogates	REC (%)	Limits	
aaa-TFT	97	90-117	06/21/2018 20:15

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	**1806808-004A**	**Water**	**06/14/2018 09:40**	**GC3 06221808.D**	**160406**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**4100**	250	5	06/22/2018 16:01
MTBE	---	70	5	06/22/2018 16:01
Benzene	---	2.5	5	06/22/2018 16:01
Toluene	---	2.5	5	06/22/2018 16:01
Ethylbenzene	---	2.5	5	06/22/2018 16:01
Xylenes	---	2.5	5	06/22/2018 16:01

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	121	S	90-117	06/22/2018 16:01

Analyst(s): IA Analytical Comments: c4,d1,d17

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/21/18-6/22/18	**Analytical Method:**	SW8021B/8015Bm
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW2	**1806808-005A**	**Water**	**06/13/2018 14:55**	**GC3 06211820.D**	**160406**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**350**	50	1	06/21/2018 22:21
MTBE	---	20	1	06/21/2018 22:21
Benzene	---	0.50	1	06/21/2018 22:21
Toluene	---	0.50	1	06/21/2018 22:21
Ethylbenzene	---	0.50	1	06/21/2018 22:21
Xylenes	---	0.50	1	06/21/2018 22:21

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	918	S	90-117	06/21/2018 22:21

Analyst(s): IA Analytical Comments: c4,d1,d17

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	**1806808-006A**	**Water**	**06/14/2018 13:39**	**GC3 06211826.D**	**160406**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**65**	50	1	06/22/2018 01:27
MTBE	---	5.0	1	06/22/2018 01:27
Benzene	---	0.50	1	06/22/2018 01:27
Toluene	---	0.50	1	06/22/2018 01:27
Ethylbenzene	---	0.50	1	06/22/2018 01:27
Xylenes	---	0.50	1	06/22/2018 01:27

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	281	S	90-117	06/22/2018 01:27

Analyst(s): IA Analytical Comments: c4,d6

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/21/18-6/22/18	**Analytical Method:**	SW8021B/8015Bm
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	**1806808-007A**	**Water**	**06/14/2018 11:09**	**GC3 06211829.D**	**160406**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	**1500**	50	1	06/22/2018 03:00
MTBE	---	110	1	06/22/2018 03:00
Benzene	---	0.50	1	06/22/2018 03:00
Toluene	---	0.50	1	06/22/2018 03:00
Ethylbenzene	---	0.50	1	06/22/2018 03:00
Xylenes	---	0.50	1	06/22/2018 03:00

Surrogates	REC (%)	Qualifiers	Limits	
aaa-TFT	187	S	90-117	06/22/2018 03:00

Analyst(s): IA Analytical Comments: c4,d1,d17

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	**1806808-008A**	**Water**	**06/14/2018 08:35**	**GC12 06221810.D**	**160406**

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/22/2018 15:47
MTBE	---	5.0	1	06/22/2018 15:47
Benzene	---	0.50	1	06/22/2018 15:47
Toluene	---	0.50	1	06/22/2018 15:47
Ethylbenzene	---	0.50	1	06/22/2018 15:47
Xylenes	---	0.50	1	06/22/2018 15:47

Surrogates	REC (%)	Limits	
aaa-TFT	107	90-117	06/22/2018 15:47

Analyst(s): IA

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW5030B
Date Prepared:	6/21/18-6/22/18	**Analytical Method:**	SW8021B/8015Bm
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW1	1806808-009A	Water	06/13/2018 13:37	GC3 06211831.D	160406

Analytes	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	06/22/2018 04:02
MTBE	---	5.0	1	06/22/2018 04:02
Benzene	---	0.50	1	06/22/2018 04:02
Toluene	---	0.50	1	06/22/2018 04:02
Ethylbenzene	---	0.50	1	06/22/2018 04:02
Xylenes	---	0.50	1	06/22/2018 04:02

Surrogates	REC (%)	Limits	
aaa-TFT	101	90-117	06/22/2018 04:02

Analyst(s): IA

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW3510C
Date Prepared:	6/15/18	**Analytical Method:**	SW8015B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	**1806808-001A**	**Water**	**06/14/2018 14:50**	**GC6B 06191825.D**	**159970**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1200**	50	1	06/19/2018 22:39
TPH-Motor Oil (C18-C36)	ND	250	1	06/19/2018 22:39

Surrogates	REC (%)	Limits	
C9	90	61-139	06/19/2018 22:39

Analyst(s): JIS Analytical Comments: e2/e4/e8

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	**1806808-002A**	**Water**	**06/13/2018 11:18**	**GC6B 06191827.D**	**159970**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1800**	50	1	06/19/2018 23:18
TPH-Motor Oil (C18-C36)	**530**	250	1	06/19/2018 23:18

Surrogates	REC (%)	Limits	
C9	89	61-139	06/19/2018 23:18

Analyst(s): JIS Analytical Comments: e2/e4/e8,e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW3	**1806808-003A**	**Water**	**06/13/2018 09:50**	**GC6B 06191829.D**	**159970**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/19/2018 23:57
TPH-Motor Oil (C18-C36)	ND	250	1	06/19/2018 23:57

Surrogates	REC (%)	Limits	
C9	87	61-139	06/19/2018 23:57

Analyst(s): JIS

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW3510C
Date Prepared:	6/15/18	**Analytical Method:**	SW8015B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	**1806808-004A**	**Water**	**06/14/2018 09:40**	**GC6B 06191831.D**	**159970**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**760**	50	1	06/20/2018 00:36
TPH-Motor Oil (C18-C36)	ND	250	1	06/20/2018 00:36

Surrogates	REC (%)	Limits	
C9	92	61-139	06/20/2018 00:36

Analyst(s): JIS Analytical Comments: e2/e4/e8

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW2	**1806808-005A**	**Water**	**06/13/2018 14:55**	**GC6B 06191833.D**	**159970**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**75**	50	1	06/20/2018 01:15
TPH-Motor Oil (C18-C36)	ND	250	1	06/20/2018 01:15

Surrogates	REC (%)	Limits	
C9	89	61-139	06/20/2018 01:15

Analyst(s): JIS Analytical Comments: e2/e8

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	**1806808-006A**	**Water**	**06/14/2018 13:39**	**GC6B 06191835.D**	**159970**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/20/2018 01:54
TPH-Motor Oil (C18-C36)	ND	250	1	06/20/2018 01:54

Surrogates	REC (%)	Limits	
C9	88	61-139	06/20/2018 01:54

Analyst(s): JIS

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Analytical Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Received:	6/15/18 15:45	**Extraction Method:**	SW3510C
Date Prepared:	6/15/18	**Analytical Method:**	SW8015B
Project:	0058; Xtra Oil Co	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	1806808-007A	Water	06/14/2018 11:09	GC6B 06191845.D	159970

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**310**	50	1	06/20/2018 05:08
TPH-Motor Oil (C18-C36)	ND	250	1	06/20/2018 05:08

Surrogates	REC (%)	Limits	
C9	89	61-139	06/20/2018 05:08

Analyst(s): JIS Analytical Comments: e2/e4/e8

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	1806808-008A	Water	06/14/2018 08:35	GC6B 06191847.D	160036

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/20/2018 05:47
TPH-Motor Oil (C18-C36)	ND	250	1	06/20/2018 05:47

Surrogates	REC (%)	Limits	
C9	89	61-139	06/20/2018 05:47

Analyst(s): JIS

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW1	1806808-009A	Water	06/13/2018 13:37	GC6B 06191849.D	160036

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	1	06/20/2018 06:26
TPH-Motor Oil (C18-C36)	ND	250	1	06/20/2018 06:26

Surrogates	REC (%)	Limits	
C9	88	61-139	06/20/2018 06:26

Analyst(s): JIS

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Prepared:	6/26/18	**BatchID:**	160510
Date Analyzed:	6/26/18	**Extraction Method:**	SW5030B
Instrument:	GC38	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	0058; Xtra Oil Co	**Sample ID:**	MB/LCS/LCSD-160510 1806798-001BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
Acetone	ND	10	-	-	-
tert-Amyl methyl ether (TAME)	ND	0.50	-	-	-
Benzene	ND	0.50	-	-	-
Bromobenzene	ND	0.50	-	-	-
Bromochloromethane	ND	0.50	-	-	-
Bromodichloromethane	ND	0.50	-	-	-
Bromoform	ND	0.50	-	-	-
Bromomethane	ND	0.50	-	-	-
2-Butanone (MEK)	ND	2.0	-	-	-
t-Butyl alcohol (TBA)	ND	2.0	-	-	-
n-Butyl benzene	ND	0.50	-	-	-
sec-Butyl benzene	ND	0.50	-	-	-
tert-Butyl benzene	ND	0.50	-	-	-
Carbon Disulfide	ND	0.50	-	-	-
Carbon Tetrachloride	ND	0.50	-	-	-
Chlorobenzene	ND	0.50	-	-	-
Chloroethane	ND	0.50	-	-	-
Chloroform	ND	0.50	-	-	-
Chloromethane	ND	0.50	-	-	-
2-Chlorotoluene	ND	0.50	-	-	-
4-Chlorotoluene	ND	0.50	-	-	-
Dibromochloromethane	ND	0.50	-	-	-
1,2-Dibromo-3-chloropropane	ND	0.20	-	-	-
1,2-Dibromoethane (EDB)	ND	0.50	-	-	-
Dibromomethane	ND	0.50	-	-	-
1,2-Dichlorobenzene	ND	0.50	-	-	-
1,3-Dichlorobenzene	ND	0.50	-	-	-
1,4-Dichlorobenzene	ND	0.50	-	-	-
Dichlorodifluoromethane	ND	0.50	-	-	-
1,1-Dichloroethane	ND	0.50	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	0.50	-	-	-
1,1-Dichloroethene	ND	0.50	-	-	-
cis-1,2-Dichloroethene	ND	0.50	-	-	-
trans-1,2-Dichloroethene	ND	0.50	-	-	-
1,2-Dichloropropane	ND	0.50	-	-	-
1,3-Dichloropropane	ND	0.50	-	-	-
2,2-Dichloropropane	ND	0.50	-	-	-
1,1-Dichloropropene	ND	0.50	-	-	-
cis-1,3-Dichloropropene	ND	0.50	-	-	-

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Prepared:	6/26/18	**BatchID:**	160510
Date Analyzed:	6/26/18	**Extraction Method:**	SW5030B
Instrument:	GC38	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	0058; Xtra Oil Co	**Sample ID:**	MB/LCS/LCSD-160510 1806798-001BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
trans-1,3-Dichloropropene	ND	0.50	-	-	-
Diisopropyl ether (DIPE)	ND	0.50	-	-	-
Ethylbenzene	ND	0.50	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	0.50	-	-	-
Freon 113	ND	0.50	-	-	-
Hexachlorobutadiene	ND	0.50	-	-	-
Hexachloroethane	ND	0.50	-	-	-
2-Hexanone	ND	0.50	-	-	-
Isopropylbenzene	ND	0.50	-	-	-
4-Isopropyl toluene	ND	0.50	-	-	-
Methyl-t-butyl ether (MTBE)	ND	0.50	-	-	-
Methylene chloride	ND	0.50	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	0.50	-	-	-
Naphthalene	ND	0.50	-	-	-
n-Propyl benzene	ND	0.50	-	-	-
Styrene	ND	0.50	-	-	-
1,1,1,2-Tetrachloroethane	ND	0.50	-	-	-
1,1,2,2-Tetrachloroethane	ND	0.50	-	-	-
Tetrachloroethene	ND	0.50	-	-	-
Toluene	ND	0.50	-	-	-
1,2,3-Trichlorobenzene	ND	0.50	-	-	-
1,2,4-Trichlorobenzene	ND	0.50	-	-	-
1,1,1-Trichloroethane	ND	0.50	-	-	-
1,1,2-Trichloroethane	ND	0.50	-	-	-
Trichloroethene	ND	0.50	-	-	-
Trichlorofluoromethane	ND	0.50	-	-	-
1,2,3-Trichloropropane	ND	0.50	-	-	-
1,2,4-Trimethylbenzene	ND	0.50	-	-	-
1,3,5-Trimethylbenzene	ND	0.50	-	-	-
Vinyl Chloride	ND	0.50	-	-	-
Xylenes, Total	ND	0.50	-	-	-
Surrogate Recovery					
Dibromofluoromethane	24.2		25	97	91-133
Toluene-d8	26.5		25	106	87-127
4-BFB	2.77		2.5	111	66-140

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Prepared:	6/26/18	**BatchID:**	160510
Date Analyzed:	6/26/18	**Extraction Method:**	SW5030B
Instrument:	GC38	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	0058; Xtra Oil Co	**Sample ID:**	MB/LCS/LCSD-160510 1806798-001BMS/MSD

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Acetone	135	143	200	68	71	47-122	5.35	20
tert-Amyl methyl ether (TAME)	7.45	7.85	10	74	79	62-121	5.28	20
Benzene	8.58	8.90	10	86	89	74-121	3.56	20
Bromobenzene	8.50	8.84	10	85	88	63-127	3.88	20
Bromochloromethane	9.89	10.2	10	99	102	70-126	3.35	20
Bromodichloromethane	8.77	9.14	10	88	91	66-127	4.23	20
Bromoform	8.06	8.54	10	81	85	60-119	5.82	20
Bromomethane	11.2	11.7	10	112	117	32-155	4.72	20
2-Butanone (MEK)	24.7	26.7	40	62	67	51-117	7.92	20
t-Butyl alcohol (TBA)	24.6	26.4	40	61	66	41-122	6.97	20
n-Butyl benzene	10.1	10.3	10	101	103	73-137	1.43	20
sec-Butyl benzene	9.08	9.33	10	91	93	71-137	2.66	20
tert-Butyl benzene	9.37	9.51	10	94	95	61-136	1.43	20
Carbon Disulfide	9.81	10.2	10	98	102	61-139	3.69	20
Carbon Tetrachloride	9.54	9.89	10	95	99	69-137	3.64	20
Chlorobenzene	9.09	9.41	10	91	94	71-122	3.48	20
Chloroethane	9.22	9.56	10	92	96	54-132	3.57	20
Chloroform	9.26	9.62	10	93	96	73-122	3.88	20
Chloromethane	7.24	7.36	10	72	74	48-136	1.65	20
2-Chlorotoluene	9.04	9.26	10	90	93	65-134	2.37	20
4-Chlorotoluene	8.91	9.17	10	89	92	65-130	2.84	20
Dibromochloromethane	8.71	9.13	10	87	91	65-121	4.67	20
1,2-Dibromo-3-chloropropane	3.10	3.30	4	77	83	41-132	6.46	20
1,2-Dibromoethane (EDB)	8.44	8.90	10	84	89	67-125	5.27	20
Dibromomethane	9.01	9.46	10	90	95	68-121	4.88	20
1,2-Dichlorobenzene	9.02	9.25	10	90	92	69-128	2.44	20
1,3-Dichlorobenzene	9.06	9.28	10	91	93	71-131	2.37	20
1,4-Dichlorobenzene	8.81	9.10	10	88	91	70-128	3.32	20
Dichlorodifluoromethane	8.17	8.67	10	82	87	21-158	5.96	20
1,1-Dichloroethane	9.08	9.42	10	91	94	73-123	3.64	20
1,2-Dichloroethane (1,2-DCA)	8.17	8.54	10	82	85	61-127	4.36	20
1,1-Dichloroethene	10.1	10.5	10	101	105	68-130	3.74	20
cis-1,2-Dichloroethene	8.98	9.28	10	90	93	72-123	3.30	20
trans-1,2-Dichloroethene	8.89	9.35	10	89	94	64-138	5.05	20
1,2-Dichloropropane	8.56	8.89	10	86	89	71-121	3.79	20
1,3-Dichloropropane	8.26	8.65	10	83	87	69-120	4.57	20
2,2-Dichloropropane	9.23	9.52	10	92	95	64-142	3.02	20
1,1-Dichloropropene	9.80	10.1	10	98	101	70-130	3.13	20
cis-1,3-Dichloropropene	9.09	9.45	10	91	94	58-136	3.83	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Prepared:	6/26/18	**BatchID:**	160510
Date Analyzed:	6/26/18	**Extraction Method:**	SW5030B
Instrument:	GC38	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	0058; Xtra Oil Co	**Sample ID:**	MB/LCS/LCSD-160510 1806798-001BMS/MSD

QC Summary Report for SW8260B

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	8.81	9.13	10	88	91	66-119	3.59	20
Diisopropyl ether (DIPE)	8.28	8.47	10	83	85	66-123	2.37	20
Ethylbenzene	9.41	9.62	10	94	96	71-125	2.20	20
Ethyl tert-butyl ether (ETBE)	7.51	7.91	10	75	79	67-122	5.27	20
Freon 113	9.48	9.82	10	95	98	68-132	3.42	20
Hexachlorobutadiene	8.98	9.19	10	90	92	56-155	2.36	20
Hexachloroethane	9.19	9.48	10	92	95	61-129	3.11	20
2-Hexanone	6.83	7.26	10	68	73	51-115	6.08	20
Isopropylbenzene	10.4	10.8	10	104	108	66-134	3.74	20
4-Isopropyl toluene	9.54	9.89	10	95	99	70-136	3.61	20
Methyl-t-butyl ether (MTBE)	7.51	7.78	10	75	78	64-118	3.49	20
Methylene chloride	8.15	8.49	10	81	85	62-121	4.13	20
4-Methyl-2-pentanone (MIBK)	7.08	7.65	10	71	76	51-115	7.64	20
Naphthalene	8.37	8.83	10	84	88	55-137	5.36	20
n-Propyl benzene	9.35	9.52	10	93	95	63-140	1.81	20
Styrene	8.90	9.08	10	89	91	62-133	1.99	20
1,1,1,2-Tetrachloroethane	9.32	9.64	10	93	96	69-128	3.36	20
1,1,2,2-Tetrachloroethane	8.52	9.09	10	85	91	60-118	6.50	20
Tetrachloroethene	9.39	9.76	10	94	98	63-136	3.92	20
Toluene	8.85	9.14	10	89	91	67-124	3.25	20
1,2,3-Trichlorobenzene	8.55	8.91	10	85	89	57-145	4.13	20
1,2,4-Trichlorobenzene	8.91	9.19	10	89	92	60-144	3.14	20
1,1,1-Trichloroethane	9.27	9.61	10	93	96	70-133	3.63	20
1,1,2-Trichloroethane	8.17	8.55	10	82	85	65-125	4.59	20
Trichloroethene	7.81	8.06	10	78	81	67-133	3.11	20
Trichlorofluoromethane	9.46	10.1	10	95	101	59-145	6.49	20
1,2,3-Trichloropropane	7.76	8.18	10	78	82	65-115	5.29	20
1,2,4-Trimethylbenzene	8.90	9.18	10	89	92	67-136	3.09	20
1,3,5-Trimethylbenzene	9.35	9.67	10	93	97	68-135	3.42	20
Vinyl Chloride	11.6	12.1	10	116	121	53-146	4.25	20
Xylenes, Total	25.8	28.0	30	86	93	68-128	8.11	20
Surrogate Recovery								
Dibromofluoromethane	25.2	25.8	25	101	103	91-133	2.37	20
Toluene-d8	26.8	26.5	25	107	106	87-127	0.912	20
4-BFB	2.67	2.70	2.5	107	108	66-140	0.996	20

(Cont.)

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Prepared:	6/26/18	**BatchID:**	160510
Date Analyzed:	6/26/18	**Extraction Method:**	SW5030B
Instrument:	GC38	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	0058; Xtra Oil Co	**Sample ID:**	MB/LCS/LCSD-160510 1806798-001BMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Acetone	157	158	200	ND	79	79	56-141	0	20
tert-Amyl methyl ether (TAME)	8.49	8.52	10	ND	85	85	78-120	0	20
Benzene	9.04	8.81	10	ND	90	88	81-118	2.52	20
Bromobenzene	9.03	8.80	10	ND	90	88	71-119	2.60	20
Bromochloromethane	10.6	10.4	10	ND	106	104	80-124	2.31	20
Bromodichloromethane	9.56	9.33	10	ND	96	93	78-124	2.42	20
Bromoform	8.86	9.03	10	ND	89	90	65-127	1.91	20
Bromomethane	12.3	11.2	10	ND	123	112	22-175	9.40	20
2-Butanone (MEK)	28.5	29.0	40	ND	71	72	50-152	1.72	20
t-Butyl alcohol (TBA)	27.6	29.8	40	ND	69	75	49-141	7.80	20
n-Butyl benzene	10.3	9.93	10	ND	103	99	77-127	3.28	20
sec-Butyl benzene	9.13	8.86	10	ND	91	89	74-123	3.06	20
tert-Butyl benzene	9.33	9.15	10	ND	93	92	68-122	1.95	20
Carbon Disulfide	10.0	9.70	10	ND	100	97	74-123	3.37	20
Carbon Tetrachloride	9.79	9.54	10	ND	98	95	78-124	2.55	20
Chlorobenzene	9.39	9.26	10	ND	94	93	79-116	1.39	20
Chloroethane	9.33	8.90	10	ND	93	89	56-134	4.68	20
Chloroform	9.88	9.56	10	ND	99	96	82-119	3.39	20
Chloromethane	6.27	5.99	10	ND	63	60	39-147	4.50	20
2-Chlorotoluene	9.08	8.92	10	ND	91	89	69-124	1.79	20
4-Chlorotoluene	9.03	8.82	10	ND	90	88	71-121	2.33	20
Dibromochloromethane	9.57	9.52	10	ND	96	95	76-119	0.523	20
1,2-Dibromo-3-chloropropane	3.47	3.56	4	ND	87	89	48-138	2.50	20
1,2-Dibromoethane (EDB)	9.31	9.28	10	ND	93	93	81-122	0	20
Dibromomethane	10.1	10.0	10	ND	101	100	83-121	0.896	20
1,2-Dichlorobenzene	9.40	9.35	10	ND	94	93	77-122	0.517	20
1,3-Dichlorobenzene	9.26	9.04	10	ND	93	90	76-125	2.34	20
1,4-Dichlorobenzene	9.17	9.02	10	ND	92	90	78-120	1.57	20
Dichlorodifluoromethane	11.1	8.25	10	ND	111	82	38-135	29.5,F1	20
1,1-Dichloroethane	9.68	9.39	10	ND	97	94	80-120	2.99	20
1,2-Dichloroethane (1,2-DCA)	9.17	9.03	10	ND	92	90	78-122	1.58	20
1,1-Dichloroethene	10.6	10.2	10	ND	106	102	77-120	3.49	20
cis-1,2-Dichloroethene	9.42	9.21	10	ND	94	92	79-123	2.26	20
trans-1,2-Dichloroethene	9.24	9.06	10	ND	92	91	77-125	1.95	20
1,2-Dichloropropane	9.33	9.15	10	ND	93	91	80-121	1.99	20
1,3-Dichloropropane	9.24	9.21	10	ND	92	92	80-120	0	20
2,2-Dichloropropane	9.76	9.49	10	ND	98	95	70-132	2.82	20
1,1-Dichloropropene	10.2	9.85	10	ND	102	98	78-122	3.43	20
cis-1,3-Dichloropropene	9.79	9.68	10	ND	98	97	73-121	1.11	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Prepared:	6/26/18	**BatchID:**	160510
Date Analyzed:	6/26/18	**Extraction Method:**	SW5030B
Instrument:	GC38	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	0058; Xtra Oil Co	**Sample ID:**	MB/LCS/LCSD-160510 1806798-001BMS/MSD

QC Summary Report for SW8260B

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	9.56	9.50	10	ND	96	95	77-116	0.632	20
Diisopropyl ether (DIPE)	9.30	9.12	10	ND	93	91	77-125	2.00	20
Ethylbenzene	9.57	9.37	10	ND	96	94	77-119	2.13	20
Ethyl tert-butyl ether (ETBE)	8.68	8.48	10	ND	87	85	81-122	2.32	20
Freon 113	9.90	9.53	10	ND	99	95	77-120	3.75	20
Hexachlorobutadiene	8.91	8.49	10	ND	89	85	57-141	4.81	20
Hexachloroethane	9.49	9.30	10	ND	95	93	26-168	2.05	20
2-Hexanone	7.91	7.80	10	ND	79	78	58-135	1.47	20
Isopropylbenzene	10.5	10.2	10	ND	105	102	74-120	2.39	20
4-Isopropyl toluene	9.60	9.38	10	ND	96	94	75-124	2.33	20
Methyl-t-butyl ether (MTBE)	8.55	8.69	10	ND	86	87	74-128	1.62	20
Methylene chloride	8.82	8.66	10	ND	87	85	55-130	1.79	20
4-Methyl-2-pentanone (MIBK)	8.19	8.56	10	ND	82	86	59-131	4.38	20
Naphthalene	9.05	9.28	10	ND	90	93	65-136	2.48	20
n-Propyl benzene	9.28	9.05	10	ND	93	91	67-128	2.49	20
Styrene	9.01	8.96	10	ND	90	90	64-133	0	20
1,1,1,2-Tetrachloroethane	9.83	9.76	10	ND	98	98	78-122	0	20
1,1,2,2-Tetrachloroethane	9.86	9.89	10	ND	99	99	72-123	0	20
Tetrachloroethene	9.37	9.17	10	ND	94	92	72-123	2.09	20
Toluene	9.05	8.99	10	ND	90	89	74-117	0.663	20
1,2,3-Trichlorobenzene	9.03	9.02	10	ND	90	90	61-141	0	20
1,2,4-Trichlorobenzene	9.27	9.21	10	ND	93	92	69-136	0.692	20
1,1,1-Trichloroethane	9.67	9.35	10	ND	97	94	78-122	3.31	20
1,1,2-Trichloroethane	9.05	9.06	10	ND	91	91	79-120	0	20
Trichloroethene	7.95	7.79	10	ND	79	78	76-122	1.96	20
Trichlorofluoromethane	9.55	10.0	10	ND	96	100	72-125	4.64	20
1,2,3-Trichloropropane	8.84	8.90	10	ND	88	89	72-123	0.662	20
1,2,4-Trimethylbenzene	9.13	8.97	10	ND	91	90	74-123	1.72	20
1,3,5-Trimethylbenzene	9.50	9.28	10	ND	95	93	73-123	2.34	20
Vinyl Chloride	11.0	10.9	10	ND	109	108	57-134	0.951	20
Xylenes, Total	27.4	25.8	30	ND	91	86	76-119	5.91	20
Surrogate Recovery									
Dibromofluoromethane	26.6	27.6	25		107	111	78-134	3.74	20
Toluene-d8	26.3	26.4	25		105	105	82-120	0	20
4-BFB	2.79	2.78	2.5		112	111	69-131	0.388	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Prepared:	6/21/18	**BatchID:**	160406
Date Analyzed:	6/21/18	**Extraction Method:**	SW5030B
Instrument:	GC3	**Analytical Method:**	SW8021B/8015Bm
Matrix:	Water	**Unit:**	µg/L
Project:	0058; Xtra Oil Co	**Sample ID:**	MB/LCS/LCSD-160406 1806798-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH(g) (C6-C12)	ND	50	-	-	-
MTBE	ND	5.0	-	-	-
Benzene	ND	0.50	-	-	-
Toluene	ND	0.50	-	-	-
Ethylbenzene	ND	0.50	-	-	-
Xylenes	ND	0.50	-	-	-
Surrogate Recovery					
aaa-TFT	9.65		10	97	89-116

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH(btex)	68.8	67.4	60	115	112	78-116	1.99	20
MTBE	8.72	8.79	10	87	88	72-122	0.790	20
Benzene	10.2	10.1	10	101	101	81-123	0	20
Toluene	10.3	10.2	10	103	102	83-129	0.827	20
Ethylbenzene	9.98	9.90	10	100	99	88-126	0.786	20
Xylenes	30.0	29.7	30	100	99	87-131	0.878	20
Surrogate Recovery								
aaa-TFT	9.47	9.52	10	95	95	89-116	0	20

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	70.6	69.3	60	ND	118	115	63-133	1.85	20
MTBE	8.73	8.29	10	ND	87	83	69-122	5.16	20
Benzene	10.1	10.2	10	ND	101	102	84-125	0.192	20
Toluene	10.2	10.3	10	ND	102	103	87-131	0.606	20
Ethylbenzene	9.95	9.95	10	ND	100	99	92-126	0.0346	20
Xylenes	29.9	29.9	30	ND	100	100	88-132	0	20
Surrogate Recovery									
aaa-TFT	9.54	9.64	10		95	96	90-117	0.958	20

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Prepared:	6/14/18	**BatchID:**	159970
Date Analyzed:	6/15/18	**Extraction Method:**	SW3510C
Instrument:	GC6B	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	0058; Xtra Oil Co	**Sample ID:**	MB/LCS/LCSD-159970

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	250	-	-	-
Surrogate Recovery					
C9	551		625	88	68-127

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1080	1050	1000	108	105	86-142	3.32	30
Surrogate Recovery								
C9	551	563	625	88	90	68-127	2.09	30

(Cont.)

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Quality Control Report

Client:	P & D Environmental	**WorkOrder:**	1806808
Date Prepared:	6/15/18	**BatchID:**	160036
Date Analyzed:	6/17/18	**Extraction Method:**	SW3510C
Instrument:	GC6B	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	0058; Xtra Oil Co	**Sample ID:**	MB/LCS/LCSD-160036

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	50	-	-	-
TPH-Motor Oil (C18-C36)	ND	250	-	-	-
Surrogate Recovery					
C9	550		625	88	68-127

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1150	1030	1000	115	103	86-142	11.4	30
Surrogate Recovery								
C9	565	562	625	90	90	68-127	0	30

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CHAIN-OF-CUSTODY RECORD

WorkOrder: 1806808 **ClientCode: PDEO**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☑ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag
☑ Detection Summary ☑ Dry-Weight

Report to:
Paul King
P & D Environmental
55 Santa Clara Ave, Ste.240
Oakland, CA 94610
(510) 658-6916 FAX: 510-834-0152

Email: lab@pdenviro.com; Paul.King@pdenviro.c
cc/3rd Party:
PO:
Project: 0058; Xtra Oil Co

Bill to:
Accounts Payable
P & D Environmental
55 Santa Clara ave, Ste.240
Oakland, CA 94610

Requested TAT: 5 days;

Date Received: 06/15/2018
Date Logged: 06/15/2018

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1806808-001	MW1	Water	6/14/2018 14:50	☐	B	A	A									
1806808-002	MW2	Water	6/13/2018 11:18	☐	B	A	A									
1806808-003	MW3	Water	6/13/2018 09:50	☐	B	A	A									
1806808-004	MW4	Water	6/14/2018 09:40	☐	B	A	A									
1806808-005	EW2	Water	6/13/2018 14:55	☐	B	A	A									
1806808-006	EW4	Water	6/14/2018 13:39	☐	B	A	A									
1806808-007	EW5	Water	6/14/2018 11:09	☐	B	A	A									
1806808-008	OW2	Water	6/14/2018 08:35	☐	B	A	A									
1806808-009	IW1	Water	6/13/2018 13:37	☐	B	A	A									

Test Legend:

1	8260B_W	2	G-MBTEX_W	3	TPH(DMO)_W	4	
5		6		7		8	
9		10		11		12	

Prepared by: Nancy Palacios

The following SampIDs: 001A, 002A, 003A, 004A, 005A, 006A, 007A, 008A, 009A contain testgroup Multi Range_W.

Comments: Always send reports to: lab@pdenviro.com; Paul.King@pdenviro.com; pdking0000@aol.com

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Client Contact: Paul King
Contact's Email: lab@pdenviro.com; Paul.King@pdenviro.com; pdking0000@aol.com

Project: 0058; Xtra Oil Co
Comments: Always send reports to: lab@pdenviro.com; Paul.King@pdenviro.com; pdking0000@aol.com

Work Order: 1806808
QC Level: LEVEL 2
Date Logged: 6/15/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1806808-001A	MW1	Water	Multi-Range TPH(g,d,mo)	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	6/14/2018 14:50	5 days	Present	☐	
				1	1LA, Unpres	☐			Present	☐	
1806808-001B	MW1	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/14/2018 14:50	5 days	Present	☐	
1806808-002A	MW2	Water	Multi-Range TPH(g,d,mo)	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	6/13/2018 11:18	5 days		☐	
				1	1LA, Unpres	☐				☐	
1806808-002B	MW2	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2018 11:18	5 days		☐	
1806808-003A	MW3	Water	Multi-Range TPH(g,d,mo)	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	6/13/2018 9:50	5 days		☐	
				1	1LA, Unpres	☐				☐	
1806808-003B	MW3	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2018 9:50	5 days		☐	
1806808-004A	MW4	Water	Multi-Range TPH(g,d,mo)	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	6/14/2018 9:40	5 days		☐	
				1	1LA, Unpres	☐				☐	
1806808-004B	MW4	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/14/2018 9:40	5 days		☐	
1806808-005A	EW2	Water	Multi-Range TPH(g,d,mo)	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	6/13/2018 14:55	5 days		☐	
				1	1LA, Unpres	☐				☐	
1806808-005B	EW2	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2018 14:55	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL
Client Contact: Paul King
Contact's Email: lab@pdenviro.com; Paul.King@pdenviro.com; pdking0000@aol.com

Project: 0058; Xtra Oil Co
Comments: Always send reports to: lab@pdenviro.com; Paul.King@pdenviro.com; pdking0000@aol.com

Work Order: 1806808
QC Level: LEVEL 2
Date Logged: 6/15/2018

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1806808-006A	EW4	Water	Multi-Range TPH(g,d,mo)	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	6/14/2018 13:39	5 days		☐	
				1	1LA, Unpres	☐				☐	
1806808-006B	EW4	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/14/2018 13:39	5 days		☐	
1806808-007A	EW5	Water	Multi-Range TPH(g,d,mo)	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	6/14/2018 11:09	5 days		☐	
				1	1LA, Unpres	☐				☐	
1806808-007B	EW5	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/14/2018 11:09	5 days		☐	
1806808-008A	OW2	Water	Multi-Range TPH(g,d,mo)	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	6/14/2018 8:35	5 days		☐	
				1	1LA, Unpres	☐				☐	
1806808-008B	OW2	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/14/2018 8:35	5 days		☐	
1806808-009A	IW1	Water	Multi-Range TPH(g,d,mo)	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	☐	6/13/2018 13:37	5 days		☐	
				1	1LA, Unpres	☐				☐	
1806808-009B	IW1	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	6/13/2018 13:37	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

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CHAIN OF CUSTODY RECORD 1806808

PAGE 1 OF 1

P&D ENVIRONMENTAL, INC.
55 Santa Clara Ave., Suite 240
Oakland, CA 94610
(510) 658-6916

PROJECT NUMBER: 0058

PROJECT NAME: Xtra Oil Co. 1701 Park Street Alameda, CA

SAMPLED BY: (PRINTED & SIGNATURE) Lindsey Deschenes

SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION	NUMBER OF CONTAINERS	ANALYSIS(ES): TPH-Multirange (G,D,mo)	8260 with Fuel Oxygenates and Lead Scavengers						PRESERVATIVE	REMARKS
MW1	6/14/18	14:50	H_2O		7	X	X							Ice	Normal TAT
MW2	6/13/18	11:18	"		7	X	X							"	"
MW3	6/13/18	9:50	"		7	X	X							"	"
MW4	6/14/18	9:40	"		7	X	X							"	"
EW2	6/13/18	14:55	"		7	X	X							"	"
EW4	6/14/18	13:39	"		7	X	X							"	"
EW5	6/14/18	11:09	"		7	X	X							"	"
OW2	6/14/18	8:35	"		7	X	X							"	"
IW1	6/13/18	13:37	"		7	X	X							"	"

RELINQUISHED BY: (SIGNATURE)	DATE 6/15/18	TIME 1300	RECEIVED BY: (SIGNATURE) LAP	6.15.18 1300	Total No. of Samples (This Shipment) 9 / Total No. of Containers (This Shipment) 63	LABORATORY: McCampbell Analytical
RELINQUISHED BY: (SIGNATURE) LAP	DATE 6.15.18	TIME 1545	RECEIVED BY: (SIGNATURE) NPalacios	6.15.18 1545	LABORATORY CONTACT: Angela Rydelius	LABORATORY PHONE NUMBER: (925) 252-9262
RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)		SAMPLE ANALYSIS REQUEST SHEET ATTACHED: ( ) YES (✓) NO	

Results and billing to:
P&D Environmental, Inc.
lab@pdenviro.com

REMARKS:

5.2 WET

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Sample Receipt Checklist

Client Name:	**P & D Environmental**	Date and Time Received	**6/15/2018 15:45**
Project:	**0058; Xtra Oil Co**	Date Logged:	**6/15/2018**
		Received by:	Nancy Palacios
WorkOrder №:	**1806808** Matrix: Water	Logged by:	Nancy Palacios
Carrier:	Lorenzo Perez (MAI Courier)		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐		
Chain of custody signed when relinquished and received?	Yes	☑	No	☐		
Chain of custody agrees with sample labels?	Yes	☑	No	☐		
Sample IDs noted by Client on COC?	Yes	☑	No	☐		
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐		
Sampler's name noted on COC?	Yes	☑	No	☐		
COC agrees with Quote?	Yes	☐	No	☐	NA	☑

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA	☑
Shipping container/cooler in good condition?	Yes	☑	No	☐		
Samples in proper containers/bottles?	Yes	☑	No	☐		
Sample containers intact?	Yes	☑	No	☐		
Sufficient sample volume for indicated test?	Yes	☑	No	☐		

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	NA	☐
Samples Received on Ice?	Yes	☑	No	☐		
(Ice Type: WET ICE)						
Sample/Temp Blank temperature	Temp: 5.2°C				NA	☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☑	No	☐	NA	☐
Sample labels checked for correct preservation?	Yes	☑	No	☐		
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA	☑
UCMR Samples:						
pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes	☐	No	☐	NA	☑
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes	☐	No	☐	NA	☑

Comments: