

Xtra OIL COMPANY

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February 13, 2017

RECEIVED

By Alameda County Environmental Health 9:28 am, Feb 15, 2017

Ms. Karel Detterman
Alameda County Environmental Health Department
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

SUBJECT: SEMIANNUAL GROUNDWATER MONITORING AND SAMPLING REPORT
CERTIFICATION
County Case # RO 191
Xtra Oil Company
1701 Park Street
Alameda, CA

Dear Ms. Detterman:

P&D Environmental, Inc. has prepared the following document for the subject site:

- Semiannual Groundwater Monitoring and Sampling Report (July through December 2016) dated February 13, 2017 (document 0058.R32).

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

Should you have any questions, please do not hesitate to contact me at (510) 865-9506.

Sincerely,
Xtra Oil Company



Keith Simas

0058.L65

P&D ENVIRONMENTAL, INC.

55 Santa Clara Avenue, Suite 240

Oakland, CA 94610

(510) 658-6916

February 13, 2017

Report 0058.R32

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

SUBJECT: SEMIANNUAL GROUNDWATER MONITORING AND SAMPLING REPORT
(JULY THROUGH DECEMBER 2016)
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 November 22, 2016 for the reporting period of July through December 2016.

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 initiated 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.

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 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 sampling and sample results are provided in P&D's Post-Ozone Sparging Pilot Test Rebound Evaluation Report dated November 13, 2014 (document 0058.R27) and 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

Water levels were measured on November 22, 2016 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.

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. 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 it was set near the bottom of the well because the well has historically dewatered during purging.

Purging was performed at a flow rate of approximately 200 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. Field parameters 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 November 22, 2016 monitoring and sampling event petroleum hydrocarbon sheen was detected on the purge water from well MW-1. In addition, strong petroleum hydrocarbon odors were detected on the purge water from well MW-1 and slight petroleum hydrocarbon odors were detected on the purge water from wells MW-2, MW-4, EW-4, and EW-5. No petroleum hydrocarbon odors were detected on the purge water from wells MW-3, EW-2, OW-2 or IW-1.

Once the wells had been purged for a minimum of fifteen minutes 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 which 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 November 22, 2016 for groundwater monitoring wells MW-1, MW-3, and MW-4 ranged from 7.12 to 7.28 feet, and the measured depth to groundwater in wells MW-2, EW-2, EW-4, EW-5, OW-2, and IW-1 was 8.24, 7.01, 5.87, 5.95, 6.09, and 6.95 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 June 27, 2016 groundwater surface elevations. Based on the groundwater surface contours, the groundwater flow direction on November 22, 2016 was southeasterly, consistent with historical calculated groundwater flow directions at the site.

The calculated groundwater flow direction on November 22, 2016 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 November 22, 2016 well water levels with available June 27, 2016 well water levels shows that the water levels were lower on November 22, 2016 in all of the wells by amounts ranging from 0.03 to 0.08 feet, with the exception of well MW-3, where the water level was 0.07 feet higher than on June 27, 2016. Well MW-4 is located in the landscaping on the north-northeast side of the property along the fence line. Historical similar 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 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) and Methyl tertiary-Butyl Ether (MTBE), and benzene, toluene, ethylbenzene, total xylenes (BTEX), using EPA Method 5030B in conjunction with modified EPA Method 8015B and EPA Method 8021B; and for Volatile Organic Compounds (VOCs) including MTBE, 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 November 22, 2016. Air sparge points ASP-2 through ASP-6 were not monitored and sampled on November 22, 2016. 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 November 22, 2016 semiannual well sampling event:

- No analytes were detected in the groundwater sample collected from well MW-3, with the exception of 4-Isopropyl Toluene at a concentration of 0.82 micrograms per liter (ug/L).
- 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 1,700, 2,900, 1,300, 210, and 1,200 ug/L, respectively;
- TPH-G was detected in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-2, EW-4, EW-5, OW-2, and IW-1 at concentrations of 18,000, 3,500, 7,200, 2,000, 350, 5,700, 66, and 120 ug/L, respectively;
- Benzene was detected using EPA Method 8021B in wells MW-1, MW-2, MW-4, EW-2, EW-4 and EW-5 at concentrations of 4,700, 25, 560, 270, 67, and 1,400 ug/L, respectively, and was detected using EPA Method 8260B at concentrations of 3,900, 13, 410, 220, 49, and 1,000 ug/L, respectively.
- The remaining BTEX compounds were detected using EPA Method 8021B at concentrations ranging from 1.2 to 450 ug/L, and were detected using EPA Method 8260B at concentrations ranging from 2.2 to 330 ug/L.
- MTBE was detected using EPA Method 8260B in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-4, EW-5, and IW-1 at concentrations of 360,

- 3.9, 52, 11, 7.5, 230 and 1.5 ug/L, respectively, and was not detected using EPA Method 8021B.
- Tert-Butyl Alcohol (TBA) was detected using EPA Method 8260B in the groundwater samples collected from wells MW-1, MW-2, MW-4, EW-4, EW-5, and IW-1 at concentrations of 900, 16, 74, 9.1, 340 and 2.9 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, EW-2, and EW-5 as consisting of gasoline-range compounds and the sample from well MW-2 as consisting of aged diesel-range compounds and/or diesel-range compounds with no recognizable pattern.

Comparison of the November 22, 2016 sample results with detected concentrations from the previous sampling event on June 27, 2016 shows that all analyte concentrations in well MW-3 have remained not detected with the exception of 4-isopropyl toluene at a concentration of 0.82 ug/L. Additionally, all analyte concentrations in wells MW-2 and IW-1 remained not detected or decreased, with the exception of toluene in well IW-1, which increased. In wells MW-1, MW-4, EW-2, EW-4, EW-5, and OW2 all of the analyte concentrations have remained not detected or increased with the exception of toluene in well MW-4 and TBA in well EW-5, which both decreased.

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

A copy of this report will be uploaded to the ACDEH website, in accordance with ACDEH requirements. 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

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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.

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 12/31/17



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

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

Abbreviations and Notes:

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ft-MSL = feet above mean sea level

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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	11/22/2016	22.13*	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	11/22/2016	20.95*	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	11/22/2016	21.20*	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-MSL = feet above mean sea level

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	11/22/2016	21.55*	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	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

Table 2
Summary of Well Water Quality Field Parameters

Sample ID	Sample Date	D.O. (mg/L)	O.R.P. (mV)	pH	Electrical Conductivity (μ S/cm)	Temperature ($^{\circ}$ C)	Turbidity (NTU)
MW-1	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	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 (μ S/cm)	Temperature (C°)	Turbidity (NTU)
MW-3	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	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 (μ S/cm)	Temperature ($^{\circ}$ C)	Turbidity (NTU)
EW-2	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	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	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
OW-2	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	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.							
μ S/cm = microsiemens per centimeter.							
$^{\circ}$ 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	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 = 170	--
	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 = 10,000	--
	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 = 14,000	--
	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	3,300, 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	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,c,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 = 2?
	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 = 4.0
	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, MBK = 1.2, MIBK = 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	--
	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	--

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)	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	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	--
	11/12/2013	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	ND	--
	5/28/2008	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	2/27/2008	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	11/29/2007	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	8/29/2007	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	5/30/2007	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	3/12/2007	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
	11/6/2006	ND<50	ND<50	ND<250	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND	--
MW-4	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	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, 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 = 6
	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	--
EW-4	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	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	ND, except PCE = 86, TCE = 11	
	11/3/2014										Not Sampled.

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 (Continued)	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
Samples only analyzed for Dissolved Hexavalent Chromium											
	8/21/2014	4,800	940, c	ND<250	--	1,200	12	110	21	ND, except TBA = 290, MTBE = 190	--
	6/19/2014	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 = 8.3	--
Not Sampled.											
EW-5	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-Dichloropropene = 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
Not Sampled.											
	11/3/2014	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
Samples only analyzed for Dissolved Hexavalent Chromium											
	8/20/2014	16,000	2,200, c	ND< 250	--	1,200	140	950	1,100	ND, except TBA = 310, MTBE = 230	--
	6/19/2014	17,000	2,600, c	ND< 250	ND<800	2,400	110	1,100	1,700	ND, except TBA = 420, MTBE = 330	--
	11/19/2013	19,000	2,500, c	ND< 250	ND<300	1,500	100	1,700	2,100	ND, except TBA = 180, MTBE = 41	--
	5/16/2013	40,000	4,700, c	ND< 250	ND<250	700	1,300	2,500	5,900	ND, except TBA = 180, MTBE = 8.6	--
	12/11/2012	44,000	4,900, c	ND< 250	ND<1,000	710	2,400	2,300	8,800	ND, except TBA = 57, MTBE = 6.5	--
	6/21/2012	48,000	3,500, b,c	ND< 250	ND<400	930	3,400	2,400	9,000	ND, except TBA = 110, MTBE = 48	--
	11/28/2011	35,000	3,600, b,c	ND< 250	ND<450	1,000	2,700	850	11,000	ND, except TBA = 250, MTBE = 86	--
Not Sampled.											
OW-2	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
	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
Not Sampled.											
	11/3/2014	200	150, c	ND<250	--	0.62	0.70	6.7	6.8	ND, except TBA = 2.4, MTBE = 1.5	--
	10/3/2014	370, c	ND<250	ND<5.0	2.2	1.5	8.8	14	ND, except TBA = 5.1, MTBE = 2.1	--	
	8/20/2014	610	ND<100	ND<250	ND<5.0	0.57	0.88	ND<0.5	0.54	ND, except TBA = 7.6, MTBE = 0.99	--
	6/20/2014	85	ND<250	ND<5.0	0.57	0.88	ND<0.5	0.54	ND, except TBA = 39, MTBE = 3.1	--	
	11/19/2013	61	ND<50	ND<250	ND<5.0	3.2	0.70	0.94	3.5	ND, except TBA = 60, MTBE = 5.4	--
	5/16/2013	4,600	840, c	ND< 250	ND<45	110	46	160	590	ND, except TBA = 210, MTBE = 50	--
	12/11/2012	5,300	1,100, b,c	ND< 250	ND<130	350	170	24	790	ND, except TBA = 350, MTBE = 3.6	--
	6/21/2012	450	430, b,c	ND< 250	ND<5.0	0.87	0.71	ND<0.5	7.7	ND, except TBA = 210, MTBE = 50	--
	11/28/2011	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	--

Table 3
Summary of Well Groundwater Sample Laboratory Analytical Results

FIGURES

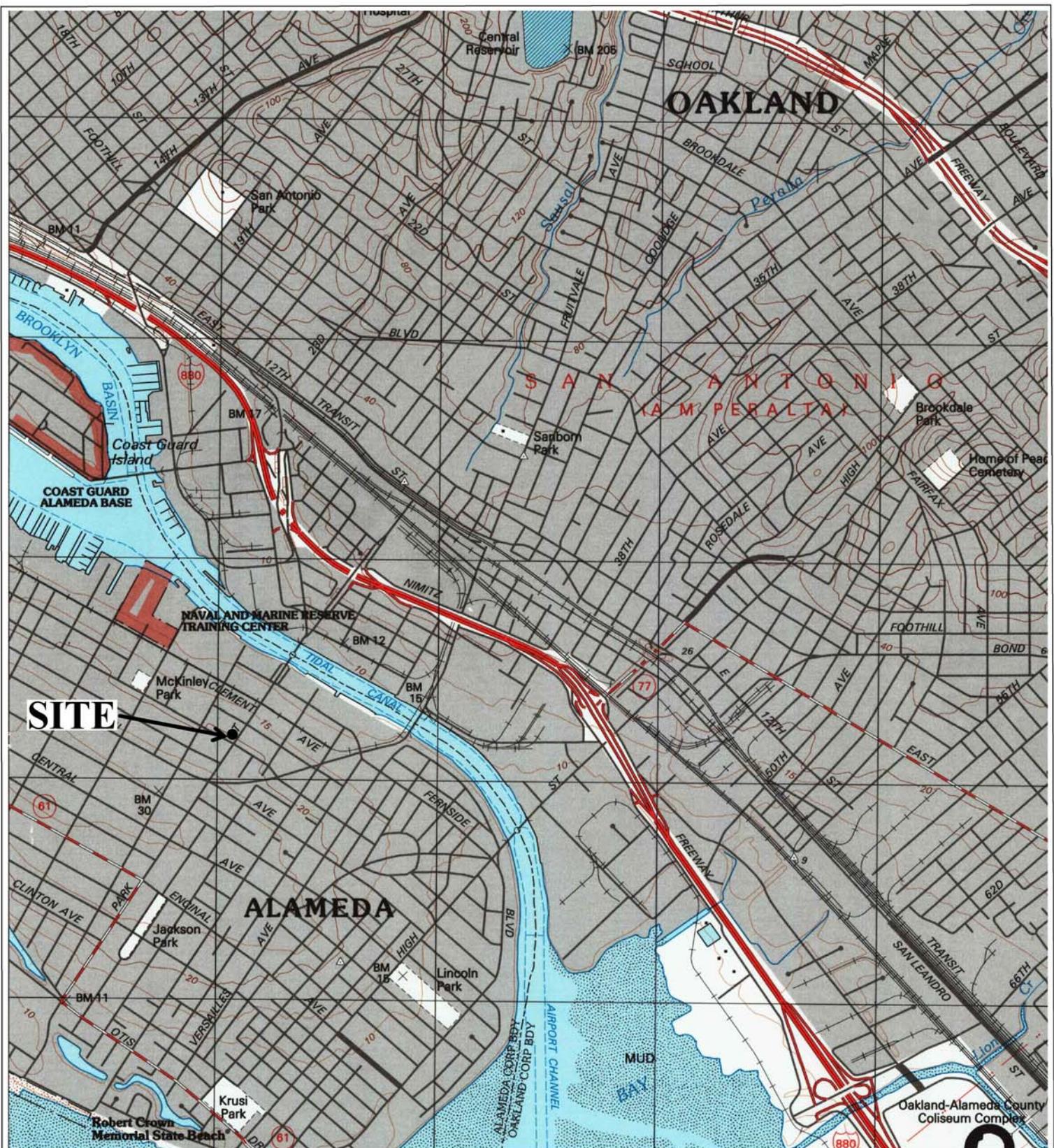


Figure 1
Site Location Map
Xtra Oil Company
1701 Park Street
Alameda, California

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



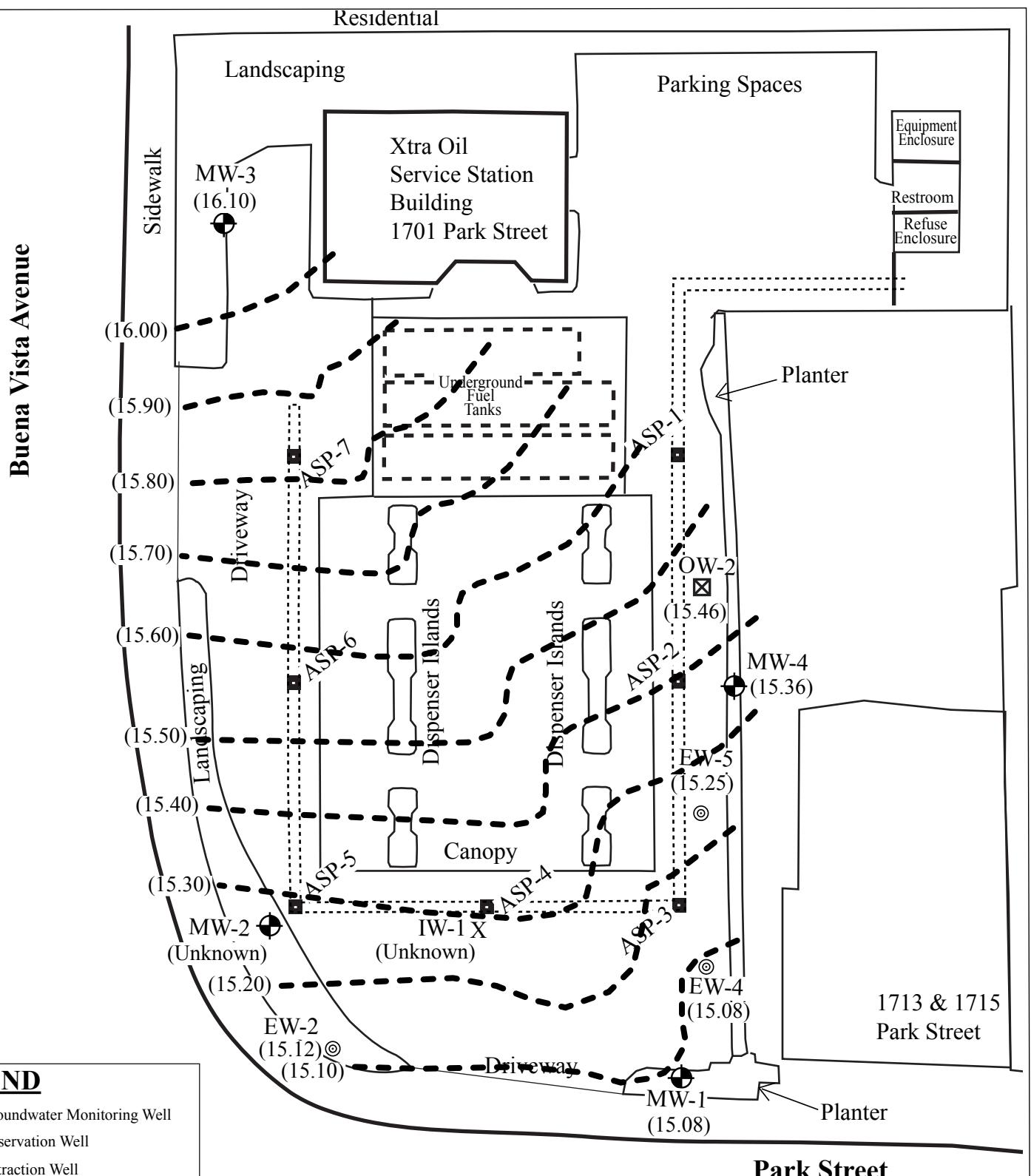


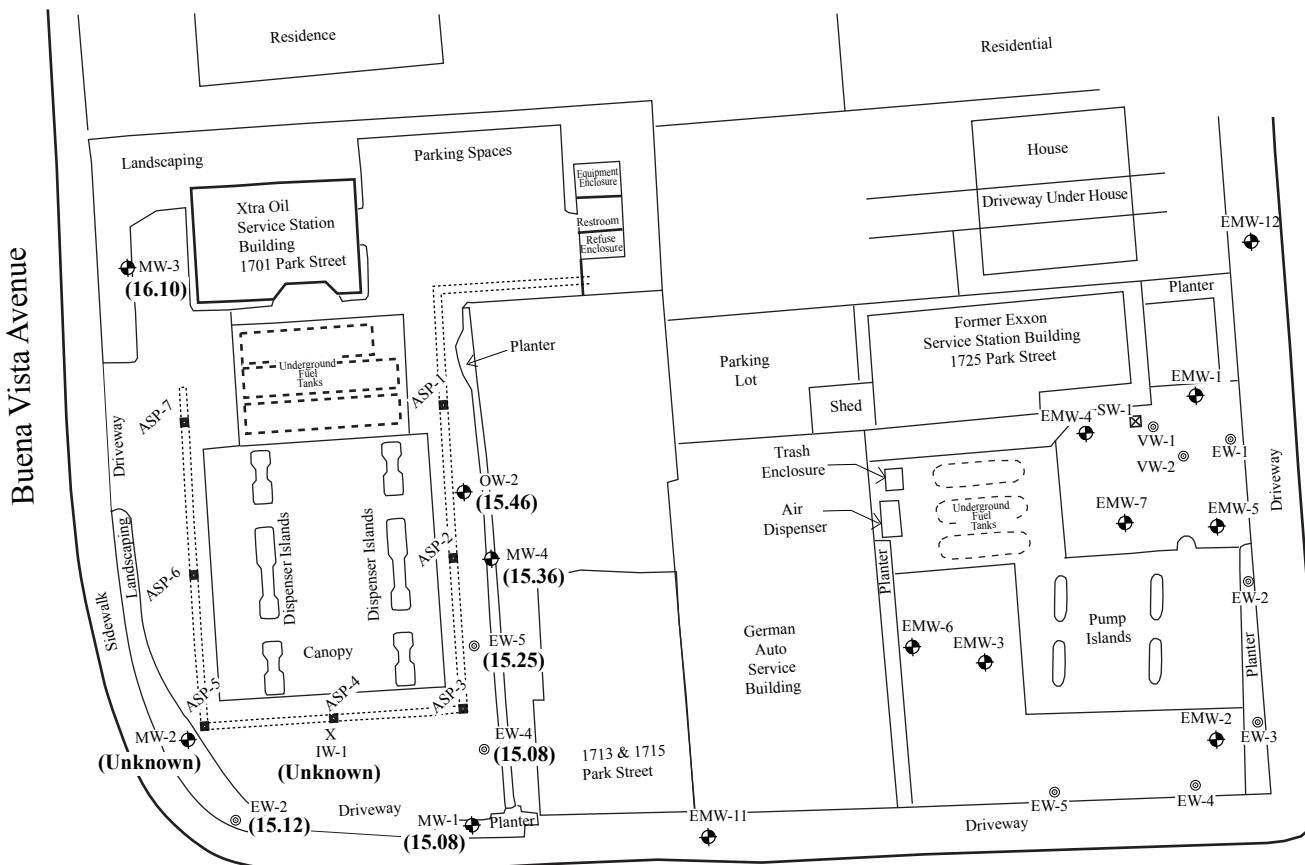
Figure 2
Site Plan Showing Well Locations and Groundwater Surface Elevations
Xtra Oil Company
1701 Park Street
Alameda, California

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

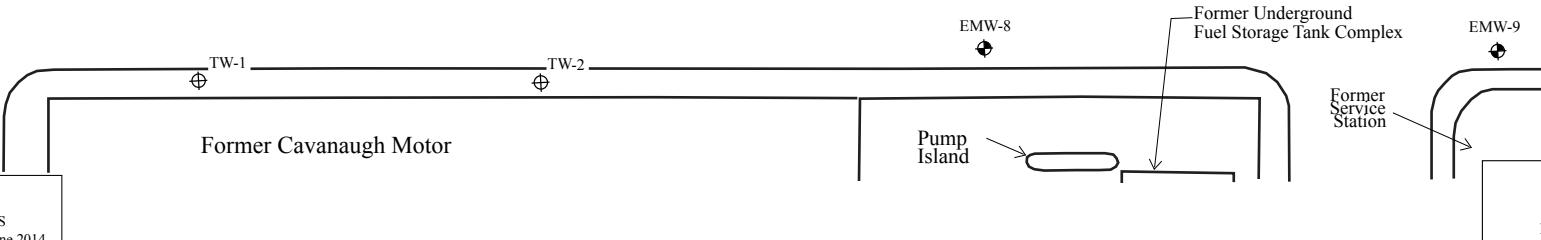




LEGEND

MW-4 or EMW-12 (17.26)	Groundwater Monitoring Well with Groundwater Surface Elevation In Feet On 11/22/16
VW-2 or EW-5	Extraction Well
ASP-7	Air Sparging Point
IW-1	Ozone Injection Well
SW-1	Destroyed Well
TW-3	Temporary Well
.....	Horizontal Vapor Extraction Trenching

APPROXIMATE HISTORICAL GROUNDWATER FLOW DIRECTION FOR SUBJECT SITE AND 1725 PARK STREET



1725 Park Street GROUNDWATER FLOW DIRECTIONS March 2004 Through April 2010

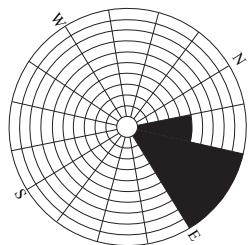
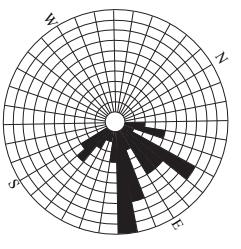


Figure 3
Site Vicinity Map Showing Groundwater Surface Elevations
1701 Park Street
Castro Valley, California

1701 Park Street GROUNDWATER FLOW DIRECTIONS November 1994 Through June 2014



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

0 25 50
Approximate Scale in Feet



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 (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (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)	NAPHTHALENE (ug/l)	BENZO-PYRENE (ug/l)	DO (ppm)	LAB		
MW-1	11/04/94	19.60	8.5	—	10.96	60000	6400	13000	4900	1300	5500	—	—	—	—	—	MCC		
QC-1 (c)	11/04/94	—	—	—	—	54000	—	12000	4500	1200	5200	—	—	—	—	—	MCC		
MW-1	01/19/95	19.60	6.10	—	13.50	—	—	—	—	—	—	—	—	—	—	—	MCC		
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	670	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		
MV-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	11/19/95	19.60	8.79	—	10.81	100000	5900	22000	17000	2100	8500	—	—	—	—	—	MCC		
QC-1 (c)	11/19/95	—	—	—	—	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	550	1100	4000	19000	—	—	—	—	—	MCC	
QC-1 (c)	06/13/96	—	—	—	—	48000	—	9300	560	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	550	1200	4100	—	—	—	—	—	MCC		
MW-1	05/09/97	19.60	7.39	—	12.21	80000	7500	14000	12000	1700	7600	14000	ND	280	ND	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	2800	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	3500	5500	2200	6700	5200	—	—	—	—	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	75000	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	—	12.89	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	—	12.89	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	5100	2100	9700	ND=500	—	—	—	—	1.1	MCC	
MW-1	05/02/03	19.60	5.60	—	14.00	48000	4600	1100	5900	1600	7300	ND=1000	—	—	—	—	—	MCC	
QC-1 (c)	05/02/03	—	—	—	—	—	—	1200	5800	1600	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=500	—	—	—	—	0.01	MCC	
MW-1	06/30/04	(e) 19.60	6.38	—	13.22	39000	3000	570	2900	2100	8200	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	1500	5700	ND=400	—	—	—	—	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	—</td						

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 (Feet)	DEPTH TO WATER (Feet)	PRODUCT THICKNESS (Feet)	GROUNDWATER ELEVATION (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)	NAPHTHALENE (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	
QC-1 (c)	09/23/96	—	—	—	—	33000	—	4700	170	1600	3900	2400	—	—	—	MCC	
MW-2	12/1/96	20.31	7.37	0.01	12.95	25000	—	1800	240	1400	5400	—	(d)	420	ND<10	MCC	
QC-1 (c)	12/1/96	—	—	—	—	25000	—	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	
MW-2	09/11/97	20.31	7.70	0.03	12.63	44000	1200000	3900	250	2400	7400	ND<610	—	—	—	6.5	
QC-1 (c)	09/11/97	—	—	—	—	47000	1100000	4000	420	2700	6300	920	—	—	—	MCC	
MW-2	12/1/97	20.31	7.87	0.03	12.46	32000	68000	4600	130	2200	5400	ND<470	—	—	—	6	
MW-2	03/11/98	20.31	5.61	0.18	14.84	44000	3800	5200	220	2000	5000	1100	—	—	—	6.2	
MW-2	06/23/98	20.31	6.74	0.02	13.59	75000	570000	5900	390	3100	8300	8400	—	—	—	6.3	
MW-2	12/01/98	20.31	7.30	—	13.01	36000	—	3800	73	1500	3900	2000	—	—	—	1.9	
MW-2	03/30/99	20.31	6.51	0.13	13.90	23000	23000	5000	100	610	870	21000	—	—	—	1.7	
MW-2	08/16/99	20.31	8.04	0.21	12.43	30000	—	5200	67	1100	1800	6000	—	—	—	2.6	
MW-2	12/31/99	20.31	8.20	0.01	12.12	43000	340000	7600	87	1400	2500	4300	—	—	—	9.0	
MW-2	03/31/00	20.31	6.29	0.01	14.03	26000	200000	4000	58	1100	1500	13000	—	—	—	8.1	
MW-2	07/14/00	20.31	8.02	—	12.29	35000	170000	5000	76	1100	2500	4900	—	—	—	3.9	
MW-2	10/04/00	20.31	8.62	—	11.69	22000	67000	4700	97	1300	1000	1900	—	—	—	1.8	
MW-2	12/21/00	20.31	7.70	—	12.61	23000	16000	7500	65	770	490	8600	220	ND<10	0.6		
MW-2	04/13/01	20.31	7.05	—	13.26	25000	21000	6400	79	790	670	8300	—	—	—	1.1	
MW-2	06/27/01	20.31	7.50	—	12.81	34000	10000	5400	100	520	370	6800	—	—	—	0.7	
MW-2	09/20/01	20.31	8.10	—	12.21	28000	64000	4600	78	670	500	2000	—	—	—	0.4	
MW-2	12/21/01	20.31	6.66	—	13.65	30000	18000	3000	52	1700	970	ND<100	—	—	—	0.9	
MW-2	02/04/02	20.31	6.75	—	13.56	17000	35000	3600	ND<50	960	500	1200	—	—	—	1.3	
MW-2	05/07/02	20.31	7.20	—	13.11	16000	59000	3500	43	520	220	3100	—	—	—	1.0	
MW-2	08/22/02	20.31	7.96	—	12.35	15000	60000	2700	30	460	220	700	—	—	—	4.2	
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	
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	86	ND<400	—	—	—	0.8	
MW-2	11/14/03	20.31	7.85	—	12.46	12000	13000	1700	29	600	100	ND<600	—	—	—	0.7	
MW-2	03/01/04	20.31	6.10	—	14.21	17000	43000	3900	100	670	430	1900	—	—	—	0.42	
MW-2	06/30/04 (e)	20.31	7.61	—	12.70	14000	12000	3800	33	380	72	1800	—	—	—	0.42	
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	3600	ND<25	400	58	ND<900	—	—	—	0.8	
MW-2	06/14/05	20.31	6.92	—	13.38	15000	53000	2100	31	310	49	530	—	—	—	2.6	
MW-2	09/12/05	20.31	8.25	0.01	12.05	10000	11000	2600	30	200	ND<10	660	—	—	—	MCC	
MW-2	01/04/06 (g)	20.31	6.45	<0.01	13.26	7300	14000	1600	18	180	47	ND<250	—	—	—	MCC	
MW-2	04/04/06 (h)	20.31	6.14	—	14.17	9500	130000	2200	25	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	ND<0.5	—	—	—	MCC	
MW-3	01/11/95	20.57	5.67	—	14.90	—	—	—	—	—	—	—	—	—	—	MCC	
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	ND<0.5	—	—	—	MCC	
MW-3	05/26/96	20.57	6.24	—	14.33	.91	ND<50	28.0	12.0	2.1	6.5	—	—	—	—	MCC	
MW-3	08/30/96	20.57	8.27	—	12.30	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	4.6	
MW-3	11/16/96	20.57	8.82	—	11.75	ND<50	ND<50	ND<0.5	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	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<0.5	—	—	—	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<0.5	—	—	—	4.9	
MW-3	12/19/96	20.57	6.59	—	13.98	ND<50	—	—	—	—	—	—	—	—	—	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<0.5	—	—	—	3.3	
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<0.5	—	—	—	7	
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<0.5	—	—	—	6.5	
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<50	—	—	—	6.1	
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<0.5	—	—	—	5.7	
MW-3	12/01/98	20.57	6.74	—	13.83	ND<50	—	—	—	—	—	—	—	—	—	4	
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<0.5	—	—	—	4.6	
MW-3	08/16/99	20.57	7.67	—	12.90	ND<50	—	—	—	—	—	—	—	—	—	2.7	
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<0.5	—	—	—	9.0	
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<0.5	—	—	—	2.8	
MW-3	07/14/00	20.57	7.64	—	12.93	68	ND<50	0.89	1.7	2.1	9.5	ND<50	—	—	—	2.1	
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<0.5	—	—	—	2.0	
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<0.5	—	—	—	1.4	
MW-3	04/19/01	20.57	6.38	—	14.19	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	1.3	
MW-3	06/27/01																

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	TPH-D	B	T	E	X	MTBE	OTHER SVOCs	NAPHTHALENE	BENZO-PYRENE	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	—	—	—	0.6	MCC	
MW-3	03/10/04	20.57	5.17	—	15.40	ND<50	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<5.0	—	—	—	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	—	—	—	2.7	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	—	—	—	3.3	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	—	—	—	—	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	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	12/21/99	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	2800	9600	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 (c)	02/07/03	—	—	—	—	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 (c)	11/14/03	—	—	—	—	—	—	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 (c)	03/01/04	—	—	—	—	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	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<400	—	—	—	2.1	MCC	
MW-4	09/12/05	19.69	7.84	—	11.85	24000	4600	1400	600	350	9300	1100	—	—	—	2.2	MCC	
MW-4	01/04/06 (g)	19.69	4.65	—	15.04	20000	2800	740	350	9300	29000	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	380	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 (f)	11/04/94	—	—	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	MCC
QC-2 (f)	02/24/95	—	—	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	MCC
QC-2 (f)	05/25/95	—	—	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	MCC
QC-2 (f)	08/30/95	—	—	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	MCC
QC-2 (f)	11/16/95	—	—	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	MCC
QC-2 (f)	03/20/96	—	—	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	MCC
QC-2 (f)	06/13/96	—	—	—	—	—	—	ND<50	—	ND<0.5	ND<0.5	ND<0.5	ND<0.5	—	—	—	—	MCC

ABBREVIATIONS:

- (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-methylnaphthalene 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 exceeding slow, not to be used in preparing contours.

APPENDIX B

**GROUNDWATER MONITORING/
WELL PURGING DATA SHEETS**

P&D Environmental, Inc.

Site Name XTRA OIL, 1701 PARK ST., ALAMEDA

Well No. MW1

Job Number 0058

Date 11-22-16

TOC to Water (ft.) 7.28

Sheen *YES*

Well Depth (ft.) 19.2

Free Product Thickness 1/8"

Well Diameter 2"

Sample Collection Method TERIST

Flow Rate (mL/minute) 200

DEDICATED PETUB

Start Purge Time 1323

NOTES

Stability Parameters

pH = +/- 0.1

Sp. Conductivity = +/- 3%

Turbidity = +/- 10%

D.O. = +/- 10%

D.O. = +/- 10%

PE THINING INLET SET AT 15.0 FT

MN 1 COLLECTED AT 1345

SHE ODES AND SHEEN).

THE SHEPHERD AND SHEEP.

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.) 8.24

Well Depth (ft.) 15.8 (with ADDED COUPLING)

Well Diameter 2"

Flow Rate (mL/minute) 200

Start Purge Time 1045

Well No. MW2

Date 11-22-16

Sheen NON

Free Product Thickness 1/8

Sample Collection Method PERISTALTIC PUMP

↑ NEW UNUSED PE TUBING

NOTES

Stability Parameters

pH = +/- 0.1

Sp. Conductivity = +/- 3%

Turbidity = \pm 10%

Turbidity = +/- 10

D.O. = +/- 10%

DE TUBING INLET AT 12.0 FT

MW2 COLLECTED AT 1105

SIGHT 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.) 7.25

Well Depth (ft.) 19.1

Well Diameter 2"

Flow Rate (mL/minute) 200

Start Purge Time 0959

Well No. 4W3

Date 11-22-16

Sheen NONE

Free Product Thickness _____

Sample Collection Method PERISTALTIC PUMP
& DEDICATED PET TUBING

NOTES

Stability Parameters

p.H. = +/- 0.1

Sp. Conductivity = +/- 3%

Turbidity = +/- 10%

Turbidity = +/-

D.O. = +/- 10%

^{INLET}
PE TUBING SET AT 16 FT
MW3 COLLECTED AT 1025
NO ADOR 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.) 7.08

Well Depth (ft.) 10.8

Well Diameter 2"

Flow Rate (mL/minute) 200

Start Purge Time 0903

Start Purge Time 0903

Well No. MW4

Date 11-23-16

Sheen NONE

Free Product Thickness _____

Sample Collection Method PERISTALTIC PUMP
AND DEDICATED PET TUBING

NOTES

Stability Parameters

pH = +/- 0.1

Sp. Conductivity = +/- 3%

Turbidity = +/- 10%

Turbidity = +/- 10%

D.O. = +/- 10%

PE TUBING INLET AT 10.0 ft

MW 4 collected at 0930

SLIGHT ODOR, IRIDESCENT.

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

Site Name XTRA OIL, 1701 PARK ST., ALAMEDA

Well No. EW2

Job Number 0058

Date 11-22-16

TOC to Water (ft.) 7.01

Sheen NONE

Well Depth (ft.) 23.5

Free Product Thickness _____ Ø

Well Diameter 4"

Sample Collection Method PERIST

Flow Rate (mL/minute) 200

NEW UNUSED PET

Start Purge Time 11:29

NOTES

Stability Parameters

pH = +/- 0.1

Sp. Conductivity = +/- 3%

Turbidity = +/- 10%

Turbidity = +/- 10%

D.O. = +/- 10%

PE TUBING INLET AT 20.0 FT

EW2 COLLECTED AT 1155

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.) 5.84

Well Depth (ft.) 21.8

Well Diameter 4"

Flow Rate (mL/minute) 200

Start Purge Time 1048

Start Purge Time 1048

Well No. EW4

Date 11-23-14

Sheen NONE

Free Product Thickness 0

Sample Collection Method PERISTALTIC PUMP & NEW UNILED PET TUBING.

NOTES

Stability Parameters

pH = +/- 0.1

Sp. Conductivity = +/- 3%

Turbidity = +/- 10%

Turbidity = +/- 10

D.O. = +/- 10%

PE TUBING SET AT 19.0 FT

EN4 COLLECTED AT 1110

SLIGHT GEOR, NO SHEEN.

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

Site Name XTRA OIL, 2701 ARK ST, ALAMEDA

Well No. EW5

Job Number 0058

Date 11-23-16

TOC to Water (ft.) 5.92

Sheen NONE

Well Depth (ft.) 23.7

Free Product Thickness 0

Well Diameter $\frac{7}{16}$ "

Sample Collection Method

Flow Rate (mL/minute) 20

1 NEW UNLINED PEG

Start Purge Time 1000

NOTES

Stability Parameters

Stability Parameters

Sp. Conductivity = +/- 3%

Turbidity = $\pm 10\%$

Turbidity = +/-

PE TUBING INLET SET AT 20.0 FT

EW5 COLLECTED AT 1020

SLIGHT ODR. NO SHEEN.

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

Site Name XTRA OIL, 1701 PARK ST, ALAMEDA

Well No. 0W2

Job Number 0058

Date 11-23-16

TOC to Water (ft.) 6.07

Sheen NONE

Well Depth (ft.) 18.5

Free Product Thickness 1/8

Well Diameter 4"

Sample Collection Method PERIST

Flow Rate (mL/minute) 200

~~NEW UNUSED PETU~~

Start Purge Time 0819

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)
0820	200	6.18	6.27	413.2	18.0	2.09	53.9	0.00
0823	800	6.20	6.11	414.0	18.2	1.40	43.8	0.00
0826	1400	6.22	6.10	414.4	18.2	0.95	39.6	0.00
0829	2,000	6.24	6.12	415.5	18.2	0.73	37.3	0.00
0832	2,600	6.24	6.19	415.8	18.3	0.60	36.6	0.00
0835	3,200	6.25	6.17	415.5	18.3	0.56	36.1	0.00

NOTES

Stability Parameters

pH = +/- 0.1

Sn Conductivity = +/- 3%

Turbidity = $\pm/ \pm 10\%$

D.O. = +/- 10%

D.O. = +/- 10%

PE TUBING INLET SET AT 15.0 ft.

DW2 COLLECTED AT 0840'

NO ODOR OR SHEEN

P&D Environmental, Inc.

Site Name XTRA OIL 1701 PARK ST., ALAMEDA

Job Number 0058

TOC to Water (ft.) 6.95

Well Depth (ft.) 23.1

Well Diameter 2"

Flow Rate (mL/minute) 200

Start Purge Time 1245

Start Purge Time 1245

Well No. TW1

Date 11-22-16

Sheen NONE

Free Product Thickness _____

Sample Collection Method PERISTALTIC PUMP

DEDICATED PET LIVING

Time	Vol. Purged (mL)	Depth to Water (ft.)	pH	Electrical Conductivity ($\mu\text{S}/\text{cm}$)	Temperature ($^{\circ}\text{C}$)	Dissolved Oxygen (mg/L)	Oxidation/ Reduction Potential (mV)	Turbidity (NTU)
1246	200	7.56	7.19	193.2	23.0	0.71	-26.4	0.00
1249	800	8.07	7.04	190.1	23.1	0.45	-37.2	0.00
1252	1,400	8.47	7.04	234.3	23.1	0.34	-60.3	0.00
1255	2,000	8.73	6.96	300.0	22.9	0.28	-49.2	0.00
1258	2,600	8.91	6.92	333.0	23.0	0.27	-38.5	0.00
1301	3,200	9.08	6.91	340.1	23.0	0.27	-37.3	0.00

NOTES

Stability Parameters

pH = +/- 0.1

Sn Conductivity = +/- 3%

Turbidity = +/- 10%

Turbidity = +/- 10

D.O. = +/- 10%

PE TUBING INLET SET AT 20.0 FT

IW1 COLLECTED AT 1310

NO ODOR OR SHEEN ON SAMPLE.

APPENDIX C

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION



McCampbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1611B32

Report Created for: P & D Environmental

55 Santa Clara, Ste.240
Oakland, CA 94610

Project Contact: Michael Deschenes

Project P.O.:

Project Name: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

Project Received: 11/23/2016

Analytical Report reviewed & approved for release on 12/02/2016 by:

Angela Rydelius,
Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: P & D Environmental
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA
WorkOrder: 1611B32

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
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)



Glossary of Terms & Qualifier Definitions

Client: P & D Environmental

Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32

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
d17 Reporting limit for MTBE raised due to co-elution with non-target peaks.
e3/e2 aged diesel is significant; and/or diesel range compounds are significant; no recognizable pattern
e4 gasoline range compounds are significant.

Quality Control Qualifiers

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



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

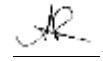
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	1611B32-001B	Water	11/22/2016 13:45	GC18	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		1000	100	11/30/2016 10:35
tert-Amyl methyl ether (TAME)	ND		50	100	11/30/2016 10:35
Benzene	3900		50	100	11/30/2016 10:35
Bromobenzene	ND		50	100	11/30/2016 10:35
Bromoform	ND		50	100	11/30/2016 10:35
Bromomethane	ND		50	100	11/30/2016 10:35
Bromodichloromethane	ND		50	100	11/30/2016 10:35
2-Butanone (MEK)	ND		200	100	11/30/2016 10:35
t-Butyl alcohol (TBA)	900		200	100	11/30/2016 10:35
n-Butyl benzene	ND		50	100	11/30/2016 10:35
sec-Butyl benzene	ND		50	100	11/30/2016 10:35
tert-Butyl benzene	ND		50	100	11/30/2016 10:35
Carbon Disulfide	ND		50	100	11/30/2016 10:35
Carbon Tetrachloride	ND		50	100	11/30/2016 10:35
Chlorobenzene	ND		50	100	11/30/2016 10:35
Chloroethane	ND		50	100	11/30/2016 10:35
Chloroform	ND		50	100	11/30/2016 10:35
Chloromethane	ND		50	100	11/30/2016 10:35
2-Chlorotoluene	ND		50	100	11/30/2016 10:35
4-Chlorotoluene	ND		50	100	11/30/2016 10:35
Dibromochloromethane	ND		50	100	11/30/2016 10:35
1,2-Dibromo-3-chloropropane	ND		20	100	11/30/2016 10:35
1,2-Dibromoethane (EDB)	ND		50	100	11/30/2016 10:35
Dibromomethane	ND		50	100	11/30/2016 10:35
1,2-Dichlorobenzene	ND		50	100	11/30/2016 10:35
1,3-Dichlorobenzene	ND		50	100	11/30/2016 10:35
1,4-Dichlorobenzene	ND		50	100	11/30/2016 10:35
Dichlorodifluoromethane	ND		50	100	11/30/2016 10:35
1,1-Dichloroethane	ND		50	100	11/30/2016 10:35
1,2-Dichloroethane (1,2-DCA)	ND		50	100	11/30/2016 10:35
1,1-Dichloroethene	ND		50	100	11/30/2016 10:35
cis-1,2-Dichloroethene	ND		50	100	11/30/2016 10:35
trans-1,2-Dichloroethene	ND		50	100	11/30/2016 10:35
1,2-Dichloropropane	ND		50	100	11/30/2016 10:35
1,3-Dichloropropane	ND		50	100	11/30/2016 10:35
2,2-Dichloropropane	ND		50	100	11/30/2016 10:35

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

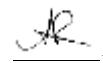
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	1611B32-001B	Water	11/22/2016 13:45	GC18	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		50	100	11/30/2016 10:35
cis-1,3-Dichloropropene	ND		50	100	11/30/2016 10:35
trans-1,3-Dichloropropene	ND		50	100	11/30/2016 10:35
Diisopropyl ether (DIPE)	ND		50	100	11/30/2016 10:35
Ethylbenzene	130		50	100	11/30/2016 10:35
Ethyl tert-butyl ether (ETBE)	ND		50	100	11/30/2016 10:35
Freon 113	ND		50	100	11/30/2016 10:35
Hexachlorobutadiene	ND		50	100	11/30/2016 10:35
Hexachloroethane	ND		50	100	11/30/2016 10:35
2-Hexanone	ND		50	100	11/30/2016 10:35
Isopropylbenzene	ND		50	100	11/30/2016 10:35
4-Isopropyl toluene	ND		50	100	11/30/2016 10:35
Methyl-t-butyl ether (MTBE)	360		50	100	11/30/2016 10:35
Methylene chloride	ND		50	100	11/30/2016 10:35
4-Methyl-2-pentanone (MIBK)	ND		50	100	11/30/2016 10:35
Naphthalene	61		50	100	11/30/2016 10:35
n-Propyl benzene	120		50	100	11/30/2016 10:35
Styrene	ND		50	100	11/30/2016 10:35
1,1,1,2-Tetrachloroethane	ND		50	100	11/30/2016 10:35
1,1,2,2-Tetrachloroethane	ND		50	100	11/30/2016 10:35
Tetrachloroethene	ND		50	100	11/30/2016 10:35
Toluene	59		50	100	11/30/2016 10:35
1,2,3-Trichlorobenzene	ND		50	100	11/30/2016 10:35
1,2,4-Trichlorobenzene	ND		50	100	11/30/2016 10:35
1,1,1-Trichloroethane	ND		50	100	11/30/2016 10:35
1,1,2-Trichloroethane	ND		50	100	11/30/2016 10:35
Trichloroethene	ND		50	100	11/30/2016 10:35
Trichlorofluoromethane	ND		50	100	11/30/2016 10:35
1,2,3-Trichloropropane	ND		50	100	11/30/2016 10:35
1,2,4-Trimethylbenzene	ND		50	100	11/30/2016 10:35
1,3,5-Trimethylbenzene	ND		50	100	11/30/2016 10:35
Vinyl Chloride	ND		50	100	11/30/2016 10:35
Xylenes, Total	200		50	100	11/30/2016 10:35

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	1611B32-001B	Water	11/22/2016 13:45	GC18	130586
Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)		Limits		
Dibromofluoromethane	98		70-130		11/30/2016 10:35
Toluene-d8	100		70-130		11/30/2016 10:35
4-BFB	86		70-130		11/30/2016 10:35

Analyst(s): HK

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

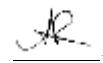
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	1611B32-002B	Water	11/22/2016 11:05	GC16	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		33	3.3	11/30/2016 20:42
tert-Amyl methyl ether (TAME)	ND		1.7	3.3	11/30/2016 20:42
Benzene	13		1.7	3.3	11/30/2016 20:42
Bromobenzene	ND		1.7	3.3	11/30/2016 20:42
Bromoform	ND		1.7	3.3	11/30/2016 20:42
Bromomethane	ND		1.7	3.3	11/30/2016 20:42
Bromodichloromethane	ND		1.7	3.3	11/30/2016 20:42
2-Butanone (MEK)	ND		6.7	3.3	11/30/2016 20:42
t-Butyl alcohol (TBA)	16		6.7	3.3	11/30/2016 20:42
n-Butyl benzene	12		1.7	3.3	11/30/2016 20:42
sec-Butyl benzene	5.3		1.7	3.3	11/30/2016 20:42
tert-Butyl benzene	ND		1.7	3.3	11/30/2016 20:42
Carbon Disulfide	ND		1.7	3.3	11/30/2016 20:42
Carbon Tetrachloride	ND		1.7	3.3	11/30/2016 20:42
Chlorobenzene	ND		1.7	3.3	11/30/2016 20:42
Chloroethane	ND		1.7	3.3	11/30/2016 20:42
Chloroform	ND		1.7	3.3	11/30/2016 20:42
Chloromethane	ND		1.7	3.3	11/30/2016 20:42
2-Chlorotoluene	ND		1.7	3.3	11/30/2016 20:42
4-Chlorotoluene	ND		1.7	3.3	11/30/2016 20:42
Dibromochloromethane	ND		1.7	3.3	11/30/2016 20:42
1,2-Dibromo-3-chloropropane	ND		0.67	3.3	11/30/2016 20:42
1,2-Dibromoethane (EDB)	ND		1.7	3.3	11/30/2016 20:42
Dibromomethane	ND		1.7	3.3	11/30/2016 20:42
1,2-Dichlorobenzene	ND		1.7	3.3	11/30/2016 20:42
1,3-Dichlorobenzene	ND		1.7	3.3	11/30/2016 20:42
1,4-Dichlorobenzene	ND		1.7	3.3	11/30/2016 20:42
Dichlorodifluoromethane	ND		1.7	3.3	11/30/2016 20:42
1,1-Dichloroethane	ND		1.7	3.3	11/30/2016 20:42
1,2-Dichloroethane (1,2-DCA)	ND		1.7	3.3	11/30/2016 20:42
1,1-Dichloroethene	ND		1.7	3.3	11/30/2016 20:42
cis-1,2-Dichloroethene	ND		1.7	3.3	11/30/2016 20:42
trans-1,2-Dichloroethene	ND		1.7	3.3	11/30/2016 20:42
1,2-Dichloropropane	ND		1.7	3.3	11/30/2016 20:42
1,3-Dichloropropane	ND		1.7	3.3	11/30/2016 20:42
2,2-Dichloropropane	ND		1.7	3.3	11/30/2016 20:42

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	1611B32-002B	Water	11/22/2016 11:05	GC16	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		1.7	3.3	11/30/2016 20:42
cis-1,3-Dichloropropene	ND		1.7	3.3	11/30/2016 20:42
trans-1,3-Dichloropropene	ND		1.7	3.3	11/30/2016 20:42
Diisopropyl ether (DIPE)	ND		1.7	3.3	11/30/2016 20:42
Ethylbenzene	6.7		1.7	3.3	11/30/2016 20:42
Ethyl tert-butyl ether (ETBE)	ND		1.7	3.3	11/30/2016 20:42
Freon 113	ND		1.7	3.3	11/30/2016 20:42
Hexachlorobutadiene	ND		1.7	3.3	11/30/2016 20:42
Hexachloroethane	ND		1.7	3.3	11/30/2016 20:42
2-Hexanone	ND		1.7	3.3	11/30/2016 20:42
Isopropylbenzene	25		1.7	3.3	11/30/2016 20:42
4-Isopropyl toluene	ND		1.7	3.3	11/30/2016 20:42
Methyl-t-butyl ether (MTBE)	3.9		1.7	3.3	11/30/2016 20:42
Methylene chloride	ND		1.7	3.3	11/30/2016 20:42
4-Methyl-2-pentanone (MIBK)	ND		1.7	3.3	11/30/2016 20:42
Naphthalene	42		1.7	3.3	11/30/2016 20:42
n-Propyl benzene	69		1.7	3.3	11/30/2016 20:42
Styrene	ND		1.7	3.3	11/30/2016 20:42
1,1,1,2-Tetrachloroethane	ND		1.7	3.3	11/30/2016 20:42
1,1,2,2-Tetrachloroethane	ND		1.7	3.3	11/30/2016 20:42
Tetrachloroethene	ND		1.7	3.3	11/30/2016 20:42
Toluene	3.1		1.7	3.3	11/30/2016 20:42
1,2,3-Trichlorobenzene	ND		1.7	3.3	11/30/2016 20:42
1,2,4-Trichlorobenzene	ND		1.7	3.3	11/30/2016 20:42
1,1,1-Trichloroethane	ND		1.7	3.3	11/30/2016 20:42
1,1,2-Trichloroethane	ND		1.7	3.3	11/30/2016 20:42
Trichloroethene	ND		1.7	3.3	11/30/2016 20:42
Trichlorofluoromethane	ND		1.7	3.3	11/30/2016 20:42
1,2,3-Trichloropropane	ND		1.7	3.3	11/30/2016 20:42
1,2,4-Trimethylbenzene	ND		1.7	3.3	11/30/2016 20:42
1,3,5-Trimethylbenzene	2.7		1.7	3.3	11/30/2016 20:42
Vinyl Chloride	ND		1.7	3.3	11/30/2016 20:42
Xylenes, Total	3.5		1.7	3.3	11/30/2016 20:42

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	1611B32-002B	Water	11/22/2016 11:05	GC16	130586
Analyses	Result		RL	DF	Date Analyzed
Surrogates	REC (%)		Limits		
Dibromofluoromethane	107		70-130		11/30/2016 20:42
Toluene-d8	105		70-130		11/30/2016 20:42
4-BFB	109		70-130		11/30/2016 20:42

Analyst(s): KF

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

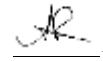
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW3	1611B32-003B	Water	11/22/2016 10:25	GC18	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	11/30/2016 11:54
tert-Amyl methyl ether (TAME)	ND		0.50	1	11/30/2016 11:54
Benzene	ND		0.50	1	11/30/2016 11:54
Bromobenzene	ND		0.50	1	11/30/2016 11:54
Bromoform	ND		0.50	1	11/30/2016 11:54
Bromochloromethane	ND		0.50	1	11/30/2016 11:54
Bromodichloromethane	ND		0.50	1	11/30/2016 11:54
Bromoform	ND		0.50	1	11/30/2016 11:54
Bromomethane	ND		0.50	1	11/30/2016 11:54
2-Butanone (MEK)	ND		2.0	1	11/30/2016 11:54
t-Butyl alcohol (TBA)	ND		2.0	1	11/30/2016 11:54
n-Butyl benzene	ND		0.50	1	11/30/2016 11:54
sec-Butyl benzene	ND		0.50	1	11/30/2016 11:54
tert-Butyl benzene	ND		0.50	1	11/30/2016 11:54
Carbon Disulfide	ND		0.50	1	11/30/2016 11:54
Carbon Tetrachloride	ND		0.50	1	11/30/2016 11:54
Chlorobenzene	ND		0.50	1	11/30/2016 11:54
Chloroethane	ND		0.50	1	11/30/2016 11:54
Chloroform	ND		0.50	1	11/30/2016 11:54
Chloromethane	ND		0.50	1	11/30/2016 11:54
2-Chlorotoluene	ND		0.50	1	11/30/2016 11:54
4-Chlorotoluene	ND		0.50	1	11/30/2016 11:54
Dibromochloromethane	ND		0.50	1	11/30/2016 11:54
1,2-Dibromo-3-chloropropane	ND		0.20	1	11/30/2016 11:54
1,2-Dibromoethane (EDB)	ND		0.50	1	11/30/2016 11:54
Dibromomethane	ND		0.50	1	11/30/2016 11:54
1,2-Dichlorobenzene	ND		0.50	1	11/30/2016 11:54
1,3-Dichlorobenzene	ND		0.50	1	11/30/2016 11:54
1,4-Dichlorobenzene	ND		0.50	1	11/30/2016 11:54
Dichlorodifluoromethane	ND		0.50	1	11/30/2016 11:54
1,1-Dichloroethane	ND		0.50	1	11/30/2016 11:54
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	11/30/2016 11:54
1,1-Dichloroethene	ND		0.50	1	11/30/2016 11:54
cis-1,2-Dichloroethene	ND		0.50	1	11/30/2016 11:54
trans-1,2-Dichloroethene	ND		0.50	1	11/30/2016 11:54
1,2-Dichloropropane	ND		0.50	1	11/30/2016 11:54
1,3-Dichloropropane	ND		0.50	1	11/30/2016 11:54
2,2-Dichloropropane	ND		0.50	1	11/30/2016 11:54

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

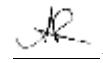
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW3	1611B32-003B	Water	11/22/2016 10:25	GC18	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		0.50	1	11/30/2016 11:54
cis-1,3-Dichloropropene	ND		0.50	1	11/30/2016 11:54
trans-1,3-Dichloropropene	ND		0.50	1	11/30/2016 11:54
Diisopropyl ether (DIPE)	ND		0.50	1	11/30/2016 11:54
Ethylbenzene	ND		0.50	1	11/30/2016 11:54
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	11/30/2016 11:54
Freon 113	ND		0.50	1	11/30/2016 11:54
Hexachlorobutadiene	ND		0.50	1	11/30/2016 11:54
Hexachloroethane	ND		0.50	1	11/30/2016 11:54
2-Hexanone	ND		0.50	1	11/30/2016 11:54
Isopropylbenzene	ND		0.50	1	11/30/2016 11:54
4-Isopropyl toluene	0.82		0.50	1	11/30/2016 11:54
Methyl-t-butyl ether (MTBE)	ND		0.50	1	11/30/2016 11:54
Methylene chloride	ND		0.50	1	11/30/2016 11:54
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	11/30/2016 11:54
Naphthalene	ND		0.50	1	11/30/2016 11:54
n-Propyl benzene	ND		0.50	1	11/30/2016 11:54
Styrene	ND		0.50	1	11/30/2016 11:54
1,1,1,2-Tetrachloroethane	ND		0.50	1	11/30/2016 11:54
1,1,2,2-Tetrachloroethane	ND		0.50	1	11/30/2016 11:54
Tetrachloroethene	ND		0.50	1	11/30/2016 11:54
Toluene	ND		0.50	1	11/30/2016 11:54
1,2,3-Trichlorobenzene	ND		0.50	1	11/30/2016 11:54
1,2,4-Trichlorobenzene	ND		0.50	1	11/30/2016 11:54
1,1,1-Trichloroethane	ND		0.50	1	11/30/2016 11:54
1,1,2-Trichloroethane	ND		0.50	1	11/30/2016 11:54
Trichloroethene	ND		0.50	1	11/30/2016 11:54
Trichlorofluoromethane	ND		0.50	1	11/30/2016 11:54
1,2,3-Trichloropropane	ND		0.50	1	11/30/2016 11:54
1,2,4-Trimethylbenzene	ND		0.50	1	11/30/2016 11:54
1,3,5-Trimethylbenzene	ND		0.50	1	11/30/2016 11:54
Vinyl Chloride	ND		0.50	1	11/30/2016 11:54
Xylenes, Total	ND		0.50	1	11/30/2016 11:54

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW3	1611B32-003B	Water	11/22/2016 10:25	GC18	130586
Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)		Limits		
Dibromofluoromethane	102		70-130		11/30/2016 11:54
Toluene-d8	97		70-130		11/30/2016 11:54
4-BFB	87		70-130		11/30/2016 11:54

Analyst(s): HK

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

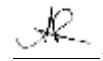
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	1611B32-004B	Water	11/22/2016 09:30	GC16	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		200	20	11/30/2016 22:02
tert-Amyl methyl ether (TAME)	ND		10	20	11/30/2016 22:02
Benzene	410		10	20	11/30/2016 22:02
Bromobenzene	ND		10	20	11/30/2016 22:02
Bromoform	ND		10	20	11/30/2016 22:02
Bromomethane	ND		10	20	11/30/2016 22:02
Bromodichloromethane	ND		10	20	11/30/2016 22:02
2-Butanone (MEK)	ND		40	20	11/30/2016 22:02
t-Butyl alcohol (TBA)	74		40	20	11/30/2016 22:02
n-Butyl benzene	10		10	20	11/30/2016 22:02
sec-Butyl benzene	ND		10	20	11/30/2016 22:02
tert-Butyl benzene	ND		10	20	11/30/2016 22:02
Carbon Disulfide	ND		10	20	11/30/2016 22:02
Carbon Tetrachloride	ND		10	20	11/30/2016 22:02
Chlorobenzene	ND		10	20	11/30/2016 22:02
Chloroethane	ND		10	20	11/30/2016 22:02
Chloroform	ND		10	20	11/30/2016 22:02
Chloromethane	ND		10	20	11/30/2016 22:02
2-Chlorotoluene	ND		10	20	11/30/2016 22:02
4-Chlorotoluene	ND		10	20	11/30/2016 22:02
Dibromochloromethane	ND		10	20	11/30/2016 22:02
1,2-Dibromo-3-chloropropane	ND		4.0	20	11/30/2016 22:02
1,2-Dibromoethane (EDB)	ND		10	20	11/30/2016 22:02
Dibromomethane	ND		10	20	11/30/2016 22:02
1,2-Dichlorobenzene	ND		10	20	11/30/2016 22:02
1,3-Dichlorobenzene	ND		10	20	11/30/2016 22:02
1,4-Dichlorobenzene	ND		10	20	11/30/2016 22:02
Dichlorodifluoromethane	ND		10	20	11/30/2016 22:02
1,1-Dichloroethane	ND		10	20	11/30/2016 22:02
1,2-Dichloroethane (1,2-DCA)	ND		10	20	11/30/2016 22:02
1,1-Dichloroethene	ND		10	20	11/30/2016 22:02
cis-1,2-Dichloroethene	ND		10	20	11/30/2016 22:02
trans-1,2-Dichloroethene	ND		10	20	11/30/2016 22:02
1,2-Dichloropropane	ND		10	20	11/30/2016 22:02
1,3-Dichloropropane	ND		10	20	11/30/2016 22:02
2,2-Dichloropropane	ND		10	20	11/30/2016 22:02

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

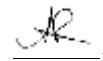
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	1611B32-004B	Water	11/22/2016 09:30	GC16	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		10	20	11/30/2016 22:02
cis-1,3-Dichloropropene	ND		10	20	11/30/2016 22:02
trans-1,3-Dichloropropene	ND		10	20	11/30/2016 22:02
Diisopropyl ether (DIPE)	ND		10	20	11/30/2016 22:02
Ethylbenzene	82		10	20	11/30/2016 22:02
Ethyl tert-butyl ether (ETBE)	ND		10	20	11/30/2016 22:02
Freon 113	ND		10	20	11/30/2016 22:02
Hexachlorobutadiene	ND		10	20	11/30/2016 22:02
Hexachloroethane	ND		10	20	11/30/2016 22:02
2-Hexanone	ND		10	20	11/30/2016 22:02
Isopropylbenzene	28		10	20	11/30/2016 22:02
4-Isopropyl toluene	ND		10	20	11/30/2016 22:02
Methyl-t-butyl ether (MTBE)	52		10	20	11/30/2016 22:02
Methylene chloride	ND		10	20	11/30/2016 22:02
4-Methyl-2-pentanone (MIBK)	ND		10	20	11/30/2016 22:02
Naphthalene	44		10	20	11/30/2016 22:02
n-Propyl benzene	67		10	20	11/30/2016 22:02
Styrene	ND		10	20	11/30/2016 22:02
1,1,1,2-Tetrachloroethane	ND		10	20	11/30/2016 22:02
1,1,2,2-Tetrachloroethane	ND		10	20	11/30/2016 22:02
Tetrachloroethene	ND		10	20	11/30/2016 22:02
Toluene	14		10	20	11/30/2016 22:02
1,2,3-Trichlorobenzene	ND		10	20	11/30/2016 22:02
1,2,4-Trichlorobenzene	ND		10	20	11/30/2016 22:02
1,1,1-Trichloroethane	ND		10	20	11/30/2016 22:02
1,1,2-Trichloroethane	ND		10	20	11/30/2016 22:02
Trichloroethene	ND		10	20	11/30/2016 22:02
Trichlorofluoromethane	ND		10	20	11/30/2016 22:02
1,2,3-Trichloropropane	ND		10	20	11/30/2016 22:02
1,2,4-Trimethylbenzene	110		10	20	11/30/2016 22:02
1,3,5-Trimethylbenzene	30		10	20	11/30/2016 22:02
Vinyl Chloride	ND		10	20	11/30/2016 22:02
Xylenes, Total	330		10	20	11/30/2016 22:02

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	1611B32-004B	Water	11/22/2016 09:30	GC16	130586
Analyses	Result		RL	DF	Date Analyzed
Surrogates	REC (%)		Limits		
Dibromofluoromethane	107		70-130		11/30/2016 22:02
Toluene-d8	106		70-130		11/30/2016 22:02
4-BFB	108		70-130		11/30/2016 22:02

Analyst(s): KF

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

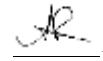
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW2	1611B32-005B	Water	11/22/2016 11:55	GC16	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		200	20	11/30/2016 22:42
tert-Amyl methyl ether (TAME)	ND		10	20	11/30/2016 22:42
Benzene	220		10	20	11/30/2016 22:42
Bromobenzene	ND		10	20	11/30/2016 22:42
Bromoform	ND		10	20	11/30/2016 22:42
Bromomethane	ND		10	20	11/30/2016 22:42
Bromodichloromethane	ND		10	20	11/30/2016 22:42
2-Butanone (MEK)	ND		40	20	11/30/2016 22:42
t-Butyl alcohol (TBA)	ND		40	20	11/30/2016 22:42
n-Butyl benzene	ND		10	20	11/30/2016 22:42
sec-Butyl benzene	ND		10	20	11/30/2016 22:42
tert-Butyl benzene	ND		10	20	11/30/2016 22:42
Carbon Disulfide	ND		10	20	11/30/2016 22:42
Carbon Tetrachloride	ND		10	20	11/30/2016 22:42
Chlorobenzene	ND		10	20	11/30/2016 22:42
Chloroethane	ND		10	20	11/30/2016 22:42
Chloroform	ND		10	20	11/30/2016 22:42
Chloromethane	ND		10	20	11/30/2016 22:42
2-Chlorotoluene	ND		10	20	11/30/2016 22:42
4-Chlorotoluene	ND		10	20	11/30/2016 22:42
Dibromochloromethane	ND		10	20	11/30/2016 22:42
1,2-Dibromo-3-chloropropane	ND		4.0	20	11/30/2016 22:42
1,2-Dibromoethane (EDB)	ND		10	20	11/30/2016 22:42
Dibromomethane	ND		10	20	11/30/2016 22:42
1,2-Dichlorobenzene	ND		10	20	11/30/2016 22:42
1,3-Dichlorobenzene	ND		10	20	11/30/2016 22:42
1,4-Dichlorobenzene	ND		10	20	11/30/2016 22:42
Dichlorodifluoromethane	ND		10	20	11/30/2016 22:42
1,1-Dichloroethane	ND		10	20	11/30/2016 22:42
1,2-Dichloroethane (1,2-DCA)	ND		10	20	11/30/2016 22:42
1,1-Dichloroethene	ND		10	20	11/30/2016 22:42
cis-1,2-Dichloroethene	110		10	20	11/30/2016 22:42
trans-1,2-Dichloroethene	25		10	20	11/30/2016 22:42
1,2-Dichloropropane	ND		10	20	11/30/2016 22:42
1,3-Dichloropropane	ND		10	20	11/30/2016 22:42
2,2-Dichloropropane	ND		10	20	11/30/2016 22:42

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

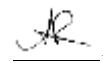
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW2	1611B32-005B	Water	11/22/2016 11:55	GC16	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		10	20	11/30/2016 22:42
cis-1,3-Dichloropropene	ND		10	20	11/30/2016 22:42
trans-1,3-Dichloropropene	ND		10	20	11/30/2016 22:42
Diisopropyl ether (DIPE)	ND		10	20	11/30/2016 22:42
Ethylbenzene	36		10	20	11/30/2016 22:42
Ethyl tert-butyl ether (ETBE)	ND		10	20	11/30/2016 22:42
Freon 113	ND		10	20	11/30/2016 22:42
Hexachlorobutadiene	ND		10	20	11/30/2016 22:42
Hexachloroethane	ND		10	20	11/30/2016 22:42
2-Hexanone	ND		10	20	11/30/2016 22:42
Isopropylbenzene	ND		10	20	11/30/2016 22:42
4-Isopropyl toluene	ND		10	20	11/30/2016 22:42
Methyl-t-butyl ether (MTBE)	11		10	20	11/30/2016 22:42
Methylene chloride	ND		10	20	11/30/2016 22:42
4-Methyl-2-pentanone (MIBK)	ND		10	20	11/30/2016 22:42
Naphthalene	ND		10	20	11/30/2016 22:42
n-Propyl benzene	17		10	20	11/30/2016 22:42
Styrene	ND		10	20	11/30/2016 22:42
1,1,1,2-Tetrachloroethane	ND		10	20	11/30/2016 22:42
1,1,2,2-Tetrachloroethane	ND		10	20	11/30/2016 22:42
Tetrachloroethene	270		10	20	11/30/2016 22:42
Toluene	ND		10	20	11/30/2016 22:42
1,2,3-Trichlorobenzene	ND		10	20	11/30/2016 22:42
1,2,4-Trichlorobenzene	ND		10	20	11/30/2016 22:42
1,1,1-Trichloroethane	ND		10	20	11/30/2016 22:42
1,1,2-Trichloroethane	ND		10	20	11/30/2016 22:42
Trichloroethene	440		10	20	11/30/2016 22:42
Trichlorofluoromethane	ND		10	20	11/30/2016 22:42
1,2,3-Trichloropropane	ND		10	20	11/30/2016 22:42
1,2,4-Trimethylbenzene	ND		10	20	11/30/2016 22:42
1,3,5-Trimethylbenzene	ND		10	20	11/30/2016 22:42
Vinyl Chloride	ND		10	20	11/30/2016 22:42
Xylenes, Total	ND		10	20	11/30/2016 22:42

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW2	1611B32-005B	Water	11/22/2016 11:55	GC16	130586
Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)		Limits		
Dibromofluoromethane	107		70-130		11/30/2016 22:42
Toluene-d8	108		70-130		11/30/2016 22:42
4-BFB	107		70-130		11/30/2016 22:42

Analyst(s): KF

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

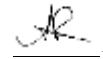
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	1611B32-006B	Water	11/22/2016 11:10	GC28	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		20	2	12/01/2016 17:30
tert-Amyl methyl ether (TAME)	ND		1.0	2	12/01/2016 17:30
Benzene	49		1.0	2	12/01/2016 17:30
Bromobenzene	ND		1.0	2	12/01/2016 17:30
Bromoform	ND		1.0	2	12/01/2016 17:30
Bromomethane	ND		1.0	2	12/01/2016 17:30
Bromodichloromethane	ND		1.0	2	12/01/2016 17:30
2-Butanone (MEK)	ND		4.0	2	12/01/2016 17:30
t-Butyl alcohol (TBA)	9.1		4.0	2	12/01/2016 17:30
n-Butyl benzene	ND		1.0	2	12/01/2016 17:30
sec-Butyl benzene	ND		1.0	2	12/01/2016 17:30
tert-Butyl benzene	ND		1.0	2	12/01/2016 17:30
Carbon Disulfide	2.1		1.0	2	12/01/2016 17:30
Carbon Tetrachloride	ND		1.0	2	12/01/2016 17:30
Chlorobenzene	ND		1.0	2	12/01/2016 17:30
Chloroethane	ND		1.0	2	12/01/2016 17:30
Chloroform	ND		1.0	2	12/01/2016 17:30
Chloromethane	ND		1.0	2	12/01/2016 17:30
2-Chlorotoluene	ND		1.0	2	12/01/2016 17:30
4-Chlorotoluene	ND		1.0	2	12/01/2016 17:30
Dibromochloromethane	ND		1.0	2	12/01/2016 17:30
1,2-Dibromo-3-chloropropane	ND		0.40	2	12/01/2016 17:30
1,2-Dibromoethane (EDB)	ND		1.0	2	12/01/2016 17:30
Dibromomethane	ND		1.0	2	12/01/2016 17:30
1,2-Dichlorobenzene	ND		1.0	2	12/01/2016 17:30
1,3-Dichlorobenzene	ND		1.0	2	12/01/2016 17:30
1,4-Dichlorobenzene	ND		1.0	2	12/01/2016 17:30
Dichlorodifluoromethane	ND		1.0	2	12/01/2016 17:30
1,1-Dichloroethane	ND		1.0	2	12/01/2016 17:30
1,2-Dichloroethane (1,2-DCA)	ND		1.0	2	12/01/2016 17:30
1,1-Dichloroethene	ND		1.0	2	12/01/2016 17:30
cis-1,2-Dichloroethene	1.2		1.0	2	12/01/2016 17:30
trans-1,2-Dichloroethene	ND		1.0	2	12/01/2016 17:30
1,2-Dichloropropane	ND		1.0	2	12/01/2016 17:30
1,3-Dichloropropane	ND		1.0	2	12/01/2016 17:30
2,2-Dichloropropane	ND		1.0	2	12/01/2016 17:30

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

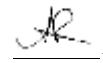
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	1611B32-006B	Water	11/22/2016 11:10	GC28	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		1.0	2	12/01/2016 17:30
cis-1,3-Dichloropropene	ND		1.0	2	12/01/2016 17:30
trans-1,3-Dichloropropene	ND		1.0	2	12/01/2016 17:30
Diisopropyl ether (DIPE)	ND		1.0	2	12/01/2016 17:30
Ethylbenzene	2.2		1.0	2	12/01/2016 17:30
Ethyl tert-butyl ether (ETBE)	ND		1.0	2	12/01/2016 17:30
Freon 113	ND		1.0	2	12/01/2016 17:30
Hexachlorobutadiene	ND		1.0	2	12/01/2016 17:30
Hexachloroethane	ND		1.0	2	12/01/2016 17:30
2-Hexanone	ND		1.0	2	12/01/2016 17:30
Isopropylbenzene	1.6		1.0	2	12/01/2016 17:30
4-Isopropyl toluene	ND		1.0	2	12/01/2016 17:30
Methyl-t-butyl ether (MTBE)	7.5		1.0	2	12/01/2016 17:30
Methylene chloride	ND		1.0	2	12/01/2016 17:30
4-Methyl-2-pentanone (MIBK)	ND		1.0	2	12/01/2016 17:30
Naphthalene	ND		1.0	2	12/01/2016 17:30
n-Propyl benzene	4.0		1.0	2	12/01/2016 17:30
Styrene	ND		1.0	2	12/01/2016 17:30
1,1,1,2-Tetrachloroethane	ND		1.0	2	12/01/2016 17:30
1,1,2,2-Tetrachloroethane	ND		1.0	2	12/01/2016 17:30
Tetrachloroethene	27		1.0	2	12/01/2016 17:30
Toluene	ND		1.0	2	12/01/2016 17:30
1,2,3-Trichlorobenzene	ND		1.0	2	12/01/2016 17:30
1,2,4-Trichlorobenzene	ND		1.0	2	12/01/2016 17:30
1,1,1-Trichloroethane	ND		1.0	2	12/01/2016 17:30
1,1,2-Trichloroethane	ND		1.0	2	12/01/2016 17:30
Trichloroethene	26		1.0	2	12/01/2016 17:30
Trichlorofluoromethane	ND		1.0	2	12/01/2016 17:30
1,2,3-Trichloropropane	ND		1.0	2	12/01/2016 17:30
1,2,4-Trimethylbenzene	ND		1.0	2	12/01/2016 17:30
1,3,5-Trimethylbenzene	ND		1.0	2	12/01/2016 17:30
Vinyl Chloride	ND		1.0	2	12/01/2016 17:30
Xylenes, Total	ND		1.0	2	12/01/2016 17:30

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	1611B32-006B	Water	11/22/2016 11:10	GC28	130586
Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)		Limits		
Dibromofluoromethane	95		70-130		12/01/2016 17:30
Toluene-d8	101		70-130		12/01/2016 17:30
4-BFB	83		70-130		12/01/2016 17:30

Analyst(s): HK

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

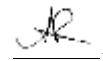
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	1611B32-007B	Water	11/22/2016 10:20	GC16	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		330	33	12/01/2016 00:02
tert-Amyl methyl ether (TAME)	ND		17	33	12/01/2016 00:02
Benzene	1000		17	33	12/01/2016 00:02
Bromobenzene	ND		17	33	12/01/2016 00:02
Bromoform	ND		17	33	12/01/2016 00:02
Bromomethane	ND		17	33	12/01/2016 00:02
Bromodichloromethane	ND		17	33	12/01/2016 00:02
2-Butanone (MEK)	ND		67	33	12/01/2016 00:02
t-Butyl alcohol (TBA)	340		67	33	12/01/2016 00:02
n-Butyl benzene	ND		17	33	12/01/2016 00:02
sec-Butyl benzene	ND		17	33	12/01/2016 00:02
tert-Butyl benzene	ND		17	33	12/01/2016 00:02
Carbon Disulfide	ND		17	33	12/01/2016 00:02
Carbon Tetrachloride	ND		17	33	12/01/2016 00:02
Chlorobenzene	ND		17	33	12/01/2016 00:02
Chloroethane	ND		17	33	12/01/2016 00:02
Chloroform	ND		17	33	12/01/2016 00:02
Chloromethane	ND		17	33	12/01/2016 00:02
2-Chlorotoluene	ND		17	33	12/01/2016 00:02
4-Chlorotoluene	ND		17	33	12/01/2016 00:02
Dibromochloromethane	ND		17	33	12/01/2016 00:02
1,2-Dibromo-3-chloropropane	ND		6.7	33	12/01/2016 00:02
1,2-Dibromoethane (EDB)	ND		17	33	12/01/2016 00:02
Dibromomethane	ND		17	33	12/01/2016 00:02
1,2-Dichlorobenzene	ND		17	33	12/01/2016 00:02
1,3-Dichlorobenzene	ND		17	33	12/01/2016 00:02
1,4-Dichlorobenzene	ND		17	33	12/01/2016 00:02
Dichlorodifluoromethane	ND		17	33	12/01/2016 00:02
1,1-Dichloroethane	ND		17	33	12/01/2016 00:02
1,2-Dichloroethane (1,2-DCA)	ND		17	33	12/01/2016 00:02
1,1-Dichloroethene	ND		17	33	12/01/2016 00:02
cis-1,2-Dichloroethene	ND		17	33	12/01/2016 00:02
trans-1,2-Dichloroethene	ND		17	33	12/01/2016 00:02
1,2-Dichloropropane	ND		17	33	12/01/2016 00:02
1,3-Dichloropropane	ND		17	33	12/01/2016 00:02
2,2-Dichloropropane	ND		17	33	12/01/2016 00:02

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

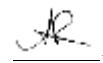
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	1611B32-007B	Water	11/22/2016 10:20	GC16	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		17	33	12/01/2016 00:02
cis-1,3-Dichloropropene	ND		17	33	12/01/2016 00:02
trans-1,3-Dichloropropene	ND		17	33	12/01/2016 00:02
Diisopropyl ether (DIPE)	ND		17	33	12/01/2016 00:02
Ethylbenzene	150		17	33	12/01/2016 00:02
Ethyl tert-butyl ether (ETBE)	ND		17	33	12/01/2016 00:02
Freon 113	ND		17	33	12/01/2016 00:02
Hexachlorobutadiene	ND		17	33	12/01/2016 00:02
Hexachloroethane	ND		17	33	12/01/2016 00:02
2-Hexanone	ND		17	33	12/01/2016 00:02
Isopropylbenzene	39		17	33	12/01/2016 00:02
4-Isopropyl toluene	ND		17	33	12/01/2016 00:02
Methyl-t-butyl ether (MTBE)	230		17	33	12/01/2016 00:02
Methylene chloride	ND		17	33	12/01/2016 00:02
4-Methyl-2-pentanone (MIBK)	ND		17	33	12/01/2016 00:02
Naphthalene	57		17	33	12/01/2016 00:02
n-Propyl benzene	100		17	33	12/01/2016 00:02
Styrene	ND		17	33	12/01/2016 00:02
1,1,1,2-Tetrachloroethane	ND		17	33	12/01/2016 00:02
1,1,2,2-Tetrachloroethane	ND		17	33	12/01/2016 00:02
Tetrachloroethene	ND		17	33	12/01/2016 00:02
Toluene	27		17	33	12/01/2016 00:02
1,2,3-Trichlorobenzene	ND		17	33	12/01/2016 00:02
1,2,4-Trichlorobenzene	ND		17	33	12/01/2016 00:02
1,1,1-Trichloroethane	ND		17	33	12/01/2016 00:02
1,1,2-Trichloroethane	ND		17	33	12/01/2016 00:02
Trichloroethene	ND		17	33	12/01/2016 00:02
Trichlorofluoromethane	ND		17	33	12/01/2016 00:02
1,2,3-Trichloropropane	ND		17	33	12/01/2016 00:02
1,2,4-Trimethylbenzene	ND		17	33	12/01/2016 00:02
1,3,5-Trimethylbenzene	ND		17	33	12/01/2016 00:02
Vinyl Chloride	ND		17	33	12/01/2016 00:02
Xylenes, Total	48		17	33	12/01/2016 00:02

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	1611B32-007B	Water	11/22/2016 10:20	GC16	130586
Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)		Limits		
Dibromofluoromethane	107		70-130		12/01/2016 00:02
Toluene-d8	106		70-130		12/01/2016 00:02
4-BFB	106		70-130		12/01/2016 00:02

Analyst(s): KF

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

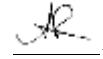
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	1611B32-008B	Water	11/22/2016 08:40	GC18	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	11/30/2016 17:48
tert-Amyl methyl ether (TAME)	ND		0.50	1	11/30/2016 17:48
Benzene	ND		0.50	1	11/30/2016 17:48
Bromobenzene	ND		0.50	1	11/30/2016 17:48
Bromoform	ND		0.50	1	11/30/2016 17:48
Bromochloromethane	ND		0.50	1	11/30/2016 17:48
Bromodichloromethane	ND		0.50	1	11/30/2016 17:48
Bromoform	ND		0.50	1	11/30/2016 17:48
Bromomethane	ND		0.50	1	11/30/2016 17:48
2-Butanone (MEK)	ND		2.0	1	11/30/2016 17:48
t-Butyl alcohol (TBA)	ND		2.0	1	11/30/2016 17:48
n-Butyl benzene	ND		0.50	1	11/30/2016 17:48
sec-Butyl benzene	ND		0.50	1	11/30/2016 17:48
tert-Butyl benzene	ND		0.50	1	11/30/2016 17:48
Carbon Disulfide	ND		0.50	1	11/30/2016 17:48
Carbon Tetrachloride	ND		0.50	1	11/30/2016 17:48
Chlorobenzene	ND		0.50	1	11/30/2016 17:48
Chloroethane	ND		0.50	1	11/30/2016 17:48
Chloroform	ND		0.50	1	11/30/2016 17:48
Chloromethane	ND		0.50	1	11/30/2016 17:48
2-Chlorotoluene	ND		0.50	1	11/30/2016 17:48
4-Chlorotoluene	ND		0.50	1	11/30/2016 17:48
Dibromochloromethane	ND		0.50	1	11/30/2016 17:48
1,2-Dibromo-3-chloropropane	ND		0.20	1	11/30/2016 17:48
1,2-Dibromoethane (EDB)	ND		0.50	1	11/30/2016 17:48
Dibromomethane	ND		0.50	1	11/30/2016 17:48
1,2-Dichlorobenzene	ND		0.50	1	11/30/2016 17:48
1,3-Dichlorobenzene	ND		0.50	1	11/30/2016 17:48
1,4-Dichlorobenzene	ND		0.50	1	11/30/2016 17:48
Dichlorodifluoromethane	ND		0.50	1	11/30/2016 17:48
1,1-Dichloroethane	ND		0.50	1	11/30/2016 17:48
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	11/30/2016 17:48
1,1-Dichloroethene	ND		0.50	1	11/30/2016 17:48
cis-1,2-Dichloroethene	ND		0.50	1	11/30/2016 17:48
trans-1,2-Dichloroethene	ND		0.50	1	11/30/2016 17:48
1,2-Dichloropropane	ND		0.50	1	11/30/2016 17:48
1,3-Dichloropropane	ND		0.50	1	11/30/2016 17:48
2,2-Dichloropropane	ND		0.50	1	11/30/2016 17:48

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

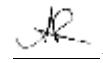
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	1611B32-008B	Water	11/22/2016 08:40	GC18	130586
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		0.50	1	11/30/2016 17:48
cis-1,3-Dichloropropene	ND		0.50	1	11/30/2016 17:48
trans-1,3-Dichloropropene	ND		0.50	1	11/30/2016 17:48
Diisopropyl ether (DIPE)	ND		0.50	1	11/30/2016 17:48
Ethylbenzene	ND		0.50	1	11/30/2016 17:48
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	11/30/2016 17:48
Freon 113	ND		0.50	1	11/30/2016 17:48
Hexachlorobutadiene	ND		0.50	1	11/30/2016 17:48
Hexachloroethane	ND		0.50	1	11/30/2016 17:48
2-Hexanone	ND		0.50	1	11/30/2016 17:48
Isopropylbenzene	ND		0.50	1	11/30/2016 17:48
4-Isopropyl toluene	ND		0.50	1	11/30/2016 17:48
Methyl-t-butyl ether (MTBE)	ND		0.50	1	11/30/2016 17:48
Methylene chloride	ND		0.50	1	11/30/2016 17:48
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	11/30/2016 17:48
Naphthalene	ND		0.50	1	11/30/2016 17:48
n-Propyl benzene	ND		0.50	1	11/30/2016 17:48
Styrene	ND		0.50	1	11/30/2016 17:48
1,1,1,2-Tetrachloroethane	ND		0.50	1	11/30/2016 17:48
1,1,2,2-Tetrachloroethane	ND		0.50	1	11/30/2016 17:48
Tetrachloroethene	ND		0.50	1	11/30/2016 17:48
Toluene	ND		0.50	1	11/30/2016 17:48
1,2,3-Trichlorobenzene	ND		0.50	1	11/30/2016 17:48
1,2,4-Trichlorobenzene	ND		0.50	1	11/30/2016 17:48
1,1,1-Trichloroethane	ND		0.50	1	11/30/2016 17:48
1,1,2-Trichloroethane	ND		0.50	1	11/30/2016 17:48
Trichloroethene	ND		0.50	1	11/30/2016 17:48
Trichlorofluoromethane	ND		0.50	1	11/30/2016 17:48
1,2,3-Trichloropropane	ND		0.50	1	11/30/2016 17:48
1,2,4-Trimethylbenzene	ND		0.50	1	11/30/2016 17:48
1,3,5-Trimethylbenzene	ND		0.50	1	11/30/2016 17:48
Vinyl Chloride	ND		0.50	1	11/30/2016 17:48
Xylenes, Total	ND		0.50	1	11/30/2016 17:48

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	1611B32-008B	Water	11/22/2016 08:40	GC18	130586
Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)		Limits		
Dibromofluoromethane	101		70-130		11/30/2016 17:48
Toluene-d8	97		70-130		11/30/2016 17:48
4-BFB	89		70-130		11/30/2016 17:48

Analyst(s): HK

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

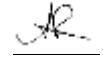
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW1	1611B32-009B	Water	11/22/2016 13:10	GC18	130657
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
Acetone	ND		10	1	12/01/2016 17:27
tert-Amyl methyl ether (TAME)	ND		0.50	1	12/01/2016 17:27
Benzene	ND		0.50	1	12/01/2016 17:27
Bromobenzene	ND		0.50	1	12/01/2016 17:27
Bromoform	ND		0.50	1	12/01/2016 17:27
Bromochloromethane	ND		0.50	1	12/01/2016 17:27
Bromodichloromethane	ND		0.50	1	12/01/2016 17:27
Bromoform	ND		0.50	1	12/01/2016 17:27
Bromomethane	ND		0.50	1	12/01/2016 17:27
2-Butanone (MEK)	ND		2.0	1	12/01/2016 17:27
t-Butyl alcohol (TBA)	2.9		2.0	1	12/01/2016 17:27
n-Butyl benzene	ND		0.50	1	12/01/2016 17:27
sec-Butyl benzene	ND		0.50	1	12/01/2016 17:27
tert-Butyl benzene	ND		0.50	1	12/01/2016 17:27
Carbon Disulfide	ND		0.50	1	12/01/2016 17:27
Carbon Tetrachloride	ND		0.50	1	12/01/2016 17:27
Chlorobenzene	ND		0.50	1	12/01/2016 17:27
Chloroethane	ND		0.50	1	12/01/2016 17:27
Chloroform	ND		0.50	1	12/01/2016 17:27
Chloromethane	ND		0.50	1	12/01/2016 17:27
2-Chlorotoluene	ND		0.50	1	12/01/2016 17:27
4-Chlorotoluene	ND		0.50	1	12/01/2016 17:27
Dibromochloromethane	ND		0.50	1	12/01/2016 17:27
1,2-Dibromo-3-chloropropane	ND		0.20	1	12/01/2016 17:27
1,2-Dibromoethane (EDB)	ND		0.50	1	12/01/2016 17:27
Dibromomethane	ND		0.50	1	12/01/2016 17:27
1,2-Dichlorobenzene	ND		0.50	1	12/01/2016 17:27
1,3-Dichlorobenzene	ND		0.50	1	12/01/2016 17:27
1,4-Dichlorobenzene	ND		0.50	1	12/01/2016 17:27
Dichlorodifluoromethane	ND		0.50	1	12/01/2016 17:27
1,1-Dichloroethane	ND		0.50	1	12/01/2016 17:27
1,2-Dichloroethane (1,2-DCA)	ND		0.50	1	12/01/2016 17:27
1,1-Dichloroethene	ND		0.50	1	12/01/2016 17:27
cis-1,2-Dichloroethene	ND		0.50	1	12/01/2016 17:27
trans-1,2-Dichloroethene	ND		0.50	1	12/01/2016 17:27
1,2-Dichloropropane	ND		0.50	1	12/01/2016 17:27
1,3-Dichloropropane	ND		0.50	1	12/01/2016 17:27
2,2-Dichloropropane	ND		0.50	1	12/01/2016 17:27

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

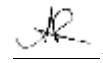
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW1	1611B32-009B	Water	11/22/2016 13:10	GC18	130657
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
1,1-Dichloropropene	ND		0.50	1	12/01/2016 17:27
cis-1,3-Dichloropropene	ND		0.50	1	12/01/2016 17:27
trans-1,3-Dichloropropene	ND		0.50	1	12/01/2016 17:27
Diisopropyl ether (DIPE)	ND		0.50	1	12/01/2016 17:27
Ethylbenzene	ND		0.50	1	12/01/2016 17:27
Ethyl tert-butyl ether (ETBE)	ND		0.50	1	12/01/2016 17:27
Freon 113	ND		0.50	1	12/01/2016 17:27
Hexachlorobutadiene	ND		0.50	1	12/01/2016 17:27
Hexachloroethane	ND		0.50	1	12/01/2016 17:27
2-Hexanone	ND		0.50	1	12/01/2016 17:27
Isopropylbenzene	ND		0.50	1	12/01/2016 17:27
4-Isopropyl toluene	ND		0.50	1	12/01/2016 17:27
Methyl-t-butyl ether (MTBE)	1.5		0.50	1	12/01/2016 17:27
Methylene chloride	ND		0.50	1	12/01/2016 17:27
4-Methyl-2-pentanone (MIBK)	ND		0.50	1	12/01/2016 17:27
Naphthalene	ND		0.50	1	12/01/2016 17:27
n-Propyl benzene	ND		0.50	1	12/01/2016 17:27
Styrene	ND		0.50	1	12/01/2016 17:27
1,1,1,2-Tetrachloroethane	ND		0.50	1	12/01/2016 17:27
1,1,2,2-Tetrachloroethane	ND		0.50	1	12/01/2016 17:27
Tetrachloroethene	ND		0.50	1	12/01/2016 17:27
Toluene	ND		0.50	1	12/01/2016 17:27
1,2,3-Trichlorobenzene	ND		0.50	1	12/01/2016 17:27
1,2,4-Trichlorobenzene	ND		0.50	1	12/01/2016 17:27
1,1,1-Trichloroethane	ND		0.50	1	12/01/2016 17:27
1,1,2-Trichloroethane	ND		0.50	1	12/01/2016 17:27
Trichloroethene	ND		0.50	1	12/01/2016 17:27
Trichlorofluoromethane	ND		0.50	1	12/01/2016 17:27
1,2,3-Trichloropropane	ND		0.50	1	12/01/2016 17:27
1,2,4-Trimethylbenzene	0.61		0.50	1	12/01/2016 17:27
1,3,5-Trimethylbenzene	ND		0.50	1	12/01/2016 17:27
Vinyl Chloride	ND		0.50	1	12/01/2016 17:27
Xylenes, Total	ND		0.50	1	12/01/2016 17:27

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/30/16-12/1/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW1	1611B32-009B	Water	11/22/2016 13:10	GC18	130657
Analytes	Result		RL	DF	Date Analyzed
Surrogates	REC (%)		Limits		
Dibromofluoromethane	100		70-130		12/01/2016 17:27
Toluene-d8	93		70-130		12/01/2016 17:27
4-BFB	90		70-130		12/01/2016 17:27

Analyst(s): HK



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 12/1/16-12/2/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

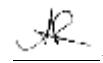
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	1611B32-001A	Water	11/22/2016 13:45	GC7	130607
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	18,000		1700	33	12/01/2016 09:49
MTBE	ND		1200	33	12/01/2016 09:49
Benzene	4700		17	33	12/01/2016 09:49
Toluene	73		17	33	12/01/2016 09:49
Ethylbenzene	190		17	33	12/01/2016 09:49
Xylenes	300		50	33	12/01/2016 09:49
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	133	S	89-115		12/01/2016 09:49
<u>Analyst(s):</u> IA			<u>Analytical Comments:</u>	d1,d17,c4	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	1611B32-002A	Water	11/22/2016 11:05	GC7	130607
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	3500		120	2.5	12/01/2016 10:18
MTBE	ND		12	2.5	12/01/2016 10:18
Benzene	25		1.2	2.5	12/01/2016 10:18
Toluene	8.2		1.2	2.5	12/01/2016 10:18
Ethylbenzene	8.5		1.2	2.5	12/01/2016 10:18
Xylenes	5.8		3.8	2.5	12/01/2016 10:18
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	125	S	89-115		12/01/2016 10:18
<u>Analyst(s):</u> IA			<u>Analytical Comments:</u>	d1,c4	

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 12/1/16-12/2/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
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	1611B32-003A	Water	11/22/2016 10:25	GC7	130607

Analyses	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	12/01/2016 11:18
MTBE	ND	5.0	1	12/01/2016 11:18
Benzene	ND	0.50	1	12/01/2016 11:18
Toluene	ND	0.50	1	12/01/2016 11:18
Ethylbenzene	ND	0.50	1	12/01/2016 11:18
Xylenes	ND	1.5	1	12/01/2016 11:18

Surrogates	REC (%)	Limits	
aaa-TFT	103	89-115	12/01/2016 11:18

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	1611B32-004A	Water	11/22/2016 09:30	GC7	130607

Analyses	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	7200	1000	20	12/01/2016 11:48
MTBE	ND	150	20	12/01/2016 11:48
Benzene	560	10	20	12/01/2016 11:48
Toluene	13	10	20	12/01/2016 11:48
Ethylbenzene	100	10	20	12/01/2016 11:48
Xylenes	450	30	20	12/01/2016 11:48

Surrogates	REC (%)	Limits	
aaa-TFT	106	89-115	12/01/2016 11:48

Analytical Comments: d1,d17

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 12/1/16-12/2/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

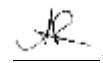
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW2	1611B32-005A	Water	11/22/2016 11:55	GC3	130606
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	2000		500	10	12/01/2016 11:07
MTBE	ND		150	10	12/01/2016 11:07
Benzene	270		5.0	10	12/01/2016 11:07
Toluene	8.2		5.0	10	12/01/2016 11:07
Ethylbenzene	44		5.0	10	12/01/2016 11:07
Xylenes	ND		15	10	12/01/2016 11:07
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	467	S	89-115		12/01/2016 11:07
<u>Analyst(s):</u>	IA		<u>Analytical Comments:</u>	d1,d17,c4	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	1611B32-006A	Water	11/22/2016 11:10	GC3	130606
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	350		100	2	12/01/2016 11:38
MTBE	ND		30	2	12/01/2016 11:38
Benzene	67		1.0	2	12/01/2016 11:38
Toluene	ND		1.0	2	12/01/2016 11:38
Ethylbenzene	4.1		1.0	2	12/01/2016 11:38
Xylenes	ND		3.0	2	12/01/2016 11:38
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	265	S	89-115		12/01/2016 11:38
<u>Analyst(s):</u>	IA		<u>Analytical Comments:</u>	d1,d17,c4	

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 12/1/16-12/2/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

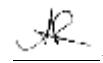
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	1611B32-007A	Water	11/22/2016 10:20	GC3	130606
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	5700		500	10	12/01/2016 12:08
MTBE	ND		500	10	12/01/2016 12:08
Benzene	1400		5.0	10	12/01/2016 12:08
Toluene	42		5.0	10	12/01/2016 12:08
Ethylbenzene	190		5.0	10	12/01/2016 12:08
Xylenes	68		15	10	12/01/2016 12:08
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	132	S	89-115		12/01/2016 12:08
<u>Analyst(s):</u>	IA		<u>Analytical Comments:</u>	d1,d17,c4	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	1611B32-008A	Water	11/22/2016 08:40	GC3	130607
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	66		50	1	12/02/2016 06:59
MTBE	ND		5.0	1	12/02/2016 06:59
Benzene	ND		0.50	1	12/02/2016 06:59
Toluene	ND		0.50	1	12/02/2016 06:59
Ethylbenzene	ND		0.50	1	12/02/2016 06:59
Xylenes	ND		1.5	1	12/02/2016 06:59
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	104		89-115		12/02/2016 06:59
<u>Analyst(s):</u>	IA		<u>Analytical Comments:</u>	d1	

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 12/1/16-12/2/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
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	1611B32-009A	Water	11/22/2016 13:10	GC3	130607
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	120		50	1	12/02/2016 07:29
MTBE	ND		5.0	1	12/02/2016 07:29
Benzene	ND		0.50	1	12/02/2016 07:29
Toluene	1.2		0.50	1	12/02/2016 07:29
Ethylbenzene	ND		0.50	1	12/02/2016 07:29
Xylenes	ND		1.5	1	12/02/2016 07:29
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	120	S	89-115		12/02/2016 07:29
<u>Analyst(s):</u>	IA		<u>Analytical Comments:</u>	d1,c4	



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 12/1/16-12/2/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

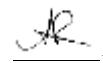
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	1611B32-001A	Water	11/22/2016 13:45	GC7	130607
<u>Analyses</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	18,000		1700	33	12/01/2016 09:49
MTBE	---		1200	33	12/01/2016 09:49
Benzene	---		17	33	12/01/2016 09:49
Toluene	---		17	33	12/01/2016 09:49
Ethylbenzene	---		17	33	12/01/2016 09:49
Xylenes	---		50	33	12/01/2016 09:49
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	133	S	89-115		12/01/2016 09:49
<u>Analyst(s):</u> IA			<u>Analytical Comments:</u>	d1,d17,c4	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	1611B32-002A	Water	11/22/2016 11:05	GC7	130607
<u>Analyses</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	3500		120	2.5	12/01/2016 10:18
MTBE	---		12	2.5	12/01/2016 10:18
Benzene	---		1.2	2.5	12/01/2016 10:18
Toluene	---		1.2	2.5	12/01/2016 10:18
Ethylbenzene	---		1.2	2.5	12/01/2016 10:18
Xylenes	---		3.8	2.5	12/01/2016 10:18
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	125	S	89-115		12/01/2016 10:18
<u>Analyst(s):</u> IA			<u>Analytical Comments:</u>	d1,c4	

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 12/1/16-12/2/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
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	1611B32-003A	Water	11/22/2016 10:25	GC7	130607

Analyses	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	ND	50	1	12/01/2016 11:18
MTBE	---	5.0	1	12/01/2016 11:18
Benzene	---	0.50	1	12/01/2016 11:18
Toluene	---	0.50	1	12/01/2016 11:18
Ethylbenzene	---	0.50	1	12/01/2016 11:18
Xylenes	---	1.5	1	12/01/2016 11:18

Surrogates	REC (%)	Limits	
aaa-TFT	103	89-115	12/01/2016 11:18

Analyst(s): IA

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	1611B32-004A	Water	11/22/2016 09:30	GC7	130607

Analyses	Result	RL	DF	Date Analyzed
TPH(g) (C6-C12)	7200	1000	20	12/01/2016 11:48
MTBE	---	150	20	12/01/2016 11:48
Benzene	---	10	20	12/01/2016 11:48
Toluene	---	10	20	12/01/2016 11:48
Ethylbenzene	---	10	20	12/01/2016 11:48
Xylenes	---	30	20	12/01/2016 11:48

Surrogates	REC (%)	Limits	
aaa-TFT	106	89-115	12/01/2016 11:48

Analytical Comments: d1,d17

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
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Date Prepared: 12/1/16-12/2/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
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	1611B32-005A	Water	11/22/2016 11:55	GC3	130606
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	2000		500	10	12/01/2016 11:07
MTBE	---		150	10	12/01/2016 11:07
Benzene	---		5.0	10	12/01/2016 11:07
Toluene	---		5.0	10	12/01/2016 11:07
Ethylbenzene	---		5.0	10	12/01/2016 11:07
Xylenes	---		15	10	12/01/2016 11:07
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	467	S	89-115		12/01/2016 11:07
<u>Analyst(s):</u>	IA		<u>Analytical Comments:</u>	d1,d17,c4	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	1611B32-006A	Water	11/22/2016 11:10	GC3	130606
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	350		100	2	12/01/2016 11:38
MTBE	---		30	2	12/01/2016 11:38
Benzene	---		1.0	2	12/01/2016 11:38
Toluene	---		1.0	2	12/01/2016 11:38
Ethylbenzene	---		1.0	2	12/01/2016 11:38
Xylenes	---		3.0	2	12/01/2016 11:38
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	265	S	89-115		12/01/2016 11:38
<u>Analyst(s):</u>	IA		<u>Analytical Comments:</u>	d1,d17,c4	

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 12/1/16-12/2/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

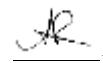
WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
Unit: µg/L

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

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	1611B32-007A	Water	11/22/2016 10:20	GC3	130606
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	5700		500	10	12/01/2016 12:08
MTBE	---		500	10	12/01/2016 12:08
Benzene	---		5.0	10	12/01/2016 12:08
Toluene	---		5.0	10	12/01/2016 12:08
Ethylbenzene	---		5.0	10	12/01/2016 12:08
Xylenes	---		15	10	12/01/2016 12:08
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	132	S	89-115		12/01/2016 12:08
<u>Analyst(s):</u>	IA		<u>Analytical Comments:</u>	d1,d17,c4	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	1611B32-008A	Water	11/22/2016 08:40	GC3	130607
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	66		50	1	12/02/2016 06:59
MTBE	---		5.0	1	12/02/2016 06:59
Benzene	---		0.50	1	12/02/2016 06:59
Toluene	---		0.50	1	12/02/2016 06:59
Ethylbenzene	---		0.50	1	12/02/2016 06:59
Xylenes	---		1.5	1	12/02/2016 06:59
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
aaa-TFT	104		89-115		12/02/2016 06:59
<u>Analyst(s):</u>	IA		<u>Analytical Comments:</u>	d1	

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 12/1/16-12/2/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW5030B
Analytical Method: SW8021B/8015Bm
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	1611B32-009A	Water	11/22/2016 13:10	GC3	130607
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH(g) (C6-C12)	120		50	1	12/02/2016 07:29
MTBE	---		5.0	1	12/02/2016 07:29
Benzene	---		0.50	1	12/02/2016 07:29
Toluene	---		0.50	1	12/02/2016 07:29
Ethylbenzene	---		0.50	1	12/02/2016 07:29
Xylenes	---		1.5	1	12/02/2016 07:29
<u>Surrogates</u>	<u>REC (%)</u>	<u>Qualifiers</u>	<u>Limits</u>		
aaa-TFT	120	S	89-115		12/02/2016 07:29
<u>Analyst(s):</u>	<u>Analytical Comments:</u> d1,c4				



Analytical Report

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Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

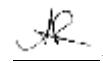
WorkOrder: 1611B32
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW1	1611B32-001A	Water	11/22/2016 13:45	GC6A	130338
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1700		50	1	11/24/2016 15:40
TPH-Motor Oil (C18-C36)	ND		250	1	11/24/2016 15:40
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	106		72-117		11/24/2016 15:40
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e4		
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW2	1611B32-002A	Water	11/22/2016 11:05	GC6A	130338
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	2900		50	1	11/24/2016 16:57
TPH-Motor Oil (C18-C36)	1200		250	1	11/24/2016 16:57
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	98		72-117		11/24/2016 16:57
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e4,e3/e2		
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW3	1611B32-003A	Water	11/22/2016 10:25	GC6A	130338
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		50	1	11/24/2016 08:33
TPH-Motor Oil (C18-C36)	ND		250	1	11/24/2016 08:33
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	100		72-117		11/24/2016 08:33
<u>Analyst(s):</u> TK					

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NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/23/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

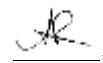
WorkOrder: 1611B32
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
MW4	1611B32-004A	Water	11/22/2016 09:30	GC6A	130338
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1300		50	1	11/24/2016 16:19
TPH-Motor Oil (C18-C36)	ND		250	1	11/24/2016 16:19
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C26	98		72-119		11/24/2016 16:19
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e4		
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW2	1611B32-005A	Water	11/22/2016 11:55	GC6A	130338
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	210		50	1	11/24/2016 07:15
TPH-Motor Oil (C18-C36)	ND		250	1	11/24/2016 07:15
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	100		72-117		11/24/2016 07:15
<u>Analyst(s):</u> TK			<u>Analytical Comments:</u> e4		
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW4	1611B32-006A	Water	11/22/2016 11:10	GC6A	130338
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		50	1	11/24/2016 10:29
TPH-Motor Oil (C18-C36)	ND		250	1	11/24/2016 10:29
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	103		72-117		11/24/2016 10:29
<u>Analyst(s):</u> TK					

(Cont.)

NELAP 4033ORELAP

 Angela Rydelius, Lab Manager



Analytical Report

Client: P & D Environmental
Date Received: 11/23/16 16:40
Date Prepared: 11/23/16
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
Extraction Method: SW3510C
Analytical Method: SW8015B
Unit: µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
EW5	1611B32-007A	Water	11/22/2016 10:20	GC6A	130338
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	1200		50	1	11/24/2016 11:08
TPH-Motor Oil (C18-C36)	ND		250	1	11/24/2016 11:08
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	102		72-117		11/24/2016 11:08
<u>Analyst(s):</u>	TK		<u>Analytical Comments:</u>	e4	
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
OW2	1611B32-008A	Water	11/22/2016 08:40	GC6A	130338
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		50	1	11/24/2016 09:12
TPH-Motor Oil (C18-C36)	ND		250	1	11/24/2016 09:12
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	102		72-117		11/24/2016 09:12
<u>Analyst(s):</u>	TK				
Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
IW1	1611B32-009A	Water	11/22/2016 13:10	GC6A	130338
<u>Analytes</u>	<u>Result</u>		<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>
TPH-Diesel (C10-C23)	ND		50	1	11/24/2016 07:54
TPH-Motor Oil (C18-C36)	ND		250	1	11/24/2016 07:54
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>		
C9	99		72-117		11/24/2016 07:54
<u>Analyst(s):</u>	TK				



Quality Control Report

Client: P & D Environmental
Date Prepared: 11/30/16
Date Analyzed: 11/30/16
Instrument: GC18
Matrix: Water
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
BatchID: 130586
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-130586
1611B32-008BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	8.67	0.50	10	-	87	54-140
Benzene	ND	9.63	0.50	10	-	96	47-158
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	34.1	2.0	40	-	85	42-140
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	9.59	0.50	10	-	96	43-157
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	9.07	0.50	10	-	91	44-155
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	9.26	0.50	10	-	93	66-125
1,1-Dichloroethene	ND	9.25	0.50	10	-	92	47-149
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	-	-	-	-

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NELAP 4033ORELAP



QA/QC Officer



Quality Control Report

Client: P & D Environmental

Date Prepared: 11/30/16

Date Analyzed: 11/30/16

Instrument: GC18

Matrix: Water

Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32

BatchID: 130586

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit: µg/L

Sample ID: MB/LCS-130586
1611B32-008BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	9.45	0.50	10	-	94	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	9.22	0.50	10	-	92	55-137
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	8.98	0.50	10	-	90	53-139
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	9.41	0.50	10	-	94	52-137
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	9.59	0.50	10	-	96	43-157
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	-	-	-	-

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NELAP 4033ORELAP

 QA/QC Officer



Quality Control Report

Client:	P & D Environmental	WorkOrder:	1611B32
Date Prepared:	11/30/16	BatchID:	130586
Date Analyzed:	11/30/16	Extraction Method:	SW5030B
Instrument:	GC18	Analytical Method:	SW8260B
Matrix:	Water	Unit:	µg/L
Project:	0058; Xtra Oil Co. 1701 Park ST. Alameda, CA	Sample ID:	MB/LCS-130586 1611B32-008BMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits		
Surrogate Recovery									
Dibromofluoromethane	24.9	25.1		25	100	100	70-130		
Toluene-d8	24.3	24.9		25	97	100	70-130		
4-BFB	2.15	2.16		2.5	86	87	70-130		
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	9.09	8.85	10	ND	91	89	69-139	2.69	20
Benzene	9.72	9.23	10	ND	96	91	69-141	5.17	20
t-Butyl alcohol (TBA)	36.9	37.4	40	ND	92	94	41-152	1.41	20
Chlorobenzene	9.82	9.34	10	ND	98	93	77-120	5.01	20
1,2-Dibromoethane (EDB)	9.67	9.29	10	ND	97	93	76-135	3.97	20
1,2-Dichloroethane (1,2-DCA)	9.68	9.35	10	ND	97	93	73-139	3.52	20
1,1-Dichloroethene	9.60	8.92	10	ND	96	89	59-140	7.38	20
Diisopropyl ether (DIPE)	9.54	9.18	10	ND	95	92	72-140	3.85	20
Ethyl tert-butyl ether (ETBE)	9.51	9.18	10	ND	95	92	71-140	3.50	20
Methyl-t-butyl ether (MTBE)	9.48	9.24	10	ND	93	91	73-139	2.55	20
Toluene	9.32	8.80	10	ND	93	88	71-128	5.76	20
Trichloroethene	9.74	9.19	10	ND	97	92	64-132	5.72	20
Surrogate Recovery									
Dibromofluoromethane	25.3	25.3	25		101	101	73-131	0	20
Toluene-d8	24.4	24.0	25		97	96	72-117	1.33	20
4-BFB	2.25	2.31	2.5		90	92	74-116	2.28	20

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NELAP 4033ORELAP

 QA/QC Officer



Quality Control Report

Client: P & D Environmental
Date Prepared: 12/1/16 - 12/2/16
Date Analyzed: 12/1/16 - 12/2/16
Instrument: GC18
Matrix: Water
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
BatchID: 130657
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-130657
1611B74-003CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	8.83	0.50	10	-	88	54-140
Benzene	ND	9.83	0.50	10	-	98	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromo(chloromethane)	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	34.7	2.0	40	-	87	42-140
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	9.71	0.50	10	-	97	43-157
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	9.32	0.50	10	-	93	44-155
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	9.42	0.50	10	-	94	66-125
1,1-Dichloroethene	ND	9.52	0.50	10	-	95	47-149
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	-	-	-	-

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QA/QC Officer



Quality Control Report

Client: P & D Environmental
Date Prepared: 12/1/16 - 12/2/16
Date Analyzed: 12/1/16 - 12/2/16
Instrument: GC18
Matrix: Water
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32
BatchID: 130657
Extraction Method: SW5030B
Analytical Method: SW8260B
Unit: µg/L
Sample ID: MB/LCS-130657
1611B74-003CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	9.56	0.50	10	-	96	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	9.40	0.50	10	-	94	55-137
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	9.18	0.50	10	-	92	53-139
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	9.56	0.50	10	-	96	52-137
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	9.76	0.50	10	-	98	43-157
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	-	-	-	-

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NELAP 4033ORELAP



QA/QC Officer



Quality Control Report

Client: P & D Environmental

Date Prepared: 12/1/16 - 12/2/16

Date Analyzed: 12/1/16 - 12/2/16

Instrument: GC18

Matrix: Water

Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

WorkOrder: 1611B32

BatchID: 130657

Extraction Method: SW5030B

Analytical Method: SW8260B

Unit: $\mu\text{g/L}$

Sample ID: MB/LCS-130657
1611B74-003CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits		
Surrogate Recovery									
Dibromofluoromethane	25.1	25.1		25	100	100	70-130		
Toluene-d8	24.3	24.8		25	97	99	70-130		
4-BFB	2.18	2.19		2.5	87	88	70-130		
Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	9.31	9.40	10	ND	93	94	69-139	1.01	20
Benzene	9.57	9.64	10	ND	96	96	69-141	0	20
t-Butyl alcohol (TBA)	40.1	42.6	40	ND	100	106	41-152	6.10	20
Chlorobenzene	9.32	9.33	10	ND	93	93	77-120	0	20
1,2-Dibromoethane (EDB)	9.58	9.78	10	ND	96	98	76-135	2.00	20
1,2-Dichloroethane (1,2-DCA)	9.80	9.89	10	ND	98	99	73-139	0.862	20
1,1-Dichloroethene	8.98	9.19	10	ND	90	92	59-140	2.26	20
Diisopropyl ether (DIPE)	9.88	9.81	10	ND	99	98	72-140	0.785	20
Ethyl tert-butyl ether (ETBE)	9.79	9.81	10	ND	98	98	71-140	0	20
Methyl-t-butyl ether (MTBE)	9.81	9.94	10	ND	98	99	73-139	1.34	20
Toluene	9.47	9.49	10	ND	95	95	71-128	0	20
Trichloroethene	9.31	9.38	10	ND	93	94	64-132	0.702	20
Surrogate Recovery									
Dibromofluoromethane	25.9	25.7	25		104	103	73-131	0.720	20
Toluene-d8	25.9	25.7	25		104	103	72-117	0.552	20
4-BFB	1.94	1.99	2.5		77	79	74-116	2.60	20



Quality Control Report

Client: P & D Environmental

WorkOrder: 1611B32

Date Prepared: 11/30/16

BatchID: 130606

Date Analyzed: 11/30/16

Extraction Method: SW5030B

Instrument: GC3

Analytical Method: SW8021B/8015Bm

Matrix: Water

Unit: $\mu\text{g/L}$

Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

Sample ID: MB/LCS-130606
1611B26-001AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	61.8	40	60	-	103	85-112
MTBE	ND	8.83	5.0	10	-	88	74-127
Benzene	ND	9.29	0.50	10	-	93	81-124
Toluene	ND	10.4	0.50	10	-	104	79-131
Ethylbenzene	ND	11.4	0.50	10	-	114	86-127
Xylenes	ND	35.8	1.5	30	-	119	87-133

Surrogate Recovery

aaa-TFT	10.3	10.2	10	103	101	87-117
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	62.4	63.0	60	ND	104	105	85-113	0.888	20
MTBE	8.99	8.95	10	ND	90	90	73-120	0	20
Benzene	9.27	9.54	10	ND	93	95	84-121	2.79	20
Toluene	10.4	10.7	10	ND	104	107	86-125	2.96	20
Ethylbenzene	11.2	11.6	10	ND	112	116	93-124	3.37	20
Xylenes	35.3	36.0	30	ND	118	120	93-130	2.10	20

Surrogate Recovery

aaa-TFT	10.1	10.2	10	101	102	89-115	0.882	20
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 QA/QC Officer



Quality Control Report

Client: P & D Environmental

WorkOrder: 1611B32

Date Prepared: 11/30/16

BatchID: 130607

Date Analyzed: 11/30/16

Extraction Method: SW5030B

Instrument: GC7

Analytical Method: SW8021B/8015Bm

Matrix: Water

Unit: µg/L

Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

Sample ID: MB/LCS-130607
1611B56-021AMS/MSD

QC Summary Report for SW8021B/8015Bm

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH(btex)	ND	55.5	40	60	-	93	85-112
MTBE	ND	9.90	5.0	10	-	99	74-127
Benzene	ND	10.8	0.50	10	-	109	81-124
Toluene	ND	11.6	0.50	10	-	116	79-131
Ethylbenzene	ND	11.1	0.50	10	-	111	86-127
Xylenes	ND	32.6	1.5	30	-	109	87-133

Surrogate Recovery

aaa-TFT	11.6	11.0	10	116	110	87-117
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Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH(btex)	47.0	59.1	60	ND	78,F1	98	85-113	22.8,F1	20
MTBE	9.73	9.24	10	ND	89	84	73-120	5.21	20
Benzene	11.2	10.7	10	ND	112	107	84-121	4.77	20
Toluene	11.9	11.6	10	ND	119	116	86-125	2.94	20
Ethylbenzene	11.3	11.0	10	ND	113	110	93-124	3.28	20
Xylenes	31.9	32.6	30	ND	106	109	93-130	1.98	20

Surrogate Recovery

aaa-TFT	11.2	10.9	10	112	109	89-115	3.37	20
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Quality Control Report

Client: P & D Environmental **WorkOrder:** 1611B32
Date Prepared: 11/23/16 **BatchID:** 130338
Date Analyzed: 11/24/16 - 11/28/16 **Extraction Method:** SW3510C
Instrument: GC6A, GC9a **Analytical Method:** SW8015B
Matrix: Water **Unit:** µg/L
Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA **Sample ID:** MB/LCS/LCSD-130338

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	627		625	100	74-107			
Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	1240	1210	1000	124	121	95-136	2.18	30
Surrogate Recovery								
C9	636	624	625	102	100	74-107	1.87	30



CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 1611B32

ClientCode: PDEO

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Report to:

Michael Deschenes
P & D Environmental
55 Santa Clara, Ste.240
Oakland, CA 94610
(510) 658-6916 FAX: 510-834-0152

Email: lab@pdenviro.com; Paul.King@pdenviro.c
cc/3rd Party:
PO:
ProjectNo: 0058; Xtra Oil Co. 1701 Park ST.
Alameda, CA

Bill to:

Accounts Payable
Xtra Oil Company
2307 Pacific Avenue
Alameda, CA 94501
xtraoil@sbcglobal.net

Requested TAT: 5 days;

Date Received: 11/23/2016
Date Logged: 11/23/2016

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
1611B32-001	MW1	Water	11/22/2016 13:45	<input type="checkbox"/>	B	A	A									
1611B32-002	MW2	Water	11/22/2016 11:05	<input type="checkbox"/>	B	A	A									
1611B32-003	MW3	Water	11/22/2016 10:25	<input type="checkbox"/>	B	A	A									
1611B32-004	MW4	Water	11/22/2016 09:30	<input type="checkbox"/>	B	A	A									
1611B32-005	EW2	Water	11/22/2016 11:55	<input type="checkbox"/>	B	A	A									
1611B32-006	EW4	Water	11/22/2016 11:10	<input type="checkbox"/>	B	A	A									
1611B32-007	EW5	Water	11/22/2016 10:20	<input type="checkbox"/>	B	A	A									
1611B32-008	OW2	Water	11/22/2016 08:40	<input type="checkbox"/>	B	A	A									
1611B32-009	IW1	Water	11/22/2016 13:10	<input type="checkbox"/>	B	A	A									

Test Legend:

1	8260B_W
5	
9	

2	G-MBTEX_W
6	
10	

3	TPH(DMO)_W
7	
11	

4	
8	
12	

Prepared by: Briana Cutino

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.



WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL

Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

Work Order: 1611B32

Client Contact: Michael Deschenes

QC Level: LEVEL 2

Contact's Email: lab@pdenviro.com; Paul.King@pdenviro.com;
pdking0000@aol.com

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

Date Logged: 11/23/2016

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1611B32-001A	MW1	Water	Multi-Range TPH by EPA 8015Bm	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	11/22/2016 13:45	5 days	Trace	<input type="checkbox"/>	
1611B32-001B	MW1	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/22/2016 13:45	5 days	Trace	<input type="checkbox"/>	
1611B32-002A	MW2	Water	Multi-Range TPH by EPA 8015Bm	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	11/22/2016 11:05	5 days	Trace	<input type="checkbox"/>	
1611B32-002B	MW2	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/22/2016 11:05	5 days	Trace	<input type="checkbox"/>	
1611B32-003A	MW3	Water	Multi-Range TPH by EPA 8015Bm	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	11/22/2016 10:25	5 days	Trace	<input type="checkbox"/>	
1611B32-003B	MW3	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/22/2016 10:25	5 days	Trace	<input type="checkbox"/>	
1611B32-004A	MW4	Water	Multi-Range TPH by EPA 8015Bm	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	11/22/2016 9:30	5 days	Trace	<input type="checkbox"/>	
1611B32-004B	MW4	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/22/2016 9:30	5 days	Trace	<input type="checkbox"/>	
1611B32-005A	EW2	Water	Multi-Range TPH by EPA 8015Bm	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	11/22/2016 11:55	5 days	Trace	<input type="checkbox"/>	
1611B32-005B	EW2	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/22/2016 11:55	5 days	Trace	<input type="checkbox"/>	
1611B32-006A	EW4	Water	Multi-Range TPH by EPA 8015Bm	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	11/22/2016 11:10	5 days	Trace	<input type="checkbox"/>	
1611B32-006B	EW4	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/22/2016 11:10	5 days	Trace	<input type="checkbox"/>	
1611B32-007A	EW5	Water	Multi-Range TPH by EPA 8015Bm	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	11/22/2016 10:20	5 days	Trace	<input type="checkbox"/>	
1611B32-007B	EW5	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/22/2016 10:20	5 days	Trace	<input type="checkbox"/>	

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.



WORK ORDER SUMMARY

Client Name: P & D ENVIRONMENTAL

Project: 0058; Xtra Oil Co. 1701 Park ST. Alameda, CA

Work Order: 1611B32

Client Contact: Michael Deschenes

QC Level: LEVEL 2

Contact's Email: lab@pdenviro.com; Paul.King@pdenviro.com;
pdking0000@aol.com

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

Date Logged: 11/23/2016

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Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1611B32-008A	OW2	Water	Multi-Range TPH by EPA 8015Bm	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	11/22/2016 8:40	5 days	Trace	<input type="checkbox"/>	
1611B32-008B	OW2	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/22/2016 8:40	5 days	Trace	<input type="checkbox"/>	
1611B32-009A	IW1	Water	Multi-Range TPH by EPA 8015Bm	4	2 VOAs w/HCL + 2-aVOAs (multi-range)	<input type="checkbox"/>	11/22/2016 13:10	5 days	Trace	<input type="checkbox"/>	
1611B32-009B	IW1	Water	SW8260B (VOCs)	2	VOA w/ HCl	<input type="checkbox"/>	11/22/2016 13:10	5 days	Trace	<input type="checkbox"/>	

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.

CHAIN OF CUSTODY RECORD

JUL 11 B32
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 ST. ALAMEDA, CA	NUMBER OF CONTAINERS	ANALYSIS(ES): TPEL - MULTI BASIC 8260 WITH FUEL OXYS AND LEAD SCAVENGERS	PRESERVATIVE	REMARKS	
SAMPLED BY: (PRINTED & SIGNATURE) MICHAEL BASS-DESCHESES Michael Bass-Deschenes										
SAMPLE NUMBER	DATE	TIME	TYPE	SAMPLE LOCATION						
MW1	11/22/16	1345	H2O		5	X X			ICE NORMAL TAT	
MW2	11/22/16	1105			5	X X				
MW3	11/22/16	1025			5	X X				
MW4	11/23/16	0930			5	X X				
EW2	11/22/16	1155			5	X X				
EW4	11/23/16	1110			5	X X				
EW5	11/23/16	1020			5	X X				
OW2	11/23/16	0840			5	X X				
IW1	11/22/16	1310			5	X X				
RELINQUISHED BY: (SIGNATURE) Michael Bass-Deschenes			DATE	TIME	RECEIVED BY: (SIGNATURE)		Total No. of Samples (This Shipment)	9	LABORATORY:	
			11/23/16	1331			Total No. of Containers (This Shipment)	45	McCAMPBELL ANALYTICAL INC.	
RELINQUISHED BY: (SIGNATURE) D.S.			DATE	TIME	RECEIVED BY: (SIGNATURE)		LABORATORY CONTACT:	LABORATORY PHONE NUMBER:		
			11/23/16	1640			ANGELA RYDELUS	(877) 252-9262		
RELINQUISHED BY: (SIGNATURE)			DATE	TIME	RECEIVED FOR LABORATORY BY: (SIGNATURE)		SAMPLE ANALYSIS REQUEST SHEET ATTACHED: () YES (X) NO			
Results and billing to: P&D Environmental, Inc. lab@pdenviro.com					REMARKS: 3 VOAs WITH HCL 2 AMBER VOAs (UNPRESERVED)					



Sample Receipt Checklist

Client Name:	P & D Environmental	Date and Time Received	11/23/2016 16:40
Project Name:	0058; Xtra Oil Co. 1701 Park ST. Alameda, CA	Date Logged:	11/23/2016
WorkOrder No:	1611B32	Received by:	Briana Cutino
Carrier:	David Shaver (MAI Courier)	Logged by:	Briana Cutino

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample/Temp Blank temperature	Temp: 5°C		
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522? Yes	<input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:
